

# Coordination of care: a contemporary care model for the older age group

## Abstract

The care model aimed at the elderly population described in this article is based on the partnership of “the geriatrician doctor and the gerontologist nurse”, both of whom have the responsibility of monitoring the health of a portfolio of clients. The doctor carries out clinical management, while the nurse coordinates care, monitoring the health conditions of users and consolidating the reference role of the model through client intake and strengthening the bond with patients.

In addition to the geriatrician and nurse, the team of gerontologists is composed of a physiotherapist, a psychologist, a social worker, a speech therapist and a nutritionist, who implement group activities, in addition to those carried out by professionals who perform dynamic integrative activities in the social center linked to the program.

Whenever the care needs of users require other levels of treatment, referral is undertaken, but always by the client’s doctor (geriatrician, general practitioner or family doctor). To provide high quality support, a telephone contact system, called the GerontoLine, is used, a second medical opinion, carried out by experienced professionals is provided, and an efficient information system is available, with a cell phone app providing information to clients and their families. The doctor and nurse from the team are paid based on performance.

This set of actions provides the client with more qualified and effective care, loyalty to the program, stable functional capacity and lower costs.

**Keywords:** health policies, human aging, older adults, prevention of diseases, coordination of care, performance-based pay

Volume 5 Issue 2 - 2020

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**Received:** March 26, 2020 | **Published:** April 08, 2020

## Introduction

One of humanity’s greatest achievements has been the extension of life expectancy. Reaching old age - once the privilege of a few - has become the norm even in the poorest countries, and has been accompanied by a substantial improvement in populational health parameters, even though the distribution of these achievements across different countries and socioeconomic contexts is far from equal. Furthermore, this feat presents us with a great challenge, which is to add quality to these additional years of life.

The current provision of health services fragments care for this age group, with the multiplication of specialist consultations, a lack of information sharing, numerous drugs, clinical and imaging exams, among other procedures that burden the system, causing a serious financial impact at all levels, and which do not generate significant benefits for health or quality of life.<sup>1</sup> In Brazil, there is an excess of consultations carried out by specialists, as the current care model prioritizes the fragmentation of care and the excessive use of the hospital. In summary, a great burden caused by disease can be avoided in both social and economic terms.

## Aging and health

Health is defined as a measure of an individual’s ability to fulfill their aspirations and meet their needs, regardless of age or the presence of diseases.<sup>2</sup> Thus, an efficient and complete geriatric assessment, at reasonable cost, is increasingly urgent.

Well-being and functionality are complementary. They represent the presence of autonomy – the individual capacity to make decisions and have command over actions, establishing and following one’s

own convictions – and independence – the ability to accomplish something through one’s own means – allowing an individual to take care of themselves and their life. It should be noted that independence and autonomy are closely related, but are different concepts.<sup>3</sup> There are those who possess physical dependence, but who are able to decide on the activities that interest them. In contrast, there are people who have the physical capability to perform certain daily tasks, but who are unable to decide and safely choose how, when and where to engage in these activities.

Determining the health conditions of the older population must consider overall health status, that is, take into account a satisfactory level of functional independence, and not just the absence of disease. Thus, the idea of functionality is considered to be a paradigm of elderly health, and becomes one of the most important attributes of human aging, as it deals with the interaction between the physical and psycho-cognitive capacity for carrying out activities of daily living.<sup>4</sup>

In recent decades, it has been found that it is possible to prevent most public health problems that affect the population - not only those related to communicable diseases, but also to noncommunicable illnesses. This finding is evidenced by the significant decrease in mortality from coronary and cerebrovascular diseases, the reduction in the incidence of and mortality from cervical cancer, as well as a reduction in the prevalence of smoking and the incidence of lung cancer in men.<sup>5</sup>

This suggests that programs aimed at this group should be based on integrated care, with the reference health professional and their team playing a key role, managing not the disease, but the individual, using all available technologies, working with the information obtained

through a high-quality medical record and frequent monitoring.<sup>6</sup>

According to the World Health Organization (WHO), chronic diseases have one or more of the following characteristics: they are permanent, result in disability or deficiencies, are caused by irreversible pathological changes and require long periods of supervision, observation or care. In general, they start slowly and have no single cause. Treatment involves lifestyle changes and continuous care that does not usually lead to a cure, but allows the disease to be controlled and the quality of life of the patient to improve, in order to prevent or mitigate functional decline. Most chronic diseases are related to age, poor eating habits, physical inactivity and stress, so most can be prevented and/or postponed. This means that, despite the disease, it is possible to live a fuller life for longer.

A contemporary healthcare model for older adults should be built around a flux of educational and health promotion actions, the prevention of preventable diseases and the delay, early treatment and rehabilitation of illnesses. In other words, a line of care for older adults that aims to provide efficacy and efficiency must comprise an articulated, referenced network, with a quality information system designed in tandem with this logic.

It is not reasonable to make hospitals the gateway to this health system, when the most contemporary medical thinking shows that this level of care, in addition to being more expensive, should be restricted to precise recommendations. In fact, the “invention” of the modern hospital is itself recent. Until quite recently, care was provided in the home.<sup>7</sup>

## The proposed model

There is a general concern with the healthcare model for older adults. The discussion about population aging brought about by the new epidemiological and demographic reality leads (or should lead) to the development of a resolute and effective health care model for such adults. The change in the age configuration of Brazil, with an increase in the proportion of older adults, is a recent phenomenon. However, the novelty stage, and the time for tired clichés accepted by everyone – even those who do not work in the area – is already over. Talk about theoretical frameworks or policies that aim to enable healthy aging – which means maintaining functional capacity and autonomy, as well as quality of life, in line with the principles and guidelines of the Unified Health System (or SUS) and focusing on disease prevention – is commendable. Major Brazilian and international health organizations have argued in favour of this concept for many years.<sup>8</sup>

This model is structured based on a treatment system that favors integrated care and prevention through the continuous monitoring of health conditions and coordination of care at all levels. Its stages focus on low complexity levels of care, that is, on health promotion and prevention, in order to stabilize chronic diseases, aiming to avoid burdening the system.<sup>9</sup>

An important space in health units is the social center, which as a place for the integration of various health education, promotion and prevention actions, plays a fundamental role. These are meetings and interactions mediated by pedagogical goals and aimed at older adults, with health workshops, therapy groups, yoga, ballroom dancing, cognitive stimulation, psychology groups, nutrition, singing, postural guidance, pelvic and muscle strengthening, all conducted by professionals from the multidisciplinary team who contribute the specific tools of their area of knowledge and performance.

Functional assessment defines the stratification and correct allocation of older patients within the line of care. For this initial contact, the Prisma-7 tool, developed in Canada, aimed at screening for the risk of functional loss in the elderly, was selected. Composed of seven items, validation and cross-cultural adaptation of the questionnaire in Brazil identified a score of four or more positive responses as ideal. The instrument does not require special materials, qualifications or extensive training, and can even be self-applied. Its application time is three minutes and socio-cultural and educational levels do not influence the understanding of the issues. In this proposal, some of the main protocols previously translated and validated in Brazil will be used.<sup>1</sup>

The proposed model is based on the “geriatrician doctor and gerontologist nurse” partnership, which is responsible for monitoring the health of a portfolio of around 600 clients through a working week of 20 hours for the doctor and 25 hours for the nurse. The doctor performs clinical management, while the nurse coordinates care, monitoring the health conditions of users and consolidating the reference role of the model through client intake and strengthening the bond with patients.

In addition to the geriatrician and the nurse, the team is composed of a physiotherapist, psychologist, social worker, speech therapist, nutritionist and workshop staff (professionals who perform dynamic integrative activities in the community center, linked to the program). Whenever the care needs of users require other levels of care, referral is performed, but always by the client’s doctor (geriatrician, general practitioner or family doctor).

However, six areas of medical specialties related to the model are recommended, as they form part of the annual evaluations where preventive control tests are performed, namely: Cardiology, Gynecology, Urology-Proctology, Dermatology, Speech Therapy and Ophthalmology. It will be noted that this list of health professionals does not include an otorhinolaryngologist, as a doctor with a more specific specialty, namely a speech therapist, is required, instead of a professional specialized in otorhinolaryngology, who is trained to diagnose diseases in the ear (oto), nose (rhino) and throat (larynx).

Appointments with the listed specialties will only be possible at the request of the patient’s general practitioner. Thus, it is explicit that when one specialist is required, the other specialists will not be. The same reasoning applies for hospitalization. Doctor and nurse will be concerned with contacting the hospital physicians, in order to acquire knowledge of the case and, preferably, acting to ensure the best care and the shortest hospital stay.

The model is structured around low complexity levels of care, that is, those that involve lower costs and are basically composed of the care of health professionals, all well trained, and the use of epidemiological screening instruments and health monitoring technologies. Efforts must be made to keep patients at these low complexity levels, in order to preserve their quality of life and social participation.<sup>10</sup> This is not always possible, but it is important to emphasize that keeping patients in the initial instances of the model does not mean preventing their progression to higher complexity instances of care. The use of the hospital, for example, should be an exception, if possible, applied for the shortest possible time, and it is for this reason the integrated care and intensive monitoring strategy is organized. In this way, the differentiation between high and low complexity levels of care is

<sup>1</sup>AUnATI/UERJhas produced a “Guide to Geriatric Assessment Instruments” which can be obtained via this link: [www.unatiuerj.com.br/links.htm](http://www.unatiuerj.com.br/links.htm)

clearly marked. The proposed model is a structure focused on care through preventive and low complexity care actions; other care needs will be performed by another sector.

The patient's doctor, the family doctor of old, works in the basic care unit, but accompanies the patient at all levels of care. If the patient is admitted to the hospital, their doctor will not treat them there, but as their guardian and reference point, will be informed of everything that happens in the hospital, alongside the nurse, and will keep in touch with the doctors in the hospital, or those providing home or any other type of care. The important thing is to ensure that even if seen in another level of care, the older patient will always have the reference point of their doctor, their reference of care.

Although these assumptions are accepted by the vast majority of health managers, very little is done. For this reason, for a properly structured care model,<sup>11</sup> certain elements cannot be overlooked.

## Admission

Admission takes place through a process called "intake", which occurs in two stages. The first is administrative and institutional in nature, with broad exposure to the proposed actions, emphasizing health promotion and disease prevention above all. The user is thus informed, in a didactic manner, about all the dynamics of differentiated care that will be offered to improve their health and quality of life. Likewise, the participation of older adults should be incentivized, as it is part of this health care model.<sup>12</sup> In the second phase of intake, the service itself begins.

As a way of organizing access to the levels of the model, a set of epidemiological instruments is applied, starting with the Prisma 7 risk assessment (RA) tool (Veras et al., 2015). Then, the patient is submitted to the other instruments that are part of this functional assessment.

In addition to the risk assessment and other screening protocols, other epidemiological instruments are used on an annual basis. The doctor and follow-up manager, in addition to the geriatric interprofessional team, will make more detailed assessments in order to propose an intervention plan. This information will be part of the patient's medical record and will be maintained until the end of the care trajectory.<sup>13</sup>

After this evaluation, an individual therapeutic plan is defined, with periodic consultations, referral to a multidisciplinary team and social center and, if applicable, evaluation by medical specialists. All information is entered in a single, longitudinal and multiprofessional electronic medical record, where the information of all levels of care in the care model will be stored, from first contact to palliative care in the final phase of life. This record should contain information about the clinical history and physical examinations of the older patient, but it is also essential that it contains information about their daily life, family and social support, among other factors. It should also draw from the records of other non-medical professionals, such as physiotherapists, nutritionists and psychologists, among others. Family participation, explanation of activities and epidemiological screenings resulting from care in the services offered are other important differentials. Information on all the procedures carried out is essential for monitoring older adults.

## Transition of care – hospitalizations

One of the main factors for controlling the costs of clients registered

with the program is monitoring at all instances of care. There should be no gaps when patients are referred to the health care network, or when they require tertiary or hospital-level care.<sup>14</sup>

The control of hospital admissions takes place via a determined flux, ensuring that those responsible for the care provided know the clinical and treatment history of the patient, in addition to the understanding that they have frequent monitoring and should return to their health team when the period of clinical aggravation is overcome.<sup>15</sup>

In the case of hospitalization, the patient is monitored on a daily basis in one of two forms. In one, the nurse maintains contact with the family to provide support, clarification or identification of needs (of the patient or the family themselves). The other aspect involves the disease prevention manager, who acts as a link between the outpatient clinic and the hospital, performing daily monitoring with the assistant hospital physician.

When this objective is achieved, the duration of the hospitalization of older patients, when required, is shorter, avoiding unnecessary procedures or hospitalizations in intensive care sectors, ensuring post-discharge referral to low complexity care contexts, without the need to consult several specialists. Everything converges in a superior quality of care with significant cost reduction, positively impacting the loss ratio of this group of patients.

## The importance of the coordination of care

There are a number of suggestions for models of care lines. The important thing is to have knowledge of the client portfolio, its profile and needs, in order to best organize the provision of services.<sup>11</sup>

Another finding is that hospitals should not be the gateway to the health system. A model should be designed with several instances of care prior to this level. Seeing the hospital as a privileged place for healing is a conceptual error. In the case of older adults, hospitalization should occur only at the acute stage of the chronic disease and for the shortest possible time, or in emergency cases. It has been found that the entrance point to the system should be a facilitating place for older adults and their families to feel protected and supported. Intake is essential for those entering the system and a stimulus to develop confidence.

The data demonstrate the positive effect of reducing referrals to specialist doctors. Furthermore, the health professionals who perform the activities are identified as members of the team and, therefore, have a high degree of credibility.

## Technology as a differential

Registering patient care paths is a strong differentiating factor. A broad, high-quality information system can document not only the clinical evolution of the older adult, but also their participation in individual or collective prevention actions, as well as the support of the nurse and the phone calls made, which must be resolute, with trained and qualified personnel. Telephone contact between patients and professionals should be carried out with full sharing of information with the team, for the benefit of a comprehensive assessment of the individual. The information system, which begins with the registration of the beneficiary, is one of the pillars of the program. Through the process, the entire care path will be monitored at every level, verifying the effectiveness of actions and contributing to decision making and monitoring. There is a single, longitudinal and multi-professional electronic medical record, which accompanies



the patient from intake onwards. This differs from existing medical records in that it includes a register of the patient's life history and their health events.

Another efficient differentiating factor is the availability of a mobile phone app with individualized information and reminders of appointments and prescribed actions. Every effort will be made to keep users in the units of the program, with minimum use of specialists.

## Performance based pay

The hegemonic model of remuneration for health services in many countries, both in public systems and in those oriented towards the private health plan market, remains the fee-for-service. This is essentially characterized by stimulating competition for users and remuneration for the number of services produced (volume). It is not sufficient to change the remuneration model without changing the care model and vice versa, as the two are interdependent. Some of the problems of the Brazilian health system, especially the supplementary system, and which primarily affect older adults, are a consequence of the model adopted decades ago. To cope with the new and urgent demands of society, alternative remuneration models must be implemented to break the vicious circle of a succession of fragmented consultations, decontextualized from the social and health reality of the elderly, in addition to the production of procedures disconnected from the expected outcome.<sup>16</sup>

Performance based pay is a reward system that considers the results obtained. As the technical and behavioral requirements required of professionals are of a high standard, it is therefore intended that the remuneration is of equivalent value.

There is no doubt that performance-based pay models will be a reality in Brazil. Healthcare professionals must realize that the implementation of performance-based compensation is not a question of when or if, but how.<sup>17-19</sup>

## Conclusion

Transforming the health care logic in Brazil is both a major challenge and a necessity. It becomes even more relevant when it comes to health care for people in situations of greater vulnerability, such as older adults. This type of change and innovation needs to be built into the daily reality of health services, into the training of health professionals, into the way the health system is managed and organized for care, and into its financing. It is impossible to talk about reorganizing the provision of services without considering remuneration models, as one determines the other. This debate must be confronted in order to move towards a higher quality of health care, and so that adequate remuneration can be provided.

It is possible to grow old with health and quality of life, as long as all actors in the sector take responsibility and allow themselves to innovate. It is worth remembering that, often, innovating means salvaging the simpler care and values that have been lost within our health system.

Too much time has already been wasted; now it is time to start building this new way of caring for older adults. We cannot wait any longer!

## Acknowledgments

None.

## Conflicts of interest

The authors declare have no conflict of interest about the publication of this paper.

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