

POST-PROCEDURE HOME BASED CARE

For ACS Patients & Post PCI
CABG Patients



A home-based care workbook for patients recovering from procedures like Percutaneous Coronary Intervention (PCI) and Coronary Artery Bypass Grafting (CABG) aimed to provide essential information about the recovery process, including post-procedure signs of complications, and how to manage medications.

It is mainly designed to enhance patient outcomes by fostering better understanding of comprehensive information on Acute Coronary Syndrome (ACS) management, lifestyle adjustments, advantages of home care, and strategies for effective post-procedure care pathways.

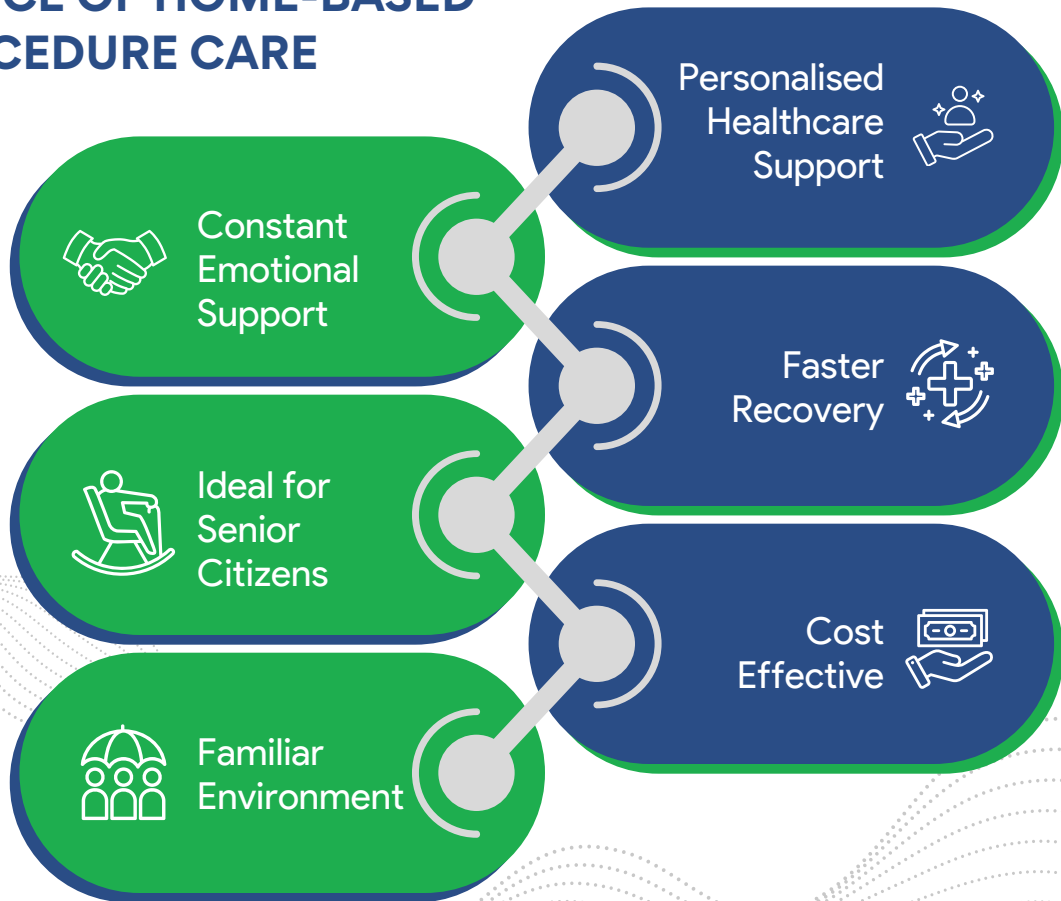
Cardiac Rehab @ Your Doorstep



DEFINITION

Home-based care is when people with long-term or serious illnesses receive care at home with help from their families and community resources, working together with healthcare providers from hospitals or clinics. [\[1\]](#) [\[2\]](#)

IMPORTANCE OF HOME-BASED POST-PROCEDURE CARE

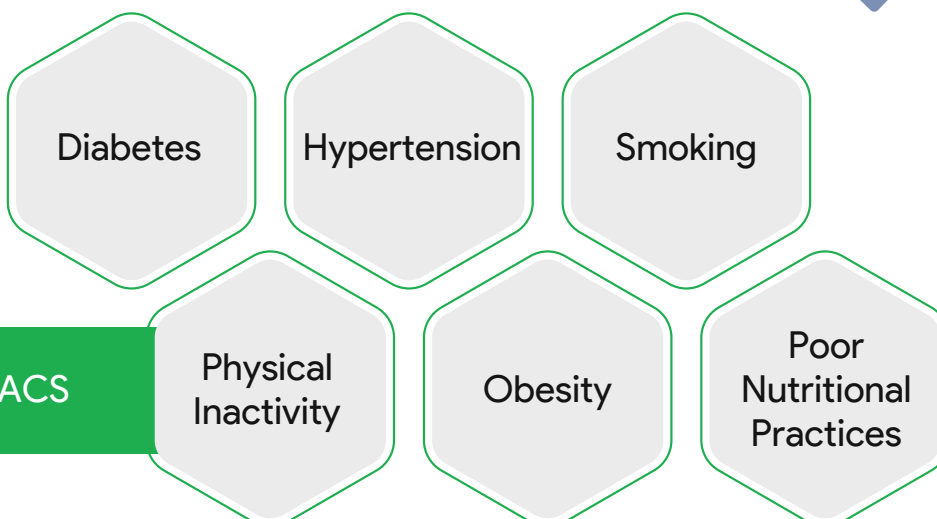


MANAGEMENT OF ACS USING PCI AND CABG

Overview - Causes, Diagnosis, Treatment of ACS

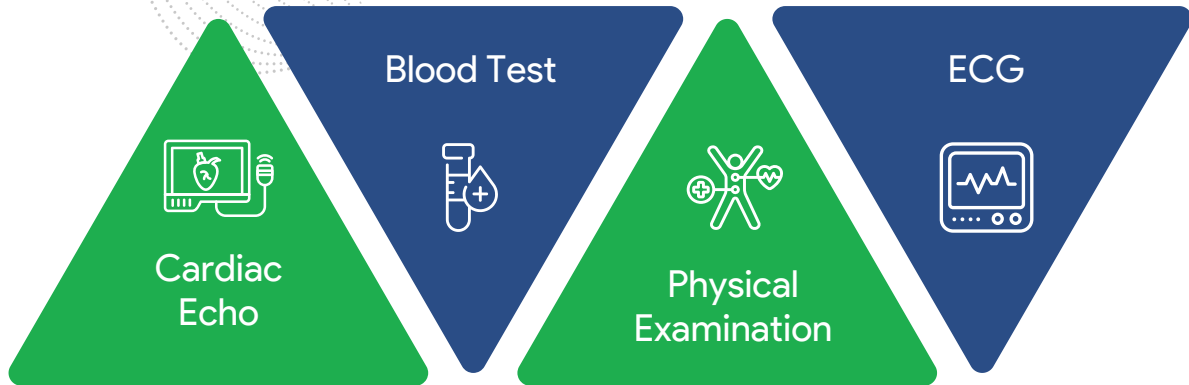


Causes of ACS



Diagnosis of ACS

Typical tests for diagnosing Acute Coronary Syndrome include:



TREATMENT OF ACS

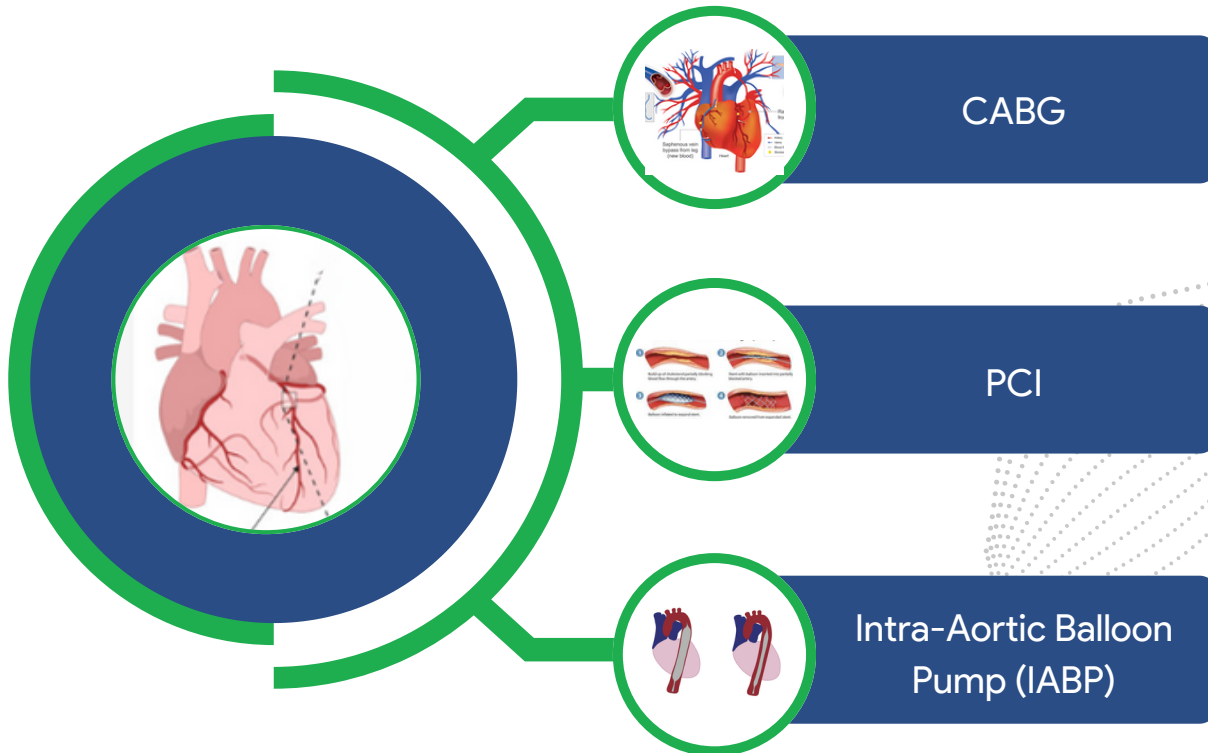
Treatment options for Acute Coronary Syndrome include medicines, surgery and other procedures. Depending on the diagnosis, treatment may include:

Pharmacotherapy associated with Acute Coronary Syndrome

Drug Classes	Examples
Thrombolytics	Streptokinase, Alteplase, Reteplase
Statins	Atorvastatin, Rosuvastatin
Anti-platelet drugs	Aspirin, Clopidogrel, Prasugrel, Ticagrelor
Beta blockers	Metoprolol, Atenolol, Bisoprolol, Nebivolol
Angiotensin-converting enzyme (ACE) inhibitors	Lisinopril, Benazepril, Ramipril, Enalapril
Angiotensin receptor blockers (ARBs)	Telmisartan, Losartan Potassium, Olmesartan, Azilsartan, Irbesartan, Valsartan
Nitrate	Nitroglycerin, Isosorbide Mononitrate
Other medications	Ezetimibe

Surgery and Other Procedures

To restore blood flow to the heart, healthcare providers may recommend surgical interventions for Acute Coronary Syndrome.



NEED FOR PCI AND CABG

PCI is often recommended for patients with less severe blockages, especially if only one or two arteries are affected. However, CABG is usually preferred for patients with more severe or multiple blockages, especially when PCI is not suitable or has failed. Both procedures aim to improve blood flow to the heart, relieve symptoms, and lower the risk of heart attacks. The choice between PCI and CABG depends on the patient's specific condition, including the severity and location of the blockages, overall health, and the presence of any other medical conditions. ^[3]

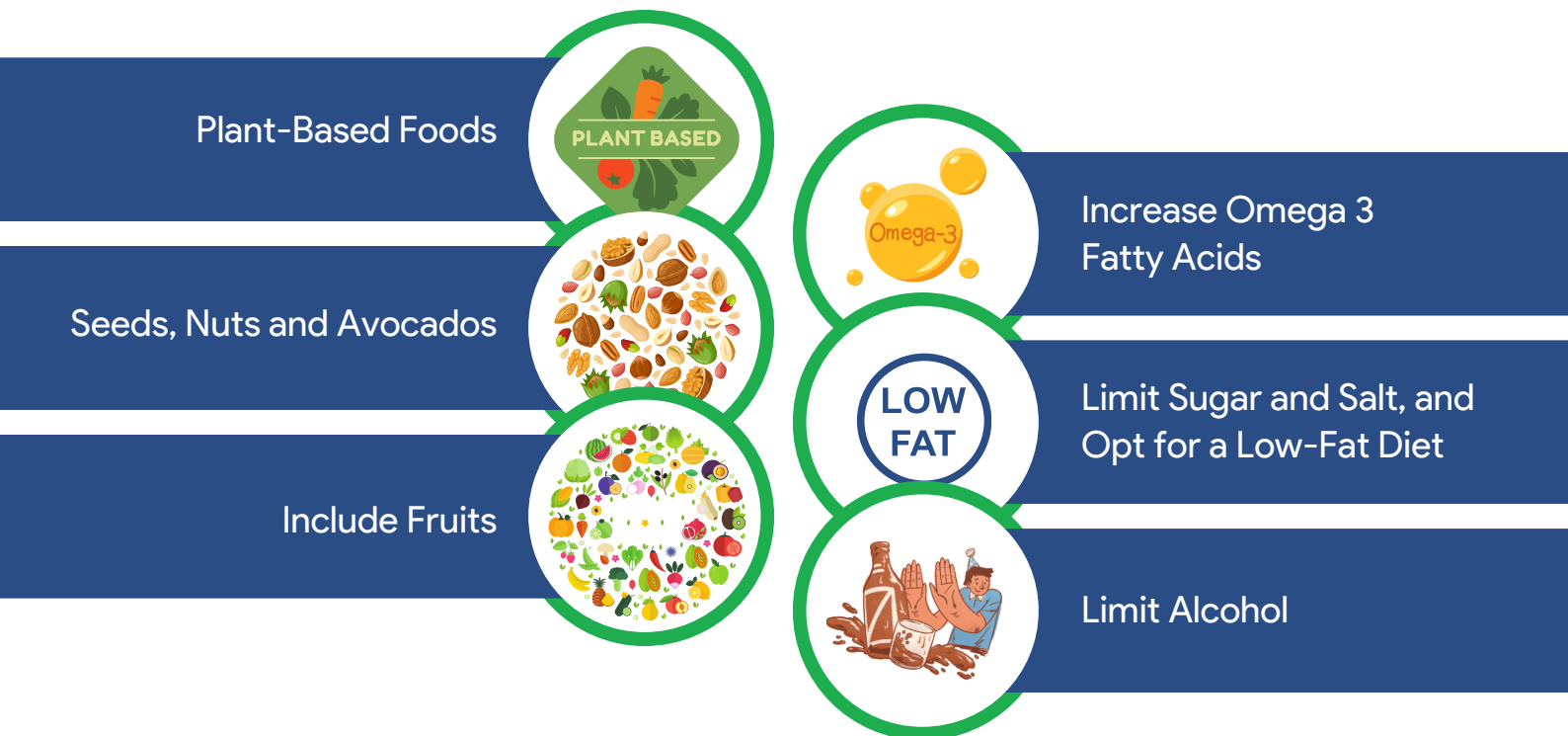
Importance of PCI and CABG

The latest guidelines from the European Society of Cardiology suggests CABG as the primary choice for treating Multi-Vessel Coronary Artery Disease (MVD). Recent advancements in PCI, such as the development of newer drug-eluting stents (DES), the introduction of more potent antiplatelet agents, and the utilisation of advanced tools like intravascular ultrasound and fractional flow reserve guidance, have led to an increased frequency of PCI procedures for multi-vessel disease. Therefore, PCI and CABG are both considered revascularisation procedures for heart patients. ^[4]

LIFESTYLE MODIFICATIONS/HOME-BASED CARE AFTER PCI AND CABG

Dietary Guidelines for Cardiac Health

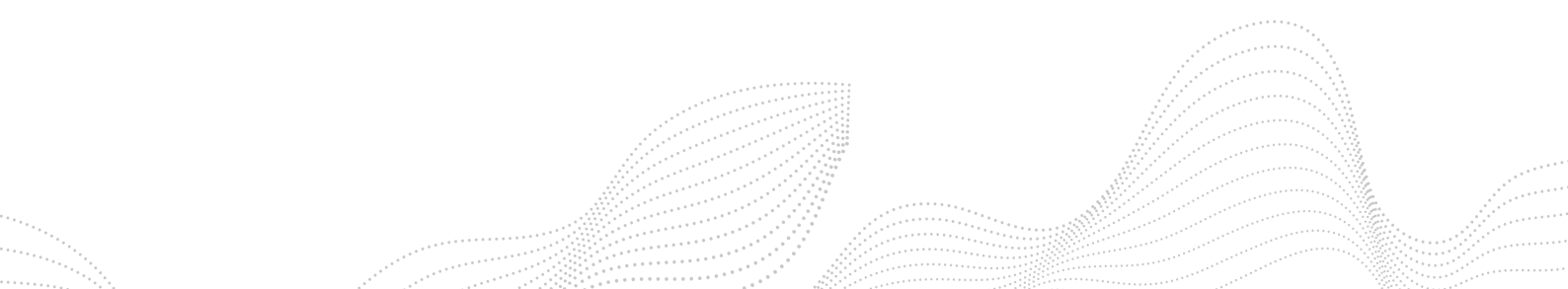
Diet plays a crucial role in cardiac health post-CABG and PCI. Consider these essential dietary guidelines to aid recovery and promote long-term heart health. ^[5]



These guidelines can help support recovery and long-term cardiac health after a CABG or PCI procedure.

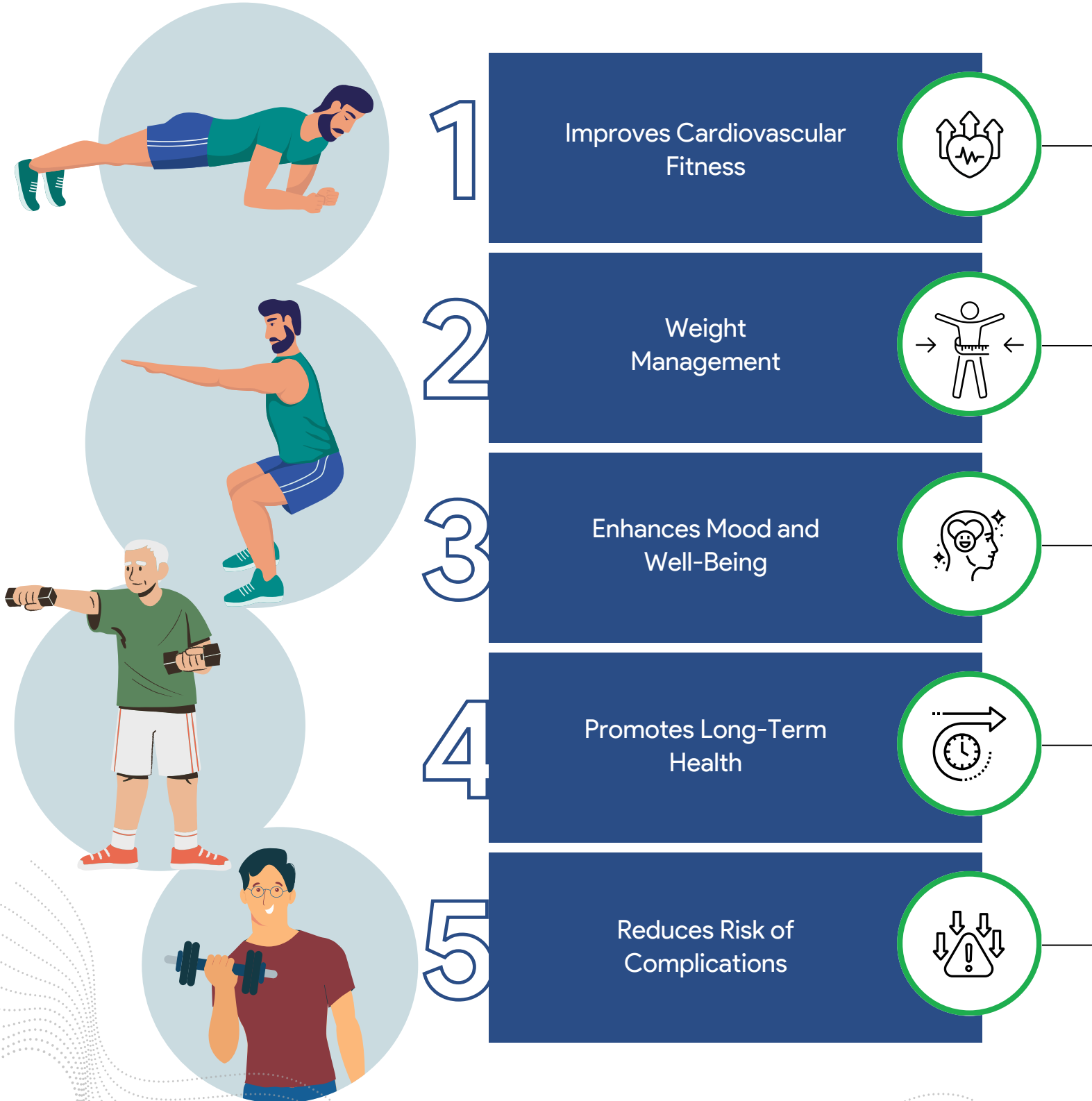
Cardiac Rehabilitation

Cardiac rehabilitation (CR) is a set of activities aimed at improving the health of people with heart disease. It helps them recover physically, mentally, and socially so they can function better in their daily lives. After a procedure like CABG or PCI, CR is crucial in two phases including right after surgery to address immediate concerns, and to encourage lifelong healthy habits. Different studies have found that CR programs, following global guidelines, lower mortality rates, enhance exercise capacity, boost quality of life, and support adherence to treatment and healthy habits. ^{[6] [7]}



Importance of Regular Exercise and Recommended Activities

Regular exercise is crucial after CABG or PCI as it has consistently been shown to improve cardiovascular health.



ADVANTAGES AND DISADVANTAGES OF BASIC CARDIAC CARE AT HOME

Advantages



Disadvantages



GUIDING PRINCIPLES AND OBJECTIVES FOR DEVELOPING A HOME-BASED CARE PROGRAM



Objective



Principles

Easy Access for Patients

1

Patient Engagement

Flexible Care Delivery

2

Empower Patients

Effective Clinician-Patient Relationship

3

Improving Patient Outcomes

Team-Based

4

Lower Resource Utilisation

Effective Care

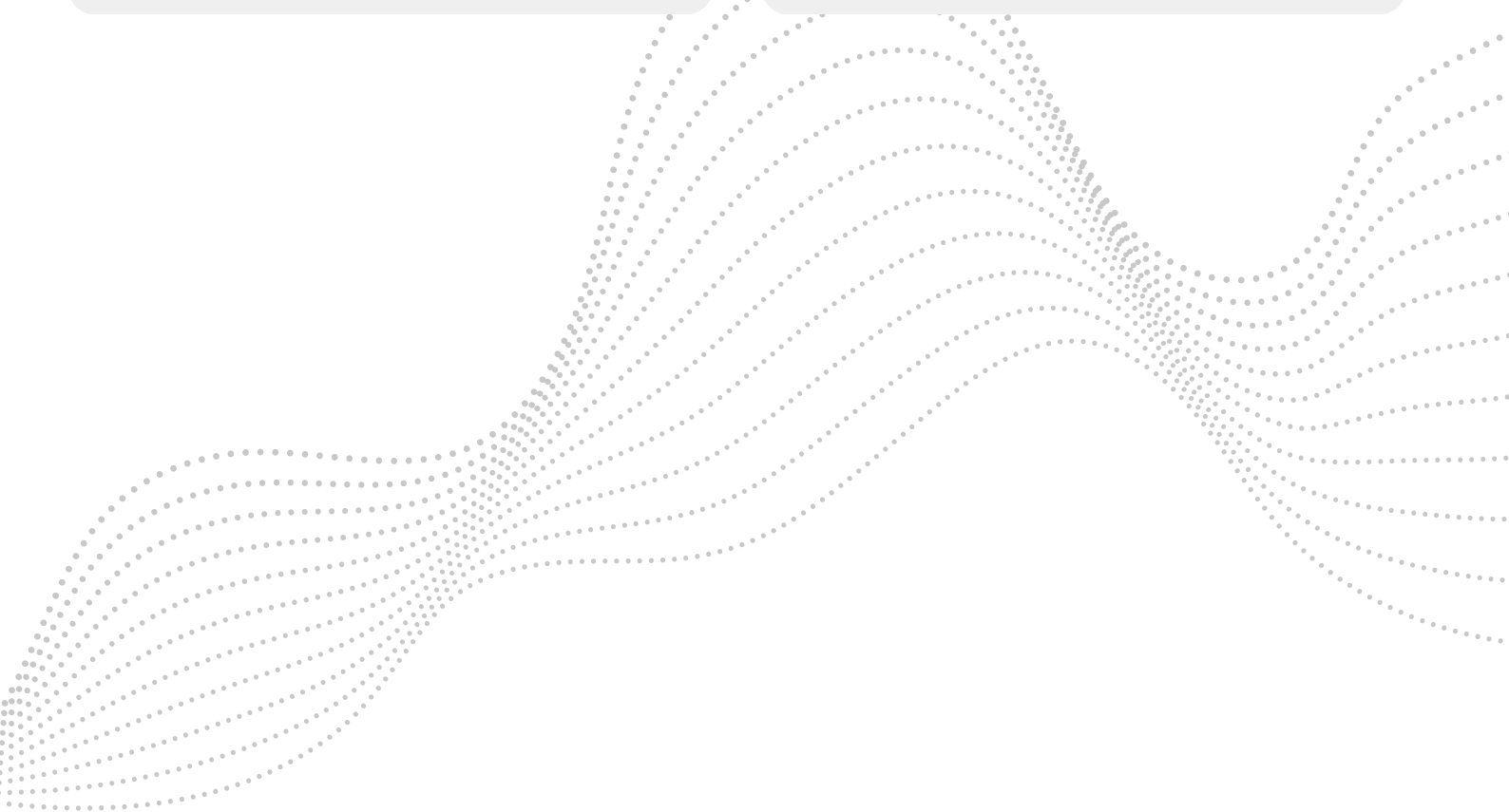
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Lower Total Cost

Ensure Safety for Clinicians

6

Revolutionise Care



KEY PERFORMANCE INDICATORS

We suggest using the following key performance indicators to evaluate the success of home-based care programs:



KEY PERFORMANCE INDICATORS



ONGOING CHALLENGES RELATED TO HOME-BASED HEALTH CARE ^[8]

- 1 Unequal Access to Healthcare
- 2 Structure
- 3 Affordability
- 4 Context & Culture
- 5 Coordination
- 6 Lack of Insurance Coverage
- 7 Competence
- 8 Patient Clinical Engagement

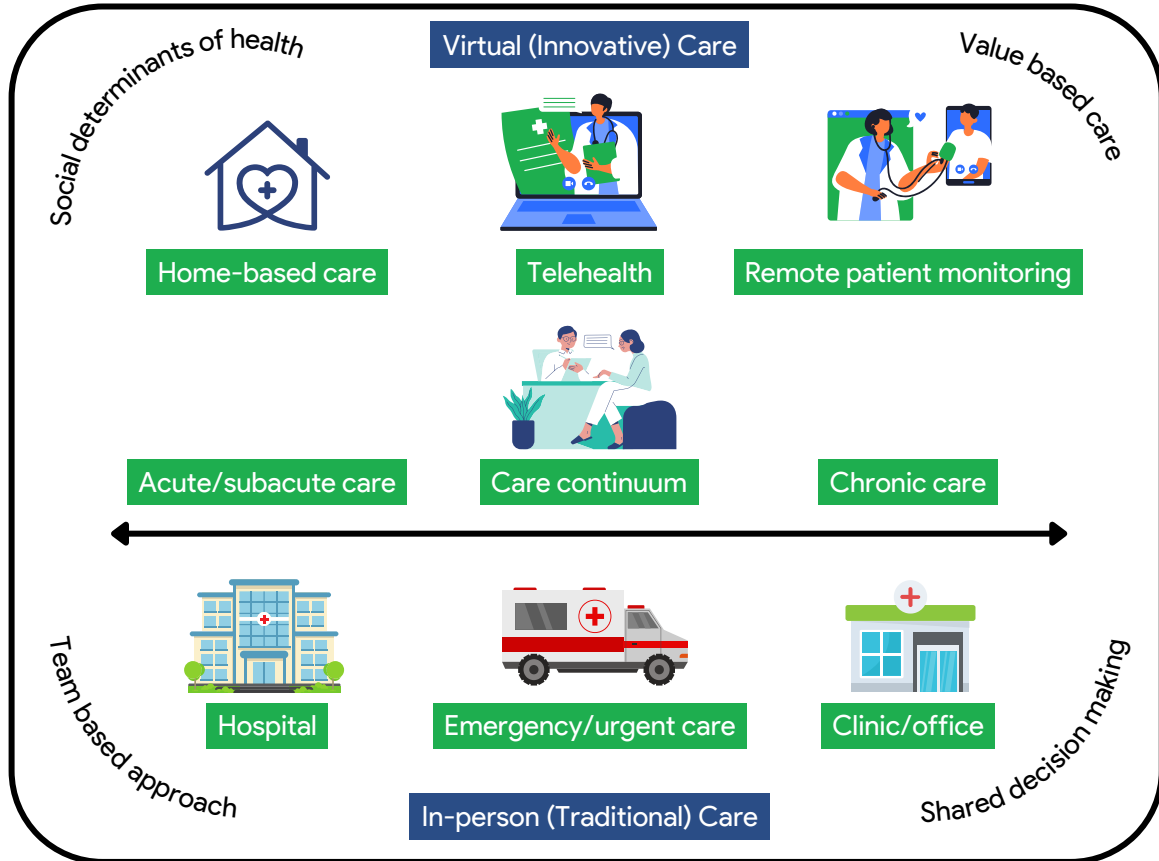
ONGOING CHALLENGES RELATED TO HOME-BASED HEALTH CARE

Despite this multiple challenges such as affordability, access, culture, competence, and health equity exist. We have various mitigation strategies to address these issues:

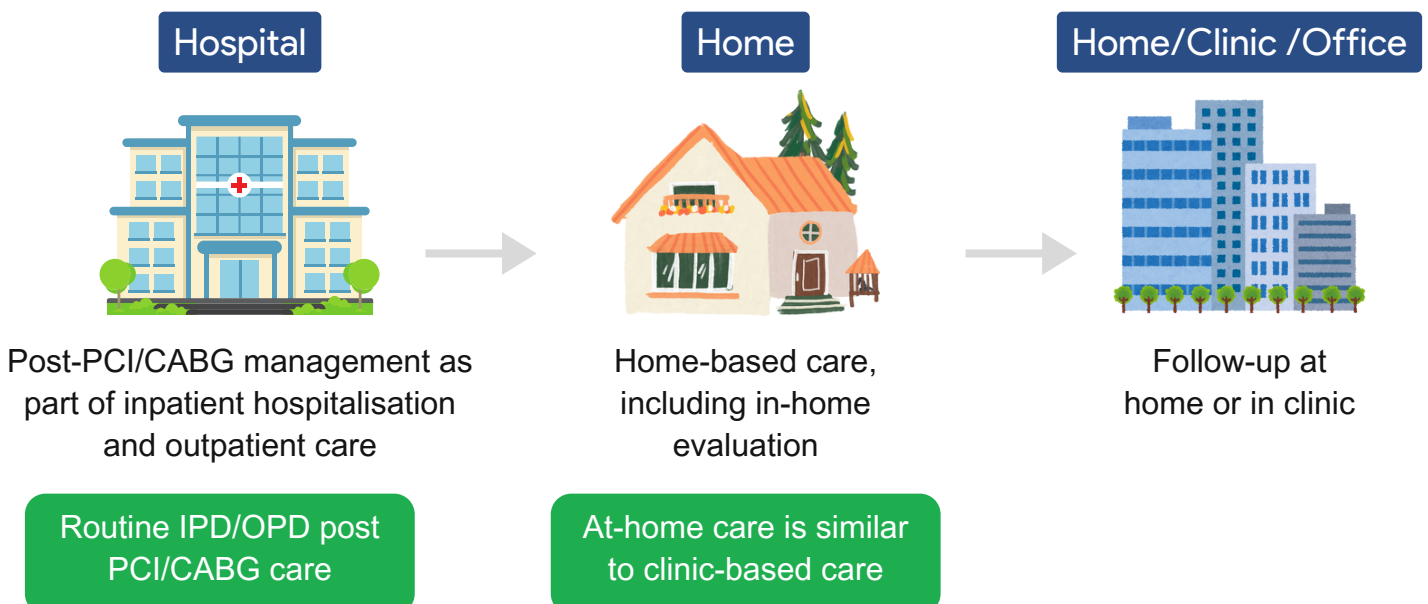
Problems Related to	Challenges	Mitigation Strategies
Patients	Traditional view of health care delivery outside at OPD/IPD and at hospital	Incorporation into traditional healthcare delivery protocols of OPD/IPD
	Technical challenges	Easy digital tools/technology support
Patient safety	Environmental hazards (fall risk, infection prevention)	In-home assessment for home-based care and safety assessments
	Challenges with caregiver hand-off and communication	Simplified and standardised hand-off check lists/tools
	Escalation of service, when needed	Appropriate monitoring equipment and ability to access emergency care
Clinician	Longer waiting period/smaller consultation time/ longer transportation time and time to visit cardiologist	Transforming healthcare payment structures to emphasise value-based reimbursement to enhance affordability and accessibility by leveraging widely accessible telehealth and virtual care technologies
	Medical training	Incorporation of home-based care in medical education curriculums
Infrastructure	Lack of assistive durable medical equipment (DME) for the home	Boost DME supply chain
	Need for in-home support services (e.g. cooking, bathing)	Expanded coverage of in-home services
	Need for other support services (e.g., laboratory, pharmacy, information technology)	Centralised management of mobile support services
	Need for uniform electronic medical record and data integration	Standardised interoperability of electronic medical record systems
Regulatory	No uniform standards for care delivery	Standardised methods to define and measure quality and outcomes in home-based care

HOW IS INNOVATIVE CARE DIFFERENT FROM TRADITIONAL CARE?

An integrated model supports the delivery of home-based care to patients with various wellness and healthcare requirements, without time constraints.



HOME-BASED CARE PATHWAYS FOLLOWING HOSPITALISATION AND AN INPATIENT PROCEDURE



- Clinical assessment, with evaluation of symptoms and a physical examination
- Medication history and reconciliation
- A 12-lead ECG and/or cardiac telemetry monitoring
- Laboratory testing
- Infection assessment

- Fever, heart rate and skin colour assessment
- Additional testing as needed (e.g. echocardiogram, chest x-ray, ultrasound, etc.)
- Patient education
- Care coordination, with establishment of a follow-up plan and phase 2 cardiac rehabilitation

Asynchronous or follow-up virtual visit with a member of the outpatient clinic

CONCLUSION

Home-based care workbook for PCI and CABG recovery provides crucial guidance for patients transitioning from hospital to home. By emphasising ACS management, lifestyle adjustments, and effective post-procedure care pathways, this workbook aims to optimise patient outcomes. Home-based care offers a familiar environment, personalised support, and cost-effective treatment, promoting faster recovery and emotional well-being, especially beneficial for senior citizens. As healthcare evolves, integrating these principles ensures comprehensive care continuity and enhances overall quality of life post-procedure.

REFERENCES

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Note:

A series of horizontal dashed lines providing a template for writing notes.



Scan to listen to the podcasts of
the home care workbooks

