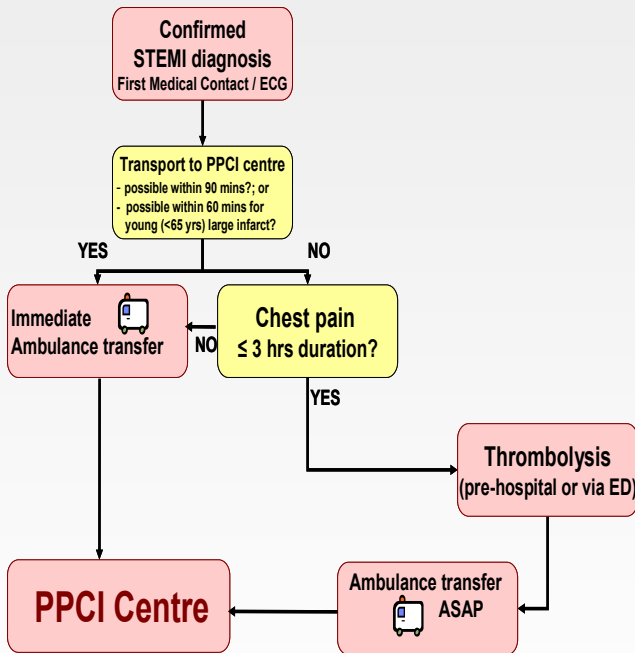


### Objectives of the ACS programme

<p><b>Quality</b></p> <ul style="list-style-type: none"> <li>• Every patient with acute coronary syndrome is managed according to the optimal reperfusion protocol (including early angiography for NSTEMI)</li> <li>• Implement programme to prevent cardiovascular disease</li> </ul>	<p><b>Access</b></p> <ul style="list-style-type: none"> <li>• Every patient with acute coronary syndrome is diagnosed correctly, without delay and transferred to an appropriate cardiology unit for investigation and treatment</li> </ul>	<p><b>Cost</b></p> <ul style="list-style-type: none"> <li>• Reduce mean length of stay for STEMI patients from 5 to 4 days and thus reduce the number of bed days by 1800 per year</li> <li>• Reduce mean length of stay for Non ST Elevation ACS (NSTEMI) patients saving over 6200 bed days per year</li> </ul>
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**Figure 1 – sample optimal reperfusion protocol**



**Figure 2 – PPCI centre definition**

<ul style="list-style-type: none"> <li>♥ No refusal policy</li> <li>♥ Adequate CCU/step down beds</li> <li>♥ Dedicated call service</li> <li>♥ Point/s for ECG reception</li> <li>♥ relevant skill mix in cath lab <ul style="list-style-type: none"> <li>- interventional cardiologist</li> <li>- nursing, technical and radiology</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>♥ For 24/7 centre <ul style="list-style-type: none"> <li>- 1 in 5 cardiologist rota minimum</li> <li>- minimum of 2 cath labs</li> <li>- 24/7 on call cath lab staff</li> </ul> </li> <li>♥ For weekday 9 to 5 centre <ul style="list-style-type: none"> <li>- at least 3 cardiologists a centre</li> <li>- adequate cath lab availability</li> </ul> </li> </ul>
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### Current situation

<p><b>Pre-hospital protocols</b></p> <ul style="list-style-type: none"> <li>• Current PHECC protocol needs update</li> <li>• No ambulance bypass local hospital to PPCI centre</li> <li>• Only 80% of ambulances have 12 lead ECG</li> <li>• Only 50% of 12 lead ECGs can transmit</li> <li>• Only advanced paramedics apply/interpret ECGs</li> </ul>
<p><b>Primary PCI Centres</b></p> <ul style="list-style-type: none"> <li>• Dublin area – 3 x 24/7 and 2 x 9-5 centres</li> <li>• South/Sth East – 1 x 24/7 and 1 x 9-5 centre</li> <li>• West/Mid West – 1 x 24/7 and 1 x 9-5 centre</li> <li>• North West – no Primary PCI centres</li> </ul> <p><b>Issues</b></p> <ul style="list-style-type: none"> <li>• some centres (24/7 and 9-5) have only one lab</li> <li>• only some 24/7 PPCI centres manages a 1: 5 rota</li> <li>• many 9-5 centres have less than 3 cardiologists</li> </ul>
<p><b>In Hospital</b></p> <ul style="list-style-type: none"> <li>• Average of 5 day hospital stay for STEMI</li> <li>• No national protocol for PCI after thrombolysis</li> <li>• No national protocol on early PCI for NSTEMI</li> <li>• No national protocol on local repatriation</li> </ul>

### Desired situation by end 2015

<p><b>Pre-hospital protocols</b></p> <ul style="list-style-type: none"> <li>• clear pre-hospital STEMI protocol (see figs 1&amp; 3)</li> <li>• Ambulance bypass local hospital to PPCI centre</li> <li>• All operational ambulances to have 12 lead ECG</li> <li>• ECGs capable of transmission and interpretation</li> <li>• All paramedics trained to apply/interpret ECGs</li> </ul>
<p><b>Primary PCI Centres</b></p> <ul style="list-style-type: none"> <li>• Dublin area – 2 x 24/7 and 1 x 9-5 centre</li> <li>• South/South East – 1 x 24/7 (and 1 x 9-5 centre?)</li> <li>• West/Mid West – 1 x 24/7 (and 1 x 9-5 centre?)</li> <li>• North West – improved transport/helicopters</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>• all centres operate as designated centres (see fig 2)</li> <li>• ambulance will pass non-primary PCI centres</li> <li>• ambulance will pass 9-5 centres out of hours</li> <li>• above configuration to be phased in over 5 years</li> </ul>
<p><b>In Hospital</b></p> <ul style="list-style-type: none"> <li>• Average of less than 4 day hospital stay for STEMI</li> <li>• Urgent transfer to PPCI centre after thrombolysis</li> <li>• Angiography/PCI on NSTEMI within 24-72 hrs</li> <li>• Early repatriation of ACS patients to local hospital</li> </ul>

### Key benefits of the ACS programme

- Reduced mortality from ACS (particularly STEMI and NSTEMI) – 30 per year
- Reduction of bed days for ST Elevation MIs (STEMI) patients – 1800 per year
- Reduction of bed days for Non ST Elevation ACS (NSTEMI) patients – 6200 per year
- Reduction in incidence of stroke (due to reduction in use of thrombolysis)
- Hospitals dealing with ACS patients working in networks
- Each ACS patient engaging with local hospital for cardiac rehabilitation

### Acknowledgements

♥ ACS Programme Working Group ♥ ACS Programme Clinical Advisory Group

**Figure 3 – sample map: Drive times**



### Main challenges

- ♥ Resourcing of the pre-hospital emergency services
- ♥ Resourcing of PPCI centres (human and equipment)
- ♥ Allaying fears of adverse effect on general cardiology
- ♥ Overcoming local political resistance to change
- ♥ Engagement with Northern Ireland to improve NW