

What Do We Assess When Certifying Disability in Cardiology? Clinical Vulnerability and Therapeutic Dependency in the Era of Chronic Cardiovascular Diseases

¿Qué evaluamos cuando certificamos discapacidad en cardiología? Vulnerabilidad clínica y dependencia terapéutica en la era de las enfermedades cardiovasculares crónicas

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Disability certification in Argentina, implemented through a unique Disability Certificate (DC), is a key tool for accessing health rights and benefits. (1,2) Its implementation has helped highlight needs, organize coverage, and facilitate access to services for a wide range of clinical conditions. However, in the field of chronic cardiovascular diseases (CVD), tensions are beginning to emerge that call for a reevaluation of what we currently understand by “disability” and which dimensions should really be assessed. In this context, requests for certification are often not directly linked to a disability but rather to the need to document a health status that allows access to coverage or treatments that would otherwise be difficult or impossible to obtain. This raises questions about whether current instruments are being used to assess disability or, in some cases, to overcome barriers to accessing the health care system.

Over the past few decades, therapeutic advances have substantially transformed the natural course of numerous cardiovascular diseases (CVD). The development of highly effective pharmacological treatments, implantable devices, cardiovascular rehabilitation programs, and integrated care models has improved functional capacity, reduced hospitalizations, and prolonged survival. (3,4) As a result, a growing number of patients remain clinically stable for long periods. However, this stability often depends on complex, ongoing, and costly interventions whose

availability, accessibility, and sustainability are not always guaranteed.

Epidemiological transition, population aging, and the sustained increase in chronic diseases challenge models of disability originally conceived for conditions considered more stable or permanent. Today, disability is understood as a dynamic condition resulting from the interaction between a person's health characteristics and the barriers or facilitators in their environment, so it should not be defined exclusively based on a diagnosis. From this perspective, assessment should focus on functional limitations and the supports each person requires to participate fully in social, educational, occupational, and community life.

From a human rights perspective, disability cannot be understood solely as an individual characteristic or as a direct consequence of a medical condition, but rather as the result of the interaction between people and the barriers present in their environment. In this regard, the Convention on the Rights of Persons with Disability recognizes the obligation of States to promote equal opportunities, full participation, and access to the supports necessary for the effective exercise of rights. Within this framework, an analysis of complex chronic CVD conditions invite reflection not only on existing functional limitations but also on the conditions that enable the maintenance of autonomy, social participation, and the continuity of life plans.

REV ARGENT CARDIOL 2026;94:413-416. <https://doi.org/10.7775/rac.v94.i5.21049>

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The availability of treatments, medical devices, specialized rehabilitation, and adequate follow-up can thus be understood not only as a clinical necessity but also as an essential component for ensuring the effective exercise of rights and preventing situations of exclusion or inequity. (5)

Increased life expectancy associated with healthcare advances has led to a rise in the number of years lived with illness and disability—a phenomenon particularly relevant in an increasingly aging population in the region of the Americas⁷, where the burden of chronic disease is placing a growing strain on health systems. (6–8) Currently, CVD continue to be one of the leading causes of mortality and disease burden worldwide. In the Americas, they account for approximately 47 million disability-adjusted life years (DALYs), while the number of years lived with cardiovascular disability has nearly doubled over the past two decades, reflecting the increased survival of patients with complex conditions. (9–12)

In this regard, a central question arises: What are we really assessing when we certify disability in cardiology? Are we measuring an observable functional limitation, or are we attempting to recognize a state of vulnerability whose stability depends on sustained access to specific healthcare support?

In this conceptual reflection, clinical vulnerability is defined as an increased likelihood of clinical deterioration, loss of functionality, or restrictions on social participation in the event of interruption in the therapeutic support necessary to maintain the stability that has been achieved. Unlike disability—which, according to the International Classification of Functioning, Disability, and Health (ICF) is expressed through limitations in activity and participation resulting from the interaction between a health condition and the environment—clinical vulnerability describes situations in which observed functioning depends heavily on ongoing health care resources. It does not constitute an alternative category to disability nor does it intend to replace existing conceptual frameworks, but rather to provide a complementary dimension for understanding certain complex chronic CVD. (13–18)

The classification used in national registries recognizes visceral disability as a category that includes cardiovascular, respiratory, digestive, endocrine, hematological, and immunological disorders. However, the information currently available continues to group highly heterogeneous conditions together, preventing an adequate epidemiological characterization of specific cardiovascular disability. (6) This limitation makes it difficult to accurately assess the magnitude of the problem and to design appropriate health policies for this population.

Current disability assessment models were developed in a historical context in which numerous diseases caused more stable and visible functional limitations. Contemporary cardiology has transformed many previously fatal diseases into chronic, long-term

conditions. Advanced heart failure, complex congenital heart diseases, pulmonary hypertension, and heart transplantation are prime examples of this transition. As a result, patients with complex diseases can maintain adequate levels of functioning thanks to ongoing therapeutic interventions, which poses new challenges for assessment and certification systems. Recent studies show that factors related to access to healthcare resources, community integration, and social participation continue to significantly influence the outcomes of these patients even when functional capacity is preserved. (19–21)

ILLUSTRATIVE CLINICAL SCENARIOS

Case 1. Stabilized advanced heart failure

This is the case of a 58-year-old patient with heart failure and reduced left ventricular ejection fraction (LVEF), who has an implantable cardioverter-defibrillator and is receiving optimized medical treatment. The patient has NYHA Class II functional capacity and has had no recent hospitalizations. From a strictly functional perspective, he might appear to be only minimally limited. However, his stability depends critically on lifelong medication, regular follow-up, and access to specialized healthcare technology.

This situation is particularly evident in heart failure, where therapeutic advances have significantly improved survival and quality of life, although often at the expense of a permanent dependence on pharmacological treatments, devices, and specialized follow-up. (21–24).

Case 2. Complex Congenital Heart Disease in an Adult

This is the case of a 28-year-old patient who has a history of surgical correction of complex congenital heart disease. He works, studies, and maintains independence in daily-life activities. However, he requires lifelong specialized follow-up, periodic tests, and eventual access to new interventions. His adequate daily functioning coexists with sustained dependence on the healthcare system.

The population of adults with congenital heart disease represents one of the clearest examples of the gap between observable functioning and persistent healthcare needs. Although many patients lead active and productive lives, they continue to require lifelong specialized monitoring, with potential impact on their social participation, use of healthcare resources, and quality of life (20,21,25).

Both cases illustrate a common situation in contemporary cardiology: patients with an adequate level of daily functioning whose stability depends critically on sustained access to treatments, devices, specialized follow-up, and referral centers. This discrepancy between observable functioning and potential vulnerability poses a challenge for current assessment models, since clinical improvement can reduce the visibility of needs whose continuity depends precisely on the supports that made that improvement possible. This let-

ter does not propose equating therapeutic dependence with disability, but rather point out that this vulnerability could constitute a complementary dimension for understanding certain complex clinical situations.

In daily practice, requests for the DC typically arise in a context where clinical, social, and administrative needs converge. Frequently, patients often perceive it less as an identity category associated with disability and more as a necessary tool to ensure therapeutic continuity, access to medications, diagnostic tests, transfers, and specialized follow-up. This suggests that the DC currently fulfills functions that partially transcend the traditional certification of disability.

Regional inequities take on particular significance in this context. In countries with marked regional differences in the distribution of healthcare resources, access to high-complexity centers can become a clinically significant determinant. Geographic distance, the availability of specialists, and difficulties in maintaining continuous treatment are factors that can increase vulnerability even when functional capacity remains intact. (12)

Without intending to define a new certification tool, future reviews could explore complementary indicators that better capture the dynamic nature of certain chronic CVD. These might include dependence on permanent medical devices, the need for highly complex medication, the frequency of hospitalizations or decompensations, the requirement for follow-up at referral centers, and the foreseeable risk of deterioration in the event of treatment interruptions.

These elements should not be interpreted as diagnostic criteria for disability, but rather as potential dimensions for future research aimed at better understanding the relationship between chronicity, functioning, and social and health protection.

Epidemiological changes, an aging population, the expansion of cardiovascular therapies, and increased survival rates have substantially altered the natural history of numerous CVD. In this context, disability in people with chronic CVD could be analyzed less as a condition determined exclusively by functional loss and more as the result of a dynamic interaction between the disease, functionality, social participation, and the availability of healthcare supports capable of sustaining the clinical stability achieved. From this perspective, the assessment of this population should consider not only the limitations observable at a given moment but also the therapeutic and healthcare context on which their functioning depends.

Rather than offering definitive answers, this reflection aims to raise questions. Is traditional functional assessment sufficient to characterize the needs of people with complex chronic CVD? How should therapeutic dependence, clinical vulnerability, and inequities in access to the health care system be incorporated into assessment processes? Is it possible that certain situations are inadequately represented by categories de-

signed in an epidemiological and therapeutic context different from the current one? Are we using disability certification to recognize situations of disability or to guarantee access to rights, benefits, and essential support for certain individuals with complex chronic CVD?

In this context, the DC is much more than an administrative tool: it represents one of the mechanisms through which society seeks to address needs related to health, participation, and protection. The discussion about what we assess when certifying disability in cardiology therefore goes beyond the instrument itself and raises a broader question about how to support the clinical courses of these patients in the contemporary context. Addressing this issue will necessarily require an interdisciplinary debate involving healthcare professionals, disability specialists, healthcare policymakers, patients, and civil society organizations, with the goal of developing responses that are in line with real needs and the current historical moment.

FINAL CONSIDERATIONS

Addressing chronic CVD from a disability perspective highlights that the vulnerability of this population does not depend exclusively on the medical condition, but also on contextual and structural factors that influence access to care and the necessary support. Throughout this manuscript, it has become evident that timely and equitable access to health care remains a right conditioned by socioeconomic and geographic factors, which deepens the exclusion of those living with these conditions. The lack of continuity in treatment, difficulties in obtaining disability certification, and the scarcity of specialized resources in the public sector create a scenario of social and health vulnerability. Current regulations are often fragmented, bureaucratic, and disconnected from the daily needs of people with chronic CVD. Furthermore, challenges persist regarding the coordination between regulatory frameworks, care systems, and the needs of people with these conditions.

Finally, recognizing the complex relationship between chronic heart disease, functioning, and disability is essential to enrich the debate on protection and support strategies aimed at this population.

Strengthening healthcare systems and consolidating appropriate social and health protection mechanisms are central components of supporting the care pathways of people with complex chronic CVD. Developing sustainable, person-centered institutional responses could help reduce situations of vulnerability and promote greater equity in access to care, regardless of place of residence or socioeconomic status

Conflicts of interest

None declared.

(See authors' conflict of interests forms on the web/Additional material).

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