



## THE IMPACT OF NURSE-LED CARE COORDINATION PROGRAMS ON REDUCING HEALTHCARE COSTS

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### Abstract

A significant number of individuals over the globe possess intricate health and social care requirements. Ensuring care coordination for these patients is an essential aspect of integrated care and a basic obligation of primary healthcare. Registered nurses have a significant role in coordinating care. This study builds upon existing theoretical research and presents a comprehensive analysis of care coordination treatments used by nurses for complicated patient populations in primary healthcare settings. We conducted a methodical search throughout the databases CINAHL, MEDLINE, Scopus, and ProQuest. The nursing care coordination activities were consolidated into three distinct categories: interventions aimed at the patient, family, and caregivers; interventions aimed at health and social care teams; and interventions aimed at facilitating collaboration between patients and professionals. Interpersonal communication and information transmission have been identified as fundamental behaviors that facilitate all other activities. These factors include heightened levels and regularity of activities, consistent care relationships, and visits to the individual's residence. Given the increasing intricacy of patients' requirements, it is crucial to focus on empowering primary healthcare to properly fulfill its significant position in coordinating treatment. This involves identifying primary care employment models that would promote interdisciplinary collaboration and the provision of integrated care, while ensuring the provision of intense but efficient coordinated care.

**Keywords:** care coordination, integrated care, primary healthcare, complicated health and social care requirements, registered nurses, review

### 1. Introduction

In the last twenty years, the issue of integration has emerged as a significant priority for several governments and healthcare systems [1,2,3,4]. Due to budgetary constraints, increasing numbers of elderly individuals, and the presence of several chronic illnesses [5,6,7], numerous nations have acknowledged the need of transitioning from disjointed and sporadic healthcare to a more cohesive and unified healthcare system [8]. Research has shown that integrated care has the



capacity to enhance the consistency of healthcare, its accessibility, quality, and safety, while also improving the cost-effectiveness of services [9]. The need of coordinating care around patients' requirements has been recognized as a fundamental aspect of integration, which enables the delivery of complete and uninterrupted care [10]. Furthermore, it has been acknowledged as a crucial duty for primary healthcare [11].

As complexity increases, there is a corresponding demand for a more robust primary healthcare system that can provide a greater degree of care within the community and effectively coordinate treatment across different levels of healthcare [12,13]. A significant number of individuals globally possess intricate requirements that extend beyond the usual scope of the healthcare system [14]. The fragmentation of health and social care services places the burden on patients with complicated requirements to navigate their own way through many agencies and providers. As a result, patients often find the system confusing and burdensome. For these patients, the coordination of treatment and integration of health and social care services are particularly important.

While there is general agreement on the goal of care coordination, there is currently no worldwide consensus on a specific conceptual model, and there is considerable uncertainty in the definitions of care coordination [17]. Care coordination, as defined by the Agency for Healthcare Research and Quality, is the intentional arrangement of patient care activities among several partners, including the patient, to support the proper delivery of healthcare services. Various methods have been used to provide organized care in real-world situations. Case management is a highly involved intervention aimed at providing care for individuals with intricate health and social requirements [19]. Case management is a focused, community-oriented, and proactive method of providing care that includes identifying cases, evaluating them, creating care plans, and coordinating care [19].

Patient navigation is a newly developed method in primary care that aims to connect patients and their families with primary care services, specialist care, and community-based health and social services. This strategy is designed to deliver comprehensive and patient-centered treatment. The Agency for Healthcare Research and Quality has identified numerous other methodologies and names that are often used interchangeably or in combination with care coordination, including collaborative care, illness management, care management, and the Chronic Care Model [18]. Regardless of the chosen strategy, successful care coordination requires the participation of a multidisciplinary primary care team that operates as a collaborative and unified unit to provide appropriate care in the appropriate location and at the appropriate time [16].

Professionals from diverse backgrounds, such as nursing, social work, physiotherapy, and occupational therapy, may assume the job of care coordinator within primary healthcare, provided that they possess the requisite abilities and get appropriate training [19]. The selection of a designated care coordinator is often influenced by contextual variables, the target audience,

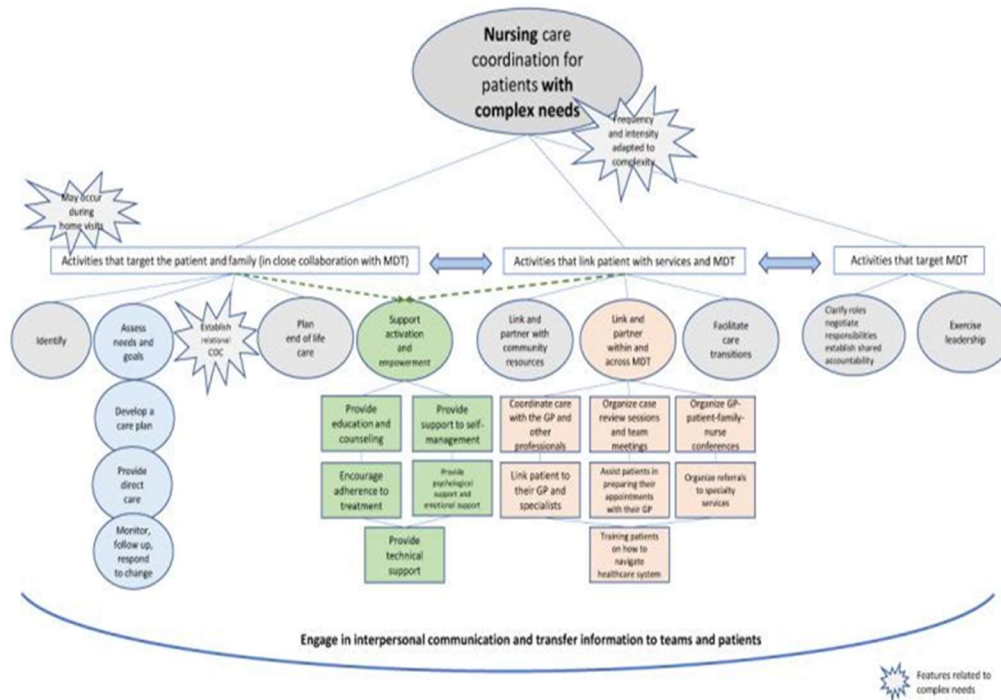
and the program's objectives. Undoubtedly, an essential aspect of care coordination is adopting a comprehensive approach to care that encompasses both clinical/medical aspects and the wider factors that influence health [21]. This particular viewpoint is what granted nurses and social workers their rightful role in organizing and overseeing care for a diverse population. However, one individual may possess superior skills and knowledge compared to the other, depending on the patient's specific condition and the specialized competence required to address this illness. For example, patients in the rehabilitation and reablement stages, as well as those experiencing functional decline, greatly benefit from social care competence [19].

On the other hand, patients with major diseases like cancer need nursing clinical skills [22]. Regardless of the situation, it is essential for health and social care professionals to cooperate and use their distinct abilities and specialized knowledge as required. Primary care practices with the necessary capabilities, such as appropriate structure and resources, have adopted a team-based approach to care coordination. In this model, a social worker and a registered nurse collaborate to conduct a comprehensive patient evaluation. The care coordination approach shown efficacy in enhancing communication between healthcare and social agencies, as well as enhancing care for difficult patients, particularly older individuals [23].

This scoping study specifically examines the involvement of registered nurses in the process of care coordination. Nurse-led care coordination interventions demonstrated efficacy in enhancing access to suitable treatment [24], reducing expenses [25,26,27], enhancing clinical outcomes [27,28] and quality of care [29], improving staff communication [30], enhancing safety for vulnerable patients during transition [29], and decreasing unplanned readmissions [19,31]. It is important to mention that nurses may be hired to do care coordination tasks alone [32,33], or they may combine care coordination with broader team management duties or clinical care giving [34], depending on local requirements and available resources.

## **2. Coordination activities**

Furthermore, we observed discrepancies in care coordination activities not just within the same kind of intervention, but also when attempting to compare these activities based on the specific patient groups they target. For example, among elderly patients who have numerous vulnerabilities and rely heavily on healthcare services, the need of enabling care transitions was not noted in all research, but it was addressed in few studies [32,35,36]. Another category that was shown to be pervasive and beneficial to all other activities is interpersonal contact and information transmission (Figure 1).



**Figure 1.** A model illustrating the many actions involved in coordinating nursing care for patients with complicated needs.

The care coordination model we propose should not be seen as a step-by-step guide, but rather as a tool to assist professionals and decision makers in customizing their own intervention based on the specific needs of their target patient population and the realities of their context and environment. The effectiveness of integrated care interventions, such as care coordination, has always been influenced by the specific circumstances in which they are implemented [37,38]. Establishing a consistent and ongoing relationship with the patient and their family is crucial for coordinating treatment for individuals with complicated needs.

Our findings highlight the importance of the care coordinator being accessible outside of regular hours and when urgent matters occur. This accessibility contributes to the establishment of a strong and consistent continuity of care. For patients with complicated requirements, integrated care often involves a centralized access point and direct communication with a designated care coordinator [40]. Our research demonstrates the crucial role that nurses play as the primary point of contact for patients in all circumstances. Research shown that maintaining consistent relationships between healthcare providers and patients led to improvements in preventive care, decreased hospitalization rates, better adherence to treatment, and higher levels of satisfaction with healthcare [41].

Home visits are crucial for coordinating the treatment of patients with specific or complicated requirements. The primary reason for this is the vulnerability and potential decline in functioning of the target patient populations. Additionally, it enables nurses to obtain a deeper

understanding of the patient's living environment, including important factors such as safety concerns [33] and the burden on caregivers [42], which are essential for effective care planning. However, it is important to see home visits not as a standalone activity, but as part of a complete care coordination intervention. The first phase of this intervention is to understand the patient and caregiver in order to determine the specific care or services they need.

### **3. Significance of the findings for both research and practical applications**

It is commonly acknowledged that complicated treatments are often not implemented or followed as planned [43]. However, the studies included in our study seldom included information on their evaluation of intervention fidelity. Additionally, it is unclear if nurses engaged in one action more often than another, or whether they required additional training for the tasks that were done less frequently. Subsequent investigations should focus on these two domains as they may provide insights into the incomplete effectiveness of some treatments.

Recently, there has been significant interest in the co-location of health and social care workers. This approach is valued for its ability to promote collaboration across different disciplines and enhance the provision of integrated care [10]. Our results confirm that no one professional can fulfill the work alone, and that a "close" cooperation between health and social care agencies is especially crucial for effective care coordination. This evaluation might therefore serve as an additional justification for the staff co-location.

To properly acknowledge care coordination in practice, it is necessary to clearly define the tasks involved and deliberately analyze the specific times, locations, and methods in which it occurs [16]. This synthesis would facilitate the establishment of a system to record nurses' care coordination actions, with the aim of guaranteeing proper financial and social acknowledgement of their role in delivering high-quality, efficient, and integrated care.

### **4. Conclusion**

Various interventions are used to facilitate the coordination of care for individuals with intricate health and social care requirements in primary healthcare. Although they are diverse, these activities have a similar characteristic: they need frequent and intense coordination of care to address the complicated requirements of the specific patient groups. Care coordinators provide a seamless continuity of care for these patients by being accessible outside of usual hours and promptly addressing critical matters. As complexity increases, it is necessary to focus on empowering the primary healthcare level to successfully fulfill its significant role in coordinating care. This involves identifying primary care employment models that would promote interdisciplinary collaboration and the provision of integrated care, while ensuring the provision of intense but efficient coordinated care.

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