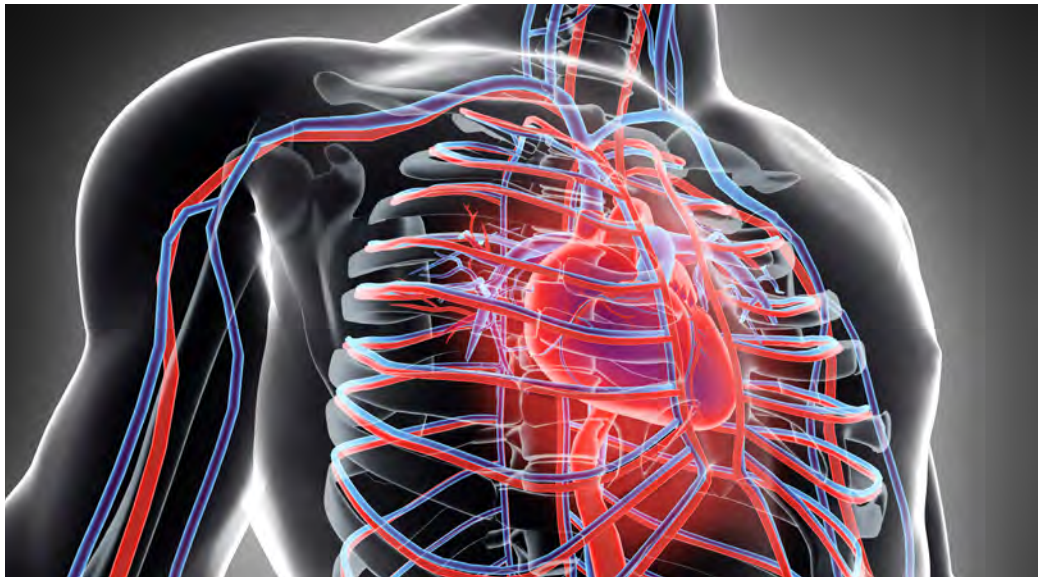
WORLD HEART FEDERATION

WORLD HEART FEDERATION ROADMAP FOR HEART FAILURE

Informing health systems approaches to heart failure by prioritizing practical, proven, cost-effective action

HEART FAILURE

1 IN 5 **The lifetime risk of developing heart failure**



Due to the aging population, increase in cardiovascular risk factors and improved survival of cardiovascular conditions, the prevalence of heart failure is increasing globally to an estimated number of *26 million, with additional millions of undiagnosed cases.*

Despite the fact that many cardiovascular diseases end in heart failure, the condition too often fails to attract the awareness and emphasis it deserves.

ABOUT HEART FAILURE

Heart failure is a complex clinical syndrome when the heart is unable to pump sufficiently to maintain blood flow to meet the body's needs. It can be either acute and come on suddenly, or a progressive, long-term condition. The symptoms including worsening shortness of breath, coughing or wheezing, tiredness and fatigue, fluid retention with swelling of the legs and/or abdomen, and being less able to do physically demanding tasks or exercise.

There are many possible causes, including: infectious diseases, such as Chagas and rheumatic heart disease; cardiac conditions, such as heart muscle disease, coronary heart disease including previous heart attack, valve disease, congenital heart disease, pericardial disease and rhythm disorders; chronic lung disease; poor lifestyle choices, such as a high salt diet, smoking tobacco, alcohol or drug misuse; or failure to adhere to preventative medications.

THE MAGNITUDE OF THE PROBLEM

Heart failure is the world's leading cause of hospitalization. It results in a burden that is felt at every level of healthcare:

- For systems and healthcare workers assisting with greater numbers of very ill patients
- For health economies with increasing costs, particularly in a disease area where rehospitalizations are so high: 50% are readmitted within six months of discharge
- For patients who are diagnosed with a progressive disease without a cure, and their carers

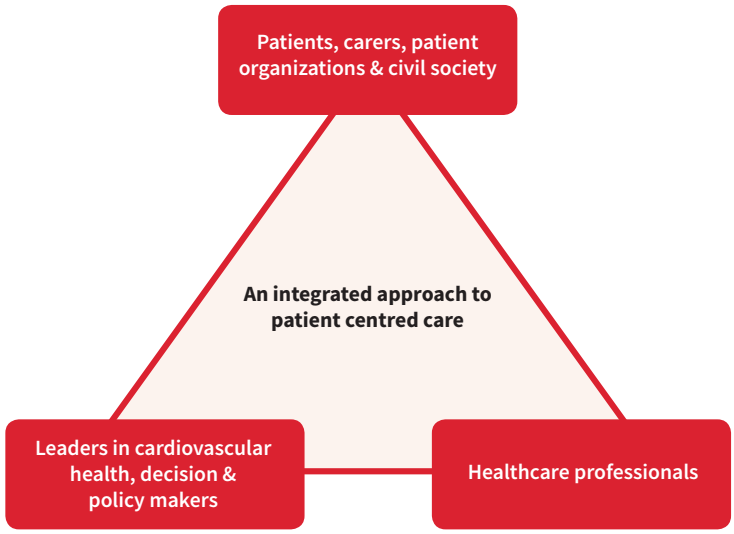
The prognosis for those diagnosed with heart failure is poor:

- 17-45% of patient deaths occur within one year of hospital admission
- 45-60% of deaths occur within five years of admission

But heart failure also takes its toll on people's daily lives and their families, often resulting in a reduced ability to lead the same lifestyles as before.

Reference: Ferreira JP, Kraus S, Mitchell S, et al. World Heart Federation Roadmap for Heart Failure. Glob Heart 2019;14:197-214.

AN INTEGRATED APPROACH TO PATIENT CARE



PATIENT STORY:
HOW I TRANSFORMED MY LIFE TO OVERCOME HEART FAILURE

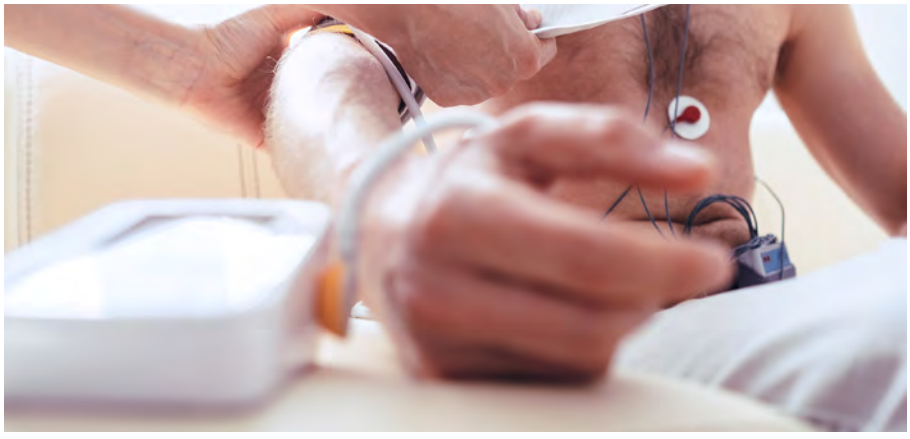
"In my 20s and 30s I never thought about my heart health. I stopped exercising when I left school, my diet was pretty bad and I was a smoker. By my late 30s I had gained quite a bit of weight, I couldn't climb the stairs without getting out of breath and my legs were swollen. I didn't realise this meant I was retaining fluid which is a classic symptom of heart failure.

A few years later, my breathlessness was getting worse and my legs were an unusually pale colour. But I still didn't go to my doctor... I think I was scared of what he'd say. By the next year I was coughing a lot and I felt like I couldn't breathe when I was lying in bed. I finally went to see the doctor who diagnosed me with high blood pressure, type 2 diabetes and kidney disease. Shortly after this I was diagnosed with progressive heart failure and my heart was working at only 30% of it function. That dropped to 20% within a couple of months.

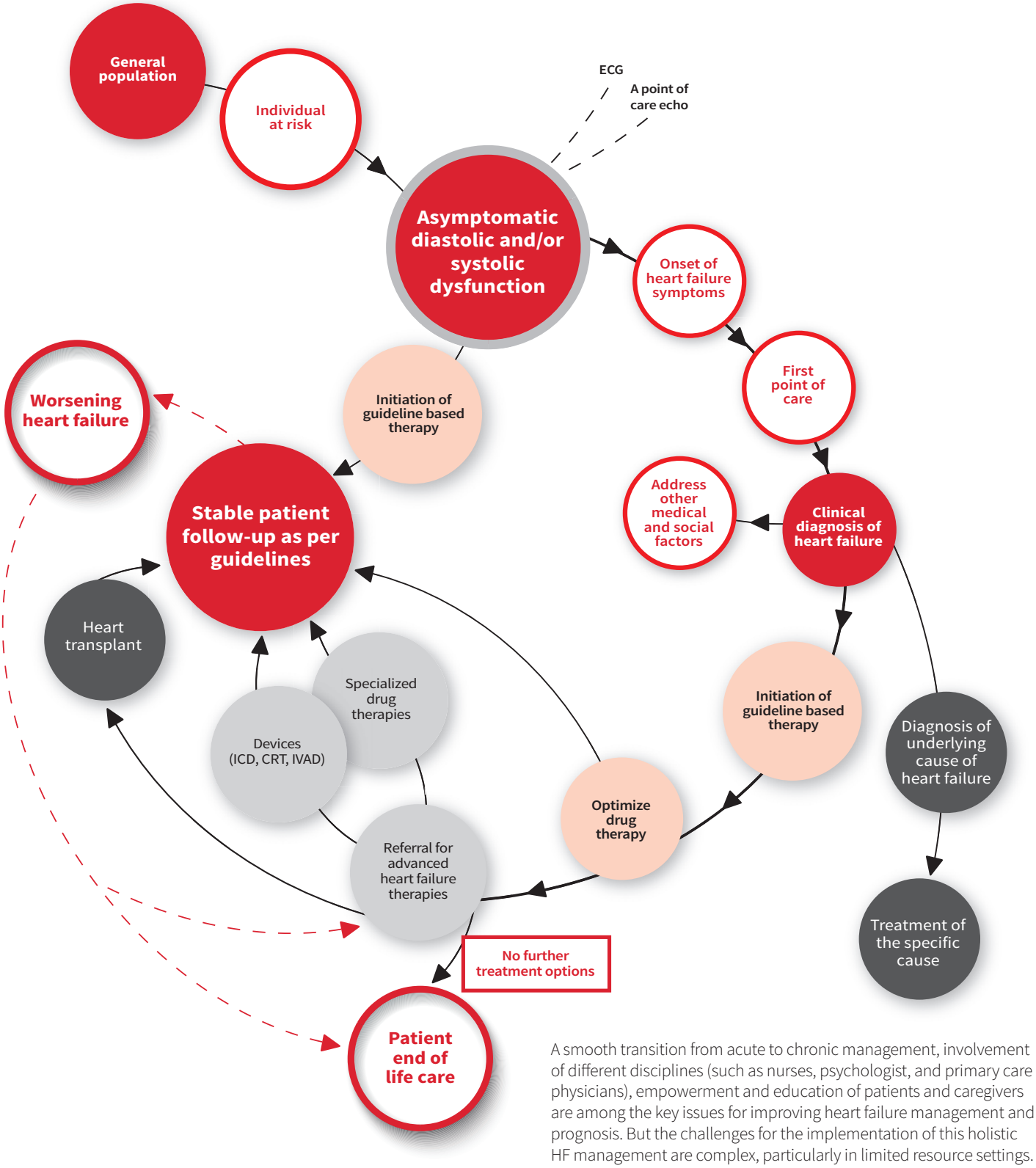
In hospital, a cardiologist told me that I was in serious trouble, so as well as taking my medications I stopped smoking and drinking, and started eating healthily.

Within a few months I was able to go for short walks and that progressed quite quickly to longer exercise sessions.

My family had a history of heart disease but I was determined not to let this condition get the better of me. Now heart health has become a way of life for me."



THE IDEAL PATHWAY OF CARE

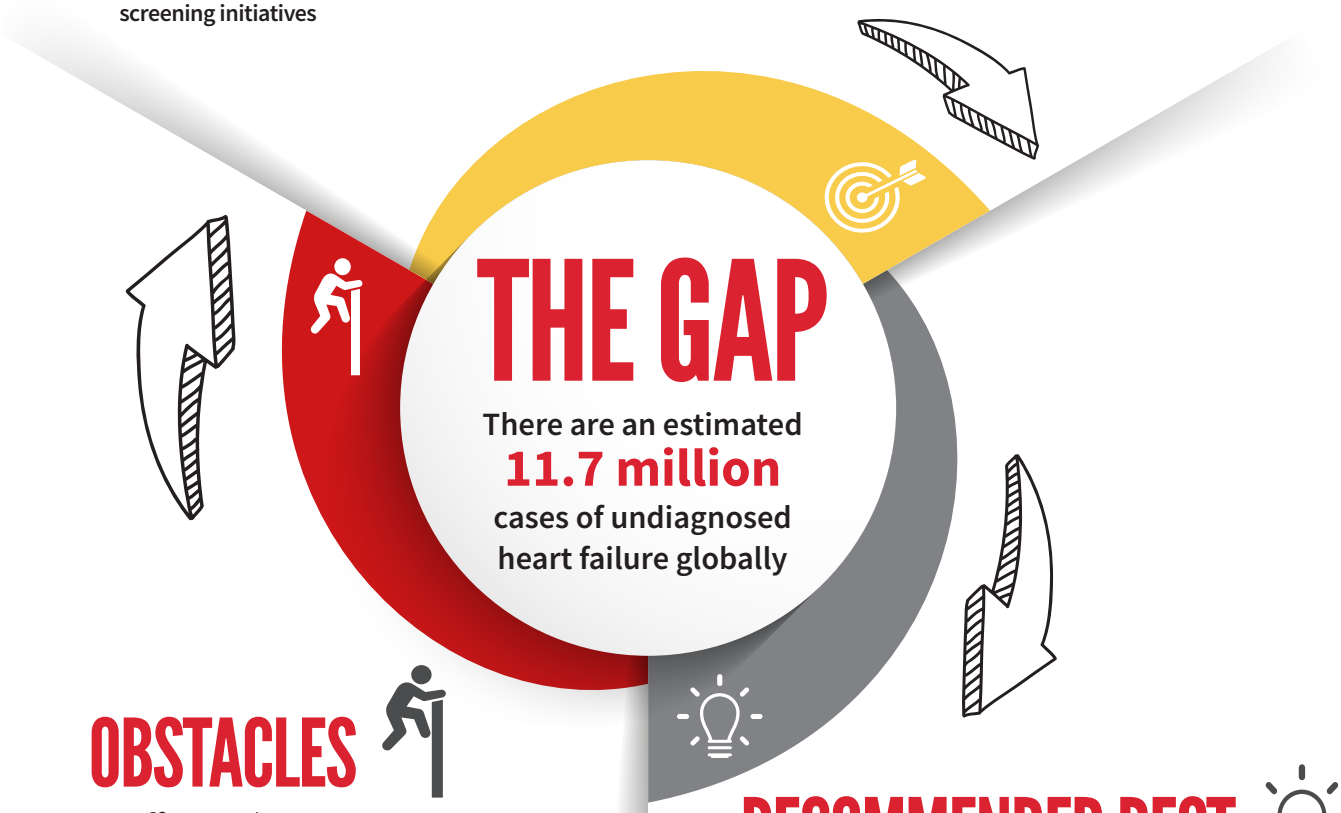


A smooth transition from acute to chronic management, involvement of different disciplines (such as nurses, psychologist, and primary care physicians), empowerment and education of patients and caregivers are among the key issues for improving heart failure management and prognosis. But the challenges for the implementation of this holistic HF management are complex, particularly in limited resource settings.

POTENTIAL SOLUTIONS

to overcome obstacles include:

- Implement global and local patient education programmes
- Implement community-based healthy living programmes
- Engage at government level to raise the profile of heart failure
- Develop professional training and patient screening initiatives
- Improve awareness of diagnostic criteria and clinical practice guidelines
- Educate patients on medication side effects and adherence
- Establish nurse-run clinics for patient follow up
- Ensure essential medicines availability and lobby for government subsidies



THE GAP

There are an estimated
11.7 million
cases of undiagnosed heart failure globally

OBSTACLES

to effectively manage heart failure include:

- Lack of awareness among patients, carers, healthcare professionals and general public
- Lack of patient follow up and education programmes
- Limited access to healthcare facilities with sufficient expertise to diagnose heart failure
- Failure of patients to adhere to their medication
- Lack of appropriately trained and experienced clinicianand pharmacists
- Lack of availability and affordability of essential medicines and technology

RECOMMENDED BEST PRACTICES

for heart failure prevention, diagnosis and management

- Develop effective approaches to prevention, including:
  - Addressing risk factors such as hypertension, diabetes, ischaemic heart disease
  - Screening for asymptomatic left ventricular (LV) dysfunction in high risk individuals
  - Early initiation of guideline-based therapy in patients with asymptomatic LV dysfunction
- Ensure effective drug treatment, including:
  - Diuretics to relieve the symptoms of congestion
  - ACE-inhibitors, beta-blockers and mineralocorticoid receptor antagonists
- Promote education on lifelong lifestyle modification and medication use

Please note, the obstacles and solutions shown above are examples; not all will apply in every country or region. For more detail please refer to the full WHF Roadmap for Heart Failure.

TAKING ACTION AGAINST HEART FAILURE

A global framework for regional and national action, WHF Roadmaps are now being used to convene country-specific Roundtables through WHF and our Members. They are gathering relevant stakeholders to identify obstacles and potential solutions that are relevant to their settings, and produce national plans.

REACHING A LARGE, AT-RISK POPULATION IN RWANDA

It is well recognized that CVD is most notably reported in low-resource settings, with 44% of patients newly diagnosed with CVD presenting with heart failure. Due to limited access to doctors in Africa, the majority of specialist clinics residing in capital cities and a lack of transportation, a large percentage of the African population simply do not have access to the required care.

In Rwanda, with the support of the Ministry of Health, concerted efforts were made to reach a large at-risk population. The broad aim was to decentralize services for heart failure and so integrated nurse-led and physician-supervised clinics were set up in two rural public sector district hospitals, and a strategy to disseminate and use portable echocardiography and simplified algorithms for diagnosis was established.

Nurses were trained to perform and interpret limited ECG studies using visual qualitative inspection to make a preliminary diagnosis, with a confirmatory diagnosis made following referral to a cardiologist. This simplified approach to early diagnosis in a resource-limited setting is just one example of how to provide care in difficult-to-reach populations.

Building on this example, providing access to specialist care at a district level can be achieved by arranging rotational visits, which in turn may help to address a number of reported roadblocks along this care pathway.

IMPLEMENTING TELEMONITORING WITHIN THE CARE PATHWAY IN THE NETHERLANDS

The University Medical Center Utrecht has developed an innovative telemonitoring component to support the care of people living with heart failure as outpatients.

Either invasive, via an implanted device, or non-invasive, a specialist nurse monitors the patient's signs and symptoms, and then provides self-care education and support, and medication as needed. The service is supervised by a specialist cardiologist. It also connects with other healthcare professionals, such as GPs, social workers and dieticians, and offers access to cardiac rehabilitation.

> Roadmaps are scientific documents for translating science into policy. They help all people to get the best science for promoting health, for preventing and controlling disease, and for rehabilitating patients. It is time for 'Health in All Policies' worldwide. As not only doctors but also world citizens, we are proud to be part of this World Heart Federation initiative.

DANIEL PINIERO
Member of Science Committee, World Heart Federation

> WHF Roadmaps provide a global framework to focus the minds of national and local stakeholders on how in-country progress can be achieved in the fight against CVD. By convening at Roundtables, we can kick-start essential action to overcome obstacles and agree tangible solutions for positive change.

PROFESSOR ELIJAH OGOLA
Secretary General, Pan-African Society of Cardiology

WORLD HEART FEDERATION ROADMAPS

Already the world's number one killer, deaths from cardiovascular disease (CVD) are increasing globally. CVD and related conditions can be detected early and treated cost-effectively, preventing costly hospitalizations and death. But this requires coordinated national policy and health systems responses built around evidence-based strategies.

Health resources are limited and so cost-effective interventions for the prevention, detection and management of CVD must be prioritized in order to plan effective health systems responses.

WHAT ARE ROADMAPS?

WHF Roadmaps are a global framework that are adapted and used at national or regional level.

THEIR PURPOSE IS TO:

1. **Summarize current CVD recommendations that are proven, practical and cost effective**
2. **Highlight obstacles to implementing these recommendations**
3. **Propose potential solutions for overcoming these obstacles**
4. **Provide tools and strategies to adapt solutions to local needs**

HOW DO THEY WORK?

WHF Roadmaps offer a global framework, tools and solutions that are then used and adapted, through stakeholder collaboration, to meet the specific needs of individual regions and nations.

This requires:

- A situation analysis of the current health system based on tools such as WHF CVD Scorecards
- Roundtables with multiple stakeholders to discuss obstacles, solutions and appropriate strategies
- A plan to implement and evaluate the proposed strategies

WHO ARE THEY FOR?

WHF Roadmaps empower our Members, including CVD foundations, societies and patient associations, to lead country specific, action-oriented initiatives, including Roundtables.

These involve diverse stakeholders, such as:

- Governments and policy makers
- NGOs, health activists and advocates
- Healthcare professionals
- Corporate entities
- Academic and research institutions
- Patients and patient groups

WHY ARE THEY IMPORTANT?

To trigger effective action that can measurably reduce premature deaths and the associated global economic burden caused by CVD.

TO DOWNLOAD THE FULL ROADMAP PLEASE VISIT - CVDROADMAPS.ORG

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