AGENDA ITEM 4.1
12 OCTOBER 2010

UPDATE REPORT ON THE TRANSFORMATION OF THE ACUTE CORONARY SYNDROME (ACS) PATHWAY

<table>
<thead>
<tr>
<th>Report of</th>
<th>Director of Acute Hospital Services</th>
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</thead>
<tbody>
<tr>
<td>Paper prepared by</td>
<td>Divisional Manager, Specialist Services Division</td>
</tr>
<tr>
<td>Purpose of Paper</td>
<td>To update the committee on progress relating to the implementation of the new ACS transfer pathway within Cardiac Services</td>
</tr>
<tr>
<td>Action/Decision required</td>
<td>To receive the report and note the work being progressed within the Division to improve the arrangements for quality and safety, and efficient use of resources.</td>
</tr>
</tbody>
</table>
| Link to Health Care Standards:| AOF Target 21
Intelligent Targets for the treatment of Acute Chest Pain
AOF Target 08
NSF for Cardiac Disease |
| Link to Health Board’s Strategic Direction and Corporate Objectives / Legislative and Regulatory Framework | Supports and strengthens systems in place to improve the quality and safety of patient care. |
| Acronyms and abbreviations    | ACS – Acute Coronary Syndrome
AOF – Annual Operating Framework
NICE – National Institute for Clinical Excellence
NSF – National Service Framework
NSTEMI - non-ST-segment-elevation myocardial infarction |
UPDATE REPORT ON THE TRANSFORMATION OF THE ACUTE CORONARY SYNDROME (ACS) PATHWAY

EXECUTIVE SUMMARY

As part of the Specialist Services 2010/11 Divisional Plan the modernisation and improvement of the regional ACS emergency transfer and treatment service was identified as a key objective.

The Cardiothoracic Services Directorate has led the implementation of a redesigned pathway and capacity to support the improved management of ACS patients across the region and successfully launched the new service from the beginning of July 2010.

There has been a significant improvement in the transfer waiting times across the regional hospitals for patients requiring specialist tertiary intervention at UHW with a reduction from up to 2 weeks to approximately 48 hours. The evaluation of the new service is ongoing and a formal review and audit will be presented at the Annual Cardiac Services Commissioners Review later in 2010.

BACKGROUND

The National Institute for Health and Clinical Excellence (NICE) published guidance on the early management of unstable angina and non-ST-segment-elevation myocardial infarction in March 2010 (NICE Clinical Guideline 94). If untreated, the prognosis is poor and mortality high. Therefore, appropriate triage, risk assessment and timely intervention is critical for the prevention of future adverse events.
The updated Cardiac Disease National Service Framework was published in July 2009. Standard 3, managing the care of patients with coronary heart disease, states that:

“Time is critical to saving the lives of people with a myocardial infarction or cardiac arrest. Minutes lost at any stage may adversely affect outcomes. Early diagnosis is pivotal and early treatment may be life-saving.”

The NSF recommends that all patients with a presenting diagnosis of ACS should be assessed by a consultant cardiologist within 24 hours of admission and that all appropriate patients should have access to angiography. In patients who would benefit from intervention, angiograms should be undertaken within 48 hours of risk stratification and angioplasty should be undertaken within 48 hours of angiography.

The recommendation for management of patients with acute coronary syndromes now also forms one of the intelligent targets published as part of the 2010/11 AOF. This clearly states that patients with a diagnosis of NSTEMI/ACS should receive angiography +/- revascularisation within 96 hours if in higher risk or intermediate risk groups, by transfer where appropriate.

PROGRESS

The new ACS pathway was implemented from the beginning of July 2010.

The achievements to date are as follows;

- All patients admitted directly to UHW with a diagnosis of NSTEMI/ACS are managed in accordance with the Chest Pain clinical pathway and identified to Cardiology for admission to the ACS unit.
- Patients admitted to regional DGHs are referred to the ACS service at UHW as soon as possible following assessment by the local consultant cardiology team (ideally within 24 hours of presentation).
- There is a dedicated, ring fenced ACS unit (10 beds) on ward B1 for admission of patients.
- Patients are transferred to the new UHW unit as soon as possible with current waiting times from referral to transfer at circa 48 hours.
The cardiac catheter lab schedule has been revised to create an all day acute list every day (Monday to Friday) to ensure treatment of patients is in accordance with the guidelines.

Once admitted, patients will be taken to the cardiac catheter lab for treatment within 12-24 hours.

The implemented ACS pathway is designed to manage patients in accordance with NICE guidelines.

Following treatment the majority of patients are discharged home. Some patients need to remain in hospital for further treatment (possibly cardiac surgery) and if this is the case they are discharged from the ACS unit to another bed within cardiology.

Patients requiring on-going rehab are being repatriated to their DGH in accordance with the SEWCN protocol already in place and working effectively.

A detailed monitoring action plan for the implementation is attached in appendix 1.

**BENEFITS**

- The new pathway is providing more equitable, timely, and clinically effective access to diagnostic treatment and intervention.
- There has been a reduction in the wait for transfer for patients in DGHs from 2 weeks to approximately 48 hours.
- There is a reduced wait for catheter lab access for patients once admitted to UHW.
- The changes have been made within the existing consultant and nursing staff resource available through the realignment of capacity rather than any additional capacity.

**FURTHER ACTIONS**

- The Directorate are currently working with IM&T to develop an electronic referral system for DGHs across the region to streamline and standardise the transfer of referral and outcome information.
- The new pathway is currently being formally audited to assess both the access and clinical improvements for patients. The audit results will be presented at the Annual Cardiac Services Commissioners Review later in 2010.
RECOMMENDATION

The Quality and Safety Committee is asked to:

- **RECEIVE** the update report on the implementation of the new pathway for regional ACS transfers and
- **NOTE** the successful implementation of the new pathway and the resulting quality and safety improvements.

IMPACT ASSESSMENT

<table>
<thead>
<tr>
<th>Health Improvement</th>
<th>The establishment of the new service is essential in order to comply with the Cardiac NSF standards and deliver improved clinical outcomes for this group of patients.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce</td>
<td>Improved staff morale as patients receive improved care within the service.</td>
</tr>
<tr>
<td>Financial</td>
<td>No resource implications. Improved efficiency within the pathway has enabled bed day savings within the directorate (pre lab LOS) and therefore enabled a reduction of 10 beds within the Directorate as part of the overall UHB capacity plan.</td>
</tr>
<tr>
<td>Legal</td>
<td>No legal impact.</td>
</tr>
<tr>
<td>Equality</td>
<td>Ensuring a consistent approach will positively impact on the equality agenda across the South East Wales region.</td>
</tr>
<tr>
<td>Environmental</td>
<td>No environmental impact.</td>
</tr>
</tbody>
</table>

RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Clinical/Service</th>
<th>Inability to effectively move patients through the pathway due to the use of Cardiac inpatient beds by Medical outliers will impact transfer waiting times.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>No financial risks have been identified.</td>
</tr>
<tr>
<td>Reputational</td>
<td>Implementing the new pathway has had a positive impact on the reputation of the Division and UHB. Improved access is expected to reduce complaints (across the region) relating to delays to treatment for this group of patients.</td>
</tr>
</tbody>
</table>
### APPENDIX 1 - IMPLEMENTATION OF ACS PATHWAY ACTION PLAN

<table>
<thead>
<tr>
<th>ISSUE IDENTIFIED</th>
<th>ACTION AGREED</th>
<th>DESIGNATED LEAD</th>
<th>DEADLINE</th>
<th>COMMENTS</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patient Referral Process</td>
<td>Referrals from DGHs should take place within 24 hours of patient presentation. Information should be transmitted to UHW as efficiently as possible.</td>
<td>TDK/RAA PL CG</td>
<td>May 2010</td>
<td></td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>• Existing referral form to be reviewed and updated</td>
<td></td>
<td>June 2010</td>
<td></td>
<td>In development</td>
</tr>
<tr>
<td></td>
<td>• E-referral solution to be agreed and developed</td>
<td></td>
<td>April/May 2010</td>
<td>Job description completed, advert request submitted</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>• Advertise for Admin Support Officer to receive and process referrals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Configuration of ACS Unit</td>
<td>Patients with a diagnosis of ACS will be admitted to the dedicated ACS unit on B1.</td>
<td>KB CG/PW CG</td>
<td>April 2010</td>
<td>Agreement received in writing 6/4/10 Agreed 2 x 4 bedders and 2 x cubicles on B1S will form ACS unit</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>• ACS beds to be ring fenced</td>
<td></td>
<td>May 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A designated area on B1 will form the ACS unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Existing CDCU pathway for angio +/- PCI will be modified for ACS patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transfers</td>
<td>Patients will be transferred to the ACS unit from UHW (direct entry), UHL or DGHs.</td>
<td>PL</td>
<td>May 2010</td>
<td>Discussions with WAST unsuccessful at present No reported delays for first 2 months of implementation</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>• Agreement with WAST for timely ambulance transfers from DGHs to UHW</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Admin Support Officer/Cardiology Nurse Practitioners will liaise closely with the Cardiac Bed Manager to advise on admission of patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Admin Support Officer to liaise daily with wards/WAST regarding which patients are to be transferred</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Cath Lab Schedule</td>
<td>The scheduling of patients in the cath lab must be prioritised to deal with ACS/acute patients to ensure timely flow of patients through the system.</td>
<td>TDK/MH POK</td>
<td>March 2010</td>
<td>New schedule drafted, implemented during May 2010 Job plan changes agreed</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>• Cath lab schedule to be revised to ensure all day acute list for ACS patients</td>
<td></td>
<td>March 2010</td>
<td></td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>• Agree with consultants any changes to existing job plans</td>
<td></td>
<td></td>
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</tbody>
</table>
### ISSUE IDENTIFIED

**5. Discharge Planning**

Appropriate discharge arrangements need to be in place for all patients admitted to the ACS unit, having a maximum length of stay of 24-36 hours

- The majority of patients will be discharged home following their treatment in accordance with the pathway
- Patients requiring further treatment at UHW will be admitted to a general cardiac surgery/cardiology bed at UHW
- If on-going rehab is required, patients may be repatriated to the referring DGH (this could be facilitated via a swap with another patient due for transfer if necessary)
- Discharge documentation to be updated to include e-discharge summary/letter to be agreed and developed
- Link from Centricity to Results Reporting to be established

**6. Audit and Governance**

Appropriate arrangements must be in place to audit compliance with the guidance and monitor patient outcomes

- Admin Support Officer/Cardiology Nurse Practitioner will input transfer data into the NLIAH IHT database
- Transfer times and average length of stay will be monitored using the database
- Patient outcomes will be monitored using the CCAD database/CHKS data

<table>
<thead>
<tr>
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<th>COMMENTS</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients admitted to the ACS will be scheduled into a cath lab slot within 12 hours of arrival</td>
<td>as necessary</td>
<td>MH</td>
<td>Ongoing</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>The majority of patients will be discharged home following their treatment in accordance with the pathway</td>
<td></td>
<td>Ongoing</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients requiring further treatment at UHW will be admitted to a general cardiac surgery/cardiology bed at UHW</td>
<td></td>
<td>Ongoing</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If on-going rehab is required, patients may be repatriated to the referring DGH (this could be facilitated via a swap with another patient due for transfer if necessary)</td>
<td></td>
<td>Ongoing</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge documentation to be updated to include e-discharge summary/letter to be agreed and developed</td>
<td></td>
<td>Under development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Link from Centricity to Results Reporting to be established</td>
<td></td>
<td>Ongoing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin Support Officer/Cardiology Nurse Practitioner will input transfer data into the NLIAH IHT database</td>
<td></td>
<td>Ongoing</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer times and average length of stay will be monitored using the database</td>
<td></td>
<td>Monthly</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient outcomes will be monitored using the CCAD database/CHKS data</td>
<td></td>
<td>Annual</td>
<td>To be presented at Commissioners Audit Day</td>
<td>Complete</td>
<td></td>
</tr>
</tbody>
</table>