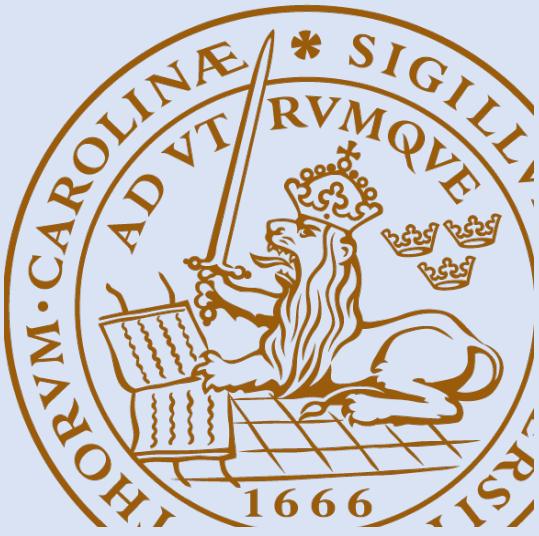
How systemic change is understood by nursing home leaders and implemented using plans of correction

Shannon Gadd | LUND UNIVERSITY



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Abstract
When there is a statement of deficiency given to a nursing home, the Centers for Medicare & Medicaid Services (CMS) requires facilities to submit a plan of correction stating how they will create systemic change to prevent recurrence of the incident. This study reviewed 90 statements of deficiency and associated plans of correction from across the United States for abuse, neglect, and exploitation from July 1, 2024 through December 31, 2024. Data analysis of the plans of correction showed that 100% included education and re-training as systemic changes. While these may be useful strategies, research in human factors and system safety defines education and re-training as quick fixes, not systemic changes. Interviews with nursing home leadership were conducted to determine what understanding leaders had of systemic change and how they use plans of correction to implement systemic change in their facilities. These interviews revealed that leaders know quick fixes are not improving quality in facilities but feel the survey process and overall compliance and regulation is not designed to address underlying systemic issues. The study also found conflicting guidance available from CMS on its expectations of systemic change.

Riskhantering och samhällssäkerhet
Lunds tekniska högskola
Lunds universitet
Box 118
221 00 Lund

http://www.risk.lth.se

Telefon: 046 - 222 73 60

Division of Risk Management and Societal Safety
Faculty of Engineering
Lund University
P.O. Box 118
SE-221 00 Lund
Sweden

http://www.risk.lth.se

Telephone: +46 46 222 73 60

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Introduction

Relevance

This thesis is inspired by my work in the aging services sector. From 2009 to 2018, I was an advocate for victims of crime who were aged 60 and older. In this role, I supported individuals who had crimes committed against them such as assault, robbery, burglary, and fraud. I would go with them to court, help with identity restoration, assist in financial recovery if possible, assist in obtaining domestic violence protective orders, and generally support clients in recovery from victimization. As a part of my role as an advocate, I trained police, nursing home staff, lawyers, community members, bank employees, and others about elder abuse and how to detect, address, and prevent it. In 2018, I transitioned to a state role where I had oversight of the state's aging and disability services, the nursing home ombudsman program, adult guardianship, and regulation of assisted living facilities.

Having worked in the aging and disability services sector for several years, I can state unequivocally that the dedication of all the individuals working in this field, including and especially direct care workers, is second to none. Despite the challenges presented in caring for individuals with complex needs and the hurdles of endless bureaucratic red tape, the people who do this work every day show up not for a paycheck, but because of the deep need to serve others. Considering my work with victims of elder abuse, I was often faced with the darker side of the aging and disabilities field. There were times I came across caregivers that did not have good intentions. Yet, despite media depictions and popular discourse, even when bad things happened, staff were still doing the best they could with what they had. Which is why I became increasingly frustrated at how the long-term care system responded to elder abuse, particularly in nursing homes and in assisted living. When a facility is cited for abuse, neglect, and exploitation, the mandated response is to complete a plan of correction. Nearly every plan I saw provided training or re-educating staff about elder abuse as the solution to ensuring this bad outcome did not recur. It has been my experience, and the safety science research supports, people do not need reminders like this to not abuse others (Dekker, 2014). In a discussion recently with a state surveyor who served in a role approving these plans, I shared this frustration. The response was "What else can they do?" (Anonymous, personal communication, February 25, 2025). Safety science would say quite a bit.

Background

The Institute of Medicine launched a revolution in healthcare with the publication *To Err is Human – Building a Safer Health System*. For the first time in the medical field, experts called for a shift in focus from "blaming individuals for past errors to a focus on preventing future errors by designing safety into the system" (Kohn et al., 2000, p.5). The medical field saw a significant investment of resources dedicated to addressing system change (St. Pierre et al., 2022). Despite the changes in the medical field, resources in the long-term care industry have not been well-developed (Aujla et al., 2024; Bonner et al., 2008). Nursing homes did not see the same level of investment in developing tools and training or in emphasizing a paradigm shift towards system approaches as did other sectors of the healthcare industry (Li et al., 2019). Long-term care finds itself still mired in blaming individuals for systems problems (Zadeh & Haggerty, 2022) and attempting to solve these problems with approaches like firing people, adding policies, and requiring more documentation. This is, as Senge (2006) pointed out, "pushing harder and harder on familiar solutions, while fundamental problems persist or worsen, is a reliable indicator of nonsystemic thinking" (p. 61).

In the United States, the Centers for Medicare & Medicaid Services (CMS) oversees nursing home regulation. CMS promulgates the regulations and tasks state survey agencies to conduct surveys and monitor the compliance of facilities within their state. All nursing homes receive at least one annual survey to assess compliance with federal and state regulations. If a facility is found to be out of compliance, they receive what is called a statement of deficiency (SOD). Upon receiving an SOD, the facility is required to submit a plan of correction (POC) to address the deficiencies.

According to Chapter 7 of the State Operations Manual Section 7317 (Centers for Medicare & Medicaid Services, 2023) (See Appendix B), POCs are required to address how they will implement systemic change to ensure what is cited in the SOD will not recur. In POCs, quick fixes like training, retraining, and reminders are commonly used as solutions for systemic change. These may indeed need to be part of a solution, but they are not systemic changes. According to Dekker (2014), these amount to little more than reminders to try harder or do better and tend to focus on blaming the person for what went wrong, rather than looking at system influences. When underlying systemic factors are addressed, an organization can make critical advancements in promoting safe outcomes for their employees and the

people they serve (Institute of Medicine, 1999). In fact, in high-risk industries – such as aviation, oil and gas, and mining – are distinguished by their use of proactive methods for detecting hazards and managing risks. Many have achieved exemplary safety performance. It is in these high-risk industries that human factors and system safety were developed and continue to be the standard for ensuring safe operations. In contrast, health care continues to have a high level of events causing harm (Dixon-Woods et al., 2014). If nursing home leadership considers or confuses quick fixes to be systemic change, there appears to be a disconnect in understanding what systemic change means in the parlance of human factors and system safety science and how to implement these changes. Meanwhile, individuals continue to be harmed, staff continue to be blamed, turnover continues to be exponentially high, and staffing shortages persist. According to Anderson et al. (2003), the long-term care industry has the "knowledge needed to improve, such as best practice guidelines, quality improvement models…and tougher regulations. However, none of these efforts has yet led to broad-based improvement" (p. 12). Perhaps it is time to do something different.

Research Question

How do nursing home administrators, directors of nursing, and quality improvement staff understand and implement systemic change as required by CMS in the plan of correction following a statement of deficiency? Is the understanding and implementation of systemic change by nursing homes at the facility level congruent with contemporary research in human factors and system safety?

Why focus on the facility level

For decades, there have been many calls for system level reform for long-term care (Zadeh & Haggerty, 2022). Many changes have been made by CMS including the introduction quality assurance and performance improvement programs, staffing ratios, rate reimbursement changes, and more oversight. The importance of looking at systemic changes at the facility level is that there can be more immediate and direct impact on staff and residents. Changes at the state and federal government level of the system, though crucial, take substantially longer to achieve. Also, the facilities are at the sharp end of the system. They are the recipients of change created by the blunt end. Facilities are expected to implement the changes decided for them at higher levels of the system with, oftentimes, little input on what those changes are and how they are carried out (Reason, 1997). It is helpful, then, to understand how CMS's

initiatives in quality assurance and performance improvement, specifically in the context of systemic change, are understood and implemented by facilities.

Literature Review

Traditional Responses to Adverse Events

Following an adverse event or a bad outcome, explanations are often created using some form of linear thinking (Braithwaite et al., 2018) and rely on the identification of a single-factor or a root cause (Dekker et al., 2011). Human error is typically determined as the cause of why something went wrong (Reason, 1990). If someone had paid more attention, followed a policy, provided more supervision, had more training, or tried harder, the incident would not have happened. These explanations often lead to responses such as firing employees, writing new policies, retraining staff, and increasing compliance (Dekker, 2014; Rasmussen, 1997; Woods et al., 2010). When the cause of an adverse event is labelled as human error, it assumes that the system is perfect. No system is perfect, just as human aren't. Imperfect humans work in imperfect systems.

Blaming people also has poor results when it comes to making systems safer (Vaughan, 1996). In fact, they can have the opposite effect and may be less safe because true accounts of how the system operates and how it can be improved often are not collected or analysed (Reason, 1998). Employees are less likely to account for how things may go wrong and share how these issues can be avoided in the future because of fear they may be sanctioned or even fired (Woods, 2005). Without these vital clues and insights into the realities of and problems within the system, organizations are unable to learn and therefore improve. This can leave agencies with the false impression that they have dealt with a problem, when in fact it may have become worse.

Another common response to addressing adverse events is to identify opportunities for process improvement. This typically appears as creating new or changing existing policies and procedures, creating new documentation, or increasing audits. Process improvement approaches, including Lean, Six Sigma, and Plan-Do-Study-Act (PDSA) Cycles, "are likely to remain best suited to well-defined, simple technical pathways and have inconsistent effects when applied to more complex areas" (Aujla et al., 2024). Process improvement can be part of a systemic change, but without systems thinking, smaller process improvements have the potential for unintended consequences in other parts of the system (Aujla et al., 2024). Instead, "safety must be considered in the context of the overall system, not isolated individuals, parts, events or outcomes" (Shorrock et al., 2014, p. 4).

Systems Thinking

Safety science often takes a systems approach of error and accident and is championed in industries such as aviation, nuclear power, and some sectors of healthcare, military, and technology (Dekker, 2014; Hollnagel, 2014; Leveson, 2011; Reason, 1997). These industries apply the science of Human Factors and System Safety, or safety science, that advances how organizations can respond when failure occurs (Dekker, 2005; Reason, 1997). Safety science emphasizes that a system is more than a collection of its parts (Shorrock et al., 2014). Systems are dynamic, unpredictable, and non-linear "with components that are tightly connected and highly sensitive to change elsewhere in the system" (de Savigny & Adam, 2009).

Systems thinking moves beyond linear thinking and single-factor explanations (Dekker et al., 2011) and embraces the complexity of the interactions and relationships between components of the system (McNab et al., 2020). Accidents and adverse events are rarely caused by single factors; instead, they emerge from complex interactions among humans, technology, and organizational processes (Perrow, 1999; Reason, 1997). Systems thinking can help shift from reactive problem-solving to a focus on learning and improvement in an organization (de Savigny & Adam, 2009). Systems change, or systemic change, then, refers to modifications of the underlying infrastructure, social practices, relationships, values, and culture of a system (Foster-Fishman & Behrens, 2007, p. 197).

Systems thinking is built upon the belief in the importance of learning to improve systems (Degerman & Wallo, 2024). "Accident and incident investigations are executed to create a learning opportunity for the organisation" (Dijkstra, 2006, p. 199). Prioritising learning reduces the likelihood of employing the traditional reactive responses to adverse events that often lead to poor safety results and unintended consequences (Dekker, 2014; Hollnagel, 2014). An essential component of learning is what is called the second story. A second story is the why behind how a decision is made and constitutes an understanding of what someone's focus of attention was at the time of an incident, what they were trying to accomplish, and what information was being relied on at the time (Dekker, 2014; Weick, 1995). In contemporary safety science, the second story is necessary to identify opportunities for systemic change.

The first story is someone did not do what was expected – a policy was not followed, paperwork was not completed, a procedure was done incorrectly. The second story is the why. To prevent something

from happening again, it is essential to understand why it happened in the first place. The best person to provide the why is the people making those decisions. It does not mean that leadership has to agree with or support the decisions that were made, but to improve the system, it means how work happens every day has to be seen from the lens of the people doing the work (Woods & Cook, 2022). Staff are always making decisions. They're juggling competing goals like efficiency versus thoroughness: it is impossible to be fully efficient and fully thorough at the same time (Hollnagel, 2009). Staff cannot document every detail of a resident's care and complete documentation for all the residents that day. Staff cannot spend time getting to know residents and complete all their daily tasks. Other common goal conflicts in nursing homes are resident choice versus safety, quality of life versus operational efficiency, and individualized care versus standard policy. Also, how are staff navigating time pressures, crises, multiple calls for service at once, and having their attention constantly diverted? Getting the second story helps to build the picture of how staff are navigating their daily work and provides the best clues to improve the system.

To get the second story, to learn about what is happening within the system, requires a trusting relationship between leadership and frontline staff. Leaders, including oversight bodies, must look to frontline staff as the experts and give them the autonomy to do their jobs in the face of challenging circumstances (Weick & Sutcliffe, 2015). When frontline staff feel safe and empowered to talk about the difficulties of work, organizations are better suited to learning – to identifying barriers and challenges and addressing those before they become problems.

In the aftermath of an adverse event, a focus on learning increases the likelihood of preventing recurrence because system level problems can be identified and addressed (Reason, 1997; Leveson, 2011). According to Leveson et al. (2006) "the amount and quality of learning achieved through the investigation and resolution of safety problems impacts the effectiveness of system safety efforts and the quality of resulting corrective actions" (p. 116).

Complexity and the Need for Systems Thinking in Nursing Homes

Despite the numerous quality improvements made over the last four decades, the complexity of the long-term care system and the challenges presented by the growing number of people served who have complex needs, "have resulted in a system of nursing home care that often fails to provide the supports and care necessary to ensure the well-being and safety of nursing home residents" (National

Academies of Sciences, Engineering, and Medicine, 2022, pp. 1-2). There is no doubt that the long-term care system is complex. Providing skilled nursing care requires extensive coordination across several different systems including physicians, pharmacists, and non-clinical support staff. This interconnectedness means that nursing homes cannot be understood through linear thinking, and adverse events cannot be boiled down to a singular cause (Rantz et al., 2010). "Due to this level of complexity…the [long-term care] system is highly susceptible to catastrophic failures" (Zadeh & Haggerty, 2022, p. 175).

The National Imperative to Improve Nursing Home Quality: Honoring Our Commitment to Residents, Families, and Staff report pointed to the disproportionate cases and deaths of COVID-19 as an example of a catastrophic failure "indicative of a more systemic problem, one that will require systemic solutions" (National Academies of Sciences, Engineering, and Medicine, 2022, p. 2). Similarly, in 2021, the Australian Royal Commission into Aged Care Quality and Safety issued a five-volume investigation into several aspects of the Australian aged care system. Lamenting the poor quality of care in long-term care in Australia, the report concluded, "the current state of the aged care system is a fairly predictable outcome of the various systemic problems we have identified" (Royal Commission, 2021, p. 78).

A study that took place in Korea (Park & Min, 2023) ascertained the perspectives of registered nurses (RNs), on what elements of their work most impacted resident safety and quality of care. The themes identified by the RNs were all "systemic factors such as maintaining an appropriate number of RNs and improving their working condition" (p. 1906). The focus on systemic factors by the RNs, whether consciously thinking about systemic factors or not, is at direct odds with how the regulatory process has created the overall system of long-term care – attempting to correct problems incrementally through punishment and more oversight.

In another study, Zadeh & Haggerty (2022) also concluded that the long-term care system's steadfast focus on compliance exhausts resources that could otherwise be used to develop proactive capacities. However, Sturmberg et al. (2023) believe that despite the issues of complexity it is possible to create a "nursing home system that will achieve quality care, resident centred outcomes, accountability, and financial viability, it simply depends on applying readily available systems-thinking approaches" (p. 494).

Plans of Correction

There is no independent research found so far on plans of correction that was found by this author. However, the US Department of Health & Human Services Office of Inspector General (2019) has written one report that discusses POCs. This report revealed that 7 of 9 states were not verifying the plans of correction for compliance. The OIG concluded that new guidance to states about how to verify and accept changes stated in POCs was necessary. The OIG report did not discuss the efficacy or contents of POCs.

Compliance and Safety

It is no secret that regulation and oversight have driven nursing home improvement efforts (Forbes-Thompson et al., 2007). According to Dekker (2018), "following rules and procedures can have little or no effect on safety whatsoever" (p. 16). Compliance cannot respond to the complexity of situations that require adaptation, which is a constant in a nursing home environment. Staff consistently respond to new and ever-changing behaviours, schedules, routines, care plans, meal plans, rules, requirements, directives, wants, needs, and more. Adaptation is the only way to effectively do the job. However, from the lens of compliance, this is seen as deviation, not resilience, (Hollnagel, 2014; Woods et al, 2010) and can then result in a statement of deficiency for a facility. Staff are placed in no-win situations when there are crises, surprises, and changes in routine (Dekker, 2018; Woods & Shattuck, 2000):

1) Strictly adhere to policy and procedure and if there is a bad outcome, be blamed for inflexibility; or
2) Adapt to the situation based on experience and if there is a bad outcome, be blamed for not following policy and procedure.

It is widely believed that the current "regulatory system still fails to force substandard nursing homes to improve or get out of the business" (Hirschel & Anetzberger, 2017, p. 23) and that this evaluative system has been designed to be reactive rather than proactive (Royal Commission, 2021, p. 77). Most important, "the pressure to demonstrate regulatory compliance consumes extensive resources and leaves no slack resources for developing a capacity for learning from failures" (Zadeh & Haggerty, 2022, p. 182). "It could be argued that a relentless focus on waste and inefficiency does not necessarily improve quality or delivery of person-centred care" (Aujla et al., 2024, p. 3). An entire regulatory behemoth has

been created, perpetuated, and grown with little insight into how or if it is ultimately improving care for older adults.

Methodology

Epistemology and Ontology

Epistemology is concerned with how people know what they know (Guba & Lincoln, 1994; Creswell & Poth, 2018), which would be relevant to what nursing home administrators think about systemic change and what drives that knowledge. Ontology looks at how people construct reality (Creswell & Poth, 2018). This research will be grounded in constructivism. Constructivism is the belief that knowledge is actively constructed by individuals, rather than being independent of them. It emphasizes that our understanding of reality is shaped through interactions with the environment, and meaning is derived from each person's unique perspective (Le Coze, 2012). A constructivist view of ontology recognizes there is not an absolute reality, but that reality is informed by context (Guba & Lincoln, 1994). A constructivist view of epistemology leads the researcher to create findings based on interactions with participants (Guba & Lincoln, 1994).

Ethnographically Inspired

The methodology for this thesis is ethnographically inspired. Crotty (1998) writes of ethnographic inquiry as "the researcher strives to see things from the perspective of the participants" (p. 7). Ethnography is also concerned with how people construct meaning from the environment around them (Eriksson & Kovalainen, 2016). It is important to note that conducting ethnographic research generally requires intensive research and observation over an extended period of time (Dutta, 2011). This would be unrealistic for a master's thesis which is why ethnography will be used as an inspiration in creating the methodological approach, rather than committing here to an ethnography project.

Methods and Data

Interviews

Semi-structured interviews will be conducted as an "open-ended approach that is characteristic of ethnographic and qualitative research…[attempting] to gain a greater understanding of the context and meaning of those responses through various forms of probing" (Whitehead, 2005, p. 17). With semi-structured interviews, the aim is to obtain the perspectives of nursing home leadership (administrators, directors of nursing, QA/QI specialists) on the systemic change they are required to implement according to CMS. How do they understand systemic analysis? What does systemic change mean to them? How do they create this meaning? What influences their perspectives? Do they feel like retraining is a systemic change? If so, why? If not, why not? Do they feel they are addressing the underlying issues that influence quality of care? Are they using root cause analysis? If so, what does that look like?

Six semi-structured interviews were conducted. Interviewees included a mix of leadership positions including Director of Nursing, Associate Director of Nursing, Lead Clinical Nurse, and Quality Assurance and Performance Improvement professionals. 2 of 6 were for profit, with 4 nonprofit. Interviewees represented states in the Pacific Northwest, the South, the Midwest, and New England. 4 of 6 were Registered Nurses. Years of experience in long-term care ranged from 29 years to 40+ years. Interviews were conducted over Zoom. Transcription was provided by Zoom. Interview questions included:

- Can you describe your (current or previous) role in a nursing home and how long you've worked in the field?
- What is/was your role in creating a plan of correction?
- What is your understanding of the CMS requirement to include systemic changes in a plan of correction?
- What does systemic change mean to you?
- How do you identify opportunities for systems change?
- What changes or improvements have you made or seen that addressed systemic change?
- What training have you received about systemic change? Who provided the training?

- Does the current structure of CMS surveys and regulation support your ability to identify opportunities for systemic change?

Document Review

Centers for Medicare & Medicaid Services (CMS) Publications on Systemic Change

Major publications from CMS about systemic change will be reviewed to assist in understanding how the plans of correction are created and the perspectives of the interviewees. Publications reviewed were:

- 42 eCFR § 483.75 Requirements for State and long-term care facilities: Quality assurance and performance improvement. (See Appendix A)
- CMS Chapter 7 Survey and Enforcement process Skilled Nursing Facilities Section 7317 (See Appendix B)
- CMS Appendix PP State Operations Manual (See Appendix C)
- QAPI at a Glance (See Appendix D)
- QAPI Self Assessment Tool (See Appendix E)

Document Analysis

Statements of Deficiency and Plans of Correction

To identify the number of SODs and POCs, there were two aggregate databases accessed. The Centers for Medicare & Medicaid Services (CMS) provides a database with a list of nursing home health citations (Centers for Medicare & Medicaid Services, 2025). ProPublica, an independent organization specializing in investigative journalism, hosts the ProPublica Nursing Home Inspection Database (Talbot et al., 2025). Using both sites acts as a check and balance on the other to help ensure that the most accurate number of SODs can be identified. The period chosen for the statements of deficiencies and associated plans of correction was between 7/1/2024 and 9/30/2024. This period is recent while still allowing enough time that the plans of correction have been submitted, approved, and posted. Statements of deficiency with severity levels G through L were chosen because these are incidents resulting in actual harm and most likely to have detailed information on both the survey and the plan of correction. The CMS data was pulled in November 2025 and had 274 deficiencies. The ProPublica data was pulled in April 2025 and had 206 deficiencies. After comparing the two database results, there was a

total of 298 unique deficiencies. After the database results, the individual CMS-2567 forms used to document the SODs and associated POCs were retrieved from individual state websites.

Data Analysis

For both the interviews and document analysis, data was analysed using thematic analysis. "Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). A theoretical thematic analysis provided a more detailed analysis of the data guided by "the researcher's theoretical or analytic interest in the area" (Braun & Clarke, 2006, p. 84). "A thematic analysis at the latent level goes beyond the semantic content of the data, and starts to identify or examine the underlying ideas, assumptions, and conceptualizations… shaping or informing the semantic content of the data" (Braun & Clarke, 2006, p. 84). The theoretical thematic analysis assisted in identifying themes in the qualitative data received from the interviewees. No software was used in the data analysis.

Coding

In addition to thematic analysis of the data from POCs, quantitative analysis revealed how often themes or codes appeared in the POCs. For example, what percentage of POCs state systemic change would be carried out by training staff? What percentage of POCs indicated opportunities for systemic change would be identified by creating new policies?

Ethical Considerations

Though I was in a position that oversaw regulation of assisted living facilities in a prior job, this research focused on nursing homes overseen by CMS. The facilities overseen in the previous role were not the subject of this project. Additionally, I did not seek referrals for participants through contacts I made while in a regulatory position. It is also important to acknowledge that I work for a for-profit entity, Collaborative Safety, that provides consultation to human service agencies regarding implementation of safety science principles in their organizations. No staff chosen for interviews were trained by Collaborative Safety nor do the facilities they represent have any connection to Collaborative Safety. Additionally, informed consent was received by the interviewees.

Results

Document Review

Centers for Medicare & Medicaid Services (CMS) Publications on Systemic Change

42 eCFR § 483.75 Requirements for State and long-term care facilities: Quality assurance and performance improvement. (Code of Federal Regulations, 2025) (See Appendix A)

The Code of Federal Regulations states the requirements for long-term care facilities. The quality assurance and performance improvement section is as follows:

> *Program systematic analysis and systemic action.*
>
> (1) The facility must take actions aimed at performance improvement and, after implementing those actions, measure its success, and track performance to ensure that improvements are realized and sustained.
>
> (2) The facility will develop and implement policies addressing:
>
> (i) How they will use a systematic approach to determine underlying causes of problems impacting larger systems;
>
> (ii) How they will develop corrective actions that will be designed to effect change at the systems level to prevent quality of care, quality of life, or safety problems; and
>
> (iii) How the facility will monitor the effectiveness of its performance improvement activities to ensure that improvements are sustained.

CMS Chapter 7 Survey and Enforcement Process Skilled Nursing Facilities Section 7317. (Centers for Medicare & Medicaid Services, 2023) (See Appendix B)

The CMS Survey and Enforcement Process guide for state survey agencies details what is required in an acceptable plan of correction:

> An acceptable plan of correction must:
>
> - Address how corrective action will be accomplished for those residents found to have been affected by the deficient practice;
> - Address how the facility will identify other residents having the potential to be affected by the same deficient practice;

- Address what measures will be put into place or systemic changes made to ensure that the deficient practice will not recur;
- Indicate how the facility plans to monitor its performance to make sure that solutions are sustained; and
- Include dates when corrective action will be completed.

CMS Appendix PP State Operations Manual F607 Guidance VIII Coordination with QAPI. (Centers for Medicare & Medicaid Services, 2024a) (Appendix C)

The CMS State Operations Manual provided to state survey agencies describes what is required for quality assessment and performance improvement in response to abuse and neglect. Facilities are required to determine:

Whether there is further need for systemic action such as:

- Insight on needed revisions to the policies and procedures that prohibit and prevent abuse/neglect/misappropriation/exploitation,
- Increased training on specific components of identifying and reporting that staff may not be aware of or are confused about,
- Efforts to educate residents and their families about how to report any alleged violations without fear of repercussions,
- Measures to verify the implementation of corrective actions and timeframes, and
- Tracking patterns of similar occurrences. (p. 148)

QAPI at a Glance. (Centers for Medicare & Medicaid Services, 2013)

QAPI at a Glance was created as a guide for nursing homes to understand and implement quality assurance and improvement plans. The guide provides expectations for what it terms *Systematic Analysis and Systemic Action*:

The facility uses a systematic approach to determine when in-depth analysis is needed to fully understand the problem, its causes, and implications of a change. The facility uses a thorough and highly organized/structured approach to determine whether and how identified problems may be caused or exacerbated by the way care and services are organized or delivered. Additionally, facilities will be expected to develop policies and procedures and demonstrate proficiency in the

> use of Root Cause Analysis. Systemic Actions look comprehensively across all involved systems to prevent future events and promote sustained improvement. This element includes a focus on continual learning and continuous improvement. (p. 8)

The guide also states

> Common solutions such as providing more training/education or asking clinicians to "be more careful" do not change the process or system. These proposed solutions are based on two assumptions: lack of knowledge contributed to the event, and if a person is educated or trained, the mistake won't happen again. (p. 19)

The guide labels corrective actions such as new policies/procedures and training/education as weak. Strong actions are those that change the process.

QAPI Self Assessment Tool. (Centers for Medicare & Medicaid Services, 2024b)

The QAPI Self Assessment Tool is provided but not required by CMS to assist facilities in determining their adherence to and progress with QAPI. Facilities are asked to rate their adherence to specific statements. Statements that reference systems include the following:

- When addressing performance improvement opportunities, our organization focuses on making changes to systems and processes rather than focusing on addressing individual behaviors. For example, we avoid assuming that education or training of an individual is the problem, instead, we focus on what was going on at the time that allowed a problem to occur and look for opportunities to change the process in order to minimize the chance of the problem recurring.
- Our organization has established a culture in which caregivers are held accountable for their performance, but not punished for errors and do not fear retaliation for reporting quality concerns. For example, we have a process in place to distinguish between unintentional errors and intentional reckless behavior and only the latter is addressed through disciplinary actions.
- Our organization uses a structured process for identifying underlying causes of problems.
- Our organization identifies system and process breakdowns and avoids focus on individual performance. For example, if an error occurs, we focus on the process and look for what

allowed the error to occur in order to prevent the same situation from happening with another caregiver and another resident.

- When systems and process breakdowns have been identified, we consistently link corrective actions with the system and process breakdown, rather than having our default action focus on training education, or asking caregivers to be more careful, or remember a step. We look for ways to assure that change can be sustained. For example, if a policy or procedure was not followed due to distraction or lack of caregivers, the corrective action focuses on eliminating distraction or making changes to staffing levels.

Document Analysis

Statements of Deficiency

Data.

Of the 297 statements of deficiency (SODs) identified from the databases, 90 were able to be analyzed for this project. The most significant influencing factor for the use of the records was that, of all fifty states, only thirty had both the SODs and the plans of correction (POCs) available on their respective websites (see Table 1).

Table 1

Availability of Statements of Deficiency (SODs) and Plans of Corrections (POCs)

Availability of Records	Number of Records
State does not post SODs or POCs online	123
State posts SODs and POCs online	90
SODs are considered past noncompliance and no POCs are required	31
State posts SODs online but does not post POCs online	22
State posts SODs and POCs online but the record was not found	27
SODs and POCs available but had too many redacted elements to be legible	4
Total Records	**297**

It was also important to dive deeper into what the SODs revealed about the incidences of abuse to later look at how the POCs intended to resolve the challenges presented. Considering a statement of deficiency could include more than one deficiency, across the 90 SODs, there were 135 incidences of abuse documented. The most common documented type of abuse was physical abuse at 45% of incidences (see Table 2). Examples of physical abuse included but were not limited to being punched, slapped, pushed, grabbed, held down, splashed with coffee, hurt during a medical procedure, and having an object thrown at a resident.

Table 2

Types of Abuse on SODs with POCs Jul 1, 2024 – Dec 31, 2024

Type of Abuse	Count of Incidents	Percentage of Incidents
Physical	60	45%
Sexual	36	27%
Neglect	33	24%
Psychological	6	4%
Total Records	**135**	**100%**

Each statement of deficiency identified a perpetrator, or instigator, associated with an incident (see Table 3). This not a legal term but one designed to clarify the roles of different individuals involved in an adverse event. The most common perpetrator was a resident, named in 59% of incidents. This is regardless of level of cognition or intent.

Table 3

Identified Perpetrators of Abuse on SODs with POCs Jul 1, 2024 – Dec 31, 2024

Type of Abuse	Count of Incidents	Percentage of Incidents
Resident	79	59%
Facility	33	24%
Staff	22	16%
Guest	1	1%
Total Records	**135**	**100%**

Gaining a better understanding of the incidents themselves could also help in devising a plan of action. Descriptions of abuse that occurred more than five times across the 135 incidents are included in Table 4.

Table 4

Descriptions of Abuse Documented on SODs with POCs Jul 1, 2024 – Dec 31, 2024

Description	Count of Incidents
Resident physically assaulted by a resident diagnosed with severe cognitive impairment and having a reported history of aggressive behaviour	12
Facility did not provide an expected or required service (ex. incontinence care)	11
Resident sexually assaulted by a resident diagnosed with severe cognitive impairment and having a reported history of sexually inappropriate behaviour	11
Resident physically assaulted by a resident diagnosed with severe cognitive impairment, serious mental illness, and having a reported history of aggressive behaviour	9
Resident physically assaulted by a resident diagnosed with severe cognitive impairment and no reported history of aggressive behaviour	7
Two residents with severe cognitive impairment had sexual contact with each other	7
Resident physically abused by staff when it is not a reflexive/defensive reaction to resident aggression	7
Staff had a physical reflexive/defensive reaction to resident aggression	7
Bed transfer completed not according to care plan and/or procedure	6

Note. The description "Staff had a physical reflexive/defensive reaction to resident aggression" refers to incidents where a resident may physically hurt a staff person while staff are attempting to provide care and that staff person reacts defensively such as grabbing a wrist, blocking an arm, or pushing back. This does not excuse the behaviour or action, but to reduce the likelihood of an event happening again requires an understanding of what happened and why.

Overall, the most common type of incident documented on CMS-2657 forms with available POCs from July 1, 2024 – December 31, 2024 was physical abuse where the perpetrator was a resident with severe cognitive impairment.

Contents of SODs.

In reading the statements of deficiency (SODs), it was observed that the CMS-2567 is structured to look at what the facility failed to do. All 90 SODs started with "the facility failed to" or "the facility did not." For example, "the facility failed to protect a resident's right to be free from abuse for 1 of 5 residents reviewed for physical abuse." This is typically followed by a review of the impacted resident's or residents' health history and admission records, a review of the facility's pertinent policies and procedures, and interviews with staff and residents. The document review and interviews are centered on substantiating whether something did or did not happen. This is the first story which is a key element of investigation, and it's the start of a learning process. But at least for the SODs, the first story is where the learning starts and stops. There is very little evidence of learning in the survey process.

Of the 90 plans of correction reviewed, 20 had some element of a second story, or learning about the why behind what happened. Second stories are essential to learning about how work is being done – how staff are balancing goals, handling demands and pressures, carrying out policies, and making decisions. The following are three examples of second stories, or at least hints of them, that will later also have their plans of correction reviewed:

Example 1 – Midwest Facility - Resident physically assaulted by a resident with severe cognitive impairment and a history of aggressive behaviour.

According to the statement of deficiency (SOD), "the facility failed to provide adequate supervision to ensure residents remained free from resident-to-resident abuse when" a resident threw a mug at another resident in an unsupervised altercation in the dining room. Staff interviews included in the SOD provided details that started to build a second story. Staff revealed that there was a delay in serving the meal, and one of the CNAs on shift had to help in the kitchen. Influencing the decision for a CNA to help in the kitchen was that residents were often restless when there was a delay in serving the meal which can increase the likelihood of an adverse event. Additionally, shift change occurs when the residents are in the dining room at dinner time and a delay in serving dinner puts the CNAs late on finishing their shift tasks.

Though limited, this information starts to build a second story that shows the pressures, constraints, and adaptations in providing supervision during dinner. CNAs are balancing providing

supervision of residents with the need to serve the meal on time. CNAs are also feeling pressure to serve the meal on schedule because they have competing tasks that must also be completed before they can finish their shift. While no kitchen staff or supervisors were interviewed by the state survey agency in their completion of the SOD, to prevent an incident from recurring, there is more to learn about why the kitchen was short-staffed and how tasks are prioritized when they are short-staffed.

Example 2 – West Coast Facility - Resident sexually assaulted by resident who was assigned to be 1:1 supervision but was not staffed 1:1.

According to the SOD, "the facility failed to monitor and provide [the resident] with the 1:1 supervision as per the care plan" after the resident had inappropriately grabbed another resident. The SOD concludes that "this failure resulted in [the resident] continuing to sexually abuse other residents." On the two days in question, the nurse stated there were not enough staff available to provide 1:1 supervision for the resident. The CNA assigned to the resident had nine other residents to supervise.

This is only the very start of a second story, but short staffing is a constant challenge in nursing homes. It would be ideal to dive deeper into how staff prioritize tasks when they are short staffed, the level of comfort they felt with the resident and the resident's behavior history, how they typically accommodate 1:1 supervision, what goals they were trying to achieve on that shift, and what priorities they had on that shift. If the goal is to have staff provide 1:1 supervision for a resident when required, the first step is understanding why it wasn't.

Example 3 – East Coast Facility - Bed transfer completed not according to care plan and/or procedure.

According to the SOD, "the facility failed to ensure that a resident was free from neglect, which resulted in actual harm." Two nurse aides transferred a resident out of bed using a two-person assist rather than a sit-to-stand mechanical lift as required by the care plan. During the transfer, the resident hurt her leg. In interviews with the two nurse aides, it was revealed that Nurse Aide 1 (NA1) could not find the mechanical lift and asked for assistance from Nurse Aide 2 (NA2). NA2 stated that the resident could be a mechanical lift or a two-person assist. The resident's chart required a mechanical lift with a two-person assist. NA2 assumed that a two-person assisted transfer was an option because the resident can stand with two people assisting. Additionally, NA1 and NA2 are not usually assigned to this resident.

Other opportunities to build the second story may include learning what steps it takes for the nurse aide to access the resident's chart and find and read the care plan. Are there time pressures? How do aides unfamiliar with a resident get brought up to speed? Why couldn't the mechanical lifts be located?

Plans of Correction

In reading the plans of correction, the most common themes were identified for how facilities planned to address the deficiency:

Table 5

Corrective Actions Stated in POCs with an Occurrence Rate > than 10%

Plan of Correction (POC) Element	Number of POCs	Percentage of POCs
Implement new audits ongoing or for a limited time	87	94%
Require education or re-training on the abuse, neglect, and exploitation policy	76	82%
Conduct an audit immediately	57	61%
Require education or re-training on other policies	54	58%
Create new policies/procedures	29	31%
Staff discipline or termination	27	29%
Hire outside contractors to conduct education, re-training, or audits	21	23%
Increase monitoring or supervision of residents	18	19%
Review the abuse, neglect, and exploitation policy	10	11%

Of the 90 plans of correction analysed, 100% included education and re-training on the abuse, neglect, and exploitation policy, on other policies, or both.

Let's look at how plans of correction resolve the problems identified in the second stories found in the three statements of deficiency above:

Example 1 – Midwest Facility - Resident physically assaulted by a resident with severe cognitive impairment and a history of aggressive behaviour.

The facility's plan of correction included completing de-escalation training for all staff and training on abuse, neglect, and exploitation. New hire files were to be audited each week to ensure training is completed. The facility looked at all residents in house and identified additional residents to complete Behavior Escalation Toolkits on. The daily staffing sheets were revised to include a designated nursing staff member to be in the dining room at all meals to increase supervision. Weekly audits would be completed to ensure that staff are present in the dining room during mealtimes to ensure adequate supervision. Audits were to be taken to the QAPI committee for three months.

Rather than address the challenges that were revealed by staff such as short staffing and the scheduling of dinner and shift change at the same time, the answer to ensuring that type of incident did not recur was to remind staff about the importance of preventing abuse and increase supervision using staff from a staffing pool that is already short-staffed. This does not mean that training and increased supervision could not be helpful, but it does mean that the real problems that influenced the incident in the first place are continuing unaddressed, increasing the likelihood of recurrence.

Example 2 – West Coast Facility - Resident sexually assaulted by resident who was assigned to be 1:1 supervision but was not staffed 1:1.

The plan of correction for this facility had multiple elements:

- Facility leadership had training on the importance of immediately reporting allegations of abuse to various agencies and on immediately escalation the plan of care to protect the resident.
- All staff were trained on abuse prevention, management of residents with abusive tendencies, and reporting abuse allegations.
- All allegations of abuse and/or resident-resident altercations will be reported immediately and discussed with the RN supervisor and LNs.
- The Ombudsman also trained staff on the importance of reported abuse.
- Regular reviews will be conducted for any residents with allegations of abuse requiring 1:1 sitter.
- Daily room rounds will be conducted to residents with allegations of abuse to identify if the resident needs a 1:1 sitter.

There was nothing in the interviews with staff that indicated they did not understand the importance of preventing and reporting abuse. The concern was staffing. Despite a detailed plan of correction, it didn't address the second story - how to prioritize and staff a resident on 1:1 supervision when short-staffed. Training on prevention and reporting of abuse is vital, especially for staff working with this population, but is it the only solution needed to reduce the likelihood of recurrence of this same incident?

Example 3 – East Coast Facility - Bed transfer completed not according to care plan and/or procedure.

In the facility's plan of correction, they stated that NA1 and NA2 were terminated from employment. Outside consultants were hired to educate staff on abuse, neglect, and exploitation, and all staff were required to complete a competency assessment. Staff were re-educated on the resident transfer policy and how to identify the resident's status. The Director of Nursing will observe five resident transfers per week for four weeks and monthly for two months to ensure residents are free from abuse, neglect, and exploitation. The Director of Nursing will review all progress notes every weekday for four weeks for two months to ensure residents are free from abuse, neglect, and exploitation.

What does the impact of terminating the two nurse aides have on other staff? Does it send the message that abuse will not be tolerated? Or does it send a message that if you try to do the best you can in difficult circumstances and something bad happens, you'll lose your job? Just as in Example 2, staff gave no indication that they needed to be reminded about abuse, neglect, and exploitation. In fact, the interviews of staff in this case showed two devastated nurse aides who were heartbroken that the resident was hurt. Staff being re-educated about the resident transfer policy and how to identify status may be part of a solution, but digging deeper into a second story would hopefully reveal if the current policy and status system was working. If it's not working, if it's not the best solution when staff are under pressure and time-constricted, then reminding them about the policy does nothing to reduce the likelihood of problems recurring. Another thing to consider is how will increasing the Director of Nursing's workload impact the work of others? Often when extra work is added, no duties are taken away to balance for the time pressure.

For the 20 plans of correction that had at least some element of a second story, it was a consistent response that the solution to prevent recurrence did not match with the problems identified. Instead, the

quick fixes, illuminated in Table 5, were the most common answers. Quick fixes are typically aimed at people – reminders, discipline, more policies, more procedures – and not at the system. Quick fixes are designed to demonstrate compliance, not to build a system that continuously learns and improves.

Interviews

Interviewees

Analysis looked for instances where the statements of interviewees demonstrated or did not demonstrate an understanding of systems thinking congruent with human factors and system safety.

Statements and beliefs that were not congruent with contemporary systems thinking

Traditional approaches to adverse events.

Traditionally, when something bad happens, people are blamed (Reason, 1990). One interviewee focused on individuals as the cause of adverse events. "People just tend not to want to do right." This belief supported the interviewee's primary interventions of terminating staff who did not follow policy and procedure, conducting continuous audits, and providing education and retraining for staff.

Increasing compliance is another traditional response to critical incidents based on the belief that people are the problem; if people just did what they were told, if they followed the rules and policies, then nothing bad would happen (Dekker, 2014; Rasmussen, 1997; Reason, 1997). Two interviewees described the need "to be ready, survey ready at all times." This involved dedicated positions and time to perform constant audits to ensure compliance. For one interviewee, this also meant disciplining staff during mock audits for failing to follow policy.

Juxtaposing systems thinking and process improvement.

Three interviewees juxtaposed systems thinking and process improvement. "Systemic change…is more process improvement…changing the actual process." An example of this was stating that changing from a paper-based system to an electronic health record system is a systemic change when it is actually a change in process. Another example of a process improvement change confused for systemic change was examining what processes were in place that may need to be changed when a resident eloped from a facility. Two interviewees stated that implementing best practices was a systemic change. The best practices noted were changes in process, not something that involved systemic thinking. Though, it is

possible that the implementation of a best practice could be a systemic change, it was not what was described by the interviewees.

Statements and beliefs that were congruent with contemporary systems thinking

Reliance on frontline autonomy and expertise.

Interviewees revealed a commitment to relying on frontline autonomy and expertise that is essential for learning and effectively implementing systemic change. Interviewee 1 stated that "I believe that the people I hired, I trust them, and they're going to do their jobs right. You have to trust." When it comes to quality care and meeting the needs of residents, the importance of having the frontline perspective was echoed by Interviewee 3: "Those were vital voices to come into our interdisciplinary team, because they knew these people far better than anybody else." Interviewee 5 agreed: "They have the best ideas, because they're the ones doing the work, and so they are the experts." Interviewee 2 added: "I don't have the answer; I'm not the one doing it."

For Interviewee 3, not having frontline perspective can be damaging to the work being done: "if you're not the one that's currently providing care with our current processes and procedures, we don't know that having the linen cart in the middle of each hall is actually a detriment. We think it's a shorter path for everybody, but then it becomes these other hazards. Those are kinds of things that we wouldn't pick up on. Because we're just like, oh yeah, if it's a shorter path to everybody to get to the linens, great! We're good! Fix that one! Check. But then, we didn't know the downstream effects that we had caused by the change."

Emphasis on learning.

Interviewees demonstrated an understanding of the importance of learning to better understand their systems and identify opportunities for change. Interviewee 2 explained, "If you're going through a systems change and you don't put the resources in to support the learning and understanding, you're never gonna get change….Systemic change starts with the learning." Interviewee 1 emphasized learning from staff and the challenges they experience on the job: "You hear people say that you learn more from failure than you really do with success. You gotta have some time to reflect a little." Interviewee 4 added, "You can't necessarily look to CMS for educational guidance, or, there's just, like, we're gonna go in and write

you up, and that, in the back end, really does affect the ability for nursing homes to learn, to build, to become better, and stay viable."

Understanding complexity.

Interviewees identified several elements of the system that can have an impact on decision-making and play a role in adverse events. Interviewee 2 demonstrated an understanding of the complexity involved in using systems thinking: "Systemic change is complex….It's hard to say, how do you do systemic change? There's so many emotions attached to change, to systems. Or biases that you have to get through to understand what is the bias that's preventing this from happening, or what's, you know, a perceived barrier…. And sometimes people's interpretation of what the rule is, is different than what actually the rule says." There are many different elements (e.g. politics, financial, societal pressures, media attention) that can impact a system outside policies and procedures, rules and regulations, staffing, training, and supervision. There are also the intangibles like how people feel about policies and procedures, biases that can impact decision-making and the structure of the system, and how people interpret rules and policies. It is not enough to have rules and regulations and policies and procedures, to understand how the system is working and to ultimately implement systemic change, it is essential to also understand varying interpretations that inevitably occur in large systems (Reason, 1990).

One interviewee described the difficulties involved in making a systemic change: "We did a huge committee of people from all departments, not just managers, I mean people that work in the departments, and we decided we wanted to be more person-centred as an organization. And in doing that, we had to change our job descriptions, we had to look at our mission statements, we had to, you know, look at how we interview people. We had to take our policies and procedures, change them so they're more person-centric. We had to look at all our operations. We had to look at, like, nursing, housekeeping, therapy. How are we person-centric? And what are those areas we need to work on?" This work went beyond changing policies and procedures and providing education to staff to weaving the person-cantered philosophy into every part of the organization and identifying how each change impacted the work.

One interviewee reflected on the complexity of addressing physical abuse by residents, which is the largest percentage of abuse and neglect incidents appearing in this data: "There are people that have cognitive issues or mental health challenges, and so that approach to behavioural care and behavioural

health is a huge challenge in nursing homes. Because, again, you don't have… I don't have resources and space, I don't have private rooms to put anybody in, because we're two-bed semis. And so, if I move you I can't move you someplace that, like, you can impact somebody else, so then do I flip a room to private? Well, then that's gonna change, you know, the bill rate. And it means I have to take a bed offline, which becomes problematic, because if you don't use all your bed allotment, you lose beds…You can have beds taken away by the state from your certificate of need because you haven't used them, so you haven't demonstrated a need. Well, maybe I haven't demonstrated a need because I got these issues I'm trying to finagle. So, it's… it's a hard one, because there's no clear, easy answer." As this interviewee explained, the ability for the facility to prevent recurrence of physical abuse by a resident was impacted not by what training staff had on the abuse policy, but by decisions made higher up in the system such as bill rates and pressures to maintain occupancy rates.

In reviewing the plans of correction, 19% stated that there would be an increase in monitoring or supervision of residents. Interviewee 3 reflected on this complexity: "You can put somebody in one-to-one, but here's what you do. Now, you are either paying crazy overtime, and… it's not economically sustainable. Or, you are now leaving other areas of the building more skeleton-staffed, and therefore opening yourself to more problems. But it might solve this immediate issue. You know, it might get you past this one thing. We did some contracting with outside companies for sitters, occasionally. That was not economically viable for us on a long-term basis."

Interviewee 3 acknowledged that the system is beyond one individual facility: "When you define systemic as within the walls of this building. It isn't systemic. It's, you know, systemic within the walls, okay. But it means the industry hasn't set those nursing homes out to be able to be successful." Interviewee 2 also noted impacts on the wider system, "CMS has recognized that they would like to change some things as well, but… they've got other directives they have to work through….How do government agencies also do systemic change? [There's also] the political layers."

One interviewee described how the organization works to impact the wider system – outside its own walls. They told of partnering with a local community college to train CNAs. The organization only needed to hire three, so all remaining attendees were now trained CNAs available for hire to other

organizations. This is an example of what more could be done to positively impact the long-term care system when thinking outside a single facility.

Challenges to implementing systemic change

Interviewees acknowledged the importance of identifying opportunities deeper in the system to make lasting change. As Interviewee 2 stated, "if you're really going to do systemic change, you gotta do this process right, because otherwise you're just going to put a band-aid on it."

In demonstrating understanding of systems thinking, interviewees identified challenges to implementing systems thinking in their facilities and in the larger system of long-term care.

These themes emerged:

- Lack of knowledge of/education about systems change
- Lack of protected time and resources
- Lack of a collaborative approach between facilities, surveyors, and CMS
- Emphasis on compliance

Lack of knowledge of/education about systems change.

Interviewees noted that without specific investment, it is difficult to obtain the knowledge needed to utilize systemic thinking and implement systemic change. According to Interviewee 3, "we didn't have a lot of resources to pull from….we didn't have the budget for it, so we just had to figure out how to do it ourselves." Small and independent nursing homes are less likely to have positions dedicated to systemic change. "They don't have an infection control team. They don't have a quality team. They have one DON and one ADON who are trying to, like, wrangle the troops and make miracles happen" (Interviewee 4).

To the knowledge and experience of the interviewees, CMS does not provide education about and support for how to use systems thinking and implement systemic change. Interviewees 1 and 4 recognized that in the current structure, the role of CMS may not be educational, as it is a regulatory body. "I think the survey process doesn't teach you about how to make the change. They come in and assess if you have deficiencies, and that's what they do. And it's kind of punitive…Do they support you in making the change? No. I don't believe that they're there for that" (Interviewee 1).

Yet, as Interviewee 2 stated, "if they don't know how to do it…. who's helping them learn?" CMS does have the Quality Improvement Organization (QIO) Program that provides technical assistance to

nursing homes. Interviewees 2 and 5 felt that QIOs need to be more broadly available to providers and focus on learning and improvement rather than being reactive to adverse events or special focus facilities. "There is some potential within CMS and the QIO of helping providers in long-term care understand how to do systemic change for organizations" (Interviewee 2).

Lack of time and other resources.

Interviewees expressed concerns about the lack of resources, in addition to not having the right education, that impact the ability to strive for systemic change. As Interviewee 4 explained, "The best intention for a lot of these places is, you know, they want to do the right thing, they want to meet the regulation, they want to keep people safe and cared for, but the resources may not be there." Several interviewees identified the importance of having multiple perspectives at the table to learn about different parts of the system. Interviewee 4 explained it "takes a lot of people around the table. And that is something that, particularly in a nursing home environment, is hard to come by….How do we support people so that they can have protected time and resources to make these systemic changes?" Interviewee 3 agreed, "there's not often a lot of protected time, a lot of…capability and resources to do a lot of the systems thinking and optimization and strategic thinking….We're just trying to survive." Interviewee 4 also noted, "We've got so much to do, and we don't have the resources to make bigger change."

In particular, to gain the direct care worker perspective is especially challenging. Interviewees 3 and 4 explained that to be able to take direct care workers off the floor to attend meetings and provide information that could fuel systemic change was a challenge that was often insurmountable. As Interviewee 3 explained, "Nobody was overstaffed, and so to pull people off of a unit to attend a meeting…. leaves a huge hole, and it leaves the rest of the team behind, and it creates ill will everywhere."

Interviewee 4 shared thoughts on the impact of not having the time to make systemic change and the need to do so. "We have to get back to doing business, and we don't have time to do all these things that we would want to do. We need to check the box and move on, and, you know, we don't have enough staff, and we don't have enough this, and we don't have enough money for that…It's hard with those day-to-day operational strains to make time to think about the rest….From an operational and managerial perspective for the nurse managers it's like, don't tell me about system optimization today, because I've

got a patient family yelling at me, and I've got this happening here, and I'm short three staff for the evening, like, I have no time to worry about systemic change."

Lack of a collaborative approach between facilities, surveyors, and CMS.

Several of the interviewees felt that the adversarial relationship between facilities and the state survey agencies and CMS was not conducive to learning and improvement. (It is important to note that the regulations are not written to encourage collaboration between the facilities and the state survey agencies; however, that does not mean collaboration could not be a feature of the system.) Interviewee 4: "I feel a little bit conflicted about this, because the survey process exists to hold people accountable and to the highest of standards to provide for patient safety. It shouldn't be easy. We shouldn't…expect that they walk in and are like, oh, no big deal. But sometimes it feels adversarial, and I think that's unfortunate, that you can't necessarily look to CMS For educational guidance….The process itself isn't conducive to systemic change and creating systems-based thinking. [It's] punitive. There's not…a collaborative experience between CMS and the nursing homes, and not that there necessarily should be, though I think it would be beneficial. And then there's not…supports on the back end, necessarily, to ensure that systems are changed." Agreeing, interviewee 3 stated: "We could do this together instead of it feeling just punitive. It could be a relationship that was beneficial." Interviewee 5 added stated: "Until it's a collaborative approach to regulation and to survey, I feel like it'll never improve. I don't think it'll ever be full systemic change."

Emphasis on compliance.

Interviewees felt the emphasis on compliance actually took them away from doing the work needed to provide quality care to residents. As Interviewee 4 stated, "Sometimes the regulatory burden does feel like we're doing a lot of things that are…bringing staff farther away from the patient care and the work, the actual heart of the work to be done." Interviewee 5 shared a story that provided insight into the impact of the emphasis on compliance. The facility had a resident come to the facility with a wound and instructions from the doctor on how and when to clean the wound. The facility was able to follow those directions, and the wound healed quickly. However, when the state survey agency reviewed the documentation, the facility received a statement of deficiency for using the name of the cleanser in their paperwork and not using the required phrase "cleanse the wound." The interviewee lamented, "I spent

hours and hours and hours away from my residents, myself and my managers, auditing orders for the word cleanse, and writing the plan of correction, and re-educating everyone."

Interviewee 5 further explained, "the citations that they give take the time from administration and leadership away from the residents that we serve. Again, it's all paper stuff. We have binders full of audits and sign-in sheets with education, and does it really make an impact? I don't think so. What makes the impact…is peer-to-peer coaching and collaborative interdisciplinary team meetings to be able to make the best…outcome for the resident. The way the state operates is audits, education, citation, fine, you know, not get a star rating. It doesn't benefit the resident."

Commentary on plans of correction

Interviewees agreed that education and audits are not systemic changes and are not sufficient pathways to making improvements to the system. According to Interviewee 4 education and audits are "not the answer. It's not even remotely close to the answer. It is the…easiest… it is, like, lowest on the totem pole….Education is the lowest possible level of effectiveness in terms of change solutions because it's only as good as that one moment in time. It's only as good as those people. Those people turn over, those people are gone, and education's out the window. Education needs to be updated, evidence changes."

As an example, Interviewee 4 added, "oh, we missed, you know, a dressing change for a PICC line. Okay, we're gonna audit all the patients who have PICC lines on this particular unit for 3 months, and then we're gonna educate all the nurses, and…then after 3 months, you've not changed your process at all, you've not changed anything in the system that alerts nurses to the time that there needs to be a change, but you've met your requirement. And so, because that's the easiest thing to put in place, that's what's done. That is selected not because it is the right thing to do, and again, I say that without… judgment. It checks the box."

About the persistent use of education and audits in plans of correction, interviewee 5 added, "I just think it's busy work….We get cited on something from five years ago, and then we change…a process, and then we just, like, keep that change, and it might not be the best process, but… because we got cited, we had to change the world upside down when maybe it was done right before, and it was just something that could be re-evaluated….It's not helpful at all."

Interviewees also explained why plans of correction consistently choose education and audits as the answer to statements of deficiency. Interviewee 4 stated, "You get a plan of correction, and you're like, well, crap, we better just show them that we're not screwing up. And then it's like, what is the menial administrative work that we have to do to make… to survive the plan of correction, and demonstrate that for 3 months…we've audited, we've educated. But we've never actually changed the system, and I feel like…the current process just requires that there is an education and an audit, and now we're fine, because we've demonstrated, you know, compliance. I say that, one, that's kind of all CMS is looking for to meet the demand. But two, I mean, that's all sometimes nursing homes can offer, because…we don't have time to, like, upend the apple cart, you know. We're just trying to get by."

Interviewee 3 explained, "Another challenge is the fear of not being able to complete something that a facility puts in a plan of correction, because anything you write in the plan of correction, you will be evaluated on. Next time the surveyor comes in, they're going to see if that plan of correction is being followed. So if I write, I'm going to do XYZ PDQ in every instance, but I miss step P three times when they come in, I get a new tag for it. And so, if I'm gonna say, we're gonna educate, we're gonna audit… am I still gonna do XYZ PDQ? Darn right, because that's what we need to do to really solve the issue, but I would prefer to not be held to a higher standard than I have to be, just in case we miss it once, because you don't want to be re-tagged the next survey." Interviewee 3 also provided the perspective that "one of the influences into why plans of correction continue to have the same solutions is because the state says okay, and signs off on their plan of correction."

Discussion

Without Learning, You Cannot Achieve Systemic Change

If state survey agencies are expecting education, training, and monitoring to be the drivers of systemic change in the plans of correction from facilities, as stated in CMS Appendix PP, that is exactly what they are getting. An overwhelming 94% of the POCs reviewed stated that new audits would be implemented and 100% of the POCs included education and re-training as a systemic change. These, of course, are not derived from systems thinking. More so, most incidents in this study were resident-to-resident physical abuse whereas the most common solutions were audits and training on abuse. POCs are not currently achieving the stated purpose to identify systemic change to prevent recurrence of an adverse event. This does not mean that the solution is to remind facilities to try harder and do better. Instead, it requires a systems thinking lens to look deeper into how the long-term care system can be better positioned to learn and improve. This is also not limited to abuse, neglect, and exploitation. There is learning to be had from all adverse events including the development of pressure ulcers, medication errors, infections, and restraints.

To successfully implement systemic change requires a focus on learning the why. Why are people making the decisions that they do? Why did something make sense in the moment? If someone didn't do something that was expected, it's not enough to say they failed – the why is essential to improving the system. Right now, the SODs, created from the state survey agency investigations, are largely devoid of learning. As some of the interviewees noted, the state agencies are there to ensure compliance and not to learn from adverse events. Yet, oversight and investigative bodies of safety critical industries like the Federal Aviation Administration, Transportation Safety Board of Canada, and the Nuclear Regulatory Commission are all charged with ensuring compliance to regulations while simultaneously prioritizing learning, and they have extraordinary safety records (Dekker, 2014). If the goal of investigations in long-term care and the subsequent plans of correction is to identify opportunities for systemic change then all levels of the system need to be engaged in learning and improvement.

CMS Guidance on Systemic Change is Conflicting

According to CMS, the purpose of the plan of correction is, in part, to identify systemic change to prevent the recurrence of an adverse event (Code of Federal Regulations, 2025; Centers for Medicare & Medicaid Services, 2024b; Centers for Medicare & Medicaid Services, 2013). However, the guidance from CMS about systemic change is not only limited, but what is available is conflicting. The QAPI Self Assessment Tool (Centers for Medicare & Medicaid Services, 2024b) and QAPI at a Glance (Centers for Medicare & Medicaid Services, 2013) align with the human factors and system safety approach that avoids placing blame on individuals and instead strives to understand the context of adverse events. Both documents specifically state a need to look beyond education and training as a solution. However, the CMS Appendix PP State Operations Manual (Centers for Medicare & Medicaid Services, 2024a) (Appendix C) that provides guidance to state survey agencies on how they conduct audits and investigations of facilities, provides staff training and education, revisions to policies and procedures, and monitoring as solutions that the agency should expect in quality assurance and performance improvement plans and performance improvement projects. These are the quick fixes seen throughout the POCs across states and facilities. Perhaps this conflict has influenced how facilities feel about the adversarial nature of their relationships with the state survey agencies and CMS and why POCs have been written in a way that is not reflective of systemic change.

What is also missing is the education and guidance needed for state survey agencies and facilities on how to operationalise the principles of human factors and system safety. Some guidance already exists, but there is a definitive need, as evidenced by the contents of SODs and POCs, to provide active support on how to transition from traditional responses to adverse events to ones that use systems thinking.

The System is Designed for Compliance, Not Systemic Change

The system is not designed to be collaborative. State surveyors are trained by CMS at the federal level to focus on failures and are specifically taught to not be collaborative with facilities (A. Bonner, personal communication, April 15, 2026). Surveyors are not taught to find information about why things happened, to understand, or to learn. While interviewees clearly pointed to an understanding of systems thinking and what is needed for systemic change, this is in stark contrast to what is contained in both the statements of deficiency written by the state surveyors and the plans of correction.

Interviewees felt that the work created by the plans of correction is taking facilities further away from finding opportunities to improve quality of care. It was also made clear that plans of correction rely largely on education and audits because that is what is expected and accepted by state survey agencies, not because they produce systemic change. Interviewees expressed that because of the focus by CMS on compliance, as opposed to learning, they have no resources remaining to dedicate to systems thinking. Research supports this too. For example, Zadeh & Haggerty (2022) state that in long term care, despite concerted efforts within facilities, "the overemphasis on compliance can deplete organizational resources that otherwise could be used to develop a capacity necessary for remaining continuously alert and tracking small frequent lapses before they turn into system-level breakdowns" (p. 179).

In other words, facilities spend so much time on busy work created by unnecessary or misapplied compliance that they cannot direct resources to prevention, to learning about problems before they become serious. This does not mean that compliance isn't important; it absolutely is. Regulations, standards, expectations, and accountability are crucial components of any system. They just can't be the only parts.

Limitations of Research

This study was limited by sample size and capacity. It would be beneficial to hear from more leaders in the nursing home industry and from frontline staff about their thoughts on the survey process. Future projects may want to cast a wider net and look at citations other than abuse and neglect to see if there is evidence of learning in those statements of deficiency and if other plans of correction are more successful in identifying opportunities for systemic change.

The study was also impacted by the variability in how states post, or do not post, their nursing home surveys. Thirty of fifty states had both the surveys and the plans of correction available on their respective websites. Additionally, every website used a different platform, some more cumbersome and time-consuming to navigate than others. Neither the CMS database of nursing home health citations nor the ProPublica had a comprehensive list of statements of deficiency, meaning that some that met the criteria could have been missed. There were also statements of deficiency listed in the databases that were not found on the individual state websites.

Keep in mind, this study only looked at statements of deficiency and plans of correction as potential vehicles for learning. There may be other ways that nursing homes, state survey agencies, and CMS are learning about adverse events in their system. There is more to learn too about what aspects of organizations like the Federal Aviation Administration and the Nuclear Regulatory Commission could be replicated for the long-term care system.

There is another aspect of learning that has been left out of this discussion. There are far more successful events occurring in nursing homes every single day that go unstudied. In fact, "to understand how failure sometimes happens one must first understand how success is obtained – how people learn and adapt to create safety in a world fraught with gaps, hazards, trade-offs, and multiple goals" (Woods & Hollnagel, 2006, p. 3). There is an opportunity to capture how things go well that does not appear to have been capitalized on by CMS.

This study reviewed the statements of deficiency which are self-reports by facilities. There is other research that looks at abuse, neglect, and exploitation reported by residents and by staff that has different quantitative data. It also cannot be assumed that every incident is reported to the state and CMS by the facility. However, the learning process has to start somewhere.

Conclusion

Long-term care is a highly regulated industry. It operates as if the number of regulations is directly proportional to the level of safety – as if policies make people safe. Instead, rigid adherence to regulations creates an environment where people do not talk about the challenges of work. The plan of correction process is a perfect example of this. Facilities create these from a place of fear – fear of losing licenses, beds, contracts, or fear of being fined. They do exactly what they are told to do even if it never addresses the real problem and even if it creates greater risk.

There is no safety manual that can predict every possible permutation of risk. There will always be a gap between what is planned for and what actually happens. In complex systems, it is people who fill this gap. It is the direct care workers, social workers, and case managers who rely on their expertise and education to respond in the best way they know how. That is what makes safety – people figuring it out every single day. Safety is not about avoiding risk or error; it is about all of the interactions within the system that build (or destroy) a culture where people feel safe and supported to make decisions they feel will be most successful (Rochlin, 1999).

Unfortunately, long-term care operates in a way that blames people for problems. If something bad happens, it is because somebody did not do something they were supposed to do – did not follow a policy or procedure, use a wheelchair brake, put up a bed rail, provide adequate supervision. These beliefs are why, for years, there has been indescribably high turnover in many levels of long-term care. As one interviewee stated, the focus on compliance is "what's gonna drive me out. I know I could make more money as an RN somewhere else. I know I could have less stress being an RN passing medications at a hospital, but I don't want that. I love my residents, but the state just makes it impossible." No one wants to work in a system where they are constantly blamed and told to try harder, do better.

Despite CMS having multiple publications referencing systems thinking and systemic change, there is no guidance telling facilities how to implement it, and even if there was guidance, the long term care system does not operate in a manner that is consistent with and supportive of systemic change. Nursing home leaders have clearly demonstrated an understanding that there is more to improving the system than quick fixes. They understand the complexity of not only the work within their own facility but the entire nursing home system. Yet, the current landscape is so focused on compliance that nursing home

leaders feel no support and have no resources to dedicate to systems thinking. More rules do not equate to more safety. But it does not have to be this way.

First and foremost, the system has to stop fighting itself. The mentality of CMS and state survey agencies versus the facilities is no longer sustainable. CMS must create a culture where staff and facilities can report errors and concerns without fear of punishment. This does not mean that poor-performing nursing homes can continue to flout regulations. In fact, using safety science will give us more information about performance, create pathways to improvement, and help determine with clearer evidence if and what type of punitive action is the most appropriate response.

Culture shifts are incremental over a long period of time. A quick(er) win would be to start using the statement of deficiency as a learning opportunity. Train state surveyors how to ask questions that build second stories, that uncover the challenges and barriers to doing the work. When the surveyors and facilities can better understand why something happened, they can then use this information in two ways. The facility can create a plan of correction that is meaninful to what needs to be addressed. The state can take information that is influencing the facility higher up in the system, like policies or reimbursement rates, analyse that data over time, and make recommendations for wider changes to the long-term care system.

Of course, when it comes to making these changes, long-term care does not have to reinvent the wheel. There are multiple entities that act as a regulatory authority while prioritising learning. It can be done; it has been done; and there are decades of research that show it should be done.

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