

# IRISH HEART ATTACK AUDIT SUMMARY REPORT 2021

The Irish Heart Attack Audit measures the care of patients who suffered a major heart attack in 2021 and were treated in one of 10 specialist cardiac hospitals.

## WHAT IS A HEART ATTACK?

A heart attack is a life-threatening medical emergency where the blood supply to the heart is suddenly cut off, usually by a blood clot (thrombosis). In Europe, heart disease is the largest cause of death for both men and women.



### SYMPTOMS OF A HEART ATTACK

#### COMMON/TYPICAL SYMPTOMS



Chest pain  
moving into  
the jaw, neck,  
arms or back



New shortness  
of breath

#### UNCOMMON/ATYPICAL SYMPTOMS



Unusual  
stomach pain



Confusion



Sweatiness

What should I do if I or someone else  
has symptoms of a heart attack?

**CALL 999 OR 112  
IMMEDIATELY**


**Why? Patients who call 999 or 112  
are more likely to experience a timely  
diagnosis and treatment.**

- Have the heart attack diagnosed in the ambulance by the paramedic using an ECG machine
- Are brought urgently to the specialist centre
- Arrive at the specialist centre within the recommended time
- Are twice as likely to be treated within the recommended time.



**Patients who are treated within the recommended  
time are more likely to survive the heart attack.**


# KEY HIGHLIGHTS 2021




**10** specialist centres

**1491** confirmed STEMI recorded in 2021

**77%** Male with median\* age **61**



**23%** Female with median age **67**



## RISK FACTORS

**82%** had at least one known cardiovascular risk factor.


**46%** had high cholesterol (hypercholesterolaemia).

**44%** had high blood pressure (hypertension).

**18%** had diabetes.

## SMOKING

**39%** were smokers at the time of their heart attack, more than double the population rate of smoking (**18%**). Smokers present with a heart attack 9 years earlier than people who have never smoked.



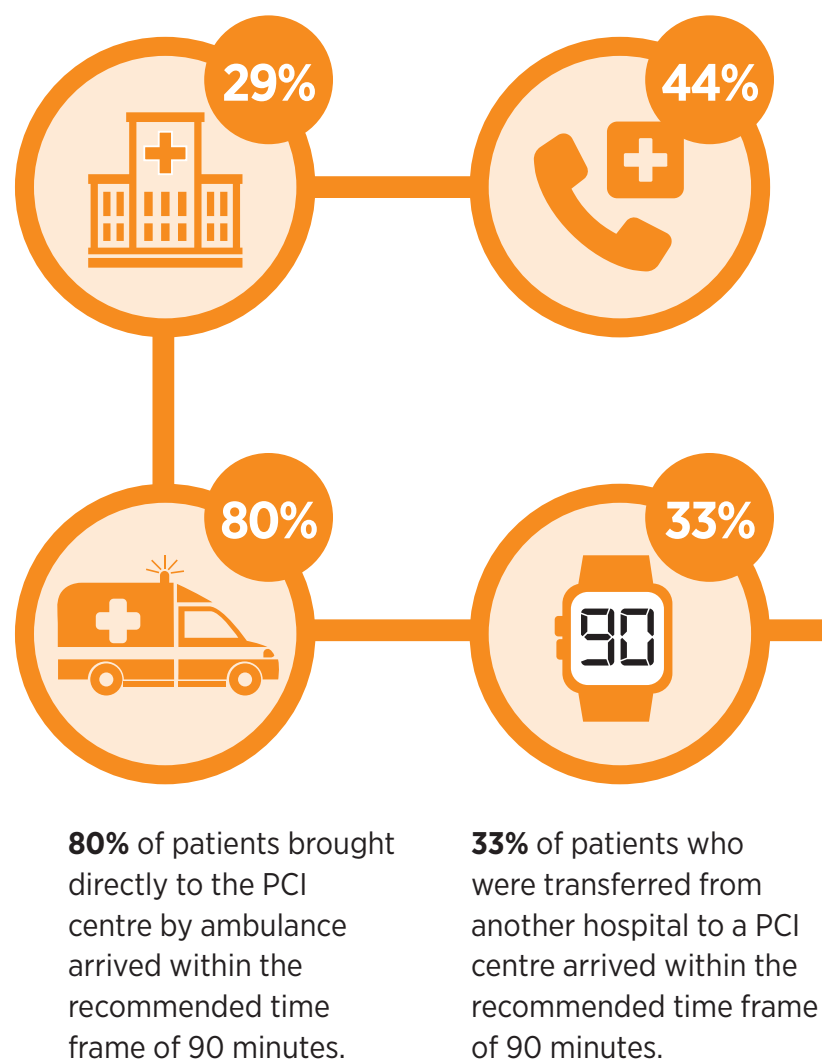
## How are people with heart attack treated in Ireland?

All patients with a major heart attack, known as an ST elevation myocardial infarction (STEMI) should have specialist treatment to unblock clogged arteries. There are two types of treatment - thrombolysis, which is a clot-dissolving drug and primary percutaneous coronary intervention (primary PCI) which involves inserting a wire into the blocked artery in order to open it with a balloon and stent. There are 10 hospitals in Ireland, known as PCI centres, who carry out primary PCI.

## GETTING TO THE SPECIALIST CARDIAC CENTRE

**58%** of patients were brought directly by ambulance to the PCI centre and **29%** were transferred from another hospital to the PCI centre.

**44%** of patients called 112 or 999 for help within 60 minutes of onset of symptoms.

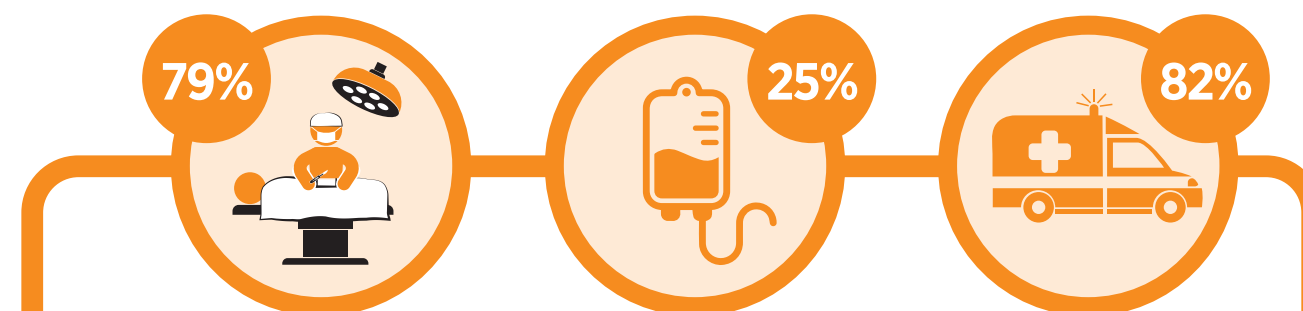


## HEART ATTACK TREATMENT

**79%** of patients with a STEMI received treatment with primary PCI.

**5%** received treatment with thrombolysis but only **25%** received it within the recommended 30 minute timeframe

Timely primary PCI was higher in patients admitted directly by ambulance to a PCI centre (**82%**) compared to those transferred to a PCI centre from another hospital (**41%**).



## PREVENTING ANOTHER HEART ATTACK

Quit smoking advice was given in **85%** of cases before discharge.

**66%** of eligible patients were referred to cardiac rehabilitation (target is 90%).

**74%** of patients with a STEMI had an appropriate secondary prevention medication prescribed (target is 90%).



## OUTCOMES

The rate of complications associated with treatment for heart attack was low.

The unadjusted in-hospital mortality rate was **5.6%**. Timely treatment was associated with reduced mortality (**3.5% vs 5.1%**).



\*The median is the middle number in a list of numbers.

# 2021 RECOMMENDATIONS

## RECOMMENDATION 1

Develop a public awareness campaign to encourage people with heart attack symptoms to call 112 or 999 immediately for emergency help in order to facilitate pre-hospital electrocardiogram (ECG) diagnosis of a STEMI.



## RECOMMENDATION 2

There should be a national and regional focus on quality improvement in the STEMI care pathway.



## RECOMMENDATION 3

Improve public awareness of the adverse impact of smoking on heart attack risk.



## RECOMMENDATION 4

Support patients with STEMI to reduce the risk of further heart attack by increasing the rate of referral to cardiac rehabilitation phase 3.



## PUBLIC AND PATIENT INTEREST

My name is Michael Madigan. I worked as a Clinical Nurse Manager in Mental Health Service in the NHS and HSE before retiring in 2018 due to heart failure following a heart attack in 2016. I am a member of the National Heart Failure Patient Panel with the Irish Heart Foundation. I told my story at the launch of the first Irish Heart Attack Audit (IHAA) report launch in 2022 and was nominated by the Irish Heart Foundation to join the IHAA Governance Committee in 2023 as a public and patient interest representative. I am delighted to see the IHAA recommending the need for increased public awareness about the symptoms of heart attack and the need to call 999. I would like to see hospitals improve their referral to cardiac rehabilitation in order to ensure that as many people as possible live life after heart attack to their full potential

*Michael Madigan, Public and Patient Interest Representative, Irish Heart Attack Audit Governance Committee*

Hi my name is Pauline O'Shea and I work as the Advocacy Campaign Manager, at the Irish Heart Foundation. My journey to this role came out of my own experience as a heart attack survivor. With complications, including misdiagnosis, cardiac arrest, and therapies that included open heart surgery, as well as ICD implantation, I became very passionate about the way patients were treated and informed in healthcare.

I now represent cardiac and stroke patients at national level through the Irish Heart Foundation, trying to highlight to policy and decision makers the importance of patient care and welfare beyond purely medical requirements, so that the patient is seen as more than their diagnosis, and acknowledged and recognised in society as human beings with complex needs. This includes advocating for consciousness of the psychological, social, economic, informational, and peer supports required for patients, and the funding of services for same, to help patients achieve their best health post diagnosis. I believe that my direct experience of being a cardiac patient, adds hugely to my ability to advocate for patients.

*Pauline O'Shea, Heart patient, PPI rep, and Advocacy Campaign Manager, Irish Heart Foundation*



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