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# Implementation of nursing case management to improve community access to care: A scoping review

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## Abstract

**Background:** Case management is an approach used to help patients locate and manage health resources as well as to enhance effective communication among patients, families, and health systems. Nurses' role as case managers has been proven effective in reducing healthcare costs among patients with chronic diseases. However, little is known about its implementation in improving access to care in community-based settings.

**Objectives:** This scoping review aimed to examine the components of nursing case management in improving access to care within community settings and to identify the issues of community-based nursing case management for future implications.

**Design:** This study was conducted following the framework of scoping review.

**Data Sources:** The authors systematically searched five electronic databases (CINAHL, PubMed, Science Direct, Scopus, and Google Scholar) for relevant studies published from January 2010 to February 2021. Only original studies involving nurses as one of the professions performing case management roles in the community-based settings, providing 'access to care' as the findings, were included.

**Review Methods:** The article screening was guided by a PRISMA flowchart. Extraction was performed on Google Sheet, and synthesis was conducted from the extraction result.

**Results:** A total of 19 studies were included. Five components of nursing case management to improve access to care were identified: 1) Bridging health systems into the community, 2) Providing the process of care, 3) Delivering individually-tailored health promotion and prevention, 4) Providing assistance in decision making, and 5) Providing holistic support. In addition, three issues of nursing case management were also identified: 1) Regulation ambiguity, 2) High caseloads, and 3) Lack of continuing case management training.

**Conclusion:** Care coordination and care planning were the most frequent components of nursing case management associated with access to care. These findings are substantial to improve nurses' ability in performing the nursing process as well as to intensify nurses' advocacy competence for future implications.

## Keywords

case management; care manager; nursing process; health service accessibility; health resources; nurses' role

Access to health care is still a persistent challenge in the healthcare system around the world. Since the Alma Ata Declaration of 1978, 134 countries and 67 international

organizations have committed to eliminating the barriers to universal health coverage (UHC), thus providing accessible health services for all populations ([Pan American Health](#)

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Organization, 2019). One dimension indicating the UHC is the proportion of people covered by the health system. Based on the report from the World Bank and World Health Organization (WHO), half of the global population could not obtain basic health services due to poor access (WHO, 2017). Access to health care is defined as reaching a health care service, provider, or institution to utilize appropriate services in proportion to their need for care (Levesque et al., 2013). It comprises three distinct components: 1) being able to gain entry into the healthcare system; 2) being able to locate provided health care services; and 3) being able to communicate with trusted health care providers (Agency for Healthcare Research and Quality, 2020). The commitment to accelerate the UHC should be accompanied by efforts to strengthen community-based health care services and maintain appropriate healthcare financing systems.

Case management is used as an approach to promote better coordination of health care services and enable broader access to all populations. This intervention helps optimization of available resources; enhances communication among health care providers, patients, and their families; and serves as patient advocates within the health care system (Fabbri et al., 2017). As the largest occupational group in the health sector (WHO, 2020), the nursing profession contributes to important roles in case management. Within nursing, a case manager is a nurse responsible for case finding, multidimensional assessment, care delivery, monitoring, and evaluation of health outcomes of a patient and their families (Bertuol et al., 2020). To deliver effective case management intervention, a nurse case manager should obtain clinical, managerial, and financial skills. In addition, not only should a nurse case manager be proficient in the health and well-being of individuals across the lifespan, but also adept in communication (with patients, families, and health care team) and the health care system (Fabbri et al., 2017).

Currently, nurse case managers work in multiple settings from hospitals, home health services, or patient homes (Arnold, 2019). It has been known as one strategy to reduce health care costs (van Voorst & Arnold, 2020). There was strong evidence of using case management to significantly reduce the patients' hospital use and improve their quality of life (Joo & Liu, 2017; van Voorst & Arnold, 2020). For individuals with chronic illnesses transitioning between hospitals and their communities, case management is often cited as an effective intervention to improve access to health care services (Joo & Liu, 2017). According to the Commission for Case Management Certification (CCMC) in the United States, on average, two-thirds of nurse case managers work within community settings (Arnold, 2019). However, the majority of evidence focused on improving patients' and families' quality of life, cost-effectiveness, and reduced hospital readmission rates. Information about community-based case management implementation in relation to its impact on access to health care is limited.

This scoping review aimed to examine the components of nursing case management in improving access to care within community settings as well as the issues for future implications. Two research questions were formulated: 1) "What are the components of nursing case management interventions to necessarily improve access to health care?" and 2) "What are the issues faced by nursing professions in delivering case management interventions?" This study is expected to provide existing information on how nursing case management contributes to leaving no one behind in the health system.

## Methods

As the topic of community-based case management's impact on access to health care has not been comprehensively reviewed, this study employed a scoping approach to evidence synthesis from existing literature following the guidelines by Arksey and O'Malley (2005): 1) formulation of the research question(s), 2) identification of relevant studies, 3) study selection, 4) charting the data, and 5) collating, summarizing, and reporting the results. A scoping review does not usually apply critical appraisal for selected studies as it includes a wide spectrum of studies and aims to broadly sum up the research findings (Nam et al., 2015).

### Search Methods

Five electronic databases (CINAHL, PubMed, Science Direct, Scopus, and Google Scholar) had been searched to retrieve relevant references. Keywords of ((community) AND ("case manage\*")) AND (nurs\*) AND (access) AND (care) were applied to identify original studies published between January 2010 and February 2021 with free full-text availability in English or Bahasa Indonesia.

### Eligibility Criteria

References were included if those were original studies employing quantitative, qualitative, or mixed methods; involving nurses as one of the professions performing case management roles; providing "access to health care" as the main finding; and published in peer-reviewed journals. Conversely, studies were excluded if they did not describe case management intervention or roles of nurse case manager; only focused on other types of health workers (i.e., community health workers, traditional healers); and in the form of review, editorial, commentary, book, policy documents, or government document.

### Screening

Initially, 505 references were identified, of which 35 were duplicates. Two authors then independently screened 470 studies by title and abstract. After screening by title and abstract, the full texts of 34 studies were assessed for eligibility. After screening the full text, 15 studies were excluded. Six studies employed study designs that did not fit into the inclusion criteria, five studies focused on other

types of health workers, and four studies provided no explanation about community case managers. Nineteen studies were found to meet the aim of this scoping review (Figure 1).

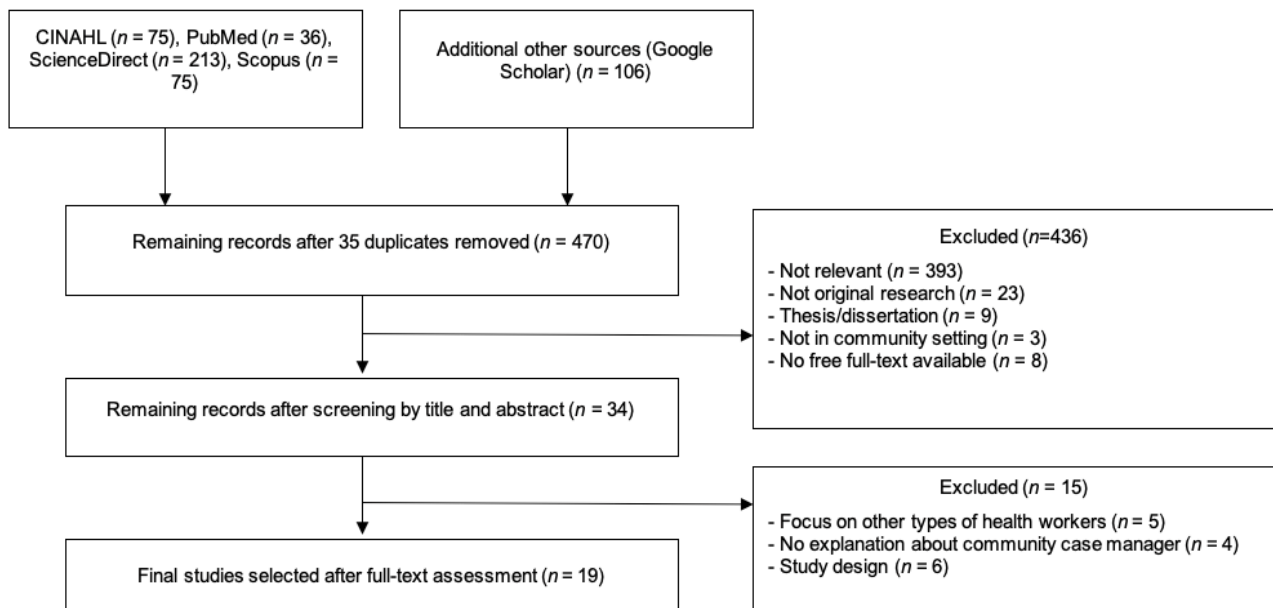
### Data Extraction

Narrative tables were used to chart, collate, and summarize selected studies. The data charting table was created to identify themes from research findings in accordance with the research questions and purpose (Tricco et al., 2016). The data extraction table was formulated to insert the

following information from selected studies: author, publication date (year), sample, design, research objectives, and findings.

### Data Analysis

Data analysis was conducted by two authors, who summarized the major findings from selected studies to draw themes and subthemes independently (Tricco et al., 2016). Next step, the authors merged the data analysis and performed joint analysis to determine the sub-themes of research questions.



**Figure 1** Flowchart of searching and screening strategy

## Results

### Search Results

**Table 1** Characteristics of selected studies

Categories	Details	Total	%
Design of studies	Qualitative studies	10	52.6
	Quasi-experimental	3	15.8
	Analytical studies	4	21.1
	Others	2	10.5
Year of publication	2010-2013	6	31.6
	2014-2017	6	31.6
	2018-2020	7	36.8

Table 1 presents the characteristics of selected studies after the final full-text assessment. The majority of studies

are qualitative studies, while the remaining articles included quasi-experimental studies, analytical studies (cross-sectional, case study, and cohort study), mixed-method study, and a study utilizing grounded theory.

### Analytical Findings

As seen in Table 2, five components of nursing case management interventions to improve access to health care were deduced, namely: 1) bridging health systems into the community, 2) providing the process of care, 3) delivering individually-tailored health promotion and prevention, 4) providing assistance in decision making, and 5) providing holistic support. There were also three issues of nursing case management identified, namely: 1) regulation ambiguity, 2) high caseloads, and 3) lack of continuing case management training. Table 3 presents a detailed summary of the final studies selected.

**Table 2** Themes and subthemes derived from the selected studies

Studies	Components						Issues	
	Bridging health systems into community	Providing the process of care	Delivering individually-tailored health promotion and prevention	Providing assistance in decision making	Providing holistic support	Regulation ambiguity	High caseloads	Lack of continuing case management training
Balard et al. (2016)	V	V			V	V		
You et al. (2016)	V					V		
Williams et al. (2011)	V							
Uittenbroek et al. (2018)	V	V	V	V			V	V
Tønnessen et al. (2017)	V					V		
Setiawan and Dawson (2018)	V					V		
Setiawan et al. (2016)	V		V					
Manthorpe et al. (2012)	V	V			V	V		
Klein and Evans-Agnew (2019)	V	V		V			V	
Hudon et al. (2015)	V	V	V	V				
Hensley (2011)	V			V	V	V	V	
Head et al. (2010)	V	V			V	V	V	V
Gage et al. (2013)		V						
Dhingra et al. (2016)	V	V			V			
David et al. (2019)		V		V			V	V
Cicutto et al. (2020)	V	V	V					
Chapman et al. (2018)		V	V		V	V	V	
Brown et al. (2011)	V	V	V		V		V	
Borgès Da Silva et al. (2018)	V	V						

### Bridging Health Systems Into Community

Nurse case managers should be able to engage clients and their families in the health system. This was the most common role, as mentioned in the 16 studies. Nurse case managers are responsible for interpreting the information from the health system to clients and vice versa (Balard et al., 2016). In one case, a nurse case manager becomes the only health worker in the designated area; thus, it is important to obtain community trust (Setiawan & Dawson, 2018) so that initial treatment could be promptly delivered (Setiawan et al., 2016). Service provided towards clients and family members from the vulnerable population would eventually help reduce delays in receiving medical care (Setiawan et al., 2016; Tønnessen et al., 2017). To ensure the continuity of this role, a nurse case manager should possess strong collaboration skills with other health professions (Borgès Da Silva et al., 2018; Uittenbroek et al., 2018; Klein & Evans-Agnew, 2019). Shared care could be in the form of communicating with family physicians or arranging schedules with general physicians, referrals, or other community health resources (Hensley, 2011; Williams et al., 2011; Hudon et al., 2015; Klein & Evans-Agnew, 2019).

### Providing the Process of Care

As many as 13 studies emphasize the importance of a nurse case manager in providing the process of care. The care process includes five essential steps: assessment,

problem analysis, planning, implementation, and evaluation (Hudon et al., 2015; Klein & Evans-Agnew, 2019; Toney-Butler & Thayer, 2020). Following those steps, a nurse case manager should determine the formulation of a care plan to meet clients' needs (Head et al., 2010; Brown et al., 2011; Manthorpe et al., 2012; Gage et al., 2013; Balard et al., 2016; Dhingra et al., 2016; Borgès Da Silva et al., 2018; Chapman et al., 2018; David et al., 2019; Cicutto et al., 2020). The care plan should be shifted from traditionally task-oriented to person-centered care (Uittenbroek et al., 2018) and involve family members to maintain the continuity of care.

### Delivering Individually-Tailored Health Promotion and Prevention

Six studies reported that nurse case managers provided personalized health promotion and disease prevention along with case management itself. The development of personalized service plans helped the patients and families understand where they were leading (Hudon et al., 2015). Furthermore, it indicated that nurse case managers prepare different approaches to each patients' condition so that the health information obtained would be completely in accordance with the patients' needs. For example, Cicutto et al. (2020) presented that the nurse case managers catered face-to-face visits to teach asthma management (asthma control, inhaler utilization technique) for children diagnosed with asthma, and Brown et al. (2011) provided additional information besides regular diabetes self-management education sessions. Moreover, Uittenbroek



et al. (2018) showed flexible and creative personalities were needed in terms of giving chronic care health education for the elderly into their daily routine. In general, a nurse case manager should perform promotive and preventive care to empower clients to be aware of lifestyle that might cause disturbance in health (Chapman et al., 2018; Uittenbroek et al., 2018); the goal is not only to improve patients' understanding about one's health but also to change their health-seeking behavior (Setiawan et al., 2016).

### Providing Assistance in Decision Making

Five studies reported the nurse case manager's role in assisting patients and their families in making decisions regarding the treatment and health status. Patients who had easy access to nurse case managers were reported to have better communication with health professions, better participation in the process of improving their health and well-being, and better healthcare transition (Hensley, 2011; Hudon et al., 2015). To be able to do that, a nurse case manager should own the leadership, articulation, and mediation skills (David et al., 2019).

### Providing Holistic Support

Seven studies reported that the nurse case manager contributed to provide holistic support towards patients and their families. As mentioned in one study focusing on the elderly, patients, and their families emphasized that nurse case manager's clinical expertise and psychological support contributed to the improvement of the continuum of care provided (Manthorpe et al., 2012). In another study, elderly and caregivers saw a case manager as a person to be "present", "help others", "respond to all the questions", and to be "aware of everything"; thus, it is important for a case manager to show caring behaviors (Balard et al., 2016). A nurse case manager should also be aware of any cultural or environmental barriers that might hamper one's health status (Brown et al., 2011).

### Issues of Nursing Case Management

Three sub-themes of issues of nursing case management were identified. First, the regulation ambiguity issue was raised in terms of the roles and legal aspects. In one study conducted in Indonesia, the legal aspect for prescribing becomes an issue since nurses are not allowed to prescribe medication, yet sometimes they are the only health provider in the rural areas (Setiawan & Dawson, 2018). In Australia, they consistently agreed that gatekeeper and direct service provision were not the case manager roles. This study suggests that case managers should just coordinate care service and plan (You et al., 2016). In Norway, case managers often found that balancing their roles as a care-manager and a provider was a challenging task, also to set the limits between being private and professional and consider between patients' needs and limited resources grant (Tønnessen et al., 2017).

The second issue of nursing case management is about the high caseloads; as mentioned in one study, a nurse case manager should perform multiple roles, thus working overtime (Klein & Evans-Agnew, 2019). The third issue in nursing case management is the lack of continuing case management training. Experienced nurses should serve as expert role models and consultants to the case management staff and help to develop training curriculum for case managers (Head et al., 2010). It is also mentioned that the understanding and recognition of a nurse case manager might depend on one's adequate training, although, so far, there is no consensual model of course or training for nurse case managers (David et al., 2019).

## Discussion

This study provided evidence on components of community-based nursing case management and related issues within the last ten years. To the best of our knowledge, this is the first scoping review to describe the components and issues in the implementation of case management in improving community access to care.

This study discovered that nurse case managers connect, coordinate, collaborate, and care for the patients/community with health care service providers through holistic and personalized care provision. Also, it revealed that most of the nursing case management models cater to specific targeted populations. For example, elderly (Manthorpe et al., 2012; Gage et al., 2013; Balard et al., 2016; You et al., 2016), patients with long-term illness (Hudon et al., 2015; Uittenbroek et al., 2018), palliative patients (Head et al., 2010; Dhingra et al., 2016), students/children (Setiawan et al., 2016; Setiawan & Dawson, 2018; Klein & Evans-Agnew, 2019; Cicutto et al., 2020) and people living with mental health problems (Chapman et al., 2018) are the populations reported as the beneficiaries in this study. In one study conducted in Norway, Tønnessen et al. (2017) displayed nurse case managers as health providers to serve diverse populations with varied health conditions. Nurse case managers also play the same role towards adults under certain primary health care, as presented in a Canadian study (Borgès Da Silva et al., 2018). This finding showed that nursing case management could be implemented in bridging a broad range of cases and ages to improve access to care in various populations.

Another highlighted finding of this review was related to the issues that occurred during the implementation of nursing case management in the community settings. Case managers struggle with the ambiguity of the nurse case managers' roles and deal with high caseloads as well as limited case management training. A study by Joo and Huber (2014), which reviewed nursing case management, also reported unclear and confusing roles for nurse case managers in the United States. Periodically nurse case managers wished to set clear boundaries, but due to the patient's condition, nurse case managers were still required

to provide direct care. It shows that the sense of caring remains a principle among nurse case managers. Advance training would be required for case managers to equip themselves in dealing with these issues (Machini et al., 2020; Muscat, 2020).

This review found the implementations of community-based case management are different according to each country's health care system requirements. Developed countries like Australia, Norway, and Spain clearly divided the roles and responsibilities between nurses and nurse case managers. Case managers are only expected to perform their natural roles of the case manager. On the other hand, several countries' nurse case managers are also counted on to provide direct care services to the community besides performing their role as case managers. For example, in England, nurses can hold their role as case managers while simultaneously working as practice nurses in the clinic (Iliffe et al., 2011), as district nurses providing visits towards housebound clients in the community (Challis et al., 2011), and as disease-specific nurses in either secondary care settings or the community (Whittingham & Pearce, 2011). Also, in Indonesia, nurse case managers could be the only health professional in the particular area, so one should be familiar with disease management and treatments. Differences in roles of nurse case managers among countries are seen as the result of different health system issues and challenges in each nation.

There is a limitation to this scoping review. The terminology of community nursing management may vary among countries. As a result, it is plausible that several essential articles might not be included in this study. Therefore, future review studies should include more terminologies for the keywords in literature searching.

### Implications for Nursing Management and Health Policy

In the era of UHC reform, many countries committed to provide accessible health services for all populations despite the consequences of high spending. This commitment should be accompanied by efforts in strengthening the community-based health care services. This study showed that nurse case managers improve the access of care for different populations in the community in both urban and rural areas. Besides, previous studies have provided evidence on the implementation of case management to reduce health care spending and the number of readmissions or rehospitalization (Joo, 2014; Duarte-Climent et al., 2019). This is the starting point for the government to incorporate the implementation of community-based nursing case management into the policy level. In addition, the government still has to consider the needs and challenges in determining which case management model is most suitable to the population.

**Table 3** Detailed summary of the final studies selected

Study	Sample	Design	Objectives	Major findings
<a href="#">Balard et al. (2016)</a>  France	Elderly, caregivers, case managers	Qualitative, opened-ended, and guided interviews	To explore the users' (elderly and their informal caregivers) and case managers' first experiences of case management	Case managers delivered care to clients and subsequently helped patients and their families engage with the health system, be familiarized with health information and administrative processes, and make decisions. Case managers were also seen to perform caring behavior such as responsive, helpful, present, and aware.
<a href="#">You et al. (2016)</a>  Australia	Case managers (with nursing, social work, Allied Health, and other backgrounds)	Qualitative study, semi-structured interview	To explore the perceptions about case managers' role in establishing community aged care in Australia	The study reported 16 essential roles of case manager (CM) in Australia for community aged care. However, CM felt that the roles of broker, mediator, and counselor were ambivalent. Moreover, they consistently agreed that gatekeeper and direct service provision were not the case manager roles. This study suggested that case managers coordinate care services and plans.
<a href="#">Williams et al. (2011)</a>  United Kingdom	Patients receiving or had recently received care by community matrons	An inductive qualitative design using a semi-structured interview	To explore patients' views and experiences of the community matrons' roles in one primary care provider organization	The study showed that community matrons (CMs) assist the patients in the community to obtain easier and shorter coordination and communication with general physicians, including the referral to advanced health facilities.
<a href="#">Uittenbroek et al. (2018)</a>  The Netherlands	District nurses (nurses and social workers)	A qualitative study of in-depth interview	To explore how district nurses and social workers experience new professional roles as case managers within embrace a person-centered and integrated care service for community-living older adults	The reflection of the case manager about providing case management was related to the central element of person-centered and integrated care, such as proactive and preventive care delivery that includes monitoring, self-management support, care coordination, and network collaboration. Case management followed the nursing process framework. District nurses focused more on healthcare and medical problems, while social workers focused more on psychosocial aspects.

Table 3 (Cont.)

Tønnessen et al. (2017)	Group meetings with care managers (nurses, occupational therapists, physiotherapists, and social workers)	Qualitative	To investigate the conflicting expectations and ethical dilemmas and to discuss future clinical implications	The study identified the responsibility of care managers in providing services to vulnerable populations. However, balancing between the task of care manager and health provider appears as a challenge.
Norway				
Setiawan and Dawson (2018)	Primary healthcare workers (nurse, midwives, kader - cadre)	Interpretative qualitative methodology	To report on the implementation of community case management (CCM) to reduce infant mortality in a rural district	Nurses and midwives gained confidence and trust from the community because they were often the only ones who could administer medication in the village. CCM reportedly thrived the primary health care workers (PHCWs) clinical reasoning despite the confusion of their prescription role.
Indonesia				
Setiawan et al. (2016)	Mothers and health workers	Qualitative	To investigate the implementation of community case management (CCM) in the Kutai Timur district from the perspective of mothers who received care	Treatment provision could be initiated by primary health care workers (PHCWs) in villages; therefore, it reduced delays in receiving medical help. Besides, participants were more likely to seek help from PHCWs than traditional birth attendants since PHCWs were employed in the village. Moreover, under the CCM scheme, families with sick babies were frequently visited by PHCW.
Indonesia				
Manthorpe et al. (2012)	Nurse case managers, older people, family carers	Case study	To understand the effects of nurse case manager (NCMS) working in primary care in the English national health service (NHS) from multiple perspectives and how this new role impacts social workers	The opinions of older people receiving nurse case management revealed the value of high-intensity assistance to individuals with major health and social needs. Older people or their carers reported the improvement of continuity of care provision and psychosocial support. NCM supplemented social services by identifying unmet needs.
England				
Klein and Evans-Agnew (2019)	School nurses	Grounded theory	To develop a theory describing the processes and actions for school case management targeting children with chronic conditions	Nurses provided direct nursing care in several forms for children in the school.
United State of America				
Hudon et al. (2015)	Patients and family members	Descriptive, qualitative, in-depth interview	To examine experience of patients and their family members with care integration as part of a primary care case manager (CM) intervention	Easy access to the CM nurse facilitated communication. This also allowed closer follow-up when needed. The privileged access to CM nurses fostered better communication with their family physicians. Participants reported improved access to personalized information, communication, coordination, and decision-making assistance, as well as better healthcare transition.
Canada				
Hensley (2011)	Case managers with nursing background and professionals from other disciplines	Qualitative, focus group interview	To explore the perceptions and experiences of community-based mental health case managers in the field of Medicare prescription drug benefits	These managers saw themselves as an essential bridge in the process of medication utilization for their clients. Case managers allocated their time to talk with clients by phone and browse the Medicare websites, assisting the client in understanding the information and making decisions about Medicare benefits.
United States of America				
Head et al. (2010)	Users, nurses	Quasi-experiment	To integrate palliative care principles and practices into the daily routines of a Medicaid managed care provider	Provision of palliative care case management included assessment of physical and psychosocial complications experienced by patients with serious illnesses, pharmaceutical interventions, identification of community resources to assist palliative care patients, and assistance in hospice referrals.
United States of America				
Gage et al. (2013)	Elderly, nurses	Case study	To compare community matrons in holding case management roles for impact on service utilization and costs	The roles of case management were varied among nurses. Meanwhile, community matrons were working more intensively on the elderly and those taking more medication than nurse case managers.
England				



**Table 3 (Cont.)**

<a href="#">Dhingra et al. (2016)</a>	Adult users	Retrospective cohort study	To evaluate a diverse population served by an interdisciplinary model of community-based specialist palliative care and the variation in service delivery over time and identify subgroups with distinct illness burden profiles	Case managers played roles in conducting a comprehensive assessment (medical evaluation and mental health wellness of patients and their family), formulation of goals of care and advance care plans, evaluation of the need for home care, and evaluation of the need for care coordination and hospice eligibility. In delivering care, the duties were assigned to an interdisciplinary team including nurses, physicians, social workers, nurses who provided telephone support, and chaplains. Individuals who received more home visits and telephone calls had greater health improvement.
United States of America				
<a href="#">David et al. (2019)</a>	Nurses	Literature review and qualitative approach including individual interviews	To present and discuss the central aspects of the case manager nurse work process in three Spanish autonomous communities	As case managers, nurses should understand the health-illness process as a result of a complex interaction of factors at various levels of life; perform care beyond individual needs because the scope is broad and include not only patients but also the caregivers; own the leadership, articulation and mediation skills.
Spain				
<a href="#">Cicutto et al. (2020)</a>	Users, caregivers, school nurses	Quasi-experiment	To describe the elements of asthma care program and its utilization by school nurses and school health teams in two urban school districts	A school nurse provided case management and case coordination, including delivering care (asthma management, asthma control, and medication management) and providing asthma education to both clients and parents/guardians. Barriers in conducting case management, among others, are difficulty in making contact with carers, restricted access to health-care records outside school settings, and time limitations experienced by school health teams.
United States of America				
<a href="#">Chapman et al. (2018)</a>	Public county-based mental health delivery system	Mixed methods approach, including a semi-structured interview	To describe how psychiatric mental health nurse practitioners (PMHNP) are made use of, determine obstacles to full access, and evaluate PMHNP's economic contribution to public health systems	A PMHNP provided case management services, including formulating care plans (medication management, crisis stabilization, and crisis intervention), assisting clients in administrative issues, and performing promotive functions (empower clients to be aware of lifestyles that might cause disturbance in health).
United States of America				
<a href="#">Brown et al. (2011)</a>	Adult users	Quasi-experiment	To explore the feasibility of adding a nurse case manager to diabetes self-management education to foster users' attendance and increase utilization of other available health care services	Roles of a nurse case manager, among others, are: providing health education and consultation about diabetes self-management, assisting patients in coping with cultural and environmental barriers, assisting patients in locating and accessing health care facilities, as well as collaborating with health care teams. Individuals who had higher contacts with nurse case managers attended diabetes self-management education sessions more often. In addition, participants expressed preference of having face-to-face contact with the nurse case managers than by telephone.
United States of America				
<a href="#">Borgès Da Silva et al. (2018)</a>	Adult users, primary health care organizations	Cross-sectional	To evaluate patients' experience of care in primary care as it pertained to the nursing role	Patients experienced better access to primary health facilities as nurses acted as case managers and systematically followed patients. In addition, sharing care between nurses and general physicians could enhance primary care access.
Canada				

## Conclusion

Care coordination and care planning were the most components of nursing case management frequently associated with access to care. This scoping review showed that nurse case managers improve the access of care for different populations in the community, both urban and rural areas, besides reducing health care spending and the number of readmissions or rehospitalization. However, the initiation of implementation still has to

consider the issues, needs, and challenges of each country in determining which case management model is most suitable to the population. Also, clear regulation and continuing training for case management should be provided by the authorities to reduce the occurrence of possible constraints during the implementation. Further research is needed to find a nursing case management model according to primary health care to accelerate achieving UHC and develop validated measurement tools to measure access to care based on the components of the community nursing case management model.

## Declaration of Conflicting Interest

The authors have no conflict of interest to declare.

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## Authors' Contribution

All authors contributed equally to the study conceptualization, methodology, article search, data analysis, writing, and editing of the manuscript. All authors approved the final version of the article.

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