NOCA National Office of Clinical Audit

IHAA Irish Heart Attack Audit

IRISH HEART ATTACK AUDIT
NATIONAL REPORT 2024
APPENDICES

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APPENDIX 1: AIM AND OBJECTIVES OF THE IRISH HEART ATTACK AUDIT

Aim	To conduct audit of Acute Coronary Syndrome (ACS) care.
Objectives	• To integrate the existing Heartbeat audit of STEMI into the IHAA within NOCA and to encompass STEMI, NSTEMI, and unstable angina hospital admissions. To evolve and develop the current Heartbeat dataset to match international data collection best practice standards for ACS audit (i.e. the Swedeheart Swedish Coronary Angiography and Angioplasty Registry; National Cardiovascular Data Registry Myocardial Infarction Percutaneous Coronary Intervention Registry; and Myocardial Ischaemia National Audit Project datasets). • To maintain a database of all inpatients with an ACS in Ireland in order to support/promote continuous QI initiatives at local and national level and to deliver the best patient outcomes. • To support the collection of high-quality data on all inpatient ACS admissions in Ireland in order to permit local and national reporting of outcomes. • To disseminate the outputs from the data to all relevant stakeholders in a timely manner. • To benchmark ACS care and outcomes against national and international standards. • To develop appropriate risk-adjusted modelling of outcomes in order to facilitate national, regional Hospital Group, and individual hospital- and physician-level QI, and to develop patient-reported outcome measures for ACS. • To provide data to support and inform national policies for ACS and related cardiovascular conditions.

APPENDIX 2: IHAA GOVERNACE COMMITTEE MEMBERSHIP AND MEETING ATTENDANCE

Representative	Name	01.03.24	24.05.24	06.09.24	29.11.24
Clinical Expert Consultant Cardiologist, MMUH	Dr Gavin Blake	x	x	x	✓
Research Expertise Cardiac Research Group, RCSI	Prof Robert Byrne	✓	x	x	x
Clinical Expert Irish Cardiac Society	Prof James Crowley	x	x	x	x
Healthcare Pricing Office	Jacqui Curley	✓	✓	✓	✓
Programme Manager, National Heart Programme & Coronary Heart Attack Ireland Register	Linda Drummond	✓	✓	✓	✓
Clinical Expert Consultant Cardiologist, MRH Portlaoise	Dr Sean Fleming	Chair	Chair	Chair	Chair
Clinical Psychologist, Beaumont Hospital	Jonathan Gallagher	✓	x	x	x
Senior Accountable Healthcare Manager IEHG, Director of Nursing	Paul Gallagher	x	✓	✓	✓
National Heart Programme	Dr Joseph Galvin	n/a	n/a	✓	✓
Healthcare Professional Expert Cardiac Rehabilitation Council member of Irish Association of Cardiac Rehabilitation	Stephen Giffney	✓	✓	✓	✓
Public Health Expertise	Siobhan Jennings	x	✓	✓	✓
Consultant Cardiologist & Chair of Coronary Heart Attack Ireland Register	Dr Peter Kearney	x	✓	x	x
Clinical Expert Consultant Cardiologist, Beaumont Hospital	Dr Mark Kennedy	x	x	x	x
Audit Coordinator	Sreeji Kurup	n/a	n/a	✓	✓
Patient and Public Interest Representative	Michael Madigan	✓	✓	✓	✓
Clinical Expert Consultant Cardiologist, St James's Hospital	Dr Andrew Maree	X	x	✓	x
Clinical Lead for IHAA	Prof Ronan Margey	✓	✓	✓	✓
National Ambulance Service - Lead	Siobhan Masterson	✓	x	✓	R
Heartbeat Audit Assistant Manager	Yvonne McConnon	X	✓	x	✓
Cardiovascular Programme Audit Manager	Joan McCormack	✓	✓	✓	✓
Research Expertise Consultant Cardiologist, CUH	Dr Eugene McFadden	✓	✓	✓	✓
Consultant Cardiologist	Dr Ian Pearson	X	x	x	x
Patient and Public Interest Representative - Irish Heart Foundation	Pauline O'Shea	✓	x	✓	x
NOCA	Collette Tully	MC	MC	MK	CT
Audit Coordinator	April Vilalobos	n/a	n/a	✓	x
Clinical Lead National Heart Programme	Prof Ken McDonald	X	x	x	R
Attended = ✓ Did not attend = x Retired = R Not Applicable = n/a					

International performance indicators and targets for ST elevation myocardial infarction (STEMI) care vary both in terms of what is suggested to be reported on and what is considered acceptable, although some commonality can be seen across most indicators and targets. The following are some of the main international indicators and/or targets, mainly for reperfusion therapy.

1. European Society of Cardiology (ESC) STEMI Guidelines 2012 (Steg et al., 2012):

Quality targets:
· First medical contact (FMC)* to first electrocardiogram (ECG): 10 minutes
· FMC* to reperfusion therapy: -
 - for fibrinolysis: 30 minutes
 - for primary percutaneous coronary intervention (PCI): 90 minutes (60 minutes if the patient presents within 120 minutes of symptom onset or directly to a PCI-capable hospital).
*FMC is defined as the point at which the patient is either initially assessed by a paramedic or physician or other medical personnel in the pre-hospital setting, or at which the patient arrives at the hospital emergency department.

2. Myocardial Ischaemia National Audit Project 2012 report (MINAP, 2016) (United Kingdom):

• 'call to balloon' (CTB) time: audit standard – up to 150 minutes
• 'door to balloon' (DTB) time: audit standard – up to 90 minutes
• 'call to needle' (CTN) time: audit standard – up to 60 minutes
• 'door to needle' (DTN) time: audit standard – up to 30 minutes

3. Danish national indicators:

• primary PCI as a national reperfusion strategy
• 100% and accordingly no fibrinolysis = pre-hospital diagnosis in 90% of cases
• field triage in 60% of those diagnosed in a pre-hospital setting
• DTB time of 30 minutes.

4. 2013 American College of Cardiology Foundation (ACCF)/American Heart Association (AHA) Guideline for the Management of STEMI (O'Gara et al., 2013):

• for direct emergency medical service (EMS) transport: FMC-to-device time system goal of 90 minutes or less
• for non-PCI to primary PCI centre transport: FMC-to-device time system goal of 120 minutes or less

• when indicated or chosen as the primary reperfusion strategy, fibrinolytic therapy should be administered within 30 minutes of hospital arrival.

5. Institute for Healthcare Improvement (IHI) (United States of America) method (2008):

• thrombolytic agent received within 30 minutes of hospital arrival; goal: 100% of patients
• PCI received within 90 minutes of hospital arrival; goal: 100% of patients.
6. Safer Healthcare Now (SHN) (Canada) method:
• thrombolytic agent received within 30 minutes of hospital arrival; goal: 85% of patients
• PCI received within 90 minutes of hospital arrival; goal: 90% of patients.

7. Canadian Cardiovascular Outcomes Research Team (CCORT) guidelines (Tu et al., 2008):

• primary PCI within 90 minutes of hospital arrival* and within 120 minutes of call for help
• thrombolysis within 30 minutes of hospital arrival*
• ECG within 10 minutes of hospital arrival. *
* Triage time or registration time – whichever comes first.

8. Australia/New Zealand guidelines (Aroney et al., 2006) (with 2011 Addendum):

• primary PCI within 60 minutes of presentation if patient presents within 1 hour of symptom onset
• primary PCI within 90 minutes of presentation if patient presents more than 1 hour after symptom onset
• if patient presents to facility without catheterisation laboratory (cath lab) (and symptoms between 3 and 12 hours), appropriate to transfer for primary PCI if primary PCI can be done within 120 minutes (including transport time)
• thrombolysis should be considered where there are major delays (>30 minutes) to hospitalisation
• ECG should, where possible, be done pre-hospital and transmitted to hospital
• ECG should otherwise be done within 5 minutes of hospital arrival.

INFORMATION ON HOW THE KEY QUALITY INDICATORS (KQIs) ARE CALCULATED
Defining the cohort for analysis
Data on all cases submitted to the Heartbeat portal are sent to NOCA from the Healthcare Pricing Office (HPO) every month. Before the data analyst reports on the data, all patients who do not have a discharge diagnosis of STEMI and patients aged 16 years and under are excluded.
This now forms the dataset to report on the 9 KQIs:

KQI 1: Percentage of eligible patients with a STEMI who were offered reperfusion

Out of all the patients, what was the percentage who were offered reperfusion therapy (primary PCI or thrombolysis).
Analysis:
The total number of patients divided by the total number of patients who were offered reperfusion – expressed as a percentage.
Cases were excluded if:
o Patient was contraindicated to reperfusion therapy

KQI 2: Percentage of patients with a STEMI who had timely primary PCI – arrived directly to a Primary PCI centre.

Out of all the patients who had primary PCI and were admitted to a Primary PCI centre directly, what was the percentage who received a timely primary PCI?
Analysis:
The total number of patients who had primary PCI and were admitted to a Primary PCI centre directly and received timely primary PCI divided by the total number of patients who had primary PCI and were admitted to a Primary PCI directly – expressed as a percentage.
     o Definition of "arrived directly" – patient's initial source of referral is direct by ambulance; patient has presented to the Primary PCI centre by own transport; patient already in a hospital that is a Primary PCI centre and developed STEMI
     o Timely reperfusion is analysed by calculating difference in minutes between date and time of first positive ECG and date and time of PCI/wire cross. If the difference is 120 minutes or less, it is considered timely reperfusion
Cases were included if:
     o Patient's initial source of referral is direct by ambulance; patient has presented to a PCI centre by own transport; patient already in a hospital that is a Primary PCI centre and developed STEMI
     o Patient received Primary PCI
Cases were excluded if:
     o Patient was contraindicated to reperfusion therapy
     o If the date/time of first positive ECG and/or PCI/wire cross date/time was not recorded

o If the date/time of positive ECG was recorded as after the PCI/wire cross date/time. This indicates that wrong date was recorded

KQI 3: Percentage of patients with STEMI who had timely primary PCI – transferred to a Primary PCI centre

Out of all the patients who had primary PCI and were transferred from another hospital to a Primary PCI centre, what was the percentage who received a timely primary PCI?
Analysis:
The total number of patients who had primary PCI and were transferred from another hospital to a Primary PCI centre and received timely primary PCI divided by the total number of patients who had primary PCI and were transferred from another hospital to a Primary PCI centre – expressed as a percentage.
    o Definition of "transferred" – patient was transferred from another hospital or was an inpatient in another hospital and was transferred to a Primary PCI centre.
    o Timely reperfusion is analysed by calculating difference in minutes between date and time of first positive ECG and date and time of PCI/wire cross. If the difference is 120 minutes or less, it is considered timely reperfusion
Cases were included if:
    o Patient's initial source of referral is a transfer; transferred from other hospital or an inpatient in another hospital
    o Patient received Primary PCI
Cases were excluded if:
    o Patient was contraindicated to reperfusion therapy
    o If the date/time of first positive ECG and/or PCI/wire cross date/time was not recorded
    o If the date/time of positive ECG was recorded as after the PCI/wire cross date/time. This indicates that wrong date was recorded

KQI 4: Percentage of patients with STEMI who had radial access for Primary PCI

Out of all the patients who received Primary PCI, what was the percentage who had the procedure by radial access?
Analysis:
The total number of patients who received Primary PCI with radial access divided by total number of patients who received Primary PCI – expressed as a percentage.
Cases were included if:
o Patient received Primary PCI
Cases were excluded if:
o Patient was contraindicated to reperfusion therapy

KQI 5: Percentage of patients with a STEMI who had an appropriate secondary prevention discharge bundle prescribed.

Out of all the patients, what was the percentage who had an appropriate secondary prevention discharge bundle prescribed.
Analysis:
The total number of patients who had an appropriate secondary prevention discharge bundle prescribed divided by total number of patients – expressed as a percentage.
o Secondary prevention discharge bundle is defined as: if on discharge, the patient was prescribed or were contraindicated to each of the following treatments: ACEI or ARB, betablocker, aspirin, statin, another anti-platelet
Cases were excluded if:
o Patients were dead on discharge from the hospital

KQI 6: Percentage of patients with a STEMI who smoke and were offered smoking cessation advice

Out of all the patients who smoked prior to admission to hospital, what was the percentage who were offered smoking cessation advice?
Analysis:
The total number of patients who smoke and who were offered smoking cessation advice divided by total number of patients who smoke – expressed as a percentage.
Cases were included if:
o Patients were smoking prior to admission to hospital

KQI 7: Percentage of patients with a STEMI referred for cardiac rehabilitation phase 3

Out of all the eligible patients, what was the percentage who were referred for cardiac rehabilitation phase 3.
Analysis:
The total number of patients who were referred for cardiac rehabilitation phase 3 divided by total number of patients – expressed as a percentage.
Cases were excluded if:
o Patients were dead on discharge from the hospital
o Patient was not a resident in Ireland
o Patient was not legible for rehabilitation due to a comorbidity
o Patient declined referral for rehabilitation

KQI 8: Percentage completeness of survival status at 30 days

Out of all the patients, what was the percentage who had 30-day survival information recorded?
Analysis:

The total number of patients who had 30-day survival recorded (including those who died while in hospital) divided by total number of patients – expressed as a percentage.
Cases were excluded if:
o Patient was not a resident in Ireland

KQI 9: Percentage of patients who have cardiac rehabilitation phase 3 date recorded

Out of all the patients referred for cardiac rehabilitation phase 3, what was the percentage who had the date of cardiac rehabilitation phase 3 recorded.
Analysis:
The total number of patients who had date of referred for cardiac rehabilitation phase 3 recorded divided by total number of patients who were referred for cardiac rehabilitation phase 3 – expressed as a percentage.
Cases were included if:
o Patients were referred for cardiac rehabilitation phase 3
Cases were excluded if:
o Patients were dead on discharge from the hospital

APPENDIX 5: FREQUENCY TABLES AND SUPPLEMENTARY TABLES

FIGURE 4.1: PROPORTION OF HEARTBEAT CASE SUBMISSIONS, BY PCI CENTRE (N=1882)

	n	%
St James's Hospital	456	24.2%
Mater Misericordiae University Hospital	414	22.0%
Cork University Hospital	259	13.8%
University Hospital Limerick	242	12.9%
University Hospital Galway	267	14.2%
University Hospital Waterford	119	6.3%
Letterkenny University Hospital	53	2.8%
Beaumont Hospital	31	1.6%
Tallaght University Hospital	19	1.0%
St Vincent's University Hospital	22	1.2%
Total	**1882**	**100.0%**

FIGURE 4.2: DISCHARGE DIAGNOSIS, BY PCI CENTRE (N=1882)

	STEMI		Alternative diagnosis		Other/unknown		Total	
	n	%	n	%	n	%	n	%
St James's Hospital	394	86.4%	46	10.1%	16	3.5%	456	100.0%
Mater Misericordiae University Hospital	355	85.7%	42	10.1%	17	4.1%	414	100.0%
Cork University Hospital	238	91.9%	14	5.4%	7	2.7%	259	100.0%
University Hospital Limerick	189	78.1%	50	20.7%	~	1.2%	242	100.0%
University Hospital Galway	230	86.1%	25	9.4%	12	4.5%	267	100.0%
University Hospital Waterford	93	78.2%	19	16.0%	7	5.9%	119	100.0%
Letterkenny University Hospital	51	96.2%	~	*	~	*	53	100.0%
Beaumont Hospital	28	90.3%	~	*	~	*	31	100.0%
Tallaght University Hospital	18	94.7%	0	0.0%	~	*	19	100.0%
St Vincent's University Hospital	*	*	~	*	0	0.0%	22	100.0%
Total	**1615**	**85.8%**	**202**	**10.7%**	**65**	**3.5%**	**1882**	**100.0%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 4.3: PERCENTAGE OF STEMI CASES, BY SEX, AND AGE GROUP (N=1615)

		n	%
Male	≤40 years	42	3.5%
	41–64 years	680	56.3%
	65–79 years	391	32.4%
	≥80 years	95	7.9%
	Total	1208	100.0%
Female	≤40 years	8	2.0%
	41–64 years	161	39.6%
	65–79 years	161	39.6%
	≥80 years	77	18.9%

	Total	407	100.0%	
Total	≤40 years	50	3.1%	
	41–64 years	841	52.1%	
	65–79 years	552	34.2%	
	≥80 years	172	10.7%	
	Total	1615	100.0%	

FIGURE 4.4: PRIOR CARDIOVASCULAR DISEASE AND MAJOR COMORBIDITIES IN PATIENTS WITH A STEMI, BY SEX

			n	%
Male	Previous MI	Yes	129	10.7%
		No	1072	89.3%
		Total	1201	100.0%
	Previous peripheral vascular disease	Yes	58	4.8%
		No	1140	95.2%
		Total	1198	100.0%
	Previous angina	Yes	130	10.9%
		No	1067	89.1%
		Total	1197	100.0%
	Previous cerebrovascular disease	Yes	50	4.2%
		No	1150	95.8%
		Total	1200	100.0%
	Previous chronic renal failure	Yes	49	4.1%
		No	1151	95.9%
		Total	1200	100.0%
	Previous chronic lung disease	Yes	98	8.2%
		No	1101	91.8%
		Total	1199	100.0%
	Previous PCI	Yes	155	12.9%
		No	1045	87.1%
		Total	1200	100.0%
	Previous CABG	Yes	27	2.2%
		No	1175	97.8%
		Total	1202	100.0%
	Previous other heart surgery	Yes	21	1.7%
		No	1180	98.3%
		Total	1201	100.0%
Female	Previous MI	Yes	30	7.4%
		No	376	92.6%
		Total	406	100.0%
	Previous peripheral vascular disease	Yes	15	3.7%
		No	391	96.3%
		Total	406	100.0%
	Previous angina	Yes	42	10.4%
		No	362	89.6%
		Total	404	100.0%
	Previous cerebrovascular disease	Yes	25	6.2%
		No	380	93.8%
		Total	405	100.0%

		Yes	20	4.9%
	Previous chronic renal failure	No	385	95.1%
		Total	405	100.0%
		Yes	68	16.8%
	Previous chronic lung disease	No	336	83.2%
		Total	404	100.0%
		Yes	45	11.1%
	Previous PCI	No	362	88.9%
		Total	407	100.0%
		Yes	6	1.5%
	Previous CABG	No	400	98.5%
		Total	406	100.0%
		Yes	~	*
	Previous other heart surgery	No	*	*
		Total	407	100.0%
Total		Yes	159	9.9%
	Previous MI	No	1448	90.1%
		Total	1607	100.0%
		Yes	73	4.6%
	Previous peripheral vascular disease	No	1531	95.4%
		Total	1604	100.0%
		Yes	172	10.7%
	Previous angina	No	1429	89.3%
		Total	1601	100.0%
		Yes	75	4.7%
	Previous cerebrovascular disease	No	1530	95.3%
		Total	1605	100.0%
		Yes	69	4.3%
	Previous chronic renal failure	No	1536	95.7%
		Total	1605	100.0%
		Yes	166	10.4%
	Previous chronic lung disease	No	1437	89.6%
		Total	1603	100.0%
		Yes	200	12.4%
	Previous PCI	No	1407	87.6%
		Total	1607	100.0%
		Yes	33	2.1%
	Previous CABG	No	1575	97.9%
		Total	1608	100.0%
		Yes	26	1.6%
	Previous other heart surgery	No	1582	98.4%
		Total	1608	100.0%

~ Denotes five cases or fewer.
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FIGURE 4.5: PROPORTION OF PATIENTS WITH A STEMI WITH PRIOR CORONARY HEART DISEASE, BY SEX, AND AGE GROUP (N=1615)

	Male		Female		Total	
	n	%	n	%	n	%

		Male		Female		Total	
		n	%	n	%	n	%
≤40	At least one CHD	~	*	0	0.0%	~	*
	No CHD	38	90.5%	8	100.0%	46	92.0%
	Mixture of Nos & Unknowns	~	*	0	0.0%	~	*
	All unknowns	~	*	0	0.0%	~	*
	Total	42	100.0%	8	100.0%	50	100.0%
41–64	At least one CHD	95	14.0%	19	11.8%	114	13.6%
	No CHD	581	85.4%	141	87.6%	722	85.9%
	Mixture of Nos & Unknowns	~	*	~	*	~	*
	All unknowns	*	*	*	*	*	*
	Total	680	100.0%	161	100.0%	841	100.0%
65–79	At least one CHD	97	24.8%	36	22.4%	133	24.1%
	No CHD	289	73.9%	124	77.0%	413	74.8%
	Mixture of Nos & Unknowns	~	*	~	*	~	*
	All unknowns	~	*	*	*	~	*
	Total	391	100.0%	161	100.0%	552	100.0%
≥80	At least one CHD	31	32.6%	18	23.4%	49	28.5%
	No CHD	63	66.3%	57	74.0%	120	69.8%
	Mixture of Nos & Unknowns	~	*	~	*	~	*
	All unknowns	*	*	*	*	*	*
	Total	95	100.0%	77	100.0%	172	100.0%
Total	At least one CHD	225	18.6%	73	17.9%	298	18.5%
	No CHD	971	80.4%	330	81.1%	1301	80.6%
	Mixture of Nos & Unknowns	*	*	~	*	*	*
	All unknowns	~	*	*	*	~	*
	Total	1208	100.0%	407	100.0%	1615	100.0%

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FIGURE 4.6: DIABETES PROFILE OF PATIENTS WITH A STEMI, BY SEX, AND AGE GROUP (N=1615)

		Male		Female		Total	
		n	%	n	%	n	%
≤40	Not diabetic	34	81.0%	6	75.0%	40	80.0%
	Diabetes (diet control)	~	*	~	*	~	*
	Diabetes (oral medications)	~	*	0	0.0%	~	*
	Diabetes (insulin)	~	*	~	*	~	*
	Unknown	~	*	0	0.0%	~	*
	Total	42	100.0%	8	100.0%	50	100.0%
41–64	Not diabetic	520	76.5%	114	70.8%	634	75.4%
	Diabetes (diet control)	51	7.5%	16	9.9%	67	8.0%
	Diabetes (oral medications)	74	10.9%	20	12.4%	94	11.2%
	Diabetes (insulin)	*	*	*	*	40	4.8%
	Unknown	~	*	~	*	6	0.7%
	Total	680	100.0%	161	100.0%	841	100.0%
65–79	Not diabetic	262	67.0%	114	70.8%	376	68.1%
	Diabetes (diet control)	43	11.0%	9	5.6%	52	9.4%
	Diabetes (oral medications)	65	16.6%	31	19.3%	96	17.4%
	Diabetes (insulin)	*	*	7	4.3%	*	*
	Unknown	~	*	0	0.0%	~	*
	Total	391	100.0%	161	100.0%	552	100.0%

		Male		Female		Total	
≥80	Not diabetic	69	72.6%	54	70.1%	123	71.5%
	Diabetes (diet control)	8	8.4%	9	11.7%	17	9.9%
	Diabetes (oral medications)	13	13.7%	6	7.8%	19	11.0%
	Diabetes (insulin)	~	*	8	10.4%	*	*
	Unknown	~	*	0	0.0%	~	*
	Total	95	100.0%	77	100.0%	172	100.0%
Total	Not diabetic	885	73.3%	288	70.8%	1173	72.6%
	Diabetes (diet control)	103	8.5%	35	8.6%	138	8.5%
	Diabetes (oral medications)	155	12.8%	57	14.0%	212	13.1%
	Diabetes (insulin)	54	4.5%	*	*	80	5.0%
	Unknown	*	*	~	*	12	0.7%
	Total	1208	100.0%	407	100.0%	1615	100.0%

~ Denotes five cases or fewer.

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FIGURE 4.7: SMOKING PROFILE OF PATIENTS WITH A STEMI, BY SEX, AND AGE GROUP (n=1614)

		Male		Female		Total	
		n	%	n	%	n	%
≤40	Currently smoke	27	64.3%	6	75.0%	33	66.0%
	Formerly smoked	*	*	~	*	9	18.0%
	Never smoked	~	*	~	*	*	*
	Unknown	~	*	0	0.0%	~	*
	Total	42	100.0%	8	100.0%	50	100.0%
41–64	Currently smoke	330	48.5%	93	57.8%	423	50.3%
	Formerly smoked	168	24.7%	25	15.5%	193	22.9%
	Never smoked	167	24.6%	36	22.4%	203	24.1%
	Unknown	15	2.2%	7	4.3%	22	2.6%
	Total	680	100.0%	161	100.0%	841	100.0%
65–79	Currently smoke	78	20.0%	42	26.1%	120	21.8%
	Formerly smoked	136	34.9%	50	31.1%	186	33.8%
	Never smoked	160	41.0%	62	38.5%	222	40.3%
	Unknown	16	4.1%	7	4.3%	23	4.2%
	Total	390	100.0%	161	100.0%	551	100.0%
≥80	Currently smoke	~	*	*	*	8	4.7%
	Formerly smoked	36	37.9%	22	28.6%	58	33.7%
	Never smoked	51	53.7%	47	61.0%	98	57.0%
	Unknown	*	*	~	*	8	4.7%
	Total	95	100.0%	77	100.0%	172	100.0%
Total	Currently smoke	437	36.2%	147	36.1%	584	36.2%
	Formerly smoked	348	28.8%	98	24.1%	446	27.6%
	Never smoked	383	31.7%	146	35.9%	529	32.8%
	Unknown	39	3.2%	16	3.9%	55	3.4%
	Total	1207	100.0%	407	100.0%	1614	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 4.8: PREVALENCE OF RISK FACTORS FOR PATIENTS WITH A STEMI, BY AGE AND SEX (N=1615)

		One risk factor		Two risk factors		Three risk factors		Four risk factors		Five risk factors	
		n	%	n	%	n	%	n	%	n	%
Male	≤40	13	31.0%	16	38.1%	*	*	~	*	0	0.0%
	41–64	199	29.3%	189	27.8%	121	17.8%	76	11.2%	28	4.1%
	65–79	90	23.0%	94	24.0%	92	23.5%	52	13.3%	16	4.1%
	≥80	20	21.1%	36	37.9%	17	17.9%	*	*	0	0.0%
	Total	322	26.7%	335	27.7%	239	19.8%	142	11.8%	44	3.6%
Female	≤40	0	0.0%	~	*	~	*	0	0.0%	0	0.0%
	41–64	42	26.1%	41	25.5%	37	23.0%	*	*	9	5.6%
	65–79	32	19.9%	45	28.0%	33	20.5%	29	18.0%	*	*
	≥80	19	24.7%	*	*	*	*	~	5.2%	~	*
	Total	93	22.9%	116	28.5%	90	22.1%	54	13.3%	18	4.4%
Total	≤40	13	26.0%	21	42.0%	*	*	~	*	0	0.0%
	41–64	241	28.7%	230	27.3%	158	18.8%	97	11.5%	37	4.4%
	65–79	122	22.1%	139	25.2%	125	22.6%	81	14.7%	*	*
	≥80	39	22.7%	61	35.5%	35	20.3%	*	*	~	*
	Total	415	25.7%	451	27.9%	329	20.4%	196	12.1%	62	3.8%

		Six risk factors		No risk factor		Unknown		Total	
		n	%	n	%	n	%	n	%
Male	≤40	0	0.0%	0	0.0%	~	*	42	100.0%
	41–64	6	0.9%	53	7.8%	8	1.2%	680	100.0%
	65–79	0	0.0%	39	10.0%	8	2.0%	391	100.0%
	≥80	0	0.0%	*	*	~	*	95	100.0%
	Total	6	0.5%	100	8.3%	20	1.7%	1208	100.0%
Female	≤40	0	0.0%	~	*	0	0.0%	8	100.0%
	41–64	0	0.0%	9	5.6%	~	*	161	100.0%
	65–79	~	*	14	8.7%	~	*	161	100.0%
	≥80	0	0.0%	6	7.8%	~	*	77	100.0%
	Total	~	*	30	7.4%	~	*	407	100.0%
Total	≤40	0	0.0%	~	*	~	*	50	100.0%
	41–64	*	*	62	7.4%	10	1.2%	841	100.0%
	65–79	~	*	53	9.6%	9	1.6%	552	100.0%
	≥80	0	0.0%	14	8.1%	~	*	172	100.0%
	Total	7	0.4%	130	8.0%	25	1.5%	1615	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.1: REFERRAL SOURCE TO A PCI CENTRE FOR ALL PATIENTS, BY HOSPITAL (N=1615)

		Direct via ambulance	Self-presented	Transfer from other hospital	Already inpatient in PCI centre	Other/ unknown	Total
St James's Hospital	n	198	17	172	~	~	394
	%	50.3%	4.3%	43.7%	*	*	100.0%
	n	218	17	116	~	*	355

Mater Misericordiae University Hospital	%	61.4%	4.8%	32.7%	*	*	100.0%
Cork University Hospital	n	150	34	54	0	0	238
	%	63.0%	14.3%	22.7%	0.0%	0.0%	100.0%
University Hospital Limerick	n	124	22	32	*	~	189
	%	65.6%	11.6%	16.9%	*	*	100.0%
University Hospital Galway	n	122	*	83	~	0	230
	%	53.0%	*	36.1%	*	0.0%	100.0%
University Hospital Waterford	n	39	8	35	~	*	93
	%	41.9%	8.6%	37.6%	*	*	100.0%
Letterkenny University Hospital	n	35	0	16	0	0	51
	%	68.6%	0.0%	31.4%	0.0%	0.0%	100.0%
Beaumont Hospital	n	~	23	0	~	0	28
	%	14.3%	82.1%	0.0%	3.6%	0.0%	100.0%
Tallaght University Hospital	n	~	13	~	0	~	18
	%	*	72.2%	*	0.0%	*	100.0%
St Vincent's University Hospital	n	~	~	~	~	9	19
	%	*	*	*	*	47.4%	100.0%
National total	n	893	161	513	21	27	1615
	%	55.3%	10.0%	31.8%	1.3%	1.7%	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.2: PROPORTION OF PATIENTS WITH A STEMI WITH A SYMPTOM ONSET TO CALL FOR HELP INTERVAL WITHIN 60 MINUTES, BY SEX (n=893)

		N	%
Male	60 minutes or less	321	47.80%
	61 minutes or more	322	47.90%
	Unknown/missing	29	4.30%
	Total	672	100.00%
Female	60 minutes or less	81	36.70%
	61 minutes or more	128	57.90%
	Unknown/missing	12	5.40%
	Total	221	100.00%
Total	60 minutes or less	402	45.00%
	61 minutes or more	450	50.40%
	Unknown/missing	41	4.60%
	Total	893	100.00%

FIGURE 5.3: LOCATION OF AMBULANCE OFFLOAD AT THE PCI CENTRE FOR PATIENTS WHO ARRIVED DIRECTLY BY AMBULANCE OR WERE TRANSFERRED FROM A NON-PCI-CAPABLE HOSPITAL, BY PCI CENTRE (n=1295)

		Transferred		Direct	
		N	%	N	%
Cork University Hospital	Ambulance off load at cath lab	32	88.9%	91	61.1%
	Ambulance off load at ED	~	*	58	38.9%

	Unknown	*	*	0	0.0%
	Total	36	100.0%	149	100.0%
Letterkenny University Hospital	Ambulance off load at cath lab	15	100.0%	35	100.0%
	Ambulance off load at ED	0	0.0%	0	0.0%
	Unknown	0	0.0%	0	0.0%
	Total	15	100.0%	35	100.0%
Mater Misericordiae University Hospital	Ambulance off load at cath lab	*	*	159	72.9%
	Ambulance off load at ED	~	*	59	27.1%
	Unknown	0	0.0%	0	0.0%
	Total	113	100.0%	218	100.0%
St James's Hospital	Ambulance off load at cath lab	97	82.9%	139	70.6%
	Ambulance off load at ED	20	17.1%	58	29.4%
	Unknown	0	0.0%	0	0.0%
	Total	117	100.0%	197	100.0%
University Hospital Galway	Ambulance off load at cath lab	34	60.7%	97	79.5%
	Ambulance off load at ED	22	39.3%	25	20.5%
	Unknown	0	0.0%	0	0.0%
	Total	56	100.0%	122	100.0%
University Hospital Limerick	Ambulance off load at cath lab	*	*	79	64.2%
	Ambulance off load at ED	~	*	44	35.8%
	Unknown	0	0.0%	0	0.0%
	Total	30	100.0%	123	100.0%
University Hospital Waterford	Ambulance off load at cath lab	33	100.0%	32	82.1%
	Ambulance off load at ED	0	0.0%	7	17.9%
	Unknown	0	0.0%	0	0.0%
	Total	33	100.0%	39	100.0%
Non-designated 9–5 PCI centres	Ambulance off load at cath lab	~	*	0	0.0%
	Ambulance off load at ED	~	*	7	100.0%
	Unknown	0	0.0%	0	0.0%
	Total	~	*	7	100.0%
National total	Ambulance off load at cath lab	353	87.2%	632	71.0%
	Ambulance off load at ED	52	12.8%	258	29.0%
	Unknown	0	0.0%	0	0.0%
	Total	405	100.0%	890	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.4: FIRST REPERFUSION THERAPY TYPE FOR PATIENTS ADMITTED TO A PCI CENTRE WITH A CONFIRMED STEMI, BY YEAR (N=11837)

	Primary PCI	Thrombolysis	No reperfusion required	Contraindicated	Unknown
2024	77%	7%	5%	11%	0%
2023	78%	7%	6%	9%	0%
2022	74%	6%	5%	15%	0%
2021	79%	5%	4%	12%	0%
2020	84%	4%	5%	7%	0%
2019	83%	4%	4%	9%	1%
2018	84%	3%	3%	11%	0%

| 2017 | 86% | 3% | 2% | 8% | 1% |

FIGURE 5.5: REPERFUSION THERAPY TYPE, BY REFERRAL SOURCE, PCI CENTRE, AND SEX (N=1588)

			Male		Female		Total	
			N	%	N	%	N	%
St James's Hospital	Directly admitted to a PCI centre	Thrombolysis	~	*	~	*	~	*
		Primary PCI	153	95.6%	53	93.0%	206	94.9%
		No reperfusion required	~	*	~	*	~	*
		Contraindicated	~	*	~	*	~	*
		Total	160	100.0%	57	100.0%	217	100.0%
	Transferred to PCI Centre	Thrombolysis	42	33.6%	13	27.7%	55	32.0%
		Primary PCI	65	52.0%	26	55.3%	91	52.9%
		No reperfusion required	*	*	~	*	7	4.1%
		Contraindicated	12	9.6%	*	*	19	11.0%
		Total	125	100.0%	47	100.0%	172	100.0%
	Total	Thrombolysis	43	15.1%	14	13.5%	57	14.7%
		Primary PCI	218	76.5%	79	76.0%	297	76.3%
		No reperfusion required	*	*	~	*	11	2.8%
		Contraindicated	15	5.3%	*	*	24	6.2%
		Total	285	100.0%	104	100.0%	389	100.0%
Mater Misericordiae University Hospital	Directly admitted to a PCI centre	Primary PCI	164	88.6%	43	79.6%	207	86.6%
		No reperfusion required	~	*	~	*	7	2.9%
		Contraindicated	15	8.1%	9	16.7%	24	10.0%
		Unknown	~	*	0	0.0%	~	*
		Total	185	100.0%	54	100.0%	239	100.0%
	Transferred to PCI Centre	Thrombolysis	~	*	~	*	~	*
		Primary PCI	59	71.1%	24	72.7%	83	71.6%
		No reperfusion required	~	*	*	*	~	*
		Contraindicated	17	20.5%	8	24.2%	25	21.6%
		Total	83	100.0%	33	100.0%	116	100.0%
	Total	Thrombolysis	~	*	~	*	~	*
		Primary PCI	223	83.2%	67	77.0%	290	81.7%
		No reperfusion required	10	3.7%	~	*	12	3.4%
		Contraindicated	32	11.9%	17	19.5%	49	13.8%
		Unknown	~	*	0	0.0%	~	*
		Total	268	100.0%	87	100.0%	355	100.0%
Cork University Hospital	Directly admitted to a PCI centre	Thrombolysis	~	*	0	0.0%	~	*
		Primary PCI	108	78.3%	37	80.4%	145	78.8%
		No reperfusion required	*	*	~	*	*	*
		Contraindicated	22	15.9%	6	13.0%	28	15.2%
		Total	138	100.0%	46	100.0%	184	100.0%
	Transferred to PCI Centre	Thrombolysis	16	38.1%	~	*	18	33.3%
		Primary PCI	18	42.9%	7	58.3%	25	46.3%
		No reperfusion required	~	*	~	*	~	*
		Contraindicated	~	*	~	*	*	*
		Total	42	100.0%	12	100.0%	54	100.0%
	Total	Thrombolysis	*	*	~	*	19	8.0%
		Primary PCI	126	70.0%	44	75.9%	170	71.4%
		No reperfusion required	*	*	~	*	14	5.9%
		Contraindicated	27	15.0%	8	13.8%	35	14.7%
		Total	180	100.0%	58	100.0%	238	100.0%
		Thrombolysis	~	*	0	0.0%	~	*

Hospital								
University Hospital Limerick	Directly admitted to a PCI centre	Primary PCI	103	88.8%	32	86.5%	135	88.2%
		No reperfusion required	~	*	*	*	~	*
		Contraindicated	8	6.9%	~	*	13	8.5%
		Total	116	100.0%	37	100.0%	153	100.0%
	Transferred to PCI Centre	Thrombolysis	0	0.0%	~	*	~	*
		Primary PCI	22	81.5%	~	*	23	71.9%
		No reperfusion required	~	*	~	*	~	*
		Contraindicated	~	*	0	0.0%	~	*
		Total	27	100.0%	~	*	32	100.0%
	Total	Thrombolysis	~	*	~	*	~	*
		Primary PCI	125	87.4%	33	78.6%	158	85.4%
		No reperfusion required	*	*	~	*	8	4.3%
		Contraindicated	11	7.7%	~	*	16	8.6%
		Total	143	100.0%	42	100.0%	185	100.0%
University Hospital Galway	Directly admitted to a PCI centre	Primary PCI	96	82.8%	27	87.1%	123	83.7%
		No reperfusion required	*	*	~	*	12	8.2%
		Contraindicated	*	*	~	*	12	8.2%
		Total	116	100.0%	31	100.0%	147	100.0%
	Transferred to PCI Centre	Thrombolysis	18	32.7%	8	28.6%	26	31.3%
		Primary PCI	16	29.1%	*	*	23	27.7%
		No reperfusion required	*	*	~	*	9	10.8%
		Contraindicated	14	25.5%	11	39.3%	25	30.1%
		Total	55	100.0%	28	100.0%	83	100.0%
	Total	Thrombolysis	18	10.5%	*	*	26	11.3%
		Primary PCI	112	65.5%	34	57.6%	146	63.5%
		No reperfusion required	*	*	~	*	21	9.1%
		Contraindicated	23	13.5%	14	23.7%	37	16.1%
		Total	171	100.0%	59	100.0%	230	100.0%
University Hospital Waterford	Directly admitted to a PCI centre	Primary PCI	31	88.6%	*	*	45	90.0%
		No reperfusion required	~	*	0	0.0%	~	*
		Unknown	*	*	~	*	~	*
		Total	35	100.0%	15	100.0%	50	100.0%
	Transferred to PCI Centre	Thrombolysis	~	*	0	0.0%	~	*
		Primary PCI	22	84.6%	9	100.0%	31	88.6%
		No reperfusion required	~	*	0	0.0%	~	*
		Total	26	100.0%	9	100.0%	35	100.0%
	Total	Thrombolysis	~	*	0	0.0%	~	*
		Primary PCI	53	86.9%	*	*	76	89.4%
		No reperfusion required	*	*	0	0.0%	6	7.1%
		Unknown	0	0.0%	~	*	~	*
		Total	61	100.0%	24	100.0%	85	100.0%
Letterkenny University Hospital	Directly admitted to a PCI centre	Primary PCI	*	*	8	100.0%	*	*
		Contraindicated	~	*	0	0.0%	~	*
		Total	27	100.0%	8	100.0%	35	100.0%
	Transferred to PCI Centre	Thrombolysis	~	*	0	0.0%	~	*
		Primary PCI	*	*	~	*	14	87.5%
		No reperfusion required	0	0.0%	~	*	~	*
		Total	11	100.0%	~	*	16	100.0%
	Total	Thrombolysis	~	*	0	0.0%	~	*
		Primary PCI	36	94.7%	*	*	48	94.1%
		No reperfusion required	0	0.0%	~	*	~	*
		Contraindicated	~	*	0	0.0%	~	*
		Total	38	100.0%	13	100.0%	51	100.0%
Beaumont Hospital	Directly admitted to a PCI centre	Primary PCI	22	100.0%	6	100.0%	28	100.0%
		Total	22	100.0%	6	100.0%	28	100.0%

			N	%	N	%	N	%
	Total	Primary PCI	22	100.0%	6	100.0%	28	100.0%
		Total	22	100.0%	6	100.0%	28	100.0%
Tallaght University Hospital	Directly admitted to a PCI centre	Primary PCI	~	*	~	*	7	50.0%
		Contraindicated	~	*	~	*	7	50.0%
		Total	9	100.0%	~	*	14	100.0%
	Transferred to PCI Centre	Contraindicated	~	*	~	*	~	*
		Total	~	*	~	*	~	*
	Total	Primary PCI	~	*	~	*	7	41.2%
		Contraindicated	~	*	~	*	10	58.8%
		Total	10	100.0%	7	100.0%	17	100.0%
St Vincent's University Hospital	Directly admitted to a PCI centre	Primary PCI	~	*	~	*	6	75.0%
		No reperfusion required	~	*	0	0.0%	~	*
		Contraindicated	~	*	0	0.0%	~	*
		Total	7	100.0%	~	*	8	100.0%
	Transferred to PCI Centre	Primary PCI	~	*	0	0.0%	~	*
		Total	~	*	0	0.0%	~	*
	Total	Primary PCI	7	77.8%	~	*	8	80.0%
		No reperfusion required	~	*	0	0.0%	~	*
		Contraindicated	~	*	0	0.0%	~	*
		Total	9	100.0%	~	*	10	100.0%
National total	Directly admitted to a PCI centre	Thrombolysis	~	*	~	*	~	*
		Primary PCI	713	87.5%	223	85.8%	936	87.1%
		No reperfusion required	35	4.3%	7	2.7%	42	3.9%
		Contraindicated	63	7.7%	28	10.8%	91	8.5%
		Unknown	~	*	~	*	~	*
		Total	815	100.0%	260	100.0%	1075	100.0%
	Transferred to PCI Centre	Thrombolysis	81	21.8%	26	18.4%	107	20.9%
		Primary PCI	214	57.5%	78	55.3%	292	56.9%
		No reperfusion required	25	6.7%	7	5.0%	32	6.2%
		Contraindicated	52	14.0%	30	21.3%	82	16.0%
		Total	372	100.0%	141	100.0%	513	100.0%
	Total	Thrombolysis	84	7.1%	27	6.7%	111	7.0%
		Primary PCI	927	78.1%	301	75.1%	1228	77.3%
		No reperfusion required	*	*	*	*	*	*
		Contraindicated	115	9.7%	58	14.5%	173	10.9%
		Unknown	~	*	~	*	~	*
		Total	1187	100.0%	401	100.0%	1588	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.6: TYPE OF ARTERIAL ACCESS, BY PCI CENTRE (n=1251)

	Radial access		Other		Total	
	N	%	N	%	N	%
Cork University Hospital	151	88.8%	19	11.2%	170	100.0%
Letterkenny University Hospital	*	*	~	4.2%	48	100.0%
Mater Misericordiae University Hospital	263	90.7%	27	9.3%	290	100.0%
St James's Hospital	283	94.0%	18	6.0%	301	100.0%
University Hospital Galway	135	92.5%	11	7.5%	146	100.0%
University Hospital Limerick	155	96.3%	6	3.7%	161	100.0%

University Hospital Waterford			*	*	~	*	83	100.0%
Beaumont Hospital			*	*	~	*	28	100.0%
Tallaght University Hospital			8	100.0%	0	0.0%	8	100.0%
St Vincent's University Hospital			*	*	~	*	16	100.0%
National total			**1161**	**92.8%**	**90**	**7.2%**	**1251**	**100.0%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.8: PROPORTION OF PATIENTS WITH A STEMI WHO ARRIVED AT A PCI CENTRE DIRECTLY BY AMBULANCE WITHIN THE TARGET TIME OF 90 MINUTES, BY PCI CENTRE (n=752)

			N	%		
St James's Hospital	Male	Unknown/missing	0	0.0%	Mean	74
		90 minutes or less	94	71.8%	Median	71
		91 minutes or more	37	28.2%	IQR 1	49
		Total	131	100.0%	IQR 3	93
	Female	Unknown/missing	0	0.0%	Mean	78
		90 minutes or less	34	72.3%	Median	75
		91 minutes or more	13	27.7%	IQR 1	55
		Total	47	100.0%	IQR 3	96
	Total	Unknown/missing	0	0.0%	Mean	75
		90 minutes or less	128	71.9%	Median	72
		91 minutes or more	50	28.1%	IQR 1	52
		Total	178	100.0%	IQR 3	93
Mater Misericordiae University Hospital	Male	Unknown/missing	0	0.0%	Mean	61
		90 minutes or less	124	83.2%	Median	50
		91 minutes or more	25	16.8%	IQR 1	35
		Total	149	100.0%	IQR 3	76
	Female	Unknown/missing	0	0.0%	Mean	67
		90 minutes or less	34	73.9%	Median	64
		91 minutes or more	12	26.1%	IQR 1	41
		Total	46	100.0%	IQR 3	92
	Total	Unknown/missing	0	0.0%	Mean	62
		90 minutes or less	158	81.0%	Median	52
		91 minutes or more	37	19.0%	IQR 1	36
		Total	195	100.0%	IQR 3	80
Cork University Hospital	Male	Unknown/missing	~	*	Mean	60
		90 minutes or less	87	87.9%	Median	54
		91 minutes or more	*	*	IQR 1	37
		Total	99	100.0%	IQR 3	77
	Female	Unknown/missing	0	0.0%	Mean	61
		90 minutes or less	25	78.1%	Median	60
		91 minutes or more	7	21.9%	IQR 1	37
		Total	32	100.0%	IQR 3	81
	Total	Unknown/missing	~	*	Mean	60
		90 minutes or less	112	85.5%	Median	56
		91 minutes or more	*	*	IQR 1	37
		Total	131	100.0%	IQR 3	77
University Hospital Limerick	Male	Unknown/missing	~	*	Mean	69
		90 minutes or less	49	73.1%	Median	65
		91 minutes or more	*	*	IQR 1	49

		Total	67	100.0%	IQR 3	90
	Female	Unknown/missing	~	*	Mean	64
		90 minutes or less	19	73.1%	Median	61
		91 minutes or more	*	*	IQR 1	39
		Total	26	100.0%	IQR 3	87
	Total	Unknown/missing	~	*	Mean	67
		90 minutes or less	68	73.1%	Median	63
		91 minutes or more	*	*	IQR 1	42
		Total	93	100.0%	IQR 3	90
University Hospital Galway	Male	Unknown/missing	~	*	Mean	75
		90 minutes or less	44	59.5%	Median	80
		91 minutes or more	*	*	IQR 1	43
		Total	74	100.0%	IQR 3	96
	Female	Unknown/missing	*	*	Mean	72
		90 minutes or less	13	76.5%	Median	69
		91 minutes or more	~	*	IQR 1	47
		Total	17	100.0%	IQR 3	89
	Total	Unknown/missing	~	*	Mean	75
		90 minutes or less	57	62.6%	Median	77
		91 minutes or more	*	*	IQR 1	44
		Total	91	100.0%	IQR 3	95
University Hospital Waterford	Male	Unknown/missing	0	0.0%	Mean	72
		90 minutes or less	15	68.2%	Median	70
		91 minutes or more	7	31.8%	IQR 1	50
		Total	22	100.0%	IQR 3	95
	Female	Unknown/missing	0	0.0%	Mean	69
		90 minutes or less	*	*	Median	70
		91 minutes or more	~	*	IQR 1	54
		Total	9	100.0%	IQR 3	82
	Total	Unknown/missing	0	0.0%	Mean	71
		90 minutes or less	23	74.2%	Median	70
		91 minutes or more	8	25.8%	IQR 1	50
		Total	31	100.0%	IQR 3	93
Letterkenny University Hospital	Male	Unknown/missing	*	*	Mean	66
		90 minutes or less	20	83.3%	Median	61
		91 minutes or more	~	*	IQR 1	42
		Total	24	100.0%	IQR 3	86
	Female	Unknown/missing	0	0.0%	Mean	59
		90 minutes or less	7	100.0%	Median	67
		91 minutes or more	0	0.0%	IQR 1	39
		Total	7	100.0%	IQR 3	74
	Total	Unknown/missing	*	*	Mean	64
		90 minutes or less	27	87.1%	Median	61
		91 minutes or more	~	*	IQR 1	40
		Total	31	100.0%	IQR 3	83
Non-designated 9–5 PCI centres	Male	Unknown/missing	0	0.0%	Mean	20
		90 minutes or less	~	*	Median	20
		91 minutes or more	0	0.0%	IQR 1	3
		Total	~	*	IQR 3	36
	Female	Unknown/missing	0	0.0%	Mean	
		90 minutes or less	0	0.0%	Median	
		91 minutes or more	0	0.0%	IQR 1	
		Total	0	0.0%	IQR 3	
	Total	Unknown/missing	0	0.0%	Mean	20

		90 minutes or less	~	*	Median	20
		91 minutes or more	0	0.0%	IQR 1	3
		Total	~	*	IQR 3	36
National total	Male	Unknown/missing	~	*	Mean	67
		90 minutes or less	435	76.6%	Median	61
		91 minutes or more	*	*	IQR 1	40
		Total	568	100.0%	IQR 3	89
	Female	Unknown/missing	~	0.5%	Mean	68
		90 minutes or less	140	76.1%	Median	67
		91 minutes or more	*	*	IQR 1	43
		Total	184	100.0%	IQR 3	87
	Total	Unknown/missing	6	0.8%	Mean	67
		90 minutes or less	575	76.5%	Median	62
		91 minutes or more	171	22.7%	IQR 1	41
		Total	752	100.0%	IQR 3	88

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.9: DOOR TO BALLOON TIME FOR PATIENTS BROUGHT DIRECTLY BY AMBULANCE TO A PCI CENTRE, BY PCI CENTRE (n=810)

	30 minutes or less		31 minutes or more		Unknown		Total		Median (IQR 1–IQR3) minutes
	N	%	N	%	N	%	N	%	
St James's Hospital	131	68.6%	60	31.4%	0	0.0%	191	100.0%	23 (17–34)
Mater Misericordiae University Hospital	135	69.9%	58	30.1%	0	0.0%	193	100.0%	23 (15–33)
Cork University Hospital	44	35.5%	80	64.5%	0	0.0%	124	100.0%	40 (27–81)
University Hospital Limerick	57	49.1%	59	50.9%	0	0.0%	116	100.0%	32 (20–59)
University Hospital Galway	46	43.8%	59	56.2%	0	0.0%	105	100.0%	33 (20–53)
University Hospital Waterford	18	47.4%	20	52.6%	0	0.0%	38	100.0%	31 (23–63)
Letterkenny University Hospital	18	52.9%	16	47.1%	0	0.0%	34	100.0%	30 (22–38)
Beaumont Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	85 (35–95)
Tallaght University Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	81 (81–81)
St Vincent's University Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	60 (53–77)
National total	**449**	**55.4%**	**361**	**44.6%**	**0**	**0.0%**	**810**	**100.0%**	**29 (19–46)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.10: PROPORTION OF PATIENTS WHO RECEIVED TIMELY PRIMARY PCI FOR THOSE ADMITTED DIRECTLY TO A PCI CENTRE, BY PCI CENTRE (n=810)

	Timely (within 120 minutes)		Not timely		Unknown		Total		Median (IQR 1–IQR3) minutes
	N	%	N	%	N	%	N	%	
St James's Hospital	137	71.7%	*	*	~	0.5%	191	100.0%	98.5 (73–126)

Mater Misericordiae University Hospital	171	88.6%	22	11.4%	0	0.0%	193	100.0%	80 (64–107)
Cork University Hospital	91	73.4%	33	26.6%	0	0.0%	124	100.0%	97.5 (80–122.5)
University Hospital Limerick	96	82.8%	20	17.2%	0	0.0%	116	100.0%	97.5 (71.5–118.5)
University Hospital Galway	61	58.1%	44	41.9%	0	0.0%	105	100.0%	111 (86–140)
University Hospital Waterford	29	76.3%	9	23.7%	0	0.0%	38	100.0%	104.5 (89–118)
Letterkenny University Hospital	28	82.4%	6	17.6%	0	0.0%	34	100.0%	98.5 (83–112)
Beaumont Hospital	~	100.0%	0	0.0%	0	0.0%	~	100.0%	65 (33–92)
Tallaght University Hospital	~	100.0%	0	0.0%	0	0.0%	~	100.0%	74 (74–74)
St Vincent's University Hospital	~	100.0%	0	0.0%	0	0.0%	~	100.0%	63 (53–77)
National total	**622**	**76.8%**	*	*	~	**0.1%**	**810**	**100.0%**	**95 (72–120)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.11: PROPORTION OF PATIENTS WITH A STEMI WHO SELF-PRESENTED TO A PCI CENTRE AND WHO RECEIVED AN ELECTROCARDIOGRAM WITHIN 10 MINUTES, BY PCI CENTRE, 2024 (n=149)

	10 minutes or less		11 minutes or more		Unknown		Total		Median
	N	%	N	%	N	%	N	%	(IQR 1–IQR3) minutes
St James's Hospital	~	*	13	81%	0	0%	16	100%	14.5 (12.5–21.5)
Mater Misericordiae University Hospital	~	*	11	69%	0	0%	16	100%	18.5 (10–50.5)
Cork University Hospital	16	47%	18	53%	0	0%	34	100%	11.5 (7–23)
University Hospital Limerick	~	*	13	68%	~	*	19	100%	39 (14–90)
University Hospital Galway	~	*	14	74%	~	*	19	100%	20.5 (11–25)
University Hospital Waterford	~	*	~	*	~	*	8	100%	15 (6–37)
Beaumont Hospital	12	55%	10	45%	0	0%	22	100%	10 (5–15)
Tallaght University Hospital	~	*	6	55%	0	0%	11	100%	11 (0–16)
St Vincent's University Hospital	0	0%	~	*	0	0%	~	100%	168 (25–392)
National total	*	*	93	62%	~	*	149	100%	15 (8–30)

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.12: PROPORTION OF TIMELY PRIMARY PCI FOR PATIENTS WHO SELF-PRESENTED TO A PCI CENTRE, BY PCI CENTRE (n=126)

	60 minutes or less		61 minutes or more		Unknown		Total		Median
	N	%	N	%	N	%	N	%	(IQR 1–IQR3) minutes
St James's Hospital	14	*	~	7%	0	0%	15	100%	28 (17–35)
Mater Misericordiae University Hospital	~	*	9	*	0	0%	14	100%	83.5 (58–95)
Cork University Hospital	0	0%	21	100%	0	0%	21	100%	115 (78–147)
University Hospital Limerick	~	*	17	89%	~	*	19	100%	143.5 (111–223)
University Hospital Galway	~	*	14	78%	0	0%	18	100%	84.5 (67–121)
University Hospital Waterford	~	*	~	*	0	0%	7	100%	165 (54–472)
Beaumont Hospital	10	43%	12	52%	~	*	23	100%	70.5 (40–140)
Tallaght University Hospital	~	*	~	*	0	0%	6	100%	75.5 (49–98)
St Vincent's University Hospital	0	0%	~	*	0	0%	~	100%	607 (71–652)
National Total	*	*	**86**	**68%**	~	*	**126**	**100%**	83.5 (53.5–143.5)

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.13: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO THE PCI CENTRE AND WHO RECIEVED AN ELECTROCARDIOGRAM WITHIN TEN MINUTES, BY PCI CENTRE AND REFERRING HOSPITAL (n=388)

			10 minutes or less		11 minutes or more		Unknown/missing		Total		Median (IQR 1–IQR3) minutes
			N	%	N	%	N	%	N	%	
Cork University Hospital	Bantry General Hospital	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	49 (49–49)
		Primary PCI	~	*	~	*	0	0.0%	~	100.0%	9 (1–38)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	551 (551–551)
		Total	~	*	~	*	0	0.0%	~	100.0%	38 (9–49)
	Mercy University Hospital	Thrombolysis	0	0.0%	*	*	0	0.0%	0	0.0%	(–)
		Primary PCI	0	0.0%	7	100.0%	0	0.0%	7	100.0%	152 (32–440)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	6	100.0%	20 (13–52)
		Total	~	*	12	92.3%	0	0.0%	13	100.0%	39 (20–244)
	Tipperary University Hospital	Thrombolysis	~	*	~	*	0	0.0%	~	100.0%	74 (5–77)
		Primary PCI	~	*	7	87.5%	0	0.0%	8	100.0%	24 (20.5–81.5)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	255 (255–255)
		Total	~	*	*	*	0	0.0%	12	100.0%	33.5 (20.5–100)
	University Hospital Kerry	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	49 (13–269)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Total	0	0.0%	~	*	0	0.0%	~	100.0%	49 (13–269)
	University Hospital Waterford	Thrombolysis	*	*	*	*	0	0.0%	13	100.0%	8 (3–14)
		Primary PCI	~	*	0	0.0%	0	0.0%	~	100.0%	5 (5–5)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	14.5 (12–17)
		Total	8	50.0%	8	50.0%	0	0.0%	16	100.0%	9.5 (4–14.5)
	Mallow General Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	~	*	0	0.0%	~	100.0%	11.5 (2–21)
		No reperfusion required/unknown	~	*	0	0.0%	0	0.0%	~	100.0%	8 (8–8)
		Total	~	*	~	*	0	0.0%	~	100.0%	8 (2–21)
	Total	Thrombolysis	8	47.1%	9	52.9%	0	0.0%	17	100.0%	11 (5–27)
		Primary PCI	~	*	19	79.2%	0	0.0%	24	100.0%	29.5 (16.5–137.5)
		No reperfusion required/unknown	~	*	9	81.8%	0	0.0%	11	100.0%	19 (12–255)
		Total	15	28.8%	37	71.2%	0	0.0%	52	100.0%	20.5 (8.5–55.5)
Letterkenny University Hospital	Letterkenny University Hospital	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	80 (80–80)
		Primary PCI	~	*	*	*	0	0.0%	9	100.0%	22 (20–27)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Total	~	*	9	90.0%	0	0.0%	10	100.0%	24.5 (20–64)
	Total	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	80 (80–80)
		Primary PCI	~	*	8	*	0	0.0%	*	100.0%	22 (20–27)
		No reperfusion required/unknown	0	0.0%	*	0.0%	0	0.0%	0	0.0%	(–)
		Total	~	*	9	90.0%	0	0.0%	10	100.0%	24.5 (20–64)
		Thrombolysis	0	0.0%	0	0.0%	0	0.0%	*	0.0%	(–)

Mater Misericordiae University Hospital	Beaumont Hospital	Primary PCI	*	*	13	61.9%	~	*	21	100.0%	15 (10–82.5)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	25 (12.5–64.5)
		Total	8	32.0%	16	64.0%	~	*	25	100.0%	15.5 (10–71)
	Cavan General Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	*	*	(–)
		Primary PCI	~	*	~	*	0	0.0%	8	100.0%	19 (9.5–67.5)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	31 (22–97)
		Total	~	*	8	61.5%	0	0.0%	13	100.0%	28 (10–91)
	Connolly Hospital	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	53.5 (52–55)
		Primary PCI	~	*	12	63.2%	~	*	19	100.0%	15 (10–40)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	48.5 (38–59)
		Total	~	*	16	69.6%	~	*	23	100.0%	20 (13–55)
	Our Lady of Lourdes Hospital Drogheda	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	*	*	0	0.0%	13	100.0%	30 (18–181)
		No reperfusion required/unknown	~	*	*	*	~	*	12	100.0%	45 (17–125)
		Total	~	*	21	84.0%	~	*	25	100.0%	43 (17.5–153)
	Our Lady's Hospital, Navan	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	*	*	0	0.0%	*	100.0%	19.5 (16–27)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	44 (19–182)
		Total	~	*	11	78.6%	0	0.0%	14	100.0%	23 (16–41)
	Other	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	20 (20–20)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Total	0	0.0%	~	*	0	0.0%	~	100.0%	20 (20–20)
	Total	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	53.5 (52–55)
		Primary PCI	*	*	49	68.1%	~	*	72	100.0%	19 (10–48)
		No reperfusion required/unknown	~	*	22	81.5%	~	*	*	100.0%	41.5 (17–94)
		Total	24	23.8%	73	72.3%	~	*	101	100.0%	26 (11–60)
St James's Hospital	Midland Regional Hospital Tullamore	Thrombolysis	~	*	~	*	0	0.0%	~	100.0%	17 (5–89)
		Primary PCI	*	*	~	*	0	0.0%	9	100.0%	8 (3–14)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	15 (15–131)
		Total	7	46.7%	8	53.3%	0	0.0%	15	100.0%	14 (3–23)
	Naas General Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	*	*	~	*	*	100.0%	29 (16–52)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	46 (28–64)
		Total	~	*	8	80.0%	~	*	10	100.0%	29 (25–52)
	Regional Hospital Mullingar	Thrombolysis	~	*	7	77.8%	0	0.0%	9	100.0%	25 (15–60)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	25 (18–37)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	37 (0–63)
		Total	~	*	14	82.4%	0	0.0%	17	100.0%	25 (15–60)
	St Luke's General Hospital, Carlow/Kilkenny	Thrombolysis	~	*	6	66.7%	~	*	9	100.0%	21 (10.5–40.5)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	366.5 (13–720)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	25 (0–181)
		Total	~	*	10	71.4%	~	*	14	100.0%	25 (11–49)
	St Vincent's University Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	12	75.0%	~	*	*	100.0%	32 (14–120)
		No reperfusion required/unknown	~	*	0	0.0%	0	0.0%	~	100.0%	9 (9–9)

		Total	~	*	12	70.6%	~	*	17	100.0%	29 (11–120)
	Tallaght University Hospital	Thrombolysis	~	*	0	0.0%	0	0.0%	~	100.0%	3.5 (3–4)
		Primary PCI	*	*	~	*	0	0.0%	11	100.0%	5 (0–29)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	2 (0–29)
		Total	10	62.5%	6	37.5%	0	0.0%	16	100.0%	3.5 (0–23)
	Wexford General Hospital	Thrombolysis	*	*	~	*	0	0.0%	10	100.0%	7 (3–14)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	17 (17–17)
		No reperfusion required/unknown	~	*	~	*	0	0.0%	~	100.0%	21 (0–72)
		Total	7	50.0%	7	50.0%	0	0.0%	14	100.0%	10.5 (3–21)
	Midland Regional Hospital Portlaoise	Thrombolysis	*	*	7	53.8%	0	0.0%	13	100.0%	15 (7–23)
		Primary PCI	~	*	~	*	0	0.0%	~	100.0%	8 (3.5–12.5)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	65 (65–65)
		Total	9	50.0%	9	50.0%	0	0.0%	18	100.0%	12.5 (7–23)
	St Michaels Hospital, Dun Laoghaire	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	~	*	0	0.0%	~	100.0%	15 (9–36)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	25 (25–25)
		Total	~	*	~	*	0	0.0%	6	100.0%	20 (9–36)
	Total	Thrombolysis	*	*	26	56.5%	~	*	46	100.0%	15 (6–32)
		Primary PCI	*	*	38	62.3%	~	*	61	100.0%	16.5 (7–38)
		No reperfusion required/unknown	6	30.0%	14	70.0%	0	0.0%	20	100.0%	25 (5.5–63.5)
		Total	*	*	78	61.4%	~	*	127	100.0%	16 (6–42)
University Hospital Galway	Letterkenny University Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	129.5 (19–240)
		Total	0	0.0%	~	*	0	0.0%	~	100.0%	129.5 (19–240)
	Mayo University Hospital	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	13 (11–15)
		Primary PCI	0	0.0%	*	*	~	*	*	100.0%	25 (22–36)
		No reperfusion required/unknown	~	*	*	*	0	0.0%	8	100.0%	82.5 (36.5–191)
		Total	~	*	16	88.9%	~	*	18	100.0%	27 (15–115)
	Portiuncula University Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	~	*	0	0.0%	~	100.0%	19 (3–30)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	37.5 (24–51)
		Total	~	*	~	*	0	0.0%	~	100.0%	24 (19–30)
	Sligo University Hospital	Thrombolysis	~	*	~	*	~	*	6	100.0%	22 (8–23)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	19.5 (19–20)
		No reperfusion required/unknown	0	0.0%	~	*	~	*	~	100.0%	103.5 (91.5–306)
		Total	~	*	9	69.2%	~	*	13	100.0%	23 (19–95)
	Other	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	0	0.0%	~	*	0	0.0%	~	100.0%	19 (19–19)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Total	0	0.0%	~	*	0	0.0%	~	100.0%	19 (19–19)
	Total	Thrombolysis	~	*	6	66.7%	~	*	9	100.0%	14 (9.5–22.5)
		Primary PCI	~	*	11	84.6%	~	*	13	100.0%	21 (19–28.5)
		No reperfusion required/unknown	~	*	15	88.2%	~	*	17	100.0%	91.5 (36.5–191)
		Total	~	*	32	82.1%	~	*	39	100.0%	24.5 (19–91.5)
		Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(–)
		Primary PCI	~	*	0	0.0%	0	0.0%	~	100.0%	2 (2–2)

University Hospital Limerick	Nenagh General Hospital	No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Total	~	*	0	0.0%	0	0.0%	~	100.0%	2 (2–2)
	University Hospital Kerry	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	57 (57–57)
		Primary PCI	~	*	12	66.7%	~	*	18	100.0%	26 (5–51)
		No reperfusion required/unknown	0	0.0%	~	*	~	*	~	100.0%	44 (24–391)
		Total	~	*	17	70.8%	~	*	24	100.0%	32.5 (15–58)
	St Johns Limerick	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Primary PCI	~	*	~	*	0	0.0%	~	100.0%	74 (3–145)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Total	~	*	~	*	0	0.0%	~	100.0%	74 (3–145)
	Total	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	57 (57–57)
		Primary PCI	*	*	13	61.9%	~	*	21	100.0%	25 (4.5–59.5)
		No reperfusion required/unknown	0	0.0%	~	*	~	*	~	100.0%	44 (24–391)
		Total	*	*	18	66.7%	~	*	27	100.0%	30 (5–58)
University Hospital Waterford	Tipperary University Hospital	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	544 (544–544)
		Primary PCI	0	0.0%	*	*	0	0.0%	*	100.0%	26 (16–162)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Total	0	0.0%	8	100.0%	0	0.0%	8	100.0%	65.5 (21–185)
	St Luke's General Hospital, Carlow/Kilkenny	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Primary PCI	~	*	*	*	0	0.0%	11	100.0%	11 (3–48)
		No reperfusion required/unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Total	~	*	*	*	0	0.0%	11	100.0%	11 (3–48)
	Wexford General Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Primary PCI	*	*	~	*	0	0.0%	9	100.0%	6 (0–11)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	14 (14–14)
		Total	*	*	~	*	0	0.0%	10	100.0%	6.5 (0–14)
	Total	Thrombolysis	0	0.0%	~	*	0	0.0%	~	100.0%	544 (544–544)
		Primary PCI	11	40.7%	16	59.3%	0	0.0%	27	100.0%	15 (3–90)
		No reperfusion required/unknown	0	0.0%	~	*	0	0.0%	~	100.0%	14 (14–14)
		Total	11	37.9%	18	62.1%	0	0.0%	29	100.0%	15 (4–90)
Non-designated 9–5 PCI centres	Naas General Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Primary PCI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		No reperfusion required/unknown	~	*	0	0.0%	0	0.0%	~	100.0%	0 (0–0)
		Total	~	*	0	0.0%	0	0.0%	~	100.0%	0 (0–0)
	Total	Thrombolysis	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		Primary PCI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	(−)
		No reperfusion required/unknown	~	*	0	0.0%	0	0.0%	~	100.0%	0 (0–0)
		Total	~	*	0	0.0%	0	0.0%	~	100.0%	0 (0–0)
National total		**Thrombolysis**	*	*	46	59.7%	~	*	77	100.0%	**15 (6–45)**
		Primary PCI	65	28.6%	154	67.8%	8	3.5%	227	100.0%	**20 (9–48)**
		No reperfusion required/unknown	*	*	65	77.4%	~	*	84	100.0%	**33 (15–94)**
		National total	110	28.4%	265	68.3%	13	3.4%	388	100.0%	**21 (9–52)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.14: PROPORTION OF PATIENTS WHO RECEIVED TIMELY REPERFUSION WITH THROMBOLYSIS, PCI CENTRE (n=111)

	N	%	Median
Timely (within 30 minutes)	24	22%	(IQR 1–IQR3)
Not timely	87	78%	minutes
National total	**111**	**100%**	**53 (32–89)**

FIGURE 5.15: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO A PCI CENTRE AND WHO ACHIEVED THE 'DOOR IN DOOR OUT' TARGET OF 30 MINUTES OR LESS, BY PCI CENTRE AND REFERRING HOSPITAL (n=370)

		30 minutes or less		31 minutes or more		Unknown/missing		Total		Median (IQR 1–IQR3) minutes
		N	%	N	%	N	%	N	%	
Cork University Hospital	Bantry General Hospital	0	0.0%	~	*	~	*	~	100.0%	61 (47–683)
	Mercy University Hospital	0	0.0%	13	100.0%	0	0.0%	13	100.0%	173 (92–286)
	Tipperary University Hospital	0	0.0%	9	100.0%	0	0.0%	9	100.0%	145 (98–346)
	University Hospital Kerry	0	0.0%	~	*	0	0.0%	~	100.0%	310 (143–803)
	University Hospital Waterford	0	0.0%	~	*	~	*	~	100.0%	158 (120–196)
	Mallow General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	111 (80–119)
	Total	0	0.0%	33	94.3%	~	*	35	100.0%	145 (92–288)
Letterkenny University Hospital	Letterkenny University Hospital	~	*	*	*	0	0.0%	14	100.0%	82.5 (63–134)
	Total	~	*	*	*	0	0.0%	14	100.0%	82.5 (63–134)
Mater Misericordiae University Hospital	Beaumont Hospital	0	0.0%	*	*	~	*	26	100.0%	95 (66–125)
	Cavan General Hospital	0	0.0%	16	100.0%	0	0.0%	16	100.0%	120.5 (88–177.5)
	Connolly Hospital	~	*	20	90.9%	0	0.0%	22	100.0%	90 (71–150)
	Our Lady of Lourdes Hospital Drogheda	0	0.0%	*	*	~	*	26	100.0%	110 (75–280)
	Our Lady's Hospital, Navan	0	0.0%	14	100.0%	0	0.0%	14	100.0%	107 (81–139)
	Other	0	0.0%	~	*	0	0.0%	~	100.0%	48 (48–48)
	Total	~	*	101	96.2%	~	*	105	100.0%	102 (76–177)
St James's Hospital	Midland Regional Hospital Tullamore	0	0.0%	*	*	~	*	12	100.0%	83 (61–233)
	Naas General Hospital	~	*	11	84.6%	~	*	13	100.0%	79.5 (54–158)
	Regional Hospital Mullingar	0	0.0%	9	100.0%	0	0.0%	9	100.0%	157 (110–283)
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	~	*	~	*	6	100.0%	120 (94–170)
	St Vincent's University Hospital	~	*	18	81.8%	~	*	22	100.0%	102 (73–185)
	Tallaght University Hospital	~	*	11	52.4%	*	*	21	100.0%	84.5 (51–128.5)
	Wexford General Hospital	0	0.0%	~	*	~	*	~	100.0%	180 (172–250)
	Midland Regional Hospital Portlaoise	0	0.0%	~	*	0	0.0%	~	100.0%	109 (65–162)
	St Michaels Hospital, Dun Laoghaire	0	0.0%	6	100.0%	0	0.0%	6	100.0%	94 (65–169)
	Other	0	0.0%	~	*	0	0.0%	~	100.0%	127 (127–127)
	Total	~	*	80	80.8%	*	*	99	100.0%	102 (65–185)
	Naas General Hospital	0	0.0%	~	*	~	*	~	100.0%	1350 (1350–1350)

									Median (IQR)
Tallaght University Hospital	Total	0	0.0%	~	*	~	*	~	100.0%	1350 (1350–1350)
University Hospital Galway	Letterkenny University Hospital	0	0.0%	~	*	~	*	~	100.0%	280 (280–280)
	Mayo University Hospital	0	0.0%	*	*	~	*	24	100.0%	147.5 (92–278)
	Portiuncula University Hospital	0	0.0%	9	100.0%	0	0.0%	9	100.0%	79 (58–166)
	Sligo University Hospital	~	*	14	77.8%	~	*	18	100.0%	117.5 (66–318.5)
	Other	~	*	0	0.0%	0	0.0%	~	100.0%	0 (0–0)
	Total	~	*	46	85.2%	~	*	54	100.0%	128 (62–298)
University Hospital Limerick	Nenagh General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	52 (52–52)
	University Hospital Kerry	0	0.0%	26	100.0%	0	0.0%	26	100.0%	83.5 (65–187)
	St Johns Limerick	~	*	~	*	0	0.0%	~	100.0%	70 (20–120)
	Total	~	*	28	96.6%	0	0.0%	29	100.0%	83 (54–171)
University Hospital Waterford	Tipperary University Hospital	0	0.0%	7	100.0%	0	0.0%	7	100.0%	188 (122–280)
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	12	100.0%	0	0.0%	12	100.0%	115.5 (88–199)
	Wexford General Hospital	0	0.0%	12	100.0%	0	0.0%	12	100.0%	133.5 (91–220.5)
	Total	0	0.0%	31	100.0%	0	0.0%	31	100.0%	138 (92–224)
National total		**12**	**3.2%**	**333**	**90.0%**	**25**	**6.8%**	**370**	**100.0%**	**111 (75–197)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.16: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO A PCI CENTRE AND WHO ARRIVED WITHIN THE TARGET TIME OF 90 MINUTES, BY PCI CENTRE (n=405)

		90 minutes or less		91 minutes or more		Unknown/missing		Total		Median (IQR1–
		N	%	N	%	N	%	N	%	IQR3) minutes
Cork University Hospital	Bantry General Hospital	~	*	~	*	0	0.0%	~	100.0%	124.5 (97–167.5)
	Mallow General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	133 (107–150)
	Mercy University Hospital	8	57.1%	~	*	~	*	14	100.0%	86 (58–143)
	Tipperary University Hospital	~	*	8	88.9%	0	0.0%	9	100.0%	178 (143–211)
	University Hospital Kerry	0	0.0%	~	*	0	0.0%	~	100.0%	222 (122–958)
	University Hospital Waterford	0	0.0%	~	*	0	0.0%	~	100.0%	190 (180–277)
	Total	10	27.8%	25	69.4%	~	*	36	100.0%	143 (86–210)
Letterkenny University Hospital	Letterkenny University Hospital	8	53.3%	7	46.7%	0	0.0%	15	100.0%	89 (78–117)
	Total	8	53.3%	7	46.7%	0	0.0%	15	100.0%	89 (78–117)
Mater Misericordiae University Hospital	Beaumont Hospital	17	63.0%	10	37.0%	0	0.0%	27	100.0%	79 (60–115)
	Cavan General Hospital	~	*	*	*	0	0.0%	*	100.0%	165 (126–192)
	Connolly Hospital	14	60.9%	9	39.1%	0	0.0%	23	100.0%	85 (62–128)
	Other	~	*	0	0.0%	0	0.0%	~	100.0%	55 (55–55)
	Our Lady of Lourdes Hospital Drogheda	8	25.8%	23	74.2%	0	0.0%	31	100.0%	109 (90–133)
	Our Lady's Hospital, Navan	~	*	10	71.4%	~	*	14	100.0%	111 (101–135)
	Total	44	38.9%	68	60.2%	~	*	113	100.0%	104.5 (79.5–135)
Non-designated 9–5 PCI centres	Naas General Hospital	0	0.0%	0	0.0%	~	*	~	100.0%	(–)
	Other	0	0.0%	~	*	0	0.0%	~	100.0%	120 (120–120)
	St Colmcille`s Hospital, Loughlinstown	~	*	0	0.0%	0	0.0%	~	100.0%	86 (86–86)
	Total	~	*	~	*	~	*	~	100.0%	103 (86–120)
St James's Hospital	Midland Regional Hospital Portlaoise	~	*	~	*	0	0.0%	6	100.0%	174.5 (103–265)
	Midland Regional Hospital Tullamore	~	*	9	69.2%	~	*	13	100.0%	144 (123–285)
	Naas General Hospital	~	*	8	61.5%	0	0.0%	13	100.0%	101 (79–236)
	Other	0	0.0%	~	*	0	0.0%	~	100.0%	213 (117–309)
	Regional Hospital Mullingar	0	0.0%	13	100.0%	0	0.0%	13	100.0%	186 (155–304)
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	~	*	~	*	8	100.0%	175 (119–240)

Hospital group	Referring hospital	Timely (within 120 minutes) N	%	Not timely N	%	Unknown N	%	Total N	%	Median (IQR1–IQR3) minutes
	St Michaels Hospital, Dun Laoghaire	~	*	~	*	0	0.0%	6	100.0%	110.5 (77–163)
	St Vincent's University Hospital	*	*	14	53.8%	~	*	26	100.0%	97 (72–137)
	Tallaght University Hospital	10	38.5%	16	61.5%	0	0.0%	26	100.0%	96.5 (71–159)
	Wexford General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	243.5 (220.5–285)
	Total	31	26.5%	79	67.5%	7	6.0%	117	100.0%	123.5 (85–220)
University Hospital Galway	Letterkenny University Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	272.5 (270–275)
	Mayo University Hospital	~	*	20	83.3%	~	*	24	100.0%	180 (119–263)
	Other	0	0.0%	~	*	0	0.0%	~	100.0%	103 (103–103)
	Portiuncula University Hospital	~	*	~	*	~	*	9	100.0%	101.5 (76–183)
	Sligo University Hospital	0	0.0%	20	100.0%	0	0.0%	20	100.0%	198.5 (152–365.5)
	Total	*	*	47	83.9%	~	*	56	100.0%	187 (116–274)
University Hospital Limerick	Nenagh General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	122 (122–122)
	St Johns Limerick	~	*	0	0.0%	0	0.0%	~	100.0%	25.5 (0–51)
	University Hospital Kerry	~	*	*	*	~	*	27	100.0%	139.5 (115–200)
	Total	~	*	25	83.3%	~	*	30	100.0%	135 (109–165)
University Hospital Waterford	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	12	100.0%	0	0.0%	12	100.0%	143.5 (120–205)
	Tipperary University Hospital	0	0.0%	8	100.0%	0	0.0%	8	100.0%	140.5 (125–168)
	Wexford General Hospital	~	*	*	*	0	0.0%	13	100.0%	148 (127–247)
	Total	~	*	*	*	0	0.0%	33	100.0%	147 (126–226)
National total		**106**	**26.2%**	**284**	**70.1%**	**15**	**3.7%**	**405**	**100.0%**	**126 (88–192)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.17: DOOR TO BALLOON TIME FOR PATIENTS TRANSFERRED TO A PCI CENTRE, BY PCI CENTRE (n=1228)

	30 minutes or less		31 minutes or more		Total		Median (IQR1–IQR3) minutes
	N	%	N	%	N	%	
Cork University Hospital	13	52.0%	12	48.0%	25	100.0%	30 (24–43)
Letterkenny University Hospital	*	*	~	*	*	100.0%	28.5 (25–34)
Mater Misericordiae University Hospital	66	79.5%	17	20.5%	83	100.0%	20 (15–28)
St James's Hospital	56	61.5%	35	38.5%	91	100.0%	27 (19–39)
St Vincent's University Hospital	~	*	~	*	~	*	33 (26–40)
University Hospital Galway	11	47.8%	12	52.2%	23	100.0%	32 (18–57)
University Hospital Limerick	15	65.2%	8	34.8%	23	100.0%	23 (15–36)
University Hospital Waterford	13	41.9%	18	58.1%	31	100.0%	33 (23–42)
National total	**184**	**63.0%**	**108**	**37.0%**	**292**	**100.0%**	**26 (18–38)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.18: PROPORTION OF PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE WHO RECEIVED TIMELY PRIMARY PCI, BY REFERRING HOSPITAL (n=292)

		Timely (within 120 minutes)		Not timely		Unknown		Total		Median (IQR1–IQR3) min
		N	%	N	%	N	%	N	%	
Cork University Hospital	Bantry General Hospital	~	*	~	*	0	0.0%	~	100.0%	145 (86–148)
	Mallow General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	181 (165–197)
	Mercy University Hospital	~	*	~	*	0	0.0%	8	100.0%	162 (90–232)
	Tipperary University Hospital	~	*	*	*	0	0.0%	8	100.0%	200.5 (150–230.5)
	University Hospital Kerry	0	0.0%	~	*	0	0.0%	~	100.0%	253 (138–988)
	University Hospital Waterford	0	0.0%	~	*	0	0.0%	~	100.0%	205 (205–205)

		N	%	N	%	N	%	N	%	
	Total	~	*	20	80.0%	0	0.0%	25	100.0%	185 (132–227)
Letterkenny University Hospital	Letterkenny University Hospital	~	*	*	*	0	0.0%	14	100.0%	132 (107–147)
	Total	~	*	*	*	0	0.0%	14	100.0%	132 (107–147)
Mater Misericordiae University Hospital	Beaumont Hospital	13	56.5%	10	43.5%	0	0.0%	23	100.0%	101 (85–147)
	Cavan General Hospital	~	*	*	*	0	0.0%	11	100.0%	205 (144–269)
	Connolly Hospital	12	60.0%	8	40.0%	0	0.0%	20	100.0%	101.5 (74.5–138.5)
	Other	~	*	0	0.0%	0	0.0%	~	100.0%	90 (90–90)
	Our Lady of Lourdes Hospital Drogheda	8	44.4%	10	55.6%	0	0.0%	18	100.0%	126.5 (108–166)
	Our Lady's Hospital, Navan	~	*	*	*	0	0.0%	*	100.0%	123 (114–170)
	Total	39	47.0%	44	53.0%	0	0.0%	83	100.0%	123 (99–164)
St James's Hospital	Midland Regional Hospital Portlaoise	~	*	~	*	0	0.0%	~	100.0%	193 (124–216)
	Midland Regional Hospital Tullamore	~	*	*	*	0	0.0%	9	100.0%	177 (132–191)
	Naas General Hospital	*	*	~	*	0	0.0%	11	100.0%	115 (99–262)
	Other	0	0.0%	~	*	0	0.0%	~	100.0%	137 (137–137)
	Regional Hospital Mullingar	0	0.0%	9	100.0%	0	0.0%	9	100.0%	203 (175–288)
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	~	*	~	*	~	100.0%	140 (135–257)
	St Michaels Hospital, Dun Laoghaire	~	*	~	*	0	0.0%	~	100.0%	157 (110–226)
	St Vincent's University Hospital	11	47.8%	*	*	~	*	23	100.0%	121 (99–166)
	Tallaght University Hospital	8	34.8%	15	65.2%	0	0.0%	23	100.0%	138 (96–181)
	Wexford General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	356 (356–356)
	Total	30	33.0%	*	*	~	*	91	100.0%	140 (111–203)
St Vincent's University Hospital	Other	0	0.0%	~	*	0	0.0%	~	100.0%	160 (160–160)
	St Colmcille`s Hospital, Loughlinstown	~	*	0	0.0%	0	0.0%	~	100.0%	112 (112–112)
	Total	~	*	~	*	0	0.0%	~	100.0%	136 (112–160)
University Hospital Galway	Mayo University Hospital	~	*	*	*	0	0.0%	12	100.0%	188 (146.5–320.5)
	Other	~	*	0	0.0%	0	0.0%	~	100.0%	112 (112–112)
	Portiuncula University Hospital	~	*	~	*	0	0.0%	~	100.0%	124 (101–202)
	Sligo University Hospital	0	0.0%	*	*	0	0.0%	6	100.0%	194 (172–290)
	Total	~	*	*	*	0	0.0%	23	100.0%	174 (135–270)
University Hospital Limerick	Nenagh General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%	135 (135–135)
	St Johns Limerick	~	*	~	*	0	0.0%	~	100.0%	78.5 (28–129)
	University Hospital Kerry	~	*	*	*	0	0.0%	20	100.0%	154.5 (134–267.5)
	Total	~	*	*	*	0	0.0%	23	100.0%	152 (129–215)
University Hospital Waterford	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	12	100.0%	0	0.0%	12	100.0%	174 (145.5–243.5)
	Tipperary University Hospital	~	*	*	*	0	0.0%	8	100.0%	189 (155.5–204.5)
	Wexford General Hospital	~	*	*	*	0	0.0%	11	100.0%	202 (135–336)
	Total	~	*	*	*	0	0.0%	31	100.0%	190 (140–267)
National total		**89**	**30.5%**	*	*	~	*	**292**	**100.0%**	**146 (113–202)**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.19 PROPORTION OF PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE WHO RECEIVED TIMELY REPERFUSION, BY REFERRING HOSPITAL (n=403)

		Timely reperfusion		Not timely reperfusion		Unknown		Total	
		N	%	N	%	N	%	N	%
St James's Hospital	Midland Regional Hospital Tullamore	~	*	*	*	0	0.0%	12	100.0%
	Naas General Hospital	*	*	~	*	0	0.0%	11	100.0%
	Regional Hospital Mullingar	~	*	*	*	0	0.0%	19	100.0%
	St Luke's General Hospital, Carlow/Kilkenny	~	*	*	*	0	0.0%	17	100.0%
	St Vincent's University Hospital	11	45.8%	12	50.0%	~	*	24	100.0%
	Tallaght University Hospital	8	32.0%	17	68.0%	0	0.0%	25	100.0%
	Wexford General Hospital	~	*	*	*	0	0.0%	13	100.0%
	Midland Regional Hospital Portlaoise	~	*	*	*	0	0.0%	19	100.0%
	St Michaels Hospital, Dun Laoghaire	~	*	~	*	0	0.0%	~	100.0%
	Other	0	0.0%	~	*	0	0.0%	~	100.0%

	Total	*	*	111	75.0%	~	*	148	100.0%
Mater Misericordiae University Hospital	Beaumont Hospital	13	54.2%	11	45.8%	0	0.0%	24	100.0%
	Cavan General Hospital	~	*	*	*	0	0.0%	11	100.0%
	Connolly Hospital	12	54.5%	10	45.5%	0	0.0%	22	100.0%
	Our Lady of Lourdes Hospital Drogheda	8	44.4%	10	55.6%	0	0.0%	18	100.0%
	Our Lady's Hospital, Navan	~	*	*	*	0	0.0%	*	100.0%
	Other	~	*	0	0.0%	0	0.0%	~	100.0%
	Total	39	45.3%	47	54.7%	0	0.0%	86	100.0%
Cork University Hospital	Bantry General Hospital	~	*	~	*	0	0.0%	~	100.0%
	Mercy University Hospital	~	*	~	*	0	0.0%	8	100.0%
	Tipperary University Hospital	~	*	10	90.9%	0	0.0%	11	100.0%
	University Hospital Kerry	0	0.0%	~	*	0	0.0%	~	100.0%
	University Hospital Waterford	~	*	11	78.6%	0	0.0%	14	100.0%
	Mallow General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%
	Other	~	*	0	0.0%	0	0.0%	~	100.0%
	Total	10	22.7%	34	77.3%	0	0.0%	44	100.0%
University Hospital Limerick	Nenagh General Hospital	0	0.0%	~	*	0	0.0%	~	100.0%
	University Hospital Kerry	~	*	*	*	0	0.0%	22	100.0%
	St Johns Limerick	~	*	~	*	0	0.0%	~	100.0%
	Other	0	0.0%	~	*	0	0.0%	~	100.0%
	Total	~	*	23	88.5%	0	0.0%	26	100.0%
University Hospital Galway	Mayo University Hospital	~	*	18	85.7%	0	0.0%	21	100.0%
	Portiuncula University Hospital	~	*	~	*	0	0.0%	~	100.0%
	Sligo University Hospital	10	43.5%	*	*	0	0.0%	23	100.0%
	Other	~	*	0	0.0%	0	0.0%	~	100.0%
	Total	16	32.7%	33	67.3%	0	0.0%	49	100.0%
University Hospital Waterford	Tipperary University Hospital	~	*	*	*	0	0.0%	9	100.0%
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	12	100.0%	0	0.0%	12	100.0%
	Wexford General Hospital	~	*	*	*	0	0.0%	12	100.0%
	Total	~	*	*	*	0	0.0%	33	100.0%
Letterkenny University Hospital	Letterkenny University Hospital	~	*	*	*	0	0.0%	15	100.0%
	Total	~	*	*	*	0	0.0%	15	100.0%
St Vincent's University Hospital	St Colmcille`s Hospital, Loughlinstown	~	*	0	0.0%	0	0.0%	~	100.0%
	Other	0	0.0%	~	*	0	0.0%	~	100.0%
	Total	~	*	~	*	0	0.0%	~	100.0%
National total		**113**	**28.0%**	**289**	**71.7%**	**~**	*****	**403**	**100.0%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 5.20: PROPORTION OF TIMELY REPERFUSION, BY REPERFUSION TYPE, REFERRAL SOURCE AND YEAR, 2017–2024

	2017	2018	2019	2020	2021	2022	2023	2024
All timely reperfusion	67%	65%	67%	67%	64%	60%	61%	58%
Timely PPCI	68%	66%	69%	69%	67%	62%	65%	61%
Timely PPCI Directly admitted to a PCI centre	81%	79%	82%	82%	81%	78%	79%	77%
Timely PPCI Self-presented to a PCI centre	39%	37%	46%	46%	22%	25%	25%	30%
Timely PPCI Transferred to PCI Centre	43%	42%	45%	45%	41%	39%	45%	30%
Timely thrombolysis	44%	41%	30%	30%	25%	29%	21%	22%

FIGURE 6.1: LEFT VENTRICULAR FUNCTION RESULTS, BY INFARCT TYPE AND TIMELINESS OF REPERFUSION (n=1187)

		Timely reperfusion		Not timely reperfusion		Total	
		N	%	N	%	N	%
Anterior	Normal (>50%)	*	*	*	*	*	*
	Slightly reduced (41-50%)	72	22.9%	52	27.2%	124	24.6%
	Moderately reduced (31-40%)	113	36.0%	69	36.1%	182	36.0%
	Severely reduced (<30%)	65	20.7%	36	18.8%	101	20.0%
	Unknown	~	*	~	*	~	*
	Total	**314**	**100.0%**	**191**	**100.0%**	**505**	**100.0%**
Non–anterior	Normal (>50%)	216	50.3%	96	38.1%	312	45.8%
	Slightly reduced (41-50%)	124	28.9%	87	34.5%	211	31.0%
	Moderately reduced (31-40%)	62	14.5%	41	16.3%	103	15.1%
	Severely reduced (<30%)	*	*	22	8.7%	45	6.6%
	Unknown	~	*	*	*	10	1.5%
	Total	**429**	**100.0%**	**252**	**100.0%**	**681**	**100.0%**
Unknown	Normal (>50%)	0	0.0%	0	0.0%	0	0.0%
	Slightly reduced (41-50%)	0	0.0%	0	0.0%	0	0.0%
	Moderately reduced (31-40%)	0	0.0%	~	*	~	100.0%
	Severely reduced (<30%)	0	0.0%	0	0.0%	0	0.0%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	**0**	**0.0%**	**~**	*****	**~**	**100.0%**
Total	Normal (>50%)	278	37.4%	128	28.8%	406	34.2%
	Slightly reduced (41-50%)	196	26.4%	139	31.3%	335	28.2%
	Moderately reduced (31-40%)	175	23.6%	111	25.0%	286	24.1%
	Severely reduced (<30%)	88	11.8%	58	13.1%	146	12.3%
	Unknown	6	0.8%	8	1.8%	14	1.2%
	Total	**743**	**100.0%**	**444**	**100.0%**	**1187**	**100.0%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 6.2: CONGESTIVE HEART FAILURE, BY INFARCT TYPE (N=3102)

		N	%
Anterior	No	544	76.9%
	Pulmonary crackles with elevated JVP	32	4.5%
	Acute pulmonary oedema	44	6.2%
	Cardiogenic shock	87	12.3%
	Unknown	0	0.0%
	Total	**707**	**100.0%**
Non–anterior	No	774	86.0%
	Pulmonary crackles with elevated JVP	29	3.2%
	Acute pulmonary oedema	*	*
	Cardiogenic shock	68	7.6%
	Unknown	~	*
	Total	**900**	**100.0%**
Unknown	No	~	*
	Pulmonary crackles with elevated JVP	0	0.0%
	Acute pulmonary oedema	~	*
	Cardiogenic shock	~	*
	Unknown	0	0.0%

		N	%
	Total	**8**	**100.0%**
Total	No	1322	81.9%
	Pulmonary crackles with elevated JVP	*	*
	Acute pulmonary oedema	73	4.5%
	Cardiogenic shock	158	9.8%
	Unknown	~	*
	Total	**1615**	**100.0%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 6.3: SURVIVAL AT DISCHARGE BY GLOBAL REGISTRY OF ACUTE CORONARY EVENTS STRATIFICATION AND DATA QUALITY, BY PCI CENTRE (n=1227)

		Low GRACE risk score		Intermediate GRACE risk score		High GRACE risk score		Total		Data Quality
		N	%	N	%	N	%	N	%	
St James's Hospital	Alive	70	100.0%	117	100.0%	122	91.0%	309	96.3%	90%
	Dead	0	0.0%	0	0.0%	12	9.0%	12	3.7%	
	Total	70	100.0%	117	100.0%	134	100.0%	321	100.0%	
Mater Misericordiae University Hospital	Alive	74	100.0%	*	*	88	88.9%	253	95.1%	91%
	Dead	0	0.0%	~	*	*	*	13	4.9%	
	Total	74	100.0%	93	100.0%	99	100.0%	266	100.0%	
Cork University Hospital	Alive	35	100.0%	*	*	83	92.2%	179	95.7%	99%
	Dead	0	0.0%	~	*	*	*	8	4.3%	
	Total	35	100.0%	62	100.0%	90	100.0%	187	100.0%	
University Hospital Limerick	Alive	33	100.0%	*	*	61	89.7%	153	95.0%	98%
	Dead	0	0.0%	~	*	*	*	8	5.0%	
	Total	33	100.0%	60	100.0%	68	100.0%	161	100.0%	
University Hospital Galway	Alive	36	100.0%	*	*	60	89.6%	151	95.0%	92%
	Dead	0	0.0%	~	*	*	*	8	5.0%	
	Total	36	100.0%	56	100.0%	67	100.0%	159	100.0%	
University Hospital Waterford	Alive	21	100.0%	31	100.0%	25	78.1%	77	91.7%	99%
	Dead	0	0.0%	0	0.0%	7	21.9%	7	8.3%	
	Total	21	100.0%	31	100.0%	32	100.0%	84	100.0%	
Letterkenny University Hospital	Alive	16	100.0%	21	100.0%	12	100.0%	49	100.0%	100%
	Total	16	100.0%	21	100.0%	12	100.0%	49	100.0%	
National total	Alive	285	100.0%	*	*	451	89.8%	1171	95.4%	94%
	Dead	0	0.0%	~	*	*	*	56	4.6%	
	Total	285	100.0%	440	100.0%	502	100.0%	1227	100.0%	

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 6.4: STANDARDISED IN-HOSPITAL MORTALITY RATIO

	Number of admissions	Observed	Expected	SMR	LCL95	OD95UCL	OD99UCL	OD99UCL
St James's	321	12	24.65	0.49	0.647	1.480	1.853	1.853

Mater	266	13	15.72	0.83	0.572	1.632	2.165	2.165
Cork	187	8	17.72	0.45	0.593	1.587	2.017	2.017
Limerick	161	8	14.25	0.56	0.547	1.688	2.284	2.284
Galway	159	8	12.30	0.65	0.517	1.761	2.440	2.440
Letterkenny	49	0	2.58	0.00				
Waterford	84	7	5.91	1.18	0.367	2.226	3.531	3.531

FIGURE 6.5: SURVIVAL STATUS AT 30 DAYS BY GLOBAL REGISTRY OF ACUTE CORONARY EVENTS STRATIFICATION AND DATA QUALITY, BY PCI CENTRE (n=1158)

		Low GRACE risk score		Intermediate GRACE risk score		High GRACE risk score		Total		Data quality
		N	%	N	%	N	%	N	%	
Cork University Hospital	Alive	7	4.3%	30	18.3%	127	77.4%	164	100.0%	94%
	Dead	0	0.0%	0	0.0%	8	100.0%	8	100.0%	
	Total	7	4.1%	30	17.4%	135	78.5%	172	100.0%	
Letterkenny University Hospital	Alive	~	*	*	*	31	64.6%	48	100.0%	98%
	Total	~	*	*	*	31	64.6%	48	100.0%	
Mater Misericordiae University Hospital	Alive	20	8.2%	54	22.2%	169	69.5%	243	100.0%	90%
	Dead	0	0.0%	0	0.0%	13	100.0%	13	100.0%	
	Total	20	7.8%	54	21.1%	182	71.1%	256	100.0%	
St James's Hospital	Alive	12	4.0%	66	21.9%	223	74.1%	301	100.0%	89%
	Dead	0	0.0%	0	0.0%	14	100.0%	14	100.0%	
	Total	12	3.8%	66	21.0%	237	75.2%	315	100.0%	
University Hospital Galway	Alive	~	*	*	*	88	75.9%	116	100.0%	75%
	Dead	0	0.0%	0	0.0%	10	100.0%	10	100.0%	
	Total	~	*	*	*	98	77.8%	126	100.0%	
University Hospital Limerick	Alive	~	*	*	*	117	78.5%	149	100.0%	98%
	Dead	0	0.0%	0	0.0%	9	100.0%	9	100.0%	
	Total	~	*	*	*	126	79.7%	158	100.0%	
University Hospital Waterford	Alive	~	*	*	*	51	67.1%	76	100.0%	98%
	Dead	0	0.0%	0	0.0%	7	100.0%	7	100.0%	
	Total	~	*	*	*	58	69.9%	83	100.0%	
National total	Alive	46	4.2%	245	22.3%	806	73.5%	1097	100.0%	90%
	Dead	0	0.0%	0	0.0%	61	100.0%	61	100.0%	
	Total	46	4.0%	245	21.2%	867	74.9%	1158	100.0%	

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 6.6: DISCHARGE DESTINATION FROM PCI CENTRES, BY PCI CENTRE AND SEX (N=1615)

		Home		Transferred		Other		Total	
		N	%	N	%	N	%	N	%
	Female	45	77.60%	6	10.30%	7	12.10%	58	100.00%
	Male	128	71.10%	34	18.90%	18	10.00%	180	100.00%

Cork University Hospital	Total	173	72.70%	40	16.80%	25	10.50%	238	100.00%
Letterkenny University Hospital	Female	*	*	~	*	0	0.00%	13	100.00%
	Male	36	94.70%	~	*	~	*	38	100.00%
	Total	48	94.10%	~	*	~	*	51	100.00%
Mater Misericordiae University Hospital	Female	*	*	63	72.40%	~	*	87	100.00%
	Male	99	36.90%	152	56.70%	*	*	268	100.00%
	Total	119	33.50%	215	60.60%	21	5.90%	355	100.00%
Non-designated 9–5 PCI centres	Female	15	83.30%	~	*	~	*	18	100.00%
	Male	39	83.00%	*	*	~	*	47	100.00%
	Total	54	83.10%	8	12.30%	~	*	65	100.00%
St James's Hospital	Female	32	30.50%	61	58.10%	12	11.40%	105	100.00%
	Male	92	31.80%	180	62.30%	17	5.90%	289	100.00%
	Total	124	31.50%	241	61.20%	29	7.40%	394	100.00%
University Hospital Galway	Female	29	49.20%	22	37.30%	8	13.60%	59	100.00%
	Male	98	57.30%	58	33.90%	15	8.80%	171	100.00%
	Total	127	55.20%	80	34.80%	23	10.00%	230	100.00%
University Hospital Limerick	Female	24	55.80%	9	20.90%	10	23.30%	43	100.00%
	Male	101	69.20%	29	19.90%	16	11.00%	146	100.00%
	Total	125	66.10%	38	20.10%	26	13.80%	189	100.00%
University Hospital Waterford	Female	13	54.20%	~	*	*	*	24	100.00%
	Male	29	42.00%	*	*	~	*	69	100.00%
	Total	42	45.20%	41	44.10%	10	10.80%	93	100.00%
National total	**Female**	**190**	**46.70%**	**169**	**41.50%**	**48**	**11.80%**	**407**	**100.00%**
	Male	**622**	**51.50%**	**496**	**41.10%**	**90**	**7.50%**	**1208**	**100.00%**
	Total	**812**	**50.30%**	**665**	**41.20%**	**138**	**8.50%**	**1615**	**100.00%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 6.7: SMOKING CESSATION ADVICE PROVIDED, BY SEX AND AGE GROUP (n=584)

		Male		Female		Total	
		N	%	N	%	N	%
≤40	Yes	*	*	~	*	*	*
	Unknown	~	*	~	*	~	*
	Total	27	100.0%	6	100.0%	33	100.0%
41–64	Yes	320	97.0%	87	93.5%	407	96.2%
	No - patient declined	0	0.0%	~	*	~	*
	Unknown	*	*	~	*	15	3.5%
	Total	330	100.0%	93	100.0%	423	100.0%
65–79	Yes	71	91.0%	37	88.1%	108	90.0%
	No - patient declined	~	*	*	*	~	*
	Unknown	~	*	~	*	10	8.3%
	Total	78	100.0%	42	100.0%	120	100.0%
≥80	Yes	~	*	*	*	8	100.0%
	Total	~	*	*	*	8	100.0%

Total	Yes	418	95.7%	135	91.8%	553	94.7%
	No - patient declined	~	*	~	*	~	*
	Unknown	*	*	*	*	*	*
	Total	437	100.0%	147	100.0%	584	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

FIGURE 6.8: PROPORTION OF PATIENTS PRESCRIBED SECONDARY PREVENTION MEDICATION ON DISCHARGE

		N	%
ACEI or ARB	Yes	1299	87.7%
	No	42	2.8%
	Contraindicated	140	9.5%
	Total	1481	100.0%
Statin	Yes	1476	98.4%
	No	12	0.8%
	Contraindicated	12	0.8%
	Total	1500	100.0%
Betablocker	Yes	1341	90.2%
	No	51	3.4%
	Contraindicated	95	6.4%
	Total	1487	100.0%
Aspirin	Yes	1476	97.9%
	No	6	0.4%
	Contraindicated	25	1.7%
	Total	1507	100.0%
Second anti-platelet agent	Yes	1465	97.2%
	No	12	0.8%
	Contraindicated	30	2.0%
	Total	1507	100.0%

FIGURE 6.9: PROPORTION OF PATIENTS WITH A STEMI REFERRED FOR CARDIAC REHABILITATION PHASE 3, BY PCI CENTRE (n=1041)

			N	%
St James's Hospital	Male	Yes	175	94.1%
		No – no reason	*	*
		Unknown	~	*
		Total	186	100.0%
	Female	Yes	*	*
		No – no reason	~	*
		Total	55	100.0%
	Total	Yes	229	95.0%
		No – no reason	*	*
		Unknown	~	*
		Total	241	100.0%
Mater Misericordiae University Hospital	Male	Yes	163	94.2%

		No – no reason	*	*
		Unknown	~	*
		Total	173	100.0%
	Female	Yes	44	95.7%
		No – no reason	~	*
		Unknown	~	*
		Total	46	100.0%
	Total	Yes	207	94.5%
		No – no reason	*	*
		Unknown	~	*
		Total	219	100.0%
Cork University Hospital	Male	Yes	*	*
		No – no reason	~	*
		Total	109	100.0%
	Female	Yes	30	100.0%
		Total	30	100.0%
	Total	Yes	*	*
		No – no reason	~	*
		Total	139	100.0%
University Hospital Limerick	Male	Yes	69	100.0%
		Total	69	100.0%
	Female	Yes	14	100.0%
		Total	14	100.0%
	Total	Yes	83	100.0%
		Total	83	100.0%
University Hospital Galway	Male	Yes	*	*
		Unknown	~	*
		Total	155	100.0%
	Female	Yes	*	*
		Unknown	~	*
		Total	47	100.0%
	Total	Yes	*	*
		Unknown	~	*
		Total	202	100.0%
University Hospital Waterford	Male	Yes	*	*
		No – no reason	~	*
		Total	52	100.0%
	Female	Yes	16	100.0%
		Total	16	100.0%
	Total	Yes	*	*
		No – no reason	~	*
		Total	68	100.0%
Letterkenny University Hospital	Male	Yes	*	*
		Unknown	~	*
		Total	31	100.0%
	Female	Yes	7	100.0%
		Total	7	100.0%
	Total	Yes	*	*
		Unknown	~	*
		Total	38	100.0%
Beaumont Hospital	Male	Yes	20	100.0%
		Total	20	100.0%
	Female	Yes	~	*
		Total	~	*
	Total	Yes	25	100.0%
		Total	25	100.0%

	Male	Yes	10	100.0%
		Total	10	100.0%
Tallaght University Hospital	Female	Yes	~	*
		Total	~	*
	Total	Yes	14	100.0%
		Total	14	100.0%
	Male	Yes	6	75.0%
		No – no reason	~	*
		Unknown	~	*
		Total	8	100.0%
St Vincent's University Hospital	Female	Yes	~	*
		No – no reason	~	*
		Total	~	*
	Total	Yes	9	75.0%
		No – no reason	~	*
		Unknown	~	*
		Total	12	100.0%
	Male	Yes	784	96.4%
		No – no reason	20	2.5%
		Unknown	9	1.1%
		Total	813	100.0%
National total	Female	Yes	223	97.8%
		No – no reason	~	*
		Unknown	~	*
		Total	228	100.0%
	Total	Yes	1007	96.7%
		No – no reason	23	2.2%
		Unknown	11	1.1%
		Total	1041	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

APPENDIX 6: HEARTBEAT VARIABLE COMPLETENESS

	Total	Beaumont Hospital	Cork University Hospital	Letterkenny University Hospital	Mater Misericordiae University Hospital	St James's Hospital	St Vincent's University Hospital	Tallaght University Hospital	University Hospital Galway	University Hospital Limerick	University Hospital Waterford
Previous MI	99.5%	100.0%	99.6%	100.0%	99.7%	99.2%	89.5%	100.0%	99.6%	100.0%	100.0%
Previous angina	99.1%	100.0%	99.6%	100.0%	99.4%	99.2%	73.7%	100.0%	98.7%	100.0%	100.0%
Previous Peripheral vascular disease	99.3%	100.0%	99.2%	100.0%	99.4%	99.2%	94.7%	100.0%	98.7%	100.0%	100.0%
Previous cerebrovascular disease	99.4%	100.0%	99.6%	100.0%	99.7%	99.2%	94.7%	100.0%	98.7%	100.0%	98.9%
Previous chronic renal failure	99.4%	100.0%	99.6%	100.0%	99.7%	99.2%	100.0%	100.0%	98.7%	98.9%	100.0%
Previous chronic lung disease	99.3%	100.0%	99.6%	100.0%	99.4%	99.2%	100.0%	100.0%	97.8%	100.0%	98.9%
Previous percutaneous coronary intervention (PCI)	99.5%	100.0%	99.6%	100.0%	99.7%	99.2%	94.7%	100.0%	99.1%	100.0%	100.0%
Previous coronary artery bypass graft (CABG)	99.6%	100.0%	99.6%	100.0%	100.0%	99.2%	100.0%	100.0%	99.1%	99.5%	100.0%
Previous other heart surgery	99.6%	100.0%	99.6%	100.0%	99.7%	99.2%	100.0%	94.4%	99.6%	100.0%	100.0%
Diabetes mellitus	99.3%	100.0%	99.2%	100.0%	98.9%	99.2%	100.0%	100.0%	98.7%	100.0%	100.0%
Smoking status	97.2%	92.9%	98.7%	100.0%	97.7%	97.2%	94.7%	100.0%	93.9%	100.0%	93.5%

Previous hypercholesterolemia	96.2%	100.0%	97.5%	86.3%	99.2%	99.2%	89.5%	100.0%	83.5%	100.0%	96.8%
Previous hypertension	98.0%	100.0%	99.2%	98.0%	99.2%	99.2%	100.0%	100.0%	91.7%	100.0%	95.7%
Source of referral	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Ambulance arrival information	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Arrival Information, admission method (other hospital)	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Arrival Information, source of referral (other hospital)	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Source of referral (other)	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%
Helicopter	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	100.0%	100.0%
Aspirin pre-admission/admission	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other antiplatelet pre-admission/admission	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Symptom onset date	99.8%	100.0%	100.0%	100.0%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Symptom onset time	95.7%	100.0%	81.1%	100.0%	96.1%	100.0%	100.0%	55.6%	98.7%	100.0%	100.0%
Call for help date	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.4%	100.0%	100.0%	100.0%
Call for help time	99.3%	100.0%	98.7%	100.0%	98.3%	100.0%	100.0%	88.9%	100.0%	99.5%	100.0%
First positive electrocardiogram (ECG) date	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
First positive ECG time	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
First positive ECG location	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.4%	100.0%	100.0%	100.0%
First positive ECG location (other)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Arrival at first hospital date	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Arrival at first hospital time	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Date patient left first hospital	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%
Time patient left first hospital	95.4%	0.0%	94.3%	100.0%	99.0%	87.9%	0.0%	100.0%	96.3%	100.0%	100.0%
Arrival at PCI centre hospital date	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Arrival at PCI centre hospital time	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Patient status on admission	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Patient status (other)	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%
Contraindicated to reperfusion therapy	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%
Contraindication to reperfusion therapy reason	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Contraindication to reperfusion therapy reason (other)	100.0%	0.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Reperfusion therapy type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Reperfusion therapy Date	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Reperfusion therapy Time	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Was angiogram performed	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Angioram performed as part of?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Outcome of angiogram/PCI	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Percutaneous arterial access	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Late reperfusion therapy (thrombolysis or primary PCI)	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%
Late reperfusion therapy reason (if reperfusion therapy outside targets)	83.7%	100.0%	66.7%	56.3%	97.6%	86.4%	12.5%	100.0%	79.2%	98.4%	83.7%
Late Reperfusion therapy reason (other)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%
Discharge diagnosis	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Discharge diagnosis (other)											
Bleeding (following any intervention)	99.6%	100.0%	100.0%	100.0%	98.6%	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%
Stroke during hospital stay	99.6%	100.0%	100.0%	100.0%	99.2%	99.7%	100.0%	100.0%	100.0%	100.0%	96.8%
Hospital of discharge	99.8%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	94.4%	100.0%	100.0%	100.0%
Survival status on discharge home	99.2%	100.0%	100.0%	100.0%	99.4%	97.7%	100.0%	94.4%	99.6%	100.0%	100.0%
Aspirin on discharge	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	93.8%	100.0%	100.0%	100.0%	100.0%
Other antiplatelet therapy on discharge	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	93.8%	100.0%	100.0%	100.0%	100.0%
Beta-blocker on discharge	98.5%	100.0%	98.2%	100.0%	99.4%	96.2%	93.8%	100.0%	99.5%	100.0%	100.0%
Statin on discharge	99.4%	100.0%	100.0%	100.0%	99.7%	98.1%	93.8%	100.0%	100.0%	100.0%	100.0%
angiotensinconverting enzyme inhibitor (ACEI) or angiotensin II receptor blocker (ARB) on discharge	98.1%	100.0%	97.3%	100.0%	99.1%	95.4%	100.0%	100.0%	99.1%	100.0%	100.0%
Smoking cessation counseling (for smokers)	95.3%	100.0%	94.0%	100.0%	94.2%	94.6%	85.7%	100.0%	98.4%	95.5%	96.4%
Referral to cardiac rehabilitation (CR) phase 3	92.9%	100.0%	94.1%	98.0%	91.8%	93.4%	78.9%	94.4%	93.5%	91.5%	90.3%
Hospital for CR	95.8%	100.0%	99.3%	32.4%	95.7%	98.7%	100.0%	92.9%	98.5%	100.0%	100.0%
Date of first phase 3 CR appointment	62.6%	76.0%	47.8%	73.0%	81.2%	67.7%	55.6%	57.1%	28.3%	100.0%	64.2%
Survival status at 30 days post-MI	95.0%	89.3%	93.5%	98.0%	98.8%	97.7%	100.0%	100.0%	79.5%	100.0%	98.9%
Cause of death	95.3%	0.0%	100.0%	0.0%	88.0%	96.0%	100.0%	100.0%	90.9%	100.0%	100.0%
LVF	99.3%	100.0%	97.1%	100.0%	99.7%	100.0%	100.0%	94.4%	99.1%	100.0%	100.0%
LVF assessment method	99.8%	100.0%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	99.5%	100.0%
What is the EF	98.9%	100.0%	99.1%	100.0%	98.6%	97.5%	100.0%	100.0%	99.5%	99.5%	100.0%
Primary coronary vessel treated during angiogram	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.4%	99.1%	100.0%	100.0%
Heart rate on arrival to cath lab	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.1%	100.0%	100.0%
Systolic BP on arrival at the cath lab	99.4%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	96.1%	100.0%	100.0%
Serum creatinine value	97.8%	100.0%	99.6%	100.0%	98.3%	94.7%	100.0%	100.0%	97.0%	100.0%	100.0%
Congestive heart failure	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.6%	100.0%	100.0%
Troponin elevation	96.5%	100.0%	100.0%	100.0%	93.0%	93.4%	94.7%	100.0%	98.7%	100.0%	98.9%
Infarct type	99.5%	100.0%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%	97.8%	100.0%	97.8%
Non culprit lesion	99.8%	100.0%	99.6%	100.0%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

APPENDIX 7: SUPPLEMENTARY FREQUENCY TABLES

TABLE 7.1: ALTERNATIVE DIAGNOSIS, BY YEAR (n=202)

	NSTEMI		Unstable Angina		Pericarditis		Myocarditis		Takosubo		Non Cardiac Chest Pain		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Cork University Hospital	~	*	0	0%	~	*	~	7%	~	*	~	*	14	100%
Letterkenny University Hospital	~	*	0	0%	0	0%	0	0%	0	0%	0	0%	~	100%
Mater Misericordiae University Hospital	0	0%	~	2%	11	26%	~	5%	8	19%	20	48%	42	100%
St James's Hospital	16	35%	0	0%	13	28%	~	11%	~	*	10	22%	46	100%
University Hospital Galway	13	52%	~	4%	6	24%	0	0%	~	*	~	*	25	100%
University Hospital Limerick	10	20%	~	4%	8	16%	~	4%	~	*	24	48%	50	100%
University Hospital Waterford	7	37%	~	5%	~	*	~	11%	~	*	~	*	19	100%
Non-designated 9–5 PCI centres	~	*	0	0%	~	*	0	0%	0	0%	~	*	~	100%
Total	**49**	**24%**	**~**	**2%**	**49**	**24%**	**12**	**6%**	**22**	**11%**	**65**	**32%**	**202**	**100%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

TABLE 7.2: REASON FOR CONTRAINDICATION (n=176)

2024	Male		Female		Total	
	N	%	N	%	N	%
Presented too late	105	89.7%	47	79.7%	152	86.4%
Recent surgery	~	*	0	0.0%	~	*
History of bleeding	~	*	~	*	~	*
Recent cerebrovascular accident	~	*	0	0.0%	~	*
Drug contraindication	~	*	0	0.0%	~	*
Other	8	6.8%	8	13.6%	16	9.1%
Total	**117**	**100.0%**	**59**	**100.0%**	**176**	**100.0%**

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

TABLE 7.3: CLINICAL STATUS ON ARRIVAL (n=1295)

		N	%
St James's Hospital	Stable	257	82%
	Cardiogenic shock	16	5%
	Resuscitated arrest	32	10%
	Other/unknown	9	3%
	Total	314	100%
Mater Misericordiae University Hospital	Stable	266	80%
	Cardiogenic shock	16	5%
	Resuscitated arrest	36	11%
	Cardiac arrest and died	~	*
	Other/unknown	*	*
	Total	331	100%
	Stable	133	72%
	Cardiogenic shock	11	6%

Cork University Hospital	Resuscitated arrest	27	15%
	Other/unknown	14	8%
	Total	185	100%
University Hospital Limerick	Stable	125	82%
	Cardiogenic shock	*	*
	Resuscitated arrest	16	10%
	Other/unknown	~	*
	Total	153	100%
University Hospital Galway	Stable	154	87%
	Cardiogenic shock	12	7%
	Resuscitated arrest	*	*
	Other/unknown	~	*
	Total	178	100%
University Hospital Waterford	Stable	58	81%
	Cardiogenic shock	8	11%
	Resuscitated arrest	~	*
	Cardiac arrest and died	~	*
	Other/unknown	~	*
	Total	72	100%
Letterkenny University Hospital	Stable	40	80%
	Cardiogenic shock	~	*
	Resuscitated arrest	~	*
	Other/unknown	6	12%
	Total	50	100%
Beaumont Hospital	Stable	~	*
	Resuscitated arrest	~	*
	Total	~	*
Tallaght University Hospital	Stable	~	*
	Total	~	*
St Vincent's University Hospital	Stable	~	*
	Total	~	*
National total	Stable	1044	81%
	Cardiogenic shock	75	6%
	Resuscitated arrest	130	10%
	Cardiac arrest and died	~	*
	Other/unknown	*	*
	Total	1295	100%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

TABLE 7.4: INCIDENCE OF BLEEDING BY REPERFUSION TYPE (n=1444)

		N	%
Thrombolysis	None	106	95%
	Intracranial haemorrhage	~	*
	Any bleed (haemoglobin fall of <3 g to >5 g)	~	*
	Unknown	0	0%
	Total	111	100%
Primary PCI	None	1204	96%

		N	%
	Intracranial haemorrhage	7	1%
	Any bleed (haemoglobin fall of <3 g to >5 g)	34	3%
	Unknown	6	0%
	Total	1251	100%
No reperfusion required	None	76	93%
	Intracranial haemorrhage	~	*
	Any bleed (haemoglobin fall of <3 g to >5 g)	~	*
	Unknown	~	*
	Total	82	100%
Total	None	1386	96%
	Intracranial haemorrhage	12	1%
	Any bleed (haemoglobin fall of <3 g to >5 g)	38	3%
	Unknown	8	1%
	Total	**1444**	**100%**

~ Denotes five cases or fewer.
* Further suppression required in order to prevent disclosure of five cases or fewer.

TABLE 7.5: INCIDENCE OF STROKE BY REPERFUSION TYPE (n=1444)

		N	%
Thrombolysis	No	*	*
	Yes – ischaemic	0	0%
	Yes – haemorrhagic	~	*
	Unknown	0	0%
	Total	111	100%
Primary PCI	No	1227	98%
	Yes – ischaemic	12	1%
	Yes – haemorrhagic	*	*
	Unknown	~	*
	Total	1251	100%
No reperfusion required	No	79	96%
	Yes – ischaemic	~	*
	Yes – haemorrhagic	~	*
	Unknown	~	*
	Total	82	100%
Total	No	1413	98%
	Yes – ischaemic	13	1%
	Yes – haemorrhagic	12	1%
	Unknown	6	0%
	Total	**1444**	**100%**

~ Denotes five cases or fewer.
* Further suppression required in order to prevent disclosure of five cases or fewer.

TABLE 7.6: PROPORTION OF PATIENTS PRESCRIBED SECONDARY PREVENTION MEDICATION ON DISCHARGE, BY HOSPITAL

	N	%

		Yes	315	85.4%
		No	~	*
	ACEI or ARB	Contraindicated	34	9.2%
		Unknown	*	*
		Total	369	100.0%
		Yes	357	96.7%
		No	0	0.0%
	Statin	Contraindicated	~	*
		Unknown	*	*
		Total	369	100.0%
		Yes	327	88.6%
		No	~	*
St James's Hospital	Betablocker	Contraindicated	25	6.8%
		Unknown	*	*
		Total	369	100.0%
		Yes	358	97.0%
		No	~	*
	Aspirin	Contraindicated	*	*
		Unknown	0	0.0%
		Total	369	100.0%
		Yes	362	98.1%
	Second anti-platelet agent	No	~	*
		Contraindicated	*	*
		Unknown	0	0.0%
		Total	369	100.0%
		Yes	275	83.3%
		No	15	4.5%
	ACEI or ARB	Contraindicated	*	*
		Unknown	~	*
		Total	330	100.0%
		Yes	326	98.8%
		No	~	*
	Statin	Contraindicated	~	*
		Unknown	~	*
		Total	330	100.0%
		Yes	296	89.7%
Mater Misericordiae University Hospital		No	16	4.8%
	Betablocker	Contraindicated	*	*
		Unknown	~	*
		Total	330	100.0%
		Yes	327	99.1%
		No	0	0.0%
	Aspirin	Contraindicated	~	*
		Unknown	~	*
		Total	330	100.0%
		Yes	319	96.7%
	Second anti-platelet agent	No	~	*
		Contraindicated	9	2.7%
		Unknown	~	*
		Total	330	100.0%
		Yes	173	77.2%
		No	~	*
Cork University Hospital	ACEI or ARB	Contraindicated	43	19.2%
		Unknown	*	*
		Total	224	100.0%
	Statin	Yes	*	*

		No	0	0.0%
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	224	100.0%
	Betablocker	Yes	211	94.2%
		No	0	0.0%
		Contraindicated	*	*
		Unknown	~	*
		Total	224	100.0%
	Aspirin	Yes	217	96.9%
		No	0	0.0%
		Contraindicated	7	3.1%
		Unknown	0	0.0%
		Total	224	100.0%
	Second anti-platelet agent	Yes	216	96.4%
		No	0	0.0%
		Contraindicated	8	3.6%
		Unknown	0	0.0%
		Total	224	100.0%
University Hospital Limerick	ACEI or ARB	Yes	154	89.5%
		No	~	*
		Contraindicated	*	*
		Unknown	0	0.0%
		Total	172	100.0%
	Statin	Yes	169	98.3%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	172	100.0%
	Betablocker	Yes	144	83.7%
		No	~	*
		Contraindicated	*	*
		Unknown	0	0.0%
		Total	172	100.0%
	Aspirin	Yes	169	98.3%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	172	100.0%
	Second anti-platelet agent	Yes	*	*
		No	0	0.0%
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	172	100.0%
University Hospital Galway	ACEI or ARB	Yes	210	95.9%
		No	*	*
		Contraindicated	0	0.0%
		Unknown	~	*
		Total	219	100.0%
	Statin	Yes	212	96.8%
		No	*	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	219	100.0%
	Betablocker	Yes	197	90.0%
		No	19	8.7%

		Contraindicated	~	*
		Unknown	~	*
		Total	219	100.0%
	Aspirin	Yes	213	97.3%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	219	100.0%
	Second anti-platelet agent	Yes	209	95.4%
		No	*	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	219	100.0%
University Hospital Waterford	ACEI or ARB	Yes	74	89.2%
		No	~	*
		Contraindicated	*	*
		Unknown	0	0.0%
		Total	83	100.0%
	Statin	Yes	81	97.6%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	83	100.0%
	Betablocker	Yes	73	88.0%
		No	~	*
		Contraindicated	*	*
		Unknown	0	0.0%
		Total	83	100.0%
	Aspirin	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	83	100.0%
	Second anti-platelet agent	Yes	79	95.2%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	83	100.0%
Letterkenny University Hospital	ACEI or ARB	Yes	45	88.2%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	51	100.0%
	Statin	Yes	*	*
		No	0	0.0%
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	51	100.0%
	Betablocker	Yes	40	78.4%
		No	~	*
		Contraindicated	*	*
		Unknown	0	0.0%
		Total	51	100.0%
	Aspirin	Yes	51	100.0%
		No	0	0.0%
		Contraindicated	0	0.0%

		Unknown	0	0.0%
		Total	51	100.0%
	Second anti-platelet agent	Yes	51	100.0%
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	51	100.0%
Beaumont Hospital	ACEI or ARB	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	28	100.0%
	Statin	Yes	28	100.0%
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	28	100.0%
	Betablocker	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	28	100.0%
	Aspirin	Yes	28	100.0%
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	28	100.0%
	Second anti-platelet agent	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	28	100.0%
Tallaght University Hospital	ACEI or ARB	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	17	100.0%
	Statin	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	17	100.0%
	Betablocker	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	17	100.0%
	Aspirin	Yes	17	100.0%
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	0	0.0%
		Total	17	100.0%
	Second anti-platelet agent	Yes	17	100.0%
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	0	0.0%

		Total	17	100.0%
St Vincent's University Hospital	ACEI or ARB	Yes	13	81.3%
		No	~	*
		Contraindicated	~	*
		Unknown	0	0.0%
		Total	16	100.0%
	Statin	Yes	*	*
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	~	*
		Total	16	100.0%
	Betablocker	Yes	*	*
		No	~	*
		Contraindicated	0	0.0%
		Unknown	~	*
		Total	16	100.0%
	Aspirin	Yes	14	87.5%
		No	0	0.0%
		Contraindicated	~	*
		Unknown	~	*
		Total	16	100.0%
	Second anti-platelet agent	Yes	*	*
		No	0	0.0%
		Contraindicated	0	0.0%
		Unknown	~	*
		Total	16	100.0%
Total	ACEI or ARB	Yes	1299	86.1%
		No	42	2.8%
		Contraindicated	140	9.3%
		Unknown	28	1.9%
		Total	1509	100.0%
	Statin	Yes	1476	97.8%
		No	12	0.8%
		Contraindicated	12	0.8%
		Unknown	9	0.6%
		Total	1509	100.0%
	Betablocker	Yes	1341	88.9%
		No	51	3.4%
		Contraindicated	95	6.3%
		Unknown	22	1.5%
		Total	1509	100.0%
	Aspirin	Yes	1476	97.8%
		No	*	*
		Contraindicated	25	1.7%
		Unknown	~	*
		Total	1509	100.0%
	Second anti-platelet agent	Yes	1465	97.1%
		No	*	*
		Contraindicated	30	2.0%
		Unknown	~	*
		Total	1509	100.0%

~ Denotes five cases or fewer.

* Further suppression required in order to prevent disclosure of five cases or fewer.

APPENDIX 8: SPECIFICATIONS FOR COMPOSITE VARIABLES

FIGURE 4.5: PROPORTION OF PATIENTS WITH A STEMI WITH PRIOR CORONARY HEART DISEASE, BY SEX, AND AGE GROUP

DATA POINT	SPECIFICATION
Coronary heart disease	A diagnosis of any of the following: prior MI, prior angina, prior PCI, or prior CABG.

FIGURE 4.8: PREVALENCE OF RISK FACTORS FOR PATIENTS WITH A STEMI, BY AGE AND SEX

DATA POINT	SPECIFICATION
Risk factor	If patient has a previous medical history of one or more: • prior cardiovascular disease (defined in Figure 4.5) • diabetes mellitus • current smoker • previous hypercholesterolaemia • previous hypertension

FIGURE 5.2: PROPORTION OF PATIENTS WITH A STEMI WITH A SYMPTOM ONSET TO CALL FOR HELP INTERVAL WITHIN 60 MINUTES, BY SEX

DATA POINT	SPECIFICATION
Symptom onset to call for help	• If patient arrived at a PCI centre directly by ambulance • Time interval in minutes was calculated based on date and time of symptom onset and date and time of call for help • Admissions for whom time information was not recorded or was recorded incorrectly were recoded as "Unknown" • Cases were recoded as "Unknown" if the time interval exceeded one week, or if the recorded date and time of the call for help occurred before the recorded date and time of symptom onset.

FIGURE 5.8: PROPORTION OF PATIENTS WITH A STEMI WHO ARRIVED AT A PCI CENTRE DIRECTLY BY AMBULANCE WITHIN THE TARGET TIME OF 90 MINUTES, BY PCI CENTRE

DATA POINT	SPECIFICATION
First medical contact to door (FMCD) for patients who arrived at a PCI centre directly by ambulance	• Only includes patients who arrived at a PCI centre directly by ambulance • Only includes patients who had their electrocardiogram (ECG) performed by ambulance personnel • Patients who had hospital or pre-hospital thrombolysis performed were excluded • Time interval in minutes was calculated based on date and time of first positive ECG and arrival at the PCI centre

	• Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded date and time of arrival at the PCI centre was recorded as before date and time of first positive ECG.

FIGURE 5.9: DOOR TO BALLOON TIME FOR PATIENTS BROUGHT DIRECTLY BY AMBULANCE TO A PCI CENTRE, BY PCI CENTRE

DATA POINT	SPECIFICATION
Door to balloon (DTB) time for patients admitted directly to a PCI centre by ambulance	• Only includes patients who arrived at a PCI centre directly by ambulance • Patients who had contraindications to PCI therapy were excluded • Only includes patients who had primary PCI therapy performed • Time interval in minutes was calculated based on date and time of arrival at the PCI centre and date and time of primary PCI reperfusion • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded date and time of primary PCI reperfusion was recorded as before date and time of arrival at the PCI centre.

FIGURE 5.10: PROPORTION OF PATIENTS WHO RECEIVED TIMELY PRIMARY PCI FOR THOSE ADMITTED DIRECTLY TO A PCI CENTRE, BY PCI CENTRE

DATA POINT	SPECIFICATION
First medical contact to balloon (FMCTB) for patients who arrived at a PCI centre directly by ambulance	• Only includes patients who arrived at a PCI centre directly by ambulance • Patients who had contraindications to PCI therapy were excluded • Only includes patients who had primary PCI therapy performed • Timely primary PCI reperfusion is defined as within 120 minutes or less • Time interval in minutes was calculated based on date and time of first positive ECG and date and time of primary PCI reperfusion • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded date and time of primary PCI reperfusion was recorded as before date and time of first positive ECG.

FIGURE 5.11: PROPORTION OF PATIENTS WITH A STEMI WHO SELF PRESENTED TO THE PCI CENTRE WHO RECEIVED AN ECG WITHIN TEN MINUTES, BY PCI CENTRE

DATA POINT	SPECIFICATION
Door to ECG for patients who self-presented to a PCI centre	• Only includes patients who self-presented to a PCI centre • Only includes patients who had their electrocardiogram (ECG) performed in emergency department (ED) • Patients who had hospital or pre-hospital thrombolysis performed were excluded

	• Time interval in minutes was calculated based on date and time of first positive ECG and arrival at the PCI centre • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded if date and time of arrival at the PCI centre was recorded as before date and time of first positive ECG.

FIGURE 5.12: PROPORTION OF TIMELY PRIMARY PCI FOR PATIENTS WHO SELF PRESENTED TO A PCI CENTRE, BY PCI CENTRE

DATA POINT	SPECIFICATION
First medical contact to balloon (FMCTB) for patients self-presented to a PCI centre	• Only includes patients who self-presented to a PCI centre • Patients who had contraindications to PCI therapy were excluded • Only includes patients who had primary PCI therapy performed • Timely primary PCI reperfusion is defined as within 60 minutes or less • Time interval in minutes was calculated based on date and time of arrival to a PCI centre and date and time of primary PCI reperfusion • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded date and time of primary PCI reperfusion was recorded as before date and time of arrival to a PCI centre.

FIGURE 5.13: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO THE PCI CENTRE AND WHO RECIEVED AN ECG WITHIN TEN MINUTES, BY PCI CENTRE AND REFERRING HOSPITAL

DATA POINT	SPECIFICATION
Door to ECG for patients who were transferred to a PCI centre	• Only includes patients who transferred to a PCI centre • Only includes patients who had their electrocardiogram (ECG) performed in emergency department (ED) • Time interval in minutes was calculated based on date and time of first positive ECG and arrival at first hospital • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded if date and time of arrival at the first hospital was recorded as before date and time of first positive ECG.

FIGURE 5.14: PROPORTION OF PATIENTS WHO RECEIVED TIMELY REPERFUSION WITH THROMBOLYSIS, PCI CENTRE

DATA POINT	REFERRAL SOURCE	SPECIFICATION
Timeliness of thrombolysis	Timeliness of pre-hospital thrombolysis	• Only includes patients who had pre-hospital thrombolysis

		• Timely thrombolysis is defined as within 30 minutes or less • Time interval in minutes was calculated based on date and time of first positive ECG and date and time of thrombolysis • Cases were recoded as "Unknown" if the recorded if date and time of thrombolysis was recorded as before date and time of first positive ECG.
	Timeliness of hospital thrombolysis for inpatients and inpatient transfers from another hospital	• Only includes patients who had hospital thrombolysis and were inpatients or inpatients transferred from another hospital • Timely thrombolysis is defined as within 30 minutes or less • Time interval in minutes was calculated based on date and time of first positive ECG and date and time of thrombolysis • Cases were recoded as "Unknown" if the recorded if date and time of thrombolysis was recorded as before date and time of first positive ECG.
	Timeliness of hospital thrombolysis for those who were not inpatients	• Only includes patients who are not defined as inpatients • Timely thrombolysis is defined as within 30 minutes or less • Time interval in minutes was calculated based on date and time of arrival at the first hospital and date and time of thrombolysis • Cases were recoded as "Unknown" if the recorded if date and time of thrombolysis was recorded as before date and time of arrival at the first hospital.

FIGURE 5.15: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO PCI CENTRE AND WHO ACHIEVED THE DOOR-IN DOOR-OUT TARGET OF 30 MINUTES OR LESS, BY PCI CENTRE AND REFERRING HOSPITAL

DATA POINT	SPECIFICATION
Door in Door Out (DIDO)	• If patient was transfer from other hospital to a PCI centre • If a patient was intended to receive a primary PCI • If the first positive ECG was performed an ambulance, hospital ED, or GP practice • Time interval in minutes was calculated based on date and time of arrival at the first hospital and date and time of when the patient left the first hospital for transfer to the PCI centre

DATA POINT	SPECIFICATION
	• Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded if date and time of when the patient left the first hospital for transfer to the PCI centre was before the date and time of arrival at the first hospital.

FIGURE 5.16: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO A PCI CENTRE AND WHO ARRIVED WITHIN THE TARGET TIME OF 90 MINUTES, BY PCI CENTRE AND YEAR

DATA POINT	SPECIFICATION
FMCTD for patients who were transferred to a PCI centre	• Only includes patients who were transferred to a PCI centre • Patients who had hospital or pre-hospital thrombolysis performed were excluded • Time interval in minutes was calculated based date and time of first positive ECG and arrival at the PCI centre • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded if date and time of arrival at the PCI centre was recorded as before date and time of first positive ECG.

FIGURE 5.17: DOOR TO BALLOON TIME FOR PATIENTS TRANSFERRED TO A PCI CENTRE, BY PCI CENTRE

DATA POINT	SPECIFICATION
DTB time for patients who were transferred to a PCI centre	• Only includes patients who were transferred to a PCI centre • Patients who had contraindications to PCI therapy were excluded • Only includes patients who had primary PCI therapy performed • Time interval in minutes was calculated based on date and time of arrival at the PCI centre and date and time of primary PCI reperfusion • Cases were recoded as "Unknown" if the time interval exceeded 48 hours, or if the recorded if date and time of primary PCI reperfusion was recorded as before date and time of arrival at the PCI centre.

FIGURE 5.18: PROPORTION OF TIMELY PRIMARY PCI FOR PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE, BY REFERRING HOSPITAL

DATA POINT	SPECIFICATION
First medical contact to balloon (FMCTB) for patients who were transferred to a PCI centre	• Only includes patients who were transferred to a PCI centre • Patients who had contraindications to PCI therapy were excluded • Only includes patients who had primary PCI therapy performed • Timely primary PCI reperfusion is defined as within 120 minutes or less • Time interval in minutes was calculated based on date and time of positive ECG and date and time of primary PCI reperfusion

| | | • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded date and time of primary PCI reperfusion was recorded as before date and time of positive ECG. |

FIGURE 5.19: PROPORTION OF TIMELY REPERFUSION, FOR PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE, BY REFERRING HOSPITAL (n=403)

DATA POINT	REFERRAL SOURCE	SPECIFICATION
Timeliness of Primary PCI	N/A	• Only includes patients who were transferred to a PCI centre • Patients who had contraindications to PCI therapy were excluded • Only includes patients who had primary PCI therapy performed • Timely primary PCI reperfusion is defined as within 120 minutes or less • Time interval in minutes was calculated based on date and time of positive ECG and date and time of primary PCI reperfusion • Cases were recoded as "Unknown" if the time interval exceeded 24 hours, or if the recorded date and time of primary PCI reperfusion was recorded as before date and time of positive ECG.
Timeliness of thrombolysis	Timeliness of pre-hospital thrombolysis	• Only includes patients who were transferred to a PCI centre Only includes patients who had pre-hospital thrombolysis • Timely thrombolysis is defined as within 30 minutes or less • Time interval in minutes was calculated based on date and time of first positive ECG and date and time of thrombolysis • Cases were recoded as "Unknown" if the recorded if date and time of thrombolysis was recorded as before date and time of first positive ECG.
	Timeliness of hospital thrombolysis for inpatients and inpatient transfers from another hospital	• Only includes patients who were transferred to a PCI centre • Only includes patients who had hospital thrombolysis and were inpatients or inpatients transferred from another hospital • Timely thrombolysis is defined as within 30 minutes or less

		• Time interval in minutes was calculated based on date and time of first positive ECG and date and time of thrombolysis • Cases were recoded as "Unknown" if the recorded if date and time of thrombolysis was recorded as before date and time of first positive ECG.
	Timeliness of hospital thrombolysis for those who were not inpatients	• Only includes patients who were transferred to a PCI centre • Only includes patients who are not defined as inpatients • Timely thrombolysis is defined as within 30 minutes or less • Time interval in minutes was calculated based on date and time of arrival at the first hospital and date and time of thrombolysis • Cases were recoded as "Unknown" if the recorded if date and time of thrombolysis was recorded as before date and time of arrival at the first hospital.

FIGURE 6.5: SURVIVAL STATUS AT 30 DAYS SURVIVAL BY GRACE STRATIFICATION AND DATA QUALITY, BY PCI CENTRE

DATA POINT	SPECIFICATION
30-day mortality	Includes the following data points: • survival status on discharge home • survival status at 30 days post-MI Excludes patients who were not resident in Ireland

FIGURE 6.6: DISCHARGE DESTINATION FROM PCI CENTRES, BY PCI CENTRE AND SEX

DATA POINT	SPECIFICATION
Home	If patient's discharge destination was home.
Transferred	If patient's discharge destination was: Transfer to Hospital – Emergency; Transfer to Hospital - Non-Emergency; Transfer to Non-Acute Hospital not in HIPE Hospital Listing – Emergency; Transfer to Non-Acute Hospital not in HIPE Hospital Listing - Non-Emergency
Other	If patient's discharge destination was: Self-discharge; Nursing home, convalescent home or long stay accommodation; Transfer to psychiatric hospital/unit; Died with post mortem; Died no post mortem; Transfer to rehabilitation facility (not in HIPE Hospital Listing); Hospice (not in HIPE Hospital Listing); Prison; Absconded; Other (e.g. Foster care); Temporary place of residence (e.g. hotel)