

Implementation of a care coordination system for chronic diseases

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ABSTRACT

The prevalence of chronic diseases has been steadily increasing, but the management indicators for these conditions have not shown significant improvements. This paper proposes a new policy to enhance the existing chronic disease management system. The policy includes the establishment of care plans for patients with hypertension and diabetes by primary care physicians, as well as the provision of care coordination services based on these plans.

INTRODUCTION

The aging population has resulted in a rise in the number of individuals suffering from chronic diseases(1), leading to escalating socio-economic costs associated with complications, disabilities, premature deaths, and direct medical expenses. Despite this situation, the management of chronic diseases has not shown significant improvement. For instance, the rates of blood pressure control for hypertension patients and glucose control for diabetes patients have remained at approximately 60% and 20% respectively. To address these challenges, several public projects have been initiated in select regions, aiming to raise awareness about diseases and improve medication adherence. The Ministry of Health and Welfare has recently announced the "Pilot Project for Primary Care Chronic Disease Management," which will introduce a stepwise strengthening of chronic disease management based on primary care services. This pilot project includes the establishment of care plans for patients with hypertension and diabetes by primary care physicians, along with the provision of care coordination services based on these plans.

KEY ELEMENTS OF CARE COORDINATION

The Chronic Care Model (CCM) has served as a widely adopted guideline for effective chronic disease management since the 1990s(2). The model emphasizes the imperative need for transforming the current health and medical system to address the management of chronic diseases. It highlights vital factors such as community resource linkage, alignment with healthcare institution characteristics, self-management

support, delivery system design, decision-making support, and establishment of a clinical information system as crucial aspects for appropriate chronic disease management.

STRUCTURE AND RESPONSIBILITIES OF CARE COORDINATION TEAM

The CCM model underscores the importance of organizing, coordinating, and delivering chronic disease management through a multidisciplinary team(3). Additionally, it recommends adopting a population-based approach to influence treatment outcomes. This approach involves the development of care plans based on comprehensive assessments, cooperation with patients to identify obstacles, problem-solving, and pursuit of service goals. Previous studies have reported the effectiveness of care coordination teams in the areas of heart failure, diabetes, treatment of the frail elderly, and integration of mental health services with chronic pain.

PLAN FOR SERVICE QUALITY ASSURANCE

Improving the coordination system necessitates collective efforts, rather than simply enforcing a system and supporting personnel and finances in primary healthcare institutions. Measures such as personnel relocation, training for new care coordination roles, and establishment of networks with numerous service providers and local organizations are essential(4). Timely sharing of information between patients and various service providers is also crucial. These efforts contribute to primary care providers making decisions that enhance care coordination. Once a care coordination team is established, developing quality management plans and monitoring operations are the subsequent steps. Clear goals, such as receiving consultation report feedback after specialist referral, or contacting patients within three days after hospital discharge, should guide the planning process

TRACKING AND MANAGEMENT OF PATIENTS

The primary objectives of care coordination are to manage the quality of care services during patient referrals and transitions and to provide service providers, organizations, and patients with the necessary information and resources for appropriate

care(5). These tasks represent core responsibilities of the care coordination team. Primary care providers are primarily responsible for patient referrals and care coordination, including initiating referrals to specialists or other providers when required.

INFORMATION SYSTEM

Having access to essential information for service providers is a critical factor in successful patient referrals and transitions. Challenges arise due to the use of different electronic medical record systems in hospitals, clinics, and public health centers, making it difficult to standardize medical information and establish an electronic information system. However, organizing practice teams and achieving consensus among service providers could standardize information crucial for patient referral and transition(6),.

CONCLUSION

This study examined the major factors of care coordination based on the CCM, and further examined the difficulties and practical measures required for introducing the system. It would take time for the care coordination system to settle. All the factors for care coordination described in this study require continuous management and improvement after the actual implementation of the system, including planning for service quality assurance, tracking and managing patients, providing patient support, maintaining consent and agreement on patient referral and transition, and developing and maintaining an electronic information system. Furthermore, most indicators on chronic diseases cannot be improved immediately after the implementation of the system. Therefore, a long-term plan should be established and continuous improvement of the system should be emphasized.

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