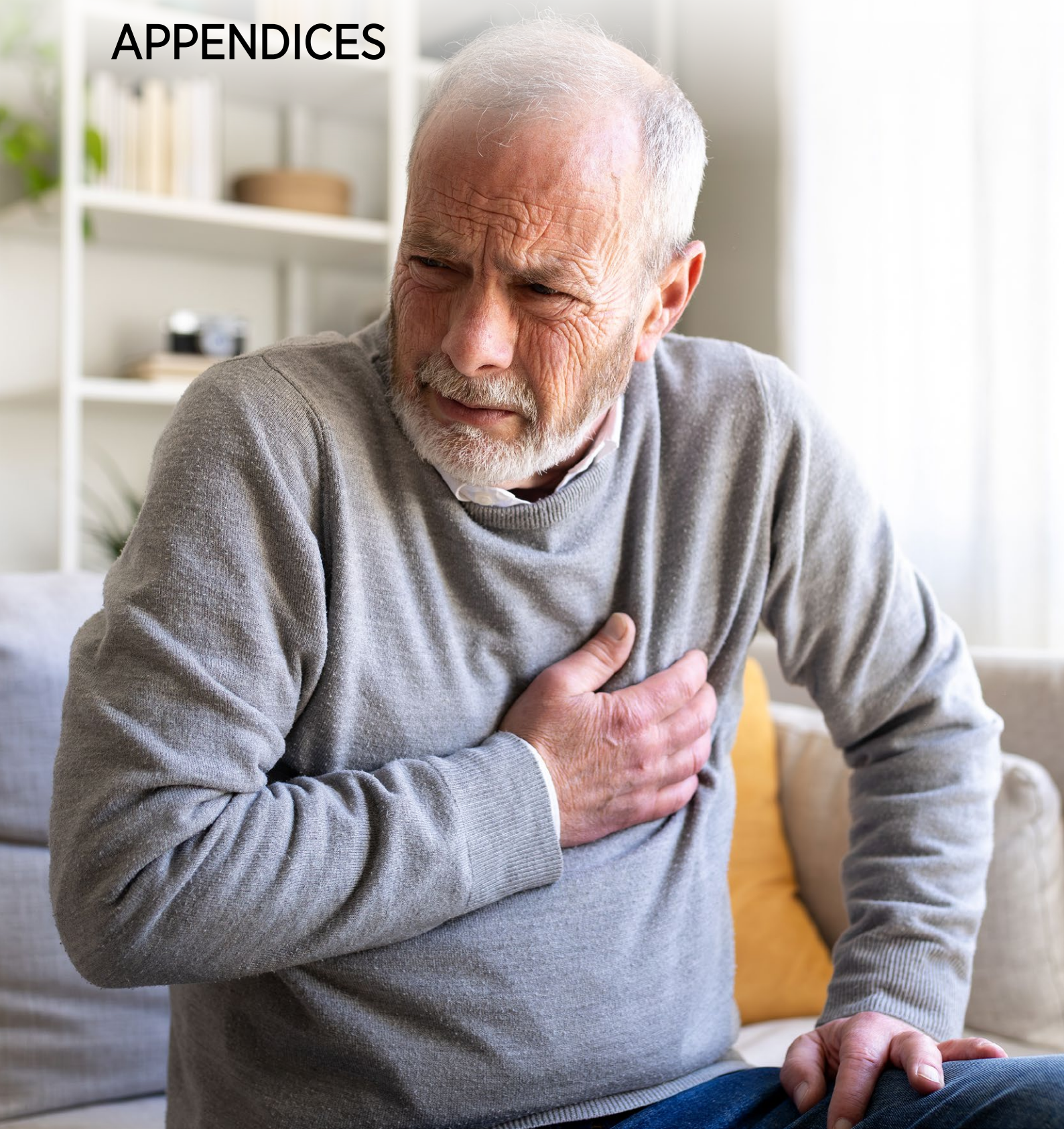


IRISH HEART ATTACK AUDIT

NATIONAL REPORT 2025

APPENDICES



IRISH HEART ATTACK AUDIT NATIONAL REPORT 2025

APPENDICES

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APPENDIX 1: AIMS 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 GOVERNANCE COMMITTEE

Irish Heart Attack Audit Governance Committee Attendance in 2025					
Representative	Name	14.03.25	06.06.25	12.09.25	12.12.25
Clinical Expert Consultant Cardiologist, MMUH	Dr Gavin Blake	x	x	x	x
Research Expertise Cardiac Research Group, RCSI	Prof. Robert Byrne	x	x	✓	✓
Patient and Public Interest	Paula Connor	n/a	✓	✓	✓
Clinical Expert Irish Cardiac Society	Prof. Jim Crowley	x	x	x	x
Healthcare Pricing Office	Jacqui Curley	x	x	x	✓
Programme Manager, National Heart Programme & CHAIR	Linda Drummond	x	✓	✓	x
Clinical Expert Consultant Cardiologist, MRH Portlaoise	Dr Sean Fleming	✓	✓	✓	✓
Clinical Psychologist, Beaumont Hospital	Jonathan Gallagher	x	x	x	x
Senior Accountable Healthcare Manager	Paul Gallagher	✓	✓	x	✓
Clinical Lead, National Heart Programme	Dr Joseph Galvin	x	✓	✓	✓
Healthcare Professional Expert Cardiac Rehabilitation	Stephen Giffney	x	✓	✓	✓
Clinical Expert, Public Health Expertise	Siobhan Jennings	x	✓	✓	✓
Consultant Cardiologist & Chair of Coronary Heart Attack Ireland Register	Dr Peter Kearney	x	x	x	x
Clinical Expert Consultant Cardiologist, BH	Dr Mark Kennedy	x	x	✓	x
IHAA Audit Coordinator	Sreeji Kurup	x	x	✓	x
Patient and Public Interest	Michael Madigan	✓	✓	✓	x
Clinical Expert Consultant Cardiologist, SJH	Dr Andrew Maree	x	x	x	x
IHAA Clinical Lead	Prof. Ronan Margey	x	✓	✓	✓

Heartbeat Audit Assistant Manager	Yvonne McConnon	✓	✓	✓	✓
Cardiovascular Audit Programme Manager	Joan McCormack	✓	✓	✓	✓
Research Expertise Consultant Cardiologist, CUH	Dr Eugene McFadden	x	✓	✓	x
National Ambulance Service, Deputy Clinical Director	Dr David Menzies	n/a	✓	✓	✓
Consultant Cardiologist	Dr Ian Pearson	x	x	x	✓
Audit Coordinator	April Vilalobos	x	x	✓	✓

APPENDIX 3: METADATA FOR KEY QUALITY INDICATORS

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

Numerator	Denominator
Those that received reperfusion therapy (primary PCI or thrombolysis) (<i>REPER_THERAPY_TYPE=1, 2 or 3</i>)	Number of eligible STEMI patients Inclusion criteria: - Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) - Patient is not contraindicated to reperfusion therapy (<i>REPER_THERAPY_CONTRA=2</i>)

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

Numerator	Denominator
Those that received timely primary PCI (<i>REPER_THERAPY_TYPE=3</i>) Definition: Time of reperfusion is less than 120 mins from first positive ECG	Number of eligible STEMI patients that had a primary PCI that arrived directly (via ambulance, self-presentation or already inpatient) to a primary PCI centre Inclusion criteria: Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>)

	• Patient is not contraindicated to reperfusion therapy (<i>REPER_THERAPY_CONTRA=2</i>) • Patient's source of arrival to PCI centre is direct via ambulance, self-presentation or already inpatient (<i>REF_SOURCE=1,2 or 5</i>) • Patient received a primary PCI (<i>REPER_THERAPY_TYPE=3</i>) • Reperfusion date/time and first positive ECG date/time is recorded
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KQI 3: Percentage of patients with STEMI who had timely primary PCI – transferred to a Primary PCI centre

Numerator	Denominator
Those that received timely primary PCI (<i>REPER_THERAPY_TYPE=3</i>) Definition: Time of reperfusion is less than 120 mins from first positive ECG	Number of eligible STEMI patients that had a primary PCI that were transferred to a primary PCI centre Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) • Patient is not contraindicated to reperfusion therapy (<i>REPER_THERAPY_CONTRA=2</i>) • Patient's source of arrival to PCI centre is via transfer from another hospital (<i>REF_SOURCE= 4 or 6</i>). • Patient received a primary PCI (<i>REPER_THERAPY_TYPE=3</i>) • Reperfusion date/time and first positive ECG date/time is recorded

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

Numerator	Denominator
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Those that had primary PCI by radial access (<i>REPER_THERAPY_TYPE=3 & PERC_ART_ACCESS=3</i>)	Number of eligible STEMI patients that had a primary PCI Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) • Patient is not contraindicated to reperfusion therapy (<i>REPER_THERAPY_CONTRA=2</i>) • Patient received a primary PCI (<i>REPER_THERAPY_TYPE=3</i>)
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KQI 5: Percentage of patients with a STEMI who had an appropriate secondary prevention discharge bundle prescribed

Numerator	Denominator
Those that had an appropriate secondary prevention discharge bundle prescribed (<i>ACEI_ARB_DIS, SATIN_DISCHARGE, BETA_DISCHARGE, ASP_DISCHARGE, OTHER_ANTI_PLAT= 1 or 3</i>) Definition: Patient prescribed, or contraindicated to, ACEI or ARB, betablocker, aspirin, statin, another anti-platelet.	Number of STEMI patients alive at discharge Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) • Patient was alive at discharge from hospital (<i>SURVIVAL_STATUS_DIS is not =2</i>)

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

Numerator	Denominator
Those that were offered smoking cessation advice (<i>SMOKING_CESSATION=1</i>)	Number of STEMI patients who are current smokers Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>)

	• Patient is a current smoker (<i>SMOKE=3 & SMOKING_CESSATION is not=3</i>) • Patient was alive at discharge from hospital (<i>SURVIVAL_STATUS_DIS is not =2</i>)
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KQI 7: Percentage of patients with a STEMI referred for cardiac rehabilitation phase 3

Numerator	Denominator
Those that were referred for cardiac rehabilitation phase 3 (<i>REF_CARDIAC_REHAB=1</i>)	Number of eligible STEMI patients Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) • Patient was alive at discharge from hospital (<i>SURVIVAL_STATUS_DIS is not =2</i>) • Patient is an Irish resident (<i>REF_CARDIAC_REHAB is not =5</i>) • Patient is eligible for rehabilitation (<i>REF_CARDIAC_REHAB is not=3</i>) • Patient did not decline referral (<i>REF_CARDIAC_REHAB is not =2</i>)

KQI 8: Percentage completeness of survival status at 30 days

Numerator	Denominator
Those that have survival status at 30 days recorded (<i>SURVIVAL_STATUS_30_DAYS = 1 or 2</i>) Inclusion: • Patients who died while in hospital are recoded to (<i>SURVIVAL_STATUS_DIS=2</i>)	Number of STEMI patients Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) • Patient is an Irish resident (<i>REF_CARDIAC_REHAB is not =5</i>)

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

Numerator	Denominator
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Those that have a date recorded for cardiac rehabilitation phase 3 (<i>DATE_FIRST_PHASE3_CR not blank</i>)	Number of STEMI patients referred for cardiac rehabilitation phase 3 Inclusion criteria: • Have a discharge diagnosis of STEMI (<i>DIS_DIAG=1</i>) • Patient was referred for cardiac rehabilitation phase 3 (<i>REF_CARDIAC_REHAB=1</i>) • Patient was alive at discharge from hospital (<i>SURVIVAL_STATUS_DIS is not =2</i>)
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APPENDIX 4: FREQUENCY TABLES

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FIGURE 4.1: PROPORTION OF HEARTBEAT CASE SUBMISSIONS, BY PCI CENTRE (N=1931)

PCI Centre	n	%
Beaumont Hospital	26	1.3%
Cork University Hospital	220	11.4%
Letterkenny University Hospital	56	2.9%
Mater Misericordiae University Hospital	413	21.4%
St James's Hospital	503	26.0%
St Vincent's University Hospital	24	1.2%
Tallaght University Hospital	25	1.3%
University Hospital Galway	255	13.2%
University Hospital Limerick	261	13.5%
University Hospital Waterford	148	7.7%
Total	1931	100.0%

FIGURE 4.2: DISCHARGE DIAGNOSIS, BY PCI CENTRE (N=1931)

PCI Centre	STEMI		Alternative diagnosis		Other/Unknown		Total	
	n	%	n	%	n	%	n	%
Beaumont Hospital	*	*	~	*	0	0.0%	26	100.0%
Cork University Hospital	207	94.1%	*	*	~	*	220	100.0%
Letterkenny University Hospital	54	96.4%	~	*	~	*	56	100.0%
Mater Misericordiae University Hospital	352	85.2%	41	9.9%	20	4.8%	413	100.0%
St James's Hospital	448	89.1%	44	8.7%	11	2.2%	503	100.0%
St Vincent's University Hospital	19	79.2%	~	*	~	*	24	100.0%
Tallaght University Hospital	*	*	~	*	~	*	25	100.0%
University Hospital Galway	205	80.4%	34	13.3%	16	6.3%	255	100.0%
University Hospital Limerick	190	72.8%	*	*	~	*	261	100.0%
University Hospital Waterford	127	85.8%	6	4.1%	15	10.1%	148	100.0%
Total	1642	85.0%	212	11.0%	77	4.0%	1931	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=1642)

Sex	Age	n	%
Male	≤40 years	35	2.7%
	41–64 years	703	55.1%
	65–79 years	426	33.4%
	≥80 years	113	8.8%
	Total	1277	100.0%
Female	≤40 years	8	2.2%
	41–64 years	133	36.4%
	65–79 years	150	41.1%
	≥80 years	74	20.3%
	Total	365	100.0%
Total	≤40 years	43	2.6%
	41–64 years	836	50.9%
	65–79 years	576	35.1%
	≥80 years	187	11.4%
	Total	1642	100.0%

~ Denotes five cases or fewer.

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

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

Sex	Comorbidities		n	%
Male	Previous MI	Yes	155	12.1%
		No	1121	87.9%
		Total	1276	100.0%
	Previous peripheral vascular disease	Yes	51	4.0%
		No	1223	96.0%
		Total	1274	100.0%
	Previous angina	Yes	150	11.8%
		No	1126	88.2%
		Total	1276	100.0%
	Previous cerebrovascular disease	Yes	58	4.6%
		No	1213	95.4%
		Total	1271	100.0%
	Previous chronic renal failure	Yes	46	3.6%
		No	1229	96.4%

	Previous chronic lung disease	Total	1275	100.0%
		Yes	110	8.7%
		No	1161	91.3%
		Total	1271	100.0%
	Previous PCI	Yes	169	13.3%
		No	1106	86.7%
		Total	1275	100.0%
	Previous CABG	Yes	37	2.9%
		No	1238	97.1%
		Total	1275	100.0%
	Previous other heart surgery	Yes	*	*
		No	*	*
		Total	1276	100.0%
Female	Previous MI	Yes	38	10.5%
		No	325	89.5%
		Total	363	100.0%
	Previous peripheral vascular disease	Yes	23	6.3%
		No	341	93.7%
		Total	364	100.0%
	Previous angina	Yes	35	9.6%
		No	330	90.4%
		Total	365	100.0%
	Previous cerebrovascular disease	Yes	25	6.9%
		No	339	93.1%
		Total	364	100.0%
	Previous chronic renal failure	Yes	26	7.1%
		No	339	92.9%
		Total	365	100.0%
	Previous chronic lung disease	Yes	51	14.0%
		No	314	86.0%
		Total	365	100.0%
	Previous PCI	Yes	38	10.4%
		No	327	89.6%
		Total	365	100.0%
	Previous CABG	Yes	8	2.2%
		No	356	97.8%
		Total	364	100.0%
	Previous other heart surgery	Yes	~	*

		No	*	*
		Total	364	100.0%
Total	Previous MI	Yes	193	11.8%
		No	1446	88.2%
		Total	1639	100.0%
	Previous peripheral vascular disease	Yes	74	4.5%
		No	1564	95.5%
		Total	1638	100.0%
	Previous angina	Yes	185	11.3%
		No	1456	88.7%
		Total	1641	100.0%
	Previous cerebrovascular disease	Yes	83	5.1%
		No	1552	94.9%
		Total	1635	100.0%
	Previous chronic renal failure	Yes	72	4.4%
		No	1568	95.6%
		Total	1640	100.0%
	Previous chronic lung disease	Yes	161	9.8%
		No	1475	90.2%
		Total	1636	100.0%
	Previous PCI	Yes	207	12.6%
		No	1433	87.4%
		Total	1640	100.0%
	Previous CABG	Yes	45	2.7%
		No	1594	97.3%
		Total	1639	100.0%
	Previous other heart surgery	Yes	18	1.1%
		No	1622	98.9%
		Total	1640	100.0%

~ Denotes five cases or fewer.

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

FIGURE 4.5: PROPORTION OF PATIENTS WITH A STEMI WITH PRIOR CORONARY HEART DISEASE, BY SEX, AND AGE GROUP (N=1642)

Age Group	Prior CHD	Male		Female		Total	
		n	%	n	%	n	%
≤40 years	At least one CHD	0	0.0%	~	*	~	*
	No CHD	35	100.0%	*	*	*	*

	Mixture of Nos & Unknowns	0	0.0%	0	0.0%	0	0.0%
	All unknowns	0	0.0%	0	0.0%	0	0.0%
	Total	35	100.0%	8	100.0%	43	100.0%
41–64 years	At least one CHD	*	*	*	*	*	*
	No CHD	609	86.6%	*	*	*	*
	Mixture of Nos & Unknowns	~	*	0	0.0%	~	*
	All unknowns	0	0.0%	0	0.0%	0	0.0%
	Total	703	100.0%	133	100.0%	836	100.0%
65–79 years	At least one CHD	101	23.7%	32	21.3%	133	23.1%
	No CHD	325	76.3%	118	78.7%	443	76.9%
	Mixture of Nos & Unknowns	0	0.0%	0	0.0%	0	0.0%
	All unknowns	0	0.0%	0	0.0%	0	0.0%
	Total	426	100.0%	150	100.0%	576	100.0%
≥80 years	At least one CHD	*	*	14	18.9%	*	*
	No CHD	65	57.5%	60	81.1%	125	66.8%
	Mixture of Nos & Unknowns	~	*	0	0.0%	~	*
	All unknowns	0	0.0%	0	0.0%	0	0.0%
	Total	113	100.0%	74	100.0%	187	100.0%
Total	At least one CHD	*	*	65	17.8%	*	*
	No CHD	1034	81.0%	300	82.2%	1334	81.2%
	Mixture of Nos & Unknowns	~	*	0	0.0%	~	*
	All unknowns	0	0.0%	0	0.0%	0	0.0%
	Total	1277	100.0%	365	100.0%	1642	100.0%

~ Denotes five cases or fewer.

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FIGURE 4.6: DIABETES PROFILE OF PATIENTS WITH A STEMI, BY SEX, AND AGE GROUP (N=1642)

Age Group	Diabetes Profile	Male		Female		Total	
		n	%	n	%	n	%
≤40 years	Not diabetic	33	94.3%	8	100.0%	41	95.3%
	Diabetes (diet control)	0	0.0%	0	0.0%	0	0.0%
	Diabetes (oral medications)	~	*	0	0.0%	~	*
	Diabetes (insulin)	0	0.0%	0	0.0%	0	0.0%
	Diabetes (medication unknown)	~	*	0	0.0%	~	*
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	35	100.0%	8	100.0%	43	100.0%
41–64 years	Not diabetic	583	82.9%	107	80.5%	690	82.5%

	Diabetes (diet control)	12	1.7%	0	0.0%	12	1.4%
	Diabetes (oral medications)	*	*	*	*	24	2.9%
	Diabetes (insulin)	*	*	~	*	13	1.6%
	Diabetes (medication unknown)	71	10.1%	18	13.5%	89	10.6%
	Unknown	*	*	~	*	8	1.0%
	Total	703	100.0%	133	100.0%	836	100.0%
65–79 years	Not diabetic	340	79.8%	115	76.7%	455	79.0%
	Diabetes (diet control)	~	*	0	0.0%	~	*
	Diabetes (oral medications)	14	3.3%	9	6.0%	23	4.0%
	Diabetes (insulin)	~	*	~	*	*	*
	Diabetes (medication unknown)	59	13.8%	20	13.3%	79	13.7%
	Unknown	~	*	~	*	*	*
	Total	426	100.0%	150	100.0%	576	100.0%
≥80 years	Not diabetic	76	67.3%	50	67.6%	126	67.4%
	Diabetes (diet control)	~	*	~	*	*	*
	Diabetes (oral medications)	~	*	~	*	*	*
	Diabetes (insulin)	~	*	~	*	~	*
	Diabetes (medication unknown)	25	22.1%	*	*	*	*
	Unknown	~	*	0	0.0%	~	*
	Total	113	100.0%	74	100.0%	187	100.0%
Total	Not diabetic	1032	80.8%	280	76.7%	1312	79.9%
	Diabetes (diet control)	*	*	~	*	24	1.5%
	Diabetes (oral medications)	36	2.8%	18	4.9%	54	3.3%
	Diabetes (insulin)	18	1.4%	8	2.2%	26	1.6%
	Diabetes (medication unknown)	156	12.2%	52	14.2%	208	12.7%
	Unknown	*	*	~	*	18	1.1%
	Total	1277	100.0%	365	100.0%	1642	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=1642)

Age Group	Smoking Status	Male		Female		Total	
		n	%	n	%	n	%
≤40 years	Currently smoke	21	60.0%	6	75.0%	27	62.8%
	Formerly smoked	~	*	0	0.0%	~	*
	Never smoked	8	22.9%	2	25.0%	10	23.3%
	Unknown	~	*	0	0.0%	~	*

	Total	35	100.0%	8	100.0%	43	100.0%
41–64 years	Currently smoke	347	49.4%	74	55.6%	421	50.4%
	Formerly smoked	*	*	*	*	177	21.2%
	Never smoked	179	25.5%	28	21.1%	207	24.8%
	Unknown	*	*	~	*	31	3.7%
	Total	703	100.0%	133	100.0%	836	100.0%
65–79 years	Currently smoke	*	*	*	*	142	24.7%
	Formerly smoked	165	38.7%	41	27.3%	206	35.8%
	Never smoked	144	33.8%	58	38.7%	202	35.1%
	Unknown	*	*	~	*	26	4.5%
	Total	426	100.0%	150	100.0%	576	100.0%
≥80 years	Currently smoke	*	*	*	*	14	7.5%
	Formerly smoked	*	*	*	*	*	*
	Never smoked	48	42.5%	44	59.5%	92	49.2%
	Unknown	10	8.8%	*	*	*	*
	Total	113	100.0%	74	100.0%	187	100.0%
Total	Currently smoke	471	36.9%	133	36.4%	604	36.8%
	Formerly smoked	366	28.7%	85	23.3%	451	27.5%
	Never smoked	379	29.7%	132	36.2%	511	31.1%
	Unknown	61	4.8%	15	4.1%	76	4.6%
	Total	1277	100.0%	365	100.0%	1642	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=1642)

Sex	Age Group	One risk factor		Two risk factors		Three risk factors		Four risk factors		Five risk factors	
		n	%	n	%	n	%	n	%	n	%
Male	≤40 years	*	*	*	*	~	*	~	*	0	0.0%
	41–64 years	204	29.0%	200	28.4%	*	*	54	7.7%	*	*
	65–79 years	99	23.2%	105	24.6%	87	20.4%	57	13.4%	*	*
	≥80 years	*	*	*	*	*	*	*	*	~	*
	Total	337	26.4%	345	27.0%	248	19.4%	131	10.3%	45	3.5%
Female	≤40 years	~	*	~	*	0	0.0%	~	*	0	0.0%
	41–64 years	28	21.1%	42	31.6%	*	*	22	16.5%	~	*
	65–79 years	30	20.0%	40	26.7%	29	19.3%	31	20.7%	~	*
	≥80 years	*	*	*	*	*	*	*	*	~	*
	Total	76	20.8%	105	28.8%	64	17.5%	68	18.6%	8	2.2%

Total	≤40 years	17	39.5%	14	32.6%	~	*	~	*	0	0.0%
	41–64 years	232	27.8%	242	28.9%	148	17.7%	76	9.1%	27	3.2%
	65–79 years	129	22.4%	145	25.2%	116	20.1%	88	15.3%	*	*
	≥80 years	35	18.7%	49	26.2%	*	*	*	*	~	*
	Total	413	25.2%	450	27.4%	312	19.0%	199	12.1%	53	3.2%
		Six risk factors		No risk factor		Unknown		Total			
		n	%	n	%	n	%	n	%		
Male	≤40 years	0	0.0%	~	*	~	*	35	100.0%		
	41–64 years	~	*	*	*	*	*	703	100.0%		
	65–79 years	~	*	48	11.3%	*	*	426	100.0%		
	≥80 years	0	0.0%	*	*	~	*	113	100.0%		
	Total	~	*	131	10.3%	*	*	1277	100.0%		
Female	≤40 years	0	0.0%	0	0.0%	0	0.0%	8	100.0%		
	41–64 years	~	*	*	*	~	*	133	100.0%		
	65–79 years	~	*	14	9.3%	~	*	150	100.0%		
	≥80 years	0	0.0%	*	*	~	*	74	100.0%		
	Total	~	*	33	9.0%	*	*	365	100.0%		
Total	≤40 years	0	0.0%	~	*	~	*	43	100.0%		
	41–64 years	~	*	83	9.9%	*	*	836	100.0%		
	65–79 years	~	*	62	10.8%	*	*	576	100.0%		
	≥80 years	0	0.0%	*	*	*	*	187	100.0%		
	Total	8	0.5%	164	10.0%	43	2.6%	1642	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=1642)

PCI Centre	Referral Source	Male		Female		Total	
		n	%	n	%	n	%
Beaumont Hospital	Direct via ambulance	~	*	0	0.0%	~	*
	Self-presentation	*	*	~	*	*	*
	Total	*	*	~	*	21	100.0%
Cork University Hospital	Direct via ambulance	107	65.2%	32	74.4%	139	67.1%
	Self-presentation	*	*	~	*	*	*
	Transfer from other hospital	30	18.3%	8	18.6%	38	18.4%
	Already inpatient in PCI centre	~	*	~	*	~	*
	Total	164	100.0%	43	100.0%	207	100.0%
	Direct via ambulance	*	*	*	*	35	64.8%
	Self-presentation	~	*	0	0.0%	~	*

Letterkenny University Hospital	Transfer from other hospital	*	*	~	*	*	*
	Total	45	100.0%	9	100.0%	54	100.0%
Mater Misericordiae University Hospital	Direct via ambulance	145	52.2%	41	55.4%	186	52.8%
	Self-presentation	*	*	~	*	*	*
	Transfer from other hospital	125	45.0%	30	40.5%	155	44.0%
	Already inpatient in PCI centre	~	*	~	*	~	*
	Total	278	100.0%	74	100.0%	352	100.0%
St James's Hospital	Direct via ambulance	169	51.2%	62	52.5%	231	51.6%
	Self-presentation	*	*	*	*	*	*
	Transfer from other hospital	143	43.3%	43	36.4%	186	41.5%
	Already inpatient in PCI centre	~	*	~	*	~	*
	Total	330	100.0%	118	100.0%	448	100.0%
St Vincent's University Hospital	Direct via ambulance	~	*	~	*	6	31.6%
	Self-presentation	~	*	~	*	6	31.6%
	Transfer from other hospital	~	*	0	0.0%	~	*
	Already inpatient in PCI centre	0	0.0%	~	*	~	*
	Other/unknown	~	*	0	0.0%	~	*
	Total	13	100.0%	6	100.0%	19	100.0%
Tallaght University Hospital	Direct via ambulance	~	*	0	0.0%	~	*
	Self-presentation	*	*	~	*	11	57.9%
	Transfer from other hospital	~	*	~	*	~	*
	Other/unknown	~	*	0	0.0%	~	*
	Total	*	*	~	*	19	100.0%
University Hospital Galway	Direct via ambulance	86	51.8%	16	41.0%	102	49.8%
	Self-presentation	*	*	*	*	28	13.7%
	Transfer from other hospital	55	33.1%	15	38.5%	70	34.1%
	Already inpatient in PCI centre	~	*	~	*	~	*
	Other/unknown	0	0.0%	~	*	~	*
	Total	166	100.0%	39	100.0%	205	100.0%
University Hospital Limerick	Direct via ambulance	104	68.9%	29	74.4%	133	70.0%
	Self-presentation	*	*	~	*	21	11.1%
	Transfer from other hospital	*	*	*	*	30	15.8%
	Already inpatient in PCI centre	~	*	0	0.0%	~	*
	Other/unknown	~	*	0	0.0%	~	*
	Total	151	100.0%	39	100.0%	190	100.0%
	Direct via ambulance	51	52.0%	16	55.2%	67	52.8%
	Self-presentation	10	10.2%	0	0.0%	10	7.9%

University Hospital Waterford	Transfer from other hospital	28	28.6%	13	44.8%	41	32.3%
	Already inpatient in PCI centre	~	*	0	0.0%	~	*
	Other/unknown	*	*	0	0.0%	*	*
	Total	98	100.0%	29	100.0%	127	100.0%
Total	Direct via ambulance	703	55.1%	203	55.6%	906	55.2%
	Self-presentation	124	9.7%	32	8.8%	156	9.5%
	Transfer from other hospital	424	33.2%	120	32.9%	544	33.1%
	Already inpatient in PCI centre	*	*	*	*	23	1.4%
	Other/unknown	*	*	~	*	13	0.8%
	Total	1277	100.0%	365	100.0%	1642	100.0%

~ Denotes five cases or fewer.

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FIGURE 5.2: PROPORTION OF PATIENTS WITH A STEMI WITH A SYMPTOM ONSET TO CALL FOR HELP INTERVAL WITHIN 60 MINUTES, BY SEX (n=906)

Age Group	Sex	Time	n	%
19–40 years	Male	60 minutes or less	11	61.1%
		61 minutes or more	*	*
		Unknown/missing	0	0.0%
		Total	*	*
	Female	60 minutes or less	0	0.0%
		61 minutes or more	~	*
		Unknown/missing	0	0.0%
		Total	~	*
	Total	60 minutes or less	11	55.0%
		61 minutes or more	9	45.0%
		Unknown/missing	0	0.0%
		Total	20	100.0%
41–64 years	Male	60 minutes or less	*	*
		61 minutes or more	162	43.0%
		Unknown/missing	*	*
		Total	377	100.0%
	Female	60 minutes or less	*	*
		61 minutes or more	38	57.6%
		Unknown/missing	~	*
		Total	66	100.0%
	Total	60 minutes or less	223	50.3%

		61 minutes or more	200	45.1%
		Unknown/missing	20	4.5%
		Total	443	100.0%
65–79 years	Male	60 minutes or less	*	*
		61 minutes or more	106	43.8%
		Unknown/missing	*	*
		Total	242	100.0%
	Female	60 minutes or less	*	*
		61 minutes or more	47	51.6%
		Unknown/missing	~	*
		Total	91	100.0%
	Total	60 minutes or less	158	47.4%
		61 minutes or more	153	45.9%
		Unknown/missing	22	6.6%
		Total	333	100.0%
≥80 years	Male	60 minutes or less	*	*
		61 minutes or more	31	47.0%
		Unknown/missing	*	*
		Total	66	100.0%
	Female	60 minutes or less	*	*
		61 minutes or more	27	61.4%
		Unknown/missing	~	*
		Total	44	100.0%
	Total	60 minutes or less	43	39.1%
		61 minutes or more	58	52.7%
		Unknown/missing	9	8.2%
		Total	110	100.0%
Total	Male	60 minutes or less	356	50.6%
		61 minutes or more	306	43.5%
		Unknown/missing	41	5.8%
		Total	703	100.0%
	Female	60 minutes or less	79	38.9%
		61 minutes or more	114	56.2%
		Unknown/missing	10	4.9%
		Total	203	100.0%
	Total	60 minutes or less	435	48.0%
		61 minutes or more	420	46.4%
		Unknown/missing	51	5.6%

		Total	906	100.0%
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~ Denotes five cases or fewer.

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

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=1351)

PCI Centre	Ambulance off-load	Direct		Transferred	
		n	%	n	%
Cork University Hospital	Ambulance off-load at cath lab	91	65.5%	20	76.9%
	Ambulance off-load at ED	48	34.5%	6	23.1%
	Unknown	0	0.0%	0	0.0%
	Total	139	100.0%	26	100.0%
Letterkenny University Hospital	Ambulance off-load at cath lab	35	100.0%	17	100.0%
	Ambulance off-load at ED	0	0.0%	0	0.0%
	Unknown	0	0.0%	0	0.0%
	Total	35	100.0%	17	100.0%
Mater Misericordiae University Hospital	Ambulance off-load at cath lab	134	72.0%*	*	
	Ambulance off-load at ED	52	28.0%~	*	
	Unknown	0	0.0%	0	0.0%
	Total	186	100.0%	155	100.0%
Non-designated 9–5 PCI centres	Ambulance off-load at cath lab	0	0.0%~	*	
	Ambulance off-load at ED	13	100.0%~	*	
	Unknown	0	0.0%	0	0.0%
	Total	13	100.0%	6	100.0%
St James's Hospital	Ambulance off-load at cath lab	160	69.3%	112	85.5%
	Ambulance off-load at ED	71	30.7%	19	14.5%
	Unknown	0	0.0%	0	0.0%
	Total	231	100.0%	131	100.0%
University Hospital Galway	Ambulance off-load at cath lab	80	79.2%	32	76.2%
	Ambulance off-load at ED	21	20.8%	10	23.8%
	Unknown	0	0.0%	0	0.0%
	Total	101	100.0%	42	100.0%
University Hospital Limerick	Ambulance off-load at cath lab	77	58.8%*	*	
	Ambulance off-load at ED	54	41.2%~	*	

	Unknown	0	0.0%	0	0.0%
	Total	131	100.0%	29	100.0%
University Hospital Waterford	Ambulance off-load at cath lab	55	82.1%	41	100.0%
	Ambulance off-load at ED	12	17.9%	0	0.0%
	Unknown	0	0.0%	0	0.0%
	Total	67	100.0%	41	100.0%
Total	Ambulance off-load at cath lab	632	70.0%	404	90.4%
	Ambulance off-load at ED	271	30.0%	43	9.6%
	Unknown	0	0.0%	0	0.0%
	Total	903	100.0%	447	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, 2017–2025 (N=13479)

Year	Primary PCI	Thrombolysis	No reperfusion required	Contraindicated	Unknown
2025	78%	6%	5%	11%	0%
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=1642)

PCI Centre	Reperfusion therapy type	Male		Female		Total	
		n	%	n	%	n	%
Beaumont Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%
	Primary PCI	*	*	~	*	*	*
	No reperfusion required	~	*	0	0.0%	~	*
	Contraindicated	0	0.0%	0	0.0%	0	0.0%

	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	*	*	~	*	21	100.0%
Cork University Hospital	Thrombolysis	*	*	~	*	12	5.8%
	Primary PCI	125	76.2%	26	60.5%	151	72.9%
	No reperfusion required	~	*	~	*	8	3.9%
	Contraindicated	26	15.9%	10	23.3%	36	17.4%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	164	100.0%	43	100.0%	207	100.0%
Letterkenny University Hospital	Thrombolysis	0	0.0%	~	*	~	*
	Primary PCI	*	*	*	*	51	94.4%
	No reperfusion required	0	0.0%	0	0.0%	0	0.0%
	Contraindicated	~	*	~	*	~	*
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	45	100.0%	9	100.0%	54	100.0%
Mater Misericordiae University Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%
	Primary PCI	227	81.7%	58	78.4%	285	81.0%
	No reperfusion required	*	*	~	*	17	4.8%
	Contraindicated	*	*	*	*	50	14.2%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	278	100.0%	74	100.0%	352	100.0%
St James's Hospital	Thrombolysis	46	13.9%	9	7.6%	55	12.3%
	Primary PCI	248	75.2%	96	81.4%	344	76.8%
	No reperfusion required	*	*	~	*	*	*
	Contraindicated	*	*	*	*	30	6.7%
	Unknown	0	0.0%	~	*	~	*
	Total	330	100.0%	118	100.0%	448	100.0%
St Vincent's University Hospital	Thrombolysis	0	0.0%	0	0.0%	0	0.0%
	Primary PCI	13	100.0%	6	100.0%	19	100.0%
	No reperfusion required	0	0.0%	0	0.0%	0	0.0%
	Contraindicated	0	0.0%	0	0.0%	0	0.0%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	13	100.0%	6	100.0%	19	100.0%
Tallaght University Hospital	Thrombolysis	~	*	0	0.0%	~	*
	Primary PCI	*	*	0	0.0%	*	*
	No reperfusion required	0	0.0%	0	0.0%	0	0.0%
	Contraindicated	*	*	~	*	12	63.2%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	*	*	~	100.0%	19	100.0%

University Hospital Galway	Thrombolysis	*	*	~	*	28	13.7%
	Primary PCI	109	65.7%	21	53.8%	130	63.4%
	No reperfusion required	*	*	~	*	19	9.3%
	Contraindicated	18	10.8%	10	25.6%	28	13.7%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	166	100.0%	39	100.0%	205	100.0%
University Hospital Limerick	Thrombolysis	~	*	0	0.0%	~	*
	Primary PCI	134	88.7%	32	82.1%	166	87.4%
	No reperfusion required	~	*	0	0.0%	~	*
	Contraindicated	12	7.9%	7	17.9%	19	10.0%
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	151	100.0%	39	100.0%	190	100.0%
University Hospital Waterford	Thrombolysis	~	*	0	0.0%	~	*
	Primary PCI	*	*	*	*	115	90.6%
	No reperfusion required	*	*	~	*	*	*
	Contraindicated	~	*	0	0.0%	~	*
	Unknown	0	0.0%	0	0.0%	0	0.0%
	Total	98	100.0%	29	100.0%	127	100.0%
Total	Thrombolysis	85	6.7%	16	4.4%	101	6.2%
	Primary PCI	1009	79.0%	278	76.2%	1287	78.4%
	No reperfusion required	54	4.2%	*	*	*	*
	Contraindicated	129	10.1%	50	13.7%	179	10.9%
	Unknown	0	0.0%	~	*	~	*
	Total	1277	100.0%	365	100.0%	1642	100.0%

~ Denotes five cases or fewer.

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FIGURE 5.6: TYPE OF ARTERIAL ACCESS, BY PCI CENTRE (n=1287)

PCI Centre	Radial access		Other		Unknown		Total	
	n	%	n	%	n	%	n	%
Beaumont Hospital	*	*	~	*	0	0.0%	20	100.0%
Cork University Hospital	144	95.4%	7	4.6%	0	0.0%	151	100.0%
Letterkenny University Hospital	*	*	~	*	0	0.0%	51	100.0%
Mater Misericordiae University Hospital	257	90.2%	*	*	~	*	285	100.0%
St James's Hospital	325	94.5%	19	5.5%	0	0.0%	344	100.0%
St Vincent's University Hospital	*	*	~	*	0	0.0%	19	100.0%
Tallaght University Hospital	6	100.0%	0	0.0%	0	0.0%	6	100.0%

University Hospital Galway	124	95.4%	6	4.6%	0	0.0%	130	100.0%
University Hospital Limerick	161	97.0%	~	*	~	*	166	100.0%
University Hospital Waterford	*	*	~	*	0	0.0%	115	100.0%
Total	1214	94.3%	*	*	~	*	1287	100.0%

~ Denotes five cases or fewer.

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FIGURE 6.1: PROPORTION OF TIMELY REPERFUSION BY REPERFUSION TYPE, REFERRAL SOURCE AND YEAR, 2017-2025

Reperfusion Type	2017	2018	2019	2020	2021	2022	2023	2024	2025
All timely reperfusion	67%	65%	67%	67%	64%	60%	61%	58%	59%
Timely PPCI	68%	66%	69%	69%	67%	62%	65%	61%	62%
Timely primary PCI: directly admitted	81%	79%	82%	82%	81%	78%	79%	77%	77%
Timely primary PCI: self-presented	39%	37%	46%	46%	22%	25%	25%	30%	28%
Timely primary PCI: transferred to a PCI centre	43%	42%	45%	45%	41%	39%	45%	30%	37%
Timely thrombolysis	44%	41%	30%	30%	25%	29%	21%	22%	27%

FIGURE 6.3 PROPORTION OF PATIENTS WHO RECEIVED TIMELY PRIMARY PCI FOR THOSE ADMITTED DIRECTLY TO A PCI CENTRE, BY PCI CENTRE (n=796)

PCI Centre	Timely (within 120 minutes)		Not timely		Unknown		Total	
	n	%	n	%	n	%	n	%
Beaumont Hospital	~	*	~	*	0	0.0%	~	*
Cork University Hospital	90	78.3%	25	21.7%	0	0.0%	115	100.0%
Letterkenny University Hospital	28	80.0%	7	20.0%	0	0.0%	35	100.0%
Mater Misericordiae University Hospital	146	89.6%	17	10.4%	0	0.0%	163	100.0%
St James's Hospital	155	73.1%	57	26.9%	0	0.0%	212	100.0%
St Vincent's University Hospital	~	*	~	*	0	0.0%	6	100.0%
Tallaght University Hospital	~	*	0	0.0%	0	0.0%	~	*
University Hospital Galway	52	64.2%	29	35.8%	0	0.0%	81	100.0%
University Hospital Limerick	102	85.0%	18	15.0%	0	0.0%	120	100.0%
University Hospital Waterford	37	61.7%	23	38.3%	0	0.0%	60	100.0%
Total	615	77.3%	181	22.7%	0	0.0%	796	100.0%

~ Denotes five cases or fewer.

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

FIGURE 6.4: TIME (MINUTES) TO PRIMARY PCI FOR THOSE DIRECTLY ADMITTED TO A PCI CENTRE, BY PCI CENTRE (n=796)

PCI Centre	Lower bound	IQR1	Median	IQR3	Upper bound	Interquartile range (IQR)
Cork University Hospital	35	74	96	111	166.5	37
Letterkenny University Hospital	23	87	95	117	162	30
Mater Misericordiae University Hospital	32	66	83	105	163.5	39
St James's Hospital	40	75	97	123	195	48
University Hospital Galway	12	72	105	145	254.5	73
University Hospital Limerick	36	74	94	117	181.5	43
University Hospital Waterford	42	82	104	140	227	58
Non-designated 9–5 PCI centres	40	50	101	207	442.5	157
Total	12	73	95	118	185.5	45

FIGURE 6.5: 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= 763)

PCI Centre	Sex	Time	n	%
Beaumont Hospital	Male	Unknown/missing	0	0.0%
		90 minutes or less	~	*
		91 minutes or more	0	0.0%
		Total	~	*
	Female	Unknown/missing	0	0.0%
		90 minutes or less	0	0.0%
		91 minutes or more	0	0.0%
		Total	0	0.0%
	Total	Unknown/missing	0	0.0%
		90 minutes or less	~	*
		91 minutes or more	0	0.0%
		Total	~	*
Cork University Hospital	Male	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	92	100.0%
	Female	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	~	*
		Total	~	*

	Total	Total	28	100.0%
		Unknown/missing	0	0.0%
		90 minutes or less	107	89.2%
		91 minutes or more	13	10.8%
		Total	120	100.0%
Letterkenny University Hospital	Male	Unknown/missing	~	*
		90 minutes or less	24	82.8%
		91 minutes or more	~	*
		Total	29	100.0%
	Female	Unknown/missing	0	0.0%
		90 minutes or less	~	*
		91 minutes or more	~	*
		Total	~	*
	Total	Unknown/missing	~	*
		90 minutes or less	28	82.4%
		91 minutes or more	~	*
		Total	34	100.0%
Mater Misericordiae University Hospital	Male	Unknown/missing	~	*
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	129	100.0%
	Female	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	37	100.0%
	Total	Unknown/missing	~	*
		90 minutes or less	138	83.1%
		91 minutes or more	*	*
		Total	166	100.0%
St James's Hospital	Male	Unknown/missing	~	*
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	143	100.0%
	Female	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	55	100.0%
	Total	Unknown/missing	~	*

		90 minutes or less	146	73.7%
		91 minutes or more	*	*
		Total	198	100.0%
St Vincent's University Hospital	Male	Unknown/missing	0	0.0%
		90 minutes or less	~	*
		91 minutes or more	0	0.0%
		Total	~	*
	Female	Unknown/missing	0	0.0%
		90 minutes or less	~	*
		91 minutes or more	0	0.0%
		Total	~	*
	Total	Unknown/missing	0	0.0%
		90 minutes or less	~	*
		91 minutes or more	0	0.0%
		Total	~	*
University Hospital Galway	Male	Unknown/missing	~	*
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	64	100.0%
	Female	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	13	100.0%
	Total	Unknown/missing	~	*
		90 minutes or less	53	68.8%
		91 minutes or more	*	*
		Total	77	100.0%
University Hospital Limerick	Male	Unknown/missing	~	*
		90 minutes or less	63	77.8%
		91 minutes or more	*	*
		Total	81	100.0%
	Female	Unknown/missing	~	*
		90 minutes or less	16	66.7%
		91 minutes or more	*	*
		Total	24	100.0%
	Total	Unknown/missing	~	*
		90 minutes or less	79	75.2%
		91 minutes or more	*	*

		Total	105	100.0%
University Hospital Waterford	Male	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	*	*
		Total	45	100.0%
	Female	Unknown/missing	0	0.0%
		90 minutes or less	*	*
		91 minutes or more	~	*
		Total	15	100.0%
	Total	Unknown/missing	0	0.0%
		90 minutes or less	45	75.0%
		91 minutes or more	15	25.0%
		Total	60	100.0%
Total	Male	Unknown/missing	*	*
		90 minutes or less	459	78.5%
		91 minutes or more	*	*
		Total	585	100.0%
	Female	Unknown/missing	~	*
		90 minutes or less	140	78.7%
		91 minutes or more	*	*
		Total	178	100.0%
	Total	Unknown/missing	8	1.0%
		90 minutes or less	599	78.5%
		91 minutes or more	156	20.4%
		Total	763	100.0%

~ Denotes five cases or fewer.

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

FIGURE 6.6: DOOR TO BALLOON TIME FOR PATIENTS WHO ARRIVED DIRECTLY BY AMBULANCE TO A PCI CENTRE, BY PCI CENTRE (n=796)

PCI Centre	30 minutes or less		31 minutes or more		Unknown		Total		Median (IQR1 - IQR3) minutes
	n	%	n	%	n	%	n	%	
Beaumont Hospital	0	0.0%	~	*	0	0.0%	~	*	130 (65-604)
Cork University Hospital	47	40.9%	68	59.1%	0	0.0%	115	100.0%	34 (23-64)
Letterkenny University Hospital	15	42.9%	20	57.1%	0	0.0%	35	100.0%	32 (24-41)

Mater Misericordiae University Hospital	113	69.3%	50	30.7%	0	0.0%	163	100.0%	23 (17-36)
St James's Hospital	136	64.2%	76	35.8%	0	0.0%	212	100.0%	25 (18-36)
St Vincent's University Hospital	~	*	~	*	0	0.0%	6	100.0%	115.5 (50-184)
Tallaght University Hospital	0	0.0%	~	*	0	0.0%	~	*	102 (102-102)
University Hospital Galway	*	*	46	56.8%	~	*	81	100.0%	34.5 (23.5-58)
University Hospital Limerick	56	46.7%	64	53.3%	0	0.0%	120	100.0%	32 (22-55.5)
University Hospital Waterford	31	51.7%	29	48.3%	0	0.0%	60	100.0%	30 (23-55)
Total	433	54.4%	*	*	~	*	796	100.0%	29 (20-45)

~ Denotes five cases or fewer.

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

FIGURE 6.8: PROPORTION OF PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE WHO RECEIVED TIMELY PRIMARY PCI, BY REFERRING HOSPITAL (n=338)

PCI Centre	Referring Hospital	Timely (within 120 minutes)		Not timely		Unknown		Total		Median (IQR1 - IQR3) minutes
		n	%	n	%	n	%	n	%	
Cork University Hospital	Bantry General Hospital	0	0.0%	~	*	0	0.0%	~	*	171 (171-171)
	Mallow General Hospital	~	*	~	*	0	0.0%	~	*	132 (81-182)
	Mercy University Hospital	~	*	~	*	0	0.0%	7	100.0%	106 (65-142)
	Other	0	0.0%	~	*	0	0.0%	~	*	134 (134-134)
	South Infirmary	0	0.0%	~	*	0	0.0%	~	*	127 (127-127)
	Tipperary University Hospital	0	0.0%	~	*	0	0.0%	~	*	182 (130-184)
	University Hospital Waterford	0	0.0%	~	*	0	0.0%	~	*	196 (196-196)
	Total	~	*	*	*	0	0.0%	16	100.0%	136 (94-177)
Letterkenny University Hospital	Letterkenny University Hospital	9	60.0%	6	40.0%	0	0.0%	15	100.0%	113 (95-185)
	Total	9	60.0%	6	40.0%	0	0.0%	15	100.0%	113 (95-185)
Mater Misericordiae University Hospital	Beaumont Hospital	19	76.0%	6	24.0%	0	0.0%	25	100.0%	97 (86-108)
	Cavan General Hospital	0	0.0%	13	100.0%	0	0.0%	13	100.0%	198 (140-240)
	Connolly Hospital	23	76.7%	7	23.3%	0	0.0%	30	100.0%	93 (77-119)
	Other	~	*	~	*	0	0.0%	7	100.0%	87 (65-123)
	Our Lady of Lourdes Hospital Drogheda	10	35.7%	18	64.3%	0	0.0%	28	100.0%	136 (112-204)

	Our Lady's Hospital, Navan	~	*	*	*	0	0.0%	10	100.0%	145 (130-168)
	Total	58	51.3%	55	48.7%	0	0.0%	113	100.0%	119 (90-155)
St James's Hospital	Midland Regional Hospital Portlaoise	~	*	~	*	0	0.0%	6	100.0%	185 (139-409)
	Midland Regional Hospital Tullamore	~	*	10	83.3%	~	*	12	100.0%	172 (156-288)
	Naas General Hospital	8	42.1%	11	57.9%	0	0.0%	19	100.0%	129 (102-187)
	Other	0	0.0%	~	*	0	0.0%	~	*	240 (206-309)
	Regional Hospital Mullingar	~	*	*	*	0	0.0%	19	100.0%	169 (120-260)
	St Colmcille's Hospital, Loughlinstown	~	*	~	*	0	0.0%	~	*	120 (107-133)
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	*	*	~	*	7	100.0%	463 (370-839)
	St Michael's Hospital, Dun Laoghaire	~	*	~	*	0	0.0%	~	*	132 (107-156)
	St Vincent's University Hospital	*	*	~	*	0	0.0%	14	100.0%	95 (78-126)
	Tallaght University Hospital	11	52.4%	10	47.6%	0	0.0%	21	100.0%	120 (93-143)
	Wexford General Hospital	0	0.0%	~	*	0	0.0%	~	*	578 (531-625)
	Total	*	*	68	63.6%	~	*	107	100.0%	146 (107-211)
St Vincent's University Hospital	Other	0	0.0%	~	*	0	0.0%	~	*	1297 (1297-1297)
	St Colmcille's Hospital, Loughlinstown	~	*	~	*	0	0.0%	~	*	94 (60-127)
	Total	~	*	~	*	0	0.0%	~	*	127 (60-1297)
Tallaght University Hospital	Naas General Hospital	0	0.0%	0	0.0%	~	*	~	*	.
	Total	0	0.0%	0	0.0%	~	*	~	*	.
University Hospital Galway	Mayo University Hospital	~	*	*	*	0	0.0%	8	100.0%	176 (136-214)
	Portiuncula University Hospital	~	*	~	*	0	0.0%	7	100.0%	120 (113-159)
	Roscommon University Hospital	~	*	~	*	0	0.0%	~	*	140 (120-160)

	Sligo University Hospital	0	0.0%	~	*	0	0.0%	~	*	262 (180-521)
	Total	6	28.6%	15	71.4%	0	0.0%	21	100.0%	159 (120-218)
University Hospital Limerick	Ennis Hospital	~	*	0	0.0%	0	0.0%	~	*	89 (58-120)
	Nenagh General Hospital	~	*	~	*	0	0.0%	~	*	121 (77-165)
	St Johns Limerick	~	*	0	0.0%	0	0.0%	~	*	113 (113-113)
	University Hospital Kerry	~	*	*	*	0	0.0%	17	100.0%	150 (131-203)
	Total	7	31.8%	15	68.2%	0	0.0%	22	100.0%	137 (113-197)
University Hospital Waterford	St Luke’s General Hospital, Carlow/Kilkenny	0	0.0%	9	100.0%	0	0.0%	9	100.0%	192 (156-243)
	Tipperary University Hospital	~	*	*	*	0	0.0%	12	100.0%	175 (145-262)
	Wexford General Hospital	~	*	*	*	0	0.0%	19	100.0%	166 (158-208)
	Total	~	*	*	*	0	0.0%	40	100.0%	175 (153-247)
National total	Total	125		210	62.1%	~	*	338	100.0%	139 (104-197)

~ Denotes five cases or fewer.

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

FIGURE 6.9: TIME TO PRIMARY PCI FOR THOSE WHO WERE TRANSFERRED TO A PCI CENTRE, BY REFERRING HOSPITAL (n=338)

PCI Centre	Referring Hospital	Lower bound	IQR1	Median	IQR3	Upper bound	Interquartile range (IQR)
Cork University Hospital	Mercy University Hospital	57	65	106	142	162	77
	Total	57	94	136	177	196	83
Letterkenny University Hospital	Total	84	95	113	185	320	90
Mater Misericordiae University Hospital	Beaumont Hospital	54	86	97	108	141	22
	Cavan General Hospital	122	140	198	240	390	100
	Connolly Hospital	54	77	93	119	182	42
	Other	62	65	87	123	134	58
	Our Lady of Lourdes Hospital Drogheda	96	112	136	204	342	92
	Our Lady's Hospital, Navan	92	130	145	168	225	38

	Total	54	90	119	155	252.5	65
St James's Hospital	Midland Regional Hospital Portlaoise	110	139	185	409	664	270
	Midland Regional Hospital Tullamore	106	156	172	288	382	132
	Naas General Hospital	81	102	129	187	314.5	85
	Regional Hospital Mullingar	56	120	169	260	470	140
	St Luke's General Hospital, Carlow/Kilkenny	185	370	463	839	1167	469
	St Vincent's University Hospital	74	78	95	126	198	48
	Tallaght University Hospital	50	93	120	143	218	50
	Total	50	107	146	211	367	104
University Hospital Galway	Mayo University Hospital	118	136	176	214	232	78
	Portiuncula University Hospital	80	113	120	159	228	46
	Total	80	120	159	218	365	98
University Hospital Limerick	University Hospital Kerry	27	131	150	203	311	72
	Total	27	113	137	197	323	84
University Hospital Waterford	St Luke's General Hospital, Carlow/Kilkenny	132	156	192	243	373.5	87
	Tipperary University Hospital	119	145	175	262	437.5	117
	Wexford General Hospital	118	158	166	208	283	50
	Total	118	153	175	247	388	94
National total	Total	27	104	139	197	336.5	93

FIGURE 6.10: PROPORTION OF PATIENTS WITH A STEMI WHO WERE TRANSFERRED TO THE PCI CENTRE AND WHO RECEIVED AN ECG WITHIN TEN MINUTES, BY PCI CENTRE AND REFERRING HOSPITAL (n=403)

PCI Centre	Referring Hospital	10 minutes or less		11 minutes or more		Unknown/missing		Total		Median (IQR1 -
		n	%	n	%	n	%	n	%	

										IQR3) minute
Cork University Hospital	Bantry General Hospital	~	*	0	0.0%	0	0.0%	~	*	7 (6-7)
	Mercy University Hospital	~	*	*	*	0	0.0%	10	100.0%	12.5 (11- 21)
	Tipperary University Hospital	~	*	~	*	0	0.0%	~	*	20 (14-20)
	University Hospital Kerry	0	0.0%	~	*	0	0.0%	~	*	16 (16-16)
	University Hospital Waterford	*	*	~	*	0	0.0%	10	100.0%	4.5 (2-10)
	Mallow General Hospital	~	*	~	*	0	0.0%	~	*	15 (10-20)
	South Infirmary	~	*	0	0.0%	0	0.0%	~	*	6 (6-6)
	Other	0	0.0%	0	0.0%	~	*	~	*	.
	Total	18	51.4%	*	*	~	*	35	100.0%	10 (5-16)
Letterkenny University Hospital	Letterkenny University Hospital	~	*	7	58.3%	~	*	12	100.0%	18 (8-42)
	Total	~	*	7	58.3%	~	*	12	100.0%	18 (8-42)
Mater Misericordiae University Hospital	Beaumont Hospital	~	*	*	*	0	0.0%	18	100.0%	20 (7-31)
	Cavan General Hospital	~	*	*	*	0	0.0%	16	100.0%	14.5 (9.5- 36)
	Connolly Hospital	17	51.5%	16	48.5%	0	0.0%	33	100.0%	10 (2-16)
	Our Lady of Lourdes Hospital Drogheda	7	28.0%	18	72.0%	0	0.0%	25	100.0%	16 (10-24)
	Our Lady's Hospital, Navan	6	46.2%	7	53.8%	0	0.0%	13	100.0%	12 (8-25)
	Other	~	*	~	*	~	*	8	100.0%	23 (3-47)
	Total	*	*	69	61.1%	~	*	113	100.0%	14 (6.5-26)
Non- designated 9- 5 PCI centres	Naas General Hospital	~	*	0	0.0%	~	*	~	*	0
	Total	~	*	0	0.0%	~	*	~	*	0
St James's Hospital	Midland Regional Hospital Tullamore	~	*	*	*	0	0.0%	17	100.0%	20 (9-30)
	Naas General Hospital	*	*	10	50.0%	~	*	20	100.0%	12 (3-39)
	Regional Hospital Mullingar	~	*	*	*	0	0.0%	20	100.0%	18.5 (8.5- 33)

	St Colmcille's Hospital, Loughlinstown	0	0.0%	~	*	0	0.0%	~	*	47 (47-47)
	St Luke's General Hospital, Carlow/Kilkenny	11	64.7%		6 35.3%	0	0.0%	17	100.0%	8 (3-18)
	St Vincent's University Hospital	9	60.0%		6 40.0%	0	0.0%	15	100.0%	10 (4-30)
	Tallaght University Hospital	~	*	*	*	0	0.0%	18	100.0%	14.5 (8-27)
	Wexford General Hospital	10	58.8%		7 41.2%	0	0.0%	17	100.0%	6 (0-17)
	Midland Regional Hospital Portlaoise	8	38.1%		13 61.9%	0	0.0%	21	100.0%	15 (2-18)
	St Michael's Hospital, Dun Laoghaire	0	0.0%	~	*	0	0.0%	~	*	17 (15-19)
	Other	~	*	~	*	0	0.0%	~	*	18 (10-25)
	Total	*	*		87 57.6%	~	*	151	100.0%	14 (4-27)
University Hospital Galway	Letterkenny University Hospital	0	0.0%	~	*	0	0.0%	~	*	28 (28-28)
	Mayo University Hospital	~	*	*	*	0	0.0%	9	100.0%	23 (14-32)
	Portiuncula University Hospital	0	0.0%	*	*	~	*	9	100.0%	42.5 (26-55)
	Sligo University Hospital	~	*		7 50.0%	~	*	14	100.0%	12 (6-45)
	Roscommon University Hospital	0	0.0%	~	*	0	0.0%	~	*	15 (15-15)
	Total	*	*		24 70.6%	~	*	34	100.0%	23 (12-50)
University Hospital Limerick	Nenagh General Hospital	~	*	~	*	0	0.0%	~	*	16 (7-25)
	University Hospital Kerry	~	*	*	*	0	0.0%	21	100.0%	16 (12-51)
	Ennis Hospital	~	*	~	*	0	0.0%	~	*	32 (9-55)
	St Johns Limerick	~	*		0 0.0%	0	0.0%	~	*	2 (2-2)
	Total	7	26.9%		19 73.1%	0	0.0%	26	100.0%	15.5 (9-51)
	Tipperary University Hospital	~	*	~	*	0	0.0%	9	100.0%	12 (5-37)

University Hospital Waterford	St Luke's General Hospital, Carlow/Kilkenny	~	*	~	*	0	0.0%	6	100.0%	20 (1-36)
	Wexford General Hospital	~	*	*	*	0	0.0%	14	100.0%	13.5 (8-17)
	Total	11	37.9%	18	62.1%	0	0.0%	29	100.0%	15 (7-25)
National Total	Total	154	38.2%	240	59.6%	9	2.2%	403	100.0%	14 (6-27)

~ Denotes five cases or fewer.

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

FIGURE 6.11: 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 (n=409)

PCI Centre	Referring Hospital	30 minutes or less		31 minutes or more		Unknown/ missing		Total		Median (IQR1 - IQR3) minutes
		Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	
Cork University Hospital	Bantry General Hospital	0	0.0%	~	*	~	*	~	*	388 (64-620)
	Mercy University Hospital	0	0.0%	*	*	~	*	10	100.0%	115 (54-244)
	Tipperary University Hospital	0	0.0%	~	*	0	0.0%	~	*	170 (70-529)
	University Hospital Waterford	0	0.0%	~	*	~	*	~	*	87 (87-87)
	Mallow General Hospital	0	0.0%	~	*	0	0.0%	~	*	80 (40-120)
	South Infirmary	0	0.0%	~	*	0	0.0%	~	*	45 (45-45)
	Other	0	0.0%	0	0.0%	~	*	~	*	.
	Total	0	0.0%	*	*	~	*	23	100.0%	115 (54-267)
Letterkenny University Hospital	Letterkenny University Hospital	~	*	*	*	0	0.0%	17	100.0%	126 (58-208)
	Total	~	*	*	*	0	0.0%	17	100.0%	126 (58-208)
Mater Misericordiae University Hospital	Beaumont Hospital	~	*	*	*	0	0.0%	26	100.0%	83 (53-100)
	Cavan General Hospital	0	0.0%	17	100.0%	0	0.0%	17	100.0%	111 (77-200)
	Connolly Hospital	0	0.0%	41	100.0%	0	0.0%	41	100.0%	81 (63-196)
	Our Lady of Lourdes Hospital Drogheda	0	0.0%	*	*	~	*	35	100.0%	99 (71-164)

	Our Lady's Hospital, Navan	~	*	12	85.7%	~	*	14	100.0%	105 (92-234)
	Other	~	*	*	*	0	0.0%	8	100.0%	60 (38-120)
	Total	~	*	135	95.7%	~	*	141	100.0%	93 (63-159)
St James's Hospital	Midland Regional Hospital Tullamore	0	0.0%	13	100.0%	0	0.0%	13	100.0%	127 (86-233)
	Naas General Hospital	~	*	15	75.0%	~	*	20	100.0%	107 (66-214)
	Regional Hospital Mullingar	~	*	15	75.0%	~	*	20	100.0%	82 (38-190)
	St Colmcille's Hospital, Loughlinstown	0	0.0%	0	0.0%	~	*	~	*	.
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	9	100.0%	0	0.0%	9	100.0%	247 (108-357)
	St Vincent's University Hospital	0	0.0%	*	*	~	*	16	100.0%	71 (57-135)
	Tallaght University Hospital	0	0.0%	*	*	~	*	20	100.0%	99 (55-124)
	Wexford General Hospital	0	0.0%	~	*	~	*	~	*	205 (117-292)
	Midland Regional Hospital Portlaoise	0	0.0%	*	*	~	*	8	100.0%	97 (61-171)
	St Michael's Hospital, Dun Laoghaire	0	0.0%	~	*	0	0.0%	~	*	92 (71-113)
	Other	0	0.0%	~	*	0	0.0%	~	*	194 (158-200)
	Total	~	*	95	82.6%	*	*	115	100.0%	107 (61-200)
St Vincent's University Hospital	Other	0	0.0%	~	*	0	0.0%	~	*	244 (244-244)
	Total	0	0.0%	~	*	0	0.0%	~	*	244 (244-244)
Tallaght University Hospital	Naas General Hospital	0	0.0%	~	*	~	*	~	*	1401 (1401-1401)
	Total	0	0.0%	~	*	~	*	~	*	1401 (1401-1401)
	Letterkenny University Hospital	0	0.0%	~	*	~	*	~	*	120 (120-120)

University Hospital Galway	Mayo University Hospital	~	*	*	*	0	0.0%	13	100.0%	85 (50-146)
	Portiuncula University Hospital	0	0.0%	*	*	~	*	9	100.0%	87 (52-148)
	Sligo University Hospital	~	*	*	*	0	0.0%	15	100.0%	98 (56-182)
	Roscommon University Hospital	0	0.0%	~	*	0	0.0%	~	*	40 (40-40)
	Total	~	*	36	90.0%	~	*	40	100.0%	89 (50-165)
University Hospital Limerick	Nenagh General Hospital	0	0.0%	~	*	0	0.0%	~	*	74 (52-95)
	University Hospital Kerry	~	*	19	79.2%	~	*	24	100.0%	85 (49-140)
	Ennis Hospital	0	0.0%	~	*	0	0.0%	~	*	88 (65-111)
	St Johns Limerick	~	*	0	0.0%	0	0.0%	~	*	30 (30-30)
	Total	~	*	23	79.3%	~	*	29	100.0%	82 (49-111)
University Hospital Waterford	Tipperary University Hospital	~	*	*	*	0	0.0%	12	100.0%	109 (70-217)
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	9	100.0%	0	0.0%	9	100.0%	85 (65-194)
	Wexford General Hospital	0	0.0%	19	100.0%	0	0.0%	19	100.0%	106 (91-256)
	Total	~	*	*	*	0	0.0%	40	100.0%	101 (81-217)
National total	Total	16	3.9%	365	89.2%	28	6.8%	409	100.0%	96 (60-186)

~ Denotes five cases or fewer.

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

FIGURE 6.12: 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 (n=447)

PCI Centre	Referring Hospital	90 minutes or less		91 minutes or more		Unknown/missing		Total		Median (IQR1 - IQR3) minutes
		n	%	n	%	n	%	n	%	
Cork University Hospital	Bantry General Hospital	0	0.0%	~	*	~	*	~	*	128 (115-889)
	Mallow General Hospital	~	*	~	*	0	0.0%	~	*	97 (59-135)
	Mercy University Hospital	7	58.3%	~	*	~	*	12	100.0%	71 (49-118)

	Other	0	0.0%	~	*	0	0.0%	~	*	122 (122-122)	
	South Infirmary	~	*		0	0.0%	0	0.0%	~	53 (53-53)	
	Tipperary University Hospital	0	0.0%	~	*	0	0.0%	~	*	156 (129-235)	
	University Hospital Waterford	0	0.0%	~	*	0	0.0%	~	*	178 (170-185)	
	Total	*	*		15	57.7%	~	*	26	100.0%	117 (61-156)
Letterkenny University Hospital	Letterkenny University Hospital	8	47.1%		9	52.9%	0	0.0%	17	100.0%	92 (80-146)
	Total	8	47.1%		9	52.9%	0	0.0%	17	100.0%	92 (80-146)
Mater Misericordiae University Hospital	Beaumont Hospital	19	67.9%		9	32.1%	0	0.0%	28	100.0%	80 (61-109)
	Cavan General Hospital	0	0.0%		20	100.0%	0	0.0%	20	100.0%	151 (119-199)
	Connolly Hospital	28	65.1%	*	*	~	*		43	100.0%	73 (58-166)
	Other	*	*	~	*		0	0.0%	9	100.0%	68 (45-72)
	Our Lady of Lourdes Hospital Drogheda	~	*	*	*		0	0.0%	40	100.0%	113 (98-168)
	Our Lady's Hospital, Navan	~	*	*	*		0	0.0%	15	100.0%	121 (99-143)
	Total	*	*		93	60.0%	~	*	155	100.0%	102 (72-138)
Non-designated 9–5 PCI centres	Naas General Hospital	0	0.0%		0	0.0%	~	*	~	*	.
	Other	0	0.0%		0	0.0%	~	*	~	*	.
	St Colmcille's Hospital, Loughlinstown	~	*	~	*		0	0.0%	~	*	67 (37-97)
	Total	~	*	~	*	~	*		6	100.0%	67 (37-97)
St James's Hospital	Midland Regional Hospital Portlaoise	0	0.0%	*	*	~	*		10	100.0%	176 (126-499)
	Midland Regional Hospital Tullamore	0	0.0%	*	*	~	*		14	100.0%	164 (114-255)
	Naas General Hospital	7	30.4%		16	69.6%	0	0.0%	23	100.0%	113 (85-210)
	Other	0	0.0%	~	*		0	0.0%	~	*	197 (185-230)
	Regional Hospital Mullingar	~	*		18	72.0%	~	*	25	100.0%	167 (98-219)
	St Colmcille's Hospital, Loughlinstown	~	*	~	*		0	0.0%	~	*	95 (76-114)

	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	*	*	~	*	11	100.0%	273 (148-810)
	St Michael's Hospital, Dun Laoghaire	~	*	~	*	0	0.0%	~	*	99 (85-113)
	St Vincent's University Hospital	10	58.8%	7	41.2%	0	0.0%	17	100.0%	86 (75-117)
	Tallaght University Hospital	11	52.4%	10	47.6%	0	0.0%	21	100.0%	88 (73-119)
	Wexford General Hospital	0	0.0%	~	*	0	0.0%	~	*	224 (168-512)
	Total	34	26.0%	90	68.7%	7	5.3%	131	100.0%	120 (89-205)
University Hospital Galway	Letterkenny University Hospital	0	0.0%	~	*	~	*	~	*	265 (265-265)
	Mayo University Hospital	~	*	*	*	0	0.0%	13	100.0%	125 (92-170)
	Portiuncula University Hospital	~	*	~	*	0	0.0%	9	100.0%	95 (76-128)
	Roscommon University Hospital	~	*	0	0.0%	0	0.0%	~	*	86 (84-88)
	Sligo University Hospital	0	0.0%	*	*	~	*	16	100.0%	215 (151-250)
	Total	*	*	31	73.8%	~	*	42	100.0%	146 (94-221)
University Hospital Limerick	Ennis Hospital	~	*	~	*	0	0.0%	~	*	64 (26-102)
	Nenagh General Hospital	~	*	~	*	0	0.0%	~	*	92 (62-122)
	St Johns Limerick University Hospital	~	*	0	0.0%	0	0.0%	~	*	60 (60-60)
	Kerry	~	*	22	91.7%	~	*	24	100.0%	145 (110-189)
	Total	~	*	24	82.8%	~	*	29	100.0%	127 (106-183)
University Hospital Waterford	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	9	100.0%	0	0.0%	9	100.0%	153 (126-174)
	Tipperary University Hospital	~	*	*	*	0	0.0%	12	100.0%	147 (104-216)
	Wexford General Hospital	~	*	*	*	0	0.0%	20	100.0%	137 (121-174)
	Total	~	*	*	*	0	0.0%	41	100.0%	140 (121-196)
National total	Total	130	29.1%	300	67.1%	17	3.8%	447	100.0%	117 (84-176)

~ Denotes five cases or fewer.

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

FIGURE 6.13: DOOR TO BALLOON TIME FOR PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE, BY PCI CENTRE (n=338)

PCI Centre	30 minutes or less		31 minutes or more		Total		Median (IQR1 - IQR3) minute
	n	%	n	%	n	%	
Cork University Hospital	9	56.3%	7	43.8%	16	100.0%	26 (21-46.5)
Letterkenny University Hospital	*	*	~	*	15	100.0%	27 (20-36)
Mater Misericordiae University Hospital	93	82.3%	20	17.7%	113	100.0%	22 (18-28)
St James's Hospital	62	57.9%	45	42.1%	107	100.0%	28 (19-37)
St Vincent's University Hospital	~	*	~	*	~	*	30 (23-1300)
Tallaght University Hospital	0	0.0%	~	*	~	*	1125 (1125-1125)
University Hospital Galway	~	*	*	*	21	100.0%	42 (32-53)
University Hospital Limerick	12	54.5%	10	45.5%	22	100.0%	27.5 (18-43)
University Hospital Waterford	18	45.0%	22	55.0%	40	100.0%	34.5 (24-50.5)
Total	210	62.1%	128	37.9%	338	100.0%	25.5 (20-37)

~ Denotes five cases or fewer.

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

FIGURE 6.15: PROPORTION OF TIMELY PRIMARY PCI FOR PATIENTS WHO SELF PRESENTED TO A PCI CENTRE, BY PCI CENTRE (n=123)

PCI Centre	60 minutes or less		61 minutes or more		Unknown		Total		Median (IQR1- IQR3) minutes
	n	%	n	%	n	%	n	%	
Beaumont Hospital	6	35.3%	11	64.7%	0	0.0%	17	100.0%	90 (53-442)
Cork University Hospital	~	*	*	*	0	0.0%	18	100.0%	96 (81-139)
Letterkenny University Hospital	0	0%	~	*	0	0.0%	~	*	68 (68-68)
Mater Misericordiae University Hospital	~	*	~	*	0	0.0%	7	100.0%	113 (57-248)
St James's Hospital	*	*	~	*	0	0.0%	21	100.0%	24 (19-40)
St Vincent's University Hospital	0	0%	6	100.0%	0	0.0%	6	100.0%	153.5 (85-245)
Tallaght University Hospital	~	*	~	*	0	0.0%	~	*	60 (56-149)
University Hospital Galway	~	*	*	*	0	0.0%	23	100.0%	93 (77-132)
University Hospital Limerick	0	0%	19	100.0%	0	0.0%	19	100.0%	110 (85-133)
University Hospital Waterford	~	*	*	*	0	0.0%	8	100.0%	258 (142-428)
Total	35	28.5%	88	71.5%	0	0.0%	123	100.0%	92 (57-149)

~ Denotes five cases or fewer.

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

FIGURE 6.16: TIME TO PRIMARY PCI FOR PATIENTS WHO SELF-PRESENTED TO A PCI CENTRE, BY PCI CENTRE (n=123)

PCI Centre	Lower bound	IQR1	Median	IQR3	Upper bound	Interquartile range (IQR)
Cork University Hospital	38	81	96	139	226	58
Mater Misericordiae University Hospital	34	57	113	248	534.5	191
Non-designated 9–5 PCI centres	27	60	97.5	245	522.5	185
St James's Hospital	13	19	24	40	71.5	21
University Hospital Galway	24	77	93	132	214.5	55
University Hospital Limerick	70	85	110	133	205	48
University Hospital Waterford	49	142	258	428	765	286
Total	13	57	92	149	287	92

FIGURE 6.17: PROPORTION OF PATIENTS WITH A STEMI WHO SELF PRESENTED TO THE PCI CENTRE WHO RECEIVED AN ECG WITHIN TEN MINUTES, BY PCI CENTRE (n=146)

PCI Centre	10 minutes or less		11 minutes or more		Unknown		Total		Median (IQR1-IQR3) minutes
	n	%	n	%	n	%	n	%	
Beaumont Hospital	8	47.0%	9	52.9%	0	0.0%	17	100.0%	13 (8-16)
Cork University Hospital	15	57.7%	11	42.3%	0	0.0%	26	100.0%	10 (7-23)
Letterkenny University Hospital	0	0.0%	~	*	0	0.0%	~	*	28 (28-28)
Mater Misericordiae University Hospital	~	*	*	*	0	0.0%	8	100.0%	18.5 (11.5-75.5)
St James's Hospital	6	23.1%	20	76.9%	0	0.0%	26	100.0%	20.5 (12-40)
St Vincent's University Hospital	~	*	~	*	0	0.0%	~	*	43 (15-63)
Tallaght University Hospital	~	*	*	*	0	0.0%	9	100.0%	16 (13-18)
University Hospital Galway	~	*	19	73.1%	~	*	26	100.0%	31 (16-58)
University Hospital Limerick	*	*	12	60.0%	~	*	20	100.0%	20 (5-39)
University Hospital Waterford	~	*	~	*	0	0.0%	8	100.0%	12.5 (1-21)
Total	*	*	95	65.1%	~	*	146	100.0%	16 (9-35)

~ Denotes five cases or fewer.

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

FIGURE 6.18: PROPORTION OF PATIENTS WHO RECEIVED TIMELY REPERFUSION WITH THROMBOLYSIS, PCI CENTRE (n=111)

PCI Centre	Timely (within 30 minutes)	Not timely	Unknown	Total	
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	n	%	n	%	n	%	n	%	Median (IQR1-IQR3) minutes
Cork University Hospital	~	*	*	*	0	0.0%	12	100.0%	45 (31.5-67.5)
Letterkenny University Hospital	0	0.0%	~	*	0	0.0%	~	*	165 (165-165)
St James's Hospital	10	18.2%	45	81.8%	0	0.0%	55	100.0%	53 (38-75)
Tallaght University Hospital	0	0.0%	~	*	0	0.0%	~	*	76 (76-76)
University Hospital Galway	14	50.0%	14	50.0%	0	0.0%	28	100.0%	30.5 (18-55)
University Hospital Limerick	~	*	~	*	0	0.0%	~	*	81 (10-105)
University Hospital Waterford	0	0.0%	~	*	0	0.0%	~	*	505 (505-505)
Total	27	26.7%	74	73.3%	0	0.0%	101	100.0%	51 (30-75)

~ Denotes five cases or fewer.

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

FIGURE 6.19: PROPORTION OF PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE WHO RECEIVED TIMELY REPERFUSION, BY REFERRING HOSPITAL (n=439)

PCI Centre	Referring Hospital	Timely reperfusion		Not timely reperfusion		Unknown		Total	
		n	%	n	%	n	%	n	%
Cork University Hospital	Bantry General Hospital	~	*	~	*	0	0.0%	~	*
	Mercy University Hospital	~	*	~	*	0	0.0%	7	100.0%
	Tipperary University Hospital	0	0.0%	~	*	0	0.0%	~	*
	University Hospital Kerry	0	0.0%	~	*	0	0.0%	~	*
	University Hospital Waterford	~	*	*	*	0	0.0%	9	100.0%
	Mallow General Hospital	~	*	~	*	0	0.0%	~	*
	South Infirmary	0	0.0%	~	*	0	0.0%	~	*
	Other	0	0.0%	~	*	0	0.0%	~	*
	Total	7	25.0%	21	75.0%	0	0.0%	28	100.0%
Letterkenny University Hospital	Letterkenny University Hospital	9	56.3%	7	43.8%	0	0.0%	16	100.0%
	Total	9	56.3%	7	43.8%	0	0.0%	16	100.0%
Mater Misericordiae University Hospital	Beaumont Hospital	19	76.0%	6	24.0%	0	0.0%	25	100.0%
	Cavan General Hospital	0	0.0%	13	100.0%	0	0.0%	13	100.0%
	Connolly Hospital	23	76.7%	7	23.3%	0	0.0%	30	100.0%
	Our Lady of Lourdes Hospital Drogheda	10	35.7%	18	64.3%	0	0.0%	28	100.0%
	Our Lady's Hospital, Navan	~	*	*	*	0	0.0%	10	100.0%

	Other	~	*	~	*	0	0.0%	7	100.0%
	Total	58	51.3%	55	48.7%	0	0.0%	113	100.0%
St James's Hospital	Midland Regional Hospital Tullamore	~	*	*	*	~	*	19	100.0%
	Naas General Hospital	8	34.8%	15	65.2%	0	0.0%	23	100.0%
	Regional Hospital Mullingar	6	25.0%	18	75.0%	0	0.0%	24	100.0%
	St Colmcille's Hospital, Loughlinstown	~	*	~	*	0	0.0%	~	*
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	*	*	~	*	15	100.0%
	St Vincent's University Hospital	9	64.3%	~	*	0	0.0%	14	100.0%
	Tallaght University Hospital	11	52.4%	10	47.6%	0	0.0%	21	100.0%
	Wexford General Hospital	~	*	*	*	0	0.0%	18	100.0%
	Midland Regional Hospital Portlaoise	~	*	*	*	0	0.0%	21	100.0%
	St Michael's Hospital, Dun Laoghaire	~	*	~	*	0	0.0%	~	*
	Other	0	0.0%	~	*	0	0.0%	~	*
	Total	*	*	113	69.8%	~	*	162	100.0%
St Vincent's University Hospital	St Colmcille's Hospital, Loughlinstown	~	*	~	*	0	0.0%	~	*
	Other	0	0.0%	~	*	0	0.0%	~	*
	Total	~	*	~	*	0	0.0%	~	*
Tallaght University Hospital	Naas General Hospital	0	0.0%	0	0.0%	~	*	~	*
	Other	0	0.0%	~	*	0	0.0%	~	*
	Total	0	0.0%	~	*	~	*	~	*
University Hospital Galway	Letterkenny University Hospital	~	*	0	0.0%	0	0.0%	~	*
	Mayo University Hospital	~	*	*	*	0	0.0%	16	100.0%
	Portiuncula University Hospital	~	*	~	*	0	0.0%	7	100.0%
	Sligo University Hospital	10	47.6%	11	52.4%	0	0.0%	21	100.0%
	Roscommon University Hospital	~	*	~	*	0	0.0%	~	*
	Other	~	*	~	*	0	0.0%	~	*
	Total	20	40.8%	29	59.2%	0	0.0%	49	100.0%
	Nenagh General Hospital	~	*	~	*	0	0.0%	~	*
	University Hospital Kerry	~	*	*	*	0	0.0%	18	100.0%

University Hospital Limerick	Ennis Hospital	~	*	0	0.0%	0	0.0%	~	*
	St Johns Limerick	~	*	0	0.0%	0	0.0%	~	*
	Other	~	*	~	*	0	0.0%	~	*
	Total	8	32.0%	17	68.0%	0	0.0%	25	100.0%
University Hospital Waterford	Tipperary University Hospital	~	*	*	*	0	0.0%	12	100.0%
	St Luke's General Hospital, Carlow/Kilkenny	0	0.0%	*	*	0	0.0%	*	*
	Wexford General Hospital	~	*	*	*	0	0.0%	19	100.0%
	Other	0	0.0%	~	*	0	0.0%	~	*
	Total	~	*	*	*	0	0.0%	41	100.0%
National total	Total	*	*	284	64.7%	~	*	439	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.1: LEFT VENTRICULAR FUNCTION RESULTS, BY INFARCT TYPE AND TIMELINESS OF REPERFUSION (n=1212)

Infarct type	LVF	Timely reperfusion		Not timely reperfusion		Unknown		Total	
		n	%	n	%	n	%	n	%
Anterior infarction	Normal (>50%)	69	22.2%	*	*	0	0.0%	*	*
	Slightly reduced (41–50%)	82	26.4%	*	*	~	*	130	25.3%
	Moderately reduced (31–40%)	105	33.8%	59	29.4%	0	0.0%	164	32.0%
	Severely reduced (<30%)	*	*	*	*	0	0.0%	113	22.0%
	Unknown	~	*	0	0.0%	0	0.0%	~	*
	Total	311	100.0%	*	*	~	*	513	100.0%
Non–anterior infarction	Normal (>50%)	232	50.7%	89	38.0%	0	0.0%	321	46.1%
	Slightly reduced (41–50%)	151	33.0%	*	*	~	*	235	33.8%
	Moderately reduced (31–40%)	52	11.4%	41	17.5%	0	0.0%	93	13.4%
	Severely reduced (<30%)	*	*	*	*	~	*	*	*
	Unknown	~	*	~	*	~	*	~	*
	Total	458	100.0%	*	*	~	*	696	100.0%
Unknown	Normal (>50%)	0	0.0%	~	*	0	0.0%	~	*
	Slightly reduced (41–50%)	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Moderately reduced (31–40%)	~	*	0	0.0%	0	0.0%	~	*
	Severely reduced (<30%)	~	*	0	0.0%	0	0.0%	~	*
	Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Total	~	*	~	*	0	0.0%	~	*

Total	Normal (>50%)	301	39.0%	125	28.7%	0	0.0%	426	35.1%
	Slightly reduced (41–50%)	233	30.2%	*	*	~	*	365	30.1%
	Moderately reduced (31–40%)	158	20.5%	100	22.9%	0	0.0%	258	21.3%
	Severely reduced (<30%)	*	*	79	18.1%	~	*	156	12.9%
	Unknown	~	*	~	*	~	*	7	0.6%
	Total	771	100.0%	*	*	~	*	1212	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.2: CONGESTIVE HEART FAILURE, BY INFARCT TYPE (n=1642)

Infarct type	Congestive heart failure	n	%
Anterior infarction	No	498	72.2%
	Pulmonary crackles with elevated JVP	43	6.2%
	Acute pulmonary oedema	53	7.7%
	Cardiogenic shock	96	13.9%
	Unknown	0	0.0%
	Total	690	100.0%
Non-anterior infarction	No	781	83.9%
	Pulmonary crackles with elevated JVP	*	*
	Acute pulmonary oedema	*	*
	Cardiogenic shock	*	*
	Unknown	0	0.0%
	Total	931	100.0%
Unknown	No	16	76.2%
	Pulmonary crackles with elevated JVP	~	*
	Acute pulmonary oedema	~	*
	Cardiogenic shock	~	*
	Unknown	0	0.0%
	Total	21	100.0%
Total	No	1295	78.9%
	Pulmonary crackles with elevated JVP	86	5.2%
	Acute pulmonary oedema	96	5.8%
	Cardiogenic shock	165	10.0%
	Unknown	0	0.0%
	Total	1642	100.0%

~ Denotes five cases or fewer.

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

**FIGURE 7.3: SURVIVAL AT DISCHARGE BY GLOBAL REGISTRY OF ACUTE CORONARY EVENTS
STRATIFICATION, BY PCI CENTRE (n=1250)**

PCI Centre	Survival at discharge	Low GRACE risk score		Intermediate GRACE risk score		High GRACE risk score		Total	
		n	%	n	%	n	%	n	%
Cork University Hospital	Alive	43	28.5%	56	37.1%	52	34.4%	151	100.0%
	Dead	0	0.0%	0	0.0%	9	100.0%	9	100.0%
	Total	43	26.9%	56	35.0%	61	38.1%	160	100.0%
Letterkenny University Hospital	Alive	~	*	27	51.9%	*	*	52	100.0%
	Total	~	*	27	51.9%	*	*	52	100.0%
Mater Misericordiae University Hospital	Alive	51	20.3%	99	39.4%	101	40.2%	251	100.0%
	Dead	0	0.0%	0	0.0%	13	100.0%	13	100.0%
	Total	51	19.3%	99	37.5%	114	43.2%	264	100.0%
St James's Hospital	Alive	*	*	*	*	110	34.3%	321	100.0%
	Dead	~	*	~	*	18	90.0%	20	100.0%
	Total	86	25.2%	127	37.2%	128	37.5%	341	100.0%
University Hospital Galway	Alive	29	19.7%	69	46.9%	*	*	*	*
	Dead	0	0.0%	0	0.0%	~	*	~	*
	Total	29	19.1%	69	45.4%	54	35.5%	152	100.0%
University Hospital Limerick	Alive	37	23.7%	66	42.3%	53	34.0%	156	100.0%
	Dead	0	0.0%	0	0.0%	11	100.0%	11	100.0%
	Total	37	22.2%	66	39.5%	64	38.3%	167	100.0%
University Hospital Waterford	Alive	16	14.8%	41	38.0%	51	47.2%	108	100.0%
	Dead	0	0.0%	0	0.0%	6	100.0%	6	100.0%
	Total	16	14.0%	41	36.0%	57	50.0%	114	100.0%
Total	Alive	*	*	*	*	436	36.8%	1186	100.0%
	Dead	~	*	~	*	62	96.9%	64	100.0%
	Total	267	21.4%	485	38.8%	498	39.8%	1250	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.4: STANDARDISED IN-HOSPITAL MORTALITY RATIO

PCI Centre	Number of admissions	Observed	Expected	SMR
St James's Hospital	308	20	21.54	0.85
Mater Misericordiae University Hospital	264	13	22.02	0.59

Cork University Hospital	159	9	12.25	0.73
University Hospital Limerick	167	11	13.37	0.82
University Hospital Waterford	114	6	8.38	0.72

FIGURE 7.5: SURVIVAL STATUS AT 30 DAYS BY GLOBAL REGISTRY OF ACUTE CORONARY EVENTS STRATIFICATION, BY PCI CENTRE (n=1056)

PCI Centre	Survival at 30 days	Low GRACE risk score		Intermediate GRACE risk score		High GRACE risk score		Total	
		n	%	n	%	n	%	n	%
Letterkenny University Hospital	Alive	0	0.0%	9	18.0%	41	82.0%	50	100.0%
	Total	0	0.0%	9	18.0%	41	82.0%	50	100.0%
Mater Misericordiae University Hospital	Alive	11	4.4%	49	19.8%	188	75.8%	248	100.0%
	Dead	0	0.0%	0	0.0%	13	100.0%	13	100.0%
	Total	11	4.2%	49	18.8%	201	77.0%	261	100.0%
St James's Hospital	Alive	*	*	*	*	*	*	305	100.0%
	Dead	~	*	0	0.0%	*	*	24	100.0%
	Total	*	*	*	*	238	72.3%	329	100.0%
University Hospital Galway	Alive	~	*	*	*	104	78.2%	133	100.0%
	Dead	0	0.0%	0	0.0%	8	100.0%	8	100.0%
	Total	~	*	*	*	112	79.4%	141	100.0%
University Hospital Limerick	Alive	9	6.0%	32	21.5%	108	72.5%	149	100.0%
	Dead	0	0.0%	0	0.0%	13	100.0%	13	100.0%
	Total	9	5.6%	32	19.8%	121	74.7%	162	100.0%
University Hospital Waterford	Alive	~	*	*	*	*	*	106	100.0%
	Dead	0	0.0%	~	*	*	*	7	100.0%
	Total	~	*	*	*	96	85.0%	113	100.0%
Total	Alive	*	*	*	*	746	75.3%	991	100.0%
	Dead	~	*	~	*	63	96.9%	65	100.0%
	Total	41	3.9%	206	19.5%	809	76.6%	1056	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.6: DISCHARGE DESTINATION FROM PCI CENTRES, BY PCI CENTRE AND SEX (n=1642)

PCI Centre	Sex	Home		Transferred		Other		Total	
		n	%	n	%	n	%	n	%
Cork University Hospital	Female	29	67.4%	~	*	*	*	43	100.0%
	Male	128	78.0%	*	*	*	*	164	100.0%
	Total	157	75.8%	28	13.5%	22	10.6%	207	100.0%

Letterkenny University Hospital	Female	*	*	~	*	0	0.0%	9	100.0%
	Male	*	*	~	*	~	*	45	100.0%
	Total	48	88.9%	~	*	~	*	54	100.0%
Mater Misericordiae University Hospital	Female	19	25.7%	49	66.2%	6	8.1%	74	100.0%
	Male	67	24.1%	194	69.8%	17	6.1%	278	100.0%
	Total	86	24.4%	243	69.0%	23	6.5%	352	100.0%
Non-designated 9–5 PCI centres	Female	*	*	0	0.0%	~	*	14	100.0%
	Male	*	*	*	*	~	*	45	100.0%
	Total	45	76.3%	*	*	*	*	59	100.0%
St James's Hospital	Female	42	35.6%	67	56.8%	9	7.6%	118	100.0%
	Male	89	27.0%	209	63.3%	32	9.7%	330	100.0%
	Total	131	29.2%	276	61.6%	41	9.2%	448	100.0%
University Hospital Galway	Female	18	46.2%	*	*	~	*	39	100.0%
	Male	91	54.8%	*	*	*	*	166	100.0%
	Total	109	53.2%	69	33.7%	27	13.2%	205	100.0%
University Hospital Limerick	Female	30	76.9%	~	*	~	*	39	100.0%
	Male	111	73.5%	*	*	*	*	151	100.0%
	Total	141	74.2%	32	16.8%	17	8.9%	190	100.0%
University Hospital Waterford	Female	*	*	14	48.3%	~	*	29	100.0%
	Male	*	*	34	34.7%	*	*	98	100.0%
	Total	69	54.3%	48	37.8%	10	7.9%	127	100.0%
Total	Female	166	45.5%	157	43.0%	42	11.5%	365	100.0%
	Male	620	48.6%	549	43.0%	108	8.5%	1277	100.0%
	Total	786	47.9%	706	43.0%	150	9.1%	1642	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.7: SMOKING CESSATION ADVICE PROVIDED, BY SEX AND AGE GROUP (n=604)

Age group	Smoking cessation advice	Male		Female		Total	
		n	%	n	%	n	%
19–40 years	Yes	*	*	~	*	*	*
	Unknown	0	0.0%	~	*	~	*
	Total	*	*	*	*	27	100.0%
41–64 years	Yes	*	*	*	*	406	96.4%
	No – patient declined	~	*	0	0.0%	~	*
	Unknown	11	3.2%	~	*	*	*
	Total	347	100.0%	74	100.0%	421	100.0%

65–79 years	Yes	*	*	*	*	131	92.3%
	No – patient declined	~	*	0	0.0%	~	*
	Unknown	~	*	~	*	*	*
	Total	95	100.0%	47	100.0%	142	100.0%
≥80 years	Yes	~	*	~	*	*	*
	Unknown	~	*	~	*	~	*
	Total	8	100.0%	6	100.0%	14	100.0%
Total	Yes	450	95.5%	122	91.7%	572	94.7%
	No – patient declined	~	*	0	0.0%	~	*
	Unknown	*	*	11	8.3%	*	*
	Total	471	100.0%	133	100.0%	604	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.8: PROPORTION OF PATIENTS PRESCRIBED SECONDARY PREVENTION MEDICATION ON DISCHARGE

Medication	Prescribed	n	%
ACEI or ARB	Yes	1237	84.1%
	No	40	2.7%
	Contraindicated	194	13.2%
	Total	1471	100.0%
Statin	Yes	1496	98.9%
	No	~	*
	Contraindicated	*	*
	Total	1513	100.0%
Beta-blocker	Yes	1305	87.9%
	No	22	1.5%
	Contraindicated	158	10.6%
	Total	1485	100.0%
Aspirin	Yes	1476	97.3%
	No	~	*
	Contraindicated	*	*
	Total	1517	100.0%
Second anti-platelet agent	Yes	1481	97.6%
	No	6	0.4%
	Contraindicated	30	2.0%
	Total	1517	100.0%

~ Denotes five cases or fewer.

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

FIGURE 7.9: PROPORTION OF PATIENTS WITH A STEMI REFERRED FOR CARDIAC REHABILITATION PHASE 3, BY PCI CENTRE (n=1030)

PCI Centre	Referred	n	%
Beaumont Hospital	Yes	14	100.0%
	Total	14	100.0%
Cork University Hospital	Yes	140	99.3%
	Unknown	~	*
	Total	141	100.0%
Letterkenny University Hospital	Yes	32	97.0%
	Unknown	~	*
	Total	33	100.0%
Mater Misericordiae University Hospital	Yes	205	95.3%
	No – no reason	~	*
	Unknown	~	*
	Total	215	100.0%
St James's Hospital	Yes	273	97.5%
	No – no reason	~	*
	Unknown	~	*
	Total	280	100.0%
St Vincent's University Hospital	Yes	7	100.0%
	Total	7	100.0%
Tallaght University Hospital	Yes	15	93.8%
	Unknown	~	*
	Total	16	100.0%
University Hospital Galway	Yes	153	98.1%
	Unknown	~	*
	Total	156	100.0%
University Hospital Limerick	Yes	83	100.0%
	Total	83	100.0%
University Hospital Waterford	Yes	85	100.0%
	Total	85	100.0%
Total	Yes	1007	97.8%
	No – no reason	7	0.7%
	Unknown	16	1.6%
	Total	1030	100.0%

~ Denotes five cases or fewer.

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

APPENDIX 5: HEARTBEAT VARIABLE COMPLETENESS

	Total	Beaumont Hospital	Cork University Hospital	Letterkenny University Hospital	Mater Misericordiae University	St James' s Hospital	St Vincent' s University Hospital	Tallaght University Hospital	University Hospital Galway	University Hospital Limerick	University Hospital Waterford
Previous MI	99.8%	100.0%	100.0%	100.0%	99.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Previous angina	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Previous Peripheral vascular disease	99.8%	100.0%	99.5%	100.0%	99.7%	100.0%	100.0%	100.0%	99.5%	100.0%	99.2%
Previous cerebrovascular disease	99.6%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	94.7%	98.0%	100.0%	100.0%
Previous chronic renal failure	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	99.5%	100.0%	100.0%
Previous chronic lung disease	99.6%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	98.0%	100.0%	100.0%
Previous percutaneous coronary intervention (PCI)	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%
Previous coronary artery bypass graft (CABG)	99.8%	100.0%	99.5%	100.0%	100.0%	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%
Previous other heart surgery	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	94.7%	100.0%	99.5%	100.0%	100.0%
Diabetes mellitus	98.9%	100.0%	99.0%	100.0%	97.7%	99.6%	100.0%	100.0%	97.6%	100.0%	99.2%
Smoking status	96.3%	100.0%	97.6%	96.3%	96.0%	97.1%	78.9%	100.0%	90.7%	100.0%	96.9%
Previous hypercholesterolemia	96.2%	100.0%	99.5%	98.1%	98.6%	100.0%	94.7%	100.0%	73.2%	100.0%	100.0%
Previous hypertension	97.4%	100.0%	99.0%	98.1%	98.9%	100.0%	94.7%	100.0%	82.9%	100.0%	100.0%
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)	99.8%	0.0%	100.0%	100.0%	100.0%	100.0%	66.7%	100.0%	100.0%	100.0%	100.0%

Source of referral (other)	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Helicopter	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Aspirin pre-admission/admission	99.8%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	99.0%	100.0%	100.0%
Other antiplatelet pre-admission/admission	99.8%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	98.5%	100.0%	100.0%
Symptom onset date	99.6%	100.0%	100.0%	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Symptom onset time	94.6%	100.0%	77.8%	100.0%	90.3%	99.6%	100.0%	73.7%	99.5%	100.0%	100.0%
Call for help date	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Call for help time	98.5%	100.0%	97.6%	100.0%	95.5%	100.0%	100.0%	89.5%	99.5%	100.0%	99.2%
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%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
First positive ECG location (other)	100.0%	0.0%	100.0%	0.0%	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%	100.0%	100.0%	100.0%	100.0%	100.0%
Time patient left first hospital	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	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	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.7%	100.0%	100.0%	100.0%
Patient status (other)	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	100.0%
Contraindicated to reperfusion therapy	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%
Contraindication to reperfusion therapy reason	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%

Contraindication to reperfusion therapy reason (other)	100.0%	0.0%	100.0%	0.0%	100.0%	100.0%	0.0%	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	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%
Reperfusion therapy Time	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%
Was angiogram performed	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%
Angiogram 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)	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%	100.0%	100.0%
Late reperfusion therapy reason (if reperfusion therapy outside targets)	85.9%	100.0%	66.1%	53.8%	90.7%	84.9%	100.0%	100.0%	76.9%	95.7%	98.6%
Late Reperfusion therapy reason (other)	97.8%	100.0%	100.0%	100.0%	100.0%	98.3%	100.0%	0.0%	91.2%	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)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bleeding (following any intervention)	99.3%	100.0%	100.0%	100.0%	97.9%	100.0%	100.0%	100.0%	100.0%	100.0%	96.6%
Stroke during hospital stay	99.4%	100.0%	100.0%	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	96.9%
Hospital of discharge	99.9%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Survival status on discharge home	98.0%	100.0%	99.5%	100.0%	99.1%	94.6%	100.0%	83.3%	100.0%	100.0%	100.0%
Aspirin on discharge	99.7%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other antiplatelet therapy on discharge	99.7%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Beta-blocker on discharge	97.6%	100.0%	99.5%	100.0%	98.8%	93.3%	88.2%	100.0%	99.5%	100.0%	100.0%
Statin on discharge	99.5%	100.0%	100.0%	100.0%	99.1%	99.0%	100.0%	100.0%	99.5%	100.0%	100.0%
angiotensinconverting enzyme inhibitor (ACEI) or angiotensin II receptor blocker (ARB) on discharge	96.7%	100.0%	98.4%	100.0%	99.1%	90.4%	88.2%	100.0%	98.9%	100.0%	100.0%
Smoking cessation counseling (for smokers)	95.2%	100.0%	97.4%	90.9%	93.3%	92.3%	100.0%	100.0%	98.4%	98.6%	100.0%
Referral to cardiac rehabilitation (CR) phase 3	91.7%	95.2%	91.8%	98.1%	90.6%	91.5%	89.5%	89.5%	89.8%	92.6%	93.7%
Hospital for CR	96.5%	100.0%	98.6%	40.6%	96.1%	99.3%	100.0%	86.7%	98.7%	100.0%	100.0%
Date of first phase 3 CR appointment	60.8%	100.0%	9.3%	93.8%	84.9%	50.9%	71.4%	46.7%	47.1%	98.8%	89.4%
Survival status at 30 days post-MI	90.7%	100.0%	49.3%	98.1%	99.7%	93.8%	94.1%	73.7%	94.5%	100.0%	99.2%
Cause of death	94.2%	100.0%	100.0%	0.0%	82.1%	97.0%	100.0%	100.0%	100.0%	100.0%	87.5%
LVF	99.0%	100.0%	97.6%	100.0%	99.7%	97.8%	100.0%	100.0%	99.5%	100.0%	100.0%
LVF assessment method	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%	100.0%	100.0%
What is the EF	99.4%	100.0%	100.0%	100.0%	99.7%	99.0%	94.4%	94.7%	98.9%	100.0%	100.0%
Primary coronary vessel treated during angiogram	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Heart rate on arrival to cath lab	99.7%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	98.0%	100.0%	100.0%
Systolic BP on arrival at the cath lab	99.6%	100.0%	100.0%	100.0%	99.7%	99.8%	100.0%	100.0%	98.0%	100.0%	100.0%
Serum creatinine value	97.5%	100.0%	100.0%	100.0%	98.6%	92.9%	100.0%	100.0%	98.0%	100.0%	100.0%
Congestive heart failure	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Troponin elevation	96.0%	100.0%	100.0%	100.0%	94.6%	93.1%	73.7%	100.0%	96.1%	99.5%	99.2%
Infarct type	98.7%	100.0%	97.6%	100.0%	100.0%	99.8%	100.0%	78.9%	95.1%	100.0%	99.2%
Non culprit lesion	99.9%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
BMI	96.1%	100.0%	94.2%	100.0%	96.6%	96.7%	94.7%	100.0%	100.0%	100.0%	81.1%

APPENDIX 5: HEARTBEAT VARIABLE COMPLETENESS

	Total	Beaumont Hospital	Cork University Hospital	Letterkenny University Hospital	Mater Misericordia University	St James' s Hospital	St Vincent' s University Hospital	Tallaght University Hospital	University Hospital Galway	University Hospital Limerick	University Hospital Waterford
Previous MI	99.8%	100.0%	100.0%	100.0%	99.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Previous angina	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Previous Peripheral vascular disease	99.8%	100.0%	99.5%	100.0%	99.7%	100.0%	100.0%	100.0%	99.5%	100.0%	99.2%
Previous cerebrovascular disease	99.6%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	94.7%	98.0%	100.0%	100.0%
Previous chronic renal failure	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	99.5%	100.0%	100.0%
Previous chronic lung disease	99.6%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	98.0%	100.0%	100.0%
Previous percutaneous coronary intervention (PCI)	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%
Previous coronary artery bypass graft (CABG)	99.8%	100.0%	99.5%	100.0%	100.0%	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%
Previous other heart surgery	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	94.7%	100.0%	99.5%	100.0%	100.0%
Diabetes mellitus	98.9%	100.0%	99.0%	100.0%	97.7%	99.6%	100.0%	100.0%	97.6%	100.0%	99.2%
Smoking status	96.3%	100.0%	97.6%	96.3%	96.0%	97.1%	78.9%	100.0%	90.7%	100.0%	96.9%
Previous hypercholesterolemia	96.2%	100.0%	99.5%	98.1%	98.6%	100.0%	94.7%	100.0%	73.2%	100.0%	100.0%
Previous hypertension	97.4%	100.0%	99.0%	98.1%	98.9%	100.0%	94.7%	100.0%	82.9%	100.0%	100.0%
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)	99.8%	0.0%	100.0%	100.0%	100.0%	100.0%	66.7%	100.0%	100.0%	100.0%	100.0%

Source of referral (other)	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Helicopter	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Aspirin pre-admission/admission	99.8%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	99.0%	100.0%	100.0%
Other antiplatelet pre-admission/admission	99.8%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	98.5%	100.0%	100.0%
Symptom onset date	99.6%	100.0%	100.0%	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Symptom onset time	94.6%	100.0%	77.8%	100.0%	90.3%	99.6%	100.0%	73.7%	99.5%	100.0%	100.0%
Call for help date	99.9%	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Call for help time	98.5%	100.0%	97.6%	100.0%	95.5%	100.0%	100.0%	89.5%	99.5%	100.0%	99.2%
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%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
First positive ECG location (other)	100.0%	0.0%	100.0%	0.0%	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%	100.0%	100.0%	100.0%	100.0%	100.0%
Time patient left first hospital	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	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	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.7%	100.0%	100.0%	100.0%
Patient status (other)	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	100.0%
Contraindicated to reperfusion therapy	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%
Contraindication to reperfusion therapy reason	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%

Contraindication to reperfusion therapy reason (other)	100.0%	0.0%	100.0%	0.0%	100.0%	100.0%	0.0%	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	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%
Reperfusion therapy Time	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%
Was angiogram performed	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%
Angiogram 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)	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%	100.0%	100.0%
Late reperfusion therapy reason (if reperfusion therapy outside targets)	85.9%	100.0%	66.1%	53.8%	90.7%	84.9%	100.0%	100.0%	76.9%	95.7%	98.6%
Late Reperfusion therapy reason (other)	97.8%	100.0%	100.0%	100.0%	100.0%	98.3%	100.0%	0.0%	91.2%	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)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bleeding (following any intervention)	99.3%	100.0%	100.0%	100.0%	97.9%	100.0%	100.0%	100.0%	100.0%	100.0%	96.6%
Stroke during hospital stay	99.4%	100.0%	100.0%	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	96.9%
Hospital of discharge	99.9%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Survival status on discharge home	98.0%	100.0%	99.5%	100.0%	99.1%	94.6%	100.0%	83.3%	100.0%	100.0%	100.0%
Aspirin on discharge	99.7%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other antiplatelet therapy on discharge	99.7%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Beta-blocker on discharge	97.6%	100.0%	99.5%	100.0%	98.8%	93.3%	88.2%	100.0%	99.5%	100.0%	100.0%

Statin on discharge	99.5%	100.0%	100.0%	100.0%	99.1%	99.0%	100.0%	100.0%	99.5%	100.0%	100.0%
angiotensin converting enzyme inhibitor (ACEI) or angiotensin II receptor blocker (ARB) on discharge	96.7%	100.0%	98.4%	100.0%	99.1%	90.4%	88.2%	100.0%	98.9%	100.0%	100.0%
Smoking cessation counseling (for smokers)	95.2%	100.0%	97.4%	90.9%	93.3%	92.3%	100.0%	100.0%	98.4%	98.6%	100.0%
Referral to cardiac rehabilitation (CR) phase 3	91.7%	95.2%	91.8%	98.1%	90.6%	91.5%	89.5%	89.5%	89.8%	92.6%	93.7%
Hospital for CR	96.5%	100.0%	98.6%	40.6%	96.1%	99.3%	100.0%	86.7%	98.7%	100.0%	100.0%
Date of first phase 3 CR appointment	60.8%	100.0%	9.3%	93.8%	84.9%	50.9%	71.4%	46.7%	47.1%	98.8%	89.4%
Survival status at 30 days post-MI	90.7%	100.0%	49.3%	98.1%	99.7%	93.8%	94.1%	73.7%	94.5%	100.0%	99.2%
Cause of death	94.2%	100.0%	100.0%	0.0%	82.1%	97.0%	100.0%	100.0%	100.0%	100.0%	87.5%
LVF	99.0%	100.0%	97.6%	100.0%	99.7%	97.8%	100.0%	100.0%	99.5%	100.0%	100.0%
LVF assessment method	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%	100.0%	100.0%
What is the EF	99.4%	100.0%	100.0%	100.0%	99.7%	99.0%	94.4%	94.7%	98.9%	100.0%	100.0%
Primary coronary vessel treated during angiogram	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Heart rate on arrival to cath lab	99.7%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	98.0%	100.0%	100.0%
Systolic BP on arrival at the cath lab	99.6%	100.0%	100.0%	100.0%	99.7%	99.8%	100.0%	100.0%	98.0%	100.0%	100.0%
Serum creatinine value	97.5%	100.0%	100.0%	100.0%	98.6%	92.9%	100.0%	100.0%	98.0%	100.0%	100.0%
Congestive heart failure	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Troponin elevation	96.0%	100.0%	100.0%	100.0%	94.6%	93.1%	73.7%	100.0%	96.1%	99.5%	99.2%
Infarct type	98.7%	100.0%	97.6%	100.0%	100.0%	99.8%	100.0%	78.9%	95.1%	100.0%	99.2%
Non culprit lesion	99.9%	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
BMI	96.1%	100.0%	94.2%	100.0%	96.6%	96.7%	94.7%	100.0%	100.0%	100.0%	81.1%

APPENDIX 6: SUPPLEMENTARY TABLES

TABLE 6.1: ALTERNATIVE DIAGNOSIS, BY YEAR (n=212)

PCI Centre	NSTEMI		Unstable Angina		Pericarditis		Myocarditis		Takosubo		Non Cardiac Chest Pain		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Cork University Hospital	~	*	0	0.0%	~	*	~	*	~	*	~	*	8	100.0%
Letterkenny University Hospital	~	*	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	~	*
Mater Misericordiae University Hospital	~	*	~	*	6	14.6%	~	*	6	14.6%	23	56.1%	41	100.0%
Non-designated 9–5 PCI centres	~	*	~	*	~	*	0	0.0%	~	*	0	0.0%	9	100.0%
St James's Hospital	7	15.9%	0	0.0%	9	20.5%	~	*	~	*	22	50.0%	44	100.0%
University Hospital Galway	17	50.0%	~	*	~	*	~	*	~	*	~	*	34	100.0%
University Hospital Limerick	32	46.4%	6	8.7%	~	*	~	*	~	*	22	31.9%	69	100.0%
University Hospital Waterford	~	*	0	0.0%	~	*	~	*	0	0.0%	~	*	*	*
Total	67	31.6%	12	5.7%	32	15.1%	10	4.7%	17	8.0%	74	34.9%	212	100.0%

~ Denotes five cases or fewer.

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

TABLE 6.2: REASON FOR CONTRAINDICATION, BY SEX (n=179)

Contraindication	Male		Female		Total	
	n	%	n	%	n	%
Presented too late	105	81.4%	33	66.0%	138	77.1%
Recent surgery	~	*	0	0.0%	~	*
History of bleeding	~	*	0	0.0%	~	*

Recent cerebrovascular accident	~	*	0	0.0%	~	*
Drug contraindication	0	0.0%	~	*	~	*
Other	*	*	*	*	36	20.1%
Total	129	100.0%	50	100.0%	179	100.0%

~ Denotes five cases or fewer.

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

TABLE 6.3: CLINICAL STATUS ON ARRIVAL (n=1350)

PCI Centre	Status	n	%
Beaumont Hospital	Stable	~	*
	Resuscitated arrest	~	*
	Total	~	*
Cork University Hospital	Stable	136	82.4%
	Cardiogenic shock	12	7.3%
	Resuscitated arrest	11	6.7%
	Other/unknown	6	3.6%
	Total	165	100.0%
Letterkenny University Hospital	Stable	43	82.7%
	Cardiogenic shock	~	*
	Resuscitated arrest	~	*
	Other/unknown	~	*
	Total	52	100.0%
Mater Misericordiae University Hospital	Stable	273	80.1%
	Cardiogenic shock	17	5.0%
	Resuscitated arrest	40	11.7%
	Other/unknown	11	3.2%
	Total	341	100.0%
St James's Hospital	Stable	315	87.0%
	Cardiogenic shock	11	3.0%
	Resuscitated arrest	26	7.2%
	Cardiac arrest and died	~	*
	Other/unknown	*	*
	Total	362	100.0%
St Vincent's University Hospital	Stable	*	*
	Resuscitated arrest	~	*
	Total	9	100.0%

Tallaght University Hospital	Stable	~	*
	Resuscitated arrest	~	*
	Other/unknown	~	*
	Total	6	100.0%
University Hospital Galway	Stable	112	78.3%
	Cardiogenic shock	12	8.4%
	Resuscitated arrest	19	13.3%
	Total	143	100.0%
University Hospital Limerick	Stable	132	82.5%
	Cardiogenic shock	13	8.1%
	Resuscitated arrest	15	9.4%
	Total	160	100.0%
University Hospital Waterford	Stable	92	85.2%
	Cardiogenic shock	~	*
	Resuscitated arrest	7	6.5%
	Other/unknown	~	*
	Total	108	100.0%
Total	Stable	1116	82.7%
	Cardiogenic shock	73	5.4%
	Resuscitated arrest	127	9.4%
	Cardiac arrest and died	~	*
	Other/unknown	*	*
	Total	1350	100.0%

~ Denotes five cases or fewer.

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

TABLE 6.4: INCIDENCE OF BLEEDING BY REPERFUSION TYPE (n=1470)

Reperfusion type	Bleeding	n	%
Hospital thrombolysis and pre-hosp thrombolysis	None	97	96.0%
	Intracranial haemorrhage	~	*
	Retroperitoneal haemorrhage	0	0.0%
	Any bleed (haemoglobin fall of <3 g to >5 g)	~	*
	Unknown	0	0.0%
	Total	101	100.0%
Primary PCI	None	1229	95.5%
	Intracranial haemorrhage	13	1.0%

	Retroperitoneal haemorrhage	~	*
	Any bleed (haemoglobin fall of <3 g to >5 g)	34	2.6%
	Unknown	*	*
	Total	1287	100.0%
No reperfusion required	None	75	91.5%
	Intracranial haemorrhage	~	*
	Retroperitoneal haemorrhage	0	0.0%
	Any bleed (haemoglobin fall of <3 g to >5 g)	~	*
	Unknown	0	0.0%
	Total	82	100.0%
Total	None	1401	95.3%
	Intracranial haemorrhage	20	1.4%
	Retroperitoneal haemorrhage	~	*
	Any bleed (haemoglobin fall of <3 g to >5 g)	38	2.6%
	Unknown	*	*
	Total	1470	100.0%

~ Denotes five cases or fewer.

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

TABLE 6.5: INCIDENCE OF STROKE BY REPERFUSION TYPE (n=1470)

Reperfusion type	Stroke	n	%
Hospital thrombolysis and pre-hosp thrombolysis	No	*	*
	Yes – ischaemic	0	0.0%
	Yes – haemorrhagic	~	*
	Unknown	0	0.0%
	Total	101	100.0%
Primary PCI	No	1250	97.1%
	Yes – ischaemic	*	*
	Yes – haemorrhagic	13	1.0%
	Unknown	*	*
	Total	1287	100.0%
No reperfusion required	No	*	*
	Yes – ischaemic	~	*
	Yes – haemorrhagic	~	*
	Unknown	0	0.0%
	Total	82	100.0%

Total	No	1425	96.9%
	Yes – ischaemic	15	1.0%
	Yes – haemorrhagic	20	1.4%
	Unknown	10	0.7%
	Total	1470	100.0%

~ Denotes five cases or fewer.

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

TABLE 6.6: PROPORTION OF PATIENTS PRESCRIBED SECONDARY PREVENTION MEDICATION ON DISCHARGE, BY HOSPITAL

PCI Centre	Medication	Yes		No		Contraindicated		Total	
		n	%	n	%	n	%	n	%
Beaumont Hospital	ACEI or ARB	16	80.0%	~	*	~	*	20	100.0%
	Statin	20	100.0%	0	0.0%	0	0.0%	20	100.0%
	Beta-blocker	*	*	0	0.0%	~	*	20	100.0%
	Aspirin	20	100.0%	0	0.0%	0	0.0%	20	100.0%
	Second anti-platelet agent	*	*	0	0.0%	~	*	20	100.0%
Cork University Hospital	ACEI or ARB	140	74.5%	~	*	*	*	188	100.0%
	Statin	189	99.0%	~	*	~	*	191	100.0%
	Beta-blocker	145	76.3%	~	*	*	*	190	100.0%
	Aspirin	182	95.3%	0	0.0%	9	4.7%	191	100.0%
	Second anti-platelet agent	186	97.4%	~	*	~	*	191	100.0%
Letterkenny University Hospital	ACEI or ARB	*	*	0	0.0%	~	*	54	100.0%
	Statin	*	*	0	0.0%	~	*	54	100.0%
	Beta-blocker	45	83.3%	0	0.0%	9	16.7%	54	100.0%
	Aspirin	*	*	0	0.0%	~	*	54	100.0%
	Second anti-platelet agent	*	*	0	0.0%	~	*	54	100.0%
Mater Misericordiae University Hospital	ACEI or ARB	269	83.8%	14	4.4%	38	11.8%	321	100.0%
	Statin	*	*	0	0.0%	~	*	321	100.0%
	Beta-blocker	279	87.2%	6	1.9%	35	10.9%	320	100.0%
	Aspirin	308	96.3%	~	*	*	*	320	100.0%
	Second anti-platelet agent	314	98.1%	~	*	~	*	320	100.0%
St James's Hospital	ACEI or ARB	306	81.6%	10	2.7%	59	15.7%	375	100.0%
	Statin	*	*	0	0.0%	~	*	411	100.0%
	Beta-blocker	345	89.1%	~	*	*	*	387	100.0%

	Aspirin	404	97.3%	0	0.0%	11	2.7%	415	100.0%
	Second anti-platelet agent	407	98.1%	~	*	*	*	415	100.0%
St Vincent's University Hospital	ACEI or ARB	*	*	~	*	0	0.0%	15	100.0%
	Statin	17	100.0%	0	0.0%	0	0.0%	17	100.0%
	Beta-blocker	*	*	~	*	0	0.0%	15	100.0%
	Aspirin	17	100.0%	0	0.0%	0	0.0%	17	100.0%
	Second anti-platelet agent	17	100.0%	0	0.0%	0	0.0%	17	100.0%
Tallaght University Hospital	ACEI or ARB	*	*	0	0.0%	~	*	18	100.0%
	Statin	*	*	0	0.0%	~	*	18	100.0%
	Beta-blocker	14	77.8%	~	*	~	*	18	100.0%
	Aspirin	*	*	0	0.0%	~	*	18	100.0%
	Second anti-platelet agent	*	*	0	0.0%	~	*	18	100.0%
University Hospital Galway	ACEI or ARB	*	*	~	*	0	0.0%	185	100.0%
	Statin	*	*	~	*	0	0.0%	186	100.0%
	Beta-blocker	*	*	8	4.3%	~	*	186	100.0%
	Aspirin	183	97.9%	~	*	~	*	187	100.0%
	Second anti-platelet agent	*	*	~	*	0	0.0%	187	100.0%
University Hospital Limerick	ACEI or ARB	146	83.0%	~	*	*	*	176	100.0%
	Statin	*	*	0	0.0%	~	*	176	100.0%
	Beta-blocker	159	90.3%	~	*	*	*	176	100.0%
	Aspirin	174	98.9%	~	*	~	*	176	100.0%
	Second anti-platelet agent	*	*	0	0.0%	~	*	176	100.0%
University Hospital Waterford	ACEI or ARB	104	87.4%	0	0.0%	15	12.6%	119	100.0%
	Statin	*	*	0	0.0%	~	*	119	100.0%
	Beta-blocker	109	91.6%	0	0.0%	10	8.4%	119	100.0%
	Aspirin	*	*	0	0.0%	~	*	119	100.0%
	Second anti-platelet agent	112	94.1%	0	0.0%	7	5.9%	119	100.0%
Total	ACEI or ARB	1237	84.1%	40	2.7%	194	13.2%	1471	100.0%
	Statin	1496	98.9%	~	*	*	*	1513	100.0%
	Beta-blocker	1305	87.9%	22	1.5%	158	10.6%	1485	100.0%
	Aspirin	1476	97.3%	~	*	*	*	1517	100.0%
	Second anti-platelet agent	1481	97.6%	6	0.4%	30	2.0%	1517	100.0%

~ Denotes five cases or fewer.

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

APPENDIX 7 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 6.3: 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 date and time of primary PCI reperfusion were recorded as before date and time of first positive ECG.
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FIGURE 6.5: 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 date and time of arrival at the PCI centre were recorded as before date and time of first positive ECG.

FIGURE 6.6: 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 date and time of primary PCI reperfusion were recorded as before date and time of arrival at the PCI centre.

FIGURE 6.8: 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	• 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

transferred to a PCI centre	• 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 date and time of primary PCI reperfusion were recorded as before date and time of positive ECG.
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FIGURE 6.10: 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 ECG and arrival at first hospital • Cases were recoded as “Unknown” if the time interval exceeded 24 hours, or if the date and time of arrival at the first hospital was recorded as before date and time of first ECG.

FIGURE 6.11: 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 transfered 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 • Cases were recoded as “Unknown” if the time interval exceeded 24 hours, or if the 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 6.12: 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 date and time of arrival at the PCI centre were recorded as before date and time of first positive ECG.

FIGURE 6.13: 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 date and time of primary PCI reperfusion were recorded as before date and time of arrival at the PCI centre.

FIGURE 6.15: 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 date and time of primary PCI reperfusion were recorded as before date and time of arrival to a PCI centre.

FIGURE 6.17: 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 ECG and arrival at the PCI centre • Cases were recoded as “Unknown” if the time interval exceeded 24 hours, or if the date and time of arrival at the PCI centre were recorded as before date and time of first ECG.

FIGURE 6.18: 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 date and time of thrombolysis were 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 date and time of thrombolysis were recorded as before date and time of first positive ECG.
	Timeliness of hospital thrombolysis for	• Only includes patients who are not defined as inpatients • Timely thrombolysis is defined as within 30 minutes or less

	those who were not inpatients	• 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 date and time of thrombolysis were recorded as before date and time of arrival at the first hospital.
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FIGURE 6.19: PROPORTION OF TIMELY REPERFUSION, FOR PATIENTS WHO WERE TRANSFERRED TO A PCI CENTRE, BY REFERRING HOSPITAL

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 date and time of primary PCI reperfusion were 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 date and time of thrombolysis were recorded as before date and time of first positive ECG.
	Timeliness of hospital thrombolysis for inpatients and inpatient transfers	• 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

	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 date and time of thrombolysis were 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 date and time of thrombolysis were recorded as before date and time of arrival at the first hospital.

FIGURE 7.5: SURVIVAL STATUS AT 30 DAYS BY GLOBAL REGISTRY OF ACUTE CORONARY EVENTS STRATIFICATION, 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 7.6: 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)

APPENDIX 8: COVERAGE OF STEMI CASES RECORDED IN HEARTBEAT

Coverage refers to the proportion of patients with ST-elevation myocardial infarction (STEMI) whose care should be included in this audit and who are recorded in the Heartbeat portal. Heartbeat contains data on patients whose presentation resulted in activation of a cardiac catheterisation laboratory (cath lab).

Coverage is assessed in two ways:

1. National coverage – whether all relevant PCI centres contribute data to the audit.
2. Degree of coverage – the proportion of eligible STEMI cases that are captured in Heartbeat.

National Coverage

For this report, all PCI centres in Ireland contributed data, including both designated primary PCI centres and non-designated PCI centres that provide primary PCI services during weekday working hours (9.00am–5.00pm).

Degree of Coverage

The degree of coverage can be estimated by comparing Heartbeat records with Hospital In-Patient Enquiry (HIPE) records for STEMI. However, several factors make direct comparison challenging.

Limitations of HIPE Comparisons

First, HIPE records episodes of care rather than individual patients and does not use a unique patient identifier. As a result:

- All STEMI admissions are included in HIPE, including patients who may not have undergone PCI because of factors such as age, frailty or major comorbidities.
- Patients transferred back to their local hospital after treatment in a PCI centre may be counted twice: once in the PCI centre and again in the receiving hospital.

Consequently, the number of STEMI episodes recorded in HIPE is likely to exceed the number of cases recorded in Heartbeat.

Second, diagnostic coding may differ between the two systems. Heartbeat data are entered prospectively by cardiac nurses, whereas HIPE diagnoses are derived from coded clinical

documentation and are subject to coding standards and interpretation. Therefore, some discrepancies between the two datasets are expected.

Coverage Estimate

Despite these limitations, coverage can be estimated by comparing the number of Heartbeat cases with a discharge diagnosis of STEMI against the number of HIPE records with a principal diagnosis of STEMI (ICD-10-AM codes I21.0–I21.3).

Coverage was calculated as follows:

$$\text{Coverage} = \frac{\text{Cases captured in Heartbeat}}{\text{Cases recorded in HIPE}} \times 100$$

Two points should be noted when interpreting the results:

1. Where the number of STEMI cases recorded in Heartbeat exceeded the number recorded in HIPE, coverage was capped at 100%, as these differences are most likely attributable to variation in coding practices.
2. For non-designated PCI centres, the number of Heartbeat cases used in the calculation included:
 - patients whose primary PCI was performed in that hospital and entered into Heartbeat locally; and
 - patients who underwent primary PCI in another PCI centre and were subsequently transferred back, with their procedure already recorded in Heartbeat by the treating PCI centre.

This approach provides a more accurate estimate of coverage in non-designated PCI centres.

National Coverage Estimate

Table 8.1 presents the estimated coverage for each PCI centre. Nationally, Heartbeat captured 1,817 STEMI cases, compared with 1,991 HIPE STEMI episodes, giving an estimated national coverage of 91%.

TABLE 8.1: ESTIMATED COVERAGE OF HEARTBEAT CASES, BY PERCUTANEOUS CORONARY INTERVENTION CENTRE

Primary PCI Centre	NUMBER OF HEARTBEAT CASES WITH A DISCHARGE DIAGNOSIS OF A STEMI	NUMBER OF HEARTBEAT CASES WITH A DISCHARGE DIAGNOSIS OF A STEMI ENTERED IN HEARTBEAT BY ANOTHER PCI CENTRE WHERE THE INTERVENTION OCCURRED	NUMBER OF CASES USED TO CALCULATE COVERAGE BY PCI CENTRE	CASES WITH A HIPE PRINCIPAL DIAGNOSIS OF A STEMI 2025	COVERAGE
Mater Misericordiae University Hospital	352	0	352	429	82%
St. Vincent's University Hospital	19	62	81	43	188% ¹
St. James's Hospital, Dublin	446	0	446	476	94%
Beaumont Hospital, Dublin	21	65	86	98	88%
Tallaght University Hospital	19	46	65	71	92%
University Hospital Waterford	127	5	132	125	106%
Cork University Hospital	206	0	206	229	90%
University Hospital Limerick	190	0	190	201	95%
Galway University Hospitals	205	0	205	252	81%
Letterkenny University Hospital	54	0	54	67	81%
TOTAL	1639	178	1817	1991	91%

¹ In 2025, St Vincent's University Hospital had a change in coding personnel causing some change in coding practice. Evaluation of any training needs will be reviewed for 2026.

