

## **Unique Like Everyone Else: Auditor Herding Behavior in Critical Audit Matter Implementation**

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### **ABSTRACT**

We report the results of a field study in which we interviewed and surveyed audit engagement partners about their initial implementation of critical audit matter (CAM) standard AS 3101 (2019 fiscal year-end for accelerated filers), thereby allowing us to identify the activities, factors, and parties involved in initial CAM decisions. All interviewees reported that, when making CAM judgments and decisions, they sought to avoid “sticking out,” consistent with theories of herding behavior. Consequently, we examined actions that partners perceived as “dangerous” (e.g., reporting excessive or zero CAMs) versus “safe” (e.g., discerning the “right” number of CAMs). We conclude that the lengthy CAM rulemaking process ultimately resulted in a smooth and uneventful implementation because of the profession’s extensive preparation and auditor herding behavior, inconsistent with the concerns and benefits that stakeholders anticipated. We discuss implications for CAMs reporting, future CAMs research and, more broadly, for rulemaking and implementation of new standards.

**Keywords:** Critical Audit Matters, Herding, Audit Standards, Field Study

## I. INTRODUCTION

In 2017, the SEC approved AS 3101 requiring auditors of U.S. issuers to report Critical Audit Matters (CAMs) in their audit reports (PCAOB 2017; SEC 2017). Issuers began publicly reporting CAMs in 2019.<sup>1</sup> Never before had standards required U.S. auditors to publicly disclose audit-specific judgments and approaches, and only recently had auditors in other jurisdictions faced similar requirements (e.g., materiality and risk disclosures in the U.K. [FRC 2013], key audit matters internationally [IAASB 2015]).

In this paper, we report the results of interviews of practicing audit partners conducted during the time immediately surrounding the standard's initial implementation and review professional and regulatory documents to examine the profession's implementation of the new standard. This setting presents unique opportunities to study audit firm and engagement partner behavior as they adapt to new standards and defend themselves against anticipated risks during a time of uncertainty. We use a behavioral perspective to provide evidence on initial CAM implementation, which complements aggregated practitioner reports (e.g., audit firm and engagement partner surveys [PCAOB 2020a, 2020b]) with granular, perceptual insights from individuals' experiences.

The lengthy CAMs rulemaking process ran from 2011 to 2017, involved multiple stakeholder outreach efforts, and resulted in over 500 comment letters. Throughout the rulemaking process, stakeholders expressed serious concerns about increased audit costs; over-auditing; disclosure of proprietary client information; investor confusion and information overload; heightened auditor legal liability; added boilerplate language in the audit report; and over-reporting

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<sup>1</sup> CAMs are “material matters that were communicated or required to be communicated to the audit committee and that involved especially challenging, subjective, or complex auditor judgment” (PCAOB 2017).

of CAMs.<sup>2</sup> Yet, after implementing the final CAM standard, audit firms' comment letters suggested that their early concerns were not borne out when implementing CAMs (e.g., BDO 2020; EY 2020; PwC 2020). The profession's shift from feelings of fear, reluctance, and outright opposition, to an ultimate attitude of indifference suggests that it avoided the anticipated dangers by successfully navigating the novel and uncertain landscape.

Given the novelty of the standard's requirements—a public disclosure describing audit engagement issues that auditors found more difficult to audit—this transitional period also provides a rare opportunity to study how auditors develop professional judgment for a new and unique audit requirement, and implement supporting processes related to that judgment. Despite wide-ranging implications for auditors, auditees (Bentley, Lambert, and Wang 2021), and financial statement users (Christensen, Glover, and Wolfe 2014; Brasel, Doxey, Grenier, and Reffett 2016; Gimbar, Hansen, and Ozlanski 2016; Carver and Trinkle 2017; Gutierrez, Minutti-Meza, Tatum, and Vulcheva 2018; Vinson, Robertson, and Cockrell 2019; Kachelmeier, Rimkus, Schmidt, and Valentine 2020; Lennox, Schmidt, and Thompson 2021), we know little about how individual auditors approach identifying and reporting CAMs. While the standard's definition of CAMs provides some bright-line thresholds to follow, other factors remain subject to judgment.<sup>3</sup> The "black box" of CAM processes motivates our first research question: *How did individual auditors make initial CAMs judgments and decisions?* The ostensibly frictionless execution of CAM decision-making and overall benign outcomes reported by auditors and stakeholders also raises

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<sup>2</sup> See, for example, comment letters from Crowe 2016; Deloitte 2016; Eli Lily 2016; EY 2016; Grant Thornton 2016; KPMG 2016; PwC 2016; RSM 2016.

<sup>3</sup> For example, AS 3101 provides a bright-line boundary around the population of potential CAMs—the matter should be among those items discussed or required to be discussed with the audit committee—while other elements of the CAM definition leave substantial room for professional judgment in CAM selection and reporting, such as requirements that a CAM "...relates to [matters] that are material to the financial statements..." and involves "especially challenging, subjective, or complex auditor judgment" (PCAOB 2017).

the second research question: *How did the profession achieve uneventful implementation of the novel CAM standard?*

We adopted a field study approach to address these research questions. We collected data by interviewing rank-and-file engagement partners (rather than those leading the firm's national CAM implementation efforts) at a time as close as possible to their first experience publicly reporting CAMs. During 2019 and 2020, we conducted a two-phase field study with eight audit engagement partners responsible for client-specific CAM identification and reporting. Our interviewees represented two Big4 and two non-Big4 audit firms and the specific audits discussed involved various-sized issuers from several industries. To examine auditors' preparations for CAM reporting, we began with semi-structured interviews three to six months before the partners completed their 2019 fiscal year-end audits. Over the following 12 weeks, we sent bi-weekly prompts asking participants to complete online surveys documenting any interesting events that occurred while identifying and communicating CAMs. Finally, guided by our participants' accounts, we conducted follow-up interviews after they completed year-end audits, focusing on how they reconciled their expectations with their experience.

A persistent theme in partners' accounts of their CAM thought process is that they sought to avoid "sticking out". To this end, they ultimately herd together by entrusting their national experts with centralized review responsibilities and ensuring that their ultimate CAMs decisions are consistent with peers' decisions across their firm and other companies in the same industry. Further, partners' comments suggest implicit minimums and maximums for the "right" number of CAMs per engagement to avoid scrutiny as an outlier. Despite reporting little friction in CAMs implementation, partners expressed feeling threatened by potential PCAOB inspection and concerned about drawing PCAOB scrutiny through their CAM reporting decisions.

Our interviewees' accounts illustrate perceptions and behaviors analogous to herding behavior, where vulnerable individuals herd in response to perceived threats, avoiding negative outcomes of being outside the herd (e.g., predation, impoverishment, aggression, or reputation loss). The persistent theme of avoiding "sticking out" evokes an image of herding for safety. Thus, we draw from herding theory in evolutionary biology (e.g., Hamilton 1971; Ginelli, Peruani, Pillot, Chaté, Theraulaz, and Bon 2015) and social psychology (e.g., Festinger 1954; Scharfstein and Stein 1990; Raafat, Chater, and Frith 2009) as both a theoretical lens and a structural metaphor to examine our research questions (Lakoff and Johnson 1980; Westermann, Cohen, and Trompeter 2019).

Our analysis suggests that individual partners, and the profession as a whole, found safety from uncertainty and anticipated dangers borne of the new standard by herding together.<sup>4</sup> Herding via social comparison enables individuals to defend against uncertain threats by seeking safety in numbers, so "the existence of a discrepancy in a group with respect to opinions or abilities will lead to action on the part of members of that group to reduce the discrepancy" (Festinger 1954, 124). We find partners consciously taking actions to achieve consistency with others' CAMs reports. Herding is also facilitated via shepherds who guide the herd to resources, move them safely along, keep them out of dangerous areas, and contain them within safe ones (Lien et al. 2004). Partners frequently mentioned their firms' CAM leaders who monitored the environment (e.g., activities at other firms, professional interest groups, and the PCAOB), conducted intensive and iterative CAM reviews with engagement teams, and personally reviewed *all* of their firm's first-year CAM disclosures before audit report issuance. Despite reporting extensive oversight from

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<sup>4</sup> We acknowledge that "herding" may carry negative connotations of lacking agency. However, herding is a widely observed emergent property of group behavior in nature, it is highly effective at minimizing costs and maximizing resource utilization, and its distilled behavioral rules have been applied to solve otherwise intractable problems in wide-ranging disciplines (Amali and Dinakaran 2019; Lien, Bayazit, Sowell, Rodriguez, and Amato 2004).

national office, partners described feeling substantial autonomy in their CAM decision-making. This feeling of autonomy suggests a sense of safety among individual partners with respect to their initial CAMs processes and outcomes, and likely contributed to perceptions of a smooth implementation.

Overall, our field data illuminate the profession's process for taking what was initially thought of as a transformative expansion of auditor reporting and ultimately achieving an uneventful implementation via practice and herding. For partners, the perceived dangers of sticking out were neither litigation nor pushback from the auditee's management, audit committee, legal counsel, or investors, but instead PCAOB inspections. From a financial statement users' perspective, CAMs appear to have fallen short of their intended informativeness; two members of the PCAOB Investor Advisory Group encouraged the board to undertake efforts to learn why CAMs have not achieved the level of informativeness of key audit matters reported under international auditing standards, which are closer to what investors desired (PCAOB Investor Advisory Group Meeting 2022). Our findings imply that decisions stemming from partners' herding behavior (and resultant sense of safety) could be dominating the PCAOB's intention of communicating engagement-specific insights to financial statement users, precluding the most potentially informative aspects of CAMs. As one partner remarked to another during CAM implementation: "This is just kind of a nothing burger, right?" (P6, I1).<sup>5</sup>

Our findings shed light on reports of smooth implementation in public accounting firms' 2020 post-implementation comment letters by proposing herding as a mechanism that contributed to the profession's shift from fear to safety. Interviewees' descriptions of CAMs' number and topics align with archival analysis of publicly-reported 2019 CAMs (Bochkay, Minutti-Meza,

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<sup>5</sup> We annotate interview quotes throughout our paper by using *P#* to identify the partner and *I#* to attribute the quote to Phase 1 or Phase 2 of our study. Thus, *P6, I1* indicates Partner 6, Interview Phase 1.

and Schroeder 2020), but interviewees also provided examples where common CAM topics were determined *not* to be CAMs for their specific clients. This finding indicates that CAMs are neither “automatic” nor “boilerplate” at this phase of implementation—an insight not available through archival research methods.

Our findings also have implications for academic CAM research. To conduct empirical CAM research that is meaningful to both practice and theory, researchers need a full and accurate understanding of the contextual factors, activities, critical events, and parties involved in CAM decision-making. For example, partners reported that only audit personnel at or above manager level are involved in CAM activities, and described the main beneficial outcome of the CAM standard being enhanced communications with the audit committee. Our study provides a rich description that researchers can draw on for ecological validity when conducting CAM research.

## **II. BACKGROUND AND RESEARCH QUESTIONS**

The CAM standard’s development and implementation was a long, contentious, yet collaborative process taking nearly a decade from inception to reality (see Figure 1 for a timeline of the CAM rulemaking process). To provide background, we describe the CAM standard’s origins and objectives and outline stakeholders’ concerns. We first synthesize publicly available documentation of the rulemaking process, the various proposals put forth in PCAOB releases, and an overview of stakeholder perspectives from comment letters over four rounds of PCAOB outreach. We then consider relevant prior research on CAMs.

### **Stakeholder Outreach and Prevailing Concerns during CAM Standard Development**

In response to financial statement users’ calls for more informative and decision-useful audit reports, four of the world’s major audit standard setters have completed projects clarifying and expanding auditor reporting and disclosure (EC 2012; FRC 2013; IAASB 2015; PCAOB

2017).<sup>6</sup> In June 2011, the PCAOB issued its *Concept Release on Possible Revisions to PCAOB Standards Related to Reports on Audited Financial Statements* (2011). This initial concept release solicited comments on four proposed changes to audit reporting, including adding an “Auditor’s Discussion and Analysis” (AD&A) section to the audit report. The AD&A would have, among other things, expanded auditor reporting to discuss significant audit matters, including audit procedure results, materiality levels, items communicated to the audit committee, the auditor’s views on difficult or contentious issues, and management’s choice of accounting policies and estimates (PCAOB 2011). This original AD&A proposal evolved into AS 3101 (the standard accepted by the SEC in 2017), which retains several of these concepts.<sup>7</sup>

The final AS 3101 requires auditors to identify critical audit matters from the population of material items communicated (or required to be) to the audit committee, with CAMs being those items that posed especially difficult judgments. All U.S. issuer audit reports now provide a general CAM definition in a standard paragraph (even when reporting no CAMs) and, for each reported CAM, the auditor must discuss 1) why they consider the matter a CAM, 2) how they addressed it during the audit, and 3) the results of their related audit procedures. If the auditor judges that no matters meet the CAM definition, they affirm in the report that they identified no CAMs.

In the U.S., the expansion of auditor reporting occurred over a long period and required multiple proposals and revisions in a process described as “arduous” (Minutti-Meza 2021). The CAMs rulemaking process spurred vigorous debate among stakeholders. At first, auditors and preparers criticized the proposals, while investors generally advocated for increased transparency

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<sup>6</sup> These projects varied by jurisdiction—for U.S. issuers, in addition to requiring CAMs, the audit report was rearranged to present the opinion paragraph first, clarify specific wording within the report, and add auditor tenure. International jurisdictions adopted standards for key audit matters (KAMs).

<sup>7</sup> AS 3101 went into effect for accelerated filers beginning with the June 30, 2019 fiscal year-end. CAM requirements for non-accelerated filers went into effect for December 15, 2020 fiscal year-ends (SEC 2017).

and favored expanding the audit report (PCAOB 2011, 2013, 2016, 2017). Auditors and preparers voiced concerns that the new disclosures would change the auditor's role from providing assurance to being a primary source of information management traditionally provided, confuse investors because of potentially conflicting disclosures, increase legal liability, and increase pressure on auditor time and resources by further compressing year-end audit work. However, as the process advanced (e.g., field testing, other PCAOB stakeholder engagement efforts), many auditors opened their comment letters with statements of general support even while voicing specific concerns (e.g., BDO 2013; Crowe 2013; Deloitte 2013; EY 2013).

The PCAOB indicates that the purpose of CAMs is to provide further information about the audit, not necessarily about the audited entity, that will help investors process information about the entity already contained in its financial statements (PCAOB 2017, 66-67). Additionally, the standard states that the auditor's primary responsibility is identifying and reporting CAMs, rather than adjusting the audit approach. Consequently, the PCAOB has frequently reiterated that reporting CAMs simply involves reporting on audit judgments and tasks the auditor *already* performs (PCAOB 2011, 2013, 2016, 2017).

### Prior CAMs Research

While identifying CAMs is the first judgment auditors make under the standard, little research examines how auditors develop and implement this judgment from either a theoretical or practical perspective. Early CAMs research was necessarily behavioral, based on hypothetical scenarios, and looked at potential effects of including CAMs or CAM-like information in the auditor's report on external evaluators (e.g., jurors and litigators [Brasel et al. 2016; Gimbar et al. 2016; Vinson et al. 2019; Kachelmeier et al. 2020], client management [Bentley et al. 2021], and investors [Christensen et al. 2014]). To our knowledge, no published papers using behavioral

methods (and few working papers) examine CAM decisions from the *auditor's* perspective (c.f., Reid, Nelson, and Carcello 2020, using KAMs data).

Preliminary archival research identifies the most common CAM areas reported and finds that many issuers within industries share common CAMs (Burke, Hoitash, Hoitash, and Xiao 2020; Klevak, Livnat, Pei, and Soslava 2021). Burke et al. (2020) analyze CAMs text to measure wording similarity and uniqueness by CAM topic, industry, audit firm, and partner. They find that, in the report paragraph identifying and explaining the CAM, both industry and CAM topic account for significant portions of language similarity, whereas audit partner, office, and firm do not. However, for the paragraph describing the procedures used to audit the CAM, audit partner, office, and firm all add significant explanatory power for wording similarity. Klevak et al. (2021) observe a greater influence of audit firms, finding that the average wording similarity among CAMs of different issuers is 43 percent, but within audit firms it is as high as 87 percent (p. 10).

A key research lacuna is understanding how professionals' CAM judgments are developed, propagated, refined, and implemented in practice, including the details of the processes and personnel involved in these judgments. CAQ reports on firms' field tests of the proposed CAM standard (CAQ 2014) and dry-runs of the final CAM standard (CAQ 2018) identify the process of narrowing many potential CAMs down to the few reported CAMs (CAM selection) as a source of conflict and confusion. In the first year of live CAM implementation, auditors did not have peer benchmarks for CAM numbers and topics, or the wording and granularity for reporting CAMs. By nature, CAM decision-making differs substantially from auditors' typical decisions, where they evaluate the correspondence between a firm's economic activities and financial reporting (i.e., management's assertions) and report conclusions in a standardized pass/fail manner. CAM decisions are unique because they involve identifying difficulties the *auditor* faced when

evaluating management's assertions and reporting idiosyncratic audit processes for a unique set of client facts and circumstances.

## Theoretical Lens and Research Questions

Because of CAMs' novelty, we conduct our field study from the perspective that auditors will feel threatened by uncertainty as they initially make sense of and implement CAMs on their engagements. We explore the possibility that auditor herding behavior contributed to the ultimately uneventful implementation, despite the novelty auditors faced. Herding theory is useful as an analogy (Holyoak and Koh 1987) and structural metaphor (Lakoff and Johnson 1980) to understand the behavioral patterns partners enacted to "avoid sticking out" during initial CAM standard implementation. We consider two mechanisms of herding behavior that can illuminate how partners sought safety amidst uncertainty: herding via social comparison to avoid deviance and ensure safety in numbers (Festinger 1954), and herding via shepherds to guide and contain the herd within safe boundaries (Lien et al. 2004). Thus, we are interested in what individual auditors and the audit profession perceive as dangers, and how they arrive at a sense of security in their initial CAMs decisions. We pose the following research questions:

- RQ1: *How did individual auditors make initial CAMs judgments and decisions?*  
RQ2: *How did the profession achieve uneventful implementation of the novel CAM standard?*

## III. RESEARCH METHODS

### Data

Our field study design consists of two phases of interviews with interim data collection. Phase 1 consists of semi-structured interviews, following best-practice protocols for field research (e.g., Power and Gendron 2015, Malsch and Salterio 2016). It took place three to six months before the year-end audit for at least one client on which each interviewed audit partner is the lead partner.

Phase 1's objective was to examine audit firms' preparations for implementing CAMs. The Appendix includes the Phase 1 interview script.

We then identified the activities and parties involved in selecting CAMs by collecting interim data using bi-weekly email prompts that asked participants to complete brief online surveys focusing on key judgments and pressure points. We invited responses starting three months before year-end audit busy season began and continued our requests throughout the season. Our objective was for participants to record interesting events as they occurred (e.g., CAM-related meetings, interactions, or documentation), so we could identify factors that *actually* influence CAM processes in practice, rather than factors that auditors believe *ought to* influence CAMs processes (based on standards or audit firm guidelines).<sup>8</sup> The Appendix describes this template and provides examples of events of interest.

Phase 2 consists of semi-structured interviews using a script guided by the Phase 1 findings and interim data collection, and it took place within three months of engagement wrap-up. Phase 2's objective was to examine participants' CAMs practices and outcomes on their engagements, compare these with participants' expectations, and allow participants to identify the conflicts they experienced and report their approaches to navigating these conflicts.

Development of our interview scripts and analyses of our findings were guided in part by our review of publicly-available documents related to the CAMs rulemaking process, including PCAOB releases, stakeholder comment letters, CAQ reports and stakeholder outreach materials, and trade publications. These documents situate our study in the institutional context of CAMs

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<sup>8</sup> We based this interim data collection approach on the experience sampling method, which is used to study change processes during major events and transitions, "antecedents, correlates, and consequences of daily experiences" (Bolger et al. 2003, p. 586), and constructs of situational context, affect, thoughts, and behaviors that show within-person variability over time (Fisher and To 2012). An example of research using the experience sampling method that has made a substantial contribution to social psychology literature is Hofmann, Baumeister, Forster, and Vohs's (2012) study on individuals' reports of desire and self-control in everyday situations, which offers detailed insights into the situational and interpersonal factors that inform ego depletion theory.

activities in the first year of implementation. Figure 1 reports a timeline of notable CAMs rulemaking events overlaid by our data collection phases.

[Insert Figure 1 here]

## Participants and Protocol

Eight partners from four of the Global 8 audit firms (5 from Big 4, 3 from non-Big 4) took part in the field study during 2019-2020. They are primarily rank-and-file audit engagement partners, except for one partner who also occupies a regional leadership role in their firm. None of the participants are designated CAMs experts for their firms. The partners provided information about their CAMs experiences with 23 different issuers, including roles as the lead (13) and concurring (10) partner on the engagements, and experiences with dry-runs for a large subset of the engagements. Table 1 summarizes the audit partners' attributes.

We identified potential participants from a convenience sample of partners within the professional network of a large state university and recruited them by email. Three authors conducted phone interviews in Phases 1 and 2 with an average duration of 60 minutes. Employing a semi-structured interview approach, we followed our interview script, but also asked unscripted follow-up questions, altered the order of questions to fit the natural flow of the conversation, and allowed interviewees to elaborate as they wished. This method allowed the interviewees and researchers to pursue interesting avenues as they arose (Hirst and Koonce, 1996). In addition to taking notes, we audio-recorded the interviews and had the recordings professionally transcribed promptly after the interview ended. Interviewees were free to refer to any materials they wished, but we did not ask them to do so.

During the Phase 1 interviews, we determined sample adequacy by interviewing new participants until we reached a point of saturation, meaning that we gained no new insights from

additional participants (Malsch and Salterio, 2016). A decline in interview content in the final two Phase 1 interviews compared to the prior six interviews suggests that we achieved data saturation. Specifically, average interview word count decreased by 1,255 words even as we learned more about CAMs practices and could follow-up on participants' comments in greater depth. Further, no new themes emerged from our final two interviews. We believe we reached saturation relatively quickly because of profession-wide outreach activities and the highly centralized nature of the firms' implementation processes.

Following the Phase 1 interviews, five of the eight participants provided responses to interim data collection prompts for notable CAMs decision-making events. Participants completed twelve templates. We reviewed these responses and the Phase 1 interview transcripts in preparation for the Phase 2 interviews. For the Phase 2 interviews, two of the Phase 1 interviewees did not respond to scheduling requests, resulting in six Phase 2 interviews.

An author who took part in the interviews developed preliminary themes based on perceived patterns in the data, practitioner CAMs literature, documents from the rulemaking process, and general theories of herding. Guided by these initial themes, two coders independently analyzed all interview transcripts and template responses in NVivo software.<sup>9</sup> The coders then added and refined themes as did the remaining authors while reviewing the data. Cohen's Kappa for the two independent coders was 0.72 or greater for all themes, with an average kappa of 0.91, suggesting high overall agreement. Any disagreements between the two coders were easily resolved. While we do not report further quantitative statistics from the coding, the data coding process and results were integral to refining and solidifying our interpretation of the data conveyed in the remainder of the manuscript.

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<sup>9</sup> One coder is an author who did not participate in the interview process. The other is a Ph.D. student with audit experience who is not otherwise involved with the study.

## IV. CAM STANDARD IMPLEMENTATION

In this section, our objective is to examine our two research questions by documenting the activities, critical events, key pressure points, and parties involved in initially identifying and reporting CAMs in practice.<sup>10</sup> Throughout this section, we discuss how our findings add to reports in practitioner literature on initial CAM implementation (e.g., PCAOB stakeholder outreach [PCAOB 2020b]) and provide a richer description for future academic research.

### **Personnel Involved in CAM Identification and Reporting**

#### *Engagement Team*

Our participants all noted that only managers and above, predominantly senior managers and partners, are meaningfully involved in any CAM identification and reporting work, consistent with PCAOB's (2020b) report of 41 percent partner hours and 50 percent manager hours. The most senior members of the engagement team even performed typically lower-level tasks for CAMs, such as populating the firm's CAM decision-aid templates—a type of task often assigned to staff for other audit judgments. Partners reported no staff involvement in CAMs beyond, in occasional instances hearing about CAMs at meetings.<sup>11</sup> No interviewees envision a role for staff (or even seniors) in any CAMs judgments, as P2, I1 notes, "I can't see the seniors getting too involved in it...we may ask the senior to sit and listen from a developmental perspective...maybe she can help write something up if we need her, but those are judgments that are made by the partner and the director or senior manager, and I would imagine that's the case across the board."

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<sup>10</sup> Audit partners described their experiences as the lead engagement partner, and some also shared their experiences in the concurring partner role.

<sup>11</sup> These practice insights are essential to future behavioral research on CAM judgments and decision-making, as it implies that participants below a manager level would have little to no insight or influence on CAM decisions, making them a poor choice of participant for CAM-related experimental tasks.

Our partners explained that the extensive professional judgment needed for CAM identification and reporting requires significant experience, even to complete the responses to questions in the decision-aid templates:

“The seniors I think understand what’s out there, but as far as taking the pass at the initial identification and then ultimately to drafting the opinion itself or the discussion itself, that’s been the managers and me. It needs someone that conceptually understands, broadly...the risks of the company, historically what the significant audit areas have been, and how we’ve responded to them. So that mindset, I think, is critical to getting to the right spot there. The seniors...don’t have as much experience in...the holistic risk assessments.” (P6, I1)

### ***Other Personnel***

**CAM Leaders and Specialists.** The firms assembled a hierarchical CAMs review structure led by the national CAM expert partner(s) with another set of partners trained to serve as CAM “Champions” (who our interviewees also called “Coaches” or “Chiefs”) who interfaced with engagement partners, oversaw engagement-level implementation across the firm, and monitored the state-of-the-art in CAM reporting at other firms. One partner reported that their firm formed a CAM task force that “consisted of all the engagement leaders that were associated with large, accelerated filers that would be implementing CAM this year” (P6, I1), and that the number of personnel in these roles is generally smaller; “there may be six or seven of them...doing this” (P4, I1). This centralized group of personnel develops CAM guidance, training, and decision aids for partners across the firm. The group developed knowledge through profession-wide CAM guidance and outreach and firm-wide field testing and dry-run efforts prior to implementation. They also review engagement teams’ CAM documentation, including populated CAM decision-aid templates and draft CAM reports, and communicate with the engagement partners as they make CAM judgments and decisions on their audits. Our interviewees interacted extensively with CAM “Champions” and described the Champions’ role and their consultations with them during their firms’ “dry-run” and live implementation process:

“In essence, they became our subject matter experts, because they were assigned the task of doing a bunch of these in a very short order to basically make sure that we were clearly considering and documenting our conclusions on this, and making us put some real thought into the dry-run process, and making sure we weren’t shortcircuiting anything, or...we couldn’t defend our decisions on a couple aspects of what should be a CAM or what shouldn’t be a CAM.” (P4, I2)

**Engagement Quality Review and SEC Reporting Specialists.** Some partners reported that other personnel outside the audit team reviewed CAM decisions, including engagement quality review partners and SEC experts. This additional review process seems intended to achieve consistency in CAM wording rather than CAM identification. Partners who described several rounds of communication with the firm’s CAM personnel and the auditee said that this process involved wordsmithing, without significant changes to CAM contents.

Given stakeholder concerns about added litigation risk raised during the CAM rulemaking process, we asked partners about any role of legal counsel at their firms and auditees. None of the engagements involved the audit firm’s legal counsel, but some partners reported that the auditee’s legal counsel reviewed CAM disclosures before 10-K filing.

Our findings about who is involved in CAM identification and reporting indicate that it is ultimately an engagement partner judgment, but that it undergoes approval and quality review from the national office CAM hierarchy.

## **Initial CAM Identification and Reporting Process**

### ***Dry-runs***

Our interviewees noted that their firms’ implementation process started during 2018 with extensive dry-runs. In a dry-run, an engagement team practiced the entire process of discussing CAM considerations in planning meetings, identifying CAMs by completing decision-aid templates, having them internally reviewed, drafting CAM reports, and discussing them with

company management and the board, just as if a CAMs report would be issued.<sup>12</sup> Most interviewees took part in a dry-run, and some did so in multiple periods before live implementation. One partner (P3, I1) reported that their firm conducted dry-runs for every one of its public company audits. However, a few interviewees with non-accelerated filers performed dry-runs for the first time only one year before live implementation (i.e., 2019), and in one instance, engagement circumstances forced the partner into a more hurried CAM process that did not begin until the audit planning phase for the first live implementation year.

None of our partners described a scenario in which the initial CAM identification process took place for the first time during year-end fieldwork or engagement wrap-up, a point of concern in some comment letters. Further, no partners billed for additional time associated with CAM dry-run performance, indicating that the cost of dry-runs was not passed along to auditees.

Many partners described that a key lesson from dry-runs was starting the process early. An overview from one partner in our Phase 1 interviews details key activities and timing in the live CAM implementation year<sup>13</sup>:

“...it started in earnest and officially in 2019 first quarter, where we had to submit somewhat of an explanation of how we got to our CAMs...we looked at ...critical accounting estimates...that they disclose in their 10-Ks. And that was our starting point, generally speaking, on what would be potential CAMs...a reconciliation between those two determined which ones...would be a CAM, and then we did draft notes. Those were provided to our national practice. There was a due date so they could get all of them at the same time. We received comments by the end of the first quarter, and then starting in the second quarter, we started to include those, by requirement, in audit committee materials so that audit committees could see [a] draft of probable wording for CAMs...As we learned something new as a firm or

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<sup>12</sup> Except for companies anticipating an IPO, dry-runs will no longer occur because all public company audits are now subject to the CAM requirements. However, we report on them here because of the outsized role they played in the initial year of CAM implementation.

<sup>13</sup> Our interviewees’ accounts of CAM processes indicate little adjustment from dry-runs to the requirement’s live implementation. Partners considered the dry-run as part of planning for the fiscal year-end audit under live implementation, so the process developed during dry-runs dictated the process that engagement teams followed when issuing their first public CAM reports. Thus, in this section, we report on the CAM process without delineating whether the activities and events were part of a dry-run or live event.

industry, we may have tweaked a word here or there. And then [in] the third quarter, again, we're disclosing almost the same draft of CAMs, for the most part, maybe some changes in commas and 'if's, 'and's, or 'the's, that we submitted earlier in the year." (P3, I1)

### ***CAM Identification and Internal Review***

Partners' CAM identification process begins in the audit planning phase. While AS 3101 prescribes that the initial population of CAMs comes from matters communicated to the audit committee, our interviewees report that they draw from a subset of these matters, namely issuers' significant risks and critical accounting estimates reported in their 10-Ks. Because identifying such issues was already a core audit activity, the CAMs judgment was not entirely novel:

"...In our sessions with these audit committees, we pretty much always talk about all the significant accounting estimates baked into the financial statements and why we think they're significant, why they're estimates, and how we respond to those. And, so, applying the CAM model is pretty natural, honestly, it just takes it to the next step to say what really rises to the level of...a critical audit matter. So, these concepts were not foreign to these folks at all, it was just...an additional step in that analysis." (P6, I1)

During planning and audit fieldwork, partners use firm-wide decision-aid templates to document potential CAMs and justify why a matter is or is not a CAM. Interviewees reported that their documentation is more extensive for matters they *rule out* as CAMs; that is, those items they initially identified as possible CAMs, but did not include in the final auditor's report. While one partner described dropping a CAM during fieldwork—and partners acknowledged that new CAMs could arise during fieldwork because of new facts or circumstances coming to their attention—they believed that new CAM identification arising from fieldwork would be unusual.

Next, the assigned CAMs "Champion" provides guidance, iteratively reviewing the team's documentation throughout the CAM identification and reporting process. Often, toward the end of the process, the firm's national-level SEC reporting personnel also reviews the final CAM disclosures. The following quote is representative of the hierarchical review process:

“We, as an engagement team, basically go through the process of populating this decision-making tool. We basically say, ‘Okay, for these, one item, seven items, whatever they happen to be, we believe these are most likely going to be our items that we would have as CAMs.’ We have a reviewer assigned from our national office...they’re looking at a dozen of these apiece, so there’s some consistency through the process. But then our national SEC group will...look through these templates... at the information we’ve included as potential items. They will proceed to ask us questions: ‘You said this, you said that. Why do you believe this? Why do you believe that?’ Ultimately, they will provide us feedback on whether they believe we have understated something, overstated something, need to elaborate on any details about any of the facts and circumstances of the items and basically help us come to [a] final conclusion on the items that we would identify as CAM.” (P4, I1)

### ***Discussion with Auditee Management and Audit Committee Members***

Partners then discuss identified CAMs with management and the audit committee. Our interviewees explained that the purpose is to inform the auditee parties, not to receive approval. Some partners commented that auditees paid close attention to consistency between CAMs and their 10-Ks: “And I think it’s also management—you, management, and the audit team together—because they’re looking at our draft opinion, we’re looking at their draft 10-K, and just making sure there’s nothing inconsistent between the two” (P1, I1). One partner anticipated that management would shape their MD&A disclosures to better communicate the business rationale around complex transactions reported as CAMs and to match the auditor’s language.

“I do believe that they are likely to spend more time discussing those types of items [acquisition accounting with complex financial instruments] in the MD&A and...why they’re structuring contracts the way they are, and what the benefits or cost of doing these things are...I would expect them to be making potential changes to those disclosure topics, in consideration that these CAMs are going to highlight some of those items from a reporting standpoint.” (P4, I1)

Coordination between auditors' CAMs and management's MD&A, driven by managers' reporting decisions, is one way the CAM standard has potential to influence financial reporting beyond the audit opinion.<sup>14</sup>

### *External Stakeholders*

We asked our second phase interviewees whether auditees' earnings calls included any discussion of reported CAMs, and none recalled any questions from investors or any mention of the CAM portion of the expanded auditor's report. Likewise, none of the partners mentioned any enquiries or discussions with investors or other stakeholders about CAMs in any context. Our finding is consistent with the PCAOB's description of investor awareness and current and anticipated use of CAM disclosures as "still developing" (PCAOB 2020b, 5).

## **V. THEORETICAL INTERPRETATION OF CAM IMPLEMENTATION**

In this section, we build on our descriptive findings to probe our two research questions using behavioral theory. Specifically, we consider phenomena around CAM standard development and implementation that contributed to auditors experiencing an uneventful transition and feeling safe from the uncertain threats accompanying a new audit standard with public disclosure. From our qualitative analysis of our partners' interview responses, we have identified two key mechanisms that shaped CAM implementation. The first is the extended time frame for the development and required implementation of the standard itself, which allowed the profession to have extensive input into the developing standard (e.g., testing interim proposals in the field and reporting results to the PCAOB, time to practice and train via dry-runs with clients).

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<sup>14</sup> A contemporaneous archival study examines the association between auditors' CAM disclosures and issuers' footnote language (Burke et al. 2020), but none of our interviewees reported auditee changes in actual footnote disclosure as a response to auditor-identified CAMs.

The second mechanism is herding behavior. While the term “herding” may have negative connotations, the public accounting and auditing standards of due care encourage a high level of consensus in professional judgments and decisions, operationalized as matching one’s behavior to what another competent professional would do in similar circumstances (e.g., AS 1015). We explore herding as an applicable behavioral phenomenon that underlies how the audit profession implemented the CAM standard.

### Long Runway to CAM Implementation

Perhaps unique to the CAM rulemaking process, auditors performed extensive, organized field-testing of the standard’s proposals during development, and their influence can clearly be seen in the final standard and firms’ implementation.<sup>15</sup> Coordinated through the Center for Audit Quality (CAQ), the firms first field-tested the proposed standard during the 2013 fiscal year-end using a sample of 51 audit engagements (CAQ 2014, p. 3). Auditors cited the identification of CAMs as a primary problem in the field-testing process. The first proposed standard defined CAMs more broadly than in the final standard, specifically:

Those matters the auditor addressed during the audit of the financial statements that (1) involved the most difficult, subjective, or complex auditor judgments; (2) posed the most difficulty to the auditor in obtaining sufficient appropriate evidence; or (3) posed the most difficulty to the auditor in forming an opinion on the financial statements. (PCAOB 2013)

Applying this definition in field-testing, some auditors reported identifying up to 45 CAMs in a single engagement (CAQ 2014, p. 13). The CAQ identified the absence of materiality considerations and documentation guidance in the standard as factors driving the proliferation of potential CAMs. To identify CAMs, auditors had relied on the degree of judgment in an audit area

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<sup>15</sup> Our interviewees referred to these efforts as “field-testing”, “dry-runs”, “beta testing”, and / or “pilots”. For simplicity, we review to the CAQ coordinated testing during standard development as “field-testing” and the preparation undertaken by the individual firms after the final standard as “dry-runs”. Another way the profession identifies implementation issues is through staggered introduction of new requirements conditioned on issuer type.

to identify CAMs, and “98% of the actual CAMs identified during...testing were previously communicated to the audit committee” (CAQ 2014, p. 4). These results heavily influenced refinements to the re-proposed standard, which limited CAMs by restricting their source to those material items communicated (or required to be) to the audit committee and by explicitly identifying matters that are not CAMs, such as areas for which it was simply difficult to obtain audit evidence (PCAOB 2016). This measure appears to have reduced confusion about identifying CAMs, indicated by the smaller populations of potential CAMs our participants reported in dry-runs and live implementation.

The entire process from the first PCAOB discussion paper to issuing the first CAM reports took about eight years, giving firms and partners extensive time to prepare for implementation. While some academics and regulators (including the SEC, which oversees the PCAOB) have criticized the subjectively slow pace of audit and accounting standards development (Dye, Glover, and Sunder 2015; FASB 2002; SEC 2002), others have called for slowing the pace of change (e.g., Tysiak 2016). Our participants uniformly considered the long lead-up to be a positive and important factor enabling effective CAM implementation.

“The way it was rolled out, at least, was done in a way to not put too much pressure on registrants and allow for enough lead time to do it in a way that didn’t create more risk. To me, it felt like there was a good job in providing runway and guidance on implementing, and it allowed the firms to address it in a timely manner.” (P1, I2)

“...I think the industry and the PCAOB and the SEC did a really good job primarily... because they started early, had plenty of time to vet things out. It wasn’t thrown together and it wasn’t rushed and firms cooperated with regulators and it just really went smoothly. I mean, there was just never a sense of urgency, a hiccup, anything that got us concerned.” (P3, I2)

The outcome involved little uncertainty about demands and disruptions to the typical year-end audit process for both audit and auditee personnel, illustrated by a sense of preparedness and confidence in live CAM implementation:

“I would say that the first... unofficial round, when the teams themselves did their best to draft CAMS back in mid-to-late 2018, there were significant changes, and I think the firm probably kind of saw what other firms were doing, captured those thematically, probably talked amongst themselves to...make sure that one firm wasn’t going to be terribly different from another in complying with the PCAOB. The PCAOB has been pretty transparent with their expectations as well through different speeches and things like that. So, I don’t think that was a really hard thing to do. Since then, there’s been minimal changes to the drafted CAMS and there’s...really no ambiguity about what is or isn’t going to be a CAM going into 2019’s 10-K at this point.” (P3, II)

### ***Preparing Auditees***

Engagement partners prepared their auditees for initial CAM standard implementation by first informing them, in the year before live implementation, about how they would execute the process, even for engagements on which they did not perform a dry-run. Preparation for CAMs involved educating auditees using materials developed by the firm’s national office. One partner described highlighting the new standard’s relation to more familiar, routine processes: “*...in our sessions with these audit committees we pretty much always talk about all the significant accounting estimates baked into the financial statements, and why we think they’re significant, why they’re estimates, and how we respond to those*” (P6, II). Several partners remarked that the CAM process gave them new perspective on matters habitually discussed with the audit committee. Specifically, partners streamlined their audit committee discussions, not to avoid items becoming CAMs, but to achieve precision on what really are “critical” accounting estimates and disclosures. As their perspective sharpened on issues that were “critical”, they educated their auditees on how to identify such matters. When asked about the new CAM standard’s benefits, one partner stated:

“So, it could be that we would add a little more detail into what we’re providing there, or it could be that we’re taking away detail on things that really aren’t that critical. So, if they aren’t critical, why are we presenting it? ...I think [that] has probably been insightful and helpful to our process, which was not the intent of the standard...But I think the bigger benefit has been helping us as auditors think

through...’Do we have good alignment with what we’re presenting as critical to the audit committee and then what we’re going to present as critical in the opinion?’ And if we were putting a whole bunch of stuff in there that really wasn’t critical, maybe we don’t need all that in there.” (P1, I1)

Preparing their auditees well before CAM implementation and embedding this preparatory information within routine audit communications contributed to a smooth process during live implementation in the audit reporting and wrap-up phase:

“Client reaction to CAMs was extremely benign. Audit committee reaction to CAMs was maybe not extremely benign, but benign. I think that’s in part due to all the planning and the dry-runs...for at least a calendar year, we put in draft CAMs, so audit committee members might have been interested early when they saw it for the first time, and then their interest waned as we...regularly commented that nothing material has changed since the last time you reviewed this, so it wasn’t a big crescendo or anything like that at the 10-K meetings where you were ultimately saying, ‘Here’s our final CAM.’” (P3, I2)

“As a result of this dry-run process, we always knew [we] were going to have to come back and go through the process again, but at that point we communicated those CAMs, as they were approved and written, to the management team, the CFO, and chief accounting officer. They really had no feedback on that. I mean, I think they see this as something that is in our purview, but by the same token it does impact them so they need to read it, they did, they did not have an issue with anything we said because honestly, it was quite consistent with what they say in their critical accounting matters disclosures.” (P2, I1)

Through extensive preparation, auditors averted a burdensome CAM process that could have added time and, perhaps, auditee pushback in the reporting phase of the engagement. Our partners’ accounts reveal that even auditees that did not react passively contributed to positive, rather than burdensome, CAM implementation experiences. One partner described an audit committee’s desire for extensive up-to-date discussion on CAMs:

“They were highly engaged. In all honesty, I was shocked about how engaged they actually were in this process...We had, I think, an hour and a half allocated for both those topics [SEC update and CAMs]...It became apparent through the process that we were going to boil right through the halfway mark. One of the committee members said, ‘Hey, do you guys mind if we keep going on this CAM thing?’” (P5, I2)

## ***Ready for Takeoff After the Long Runway***

Because of the CAM standard's novelty and public disclosure requirement, we expected that partners might face uncertainty and conflict about how to apply judgments unique to the facts and circumstances of their engagements. However, our interviewees' descriptions of CAM implementation depict a smooth process that did not evoke discomfort or fear. The partners' descriptions of a low-risk, low-pressure implementation process, where feelings of concern and urgency were absent during live implementation, contrast sharply with the profession's sentiment when the PCAOB first proposed CAMs and even after the standard had undergone several revisions. This observation is surprising, given that the CAMs standard represents a transformative change to the auditors' report with the potential to draw scrutiny.

## **Herding Behavior: Metaphor and Archetypes**

The second mechanism that we identify as contributing to uneventful CAM implementation is herding behavior, as the pattern of behavior that emerged from interviewees' accounts reflect surface and structural similarities to herding behaviors. We suggest that herding should not necessarily be viewed as a negative set of behaviors, but rather an emergent property of group behavior widely observed in nature as an effective strategy to deal with complex problems, such as predation and resource optimization (Amali and Dinakaran 2019).<sup>16</sup> To the extent that identifying and reporting CAMs are outcomes for which audit firms and engagement partners must allocate resources, then the most efficient way of minimizing resource use and risk of loss may rationally be for auditors to herd together. We use herding behavior as a metaphor for

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<sup>16</sup> The mathematical modeling of meta-heuristic algorithms identifies several herding behaviors that can be used to find approximate minimization solutions to complex multi-dimensional problems (Amali and Dinakaran 2019). Engineers and computer scientists apply these herding meta-heuristics to solve problems such as oil spill clean-up, power generation optimization, preventing airline disasters, circuit optimization, and machine learning (Lien et al. 2004; Amali and Dinakaran 2019).

the actions that partners described when implementing the new standard, particularly the persistent theme that they wanted to avoid “sticking out”. We take an inductive approach to reasoning from field observations up to general behavior and theory (Malsch and Salterio 2016). Using herding theory as a theoretical lens, we deploy analogy as, “...a central form of induction used to generate inferences in pragmatically important situations...by transferring knowledge from a source domain that is better understood” (Holyoak and Koh 1987).

Following Westermann, Cohen, and Trompeter (2019), we approach the remainder of our analysis using herding behavior as a theoretical lens, analogy, and structural metaphor (Lakoff and Johnson 1980) for understanding the profession’s CAM implementation as a profession-level and partner-level phenomenon. Herding is a response to actual, perceived, or imagined threats (Festinger 1954; Scharfstein and Stein 1990; Ginelli et al. 2015). Herding theories describe ways in which individuals respond to dangers by banding together and blending in physically or behaviorally (Sharfstein and Stein 1990; Ginelli et al. 2015). Individuals outside of the herd may find themselves subject to various negative outcomes, such as predation, impoverishment, aggression, or loss of reputation. We use two archetypes to interpret and synthesize our partners’ interview responses: (1) structural herding by a responsible shepherd—grouping together under the leadership and protection of a shepherd; and (2) emergent herding by social comparison—adjusting behavior to observed and explicitly communicated behavior, ideas, and expectations of referent others (Festinger 1954; Asch 1956; Scharfstein and Stein 1990; Ginelli et al. 2015).<sup>17</sup>

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<sup>17</sup> Examples of herding are abundant in the natural world. Shepherded herding in nature includes matriarchal leadership of elephant herds, patriarchal leadership of gorilla troops, and sheepdog herding in agriculture. Herding by social comparison can occur in the flocking and schooling behavior of birds and fish where there is no discernible leader, yet individuals move in unison in response to first mover individuals (Ginelli et al. 2015).

### **Dangers of Sticking Out from the Herd**

Despite interviewee sentiment consistent with CAM standard implementation as “a nothing burger”, interviewees tended to express uncertainty about the consequences of “sticking out”, echoing PCAOB reports that partners were concerned about their CAM reports being outliers (PCAOB 2020b). Further, firms restricted CAM activities to the highest ranks of the audit team, suggesting that CAMs decisions are too risky for relatively lower-ranked staff involvement. From the perspective of herding behavior, we explore: what is the source of the perceived danger of sticking out? In other words, from what threats are auditors seeking safety?

The pressure points that partners raised are not internal judgment and decision-making difficulties with interpreting the new standard or making sense of how to apply it, but rather external concerns about how others could potentially scrutinize and respond to their audit work and conclusions. Auditors’ strategy to protect against this external threat is reporting CAMs with a high degree of uniformity, as reflected in not only the audit processes we observe, but also findings of textual similarity among CAM reports within audit firms (Burke et al. 2020; Klevak et al. 2021). During the CAM rulemaking process, auditors resistant to the proposal raised concerns that added disclosure would expose them to litigation. However, only one of our interviewees raised the possibility of litigation without our prompting. When asked about their expectations that investors would react to CAM disclosures, one partner described a hypothetical restatement where the auditors did not previously identify that account as a CAM: “...inherently, you’ve got the trial lawyer concern...now, all of a sudden, we’ve exposed ourselves to having somebody second guess the work we did and documented related to...the account. Until something goes wrong there, we’re not going to know the answer to that question” (P3, I1). In contrast with this concern, another partner expressed assuredness that investors reading the CAM report would find little to act on:

“...there really isn’t any juicy insight...There’s no trashy romance novel with what we do. We’re auditors, right?” (P6, I1).

**Imagined PCAOB scrutiny.** The absence of concern about CAM litigation risk and investor reactions suggests that these are not the primary threats partners feel the need to protect themselves from. Partners did, however, express strong emotions when anticipating PCAOB inspections and scrutiny of CAMs. During Phase 2 interviews, one partner remarked, “I really hate talking about PCAOB inspection. It’s bad juju” (P5, I2). Another partner, commenting on whether implementing the CAM standard shaped the engagement team’s audit testing or conclusions, responded:

“Not really, because...driven by our inspector, the PCAOB, all of our people’s awareness of documentation requirements, risk assessments, testing strategy, summarization of work...has been so focused in those areas of judgment for so long. I would say that the answer is no, they didn’t change their opinion of what they were doing on a day-to-day business...just given where we’ve all been driven and trained based on regulatory expectations of us to begin with.” (P3, I1)

Another partner imagined:

“If the PCAOB were to have come in and reviewed the file...If they had taken exception with the fact that I didn’t call something a CAM...I don’t know how this would play out. Because the firm would stand behind me on this, they told me they would...And we just don’t know enough about how they were going to review this stuff.” (P2, I2)

The uncertainty about PCAOB inspections and the added uncertainty related to how CAMs could draw scrutiny loom large in our interviewees’ minds. Partners are aware that inspectors focus on higher risk engagements and areas, so reporting a CAM may increase the area’s vulnerability to inspection. Getting explicit national office support in CAMs consultations suggests that this consideration of inspections is a collective, firm-wide orientation.

Prior research reports that concerns about PCAOB inspection are well-entrenched within auditors' collective psyche (Johnson, Keune, and Winchel 2019; Westermann et al. 2019; Ege, Knechel, Lamoreaux, and Maksymov 2020). Our finding parallels Westermann et al. (2019), who report that inspection threat greatly influences auditor conduct and "has led to uncertainty reduction strategies" (p. 706) rather than assuring that accounting information is reliable for financial statement users. Audit partners' and firms' behavior in response to the inspection threat reflects a pattern of herding behavior, wherein pressure compels individuals to achieve uniformity, rather than communicate about the audit in a way that informs users. Through herding, individuals counter uncertainty with "a subjective feeling that the opinion is correct and valid" (Festinger 1954, p. 125). In this respect, beyond reducing vulnerability to scrutiny, our findings indicate that herding serves to produce feelings of safety in engagement partners' CAM decisions, reducing engagement partners' vulnerability and assuaging their apprehension.

At the time of our interviews, PCAOB inspection threats were speculative, as events that prompt greater scrutiny of the auditors' conclusions (e.g., inspections, restatements) had not yet occurred, so the consequences of CAM reports "sticking out" were unknown. In our review of 2019 and 2020 PCAOB inspection reports for our interviewees' firms, Part 1B findings on CAMs were reported for only four inspected audits, and the reports indicate that inspection teams performed procedures on CAMs not as a high audit risk area, but as review of implementation. The inspectors found "non-compliance" with AS 3101 due to inconsistencies between CAMs reports and audit firm documentation, and matters communicated to the audit committee that were not included in firms' procedures to rule out CAMs; the reports indicate that the instances of "non-compliance" with AS 3101 do not mean other CAMs should have been communicated in the auditor's report. The inspection findings relate to audit documentation precision, not judgments

about determining or reporting CAMs, suggesting that the worst of the imagined dangers of being an outlier have not manifested, perhaps headed off by herding in the implementation process.

### ***Herding via Shepherds: CAM Leaders***

Shepherding can be defined as a herding behavior “in which...agents guide or control” members of the herd (Lien et al. 2004). Lien et al. (2004) identify four shepherding behaviors: covering, herding, patrolling, and collecting. We consider how these shepherding behaviors are reflected in the firms’ hierarchical review structure with designated CAM leaders, and those individuals’ actions as described by our interviewees.

In “covering” behavior, shepherds guide the herd to visit all of areas of the environment, which is useful to increase grazing coverage and efficiently use all available resources (Lien et al. 2004). Our interviewees described how their CAM leader sometimes prompted them to consider CAM areas that they may have dismissed earlier, based on monitoring firm-wide and profession-wide activities. “Herding”, as a shepherding behavior, is purposefully moving the herd from point A to point B (Lien et al. 2004). The profession-wide implementation of CAMs illustrates this behavior, as the firms tasked specialists as “shepherds” with the responsibility of safely “moving” the firms from the pre-CAM to post-CAM space, and the engagement partners from dry-runs to planning to reporting. “Patrolling” behavior involves shepherds keeping the herd out of a particular, often dangerous, area (Lien et al. 2004), just as the exhaustive CAM review process discouraged partners from reporting too many or zero CAMs, which potentially exposes them as outliers. Finally, in “collecting” behavior, shepherds seek to contain the herd within a safe area (Lien et al. 2004). CAM leaders contained CAMs processes and reports within the boundaries of firm-wide and profession-wide practices and norms.

All interviewees described a centralized CAM implementation hierarchy at their firms, with a primary directive of achieving consistency that essentially demarcated a safe zone. Several interviewees' descriptions characterize their firms' CAM leaders as having a great deal of shepherding influence to keep engagement partners within this safe zone. One partner described the work burden of the CAM leader: "...We have a gentleman who is in charge of the CAM program. I think he is literally going to review every CAM that gets identified, which sounds completely awful to me..." (P2, I1). Another partner stated that the CAM leader's role is "...to make sure that if we were treating something as a CAM or as a non-CAM, that that was consistent with peer companies and the way our practice was looking at those...." (P8, I1)

Some partners conveyed how, despite the centralized responsibilities of CAM leaders and specialists, they perceived their firm's CAM implementation as somewhat different from processes they have experienced with other new auditing standards, conveying a sense of engagement team autonomy:

"I think...the mandate that this be engagement specific, ...not boilerplate, [that] this be subject to the facts and circumstances of the client, I think the firm has approached this in the mindset of, 'there's no one right answer to this'...This is...a very different approach, where we have probably a lot more left to the engagement team...I think this is more of a...ground up or engagement team up approach to implementation, versus a lot of the other stuff, which is generally...the national office formulates a template, practice aid, et cetera. and basically...pushes it down to the engagement team." (P4, I1)

"We had active...dialogue with them throughout, but they always let the engagement team go first in terms of saying, 'We believe this is a CAM or this one isn't'...But if they were to feel strongly that there was an incremental CAM that had not been identified by the team, they would have coached us through that to give us points of consideration to think about. I think, really from a process standpoint, they look to the teams to independently identify the CAMs." (P7, I1)

Another partner reinforced that CAM leaders' and specialists' role is primarily oversight: "Our national office just basically providing oversight relative to consistency, and wordsmithing

and language, and making sure that we've documented clearly, [we've] captured the complete potential population. 'Have we gotten to the right answer based on everything you've told us?'" (P4, I1).

Overall, partners conveyed a sense of security and satisfaction with the role of shepherds and the overall process. As one partner expressed when describing the centralized structure and the individual tasked with reviewing CAMs:

"I felt like the process was appropriate and reflective of what we needed to be doing as a firm. I don't know if there's a different or a better way to do it, but I think...the tools we were given, and guidance we were given, the resources we had, I thought were adequate, and were appropriate." (P2, I2)

The same partner indicated that "the firm would stand behind me on this, they told me they would..." (P2, I2). Although internal reviews by CAM specialists scrutinize the engagement team's judgments and decisions, engagement partners conveyed that these reviews protect them from the more consequential threat of PCAOB inspection. CAM specialists foster a collective attitude of vigilance towards eliminating any elements of CAM identification and reporting that land outside the safe zone, while giving engagement partners a clear delineation of the boundaries and the security of knowing they have not breached them. The authoritative nature of engagement teams' consultations with CAM specialists, with an emphasis on bureaucratic rules and practices, mirrors the consultation practices imposed immediately post-SOX as a response to public scrutiny of auditors' decisions (Aghazadeh, Dodgson, Kang, and Peytcheva, 2021) and also recalls standardization through central authority to address the globalization of audit practices (Barrett, Cooper, and Jamal 2005). Faced with another major transformation of audit reporting that could expose auditors' decisions to greater scrutiny, audit firms reproduced this organizational consultation structure to protect against vulnerability.

### ***Herding via Social Comparison***

Theory on herding behavior via social comparison posits that, when dealing with ambiguity about correct performance, individuals identify their reference groups and uniformity pressure compels them to behave consistently (Festinger 1954). Under this theory, individuals act to reduce discrepancies between their opinions and those of the reference group. Since partners faced ambiguity with no objective criteria of the “correct” topic, number, or wording of initial CAMs, we apply Festinger’s (1954) social comparison theory as structural metaphor for the herding patterns in auditors’ CAM decision processes.<sup>18</sup> Our interviewees reported that they, or their national CAM specialists, determine the norms for CAMs by making comparisons to referents: other clients at the firm, peers in the industry, and prior-year CAMs. The referents’ CAM reports mark the “safe” boundaries of the herd for the number, topics, and wording of CAMs. Partners cannot determine the “correct” CAMs because they involve professional judgment, and during implementation of the new CAM standard, no data is available to discern “incorrect” CAMs through market or inspection consequences.

The CAMs specialists engaged in these referent comparisons, and then pointed engagement partners to social comparison referents:

“One of the things that our coach did on this particular job was to point us to a couple of actual filed CAMs and asked us...whether we thought that would be appropriate...and [to]reflect on whether we needed to adopt any of that or whether it rang true to us.” (P5, I1)

Our interviewees perceived that the CAMs specialists networked with their counterparts at other firms to make sure their firms’ approach was not out of line with others’:

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<sup>18</sup> Other theories of herding behavior are proposed in various disciplines, including herding for survival in evolutionary biology (e.g., Hamilton 1971), herding to make sense of an uncertain world in social psychology (e.g., Asch 1956; Bandura 1965), and herding to preserve reputation in behavioral economics (e.g., Scharfstein and Stein 1990). While these theories could also serve as a theoretical lens for our analyses, we use Festinger’s (1954) social comparison theory because it reflects the discrepancy-reducing actions that partners reported in CAMs implementation.

“He is the central point of contact and I have to believe he’s in contact with his counterparts at the other firms. I’m speculating a little bit but I can’t imagine that we would want to be out there as the only firm making our clients report ten CAMs… I have to think that there’s probably some alignment there in terms of the number of CAMs and the types of CAMs that are going to be reported by industry. I don’t know how careful they have to be talking to each other, but I would imagine if the firm felt like we were an outlier to the high or the low, they would be trying to figure out [why], because nobody really wants to be an outlier, everybody wants to get the right answer…”(P2, I1)

“It [CAMs reporting] was certainly not a ‘one size fits all,’ but it was certainly not also an item where each engagement team said, ‘Go find what you think you have, and write it up, and we’ll derive a whole bunch of inconsistent disclosures at the back end.’ It was, in a lot of ways, designed to make sure that we were saying the same story, talking about the same items, disclosing the CAMs in a format that was consistent across companies that were similar.” (P8, I1)

Engagement partners also considered CAM developments beyond their firm as guideposts for consistency in CAM reporting. They followed professional outlets, read guidance from the PCAOB and CAQ, and looked at broad patterns in CAMs reporting to ascertain the profession’s norms for CAMs. As a result, during our second phase of interviews, partners were readily able to recount detailed, up-to-date statistics on CAMs:

“And you might have heard this from other folks if you’ve talked to people in our firm, and I’m sure the other firms have done their own analysis on this. But if you look at all the large accelerated filers that have year ends of June 30th, 2019 that have started to file their 10-K. Of those, 35% of them had Goodwill and intangible assets as a CAM. 19% had revenue, and income taxes was 15%. So those are the three...” (P7, I1)

**Number of CAMs.** Consensus among our interviewees was that the CAM identification and reporting process is presumed to culminate in **at least one CAM**. Our partners implied a minimum number of CAMs, anticipating that engagements reporting zero CAMs would face even higher scrutiny and skepticism.<sup>19</sup> When asked about the possibility that an auditor might report no

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<sup>19</sup> This is reflected in the PCAOB’s interim CAM analysis (2020a), which shows that, of 2,220 CAM reports, only 12 (0.5 percent) reported no CAMs. The PCAOB also reports survey results indicating engagement partners “felt pressure to identify at least one CAM” and “concern about being an outlier by reporting zero CAMs” (2020b, p. 10).

CAMs for an issuer, partners could not easily describe a set of facts and circumstances that would result in zero CAMs, but they were interested in contemplating the possibility as a thought exercise. One partner perceived: “Our firm doesn’t have an absolute view on this, but as a general statement, I think our firm...expected that all public clients have at least one CAM. Now, that doesn’t mean you identify one for the sake of doing that” (P7, I1). Another partner identifies the central concern of firms and engagement teams, that reports with zero CAMs would stick out as outliers and immediately draw PCAOB scrutiny:

“I get the firm impression that if we were to issue an audit opinion with zero CAMs, that they [CAM specialists] believe that would be an immediate PCAOB flag to go inspect that job. So, I think the additional oversight in order to get additional approval, if you really say you have zero, is basically saying, ‘kay, we have to be 100% sure that is the right answer because the PCAOB will knock on our door immediately’...So...without specifically saying it... you will have at least one...I think the, ‘We will have one,’ is from the standpoint of...’Be concerned about the scrutiny that we haven’t done enough to identify something that’s of potential risk’ ...I do believe that our firm believes that every one of our clients has something that’s a little difficult to get our hands around, but I think the bigger issue is they don’t want to be seen as an outlier where we’re going to be the one person who publishes a report that says, ‘Nope, everything’s great. We got nothing to worry about.’” (P4, I1)

Partners also spoke of an implied maximum number of CAMs, speculating that profession-wide, they “think anywhere from one...to three is probably where people are going to land, generally speaking is what we’re hearing” (P2, I1). Additional scrutiny from CAMs specialists was anticipated for audits with a high number of CAMs:

“Our national office is absolutely looking at that...There has been no communication...on, ‘You can’t have more than X’...They have basically left it open to be one or greater. Now I’m sure if an engagement team went back and said, ‘We have seven,’ they would expect us to have an audit that is 10,000 hours long in order to be able to address all of these complex issues. So, I think they probably would give us pushback if we had that many.” (P4, I1)

**CAM topics.** While CAM leaders looked to first movers to determine the number of CAMs to report, engagement partners looked to industry peers to anticipate CAM topics to report and

how to word the disclosure, but expressed some difficulty in identifying comparable peers: “It was difficult to find a lot of real comparable companies to ours. But that was one of the things we had to go do, was go see what did we find in the marketplace” (P5, I2). Interviewees were cognizant that looking to profession-wide norms could cause CAM reports to violate the spirit of the standard and the intended usefulness to financial statement users. When asked about whether CAMs will enhance auditors’ reports, one partner replied:

“Yeah, I don’t know if I can say better or worse, but what I’m somewhat concerned about is...what I’m afraid is going to happen is that CAMs across the [industry] are going to become uniform, right? And so, auditors will start issuing these opinions and they’ll just extract language from some of the early adopters or some of the big guys or whatever, maybe tailor it a little bit to their own clients and then paste it right in there, and it becomes not unique, right? It becomes boilerplate at that point in time.” (P6, I1)

All interviewees discussed the “stickiness” of CAMs, that is, the tendency for CAMs reported in the first year, or even in the dry-run process, to persist in future audit reports. All partners anticipated that future CAMs would be considered in light of those reported in prior years and those reported by industry peers or by issuers with similar economic activity. We conducted our second phase interviews in 2020 amid COVID-19 shutdowns, making salient the possibility for shifting facts and circumstances that could affect CAMs (although none of our interviewees reported COVID-19 specific CAMs). One partner explained, “Could COVID and all the impacts result in something that’s a critical assessment that maybe wasn’t? And that certainly could. But we haven’t had any specific discussions on that, yet. Maybe it’s still too soon. But we haven’t had any specific discussions on that” (P3, I2).

One partner described how a change in his CAM leader between the dry-run and live implementation year led to focusing more on profession-wide norms. In discussing a matter that was a potential CAM during the dry-run, but was ultimately ruled out as a CAM because it was

routine for the issuer, the partner noted: “...the people who reviewed that the first time were fine with that conclusion. So, the new set of eyes is saying, ‘Look ...’—and maybe this is an example of evolution—they’re saying, ‘Look, whenever we see material acquisition, even if it’s cookie-cutter like you guys are describing, we are typically seeing that be a CAM’” (P2, I1).

Comparison to CAM reports of referent others enables engagement teams and firms to discern the norms for number and topics of CAMs, and herd within those norms to avoid sticking out. CAM leaders and specialists and engagement partners looked across the profession and across the firm and acted to reduce discrepancies in initial CAM reports, when data on outcomes was limited. Partners’ accounts of implementation indicate a sense of security and confidence from achieving consistency in CAMs across the profession.

## **VI. DISCUSSION AND CONCLUSION**

This study examines engagement partners’ initial CAM identification and reporting processes as they navigate the transformative change in expanded auditor reporting. We specifically examine how engagement partners experienced CAM implementation rather uneventfully, despite the CAM requirement being part of an arduous rulemaking process (Minutti-Meza 2021). The sources of friction were relatively mundane, such as more burdensome documentation when narrowing potential CAMs down to reported CAMs, and wordsmithing the final CAM reports. Our data suggests that several factors reduced the frictions typically accompanying novelty and uncertainty, and these led to a smooth CAM implementation. First, a long implementation runway where the final AS 3101 standard underwent adjustments in response to iterative stakeholder outreach and engagement teams participated in field testing and dry-runs. Second, underlying initial CAMs processes was a drive towards consistency in CAM reporting within audit firms and across the profession, displaying herding behaviors within boundaries to

deal with uncertainty about the “correct” way to report CAMs and avoid sticking out. We use herding behavior as a structural metaphor for audit firms’ and engagement partners’ actions that emerged in the CAM implementation period, to understand the forces that compel individuals to enact such behaviors to dispel uncertainty and defend themselves from dangers. Partners imagined that conspicuous CAMs reports could draw scrutiny not only from their own national office, but also from audit inspectors.

While smooth implementation connotes a successful process, herding behavior is not the only conceivable way that auditors could have implemented the new CAM standard. Had the profession implemented CAMs based on partners’ engagement-specific insights with an eye to communicating informatively with financial statement users (as the standard strongly suggests), diverse judgment and reporting could potentially have developed and changed over time. This diversity could facilitate identifying and propagating the best judgment frameworks and criteria. Further, although consulting with CAM leaders and specialists promotes firm-wide consistency, engagement partners’ sense of safety from herding could reduce attention partners might otherwise give to planning for contingencies. Partners diligently rehearsed to achieve a smooth process, but they may be less prepared to respond to changing or unexpected conditions, such as the discovery of a new CAM, the loss of a prior-period CAM, inspection findings, or assurance over novel financial reporting areas. For example, Asch (1956) provides evidence that herd-like behavior can degrade judgments, even when the individual making the judgment otherwise knows the correct answer with certainty.

Our findings make several contributions to the literature. For audit researchers, our study describes CAM identification and reporting activities, events, and decision-makers in the field. By gathering real-time field data from audit partners on their initial CAM processes, we deepen

institutional insights from early reports on the CAM identification and reporting process (Daugherty, Dickins, Pitman, and Tervo 2021). We also complement archival research with insights into the processes that result in textual similarity across (Burke et al. 2020; Klevak et al. 2021), and provide new evidence that common CAMs are not automatically CAMs for all engagements. Our findings on partners' CAM judgment and decision processes are vital for conducting future research that is externally valid and meaningful for both practice and theory.

Our study also contributes to the discussion on the pace of change in auditing and accounting standards. The participants universally agreed that the long lead time helped the profession implement CAMs smoothly. While there may be downsides to slow standard setting—perhaps a faster, less collaborative process could have provided more impactful information for investors or more quality differentiation in practice—the clear upside for the profession was the time to collectively understand the standard, develop professional judgment and processes, educate their clients, and turn a major transformation from being perceived as initially threatening to ultimately untroubling.

The overall sentiment from our interviewees is that their experience of CAM implementation was uneventful, but given the nascent stage of CAM reporting, events that would draw investor scrutiny have not yet occurred, such as changes in auditors' reported CAMs (new CAMs or prior CAMs no longer reported) or restatements in 10-Ks. Future research could investigate how CAM processes differ when circumstances change, or whether the benign reaction of investors and auditees that we observed persists in such events.

## APPENDIX

### **Panel A: Phase 1 semi-structured interview protocol**

**Objective:** To examine audit firms' preparations for CAM implementation on the engagement.

#### **Main questions**

Tell us about your experiences and interactions related to CAMs in the past year (without naming any companies):

- Describe any potential CAMs you have identified at this point in planning.
  - Why are these potential CAMs?
  - What sources did you engage with to identify potential CAMs?
  - What tools or resources (e.g., training, guidance, decision aids) did you use to identify potential CAMs?
- Walk us through your communications about CAMs within your audit team, within your accounting firm but outside of your audit team, and with auditee personnel and audit committee members.
  - What is the communications timeline?
  - How did you decide the form (written versus verbal; formal versus informal) and content of communication?

#### **General questions**

- What do you see as reasons for including CAMs in the auditors' report?
- What was wrong with the existing auditors' report?
- In what ways are the new auditors' reports with CAMs better or worse?
- Have you noticed any changes in how auditors communicate with management and/or the audit committee over time? How would you describe these changes?
- What accounting firm resources did you engage with to prepare for CAM implementation (e.g., training, guidance, decision aids)?

### **Panel B: Interim data collection**

**Objective:** To identify the activities, factors, and parties involved in selecting CAMs, with an emphasis on identifying key judgments and pressure points *as they arise*, at a time that is as close to the experience as possible.

#### **Events/activities of interest: examples**

1. Communication about potential CAM
2. Documentation of potential CAM in audit workpaper
3. Informal meeting about potential CAM
4. Formal meeting about potential CAM
5. Communication about actual CAM
6. Documentation of actual CAM in audit workpaper

7. Informal meeting about actual CAM
8. Formal meeting about actual CAM
9. Working billable hours related to CAM

**Items to report in template:**

1-5 sentence description of event/activity (without naming any companies):

Duration of event:

Less than 1 hour	1-2 hours	2-4 hours	4-8 hours	More than 8 hours
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Where were you?

Was this activity...Planned?              Unplanned?

Other individuals involved in activity:

	Involved in entirety	Involved in part	Not involved
Audit staff			
Audit senior(s)			
Audit manager(s)			
Other audit partner(s)			
National office personnel			
Other audit firm personnel			
Audit firm legal counsel			
Auditee executive(s)			
Auditee controller			
Other auditee personnel			
Audit committee			
Auditee legal counsel			
Other (please describe):			

Indicate how you felt about the activity:

	Not at all	A little	Somewhat	Very much
The activity was important to me.				
The activity was challenging.				
The activity was confusing.				
I felt in control of the activity.				
I was able to perform the activity.				
The activity was successful.				

Others were expecting a lot from me during the activity.				
I felt good about myself during the activity.				
I felt comfortable during the activity.				
I felt comfortable about the outcome of the activity.				

Do you wish to report another event/activity at this time?

### **Panel C: Phase 2 semi-structured interview protocol**

**Objective:** To examine what activities took place to select and finalize reported CAMs.

#### **Main Questions:**

1. The last time we talked, you told us a lot about [...]. Did that/those end up being the CAMs reported?
2. If you were still considering any CAMs when we last spoke, were they ultimately included or excluded?
3. During busy season, did you remove any CAMs you had identified?
4. Did any new CAMs arise during the audit?
5. As you progressed through the audit, did any new people (client or audit team/firm) join the CAM process?
  - a. The last time we talked, the people you described were [...]
  - b. How did you decide whom to involve in the audit matter?
  - c. Describe your interactions with the CAM point of contact for your firm during this engagement [last time we talked, you described...]
6. Was the amount of documentation different for this past year?
  - a. Was this difference greater than you expected?
7. Were your actual results for hours compared to budget different for this past year?
8. Of all these events and activities that you, what felt like the most challenging time when you were doing CAMs work?
  - a. What was the challenge in doing that work?
9. Were the CAMs ultimately informative to users?
10. What will change next year?
11. Describe any post-implementation review activities you are doing.
12. Do you have new knowledge or skills about CAMs that you did not have 6 months ago?

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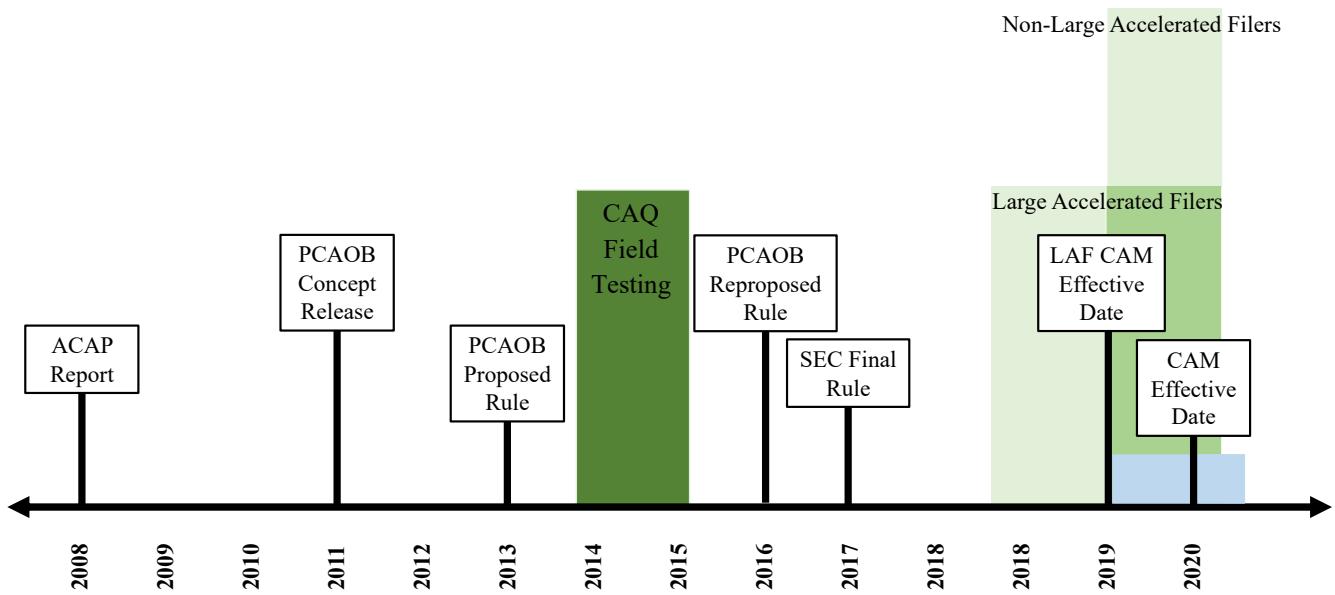
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**FIGURE 1**  
**Timelines for CAM Rulemaking, Implementation and Study Data Collection**



This timeline summarizes key events in CAM rulemaking and implementation. The shaded areas represent key periods in which CAQ-led CAM proposal field testing, CAM implementation dry-runs, CAM live implementation, and research team data collection took place.

**Legend:**

CAQ Field Testing among Member Firms
Firms' Dry-Runs on Selected Engagements
CAM Implementation for Large Accelerated Filers
Researchers' Data Collection

**TABLE 1**  
**Participants' Professional Experience**

	<b>Public Accounting Experience (Years)</b>	<b># of CAM Audits as Signing Partner</b>	<b># of CAM Audits as Quality Review Partner</b>	<b>% of Annual Work Time Spent on Audits that Report CAMs</b>
Mean	22.1	1.6	1.4	54
Median	24.5	2.0	1.5	45
Range	12-32	1-2	1-3	20-90