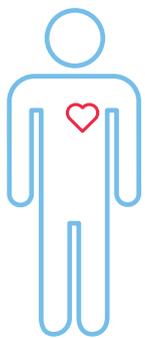


Secondary prevention of

# HEART ATTACK AND STROKE

# in Germany

## ALMOST



# 500,000

people were diagnosed with coronary heart disease in 2019<sup>1</sup>

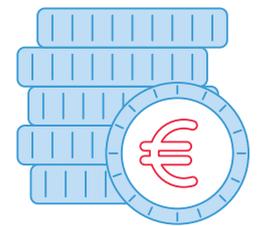
# 136,000

people were diagnosed with stroke in 2019<sup>1</sup>

## THE DIRECT COST

of coronary heart disease and cerebrovascular disease is

# €16.7 bn

 per year<sup>2</sup>

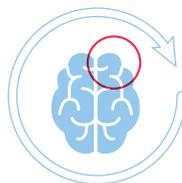
Together with other cardiovascular diseases, they incur the greatest costs among all diseases in the German healthcare system<sup>3</sup>

People who experience heart attack or stroke often face an unnecessarily **HIGH RISK OF REPEAT EVENTS.**

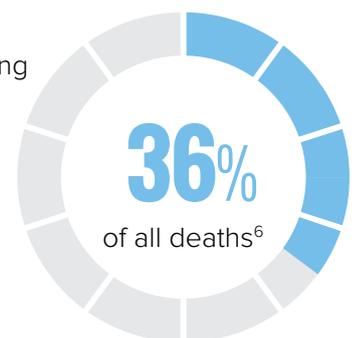


Close to 10% of hospital admissions for heart attack are due to a repeat event<sup>4</sup>

Stroke survivors have a tenfold increased risk of another stroke compared with the general population<sup>5</sup>



Cardiovascular diseases, including heart attack and stroke, are the no.1 cause of mortality in Germany, causing



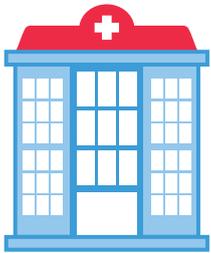
## MANY REPEAT HEART ATTACKS AND STROKES COULD BE AVOIDED.

**Secondary prevention** can mitigate the risk of a subsequent heart attack or stroke through comprehensive risk factor management, combining rehabilitation, preventive medication and lifestyle change.<sup>7,8</sup> Long-term maintenance of risk factor control is key to achieving successful secondary prevention.

**Note:** Coronary heart disease is characterised by a build-up of plaque in the arteries that serve the heart. The most dangerous consequence of coronary heart disease is heart attack. Cerebrovascular disease is a collection of conditions which affect the blood vessels of the brain. The most common cerebrovascular disease is stroke, which is classified as a neurological disease. In this summary, we have used data specific to heart attack and stroke, where available.

# WHAT IS THE CURRENT SITUATION?

Secondary prevention for heart attack and stroke involves specialist acute care, structured rehabilitation and long-term management in primary care. Systemic gaps and inequalities in the availability of such care are putting people at an increased risk of repeat events.



## Specialist acute care is well established, but gaps exist in the initiation of secondary prevention

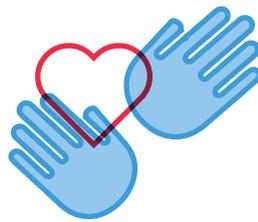
Heart attack and stroke patients should be treated in a specialist acute care setting. This helps ensure that secondary prevention is initiated while the person is still in hospital.



In 2017, comprehensive discharge management was made mandatory for all patients leaving hospital. Patients are provided with a discharge plan, follow-up medication and appropriate referral.<sup>9</sup>



Certified stroke units are widespread. Still, the majority do not regularly assess patient adherence to preventive medication after discharge.<sup>10</sup>



## Structured rehabilitation is underused

Secondary prevention should continue seamlessly following discharge from hospital. This is best achieved through a structured rehabilitation programme, such as cardiac rehabilitation.



More than 286,000 cardiac patients can miss out on cardiac rehabilitation each year. This is due to a lack of facilities and low recognition of its importance among healthcare professionals.<sup>11</sup>



Just four out of ten stroke patients receive rehabilitation in the immediate post-acute period.<sup>12</sup>

Germany



## Risk factor control during long-term management does not meet guideline recommendations

After a heart attack or stroke, people require lifelong medication and lifestyle changes to lower their risk factors, such as high cholesterol and smoking.



One year after a heart attack, just 24% of people received the guideline-recommended combination of medications to prevent another heart attack.<sup>13</sup>

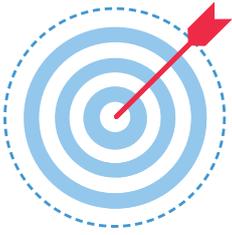


During the first year after a stroke, only around 50–60% of people received the main medications to prevent another stroke.<sup>14</sup>

### GOOD PRACTICE:

The introduction of a coronary heart disease management programme has led to improvements in secondary prevention during long-term care.<sup>15,16</sup> People who decide to participate can choose a physician (usually their family doctor) who will coordinate their long-term care, organise regular follow-up and provide support.<sup>16</sup>

The **STROKE OWL**<sup>17</sup> pilot project aims to improve follow-up care for stroke by assigning each person a guide. The guide supports the person in controlling their risk factors, including adherence to medications and making lifestyle changes.



## There is no **dedicated policy** addressing heart attack and stroke

Goal-oriented policies and strategies are vital to set clear targets and boost investment in best-practice secondary prevention.



There is no national strategy for cardiovascular disease, heart attack or stroke,



nor national targets for secondary prevention.



## Advocacy for secondary prevention of heart attack and stroke is falling short on increasing national awareness

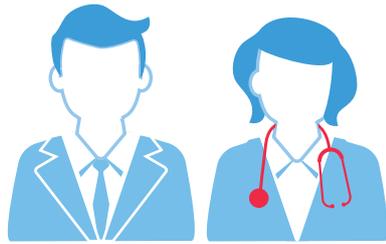
Advocacy efforts, such as targeted campaigns, help increase public and political awareness. They may stimulate action at the service delivery and policy levels.



Awareness campaigns for secondary prevention for heart attack and



stroke is limited, but patient organisations are spearheading support projects for people who have had a heart attack or stroke.<sup>17 18</sup>



## Clinical leadership is striving to improve clinical practice in secondary prevention

Clear, practice-oriented guidelines foster knowledge among healthcare professionals and implementation of best-practice care.



German medical societies have made significant progress in developing practice-oriented guidelines for post-acute management in heart attack. They cover risk factor management,<sup>19</sup> rehabilitation<sup>20</sup> and disease management programmes.<sup>21</sup>



National stroke and neurological societies have progressed best practice for secondary prevention. This has been achieved by developing dedicated guidelines, making them available in an easily accessible format,<sup>22</sup> and updating them in line with current best practice.<sup>23</sup>



## There is a lack of **national registries** to collect comprehensive data on heart attack and stroke

Data on treatment, outcomes and quality of care after the acute phase are needed to monitor, plan and assess care services for secondary prevention.



There is no national registry for heart attack to collect comprehensive post-acute data. Some data relevant to secondary prevention are collected through other national registries, for example on cardiac rehabilitation and acute-stage interventions.<sup>25 26</sup>



Certified stroke units collect data for quality control in the acute phase of care. However, there is a lack of data relevant to secondary prevention of stroke, and no registry at the national level.<sup>27</sup>

### **GOOD PRACTICE:**

**The Competence Network Stroke is a multidisciplinary group of clinicians and medical and health researchers aiming to generate new evidence and best-practice models for key issues in stroke care. The close collaboration aids rapid implementation of new care concepts.<sup>24</sup>**

# WHAT ARE THE OPPORTUNITIES FOR IMPROVEMENT?

## Effective secondary prevention in heart attack and stroke requires a comprehensive package of interventions coordinated by a multidisciplinary team across all care settings.

Currently, patients in Germany face systemic barriers and inequalities in accessing secondary prevention at all stages of care, from acute care to long-term management.

Addressing these gaps represents a major opportunity to improve outcomes and potentially reduce national healthcare spending associated with repeat events.

**Increasing the use of structured rehabilitation** represents a significant opportunity to improve care,

with too few existing facilities and too few patients being referred. Encouragingly, Germany has developed a **standardised model of follow-up care** for heart attack, the wider implementation of which would help to address some of the gaps in care. Projects are also underway to develop a long-term care model for stroke. As such programmes are currently underused in Germany, **greater national and state leadership** may be needed to support their implementation. A national policy which covers cardiovascular disease secondary prevention would be another much-needed element of strengthening care to avoid repeat heart attacks and strokes.

To find out more about this project and read the full country profile on Germany, please see <https://hpolicy.co/secondaryprevention>

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This summary is part of a larger project exploring secondary prevention of heart attack and stroke across Europe. The project was developed by The Health Policy Partnership and initiated and funded by Amgen (Europe) GmbH.