

PERSPECTIVES

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Who Uses Pathways Around Care Management?

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October 2024

J Clin Pathways. 2024;10(5):36-39. doi:10.25270/jcp.2024.09.02

Abstract

Clinical pathways are developed by clinicians but used for various purposes in the US health care system. Pathways were designed to result in the best possible clinical and financial outcomes. Real-world care management involves multiple clinicians, administrators, and other organizations responsible for benefits administration outside of direct clinical care. As a result, there are many different uses for clinical pathways. This pilot study provides a brief literature review on users, uses, and a recent electronic survey to determine how users use pathways along with their feedback around their value. Key findings from this limited sample indicate a variety of uses for pathways reported primarily by nurses, nursing staff, or practice administration. This preliminary effort aids in documenting the value and real-world use of care pathways in the diverse care provider marketplace that plans to be studied in a larger survey with updated questions. This area of clinical pathways remains an important effort to better understand and provide a guide for those working in this growing field of clinical-economic work in the health care system.

Background on the Use of Clinical Pathways

Clinical pathways, developed by practicing clinical health care experts, aim to more effectively incorporate evidence-based medicine and reduce the variation of care among patients. Ultimately, experts believe that properly using these pathways will result in the best possible clinical and financial outcomes for patients.¹⁻³

In care management and nursing practice, clinical pathways are defined in a few different ways. For example, a pathway can be "a structured, multidisciplinary [care management] plan designed to support the implementation of specific clinical guidelines and protocols" or "computational maps or algorithms that guide the health care team, especially the nonphysician care team members, on the usual treatment patterns related to common diagnoses, conditions, and/or procedures." They can also be labeled with different terms, such as care pathways, integrated care paths, or multidisciplinary pathways of care, to name a few. 1-3

Regardless of the name or definition used, clinical pathways offer several key benefits. They result in fewer hospitalizations, emergency department visits, and medical complications; they improve clinical documentation and cost reduction; and, most importantly, they lead to better patient care and outcomes.⁴⁻⁶

Clinical pathways are intended to be interdisciplinary and involve providers across various specialties so that they can better manage patients with certain conditions, particularly patients who are medically complex. To reduce variation in outcomes, patients should receive the same care and services for a condition regardless of their geographic location. However, flexibility should remain for individualization that may be specific to the region in which the patient is treated and the resources that are available for the patient's care.

For clinical staff, such as nurses, a pathway becomes a workable plan that can be used to manage the day-to-day care of patients either at bedside or over the phone. This also assists in patient and family education and can help define specific steps in a course of treatment with appropriate timeframes, sites of care, and expected milestones or outcomes.¹

Clinical pathways were initially developed for physicians, surgeons, physician assistants, and nurse practitioners to help create and manage a patient's treatment plan; however, if the sole goal is improved management of medically complex patients who encounter other allied health care professionals, then all providers should be included in these pathways to promote effective communication across disciplines to ensure the best care for the patient.²

Clinical Pathway Use Identified in Published Literature

Studies have evaluated the different models of case management and their effects on patient care. Researchers have investigated parameters such as length of stay, patient satisfaction, survival rates, unplanned readmissions, and complications.^{6,7} Ongoing research continues to evaluate the importance of the type of care managers and settings, such as siloed vs team-based approaches.

Such efforts and previous publications suggest that successful coordination between members of a multidisciplinary patient care team is critical to delivering efficient, high-quality care, which are both of utmost importance in health care. Historically, the divide between nurses and doctors has hindered care plan coordination and fragmented clinical pathways. The ever-increasing complexity of care and professional specialization has exacerbated these challenges, resulting in multistakeholder dissatisfaction with the fragmented, inefficient, and variable nature of health care.

In this vein, Baumann et al have suggested that the only way to improve patient outcomes is through closer collaboration with less mutual exclusivity of functions and values between the different caring professions.⁸ Clinical pathways have the potential to act like a bridge between nurses, physicians, and other providers to decrease inefficiencies and improve patient outcomes.

As with any illness, the treatment course for many patients often requires a variety of health care services, including diagnostics, imaging, and pharmaceuticals, that may take place in inpatient or outpatient settings, such as hospitals or by other care providers. In other words, many decisions must be coordinated and communicated to the patients, their families, and their other care providers to avoid complications, delays, and duplicate tests or interventions. Case management provides a solution by allowing an individual professional or a small team to oversee the entire complex process to ensure its efficiency and efficacy.

Case managers, whether they act as an individual or small team, serve a pivotal role in coordinating health care, similar to the role of a quarterback in football. While all health care professionals are valuable members of the team, effective communication, collaboration, and leadership is needed to help the team achieve the best outcome. In football, the goal is victory; in health care, it's providing the best possible patient care. Clinical pathways facilitate this collaboration between care managers and physicians for a better, more sustainable way to coordinate care.

While there is no gold-standard approach to case management, there are various models, which can be used individually or in combination with one another. The most common types of models are the brokerage model, the integrated case management model, and the self-managed care model.⁵ Each model has distinct functions, but the shared goals are to improve coordination of care, interoperability, site-of-care efficiency, and cost savings. A broker model allows the care manager to broker clinical and financial benefits for the patient. An integrated care management model allows the case manager to retain full care of the patient and speak with all parties involved. The self-care model uses the care manager as a guide for patients to manage their own care.

Determining Organic User Growth of Pathways

Anecdotal evidence, based on professional experience and specialty meeting attendance, suggests that clinical pathways are increasingly understood for their value and use in improving care. Many clinicians across disciplines have expressed interest in developing clinical programs to improve patient care by drawing upon multidisciplinary, evidenced-based clinical pathways.

To confirm our informal observations, we created and conducted an initial pilot survey of nurse care managers to determine what type of care management they were using (**Supplementary Material**). The survey collected data on the nurses' employers, their knowledge base regarding clinical pathways and how they were using pathways, and whether they thought pathways had any inherent benefit in how they provided patient care and management.

Pilot Survey Methodology

We collaborated on the survey with the American Association of Managed Care Nurses (AAMCN), a national organization that focuses on the role of care management nurses in patient care across all settings. The AAMCN has approximately 2500 members who work in diverse settings throughout the United States, including self-funded employers, health plans, integrated organizations, physician practices, hospitals, and countless others. We selected the AAMCN for the study because of their alignment on the topic of interest and focus on care management.

The authors created this survey in late-January 2024 based on our hypothesis that care managers are vital users of clinical pathways in their practices despite being primarily physician-oriented. The AAMCN reviewed and then distributed the survey with the authors using an online survey platform in mid- February 2024. Results from respondents of this deidentified pilot survey were aggregated and are available in the Supplementary Material.

Key Findings From the Pilot Survey

The results from this pilot survey were interesting for documenting real-world use of clinical pathways but were not entirely surprising. Most survey respondents worked in a community, academic, or medical center setting. The remainder worked in a variety of other settings, such as health plans (including administrative services only), employers, or government entities.²

Most care managers responded that they knew about clinical pathways, but the conditions and situations in which they were used were more diverse than expected. Respondents identified applications in using care pathways that covered most chronic care conditions and most common disease states in real-world care settings. Those conditions included medical care through diabetology/endocrinology, oncology, orthopedics, and cardiology.

The findings on how the nurse professionals used pathways in their respective practice or organization were also enlightening. Some respondents used clinical pathways for prior authorization, patient education/management, and site of care. Others used them for treatment validation of tests and care services. Most importantly, regardless of the care managers' payer type or the category of care management they were preforming, 88.9% of the respondents reported that clinical pathways were valuable to them and their role.

These are some of the open-ended responses we received on the value of clinical pathways:

"[Clinical pathways help] guide the direction for care for long-term management and stabilizes the disease process. It depends where the patient is on the chronic health trajectory. It assists in making sure the patient has optimized treatment in the outpatient setting to prevent unnecessary hospitalizations and readmissions."

"Appropriate knowledge helps me with patient education and finding proper care."

"[Clinical pathways help] me understand what procedures are needed, frequency or utilization of test and screening, and estimate recovery time."

"This gives me the ability to stay on the forefront of health care."

"Clinical pathways that utilize evidence-based treatment guidelines reduce variation in treatment and care management coaching.

Furthermore, there is an industry standard to digitize this knowledge base and remove the human (nurse) as part of this application."

Limitations

We collaborated on the survey with the AAMCN, who used Survey Monkey as their online platform for this email survey to their general membership. However, the response rate was low (only 12 of 2500 potential respondents), which may be due to the short (60-day) collection period in the first quarter of 2024. Despite the small sample size, which limits our ability to draw substantive conclusions, the survey did provide some documentable insights on future targeting toward an expanded survey response effort with the AAMCN and other related groups across the United States. This survey represents an initial effort to collect key data points and open-ended responses about who and what uses of care pathways occur in care settings. Documenting the value and real-world usage use of care pathways in the diverse care provider marketplace remains an important effort for this growing field of work.

Summary and Conclusion

Clinical pathways and guidelines have a long history of guiding optimal patient care, outcomes of care, and quality of care. With the rise of team-based and patient-centered care strategies in recent decades, the use of clinical pathways has expanded to include more nonphysicians care decision-makers. While managed care has driven the expansion of pathway use in hospitals and community practices, there is a need to rethink who uses or needs different types of clinical pathways.

We used our pilot confirmatory survey to gauge the awareness and use of clinical pathways across contemporary care settings. The results validated our working hypothesis around clinical pathway use across a variety of care settings and by nurses. A next step of research might be a deep dive into these findings to further explore the hypothesis that because nurse care managers are valued members of the multidisciplinary care team, they should be utilizing clinical pathways in the strategic management of patient care, regardless of care management model or setting. Exploring use of pathways by other allied health care decision-makers could also be incorporated.

Anecdotal conversations and information among professionals, meeting presentations, and panel discussions have alluded to the value of both clinical pathways and nurse care managers. Given the accelerated and expanded scope of managed care efforts that leverage electronic records data, future research should seek to determine who, how, and when clinical pathways are used. Efforts to optimize existing care pathways or develop new ones can improve on the value they provide to patients. Results from surveys such as ours can better document the use and potential of care pathways to deliver on the promise of enhanced patient outcomes.

Expanding such surveys to include health care professionals, such as oncology nurses, care or case management nurses, and other allied health care professionals, can help accelerate improvements to and implementation of clinical pathways across all care settings.

This article has supplementary material, which can be accessed <u>here</u>.

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Disclosures:

The authors disclosure no financial or other conflicts of interest.

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