



COSTS AND BENEFITS OF HOME CARE FOR PEOPLE WITH COMPLEX CHRONIC CONDITIONS: AN INTEGRATIVE REVIEW

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ABSTRACT

Objective: To analyze the costs and benefits of home care for adults or elderly with complex chronic conditions (CCC). **Method:** Integrative Review, reported according to the Preferred Reporting Items for Systematic reviews. The results were submitted to the Narrative analysis final sample was 18 studies, published from 2008 to 2021. The CCC identified were severe heart failure, chronic kidney disease, chronic obstructive pulmonary disease, multiple chronic conditions, patients undergoing chemotherapy and palliative care. The prevalent mode of home care was remote monitoring. **Conclusion:** Cost reduction was identified between 23.9% and 67.1%, with variations between the components analyzed and the methodologies used for the calculation. The benefits include decreased hospitalizations; reduced exacerbations of symptoms and use of health services, improved quality of life and more effective control of complex chronic conditions with self-care and self-management.

Keywords: Home nursing. Cost-effectiveness evaluation. Costs and cost analysis.

INTRODUCTION

The epidemiological profile of the population in Brazil and in the world has evidenced the aging of the population and the expansion of the prevalence of complex chronic conditions (CCC) and a concern with the cost, quality and access to health services⁽¹⁾. The CCC refers to the presence of physical and/or mental function limitation, drug dependence, diet, technology, the need for physical rehabilitation therapy, language, swallowing and multiprofessional care. The notion of complexity is incorporated to differentiate a chronic condition from the most prevalent chronic diseases such as hypertension and diabetes⁽²⁾. Examples of complex chronic conditions include chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), palliative care, among others⁽³⁾.

CCCs are associated with high treatment costs, greater vulnerability, worse prognosis⁽³⁾,

greater use of technologies and readmissions, as well as high costs in tertiary care when compared to nonchronic patients⁽⁴⁾. The costs of offering care practices converge to a worldwide concern about the high costs involved in caring for people with CCC. In this scenario, Home Care (HC) has been shown to be a proposal that can be offered to this public because it allows a reduction in hospital stay and favors the continuity of care⁽¹⁾.

In Brazil, HC has become an attention strategy that has been expanding and strengthening in the UHS, with potential in the production of care and in the health work process⁽⁵⁾, becoming a care alternative in the context of CCC. Considering that HC aims at the productive restructuring of care with the rationalization of costs and that the supply of these services does not respond to the care demand⁽⁶⁾, in this sense, evaluating the benefits and costs of this care model becomes relevant.

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There are different perspectives for the cost approach in the health area and this review understands that cost management can shed light to increase efficiency in the use of available resources and contribute to the use of evidence in treatment decision-making, for example, in relation to expected outcomes⁽⁷⁾.

In this study, as provided in Ordinance 5/2017 of the Brazilian Ministry of Health, HC is a modality of health care that involves actions of health promotion, prevention, treatment, rehabilitation and palliation at home, integrated with the Health Care Networks (HCN)⁽⁸⁾. Home Care Services (HCS) differ in three types according to patient complexity: HC1 (lower complexity, offered by Primary Health Care); HC2 (medium complexity) and HC3 (high complexity). In this review, patients with CCC comprise HC2 and HC3 and, to provide care, there must be the presence of a caregiver, a multidisciplinary home care team (MHCT) and/or a multidisciplinary support team (MST).

Studies dedicated to analyzing the costs and benefits involving HCS have been developed in different parts of the world⁽⁹⁻¹⁰⁾. Even identifying advances in research in this field, the studies adopt, mainly, methodologies of analysis of costs per apportionment and this may not reflect the actual costs of assistance, which reinforces the need for more evidence in this area of knowledge⁽¹¹⁾. Allied to this, in the process of health services management, the analysis of costs and benefits involving the care provided is a basic condition for sustainability and qualification of care.

Therefore, the question was: What are the costs and benefits of home care for adults or the elderly with CCC, when compared to other care modalities?

This review is justified because evidence on the benefits and costs that involve home care is necessary to support the decisions of managers and contributes to think about the offer of this type of care.

The objective was to analyze the costs and benefits involving home care of adults or the elderly with CCC.

METHODS

Integrative literature review that followed the

phases: elaboration of the guiding question, search in the literature, data collection, critical analysis of the included studies, discussion of the results and presentation of the review⁽¹²⁾. The guiding question was elaborated by adapting the acronym PICO, in which P corresponds to Population; I Intervention or exposure of interest; C to Comparison⁽¹³⁾. Thus, as Population, adult or elderly patients with complex chronic conditions; as Intervention, home care; as Comparison, costs and benefits in Home Care compared to hospital care, achieving the question: What are the costs and benefits of home care for adults or the elderly with CCC, when compared to other care modalities? The Outcome was not adopted in the question because it considerably restricted the search⁽¹³⁾.

First, a search was carried out in November 2018, which was later updated in March 2021, with the same strategies, starting from the publications made from 2008 onwards. The filter applied to publications since 2008 was applied considering the ordinance n. 370 of July 4, 2008 that expanded the list of diseases eligible for the use of Home Mechanical Ventilation⁽¹⁴⁾. This filter was adopted considering the target audience, population of this review, who were patients with complex chronic conditions. The search used the Health Sciences Descriptors (DeCS)/Medical Subject Headings (MeSH), in Portuguese and English: *Assistência Domiciliar*/Home Care; *Serviços Hospitalares de Assistência Domiciliar*/Hospital Home Care Services; *Custos de Cuidados de Saúde*/Health Care Costs; *Avaliação de Custo-Efetividade*/Cost-Effectiveness Assessment; *Custos e Análise de Custo*/Costs and Cost Analysis; *Gastos em saúde*/Health Expenditures; *Análise Custo-Benefício*/Cost-Benefit Analysis; *Análise Custo-Eficiência*/Cost-Effectiveness Analysis; and *Tempo de Internação*/Length of Stay. Boolean operators used were AND and OR.

The searches were performed directly in the databases Latin American and Caribbean Health Sciences Literature (LILACS) and *Índice Bibliográfico Español en Ciencias de la Salud* (IBECS) via Virtual Health Library (VHL), Medline via Pubmed, Scopus, Web of Science, Cumulative Nursing and Allied Health Literature (CINAHL) and Cochrane according to search

strategies, defined with the help of a librarian.

The inclusion criteria, regardless of the method, were articles published in Portuguese, English and Spanish; addressing costs and benefits of care for adults and the elderly with CCC in HC; fully available, with open or closed access and available for reading in remote access by the Federated Academic Community (CAFe) via Capes Portal or by payment to the copyright holder journal. Editorials, letters, theoretical essays, theses and dissertations were excluded.

For the selection of studies, the recommendations of PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) were followed⁽¹⁵⁾. The articles found in the defined bases were examined based on the title and abstract. In the case of uncertainty of the eligibility of the article, the inclusion for full reading was chosen. Throughout the inclusion process, two evaluators independently assessed any disagreements regarding the eligibility of the

article. The process was performed manually from an Excel spreadsheet.

The final sample consisted of 18 articles that were read in full and analyzed in a narrative way⁽¹³⁾ aiming at: 1) to critically explore the relevance, validity and reliability and categorize them according to the level of evidence⁽¹²⁾; 2) extract information according to an analysis matrix containing: study location, type of study and data collection and analysis techniques, AD modality, cost and benefit components; 3) group them by similarities. The analysis process allowed the presentation of the results in two domains: Costs involving Home Care for patients with CCC and Benefits of HC for patients with CCC.

RESULTS

Figure 1 presents a flowchart that summarizes the strategy adopted for article selection and inclusion.

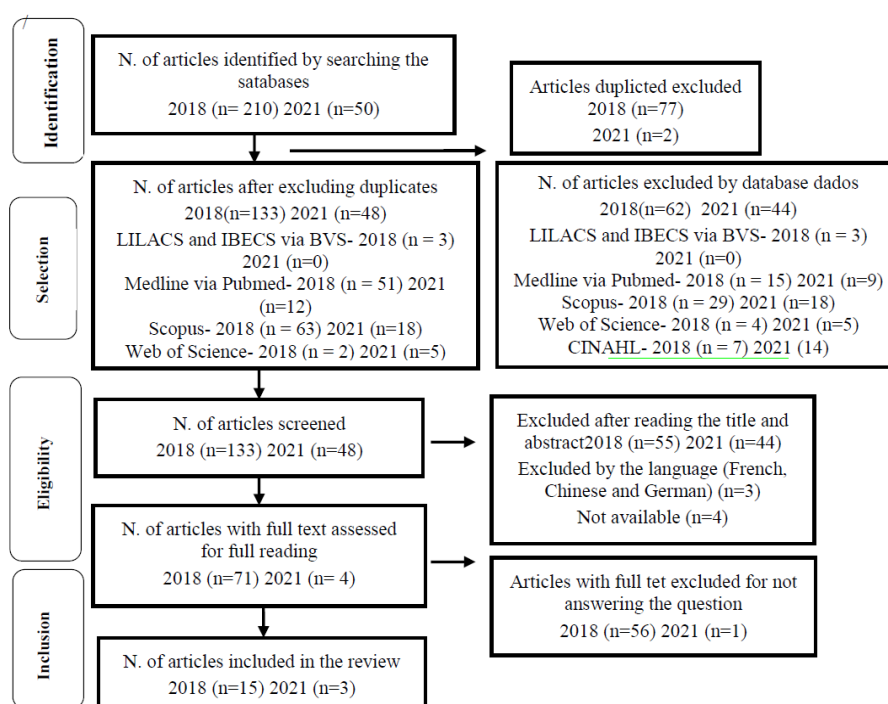


Figure 1. Flowchart for inclusion and exclusion of articles, Brazil, 2021.

Source: Research data, 2021.

The sample analyzed consisted of 18 articles, of which seven are clinical trials⁽¹⁹⁻²⁵⁾, a prospective randomized study⁽²⁶⁾ and four prospective or retrospective epidemiological

studies⁽²⁷⁻³⁰⁾, two cross-sectional studies⁽³¹⁻³²⁾ and a case report⁽³³⁾ three systematic reviews⁽¹⁶⁻¹⁸⁾. The CCCs described in the articles were: severe heart failure^(24,26-29), chronic kidney disease⁽¹⁶⁾,

chronic obstructive pulmonary disease^(17-20,22,25,26), multiple chronic conditions^(24,30,33), patients undergoing chemotherapy⁽²³⁾ and palliative care^(31,32). The surveys included several samples in relation to the participants, ranging

from 44 to 22,553 individuals. In Chart 01, the results of the included surveys that explicitly presented absolute values for the cost dimension involving HC were summarized.

Chart 1. Methodological, quality information and main results of the included articles, Belo Horizonte, Minas Gerais, 2021.

Author/Year/Countries	L/E ¹²	Method	Main Results		
			HC Model	Cost components	Cost and effectiveness outcomes
Ting Heet <i>et al</i> , (2016) ¹⁶ - China	IV	Systematic review	Remote home management/ CKD patients	Does not discriminate cost components	Remote management could be a new and effective disease management to improve quality of life
Echevarria C. ¹⁷ (2016) United Kingdom	I	Systematic review and meta-analysis	Early discharge with support	Costs of medical treatment in the acute period, readmissions and social cost.	Home hospital was associated with savings of €131,111 (equivalent to 844,944BRL)*
Cruz J, <i>et al</i> (2014) ¹⁸ Portugal	IV	Systematic review	Hospital at Home (HaH) for COPD exacerbation	Health system costs	Only the risk of hospitalization was reduced
Bourbeau J. <i>et al</i> , 2016 ¹⁹ Germany, Spain, Italy, France	I	Multicenter, parallel, randomized controlled trial	Home telemonitoring of COPD patients	Does not discriminate items	Improved self-management of health care
Vilà A. <i>et al</i> (2015) ²⁰ Spain	II	Prospective Observational Cohort Study	DPO home self-management program. (Education/Teaching of care)	Hospitalizations, emergency room visits, professional fees, ambulance, home oxygen therapy, laboratory tests, complementary tests, rehabilitation, administrative costs and health materials.	Costs per person per day decreased from €54.65 (352.20BRL)* to €17.91 (115.42BRL)*, a reduction of 67.1%.
Liu SX <i>et al</i> (2013) ²¹ USA	II	Longitudinal Intervention Study	Home COPD exacerbation management programs	Monitoring system cost; Treatment cost; Survival; Hospital admissions; Lifetime cost per patient.	Telemonitoring results in cumulative savings of US\$2,900* over the patient's lifetime (approximately 12 years). For high-risk patients with prior hospital admission and 1-2 exacerbations per year, it generates a total cumulative savings of US\$16,000 (88,993.00BRL)* over the patient's lifetime (approximately 3 years).
Goossens LM <i>et al</i> (2013) ²² Netherlands	II	Multicenter, prospective, randomized study.	Assisted early discharge for COPD patients	Direct costs for assistance.	In the follow-up phase, usual care cost less than AD.

Coriat R. <i>et al</i> (2012) ²³ France	II	Epidemiological Observational Evaluative Retrospective Cohort	Hospital-home monitoring program for cancer patients	Length of hospital stay for chemotherapy and the presence of toxicity. induced by hospitalizations (IHUs).	Treatment through the hospital-home monitoring program generates a cost savings of approximately €201,468 (292,089BRL) per year.
Stewart S. <i>et al</i> (2012) ²⁴ Australia	II	Prospective, Multicentric, Randomized and Controlled	Post-discharge home management by nurse/7/14 day visits to patients with CHF	Home and hospital visits; Exercise and nutritional program;	Due to the lower number of hospitalization days, the total healthcare cost was about 30% lower in the home intervention group – HBI (AU\$3.93 million versus AU\$5.53 million – CBI, equivalent to 16,219 and 22.822BRL million.
Echevarria C. (2018) ²⁵ United Kingdom	II	Randomized clinical trial	Hospital at Home (HAH) for COPD exacerbation	Pharmaceutical support Telemonitoring; Unplanned hospitalization; procedures.	Home treatment was cheaper and more effective for most patients.
Ricauda N.A <i>et al</i> (2008) ²⁶ Italy	III	Prospective randomized, controlled, single-blind	Hospital at Home/for COPD patients	Staff cost; use of equipment and medicines.	It did not measure the costs of standard care. But it presented benefits of HC, which will be discussed in category 2.
Punchik B. <i>et al</i> (2017) ²⁷ Israel	IV	Retrospective Observational Study	Clalit Health Services home care unit in southern Israel	Cost of telemonitoring service.	Reduction of global costs by 23.9%.
Blum K. <i>et al</i> (2014) ²⁸ – USA	II	Randomized, prospective clinical trial	Home telemonitoring for various conditions	Health system cost.	There was no decrease in total real costs.
Chen Y-H <i>et al</i> (2010) ²⁹ China	IV	Non-concurrent prospective study.	Home telephone intervention in patients with CHF	Team, Medicines, procedures Equipment and materials.	The home intervention reduced total 6-month medical costs by \$2,682 (14,917.00BRL)* per patient. Considering all costs, the home intervention reduced these by 30.8%.
Paré G <i>et al</i> (2013) ³⁰ Canaa	IV	Cohort, retrospective and prospective study.	Home telemonitoring for various chronic diseases	Nurse's working hours; hospitalizations; operation of the telemonitoring program.	Telemonitoring provided a 41% net benefit compared to the usual patient monitoring program.
Ribeiro SZR <i>et al</i> (2018) ³¹ Brazil		Descriptive, cross-sectional and economic evaluation study	Home Care Service for cancer palliative care	Cost of staff, use of equipment and medicines.	The average total cost of patients in palliative care at home was 848.63 and in hospital care 724.3 per month.
Moreton SG, <i>et al</i> (2020) ³²	IV	Parallel study of economic analysis/intervent ion in time cohort	Community palliative care services led by nursing professionals	Number of hospitalizations and total days of use of services	There was a 51.97% reduction in the average cost of patients.

Darkins A <i>et al</i> (2008) ³³ USA	V	Case report	Home telehealth for chronic patients	Human resources, medicines, equipment and procedures.	Home care cost less, per day, per patient, than hospitalization in a medical clinic.
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Source: created by the authors.

Research developed in Europe predominated, specifically in the United Kingdom^(17,25), France⁽²³⁾, Italy⁽²⁶⁾, Spain⁽²⁰⁾, Portugal⁽¹⁸⁾, and the Netherlands⁽²²⁾. Studies from Asia, Israel⁽²³⁾, China^(16,29) and North America were also included, being three studies from the United States^(21,28,29) and one from Canada⁽³⁰⁾. Two studies were conducted in Australia^(24,32), one in Brazil⁽³¹⁾ and another, multicenter, was conducted with data from France, Germany, Italy and Spain⁽¹⁸⁾.

Costs involving Home Care for patients with Complex Chronic Conditions

The cost analyses in the articles included in this review were based on the comparison between hospital-based modalities and different HC modalities, which does not allow a generalization of the values or percentages related to the reduction of costs with HC. Despite this, these findings allow inferring that HC shows potential savings for health systems in the care of people with CCC, new analysis of cost components and other factors that interfere with the offer of this type of service.

In the different HC modalities studied, the prevalent (n=9) was the Management/remote monitoring^(16,18,21,23,24,28,29,30,33). Nine studies analyzed modalities of HC with interventions at home (n= 7)^(17,19,20,22,27,31,32); two of hospitalization at home for exacerbation of COPD^(25,26); one performed both types of monitoring (n=1)⁽³¹⁾ and a long-term institutionalization service (n=1)⁽²⁶⁾. Concerning the type of service, 5 were carried out in public service and 5 in private initiatives. In 8 studies, it was not possible to identify the administrative nature of the services.

In 12 of the articles analyzed, the care cost of people with CCC assisted by HC was lower when compared to the hospital modality^(16,17,20,21,23-27,29,30,32). In 5 of these studies, the cost reduction varied between 23.9% and 67.1%^(20,27,29,32,33). A Dutch study found that

the savings obtained by early discharge for HC were made possible when this was supported by community nursing services⁽²²⁾.

Cost reduction in HC has stimulated the option for this type of care for patients with CCC, however, an American study⁽²⁸⁾ showed that the percentage of patients readmitted in 30 days was lower with telemonitoring for the 1st year, but did not persist, and a Brazilian study⁽³¹⁾ found that the cost of oncological palliative care per patient in a hospital ward was 724.30BRL/month and in the HCS, 848.63BRL/month, however, this study did not adopt a robust methodology of cost analysis that allows inferring significance.

Results from a German cohort of 7,698 patients with chronic obstructive pulmonary disease (COPD) corroborate the results of this review regarding the reduction of costs with telemonitoring compared to standard care. The reduction was mainly associated with the economy with hospitalizations and lower use of emergency services⁽³⁴⁾. Moreover, in a randomized clinical study conducted in Greece with 150 people with COPD, home maintenance telerehabilitation was associated with a lower risk for visits to emergency services⁽³⁶⁾.

On the other hand, a systematic review that evaluated the use of telemonitoring and its economic outcomes, related to quality of life, mortality and hospitalization of patients with congestive heart failure (CHF) demonstrated that overall costs tended to be higher for telemonitoring, and that no correlation was found between mortality and hospitalizations for all causes⁽³⁶⁾.

In the articles included in this review, researchers analyzed different cost components such as number of hospitalizations or total days of hospitalizations^(15,18,20,22,26,27), hospital admissions^(17,21,24,25,28,30,32), use of emergency services⁽²³⁾, professional fees^(17,20,25,26,28-31), ambulance⁽¹⁹⁾, health materials and equipment^(20,24,25,26,29), oxygeniotherapy^(20,25), medicines^(24,25,27-29,31), laboratory tests^(20,25),

complementary tests⁽²⁰⁾, rehabilitation⁽²¹⁾, administrative costs⁽²⁰⁾, cost of the monitoring system^(21,24,30,33), procedures^(21,22,24-26,29,31), in addition to social costs such as loss of productivity⁽¹⁷⁾. The study that analyzed the cost of the Spanish Home Health Program for individuals with multiple chronic conditions adopted a greater variety of cost components than the others included in this review, analyzing expenses with: professionals; procedures; equipment; orthosis and prostheses; inputs and medicines. This found a 67.1% reduction in care costs when comparing HC with hospital care⁽²⁰⁾.

The 12 studies that found cost reduction with HC consider that this economy is related to spending on food, supplies, medicines, tests, equipment, evacuation of hospital beds, reduction of readmissions and demand for emergency services^(16,17,20,21,23,24-27,29,30,32).

The articles resulting from research with different methods do not present uniformity in the cost components adopted and the analyses are related to health systems with very diverse characteristics, which prevented the generalization of the results. Nevertheless, before the careful analysis of the included articles, a contextual approximation was performed with the health systems referred to in the studies to favor an adequate and contextualized understanding of the analyzed results, that is, an attempt to deal with this limitation of the present investigation.

Although HC modalities can reduce care costs for health services and systems, it cannot be said to be a more economical modality as the costs for patients with CCC and family have not been elucidated. The analysis of patient/family costs was neither the object of investigation nor the analysis component of any of the included studies. This is a relevant finding of this review, as these costs need to be part of the overall analysis of patient care expenditures in the HC modality. Not considering the cost to the user and/or family preventing, therefore, from generalizing, that HC is a lower cost modality for CCC care. The transfer to the family of a load of care and financial stress by the purchase of equipment, materials and medications for continuous use in treatment, changes the family budget raising the monthly cost with the item health, as identified in a Brazilian study of 46

people with chronic diseases, economically vulnerable, linked to an HC service of a public hospital⁽³⁷⁾.

A systematic review carried out in the UK on dealing with families from low and middle income countries, with the costs of treating chronic diseases found that increased spending leads the family to develop coping strategies, such as: children leaving school to work; reduction of expenses; search for donations; institutionalization of the family member; move to cheaper or free accommodation; abandonment of work; informal work; search for loans; sale of goods; postponement, interruptions or search for alternative treatment, cheaper⁽³⁸⁾. In addition to the negative feelings that can generate in caregivers⁽³⁹⁾.

Benefits of HC for patients with complex chronic conditions

The benefits of care offered by HC services to people with CCC were significant in the outcomes of the studies, especially: the integration of different technologies in the development of care^(18,19,23,24,28,30,32), reducing the length of hospital stay with early discharge and use of services in general^(18,19,21,22,23,26,29,31-33), the most effective control of CCC reducing exacerbations, avoiding and reducing readmissions^(16,19-22,25,27,30,32) quality of life and/or self-care^(16,18-20,22,25,31-33).

The reduction of hospital stay by early discharge is the main benefit attributed to HC, pointed out by eleven of the included studies^(17,19,20-24,27,29,30,33). The reduction in the use of health services was a recurring benefit in the articles: the decrease in hospitalizations ranged from 19 to 66.7%^(27,30,33), the search for emergency services was up to 47%^(15,23,26), the length of hospitalization ranged between 14 and 28%^(21,30). There was also a 58.9% reduction in expenses with unscheduled medical appointments⁽¹⁹⁾.

The reduction in the use of medical-hospital services is a consequence of the early discharge and the incentive to self-care. With this, there is a tendency to lower use of machinery and tests, medicines, in addition to the costs of evaluation by the team and with materials, generating significant savings in assistance in general, in

addition to the optimization of hospital beds⁽⁴⁰⁾.

The use of technologies in care was described in ten studies^(16,18,19,23-25,28,29,30,33), revealing the trend of health services by remote monitoring of patients with CCC at home, using resources such as telemonitoring or telehealthcare. Remote monitoring models, including from telephone follow-up to clinical investigation by the health team, called telehealthcare, stand out^(23,24,29,33) until the supply of equipment for domestic use integrated to the information system present in hospitals or in the user's own residence, characterized as telemonitoring^(16,18,19,28,30).

Research developed in 33 European hospitals proposed a remote monitoring system (digital platform by internet) for people diagnosed with advanced COPD. Through this platform, the patient, after specific training, fed daily clinical data and on the use of oxygen therapy, which were analyzed by the health team, defining conducts and providing guidance when necessary. This research found a 39.8% reduction in the demand for emergency services⁽¹⁹⁾.

On the other hand, an American study with 203 patients diagnosed with CHF who used a device for continuous assessment of blood pressure at home by telemetry showed that there was no significant reduction in hospital costs or avoided see king out patient care⁽²⁸⁾.

There is evidence that telemonitoring allows a frequent assessment of the patient's clinical status and enables the modification of treatment earlier, which potentially improves the health status of patients. In a multicenter, randomized, and controlled study conducted with 1,521 patients, telemonitoring was associated with an improvement in the health status of patients with CHF, when compared to the group receiving usual care⁽⁴¹⁾.

The improvement of quality of life and self-care was described as benefits of HC, and it was identified that patients in home palliative care had global health higher than those hospitalized⁽³¹⁾ in other cases, stimulating self-management and the management of CCC by the own individual, favors decision-making by the patient about their own life and the course of their disease^(20-24,27). A study showed that, out of a total of 118 patients with COPD, 90% reported preferring treatment at home, even in cases of

future exacerbations of the disease⁽²⁵⁾.

When the patient with CCC leaves the hospital to continue the treatment at home, they participate in educational processes aimed at developing skills for the management of their disease. Allied to this, they receive professional support and therapeutic support, which contributes to the improvement in quality of life indicators^(16,18-22,26,27).

The stimulation of self-care and management of the disease by patients with Chronic Kidney Disease was effective in controlling pain in a Chinese study, which observed a reduction in the search for emergency services for pain control, because they self-applied the dose of the drug and identified the right time for its use⁽¹⁸⁾.

The promotion of self-care and self-management of the chronic condition by own patient from the interlocations with professionals of the HC team contribute to the acquisition of indicators of the quality of care provided, for decision-making about the course of their illness and own life. The reduction of exacerbations of CCC-related symptoms and readmissions were cited in nine studies as a benefit of HC^(16,19-20,23,26,29,33).

Self-care has been evidenced "as a potential for effective care for families and people in chronic conditions"⁽⁴²⁾. The reduction in exacerbations is related to the ability to perform therapeutic self-care, because people with high levels of therapeutic self-care are less prone to adverse events, which leads the low level of self-care to be considered a risk factor for the occurrence of adverse events in home care⁽⁴³⁾. Therefore, HC should stimulate the ability to perform self-care, aiming at reducing exacerbations, better quality of life and greater patient and/or caregiver satisfaction.

A limitation of this review includes results that cannot be generalized considering the diversity of methodologies, the different cost components and specificity of the local health systems of the included studies. Seeking to minimize these difficulties, prior to the in-depth analysis of the articles, a study of the local health system of the studies that composed this review was done, allowing contextualized interpretations.

CONCLUSION

HC presents potential savings for health systems in the care of people with CCC, and new careful analyses of the cost components are necessary, as well as other factors that interfere with the provision of this type of service. The reduction of costs seems to be related to the expenses with food, inputs, medicines, tests, equipment, evacuation of hospital beds, reduction of readmissions and demand for emergency services. It is important to consider that the transfer of costs to families was not considered in the texts analyzed, indicating an important component to be investigated in future

research.

The benefits of HC for people with CCC refer to the integration of different technologies in the development of care; reduction of hospital stay with early discharge; more effective control of CCC with self-care and self-management, avoiding and reducing readmissions and improving quality of life.

The findings of this study contribute to the planning and management of care of patients with complex chronic conditions in the context of HC, exposing the relevance of improving the processes of analysis of these costs and evaluation of the services provided.

CUSTOS E BENEFÍCIOS DA ATENÇÃO DOMICILIAR PARA PESSOAS COM CONDIÇÕES CRÔNICAS COMPLEXAS: REVISÃO INTEGRATIVA

RESUMO

Objetivo: analisar os custos e benefícios da atenção domiciliar de adultos ou idosos com condições crônicas complexas (CCC). **Método:** revisão integrativa, relatada segundo o *Preferred Reporting Items for Systematic reviews and Meta-Analyses*. Os resultados foram submetidos à análise narrativa. **Resultados:** A amostra final foi de 18 estudos, publicados no período de 2008 a 2021. As CCC identificadas foram insuficiência cardíaca grave, doença renal crônica, doença pulmonar obstrutiva crônica, múltiplas condições crônicas, pacientes sob quimioterapia e em cuidados paliativos. A modalidade de atenção domiciliar prevalente foi o monitoramento a distância. **Conclusão:** Identificou-se redução de custos entre 23,9% e 67,1%, com variações entre os componentes analisados e as metodologias utilizadas para o cálculo. Os benefícios incluem diminuição de hospitalizações; redução de exacerbações de sintomas e do uso de serviços de saúde, melhoria na qualidade de vida e controle mais eficaz das condições crônicas complexas com autocuidado e autogerenciamento.

Palavras-chave: Assistência domiciliar. Avaliação de custo-efetividade. Custos e análise de custo.

COSTOS Y BENEFICIOS DE LA ATENCIÓN DOMICILIARIA PARA PERSONAS CON CONDICIONES CRÓNICAS COMPLEJAS: REVISIÓN INTEGRATIVA

RESUMEN

Objetivo: analizar los costos y beneficios de la atención domiciliar a adultos o ancianos con condiciones crónicas complejas (CCC). **Método:** revisión integrativa, relatada según el *Preferred Reporting Items for Systematic Reviews and Meta-Analyses*. Los resultados fueron sometidos al análisis narrativo. **Resultados:** la muestra final fue de 18 estudios, publicados en el período de 2008 a 2021. Las CCC identificadas fueron insuficiencia cardíaca grave, enfermedad renal crónica, enfermedad pulmonar obstructiva crónica, múltiples condiciones crónicas, pacientes bajo quimioterapia y en cuidados paliativos. La modalidad de atención domiciliar prevalente fue el monitoreo a distancia. **Conclusión:** se identificó reducción de costos entre el 23,9% y el 67,1%, con variaciones entre los componentes analizados y las metodologías utilizadas para el cálculo. Los beneficios incluyen disminución de hospitalizaciones; reducción de exacerpciones de síntomas y del uso de servicios de salud, mejora en la calidad de vida y un control más eficaz de las condiciones crónicas complejas con autocuidado y autogestión.

Palabras clave: Atención domiciliar. Evaluación de costo-efectividad. Costos y análisis de costo.

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