



Department of
**Health, Social Services
and Public Safety**

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**REVISED SERVICE FRAMEWORK FOR
CARDIOVASCULAR HEALTH AND WELLBEING**

Consultation Document

Working for a Healthier People



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Foreword

As Minister for Health I am determined to ensure that services are safe, improve health and wellbeing of individuals and communities and, at the same time, make the best use of available resources. In addition, I believe it is important that services, as far as possible, meet the needs and preferences of people and are accessible to all regardless of where they live or who they are.

To make this happen, my Department has been developing a set of Service Frameworks which set out explicit standards for health and social care to be used by patients, clients, carers and their wider families to help them understand the standard of care they can expect to receive. These Frameworks are also used by health and social care organisations in planning and delivering services.

The Service Framework for Cardiovascular Health and Wellbeing was the first to be developed, recognising that it was, and continues to be, one of the most significant causes of ill health and disability in Northern Ireland. The Framework was published in 2009.

Following its first 3 years of implementation, which has led to a number of improvements in the quality of care the people of Northern Ireland receive, the Framework has been subjected to a fundamental review conducted by an extended membership of the multidisciplinary and intersectoral Cardiovascular Health and Wellbeing Commissioning Group. The review of the Framework forms the basis for this revised consultation document.

The revised Service Framework for Cardiovascular Health and Wellbeing includes 43 standards, which relate to a number of specific conditions, as well as communication and patient and public involvement, health improvement and protection, medicines management, palliative and end of life care and research.

Each standard is supported by levels of performance to be achieved over 3 years and the revised Framework will continue to be subject to regular review and refinement in the light of new evidence. This will ensure that it provides a sound basis for continued improvement in the quality of health and social services.

I would encourage everyone to respond to this consultation on the revised Framework, to ensure that it continues to improve the quality of cardiovascular services in Northern Ireland.

Edwin Poots MLA
Minister for Health, Social Services and Public Safety

NOTE ON GENERIC STANDARDS

All Service Frameworks incorporate a specific set of standards that are identified as generic.

The generic standards were subjected to public consultation during 2012, with the consultation closing on 6 August 2012. The standards have since been finalised and agreed. A summary of the consultation can be found using the following link – <http://dhsspsni.staging.nigov.net/dhsspsinterstg9.8.4/showconsultations.htm?txtid=56926>

We are therefore not seeking comment on these standards as part of this consultation. The relevant standards are clearly marked as generic throughout the document.

Further information on generic standards can be found in Section 1 – Introduction.

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Communication and Involvement

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 1 (Generic)</p> <p>All patients, clients, carers and the public should be engaged through effective communications by all organisations delivering health and social care</p>	<p>Percentage of patients and clients expressing satisfaction with communication</p>	<p>March 2014 – Establish baseline and set target March 2015 – Report percentage increase of patient and client satisfaction with communication March 2016 – Report percentage increase of patient and client satisfaction with communication</p>
<p>Standard 2 (Generic)</p> <p>All patients, clients, carers and the public should have opportunities to be actively involved in the planning, delivery and monitoring of health and social care at all levels.</p>	<p>Percentage of job descriptions containing PPI as responsibility</p> <p>Year 1: senior and middle management Year 2: designated PPI leads at all levels of HSC organisations Year 3: all new job descriptions</p>	<p>March 2014 – Establish baseline and set target March 2015 – Monitor progress March 2016 – 100% - in all new job descriptions</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients and clients expressing satisfaction</p> <p>Percentage of staff who have gained PPI training (details to be agreed for 2014/2015)</p>	<p>March 2014 – Establish baseline and set target March 2015 – Report percentage increase of patient and client satisfaction March 2016 – Report percentage increase of patient and client satisfaction</p> <p>March 2014 – Conduct training needs assessment for PPI, commission design of PPI training programme March 2015 – Establish baseline and set target March 2016 – Monitor percentage of staff trained at different levels in PPI</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 3 (Generic)</p> <p>Users of Health and Social Care services and their carers should have access to independent advocacy as required</p>	<p>To be determined</p>	<p>To be determined</p>
<p>Standard 4 (Generic)</p> <p>All Health and Social Care staff should identify carers (whether they are parents, family members, siblings or friends) at the earliest opportunity to work in partnership with them and to ensure that they have effective support as needed</p>	<p>Number of front line staff in a range of settings participating in Carer Awareness Training Programmes</p> <p>The number of carers who are offered Carers Assessments</p> <p>The percentage of carers who participate in Carers Assessments</p>	<p>March 2015 - 20% March 2016 - 50%</p> <p>Reviewed annually - Improvement targets set by H&SC Board in conjunction with Carers Strategy Implementation Group</p> <p>Reviewed annually - Improvement targets set by H&SC Board in conjunction with Carers Strategy Implementation Group</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Health Improvement / Protection

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 5 (Generic)</p> <p>All Health and Social Care staff, as appropriate, should provide people with healthy eating support and guidance according to their needs</p>	<p>Percentage of people eating the recommended 5 portions of fruit or vegetables each day</p>	<p>Baseline for 2011/12 = 32% overall, 26% for males and 36% for females</p> <p>Target: maintain or at best increase percentage by 1% year on year</p>
<p>Standard 6 (Generic)</p> <p>All Health and Social Care staff, as appropriate, should provide support and advice recommended levels of physical activity</p>	<p>Percentage of people meeting the recommended level of physical activity per week</p>	<p>New physical activity guidelines were launched in 2011 and as such a new suite of questions to establish the percentage of people of people meeting the recommended level of physical activity per week has been integrated within the 2012/13 Northern Ireland Health Survey. It is anticipated these new baseline results will be available in Nov / Dec 2013.</p> <p>Performance level to be agreed thereafter</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 7 (Generic)</p> <p>All Health and Social Care staff, as appropriate, should advise people who smoke of the risks associated with smoking and sign-post them to well-developed specialist smoking cessation services</p>	<p>Number of people who are accessing Stop Smoking Services</p> <p>Proportion of the smoking population who are accessing Stop Smoking Services.</p> <p>Number of people using stop smoking services who have quit at 4 weeks and 52 weeks.</p>	<p>Baseline 2011/12 = 39204. March 2014 -16 - 4 % year on year increase</p> <p>Baseline 2011/12 =10.8%. NICE guidance and the ten year tobacco strategy call for a target of over 5% of the smoking population to be reached, hence target to maintain at $\geq 5\%$</p> <p>Baseline 2011/12 = 20,299 for those quit at 4 weeks and 5,889 for those quit at 52 weeks. Target 2% increase in respective numbers year on year</p>
<p>Standard 8 (Generic)</p> <p>All Health and Social Care staff, as appropriate, should provide support and advice on recommended levels of alcohol consumption</p>	<p>Percentage of people who receive screening in primary care settings in relation to their alcohol consumption</p>	<p>March 2014 - Establish baseline Performance level to be determined once baseline established</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 9</p> <p>Health and Social Care professionals should work with schools, workplaces and communities to raise awareness of and access to emergency life support (ELS) skills</p>	<p>Percentage of people trained in ELS skills</p> <p>Percentage of people surviving out of hospital cardiac arrests</p>	<p>Baseline 26% in 2010. Targets to be set once region-wide ELS training is in place.</p> <p>March 2014 – Develop information system March 2015 – Establish baseline and set target March 2016 – Monitor performance against target</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 10 (Generic)</p> <p>All Health and Social Care staff should ensure that people of all ages are safeguarded from harm through abuse, exploitation or neglect</p>	<p>All HSC Organisations and organisations providing services on behalf of the HSC have a Safeguarding Policy in place, which is effectively aligned with other organisational policies (e.g. recruitment, governance, complaints, SAIs, training, supervision, etc). The Safeguarding Policy is supported by robust procedures and guidelines</p> <p>All HSC Organisations and organisations providing services on behalf of the HSC have Safeguarding Plans in place</p> <p>All HSC Organisations and organisations providing services on behalf of the HSC have safeguarding champions in place to promote awareness of safeguarding issues in their workplace</p>	<p>March 2014 - Establish baseline Performance level to be determined once baseline established</p> <p>March 2014 - Establish baseline Performance level to be determined once baseline established</p> <p>March 2014 - Establish baseline Performance level to be determined once baseline established</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Hypertension

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 11</p> <p>All adults should be offered lifestyle advice as to the prevention of hypertension and have their blood pressure measured and recorded using standardised techniques every five years from age 45 years</p>	<p>Percentage of patients aged over 45 who have had a recorded blood pressure on their GP record within the past 5 years</p>	<p>March 2014 – 90%</p> <p>March 2015 – 90%</p> <p>March 2016 – 90%</p>
<p>Standard 12</p> <p>All patients should be offered antihypertensive drug therapy if they are aged under 80 years of age and have Stage 1 hypertension with target organ damage, established cardiovascular disease, renal disease, diabetes or a 10 year cardiovascular risk equivalent to 20% or greater, or have stage 2 hypertension at any age</p>	<p>Percentage of patients with hypertension in whom the last blood pressure (measured in the preceding 9 months) is 150/90 or less</p>	<p>March 2014 – 85%</p> <p>March 2015 – 90%</p> <p>March 2016 – 90%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Hyperlipidaemia

	Key Performance Indicators	Anticipated Performance Level
Standard 13 All people with genetically linked high cholesterol (familial hypercholesterolaemia) should be identified and treated and their names entered on a regional register so that other family members can be identified in order that measures can be introduced to prevent the development of cardiovascular disease	Percentage of the putative N Ireland FH population identified Percentage of adult FH patients achieving a reduction in LDL cholesterol concentration of greater than 50%	March 2014 – 28% March 2015 – 34% March 2016 – 40% March 2014 - Establish baseline Performance level to be determined once baseline established

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Cardiology

	Key Performance Level	Anticipated Performance Level
<p>Standard 14</p> <p>All patients that have been assessed and diagnosed with Atrial Fibrillation should have their stroke risk undertaken and treatment commenced as appropriate.</p>	<p>Percentage of patients over the age of 65 that have a documented opportunistic assessment of AF</p> <p>Percentage of patients with atrial fibrillation in whom there is a record of a CHADS₂ score of 1 (latest in the preceding 15 months), who are currently treated with anti-coagulation drug therapy or anti-platelet therapy</p> <p>Percentage of patients with Atrial Fibrillation whose latest record of a CHADS₂ score is greater than 1, who are currently treated with anti-coagulation therapy</p>	<p>March 2014 – 60%</p> <p>March 2015 – 65%</p> <p>March 2016 – 70%</p> <p>March 2014 – 70%</p> <p>March 2015 – 80%</p> <p>March 2016 – 90%</p> <p>March 2014 – 50%</p> <p>March 2015 – 60%</p> <p>March 2016 – 70%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Standard 15		
<p>All patients diagnosed with chronic heart failure should be managed by a multi-professional integrated health care team that includes specialist heart failure services, community services and General Practitioners which have access to timely BNP and ECHO investigations This pathway will extend from diagnosis to end of life.</p>	<p>Percentage of referrals for assessment of left ventricular heart failure that has a BNP result recorded on their referral documentation.</p>	<p>March 2014 – 70% March 2015 – 75% March 2016 – 80%</p>
	<p>Percentage of patients referred for an ECHO for consideration of LV Failure that have their procedure completed and reported on within 9 weeks of referral (unless clinically urgent)</p>	<p>March 2014 – 80% March 2015 – 85% March 2016 – 90%</p>
	<p>Percentage of patients with chronic heart failure due to left ventricular systolic dysfunction that are offered angiotensin-converting enzyme inhibitors (or angiotensin II receptor antagonists licensed for heart failure if there are intolerable side effects with angiotensin-converting enzyme inhibitors) and beta blockers licensed for heart failure</p>	<p>March 2014 – 60% March 2015 – 65% March 2016 – 70%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	Percentage of patients that have been identified as Phase C/D on the Northern Ireland End of Life 2 model that have been offered an advance care plan	March 2014 – 40% March 2015 – 45% March 2016 – 50%
Standard 16 All patients who develop new onset chest pain, suggestive of angina should be reviewed at a rapid access chest pain clinic (RACPC) within 2 calendar weeks of referral by the GP/appropriate clinician	Percentage of patients who are seen at RACPC within 2 calendar weeks of referral by a GP / appropriate clinician (excluding refusal of first offer)	March 2014 – 90% March 2015 – 95% March 2016 – 98%
Standard 17 All patients identified as requiring cardiac rehabilitation, in line with the regional guidelines, should have their rehabilitation delivered by a specialist cardiac rehabilitation nursing team	Percentage of patients referred to cardiac rehabilitation that receive Phase 1 Percentage of eligible patients referred to cardiac rehabilitation that receive Phase 2	March 2014 – 60% March 2015 – 65% March 2016 – 70% March 2014 – 95% March 2015 – 95% March 2016 – 95%

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of eligible patients offered Phase 3</p>	<p>March 2014 – 80% March 2015 – 95% March 2016 – 90%</p>
	<p>Percentage of patients invited to join a Phase 3 that commence the programme</p>	<p>March 2014 – 45% March 2015 – 50% March 2016 – 55%</p>
	<p>Percentage of patients that complete 50% of Phase 3</p>	<p>March 2014 – 80% March 2015 – 85% March 2016 – 90%</p>
	<p>Percentage reduction in the number of unscheduled hospital readmissions for another cardiac event over one financial year</p>	<p>March 2014 – Establish baseline March 2015 – 5% increase on baseline March 2016 – 5% increase on baseline</p>
	<p>Percentage of patients surveyed that are satisfied with cardiac rehabilitation services based on 50% of the patients returning the survey</p>	<p>March 2014 – 80% March 2015 – 85% March 2016 – 90%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients accepting referral to a structured community exercise programme (Phase 4)</p> <p>Percentage of patients that indicated they felt better / much better following cardiac rehabilitation intervention on the QOL indicator tool</p>	<p>March 2014 – Establish baseline March 2015 – 5% increase on baseline March 2016 – 5% increase on baseline</p> <p>March 2014 – Establish baseline March 2015 – 5% increase on baseline March 2016 – 5% increase on baseline</p>
<p>Standard 18</p> <p>All patients suffering from an acute cardiac event (ST elevation myocardial infarction (STEMI), Non ST Elevation myocardial infarction (NSTEMI) should have Cor Angio +/- PCI / Cardiac Surgery within the agreed clinical timelines</p>	<p>Percentage of patients who have a primary PCI within 90 minutes of arrival at the 24/7 capable centre</p> <p>Percentage of eligible STEMI patents that have primary PCI within 120 minutes of calling for help</p>	<p>March 2014 – 80% March 2015 – 85% March 2016 – 90%</p> <p>March 2014 – Establish baseline Performance level to be determined once baseline established</p>

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Summary of Standards

	<p>Percentage of eligible STEMI patents that have primary PCI within 150 minutes of calling for help</p>	<p>March 2014 – Establish baseline Performance level to be determined once baseline established</p>
	<p>Percentage of eligible NSTEMI / ACS patients who have Cor Angio +/- within 72hrs from diagnosis</p>	<p>March 2014 – 60% March 2015 – 65% March 2016 – 70%</p>
	<p>Percentage of eligible patients, defined as clinically urgent, who have cardiac surgery within 7 days of acceptance by the surgical team.</p>	<p>March 2014 – 50% March 2015 – 60% March 2016 – 70%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Stroke

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 19</p> <p>All patients with suspected transient ischaemic attack should have rapid specialist assessment and investigation to confirm the diagnosis and should have a management plan urgently put in place to reduce short term and long term cardiovascular complications</p>	<p>Percentage of confirmed TIA patients at high risk of early stroke (ABCD2 score 4 or above) who undergo specialist assessment AND, where clinically indicated, urgent brain imaging (preferably by MRI DWI) within 24 hours following assessment</p> <p>MRI DWI, where clinically indicated, should be available as first choice brain imaging for all TIA patients within 24 hours, 7 days a week, for high risk patients and within 7 days for lower risk patients</p> <p>Percentage of TIA patients seeking medical attention who receive antiplatelet and statin therapy within 24 hours of the index event</p>	<p>March 2014 – 50%</p> <p>March 2015 – 60%</p> <p>March 2016 – 70%</p> <p>March 2014 – 50%</p> <p>March 2015 – 60%</p> <p>March 2016 – 70%</p> <p>March 2014 – 80%</p> <p>March 2015 – 90%</p> <p>March 2016 – 100%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 20</p> <p>All patients with suspected acute stroke should have rapid access to specialist assessment, appropriate brain imaging and emergency treatment, including thrombolysis.</p>	<p>Percentage of confirmed ischaemic stroke patients who, following an assessment, receive thrombolysis within 4.5 hours of onset of stroke symptoms</p> <p>Percentage of acute stroke patients who have brain imaging within 12 hours of the stroke event.</p> <p>Percentage of patients with ischaemic stroke in whom door to needle time is equal to or less than 60 minutes</p>	<p>March 2014 – 10%</p> <p>March 2015 – 11%</p> <p>March 2016 – 12%</p> <p>March 2014 – 80%</p> <p>March 2015 – 85%</p> <p>March 2016 – 90%</p> <p>March 2014 – 75%</p> <p>March 2015 – 80%</p> <p>March 2016 – 85%</p>
<p>Standard 21</p> <p>All patients who have had a stroke should have their rehabilitation delivered by a Specialist Stroke Rehabilitation Team in a Stroke Unit, starting immediately after admission to hospital.</p>	<p>Percentage of stroke patients admitted directly to a specialist stroke unit or an equivalent hyperacute bed</p>	<p>March 2014 – 80%</p> <p>March 2015 – 85%</p> <p>March 2016 – 90%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Stroke units admitting acute strokes must have;</p> <ul style="list-style-type: none">• Access to immediate brain imaging within 12 hours• Continuous physiological monitoring• Nurses trained in swallow screening• Nurses trained in stroke assessment /management• Existence of stroke protocols• Specialist ward rounds <p>Percentage of stroke patients, discharged from hospital, who continue rehabilitation in the community by a community stroke / early supported discharge team</p>	<p>March 2014 – 50% March 2015 – 60%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 22</p> <p>All patients who have had a stroke are reviewed post discharge by Trust stroke services at 6 weeks and 6 months, and at 12 months and annually by primary care. As part of ongoing review emotional and mental health should be assessed.</p>	<p>Percentage survivors of stroke or TIA who have timely primary care and specialist review in line with regionally agreed policy</p> <p>All Trusts should have a service model in place for offering psychological and emotional support to stroke survivors and their carers</p>	<p>March 2014 – 70%</p> <p>March 2015 – 75%</p> <p>March 2016 – 80%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Vascular

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 23</p> <p>All patients with an abdominal aortic aneurysm (AAA) > 5.5cms should have 24/7 access to a specialist vascular service in a vascular centre that meets the requirements set by the Vascular Society of Great Britain & Ireland for The Provision of Services for Patients with Vascular Disease.</p>	<p>The elective (open and EVAR) AAA mortality rate</p> <p>Time between diagnosis and treatment</p> <p>Formal identification of appropriate vascular centres that meet the requirements set by the Vascular Society of Great Britain & Ireland for The Provision of Services for Patients with Vascular Disease</p>	<p>March 2014 – 3.5% March 2015 – 3.25% March 2016 – 3%</p> <p>March 2014 – 8 weeks for screen detected AAAs March 2015 – 8 weeks for all AAAs March 2016 – Maintain 8 weeks for all AAAs</p> <p>March 2014 – Centres identified</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Standard 24		
<p>Everyone who has had a stroke or a transient ischaemic attack (TIA) should have their risk factors investigated and managed; and helped to adopt a healthy lifestyle.</p>	<p>Percentage of new patients with stroke or TIA who have been referred for further investigation</p>	<p>March 2014 – 60% March 2015 – 80% March 2016 – 90%</p>
	<p>Percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that they are taking an anti-platelet agent (asprin, clopidogrel, dipyridamole or a combination), or an anticoagulant</p>	<p>March 2014 – 70% March 2015 – 80% March 2016 – 90%</p>
	<p>Percentage of patients with a stroke or TIA whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less</p>	<p>March 2014 – 55% March 2015 – 65% March 2016 – 70%</p>
	<p>Percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less</p>	<p>March 2014 – 60% March 2015 – 70% March 2016 – 80%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 25</p> <p>People with symptomatic carotid artery stenosis should have rapid access to high quality carotid imaging and carotid revascularisation, in accordance with their risk of subsequent stroke.</p>	<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who had a duplex ultrasound scan (DUS) of carotid artery within 1 week of onset of stroke or TIA symptoms</p> <p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who underwent surgery within a maximum of 2 weeks of onset of stroke or TIA symptoms</p> <p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who have a complication during inpatient stay recorded as stroke or TIA during/after the procedure and prior to discharge</p>	<p>March 2014 – 70% March 2015 – 75% March 2016 – 80%</p> <p>March 2014 – 80% March 2015 – 90% March 2016 – 95%</p> <p>March 2014 – <4% March 2015 – <3% March 2016 – <2%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who have a complication during inpatient stay recorded as cranial nerve injury (includes neuropraxia) during/after the procedure and prior to discharge</p>	<p>March 2014 – <5% March 2015 – <4% March 2016 – <3%</p>
	<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who have a complication during inpatient stay recorded as patient returned to theatre for bleeding during/after the procedure and prior to discharge</p>	<p>March 2014 – <5% March 2015 – <4% March 2016 – <3%</p>
	<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who died during the inpatient stay</p>	<p>March 2014 – 97% March 2015 – 98% March 2016 – 99%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 26</p> <p>All people with diabetes should have a foot care pathway updated on an annual basis. Risk stratification should direct onward referral and an appropriately constituted multidisciplinary team should be in place to triage and manage major complications of diabetic foot disease.</p>	<p>The development and implementation of guidance including development of a regional diabetic foot care pathway</p> <p>Rate of hospital admissions with diabetic foot disease per 1000 population</p> <p>The number of people with diabetes who have undergone amputation surgery per 1000 population</p> <p>Percentage of people with diabetes who are recorded as having a foot assessment and risk stratification</p>	<p>March 2014 – Develop a regional diabetic foot care guidance in conjunction with GAIN March 2015 – 3 Trusts March 2016 – 5 Trusts</p> <p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 – 60% March 2015 – 80% March 2016 – 90%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 27</p> <p>All patients requiring major lower limb amputation should be individually managed by a specialist multidisciplinary vascular team, which regularly undertakes limb amputation, to ensure that mobility is maximised and perioperative mortality rates are minimised.</p>	<p>Percentage of below knee amputations carried out each year on new patients requiring major lower limb amputation</p> <p>Percentage of major lower limb amputees who are referred for multidisciplinary assessment to the Regional Amputee Unit, Musgrave Park Hospital, Belfast</p> <p>Perioperative mortality rate for major lower limb amputation</p>	<p>March 2014 – Establish baseline March 2015 – Interim performance level to be determined once baseline established March 2016 – Transtibial: transfemoral ratio >1</p> <p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 – <7% March 2015 – <6% March 2016 – <5%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of outpatients waiting no longer than nine weeks for their first appointment</p> <p>Number of patients waiting longer than a specified number of weeks for their first outpatient appointment</p>	<p>March 2014 – 80% of outpatients waiting no longer than 9 weeks for their first appointment March 2015 – 80% of outpatients waiting no longer than 9 weeks for their first appointment March 2016 – Performance levels to be set in 2014/15</p> <p>March 2014 – No outpatients waiting longer than 18 weeks for their first appointment March 2015 – No outpatients waiting longer than 15 weeks for their first outpatient appointment March 2016 – Performance levels to be set in 2014/15</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	Number of patients waiting longer than nine weeks for their first AHP outpatient treatment	March 2014 - No outpatients waiting more than 9 weeks for first AHP outpatient treatment. March 2015 - No outpatients waiting more than 9 weeks for first AHP outpatient treatment. March 2016 – Performance levels to be set in 2014/15
<p>Standard 29</p> <p>A full range of treatment modalities should be available for patients with symptomatic venous disease that has failed conservative measures, or patients with chronic venous insufficiency and skin changes, to ensure that a cost-effective and timely treatment plan is offered.</p>	<p>Intervention offered only to symptomatic C2 and above varicose veins</p> <p>Percentage of varicose veins treated in a treatment room setting under local anaesthetic in Northern Ireland</p>	<p>March 2014 – 50%</p> <p>March 2015 – 70%</p> <p>March 2016 – 90%</p> <p>March 2014 – 30%</p> <p>March 2015 – 50%</p> <p>March 2016 – 70%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 30</p> <p>All patients with lower limb ulceration should have their condition diagnosed and managed in accordance with the Venous Leg Ulcers Map of Medicine by appropriately trained staff.</p>	<p>Percentage of lower limb ulceration referrals to secondary care where the patient has had an Ankle Brachial Pressure Index performed in primary care</p> <p>Percentage of all GP practices who have a minimum of 1 registered nurse who has successfully completed a recognised post-graduate lower limb ulceration course, which includes holistic assessment and compression bandaging</p> <p>Percentage of patients with lower limb ulceration, where the ulcer has not responded to 12 weeks of adequate treatment, who are referred within 16 weeks of the start of that treatment for specialist intervention (i.e. referral to vascular service, tissue viability service or dermatology service)</p>	<p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients with healed lower limb venous ulceration who are provided with graduated compression hosiery</p> <p>Number of Trusts who have up-to-date policies and documentation in place for the treatment and management of lower limb ulceration</p>	<p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 – 3 Trusts March 2015 – 4 Trusts March 2016 – 5 Trusts</p>
<p>Standard 31</p> <p>All patients with complex vascular malformations should have their case discussed at an appropriate multidisciplinary meeting prior to intervention being performed</p>	<p>Percentage of patients undergoing intervention to vascular malformation discussed at multidisciplinary vascular malformation meeting</p>	<p>March 2014 - Establish baseline Performance levels to be determined once baseline established</p>
<p>Standard 32</p> <p>People diagnosed with peripheral arterial disease (PAD) should have their cardiovascular risk factors assessed and managed</p>	<p>Percentage of patients with PAD with a record in the preceding 15 months that aspirin or an alternative anti-platelet is being taken</p>	<p>March 2014 – 50% March 2015 – 70% March 2016 – 90%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients with PAD in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less</p> <p>Percentage of patients with PAD in whom the last total cholesterol (measured in the preceding 15 months) is 5.0mmol/l or less</p> <p>Percentage of patients with PAD and diabetes mellitus who have a record of a foot assessment within the preceding 15 months</p>	<p>March 2014 – 50% March 2015 – 70% March 2016 – 90%</p> <p>March 2014 – 50% March 2015 – 70% March 2016 – 90%</p> <p>March 2014 – 50% March 2015 – 70% March 2016 – 90%</p>
<p>Standard 33</p> <p>All people who have peripheral arterial disease (PAD) and are being considered for revascularisation should have appropriate imaging carried out</p>	<p>Percentage of patients with symptomatic PAD who have undergone interventional treatment (endovascular or open surgical) and who had prior assessment by diagnostic imaging</p>	<p>March 2014 – 90% March 2015 – 95% March 2016 – 99%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 34</p> <p>All people with symptomatic peripheral arterial disease (intermittent claudication) who undergo interventional treatment should be managed in a vascular unit that promotes the secondary prevention of cardiovascular disease and can demonstrate good surgical outcomes</p>	<p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who had been current smoker (up to within 2 months)</p> <p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who had been prescribed aspirin or clopidogrel (or an alternative anti-platelet or anticoagulant) at time of intervention</p> <p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who had been prescribed lipid-lowering statin therapy at time of intervention</p>	<p>March 2014 – 15%</p> <p>March 2015 – 10%</p> <p>March 2016 – 5%</p> <p>March 2014 – 80%</p> <p>March 2015 – 85%</p> <p>March 2016 – 90%</p> <p>March 2014 – 75%</p> <p>March 2015 – 80%</p> <p>March 2016 – 85%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who have a “Complications: graft/anastomotic complications status as none”</p>	<p>March 2014 – 90% March 2015 – 93% March 2016 – 95%</p>
	<p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who have a “Complications: limb ischaemia status as amputation”</p>	<p>March 2014 – <7% March 2015 – <6% March 2016 – <5%</p>
	<p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who have a “Patient status at discharge alive”</p>	<p>March 2014 – 93% March 2015 – 95% March 2016 – 97%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Standard 35		
<p>All people with critical limb ischaemia should be managed in a vascular unit that promotes the secondary prevention of cardiovascular disease and can demonstrate good surgical outcomes</p>	<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who had been current smoker (up to within 2 months)</p>	<p>March 2014 – 35% March 2015 – 30% March 2016 – 25%</p>
	<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who had been prescribed aspirin or clopidogrel (or an alternative anti-platelet or anticoagulant) at time of intervention.</p>	<p>March 2014 – 80% March 2015 – 85% March 2016 – 90%</p>
	<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who had been prescribed lipid-lowering statin therapy at time of intervention</p>	<p>March 2014 – 75% March 2015 – 80% March 2016 – 85%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who have a “Mode of Admission status as emergency”</p> <p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who have a “Complications: limb ischaemia status as amputation”</p> <p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who have a “Patient status at discharge alive”</p>	<p>March 2014 – 36% March 2015 – 33% March 2016 – 30%</p> <p>March 2014 – 36% March 2015 – 33% March 2016 – 30%</p> <p>March 2014 – 80% March 2015 – 83% March 2016 – 85%</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Renal Disease

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 36</p> <p>All patients with a diagnosis of chronic kidney disease (CKD) should receive timely, appropriate and effective investigation, treatment and follow-up to reduce the risk of progression and complications</p>	<p>Percentage of CKD patients with a record of blood pressure in the previous 15 months and whose blood pressure is 140/85 mmHg or less</p> <p>Percentage of hypertensive and proteinuric CKD patients treated with an angiotensin converting enzyme inhibitor (ACE-I) or, if a patient is intolerant to an ACE inhibitor, angiotensin receptor blocker (ARB) (unless a contraindication or side effects are recorded)</p> <p>Percentage of patients with CKD who have a quantitative record of a proteinuria test in the previous 15 months</p>	<p>March 2014 – 80%</p> <p>March 2015 – 82%</p> <p>March 2016 – 85%</p> <p>March 2014 – 95%</p> <p>March 2015 – 95%</p> <p>March 2016 – 95%</p> <p>March 2014 – 82%</p> <p>March 2015 – 85%</p> <p>March 2016 – 85%</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

<p>Standard 37</p> <p>Renal services should ensure the delivery of high quality, safe and effective dialysis care which is designed around the individual's needs and preferences and is available to all patients of all ages</p>	<p>Percentage of patients who have been on HD for more than 90 days and less than 1 year who receive dialysis via permanent vascular access</p>	<p>March 2014 – 70% March 2015 – 75% March 2016 – 80%</p>
<p>Standard 38</p> <p>All children, young people and adults likely to benefit from a kidney transplant should receive a high quality service which maximises their opportunities to obtain a transplant and enables them to achieve the best possible quality of life</p>	<p>Percentage of dialysis and CKD Stage 5 patients who are medically suitable and have evidence of transplant discussion and education</p> <p>Percentage of patients on transplant list who have evidence of an annual review of ongoing clinical suitability</p> <p>Maintain living donation kidney transplants in line with demand</p>	<p>March 2014 – 70% March 2015 – 75% March 2016 – 80%</p> <p>March 2014 – 75% March 2015 – 80% March 2016 – 85%</p> <p>March 2014 – 50/year (estimated) March 2015 – TBC March 2016 – TBC</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Establish a transplant programme to maximise use of donation after cardiac death (DCD) kidneys in NI (Percentage of DCD Kidneys retrieved in NI to be transplanted in NI*)</p> <p>Establish a robust MDT system to review all kidney offers to the NI team and identify any avoidable reasons for refusal</p>	<p>March 2014 – 30% March 2015 – 50% March 2016 – 50%</p> <p>June 2013</p>
<p>Standard 39</p> <p>All people at risk of, or suffering from, acute kidney injury / acute renal failure should be identified promptly, with hospital services delivering high quality, clinically appropriate care in partnership with specialized renal teams. Prevention of AKI should be a priority for all clinicians in both primary and secondary care.</p>	<p>Implement GAIN evidence-based consensus guidance on the prevention and management of AKI. All FY2 doctors in NI to have access to training on AKI recognition</p> <p>Develop the eMed system, or its replacement, so that it can identify patients who entered the long-term HD programme following AKI</p>	<p>March 2014 - 95% March 2015 - 98% March 2016 - 98%</p> <p>Obtain baseline by March 2014 with a view to setting performance targets</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Contribute to national audit programme, using the information to identify avoidable causes, and develop an action plan to minimise AKI incidence</p> <p>Explore development of an e-alert system, via routine laboratory results, to flag inpatients at potential risk of AKI requiring clinical review and intervention as appropriate</p>	<p>Feasibility report by December 2013 Implementation to follow depending on outcome</p>
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Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Medicines Management in Cardiovascular Disease

	Key Performance Indicators	Anticipated Performance Level
<p>Standard 40</p> <p>In partnership with healthcare professionals all patients with cardiovascular disease should be provided with appropriate, safe and effective medicines to enable them to gain maximum benefits from medicines to maintain or increase their quality and duration of life</p>	<p>Level of cardiovascular prescribing in concordance with local medicines formulary</p> <p>Proportion of people with cardiovascular disease accessing a specific medicines management support programme for concordance</p>	<p>Current baseline – 87%</p> <p>March 2014-16 – Ongoing in tandem with the development of the NI formulary</p> <p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p>
<p>Standard 41</p> <p>Patients with cardiovascular disease should have a systematic review of all their medicines at appropriate intervals along the patient pathway to ensure that their medicines continue to be appropriate, and that they participate in the treatment as prescribed</p>	<p>Percentage of cardiovascular patients receiving four or more medicines who are offered a medicines review annually</p> <p>Percentage of cardiovascular patients in secondary care who have had their medicines list checked and verified as accurate on admission</p>	<p>March 2014 – 80%</p> <p>March 2015 – 80%</p> <p>March 2016 – 80%</p> <p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Palliative and End of Life Care

	Key Performance Indicator	Anticipated Performance Level
Standard 42 (Generic) All people with advanced progressive incurable conditions, in conjunction with their carers, should be supported to have their end of life care needs expressed and to die in their preferred place of care	Percentage of the population that is enabled to die in their preferred place of care Percentage of population with a understanding of advance care planning	March 2014 – Establish baseline Performance levels to be determined once baseline established March 2014 – Establish baseline Performance levels to be determined once baseline established

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

Research

	Key Performance Indicator	Anticipated Performance Level
<p>Standard 43</p> <p>All Health and Social Care services promote, conduct and use research to improve the current and future health and wellbeing of the population.</p>	<p>Number of research studies (active for all or part of the monitoring period) under the auspices of NICRN cardiovascular, renal, primary care, stroke interest groups</p> <p>Percentage of commercial studies</p> <p>Number of patients screened for participation in research studies during the monitoring period under the auspices of NICRN cardiovascular, renal, primary care, stroke interest groups</p>	<p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p> <p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p>

Service Framework for Cardiovascular Health and Wellbeing

Summary of Standards

	<p>Numbers of patients recruited into research studies during the monitoring period under the auspices of NICRN cardiovascular, renal, primary care, stroke interest groups</p>	<p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p>
	<p>Numbers of patients participating in research studies (active for all or part of the monitoring period) under the auspices of NICRN cardiovascular, renal, primary care, stroke interest groups</p>	<p>March 2014 – Establish baseline Performance levels to be determined once baseline established</p>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

SECTION 1 - INTRODUCTION

Background

The overall aim of the Department of Health, Social Services and Public Safety (DHSSPS) is to improve the health and social wellbeing of the people of Northern Ireland.

In support of this the Department has been developing a range of Service Frameworks which set out explicit standards for health and social care that are evidence based and are capable of being measured.

The first round of service frameworks focussed on the most significant causes for ill health and disability - cardiovascular health and wellbeing, respiratory health and wellbeing, cancer prevention, treatment and care, mental health and wellbeing and learning disability. Work has also commenced to develop Service Frameworks for children and young people and older people.

Service frameworks have been identified as a major strand of the reform of health and social care services and provide an opportunity to:

- Strengthen the integration of health and social care services;
- Enhance health and social wellbeing, to include identification of those at risk, and prevent / protect individuals and local populations from harm and / or disease;
- Promote evidence-informed practice;
- Focus on safe and effective care; and,
- Enhance multidisciplinary and intersectoral working.

Aim of Service Frameworks

Service frameworks will set out the standards of care that patients, clients, their carers and wider family can expect to receive in order to help people to:

- prevent disease or harm;
- manage their own health and wellbeing including understanding how lifestyle affects health and wellbeing including the causes of ill health and its effective management;

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- be aware of what types of treatment and care are available within health and social care;
- be clear about the standards of treatment and care they can expect to receive.

All Service Frameworks incorporate a specific set of standards that are identified as Generic. These, essentially, are intended to apply to all the population, or all HSC professionals or all service users, regardless of their health condition or social grouping. These include:

- involvement (Generic standard 1);
- communication (Generic standard 2);
- independent advocacy (Generic standard 3);
- carers (Generic standard 4);
- healthy eating (Generic standard 5);
- physical activity (Generic standard 6);
- smoking prevention & cessation (Generic standard 7);
- alcohol (Generic standard 8);
- safeguarding (Generic standard 10); and
- palliative care (Generic standard 41).

These Generic standards reinforce the holistic approach to health and social care improvement and reflect the importance of health promotion in preventing medical or social care issues occurring in the first place. Their inclusion ensures:

- equity of opportunity for all;
- the communication of consistent messages to service users and providers of HSC; and
- a consistent approach in the design and delivery of services.

Service frameworks will also be used by a range of stakeholders including commissioners, statutory and non-statutory providers, and the Regulation and Quality Improvement Authority (RQIA) to commission services, measure performance and monitor care.

The Frameworks will identify clear and consistent standards informed by expert advice, research evidence and by national standard setting bodies such as the National Institute for Health and Clinical Excellence (NICE) and the Social Care Institute for Excellence (SCIE). The auditing and measuring of these standards will be assisted by the Guidelines and Implementation

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Network (GAIN) which will facilitate regional audit linked to priority areas, including Service Frameworks.

The standards, in the context of the 10 year Quality Strategy¹, will aim to ensure that health and social care services are:

- i. **Safe** – health and social care which minimises risk and harm to service users and staff;
- ii. **Effective** – health and social care that is informed by an evidence base (resulting in improved health and wellbeing outcomes for individuals and communities), is commissioned and delivered in an **efficient** manner (maximising resource use and avoiding waste), is **accessible** (is timely, geographically reasonable and provided in a setting where skills and resources are appropriate to need) and **equitable** (does not vary in quality because of personal characteristics such as age, gender, ethnicity, race, disability (physical disability, sensory impairment and learning disability), geographical location or socioeconomic status).
- iii. **Person centred** – health and social care that gives due regard to the preferences and aspirations of those who use services, their family and carers and respects the culture of their communities. A person of any age should have the opportunity to give account of how they feel and be involved in choices and decisions about their care and treatment dependent on their capacity to make decisions. In absence of the capacity to make decisions they should listen to those who know and care for the person best.

Involving and communicating with the public

The Department has produced guidance, “Strengthening Personal and Public Involvement in Health and Social Services”², which sets

¹ Quality 2020: A 10-Year Quality Strategy for Health and Social Care in Northern Ireland. Available from: http://www.dhsspsni.gov.uk/index/phealth/sqs/quality_strategy_2020.htm

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out values and principles which all health and social care organisations and staff should adopt when engaging with the public and service users. These include the need to involve people at all stages in the planning and development of health and social care services. This policy position has been strengthened by the introduction of the Health and Social Care (Reform) Act (Northern Ireland) 2009 and the statutory duty it places on HSC organisations to involve and consult with the public. (Art 19)

It is important that the views of service users and carers are taken into account when planning and delivering health and social care. The integration of the views of service users, carers and local communities into all stages of the planning, development and review of Service Frameworks is an important part of the continuous quality improvement and the open culture which should be promoted in HSC.

Through the proactive involvement of the public in the planning of Service Frameworks, it is hoped that concerns and ideas for improvement can be shared and that the standards developed in partnership with service users, carers and the public will focus on the issues that really matter to them.

It is also important that Service Frameworks provide service users and carers with clear and concise information, which is sensitive to their needs and abilities, so that they can understand their own health and wellbeing needs. To facilitate this, easy access versions will be made available for all Service Frameworks. Service Frameworks will also be made available in various other formats e.g. Braille, large print and audio tape. The Department will also consider requests for other formats or translation into ethnic minority languages.

People are ultimately responsible for their own health and wellbeing and that of their dependents, and it is important that service users, their carers and wider family are made aware of the role they have to play in promoting health and wellbeing.

² DHSSPS (2007) Guidance on Strengthening Personal and Public Involvement in Health and Social Care (HSC (SQSD) 29/07). Available from: http://www.dhsspsni.gov.uk/hsc_sqsd_29-07.pdf

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Involving other agencies in promoting health and wellbeing

Improving the health and wellbeing of the population requires action right across society and it is acknowledged that health and wellbeing is influenced by many other factors such as poverty, housing, education and employment. While Service Frameworks set standards for providers of health and social care services it is essential that HSC services work in partnership with other government departments and agencies both statutory and non-statutory to seek to influence and improve the health and social wellbeing of the public.

People who use health and social care services may have complex needs which require inputs from a range of health and social care professionals and other agencies.

The benefits of multidisciplinary team working and multiagency working, including voluntary and community organisations, are well recognised and it is a key component of decision making regarding prevention, diagnosis, treatment and ongoing care. This will be a key theme underpinning the development and implementation of Service Frameworks.

Data Collection

As service frameworks are implemented it is important that robust accurate data are available to support decision making and service improvement. Each specialist service must ensure timely submission of robust data collection to a regionally agreed minimum dataset. Where there are gaps in the availability of data against which to monitor service improvement then work should be undertaken at an early stage to develop these minimum datasets.

Research and Development

It is important that service frameworks are based on valid, relevant published research, where available, and other evidence.

Education and Workforce

Education and workforce development occur at individual, team, organisational, regional and national levels: they are part of the drive to promote quality. The ongoing development and

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

implementation of Service Frameworks will influence the education and training agenda and curricula content for all staff involved in the delivery of health and social care. This will require a commitment to lifelong learning and personal development alongside a focus on specific skill areas to ensure that newly qualified and existing staff are in a position to deliver on quality services.

Leadership

Effective leadership is one of the key requirements for the implementation of Service Frameworks and will require health and social care professionals from primary, community and secondary care to work together across organisational boundaries, including the voluntary and community sectors. It is essential that Service Frameworks are given priority at senior, clinical and managerial level and implemented throughout all HSC organisations.

Affordability

Many of the standards contained in the Framework do not require additional resources as they are focussed on quality improvement and should be capable of delivery by optimising the use of existing funding. Where there are additional costs associated with specific standards, these will be sought through existing service development and commissioning processes; performance indicators and targets will be reviewed and adjusted as necessary in the light of the available resources in any one year.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

SECTION 2 - SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELLBEING

Introduction

Cardiovascular disease (CVD) is one of the major causes of ill health and disability in Northern Ireland. The aim of this framework is to improve the health and wellbeing of the population of Northern Ireland, reduce inequalities and improve the HSC quality of care in relation to cardiovascular disease. It is recognised that achievement of this aim goes beyond traditional HSC boundaries and is strongly influenced by population/individual attitudes and behaviours, and the contribution of other sectors.

The cardiovascular health and wellbeing service framework sets standards in relation to the prevention, assessment, diagnosis, treatment, care, rehabilitation and palliative care of individuals/communities who currently have or are at greater risk of developing cardiovascular disease. Recognising that several diseases can co-exist, share common risk factors and can adversely impact on prognosis, this service framework includes consideration of:

- Hypertension;
- Hyperlipidaemia;
- Cardiology;
- Stroke;
- Vascular; and,
- Renal disease

Process for reviewing the Service Framework for Cardiovascular Health and Wellbeing

The development of Service Frameworks is overseen by a multi-disciplinary programme board, which is chaired by the Chief Medical Officer.

Service Frameworks have a 3-year life cycle. At the end of this cycle, RQIA appraise the implementation of the Framework and report on its effectiveness. This appraisal informs a fundamental review, which not only evaluates the final achieved position against performance indicators and targets set, but also the effectiveness

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of the standards in the Framework and their continued utility and relevance.

The Service Framework for Cardiovascular Health and Wellbeing was originally published in January 2009, therefore came to the end of its life cycle in 2012. The RQIA completed its Independent Review of the Implementation of the Cardiovascular Service Framework in November 2012. Their review report can be found here

http://www.rqia.org.uk/cms_resources/CVF%20FINAL%20REPORT%2021.11.12%20for%20publication.pdf

The fundamental review of this Framework has been conducted by an extended membership of the multidisciplinary and intersectoral Cardiovascular Health and Wellbeing Commissioning Group led by Dr Christine McMaster, Public Health Consultant at the Regional Public Health Agency for Northern Ireland (PHA). In order to take the review forward a section lead was appointed to each section contained in the Framework and they were tasked with engaging with stakeholders to produce the revised or new standards and KPIs. A list of section leads is set out in Appendix 1.

How to read the rest of this document

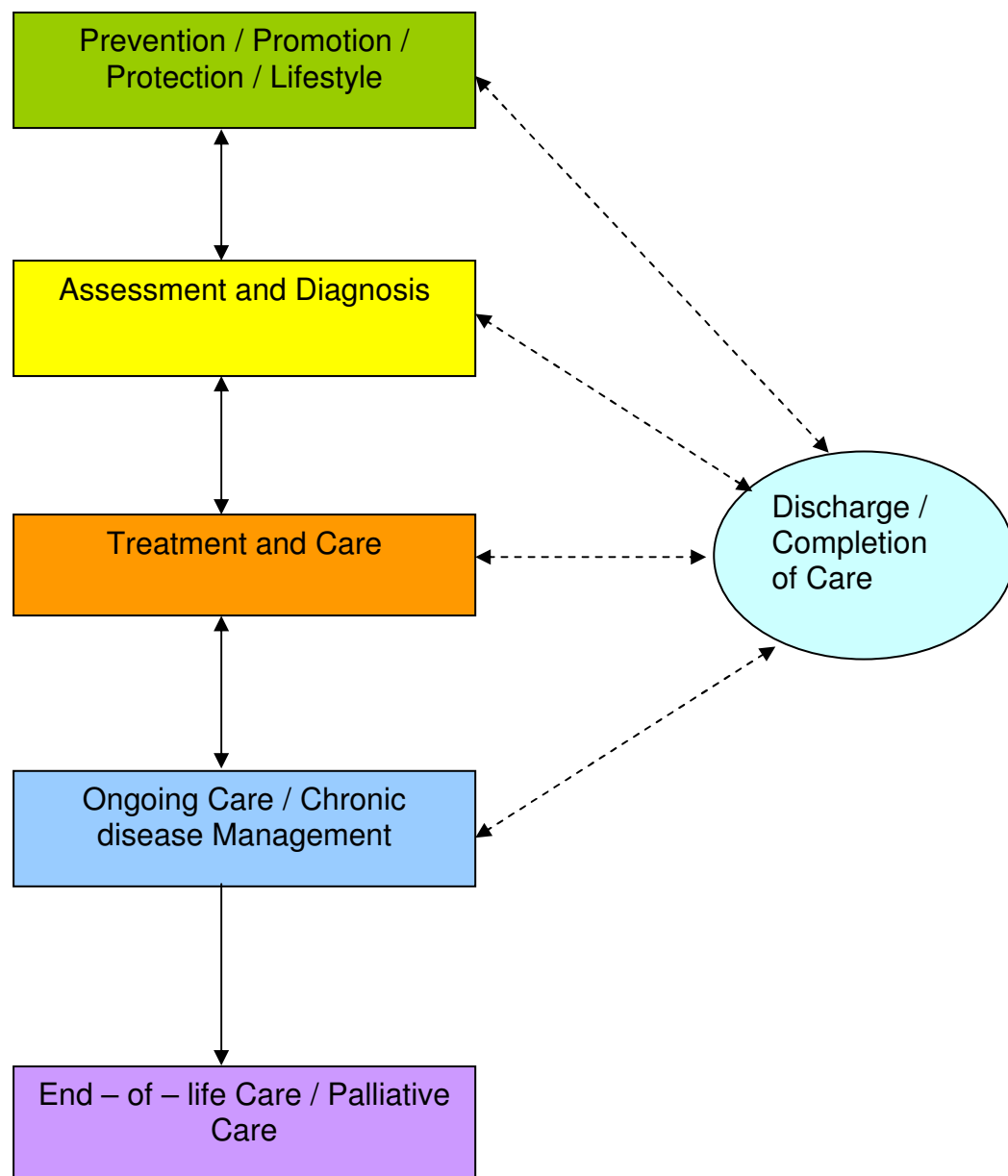
Each service framework follows an individual's journey, from prevention through to end-of-life care, taking into account the different health and social care needs of children and adults.

Each standard sets out the evidence base and rationale for the development of the standard, the impact of the standard on quality improvement as well as the performance indicators that will be used to measure to what degree the standard has been achieved within a specific timeframe. The standards are colour coded for ease of reference, for example standards related to assessment and diagnosis will be yellow.

In addition, service frameworks include generic standards relating to safeguarding, involvement, communication, health improvement, safeguarding, independent advocacy, and carers. This Service Framework also includes standards relating to medicines management and research.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Flowchart 1 – Template for Development of Service Frameworks



The rest of this document is divided into the following sections:

- **Section 3** sets out standards in relation to communication and involvement;
- **Section 4** sets out standards in relation to health improvement and protection;
- **Section 5** sets out standards in relation to specific conditions associated with cardiovascular disease;
- **Section 6** sets out standards in relation to medicines management in cardiovascular disease

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- **Section 7** sets out a standard in relation to palliative and end of life care; and,
- **Section 8** sets out a standard in relation to research.

A glossary of terms is appended to this document (Appendix 2) which explains some of the medical terms used in these standards. We would like to thank the Northern Ireland Cardiac Network for permission to use terms from their booklet “The Heart: Its Treatment and Care”. Further information on the Northern Ireland Cardiac Network can be found at <http://www.nicardiacnetwork.org/>.

In support of this framework document work is also ongoing to develop a commissioning and implementation guide which will build on the valuable work that has already commenced in relation to the identification of service model components that are required to deliver the service framework standards.

SECTION 3: STANDARDS FOR COMMUNICATION AND INVOLVEMENT

Effective communication with service users is essential to all aspects of the adequate planning and provision of health and social care services. Without effective communication, there can be no effective participation by service users in any partnership with Health and Social Care.

Communication will be of increasing importance as HSC strategies and targets are worked through. For example, it is essential to develop patient partnerships to achieve success in disease prevention and in the management of long-term conditions. It will be essential to involve service users in strategic change such as an increase in home and community-based service provision and reduced dependence on hospitals if such initiatives are to proceed at all.

Poor communication tends to be at the heart of most complaints, much negative experience and many negative perceptions and attitudes on the part of service users.

For many, good communication may be seen as to be assumed, or implicit. However, good communication cannot be presumed. It is a function requiring specific skill and training, dedicated resources, priority and focus to the same extent that clinical service provision, service planning and governance require these things.

For these reasons, a specific standard for communication should be part of all service frameworks. Making good communication part of the guiding ethos of the framework is unlikely to ensure that it is addressed with the same focus and priority as any of the individual targets.

It might be suggested that most of those charged with delivering on the frameworks will focus first on what it specifically requires them to do within their area of responsibility. A standard on communication requires action at the same level and in the same way.

Personal and Public Involvement

Personal and Public Involvement means discussing with those who use our services and the public: their ideas, your plans; their experiences, your experiences; why services need to change; what people want from

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services; how to make the best use of resources; and how to improve the quality and safety of services

Personal and Public Involvement (PPI) is a central component of the quality agenda, which aims to improve health and social care service provision in Northern Ireland and the individual experiences of those who use these services.

As a key Departmental policy it is integral to the delivery of high quality services. It is one of the key strands underpinning the Department's 10-year Quality Strategy, *Quality 2020*, which was published in November 2011. It is also seen as one of the key features of effective clinical and social care governance, and is one of the central tenets running through the five key themes of the *Quality Standards for Health and Social Care*. Our success in protecting and improving quality of services as safe, effective and patient/client focused will be the greater with effective involvement.

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Overarching standard 1: Communication (Generic)

All patients, clients, carers and the public should be engaged through effective communications by all organisations delivering health and social care.

Rationale:

Effective communication has a significant impact on all aspects of care provision from disease prevention, to diagnosis, to self-management of long-term conditions. Poor communication is a significant factor in most complaints against HSC organisations.

Evidence:

Guidance on strengthening Personal and Public Involvement in Health and Social Care (DHSSPS, 2007) http://www.dhsspsni.gov.uk/hsc_sqsd_29-07.pdf

Good Medical Practice (GMC, 2006)

http://www.gmc-uk.org/guidance/good_medical_practice/index.asp

Health and Personal Social Services (Quality, Improvement and Regulation) (Northern Ireland) Order 2003

http://www.dhsspsni.gov.uk/hpss_qi_regulations.pdf

Responsibility for delivery / implementation

Health and Social Care Board

Public Health Agency

HSC Trusts

Primary Care

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Quality Dimension

Safe

Good communication with patients/clients/carers enables adequate understanding of, consent to and compliance with treatment and care and contributes to audit and monitoring.

Accessible

Good communication helps to deliver and sustain appropriate patient/client/carer access to services and a clear understanding of the role and responsibilities of the service user in achieving health and care outcomes.

Effective

Health and care outcomes themselves are enhanced through improved patient partnership and dialogue, including, but not limited to - diagnosis, self-referral, health promotion, disease prevention and management of long term conditions.

Efficient

Good communication will lead to easily understandable information and messages reaching service users and carers and will limit potential for delays in treatment or care due to poor communication.

Equitable

As a universal requirement, good communication helps to ensure input by all service users on all aspects of the services they receive assisting in the highlighting of gaps in provision and areas for improvement.

Person Centred

Patient centredness cannot be delivered or claimed in the absence of good communication with service users and carers. Good communication is a prerequisite of patient centredness.

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Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients and clients expressing satisfaction with communication	Patient and Client Experience monitoring report Annual Accountability Report	Establish baseline and set target Report percentage increase of patient and client satisfaction with communication Report percentage increase of patient and client satisfaction with communication	March 2014 March 2015 March 2016

Overarching Standard 2 – Involvement (Generic)

All patients, clients, carers and the public should have opportunities to be actively involved in the planning, delivery and monitoring of health and social care at all levels.

Rationale:

Actively involving patients and the public in the planning and provision of health care in general has been noted to bring many advantages to both those who receive and those who provide care. These include:

- Increased patient satisfaction and reduction in anxiety with positive health effects
- Improved communication between service users and professional staff
- Better outcomes of care with greater accessibility and acceptability of services
- Bridging of the gap between those who avail of services and those who provide care
- Recognition of the expertise of the recipient of care developed through experience

Evidence:

Policy Circular Guidance for HSC organisations on arrangements for implementing effective personal and public involvement in the HSC (DHSSPS, 2012)

http://www.dhsspsni.gov.uk/arrangements_for_implementing_effective_personal_and_public_involvement_in_the_hsc.pdf

Guidance on strengthening Personal and Public Involvement in Health and Social Care (DHSSPS, 2007) http://www.dhsspsni.gov.uk/hsc_sqsd_29-07.pdf

Health and Personal Social Services (Quality, Improvement and Regulation) (Northern Ireland) Order 2003

http://www.dhsspsni.gov.uk/hpss_qi_regulations.pdf

A Healthier Future 2005-2025 (DHSSPS)

http://www.dhsspsni.gov.uk/show_publications?txtid=7282

Healthy Democracy (NHS National Centre for Involvement, 2006)

<http://www.nhscentreforinvolvement.nhs.uk/index.cfm?content=90>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Responsibility for delivery / implementation
Health and Social Care Board Public Health Agency HSC Trusts Primary Care
Quality Dimensions
Safe Personal and Public Involvement enhances governance at all levels through the routine inclusion of patient and carer input, experience and the issues arising from this in the planning, delivery and monitoring of services.
Accessible Personal and Public Involvement ensures that the level and means of engagement with service users, carers and the public are appropriate to the needs of the service and of service users and carers.
Effective The development of partnerships with service users, carers and the public contributes to positive health and social care outcomes generally. It is a prerequisite of success where patient and public participation is the decisive factor in achieving the outcome – for example, in health promotion and disease prevention.
Efficient Embedding Personal and Public Involvement at all levels of organisational decision making and delivery provides the opportunity to listen to those who use our services. By taking into account the needs of patients, clients, carers and the general public, Health and Social Care organisations ensure that resources are directed efficiently and most appropriately.
Equitable Well developed and widespread Personal and Public Involvement contributes to equitable services through the active engagement of service users, carers and the public in planning, priority setting and decision-making.
Person Centred Personal and Public Involvement is a necessity for the successful development of patient centred services

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
<p>Percentage of job descriptions containing PPI as responsibility</p> <p>Year 1: senior and middle management Year 2: designated PPI leads at all levels of HSC organisations Year 3: all new job descriptions</p>	Audit sample of job descriptions	<p>Establish baseline and set target</p> <p>Monitor progress</p> <p>100% - in all new job descriptions.</p>	<p>March 2014</p> <p>March 2015</p> <p>March 2016</p>
Percentage of Patients and Clients expressing satisfaction	<p>Patient and Client Experience monitoring report</p> <p>Annual Accountability Report</p>	<p>Establish baseline and set target</p> <p>Report percentage increase of Patient and Client satisfaction</p> <p>Report percentage increase of Patient and Client satisfaction</p>	<p>March 2014</p> <p>March 2015</p> <p>March 2016</p>
Percentage of staff who have gained PPI training (details to be agreed for 2014/15)	<p>Annual Accountability Report</p> <p>Training Report</p>	<p>Conduct training needs assessment for PPI.</p> <p>Commission design of PPI training programme</p> <p>Establish baseline and set target</p> <p>Monitor percentage of staff trained at different levels in PPI</p>	<p>March 2014</p> <p>March 2015</p> <p>March 2016</p>

Overarching standard 3: Independent Advocacy (Generic)

Users of health and social care services and their carers should have access to independent advocacy as required.

Rationale:

People engage with health and social care services at times in their lives when they might be vulnerable or in need of support and / or guidance in relation to decisions about their health and wellbeing.

For a whole raft of reasons (age, disability, mental health issues, gender, ethnic origin, sexual orientation, social exclusion, reputation, abuse and family breakdown and living away from home or in institutions), they may also feel discriminated against or simply excluded from major decisions affecting their health and wellbeing. It is at such times that independent advocacy can make a real difference because it gives people a voice; helps them access information so that they can make informed decisions and participate in their own care or treatment.

Independent advocacy is also a means of securing and protecting a person's human rights; representing their interests; and ensuring that decisions are taken with due regard to a person's preferences or perspectives where, for whatever reason, they are unable to speak up for themselves.

In strategic terms independent advocacy can contribute to increased social inclusion and justice; service improvements in health and wellbeing; reductions in inequalities across the health and social care sector; and enhanced safeguarding arrangements.

Independent advocacy can be delivered in a number of different ways and people may need different types of advocacy at different times in their lives. The most common models are self/group advocacy; peer advocacy; citizen advocacy; and individual/issue-based advocacy (also known as professional advocacy).

In this context, independence means structurally independent from statutory department or agency providing the service. The advocacy provider must be free from conflict of interest as possible as possible both in design and operation and must actively seek to reduce any conflicting interests.

Independent advocacy should be available throughout the care pathway and, in particular, should be available early in the process as this may prevent a crisis developing. An advocacy service should apply not just to service users but to

their carers and families.

There is currently a proposal to introduce a statutory right to an independent advocate in the proposed Mental Capacity Bill. Guidance on this right will be issued once the Bill has been finalised.

To be effective users need to be aware of advocacy services. Therefore they need to be promoted through accurate and accessible information.

Relevant health and social care staff should be aware of the benefits of independent advocacy and the particular importance of independence from service provision.

Evidence:

Alzheimer's Society (2009) Listening Well. Available at <http://www.alzheimers.org.uk>

Department of Health, Social Services and Public Safety (2010) Advocacy Research Summary Paper. Available at <http://www.dhsspsni.gov.uk/advocacy-research-summary-paper-of-advocacy-provision-october-2010.pdf>

Policy for Developing Advocacy Services: A Guide for Commissioners (2012) Available at <http://www.dhsspsni.gov.uk/developing-advocacy-services-a-guide-for-commissioners-may-2012.pdf>

Horton, C (2009) Creating a Stronger Information, Advice and Advocacy System for Older People. London; Joseph Rowntree Foundation

Social Care Institute for Excellence (2009) At A Glance 12: Implications for Advocacy Workers available at <http://www.scie.org.uk/publications/atagance/atagance12.asp>

Seal, M. (2007) Patient Advocacy and Advance Care Planning in the Acute Hospital Setting – Australian Journal of Advanced Nursing Vol 24, No 4, pp29-36

Wright, M. (2006) A Voice That Wasn't Speaking: Older People Using Advocacy and Shaping it's Development, Stoke-on-Trent, OPAAL UK (Older People's Advocacy Alliance)

Bamford Review (2006). Review of Mental Health and Learning Disability (NI), Human Rights and Equality of Opportunity Available at www.dhsspsni.gov.uk/bamford

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Knox, C. (2010) Policy Advocacy in Northern Ireland. University of Ulster, Jordanstown

Responsibility for delivery / implementation

Health and Social Care Board
 Public Health Agency
 Local Commissioning Groups
 Primary Care Partnerships
 Health and Social Care Trusts
 General Practitioners / Primary Care
 Voluntary and Community Sector
 Independent Sector
 Patient Client Council

Quality Dimension

Safe

Advocacy services can safeguard users from abuse and exploitation by ensuring that their rights are upheld and their voice heard

Effective

Advocacy can help prevent crises in a person's life which otherwise may result in an intervention that has greater resource implications. Advocacy can enhance capacity building at a community and individual level, which can ultimately reduce dependency on other health and social care services. An advocacy service can promote equality, social justice and inclusion of the most vulnerable and disadvantaged

Person-Centred

Advocacy services can enable individuals to access information, express their views and wishes and make informed choices about their own health and well being. The service is geared to needs of the individual. The service user will receive a service that best meets their needs at a time, which evidence shows, to be effective and to have maximum impact.

Performance Indicator	Data source	Anticipated Performance Level	Date to be achieved by
To be determined			

Overarching standard 4: Identifying & Supporting Carers (Generic)

All Health & Social Care staff should identify carers (whether they are parents, family members, siblings or friends) at the earliest opportunity to work in partnership with them and to ensure that they have effective support as needed.

Rationale:

Carers are central to providing health and social care. People want to live in their own homes as independently as possible and family caring is critical in achieving this goal. Breakdown in caring has a major impact on readmission rates to hospital and unnecessary admissions to residential and nursing home care placements.

Caring is both a demanding and rewarding activity. Evidence shows that unsupported caring can have a negative impact on the physical, social and emotional well being of an adult carer. It is in everyone's interest to ensure that carers can continue to care for as long as they wish and are able to, without jeopardising their own health and wellbeing or financial security, or reducing their expectations of a reasonable quality of life.

Young carers (children and young people up to the age of 18 years who have a substantive caring role for a member of their family) often do not have an alternative but to be a carer. These children can be lonely, isolated, lose friendships and miss out on education and social activities. Young carers are frequently involved in activities that are developmentally inappropriate and the impact on their lives is unknown. Many young carers go unidentified. This highlights the need to identify young carers and provide support and assistance which will promote their health, development and inclusion in educational and social activities.

Early intervention, individually tailored to the needs of the carer and the cared for person, can be crucial in avoiding breakdown in the caring role. Forming meaningful partnerships with carers and making agreements with them about support to be provided is essential. Carers identify their requirements as respite care, information, personal care for the cared for person and practical and emotional support to continue in their role. This highlights the need for service planning and commissioning based on partnership working between statutory and independent sector and involvement of carers or their representatives to shape future services.

To enable carers to access the right information, support and services, current methods for identifying carers and encouraging them to acknowledge their caring role need to be enhanced. Under the Carers and Direct payments Act,

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

all staff have a duty to inform carers. Staff should be particularly proactive in identifying the presence of younger and older carers.

One of the most important and far-reaching improvements in the lives of carers will be brought about by how health and social care staff view and treat them. Changes in staff knowledge of carers' issues could promote a more positive attitude to carers and this would make a significant difference to the lives of carers. Services should recognise carers both as individuals in their own right and as key partners in the provision of care and support.

Evidence:

Department of Health, Social Services and Public Safety (2006) Caring for Carers Recognising, Valuing and Supporting the Caring Role. Available at <http://www.dhsspsni.gov.uk/ec-dhssps-caring-for-carers.pdf>

Department of Health, Social Services and Public Safety / Department for Social Development (2009) Review of the Support Provision for Carers. Available at www.dhsspsni.gov.uk/review-of-support.

Department of Health, Social Services and Public Safety (2009). Circular HSS (ECCU) 2/2009, "Regional Carers Support and Needs Assessment Tool" Available at www.dhsspsni.gov.uk.

Department of Health, Social Services and Public Safety (2006). Circular HSS (ECCU) 4/2006, 'Identification of Carers'. Available at www.dhsspsni.gov.uk.

Department of Health, Social Services and Public Safety (2008). Circular HSS (ECCU) 3/2008, Good Practice Guidance – Training for Carers. Available at www.dhsspsni.gov.uk.

Earley L, Cushway D and Cassidy T (2007) Children's perceptions and experiences of care giving: A focus group study. *Counselling Psychology Quarterly*. 20. 1. pp.69–80.

Evason, E. (2007) Who Cares Now? Changes in Informal Caring 1994 and 2006. Research Update 51. Belfast: ARK Publications. Available at www.ark.ac.uk

Northern Ireland Statistics and Research Agency (2001) Northern Ireland Census of population. Available at www.nisra.gov.uk

Olsen R (1996) "Young Carers: challenging the facts and politics of research into children and caring". *Disability and Society*, 11 (1), 41-54

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Patient & Client Council NI (2011) A report of the experiences and circumstances of 16 year old carers. Available at www.patientclientcouncil.hscni.net

Social Policy Research Unit, University of York (2004) "Hearts and Minds -The Health Effects of Caring", Michael Hirst. Available at www.york.ac.uk

Southern Health and Social Care Trust (2011) General Practitioners Carers Support Project: Project Report. Available at www.southerntrust.hscni.net/services/carers

Schubotz, D. and McMullan G. (2010) The Mental and Emotional Health of 16-Year Olds in Northern Ireland: Evidence from the Young Life and Times Survey. Belfast: Patient and Client Council Report.

Tommis, Y. and Robinson, C.A. (2009) *Carers Interventions Assessed*. Wales Office of Research and Development.

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
Local Commissioning Groups
Health and Social Care Trusts
General Practitioners/ Primary Care / Pharmacy
Independent Sector
Department for Social Development and Department of Education

Quality Dimension

Safe

Carers will be encouraged to identify themselves as carers and to access information and support to protect and promote their own health and well-being and minimise the negative impact of caring

Effective

Involving carers in the planning, delivery and evaluation of services improves outcomes for the carer and cared for person. Carers will be identified and supported best through partnerships between the statutory and voluntary sector and by good referral processes. Carers will be identified and signposted to help and support as early as possible in their journey and at times of crisis/transition.

Person-Centred

Carers will feel valued and able to access the support they need. Staff will be

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facilitated to understand and value the role of carers. Carers will be recognised as real and equal partners in the delivery of care. All carers, irrespective of age, who they care for or where they live will be directed toward appropriate agencies that can offer advice and support.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Number of front line staff in a range of settings participating in Carer Awareness Training Programmes	Trust Training Report (including Induction programmes)	20% 50%	March 2015 March 2016
The number of carers who are offered Carers Assessments	Health & Social Care Board/ DHSSPS Returns	Improvement targets set by H&SC Board in conjunction with Carers Strategy Implementation Group	Reviewed annually
The percentage of carers who participate in Carers Assessments	Health & Social Care Board/ DHSSPS returns	Improvement targets set by H&SC Board in conjunction with Carers Strategy Implementation Group	Reviewed annually

SECTION 4: STANDARDS FOR HEALTH IMPROVEMENT / PROTECTION

Health is affected by a wide range of factors – individual factors such as age, gender and genetic make-up. These factors are modified by an individual's lifestyle. However, lifestyle is influenced by the environment in which individuals live. Social networks, working conditions, housing, employment, education, and health and social care services, all impact on our health and social wellbeing.

It is known that people in different circumstances experience avoidable differences in health, social wellbeing and length of life - inequalities in health arise because of inequalities in society. In Northern Ireland, males living in the 10% least deprived areas can expect on average to live almost 12 years longer than their counterparts living in the 10% most deprived areas and for females the gap is more than 8 years.

Health improvement involves partnership working across HSC and the other statutory, community and voluntary sectors to reduce health inequalities. This is achieved by improving people's life circumstances, promoting healthy lifestyles and providing services to support and empower individuals to improve their own health and social wellbeing.

Cardiovascular disease is one of the main causes of death in NI. Many of these deaths occur before 65 years of age and are potentially preventable since smoking, unhealthy diet, drinking in excess of the weekly drinking limits and physical inactivity are all major contributors to cardiovascular disease.

This section sets out the reviewed generic health improvement standards for health and social care. It includes clear quality requirements for care based on the best available evidence of what works most effectively for patients and clients.

Also included are performance indicators which will enable the monitoring of progress in implementing the standards by those organisations charged with their delivery: PHA, HSCB, Trusts and Primary Care.

In addition, this section sets out the new generic advocacy standard, which aims to ensure that people of all ages are safeguarded from harm through abuse, exploitation or neglect.

Overarching standard 5: Healthy Eating (Generic)

All HSC staff, as appropriate, should provide people with healthy eating support and guidance according to their needs.

Rationale:

Reducing fat and salt in the diet and increasing fruit and vegetable consumption is associated with a reduction in the risk of cardiovascular disease and hypertension.

Having a well balanced and nutritious diet will also help prevent many diseases which are linked to being overweight and obese such as high blood pressure, heart problems, risk of stroke, some cancers and Type 2 Diabetes. In addition, an improved diet can also contribute to an improvement in an individual's mental health and wellbeing.

Evidence:

WHO Global Strategy on Diet, Physical Activity and Health

http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf

Fit Futures <http://www.dhsspsni.gov.uk/ifh-fitfutures.pdf>

Scientific Advisory Committee on Nutrition recommendations on healthy eating for the general population <http://www.sacn.gov.uk/reports/>

DHSSPS Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland (2012-2022)

<http://www.dhsspsni.gov.uk/showconsultations?txtid=44910>

Responsibility for delivery / implementation

Health and Social Care Board

Public Health Agency

HSC Trusts

Primary Care

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension			
<p>Effective All stakeholders should promote a consistent nutrition message by using the Eat Well – getting the balance right plate model. Training and education should be available for child carers / group care workers.</p> <p>Person Centred Lifeskills development programmes for young people should include input on tobacco as well as drugs, alcohol and solvents.</p>			
Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of people eating the recommended 5 portions of fruit or vegetables each day	To be determined	<p>Baseline for 2011/12 = 32% overall, 26% for males and 36% for females</p> <p>Target: maintain or at best increase percentage by 1% year on year</p>	

Overarching standard 6: Physical Activity (Generic)

All HSC staff, as appropriate, should provide support and advice on recommended levels of physical activity.

Rationale:

The National Institute for Health and Clinical Excellence (NICE) has fully endorsed the importance of physical activity as a means of promoting good health and preventing disease. Lack of physical activity is associated with an increase in the risk of coronary heart disease.

The recently reviewed and updated UK Physical Activity Guidelines, supported by all four CMO's, provide advice and guidance on the recommended levels of physical activity throughout the life course. The report also presents the first time guidelines which have been produced in the UK for early years (under 5 year olds) as well as sedentary behaviour, for which there is now evidence that this is an independent risk factor for ill health.

Evidence:

WHO Global Strategy on Diet, Physical Activity and Health

http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf

National Institute for Health and Clinical Excellence (NICE) Public Health Intervention Guidance No.2 (2006) Four commonly used methods to increase physical activity: Brief intervention in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling <http://www.nice.org.uk/Guidance/PH2>

Fit Futures <http://www.dhsspsni.gov.uk/ifh-fitfutures.pdf>

DHSSPS Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland (2012-2022)

<http://www.dhsspsni.gov.uk/showconsultations?txtid=44910>

New UK Physical Activity Guidelines [UK physical activity guidelines : Department of Health - Publications](#)

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts
Primary Care

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension			
Effective			
Appropriate physical activity brief intervention training should be provided for Health and Social Care Staff to ensure clients receive consistent and timely advice.			
Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of people meeting the recommended level of physical activity per week	Northern Ireland Health Survey	<p>New physical activity guidelines were launched in 2011 and as such a new suite of questions to establish the percentage of people meeting the recommended level of physical activity per week has been integrated within the 2012/13 Northern Ireland Health Survey. It is anticipated these new baseline results will be available in Nov/ Dec 2013.</p> <p>Performance level to be agreed thereafter</p>	March 2014

Overarching standard 7: Smoking (Generic)

All Health and Social Care staff, as appropriate, should advise people who smoke of the risks associated with smoking and sign-post them to well-developed specialist smoking cessation services.

Rationale:

Smoking is a major risk factor for a number of chronic diseases including a range of cancers, coronary heart disease, strokes and other diseases of the circulatory system. Its effects are related to the amount of tobacco smoked daily and the duration of smoking.

A number of specialist smoking cessation services have been commissioned in a range of settings across Northern Ireland. These services offer counselling and support in addition to the use of pharmacotherapy by trained specialist advisors.

Evidence:

Tobacco Control Strategy for Northern Ireland – 2012-2022

<http://www.dhsspsni.gov.uk/showconsultations?txtid=46925>

NICE produced guidance on brief interventions and referral for smoking cessation in primary care and other settings in March 2006, which represents best practice <http://www.nice.org.uk/Guidance/PH1>

NICE guidance on ‘Smoking Cessation Services, in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities, February 2008

<http://www.nice.org.uk/Guidance/PH10>

Responsibility for delivery / implementation

Health and Social Care Board

Public Health Agency

HSC Trusts

Primary Care

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension			
<p>Effective Brief Intervention Training for Health and Social Care Staff will ensure clients receive consistent and timely advice on smoking cessation. Specialist smoking cessation services will be delivered to regional quality standards ensuring equitable service provision. People who are ready to stop smoking should be able to access specialist smoking cessation services in a choice of settings</p>			
Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Number of people who are accessing Stop Smoking Services	ELITE (PHA Stop Smoking Services Performance Report)	Baseline 2011/12 = 39,204. 4 % year on year increase	March 2014 March 2015 March 2016
Proportion of the smoking population who are accessing Stop Smoking Services	ELITE (PHA Stop Smoking Services Performance Report)	Baseline 2011/12 =10.8%. NICE guidance and the ten year tobacco strategy call for a target of over 5% of the smoking population to be reached, hence target should be to maintain at $\geq 5\%$	March 2014 March 2015 March 2016
Number of people using stop smoking services who have quit at 4 weeks and 52 weeks	ELITE (PHA Stop Smoking Services Performance Report)	Baseline 2011/12 = 20,299 for those quit at 4 weeks and 5,889 for those quit at 52 weeks. 2% year on year increase from 11/12 baseline (20,299 – 4 weeks, 5,889 – 52 weeks)	March 2014 March 2015 March 2016

Overarching standard 8: Alcohol (Generic)

All HSC staff, as appropriate, should provide support and advice on recommended levels of alcohol consumption.

Rationale:

Excessive alcohol consumption is associated with many diseases such as cancers (oesophagus, liver etc), cirrhosis of the liver and pancreatitis. There are also direct effects of alcohol and an increased association with injuries and violence.

Excessive alcohol consumption can affect the cardiovascular system, and is associated with high blood pressure, abnormal heart rhythms, cardiomyopathy and haemorrhagic stroke.

Evidence:

SIGN: The Management of harmful drinking and alcohol dependence in Primary Care <http://www.sign.ac.uk/pdf/sign74.pdf>

New Strategic Direction for Alcohol and Drugs Phase 2 (2011 – 2016) http://www.dhsspsni.gov.uk/new_strategic_direction_for_alcohol_and_drugs_phase_2_2011-2016

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts
Primary Care

Quality Dimension

Effective

Appropriate alcohol brief intervention training should be provided for Health and Social Care Staff to ensure clients receive consistent and timely advice.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of people who receive screening in primary care settings in relation to their alcohol consumption	Northern Ireland Local Enhanced Service for Alcohol	Establish baseline Performance level to be determined once baseline established	March 2014

Overarching standard 9: Emergency Life Support (ELS)

Health and social care professionals should work with schools, workplaces and communities to raise awareness of and access to emergency life support (ELS) skills.

Rationale:

Life threatening emergencies are common. Heart disease is the UK's single biggest killer. Someone dies of a heart attack every 7 minutes. 1 in 9 women and 1 in 6 men in the UK die from Heart disease. Without CPR following sudden cardiac arrest, the chances of successful defibrillation decline at a rate of about 10% with each minute delay. Bystander CPR increases survival 2-3 times compared to no bystander CPR.

An ELS education programme will help participants to recognise the signs and symptoms of a heart attack, perform CPR, deal with choking, serious bleeding and an unconscious breathing casualty.

These life skills will enable lay people to become equipped with knowledge and skills that will benefit them and their own communities.

According to research, the majority of cardiac arrests in the UK happen out of hospital. In Northern Ireland up to 84% of these happen in the home, up to 9% in a public place and up to 8% in care institutions. If each link in the chain of survival is strong and intervention is prompt the chance of survival from the out of hospital cardiac arrest is significantly increased.

In research commissioned by the British Heart Foundation it was found that out of a sample of 6,118 adults across the UK, respondents in Northern Ireland were less likely to have received CPR training than any other region, with a total of 81% claiming to have not been trained in the last 5 years.

Evidence:

Valenzuela T.D. et al, (1997), "Estimating effectiveness of cardiac arrest interventions: A logistic regression model, *Circulation*, 96:3308-3313
<http://www.ncbi.nlm.nih.gov/pubmed/9396421>

Holmberg M. et al, (2000), "Effect of bystander cardiopulmonary resuscitation in out-of-hospital cardiac arrest patients in Sweden", *Resuscitation*, 47:59-70
<http://www.ncbi.nlm.nih.gov/pubmed/11004382>

Larsen M.P. et al (1993), "Predicting survival from out-of-hospital cardiac arrest: A graphic model", *Ann Emerg Med*, 22:1952-1958
<http://www.ncbi.nlm.nih.gov/pubmed/8214853>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Moore MJ et al, (2006), 'Demographic and temporal trends in out of hospital sudden cardiac death in Belfast'. Heart 92; 311-315

Moore MJ et al, (2008) 'The Northern Ireland Public Access Defibrillation (NIPAD) study; effectiveness in urban and rural populations'. Heart, 94; 1614-1619

British Heart Foundation (2007) 'Coronary Heart Disease statistics'
<http://www.bhf.org.uk/research/heart-statistics.aspx>

Stiell et al (1999) Ontario Prehospital Advanced Life Support study (OPALS). 6,816 consecutive cardiac arrests, (Citizen CPR training significantly improved survival) Those who had bystander CPR increased the odds ratio of survival by 3.9 (2.7-5.5)

Western C et al (1997) strongest predictor of a poor outcome was delay to CPR.

Herlitz et al (2005) with bystander CPR 4.9% chance of survival, without 2.2%

Cummins et al (1991) Improving Survival from Sudden Cardiac Arrest: The Chain of Survival Concept. "EMS systems should rely on Trained Citizens rather than Emergency Responders"

British Heart Foundation: CPR training report Dec 2006

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts

Quality Dimension

Safe

Bystander CPR increases the chance of survival from an Out of Hospital Cardiac Arrest. Educating those within workplaces, schools and communities will increase the likelihood of CPR being carried out in the event of an OHCA.

Accessible

Improves the likelihood of CPR being performed in the event of an OHCA.

Effective

The ELS programme will provide members of the public with the skills to respond to a life threatening emergency. The window of opportunity for a successful outcome from an out of hospital cardiac arrest can be widened if more bystanders give 'basic life support' in the form of chest compressions and rescue breathing.

Efficient

Better focus on education in relation to prevention of Heart Disease and ELS Intervention for OHCA will be beneficial to the Northern Ireland population.

Equitable

Training in ELS skills should be made available in a range of settings such as schools, the workplace and community organisations. Approaches and resources can be tailored to ensure that we can address inequality thereby giving all members of the population fair and impartial access to this learning.

Person Centred

A focus on prevention of heart disease and ELS intervention through a joined up approach ensures continuity of service, improving the chances of survival from an OHCA

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of people trained in ELS skills	NISRA Omnibus Survey (bespoke)	Establish region-wide ELS training Performance level to be determined	March 2015
Percentage of people surviving out of hospital cardiac arrests	To be developed with NIAS, A&E, PAS and GRO data as part of Northern Ireland Community Resuscitation Strategy	Develop information system Establish baseline and set target Monitor performance against target	March 2014 March 2015 March 2016

Overarching standard 10: Safeguarding People (Generic)

All Health and Social Care staff should ensure that people of all ages are safeguarded from harm through abuse, exploitation or neglect.

Rationale:

A wide range of people, for a variety of reasons, have been shown to be at risk of harm through abuse, exploitation or neglect. People of all ages have the right to be safeguarded from such harm; to have their welfare promoted; and their human rights upheld. At the same time, they have the right to choose how to lead their lives, provided their lifestyle choices do not impact adversely on the safeguarding needs of others or, within the requirements of the law, of themselves. Decision making in this regard will have to pay due consideration to the age, maturity and capacity of the person. In this Standard, the term safeguarding is intended to be used in its widest sense, that is, to encompass both **preventive** activity, which aims to keep people safe and prevent harm occurring, and **protective** activity, which aims to provide an effective response in the event that there is a concern that harm has occurred or is likely to occur.

All HSC staff and staff providing services on behalf of the HSC have a dual responsibility with regard to safeguarding: (a) to ensure that all service users are treated with respect and dignity and are kept safe from poor practice that could lead to harm; and (b) that all staff are alert to the indicators of harm from abuse, exploitation or neglect wherever it occurs and whoever is responsible; and know how and where to report concerns about possible harm from abuse, exploitation or neglect whether these relate to the workplace or the wider community.

Effective safeguarding can ensure that people are safeguarded and their welfare promoted whether in their own homes; in the community; in families; and in establishments such as children's homes; secure accommodation; residential care and nursing homes; and hospitals.

Through safeguarding and in conjunction with positive engagement of individuals, (and as appropriate their family and carers) effective prevention and potential for early intervention is enhanced and promoted and care and service plans are supported to deliver better outcomes.

Where safeguarding is promoted, staff are empowered to act as advocates to safeguard vulnerable individuals and professional advocacy and counselling services are provided where required. A learning culture is also evident and staff are knowledgeable about safeguarding and keep abreast of local and national developments and learning, including enquiries, serious case reviews,

case management reviews, inquiries and reports.

The quality of outcomes is more consistent, regardless of age, disability, gender, ethnic origin, religion, language, sexuality, political opinion, who pays for their care or their access to HSC provided or purchased services.

Application in the wider community of knowledge and expertise gained in the workplace serves to safeguard people more broadly and more generally. The cycle of abusive behaviour(s) and/or neglect is broken.

Evidence:

European Convention on Human Rights <http://www.hri.org/docs/ECHR50.html>

The Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children
http://www.dhsspsni.gov.uk/index/hss/child_care/child_protection/child_protection_guidance.htm

UN Convention on the Rights of the Child
<http://www2.ohchr.org/english/law/crc.htm>

Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse
<http://conventions.coe.int/Treaty/EN/treaties/html/201.htm>

UN Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment <http://www2.ohchr.org/english/law/cat-one.htm>

A Guide to the Human Rights Act 1998: Third Edition (Department for Constitutional Affairs, London, October 2006)
<http://www.justice.gov.uk/guidance/docs/act-studyguide.pdf>

Improving the Patient & Client Experience 5 Standards: Respect, Attitude, Behaviour, Communication and Privacy and Dignity (DHSSPS, 2008)
http://www.dhsspsni.gov.uk/improving_the_patient_and_client_experience.pdf

Co-operating to Safeguard Children (DHSSPS, 2003) -
http://www.dhsspsni.gov.uk/show_publications?txtid=14022

Ageing in an Inclusive Society - Promoting the Social Inclusion of Older People (OFMDFM, 2005) currently under review <http://www.ofmdfmi.gov.uk/ageing-strategy.pdf>

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Report of the Promoting Social Inclusion Working Group On Disability (OFMDFM, 2009) - access through: <http://www.ofmdfmi.gov.uk/disability-promoting-social-inclusion>

A Life Like Any Other? Human Rights of Adults with Learning Disabilities (The Joint Committee on Human Rights, Seventh Report of Session 2007-08 Volume 1) - <http://www.publications.parliament.uk/pa/jt200708/jtselect/jtrights/40/4002.htm>

European report on preventing elder maltreatment (World Health Organisation, 2011) - <http://www.euro.who.int/en/home>

Responsibility for delivery / implementation

HSC Board & Local Commissioning Groups

Public Health Agency

HSC Trusts

Primary Care and Contracted Services

Patient and Client Council

Regulation and Quality Improvement Authority

Safeguarding Board for Northern Ireland (SBNI) & Safeguarding Panels

Northern Ireland Adult Safeguarding Partnership (NIASP) & Local Adult Safeguarding Partnerships (LASPs)

Working in partnership with the Police Service of Northern Ireland and other criminal justice agencies

Working in partnership with other statutory agencies and the Voluntary, Community and Private Sectors

Quality Dimension

Safe

Promotion of self-aware practice; supportive of person-centred engagement; fosters awareness and opportunity for early intervention in poor practice/potentially abusive dynamics; and promotion of individualised safety plans where these are indicated, thereby enhancing services and safeguarding awareness and responses.

Effective

Promotion of self-reliance and personal and professional safeguarding behaviours; builds personal and professional safeguarding capacity; promotion of the welfare of individuals; protection from mistreatment; impairment of health and development is prevented; and individuals are kept safe from harm.

A better focus on prevention reduces poor practice; promotes recovery; reduces complaints; breaks the cycle of abusive behaviour and/or neglect; and reduces or removes the need to have recourse to emergency services.

Person-Centred

Safeguarding interventions must be tailored to the presenting circumstances and to the needs and choices of the individual (provided these do not impact adversely on the safeguarding needs of others or, within the requirements of the law, of him or herself) and his/her circumstance. Decision making in this regard will have to pay due consideration to the age, maturity and capacity of the person. Safeguarding responses are non-discriminatory, and seek to ensure that people of all ages at risk of harm are offered support to keep them safe from harm and to protect them when harm occurs. Services are better able to support individuals, families and carers thereby aiding improvement of relationships; and to help perpetrators to address their behaviours.

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Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
<p>All HSC Organisations and organisations providing services on behalf of the HSC have a Safeguarding Policy in place, which is effectively aligned with other organisational policies (e.g. recruitment, governance, complaints, SAIs, training, supervision, etc). The Safeguarding Policy is supported by robust procedures and guidelines</p>	<p>HSC and provider Organisation annual reports</p> <p>HSC Governance Reviews, e.g. Complaints; SAIs, etc</p> <p>HSC Statutory Functions Reports and Corporate Parent Reports</p>	<p>Establish baseline</p> <p>Performance level to be determined once baseline established</p>	<p>March 2014</p>
<p>All HSC Organisations and organisations providing services on behalf of the HSC have Safeguarding Plans in place</p>	<p>SBNI, NIASP & LASP Annual Reports</p> <p>RQIA Reports & Reviews</p> <p>Case Management Reviews (CMRs)</p>	<p>Establish baseline</p> <p>Performance level to be determined once baseline established</p>	<p>March 2014</p>
<p>All HSC Organisations and organisations providing services on behalf of the HSC have safeguarding champions in place to promote awareness of safeguarding issues in their workplace</p>	<p>Serious Case Reviews (SCRs)</p>	<p>Establish baseline</p> <p>Performance level to be determined once baseline established</p>	<p>March 2014</p>

SECTION 5: STANDARDS FOR SPECIFIC CONDITIONS

5.1 HYPERTENSION

In hypertension or high blood pressure the blood pressure in arteries is elevated.³ This requires the heart to work harder than normal to circulate blood through the blood vessels. Blood pressure is summarised by two measurements, systolic and diastolic, which depend on whether the heart muscle is contracting (systole) or relaxed between beats (diastole). Normal blood pressure at rest is within the range of 100-140mmHg systolic (top reading) and 60-90 mmHg diastolic (bottom reading).

If the blood pressure measured in the clinical setting is 140/90 or higher, ambulatory or home blood pressure monitoring should be offered to confirm the diagnosis of hypertension and decide on treatment based also on age, co morbidities like established cardiovascular disease, renal disease, diabetes and the overall cardiovascular risk of the patient.⁴

Hypertension is one of the most important preventable causes of premature morbidity and mortality in the United Kingdom, and its management is one of the most common interventions in primary care. In Northern Ireland estimates range from 12.6% in 2011 (based on GP registers)⁵ and 28.7% in 2007 (based on survey data).⁶ Early identification and effective management are important to prevent cardiovascular disease, stroke and renal disease amongst others.

Patients should be offered antihypertensive medication if they are aged under 80 years and have stage 1 hypertension with additional risk factors or have stage 2 or severe hypertension regardless of age, but life style changes like losing weight, stopping smoking and exercising regularly are equally important.

Mortality from cardiovascular disease is improving continuously but the gap in health gain between high and low social class populations is

³ Chobanian AV, Bakris GL, Black HR et al. (December 2003). "[Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure](#)".

Hypertension 42 (6): 1206–52. doi:10.1161/01.HYP.0000107251.49515.c2. PMID 14656957

⁴ National Institute for Health and Clinical Excellence. NICE clinical guideline 127. Hypertension. Clinical management of primary hypertension in adults. London: August 2011. (replacing NICE clinical guideline 34)

⁵ http://www.dhsspsni.gov.uk/national_prevalence_day_report_april_2011.pdf accessed 21 November 2012

⁶ Balanda, K.P., Barron, S., Fahy, L., McLaughlin, A. *Making Chronic Conditions Count: Hypertension, Stroke, Coronary Heart Disease, Diabetes. A systematic approach to estimating and forecasting population prevalence on the island of Ireland*. Dublin: Institute of Public Health in Ireland, 2010.

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widening.⁷ General practice performance in Northern Ireland has been good on average and improving gradually, exceeding targets set in the 2009 Cardiovascular Service Framework, but variation in performance between practices remains.^{8,9}

The standards in this section have been adjusted to reflect changes in QOF and have been subject to consultation during the Health Impact Assessment of the Cardiovascular Service Framework during 2010.

⁷ http://www.dhsspsni.gov.uk/hscims_life_expectancy_decomposition_2011.pdf accessed 21/11/2011

⁸ Putting a health inequalities focus on the Northern Ireland cardiovascular service framework. Summary report. Health Impact assessment. Public Health Agency, Belfast: 2011.

⁹ Capewell S, Graham H (2010) Will Cardiovascular Disease Prevention Widen Health Inequalities? PLoS

Med 7(8): e1000320. doi:10.1371/journal.pmed.1000320

Overarching standard 11: Prevention of hypertension

All adults should be offered lifestyle advice as to the prevention of hypertension and have their blood pressure measured and recorded using standardised techniques every five years from age 45 years.

Rationale:

NICE hypertension guideline 2011 emphasises the importance of reliably diagnosing hypertension, offering appropriate treatment and monitoring its effect to prevent or improve the outlook of coronary heart disease, renal disease and diabetes amongst others.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2011) Clinical Guideline CG127 – Hypertension: Clinical management of primary hypertension in adults (replacing NICE Clinical Guideline CG34)

<http://guidance.nice.org.uk/CG127>

Responsibility for delivery / implementation

HSC Board
Public Health Agency
HSC Trusts
Primary Care

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Quality Dimension

Safe

Health care professionals taking blood pressure measurements need initial training and ongoing performance review. Equipment and technique need to be up to date and well maintained to produce reliable results on which to base management decisions on.

Accessible

Early identification and management of hypertension will reduce the incidence of long term organ damage

Effective

Systematic monitoring of the population to detect hypertension will reduce the risks of patients being undetected and therefore untreated

Efficient

Hypertension is frequently undiagnosed for many years by which time organ damage may have resulted. Early identification and management helps to prevent complications, improves healthy life expectancy and reduces health care costs.

Equitable

Primary care services reach the general population, allowing standard to be applied across geographical and socioeconomic boundaries. Variation between practices remains with some reaching almost 100% of their practice population and others considerably less.

Person Centred

The rising prevalence of modifiable risk factors (e.g. dietary salt, obesity, physical inactivity and diabetes) for the development of hypertension and an ageing population means the prevalence will increase in the future. Improved capacity for self management will increase sustainability of services, supporting patients to live more healthily and manage risk factors through life style modification.

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Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients aged over 45 years who have had a recorded blood pressure on their GP record within the past 5 years	QOF Record 17	90% 90% 90%	March 2014 March 2015 March 2016

Overarching standard 12: Antihypertensive drug therapy

All patients should be offered antihypertensive drug therapy if they are aged under 80 years of age and have Stage 1 hypertension with target organ damage, established cardiovascular disease, renal disease, diabetes or a 10 year cardiovascular risk equivalent to 20% or greater, or have stage 2 hypertension at any age.

Rationale:

NICE hypertension guideline 2011 emphasises the importance of reliably diagnosing hypertension, offering appropriate treatment and monitoring its effect to prevent or improve the outlook of coronary heart disease, renal disease and diabetes amongst others.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2011) Clinical Guideline CG127 – Hypertension: Clinical management of primary hypertension in adults (replacing NICE Clinical Guideline CG34)

<http://guidance.nice.org.uk/CG127>

Responsibility for delivery / implementation

HSC Board
Public Health Agency
HSC Trusts
Primary Care

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

Reduction in blood pressure is associated with a reduced risk of having an adverse cardiovascular event like a stroke or developing diseases like coronary heart disease and kidney disease.

Accessible

Early identification and effective management of hypertension, which in itself is largely asymptomatic, help to prevent complications.

Effective

Antihypertensive treatments work and there is clear guidance on how to use them effectively.

Efficient

Evidence attests to the clinical and cost-effectiveness of lowering blood pressure.

Equitable

Primary care services reach the general population, allowing the standard to be applied across geographical and socioeconomic boundaries. Variation between practices remains and cardiovascular disease affects disadvantaged populations disproportionately more than more affluent ones.

Person Centred

Improved capacity for self management will increase sustainability of services, supporting patients to live more healthily and manage risk factors through life style modification as well as using medicines effectively.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with hypertension in whom the last blood pressure (measured in the preceding 9 months) is 150/90 or less	QOF BP05	85% 90% 90%	March 2014 March 2015 March 2016

5.2 HYPERLIPIDAEMIA

Smoking, blood pressure and cholesterol account for 80% of premature coronary disease (Emberson et al. 2003¹⁰). CVD is rare in the absence of these factors. Blood cholesterol is closely related to risk of CVD and it is possible to reduce this risk through drugs, physical activity and dietary change. Trials have shown that statins are highly cost-effective drugs for the secondary prevention of CVD and cost-effective for primary prevention for those with a 10 year risk above 20% (RCGP 2007¹¹).

A particularly vulnerable group to CVD are those with familial hypercholesterolaemia, a genetically linked condition which causes some people to have very high blood cholesterol levels. While the numbers in the population are small, patients with this condition have greatly increased risk, are often undiagnosed and effective management and treatment can help prevent or delay the onset of symptoms. It is preferable to diagnose people with this condition as early as possible, ideally in childhood.

¹⁰ Emberson, JR, Whincup, PH, Morris, RW, Walker, M. Re-assessing the contribution of serum total cholesterol, blood pressure and cigarette smoking to the aetiology of coronary heart disease: impact of regression dilution bias. *European Heart Journal* 2003; 24(21):1903-1911.

¹¹ RCGP (2007) Cardiovascular risk assessment: the modification of blood lipids for the primary and secondary prevention of cardiovascular disease (Full guideline, consultation draft) National Collaborating Centre for Primary Care: London.

Overarching standard 13: Familial Hypercholesterolaemia

All people with genetically linked high cholesterol (familial hypercholesterolaemia) should be identified and treated and their names entered on a regional register so that other family members can be identified in order that measures can be introduced to prevent the development of cardiovascular disease.

Rationale:

Familial Hypercholesterolaemia [FH] is a genetically linked (autosomal dominant) condition with a prevalence of 1 in 500 in the population. It results in premature vascular disease with the risk of premature death. It is among the commonest of all inherited conditions and is associated with significant morbidity and mortality [~50 % of all untreated males develop heart disease by age 50 and die by age 60 with similar figures for women at ages 60 and 70 years respectively].

The identification (using Simon Broome criteria) and treatment of patients who have FH with lipid lowering therapy reduces coronary artery disease, mortality and morbidity. It is estimated that there are around 3,688 people with FH in Northern Ireland. Currently around 800 have been identified (around 22%). Therefore, at present, the majority of patients with familial hypercholesterolaemia are undiagnosed and therefore untreated.

Cascade testing is a very cost effective method of identifying people with FH in the population. When an individual is diagnosed with FH, other family members are identified and offered a test to find out if they too have FH and would benefit from treatment. If any of these relatives are found to have FH, their relatives are also offered testing and so on in a cascade fashion. The incremental cost-effectiveness ratio for cascade testing has been estimated at £3,666 per quality adjusted life year (QALY); well below the NICE threshold of £30,000 per QALY.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2008) Clinical Guideline CG71 - Identification and management of familial hypercholesterolaemia <http://www.nice.org.uk/Guidance/CG71>

European Guidelines on Cardiovascular disease prevention in clinical practice: Executive summary. Atherosclerosis: 2007; 194: 1 – 45
<http://linkinghub.elsevier.com/retrieve/pii/S002191500700528X>

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Nherera L, Marks D, Minhas R et al. Probabilistic cost-effectiveness analysis of cascade screening for familial hypercholesterolaemia using alternative diagnostic and identification strategies Heart 2011;**97**:1175-1181
doi:10.1136/hrt.2010.213975.

<http://heart.bmj.com/content/97/14/1175.abstract>

Responsibility for delivery / implementation

Health and Social Care Board

HSC Trusts

Local Commissioning Groups

ICPs

Primary Care

Quality Dimension

Safe

Lipid lowering therapy is safe with a low incidence of side effects.

Accessible

All patients with definite or probable FH should be referred to a specialist lipid clinic in a timely manner. Early screening of first and second degree relatives should take place (cascade testing).

Effective

All treatment will be provided in line with evidence based practices. Lifestyle and lipid lowering treatments should be implemented to achieve in adults: a reduction in LDL cholesterol concentration of greater than 50% from baseline to reduce cardiovascular risk.

Efficient

The screening of relatives is an efficient and cost effective method of detecting affected family members.

Equitable

All members of FH families should have access to an FH specialist nurse and the availability of cascade training.

Person Centred

All FH patients are provided with information on their condition, genetic implications, lifestyle advice and a primary / secondary prevention plan

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of the putative N Ireland FH population identified		28% 34% 40%	March 2014 March 2015 March 2016
Percentage of adult FH patients achieving a reduction in LDL cholesterol concentration of greater than 50%		Establish baseline Performance level to be determined once baseline established	March 2014

5.3 CARDIOLOGY

Currently mortality rates for cardiovascular disease (CVD) continue to be one of the highest causes of death in Northern Ireland. In 2009, there were nearly 5,000 deaths from CVD. This accounted for nearly a third of all deaths. Within these Cardiovascular mortality rates coronary heart disease (CHD) continues to be the leading cause of death and presently causes more deaths in Northern Ireland than any other disease. These figures continue to be relatively higher than the rest of the UK.

The mortality rates of both CVD and CHD have decreased continually since the 1970's (as much as 71% in males and 68% in females). However all indicators predict that it will continue to have huge demands. In 2006 CHD cost the NHS approximately £3.2 billion. The total cost of coronary heart disease to the UK economy was approximately £9.0 billion.

Although mortality and incidence figures are decreasing, prevalence rates of some cardiovascular diseases are currently increasing due to longer life expectancy and the increasing survival rates for heart attacks and stroke victims. Estimates suggest that in Northern Ireland over 72,000 people were living with CHD in 2008/09. Figures from 2005/06 show that 61,000 people had suffered a heart attack and over 97,000 people were living with angina. Best estimates of incidence of other cardiovascular diseases suggest that in 2009, there were over 785 new cases of angina and over 700 new cases of heart failure.

In addition to the CHD burden arrhythmias prevalence is approximately 1.8% across regions in the UK. This condition can affect men and women of any age, health background or ethnicity and an increasing number are presenting to secondary care either with haemodynamic instability or with an inherited predisposition for sudden cardiac death.

The recognition that growing numbers of patients derive clinical benefit, including better clinical outcomes and shortened length of hospital stay, by early intervention have seen intervention rates continually increasing and cardiac catheterisation suites forming an increasing and vital part of the overall role of cardiac services throughout the UK. Advances in invasive procedures include treatment for cardiac rhythm disturbances and structural heart disease however all will require appropriate timely diagnosis and intervention. Effective management of coronary artery disease and arrhythmias can omit and reduce unplanned hospital

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

admissions, heart disease and stroke and substantially reduce the burden on Health and Social Care.

The published British Heart Foundation report made a number of specific predictions future cardiovascular trends over the coming 10 years. They include:-

- People would present with CHD at a younger age over the next ten years, as a result of trends in obesity in the young.
- An increase in the identification of congenital heart disease was predicted and as a consequence of better care after detection, genetic counselling, better outcomes from surgery and the development of Magnetic Resonance Imaging (MRI) will result in an increasing prevalence of congenital heart disease in adults.
- The increasing public awareness of arrhythmia, as well as improved treatments such as implantable devices and better chronic disease management would lead to a decline in arrhythmia.
- Better management of hypertension and atrial fibrillation were seen to be important factors contributing to a decrease in stroke incidence.

Overarching standard 14: Atrial Fibrillation

All patients that have been assessed and diagnosed with Atrial Fibrillation should have their stroke risk undertaken and treatment commenced as appropriate.

Rationale:

Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia, occurring in 1–2% of the general population. Over 6 million Europeans suffer from this arrhythmia, and its prevalence is estimated to at least double in the next 50 years as the population ages. AF confers a 5-fold risk of stroke, and one in five of all strokes is attributed to this arrhythmia. Ischaemic strokes in association with AF are often fatal, and those patients who survive are left more disabled by their stroke and more likely to suffer a recurrence than patients with other causes of stroke. In consequence, the risk of death from AF-related stroke is doubled and the cost of care is increased 1.5-fold.

AF affects 1–2% of the population. The prevalence of AF increases with age, from 0.5% at 40–50 years, to 5–15% at 80 years. Men are more often affected than women. The lifetime risk of developing AF is 25% in those who have reached the age of 40. The prevalence and incidence of AF in non-Caucasian populations is less well studied. The incidence of AF appears to be increasing (13% in the past two decades).

Approximately every fifth stroke is due to AF; furthermore, undiagnosed ‘silent AF’ is a likely cause of some ‘cryptogenic’ strokes. Stroke in AF is often severe and results in long-term disability or death. Paroxysmal AF carries the same stroke risk as permanent or persistent AF. Hospitalizations due to AF account for one-third of all admissions for cardiac arrhythmias. Acute coronary syndrome (ACS), aggravation of heart failure, thrombo-embolic complications, and acute arrhythmia management are the main causes.

Evidence:

2012 focused update of the ESC Guidelines for the management of atrial fibrillation. European Heart Journal (2012) **33**, 2719–2747

http://www.escardio.org/guidelines-surveys/esc-guidelines/GuidelinesDocuments/Guidelines_Focused_Update_Atrial_Fib_FT.pdf

BMA (2012) Summary of 2012/13 QOF Changes

<http://bma.org.uk/practical-support-at-work/contracts/independent-contractors/qof-guidance>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

National Institute for Health and Clinical Excellence (NICE) (2006) Clinical Guideline CG36 - Atrial fibrillation: The management of atrial fibrillation CG36
<http://www.nice.org.uk/CG36>

Compass therapeutic notes on the management of Atrial fibrillation in Primary Care
http://www.hscbusiness.hscni.net/pdf/Atrial_Fibrillation_in_Primary_Care.pdf

Responsibility for delivery / implementation

Commissioners
Trust Senior Executives
Senior operation managers and clinical teams within secondary care
Primary and community care clinicians

Quality Dimension

Safe

Patient will have their care provided by appropriately trained, competent staff working in an appropriate environment.

Accessible

Patients presenting to their GP that have been assessed as at high risk of stroke will be assessed, diagnosed and treated at the onset of symptoms

Effective

Standard and core components will be assessed through an ongoing monitoring programme

Efficient

Patients presenting to their GP that have been assessed as at high risk of stroke will be assessed, diagnosed and treated at the onset of symptoms

Equitable

All patients will be treated as per the agreed patient way, irrespective of their geographical location.

Person Centred

The pathway between primary and secondary will be focus on the individual needs of the patients.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients over the age of 65 that have a documented opportunistic assessment of AF	QOF	60% 65% 70%	March 2014 March 2015 March 2016
Percentage of patients with atrial fibrillation in whom there is a record of a CHADS ₂ score of 1 (latest in the preceding 15 months), who are currently treated with anti-coagulation drug therapy or anti-platelet therapy	QOF	70% 80% 90%	March 2014 March 2015 March 2016
Percentage of patients with Atrial Fibrillation whose latest record of a CHADS ₂ score is greater than 1, who are currently treated with anti-coagulation therapy	QOF	50% 60% 70%	March 2014 March 2015 March 2016

Overarching standard 15: Chronic Heart Failure

All patients diagnosed with chronic heart failure should be managed by a multi-professional integrated health care team that includes specialist heart failure services, community services and General Practitioners which have access to timely BNP and ECHO investigations. This pathway will extend from diagnosis to end of life.

Rationale:

Heart failure is caused by structural or functional abnormalities of the heart. The most common cause of heart failure in the UK is coronary artery disease, and many patients with chronic heart failure have had a myocardial infarction in the past. There are around 700,000 people in the UK today with definite heart failure, with around 63,000 new cases each year. Heart failure accounts for a total of 1 million inpatient bed-days (2% of all NHS inpatient bed-days) and 5% of all emergency medical admissions to hospital. Re-admissions are common: about 1 in 4 patients are re-admitted within 3 months. Hospital admissions because of heart failure are projected to rise by 50% over the next 25 years – largely as a result of the ageing population.

The role of the integrated team is to improve functional status and quality of life for patients by ensuring access to the correct level of care as their clinical condition dictates. Access to both specialist services and generalist services in one pathway brings a range of benefits to patients. It ensures care and optimal management that is flexible and tailored to the needs of the individual.

Education can be provided by the specialists with treatment and monitoring given by either the generalists or the specialists on a regular basis as clinically appropriate. Follow-up and monitoring will be clinic based, home based or by telephone contact. This approach will ensure that patients to have a better understanding of their condition and treatment as wells as promoting patient empowerment and self management. Evidence has shown that this will reduce admissions and length of hospital stay. Depending on the current clinical stability this care can be provided by a specialist or a generalist nurses with fluid transition between.

When a patient has been identified to be possibly in the last year of life both active and palliative interventions can be used together to improve the quality of life. It is recognised that, when active treatment and intervention are no longer effective it is important that this is communicated and planning takes place and the person offered the opportunity to develop an advance care plan.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Evidence:

National Institute for Health and Clinical Excellence (NICE) support for commissioners and others using the quality standard on chronic heart failure.
<http://www.nice.org.uk/media/DAE/F3/CHFQualityStandardCommissioningSupport.pdf>

National Institute for Health and Clinical Excellence (NICE) (2010) Clinical Guideline CG108 - Management of chronic heart failure in adults in primary and secondary care

<http://www.nice.org.uk/CG108>

DHSSPS (2010) Living Matters, Dying Matters. A Palliative and End of Life Care Strategy for Adults in Northern Ireland.

http://www.dhsspsni.gov.uk/8555_palliative_final.pdf

DHSSPS (2011) Transforming your Care: A Review of Health and Social Care in Northern Ireland

<http://www.dhsspsni.gov.uk/transforming-your-care-review-of-hsc-ni-final-report.pdf>

Regional Cardiac Services Network (2008) Northern Ireland Standards and Guidelines for Heart Failure Nurses.

[http://www.nicardiacnetwork.org/uploads/60d02f36-1cf6-42de-92fe-8c2b5486576b/resources/cd54fcda-be89-4376-893f-3c1341d0740b/guidelinesforheartfailurenuringmay08%20\(2\).doc](http://www.nicardiacnetwork.org/uploads/60d02f36-1cf6-42de-92fe-8c2b5486576b/resources/cd54fcda-be89-4376-893f-3c1341d0740b/guidelinesforheartfailurenuringmay08%20(2).doc)

National End of Life care programme, *Improving end of life care* (2010) End of life care in heart failure, A framework for implementation

http://www.endoflifecareforadults.nhs.uk/assets/downloads/End_of_Life_Care_in_heart_failure.pdf

National End of Life care programme, *Improving end of life care* (2010) Capacity, care planning and advance care planning in life limiting illness A Guide for Health and Social Care Staff

http://www.endoflifecareforadults.nhs.uk/assets/downloads/ACP_booklet_June_2011_with_links.pdf

NHS (2000) National Service Framework for Coronary heart Disease, Chapter 6, Heart Failure

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4057523.pdf

Responsibility for delivery / implementation

Commissioners

Trust Senior Executives

Senior operation and clinical teams within the Trust

Primary and community care clinicians

Cardiac Rehabilitation teams

Specialist Heart Failure teams

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

Patient with signs and symptoms of heart failure should have their care provided by specially trained, competent staff working in an appropriate environment.

Accessible

Diagnosis, treatment and care for patients with heart failure should begin on patient presentation.

Effective

Standard and core components will be assessed a regional audit tool and through participation in the National Heart Failure Audit

Efficient

Specialist heart failure services encourage improvement in quality of life due to early diagnosis, treatment and continuity of care and appropriate secondary prevention medications.

Equitable

All patients should have access to timely diagnosis and specialist heart failure service.

Person Centred

Patients, families and carers should be provided with specialist care and support which promotes self management and independence and supported with palliative care initiatives when active treatment is no longer effective.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of referrals for assessment of left ventricular heart failure that has a BNP result recorded on their referral documentation	Regional Heart Failure Assessment document / database (currently being developed)	70% 75% 80%	March 2014 March 2015 March 2016
Percentage of patients referred for an ECHO for consideration of LV Failure that have their procedure completed and reported on within 9 weeks of referral (unless clinically urgent)	Regional Heart Failure Assessment document / database (currently being developed)	80% 85% 95%	March 2014 March 2015 March 2016
Percentage of patients with chronic heart failure due to left ventricular systolic dysfunction that are offered angiotensin-converting enzyme inhibitors (or angiotensin II receptor antagonists licensed for heart failure if there are intolerable side effects with angiotensin-converting enzyme inhibitors) and beta blockers licensed for heart failure	QOF	60% 65% 70%	March 2014 March 2015 March 2016
Percentage of patients that have been identified as Phase C/D on the Northern Ireland End of Life 2 model that have been offered an advance care plan.	Regional Heart Failure Assessment document / database (currently being developed)	40% 45% 50%	March 2014 March 2015 March 2016

Overarching standard 16: New Onset Chest Pain

All patients who develop new onset chest pain, suggestive of angina should be reviewed at a rapid access chest pain clinic (RACPC) within 2 calendar weeks of referral by the GP/appropriate clinician

Rationale:

The Rapid Access Chest Pain Clinic (RACPC) provides a quick and early specialist cardiology assessment for patients with new onset of exertional chest pain thought likely to be angina, and for patients not currently under a cardiologist who have known ischaemic heart disease and worsening symptoms, who need urgent assessment. These are consultant-supported, one-stop clinic, which enables a rapid and definitive assessment of symptoms and investigations and results in either the initiation of treatment or the swift reassurance of patients without pathology.

The clinics are a fast route of entry for patients into cardiology services. It allows quick access to appropriate treatment, either medication or invasive procedures and to all-important risk factor modification and prevention. Referrals should be for patients with new onset chest pain suspected to be cardiac in origin.

Evidence:

DoH (2000) Chapter 4, Coronary Heart Disease National Service Framework, England and Wales

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4094275

National Institute for Health and Clinical Excellence (NICE) (2010) Clinical Guideline CG95 - Chest pain of recent onset <http://guidance.nice.org.uk/cg95>

National Institute for Health and Clinical Excellence (NICE) (2010) Clinical Guideline CG126 - Management of stable angina

<http://guidance.nice.org.uk/cg126>

Responsibility for delivery / implementation

Commissioners

Trust Senior Executives

Senior operational and clinical teams within the Trust

Quality Dimension

Safe

All Services must comply with quality and safety standards for cardiac services. Reduction of patients who experience an acute cardiac event whilst waiting for an elective outpatient appointment

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Accessible

The service offers patients a rapid access into elective services.

Effective

Effectiveness of the service will be benchmarked and audited on an annual basis

Efficient

Timely access to appropriate elective services and assessed by an appropriate clinical team

Equitable

All patients, irrespective of their geographical location, will have equity of access to RACPCs

Person Centred

All patients will be treated dependent on their individual clinical risk.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients who are seen at RACPC within 2 calendar weeks of referral by a GP / appropriate clinician (excluding refusal of first offer)	PAS	90% 95% 98%	March 2014 March 2015 March 2016

Overarching standard 17: Cardiac Rehabilitation

All patients identified as requiring cardiac rehabilitation, in line with the regional guidelines, should have their rehabilitation delivered by a specialist cardiac rehabilitation nursing team

Rationale:

Cardiac rehabilitation provides intermediate care between primary and secondary care. It is an evidence-based intervention that reduces both cardiac mortality (26-36%) and total mortality (13-26%)². Cardiac rehabilitation is also associated with a reduction in morbidity, namely recurrent myocardial infarction³ and a 28-56% reduction in unplanned readmissions⁴. Cardiac rehabilitation integrates behaviour change, education, risk factors modification, including medical and lifestyle management as well as cardio protective therapies. Cardiac rehabilitation improves functional capacity, perceived quality of life. And the development of self management skills⁵. Cardiac rehabilitation is a cost—effective therapeutic intervention in cardiovascular disease management.⁶

Programmes should aim to offer cardiac rehabilitation to the following patient groups –

- Acute coronary syndrome (STEMI/NSTEMI/Unstable Angina)
- Prior to or following coronary artery bypass grafting / PCI
- Stable angina
- Stable heart transplant
- Valve surgery
- ICD Insertion

Evidence:

British Association for Cardiovascular Disease Prevention and Rehabilitation (2012) Standards and Core Components for Cardiac Rehabilitation

http://www.bacpr.com/resources/8BZ_BACPR_Standards_and_Core_Components_2012.pdf

National Institute for Health and Clinical Excellence (NICE) (2010) Clinical Guideline CG48 – Secondary Prevention in Primary and Secondary care for patients following a myocardial infarction

<http://www.nice.org.uk/CG48>

CREST (2006) Guidelines for cardiac rehabilitation in NI

<http://www.gain-ni.org/images/Uploads/Guidelines/cardiac-rehab-guidelines.pdf>

DoH (2000) National Service Framework for Coronary heart Disease, chapter 7, Cardiac Rehabilitation

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4057524.pdf

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Responsibility for delivery / implementation

Commissioners, Trust Senior Executives
Senior operation and clinical teams within the Trust
Primary and community care clinicians, Cardiac Rehabilitation teams

Quality Dimension

Safe

Patient requiring cardiac rehabilitation should have their care provided by appropriately trained, competent staff working in an appropriate environment.

Accessible

Cardiac rehabilitation should begin as soon as a diagnosis has been made and patients conditions allows. The specialist cardiac rehabilitation pathway begins on patient presentation, identification for eligibility, referral and assessment through to long term chronic disease management.

Effective

Standard and core components are assessed yearly through participation in the National Audit for Cardiac Rehabilitation. (NACR)

Efficient

Cardiac rehabilitation provides the best physical, mental and social conditions to enable the patient to resume their optimal functioning and prevent progression of the disease through appropriate behavioural change.

Equitable

All appropriate cardiac patients should have access to specialist cardiac rehabilitation.

Person Centred

Cardiac rehabilitation should be menu based and focus on the individual needs of the patients.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients referred to cardiac rehabilitation that receive Phase 1	NACR	60% 65% 70%	March 2014 March 2015 March 2016
Percentage of eligible patients referred to cardiac rehabilitation that receive Phase 2	NACR	95% 95% 95%	March 2014 March 2015 March 2016
Percentage of eligible patients invited to join a Phase 3 programme	NACR	80% 85% 90%	March 2014 March 2015 March 2016
Percentage of patients invited to join a Phase 3 that commence the programme	NACR	45% 50% 55%	March 2014 March 2015 March 2016
Percentage of patients that complete 50% of Phase 3	NACR	80% 85% 90%	March 2014 March 2015 March 2016
Percentage reduction in the number of unscheduled hospital readmissions for another cardiac event over one financial year	PAS	Establish baseline 5% increase on baseline 5% increase on baseline	March 2014 March 2015 March 2016

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Percentage of patients surveyed that are satisfied with cardiac rehabilitation services based on 50% of the patients returning the survey	Regional Patient Satisfaction Audit	80% 85% 90%	March 2014 March 2015 March 2016
Percentage of patients accepting referral to a structured community exercise programme (Phase 4)	NACR	Establish baseline 5% increase on baseline 5% increase on baseline	March 2014 March 2015 March 2016
Percentage of patients that indicated they felt better / much better following cardiac rehabilitation intervention on the QOL indicator tool	NACR	Establish baseline 5% increase on baseline 5% increase on baseline	March 2014 March 2015 March 2016

Overarching standard 18: Acute Coronary Syndrome

All patients suffering from an acute cardiac event (ST elevation myocardial infarction (STEMI), Non ST Elevation myocardial infarction (NSTEMI) should have Cor Angio +/- PCI / Cardiac Surgery within the agreed clinical timelines

Rationale:

Acute Coronary Syndrome refers to any group of symptoms attributed to obstruction of the coronary arteries. The most common symptom prompting diagnosis of ACS is chest pain often radiating of the left arm or angle of the jaw, pressure-like in character, and associated with nausea and sweating.

Evidence suggests that patients who have suffered a heart attack (STEMI) have a greater chance of survival and recovery if they are treated in a specialist centre that provides primary Percutaneous Coronary Intervention (pPCI). Programme for Government has stated that this should be available for patients across Northern Ireland. This planned introduction of a primary angioplasty service (primary PCI) for Northern Ireland (already successfully piloted in BHSCT) will mean that patients having a heart attack will be taken to a cath lab centre that is capable of undertaking the procedure 24/7. Patients bypass A&E and are taken directly to the cath lab, where they should have their procedure within 120 minutes from first call for medical help, before transferring back to their local hospital for subsequent care.

Evidence suggests that patients presenting to their local hospital with a NSTEMI should have coronary angiography / revascularization based on their risk profile but this should be performed during the same hospital stay, preferably within 72 hours of admission.

Evidence:

MINAP Annual Report 2012

<http://www.ucl.ac.uk/nicor/audits/minap/publicreports>

DoH (2008) Treatment of Heart Attack National Guidance *Final Report of the National Infarct Angioplasty Project (NIAP)*

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_089454.pdf

ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation

http://www.escardio.org/guidelines-surveys/esc-guidelines/GuidelinesDocuments/Guidelines_AMI_STEMI.pdf

ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

<http://www.escardio.org/guidelines-surveys/esc->

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

[guidelines/GuidelinesDocuments/Guidelines-NSTE-ACS-FT.pdf](#)

ESC Guidelines on myocardial revascularization

<http://www.escardio.org/guidelines-surveys/esc->

[guidelines/GuidelinesDocuments/guidelines-revasc-FT.pdf](#)

Responsibility for delivery / implementation

Commissioners

Trust Senior Executives

Senior operation and clinical teams within the Trust

Primary and community care clinicians

Cardiac Rehabilitation teams

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

All Services must comply with National Quality Standards for PCI (BCIS)

Accessible

Patients will be treated within the clinically appropriate timescales

Effective

Effectiveness of the service will be benchmarked nationally using the CCAD databases.

Efficient

The timely access to interventional cardiology and cardiac surgery will reduce the total length of the in-patient stay.

Equitable

All patients, irrespective of their geographical location, will have equity of access to intervention procedures and cardiac surgery.

Person Centred

All patients will be treated dependent on their individual clinical risk.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients who have a primary PCI within 90 minutes of arrival at the 24/7 capable centre	MINAP	80% 85% 90%	March 2014 March 2015 March 2016
Percentage of eligible STEMI patents that have primary PCI within 120 minutes of calling for help	MINAP	Establish baseline Performance level to be determined once baseline established	March 2014
Percentage of eligible STEMI patents that have primary PCI within 150 minutes of calling for help	MINAP	Establish baseline Performance level to be determined once baseline established	March 2014
Percentage of eligible NSTEMI / ACS patients who have Cor Angio +/- within 72hrs from diagnosis	Electronic WhiteBoard	60% 65% 70%	March 2014 March 2015 March 2016
Percentage of eligible patients, defined as clinically urgent, who have cardiac surgery within 7 days of acceptance by the surgical team	Electronic WhiteBoard	50% 60% 70%	March 2014 March 2015 March 2016

NOTE – Primary PCI is currently a new service development in line with PfG and as such it may be necessary to review the performance indicators and anticipated performance levels on a frequent basis

5.4 STROKE

A stroke results from an interruption of the blood supply to part of the brain. Every year in Northern Ireland, 3000 people are admitted to hospital with an acute stroke and general practice provides ongoing support to 34,000 stroke or transient ischaemic attack (TIA) survivors. It is important that patients are assessed as soon as possible after suffering a stroke and that care is provided in a clinically effective way. Significant developments in the organisation and delivery of stroke care have taken place since 2009, these include the FAST campaign, introduction of 24/7 thrombolysis, greater use of stroke units in providing care and the development early supported discharge and community stroke teams.

A transient ischaemic attack (TIA), or 'mini-stroke', is caused by a temporary interruption in the blood supply to part of the brain usually as a result of a clot in one of the arteries supplying the brain. Early assessment and treatment of TIAs is associated with an 80% reduction in the risk of early recurrent stroke. TIAs can cause symptoms that are similar to a stroke, although they don't last as long. A TIA may last only a few minutes and are usually resolved within 24 hours. TIAs are linked to stroke and are a warning sign that an individual is at risk of a stroke and should not be ignored.

Overarching standard 19: Suspected Transient Ischaemic Attack

All patients with suspected transient ischaemic attack should have rapid specialist assessment and investigation to confirm the diagnosis and should have a management plan urgently put in place to reduce short term and long term cardiovascular complications

Rationale:

A transient ischaemic attack (TIA) indicates unstable brain ischaemia with a high early stroke risk and requires assessment within 24 hours for high risk TIAs (ABCD² score greater than 4) and within 7 days for low risk TIAs (ABCD² less than 4)

Evidence:

DHSSPS (2008) N.I. Stroke Strategy: Improving stroke services in Northern Ireland <http://www.dhsspsni.gov.uk/showconsultations?txid=26878>

National Institute for Health and Clinical Excellence (NICE) (2008) Clinical Guideline CG68 - Diagnosis and initial management of acute stroke and transient ischaemic attack <http://guidance.nice.org.uk/CG68>

American Stroke Association (2006) Guidelines for prevention of stroke in patients with ischaemic stroke or transient ischaemic attack <http://stroke.ahajournals.org/cgi/content/full/37/2/577?ck=nck>

Quality and Outcomes Framework (QOF) Stroke indicators by LCG 2011-12 http://www.dhsspsni.gov.uk/stroke_indicators_by_lcg_2011-12.pdf

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts
Primary Care

Quality Dimension

Safe

Assessment of patients with suspected TIA is carried out by those with appropriate specialist skills and experience

Accessible

All suspected TIA patients are risk stratified using the ABCD2 score. People with a suspected TIA at high risk of stroke (e.g. an ABCD2 score of 4 or greater) in whom vascular territory or pathology is uncertain undergo urgent brain imaging (preferably MR with DWI*) within 24 hours of onset of symptoms.

Effective

Effective preventive treatment is instituted immediately. Those who are candidates for carotid intervention undergo carotid ultrasound as soon as possible after the event and no later than 1 week post event. Carotid endarterectomy, where indicated, is performed within 2 weeks of the event.

Efficient

Rapid access to TIA assessment by stroke services is available in all Trusts to coordinate specialist assessment, investigation and management as rapidly as possible.

Equitable

Patients should have access to the same level of services for the assessment, investigation and management of TIA regardless of domicile.

Person Centred

All confirmed TIA patients are provided with appropriate information on their condition, lifestyle advice and a secondary prevention plan.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
<p>Percentage of confirmed TIA patients at high risk of early stroke (ABCD2 score 4 or above) who undergo specialist assessment AND, where clinically indicated, urgent brain imaging (preferably by MRI DWI) within 24 hours following assessment</p>		<p>50% 60% 70%</p>	<p>March 2014 March 2015 March 2016</p>
<p>MRI DWI, where clinically indicated, should be available as first choice brain imaging for all TIA patients within 24 hours, 7 days a week, for high risk patients and within 7 days for lower risk patients</p>		<p>50% 60% 70%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of TIA patients seeking medical attention who receive antiplatelet and statin therapy within 24 hours of the index event</p>		<p>80% 90% 100%</p>	<p>March 2014 March 2015 March 2016</p>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

*Magnetic Resonance with Diffusion Weighted Imaging

Appendix 1: ABCD² Score

A (Age)	Age \geq 60 yrs	Score: 1
B (BP)	BP \geq 140/90	Score: 1
C (Clinical features)		
Unilateral weakness		Score: 2
Speech impairment without weakness		Score: 1
D (Duration)		
Duration \geq 60 mins		Score: 2
Duration \geq 10-59 mins		Score: 1
Diabetes		Score: 1

Total Score:

Maximum Score is 7

Overarching standard 20: Suspected Acute Stroke

All patients with suspected acute stroke should have rapid access to specialist assessment, appropriate brain imaging and emergency treatment, including thrombolysis.

Rationale:

Stroke is a medical emergency. Urgent investigation and management in the initial hours after onset, including thrombolysis, can minimise brain damage, reduce long term disability death rates and is cost effective.

There is good evidence for the benefits of thrombolysis in suitable patients who have suffered an acute ischaemic stroke. Thrombolysis dissolves blood clots and can help remove the clot that has caused the stroke. The sooner it is given the better the result, and it must be given within 4½ hours of the stroke symptoms starting. It is estimated that between 15% and 20% of acute ischaemic stroke patients could be eligible for treatment.

Evidence:

National Clinical Guidelines for Stroke, 4th edition (2012)

<http://www.rcplondon.ac.uk/resources/stroke-guidelines>

National Institute for Health and Clinical Excellence (NICE) (2012) Technology Appraisal TA264 - Alteplase for treating acute ischaemic stroke

<http://guidance.nice.org.uk/TA264>

National Audit Office Report (2005) Reducing brain damage, faster access to better stroke care <http://www.nao.org.uk/stroke/>

Responsibility for delivery / implementation

HSC Board

Public Health Agency

HSC Trusts

Quality Dimension

Safe

Thrombolysis should only be delivered within the parameters of NICE TA264 Alteplase for treating acute ischaemic stroke; in designated hospitals following assessment by a specialist acute stroke team and a brain scan.

Accessible

The timely and rapid progression of the patient through the appropriate care pathway is essential to better outcomes.

Effective

Thrombolysis for acute ischaemic stroke given at the right time improves patient outcomes.

Efficient

Acute stroke services should be organised to allow patients rapid access to appropriate imaging, specialist assessment and management.

Person Centred

Clear information about the benefits and risks associated with thrombolysis should be given to patients and carers

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of confirmed ischaemic stroke patients who, following an assessment, receive thrombolysis within 4.5 hours of onset of stroke symptoms		10% 11% 12%	March 2014 March 2015 March 2016
Percentage of acute stroke patients who have brain imaging within 12 hours of the stroke event.		80% 85% 90%	March 2014 March 2015 March 2016
Percentage of patients with ischaemic stroke in whom door to needle time is equal to or less than 60 minutes		75% 80% 85%	March 2014 March 2015 March 2016

Overarching standard 21: Stroke Rehabilitation

All patients who have had a stroke should have their rehabilitation delivered by a Specialist Stroke Rehabilitation Team in a Stroke Unit, starting immediately after admission to hospital.

Rationale:

Specialist stroke rehabilitation focuses on assessing the individual needs of patients and, in consultation with the patient and their family/carer(s), addressing them in the most effective way. Ongoing specialist rehabilitation needs, as defined by the Team, should continue to be delivered by a Specialist Stroke Rehabilitation Team.

Caring for stroke patients in Stroke Units improves clinical outcomes for patients in a cost-effective way. For selected patients, following their in-patient stay, an early supported discharge service with rehabilitation in the community delivered by a Specialist Stroke Rehabilitation Team can lead to a reduction in long-term dependency and admissions to long term care, as well as a shorter hospital stay.

Evidence:

Stroke Unit Trialists' Collaboration. Organised inpatient (stroke unit) care for stroke. *Cochrane Database of Systematic Reviews* 2007, Issue 4. Art. No.: CD000197. DOI: 10.1002/14651858.CD000197.pub2

<http://mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD000197/frame.html>

Early Supported Discharge Trialists. Services for reducing duration of hospital care for acute stroke patients. *Cochrane Database of Systematic Reviews* 2005, Issue 2. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub2

<http://mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD000443/frame.html>

National Clinical Guidelines for Stroke, 4th edition (2012)

<http://www.rcplondon.ac.uk/resources/stroke-guidelines>

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts
Primary Care

Quality Dimension

Safe

All patients with stroke should have rehabilitation provided by appropriately trained staff working in an appropriate environment.

Accessible

All patients should be admitted to a stroke unit at the earliest opportunity and remain there for as long as their rehabilitation needs dictate. Rehabilitation should commence as soon as the patient's condition allows.

Effective

Rehabilitation by a Specialist Stroke Team in a Stroke Unit, followed up in appropriate cases by specialist stroke rehabilitation in the community saves lives, prevents long term disability and avoids unnecessary institutionalisation.

Efficient

Specialist stroke rehabilitation significantly reduces hospital stay.

Equitable

All stroke patients should have access to specialist stroke rehabilitation for as long as required.

Person Centred

Specialist stroke rehabilitation focuses on assessing the individual needs of patients and addressing them in the most effective way.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
<p>Percentage of stroke patients admitted directly to a specialist stroke unit or an equivalent hyperacute bed</p>	<p>Self assessment / SSNAP organisational audit</p>	<p>80% 85% 90%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Stroke units admitting acute strokes must have;</p> <ul style="list-style-type: none"> • Access to immediate brain imaging within 12 hours • Continuous physiological monitoring • Nurses trained in swallow screening • Nurses trained in stroke assessment /management • Existence of stroke protocols • Specialist ward rounds 			
<p>Percentage of stroke patients, discharged from hospital, who continue rehabilitation in the community by a community stroke / early supported discharge team</p>		<p>50% 60%</p>	<p>March 2014 March 2015</p>

Overarching standard 22: Stroke Post Discharge Review

All patients who have had a stroke are reviewed post discharge by Trust stroke services at 6 weeks and 6 months, and at 12 months and annually by primary care. As part of ongoing review emotional and mental health should be assessed.

Rationale:

The disabling impact of stroke can continue for the lifetime of the stroke survivor. They and their family/carer need continuing support and care including social care, psychological support, counselling, rehabilitation and maintenance of mobility. These may not be required by every stroke survivor at all stages, but should be readily accessible.

Patients require review and appropriate treatment and management of risk factors for vascular disease life long after stroke.

Patients should continue to have access to specialist stroke care and rehabilitation after leaving hospital.

Patients and their carers should have their individual psychosocial and support needs reviewed on a regular basis.

Any patient with reduced mobility at 6 months or later after stroke should be assessed for a further period of targeted rehabilitation.

Evidence:

National Clinical Guidelines for Stroke, 4th edition (2012)
<http://www.rcplondon.ac.uk/resources/stroke-guidelines>

DHSSPS (2008) N.I. Stroke Strategy: Improving stroke services in Northern Ireland
<http://www.dhsspsni.gov.uk/showconsultations?txtid=26878>

Stroke Survivors – Our stories, in our words. Stroke survivor and carer recommendations for improvement of services: A report from the EHSSB stroke patient & carer reference group. June, 2007
<http://www.ehssc.org/pdfs/strokesurvivorsourstoriesinourwords.pdf>

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts
Primary Care

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

All stroke survivors should have ongoing assessment of their needs and those of their carer, with particular emphasis on secondary prevention, information, education and support.

Accessible

Formal assessment at critical times following stroke will ensure that needs will be identified and can be addressed in a timely way.

Effective

Effective intervention will prevent unnecessary recurrence of stroke (and other cardiovascular disease) and reduce the burden of disability resulting from incomplete rehabilitation / re-enablement or from functional deterioration.

Efficient

Reducing the burden of disability significantly reduces future demands of health and social care services.

Person Centred

Services and interventions will be more closely focussed on the identified needs of stroke survivors and their carers.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
<p>Percentage survivors of stroke or TIA who have timely primary care and specialist review in line with regionally agreed policy.</p> <p>All Trusts should have a service model in place for offering psychological and emotional support to stroke survivors and their carers.</p>	Self assessment	70% 75% 80%	March 2014 March 2015 March 2016

5.5 VASCULAR DISEASE

Vascular disease refers to diseases of the blood vessels (arteries and veins) outside the heart and brain. Lymphoedema is also included in this section. The nine main conditions considered are: abdominal aortic aneurysm (AAA); amputations (due to vascular disease); carotid artery stenosis; the diabetic foot; lower limb ulceration; lymphoedema; peripheral arterial disease; varicose veins and vascular malformations.

Diseases of the arteries and veins are common and the prevalence increases with age. Arterial occlusive disease occurs when fatty deposits (atheroma) build up in the inner walls of arteries and affect blood circulation. This can cause a blockage in the artery. When the blockage is in the arteries in the neck this causes carotid artery stenosis (which can lead to a stroke); when it occurs in the lower limbs it can cause peripheral arterial disease which can cause pain in the legs when walking and can result in infection, gangrene or amputation. In addition, a disease of the connective tissue in the arterial wall can result in a weakening of the wall and the development of aneurysm dilatation (a ballooning of the artery the can lead to rupture, e.g. AAA)

People with diabetes have a particularly increased risk of peripheral vascular disease. They can also have nerve damage in the lower limb, and a reduced ability to deal with infection. This combination of poor circulation and poor sensation can result in foot trauma and infection leading to foot deformity, abscess development, gangrene and ultimately amputation.

The lymphatic system is part of the circulatory system. It drains clear fluid away from body tissues and into the blood. Lymphoedema is a swelling of body tissue due to failure in the lymphatic system which can affect people of all ages. It is chronic and often incurable and usually requires lifelong management.

The risk factors for vascular disease are the same as those for cardiac disease and stroke, with an increased emphasis on diabetes. Much vascular disease could be prevented if people adopted a healthier lifestyle e.g. by not smoking, eating a healthy diet and by exercising regularly. In addition issues such as high blood pressure, high blood cholesterol and blood sugar control should be identified and treated to the highest possible standards. Men aged 65 and over should also make an informed choice about attending for AAA screening.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

The Northern Ireland AAA Screening Programme commenced in June 2012. The aim of this programme is to reduce mortality from AAAs by around 50%. The target population is men aged 65, as about 1 in 40 men this age will have an AAA. These aneurysms are normally asymptomatic, but approximately one-third will rupture. This is usually fatal. Aneurysms that are 5.5 cm, or more, in diameter carry the greatest risk. Screening involves a quick and simple ultrasound scan of the abdomen. Men who are identified as having a large aneurysm (5.5 cm or more) are referred to a vascular surgical team for further management. Those with a small or medium sized aneurysm are kept under surveillance and invited back at regular intervals for repeat ultrasound scans.

It is obligatory that any man diagnosed with a large AAA by the National Screening Programme has access to a vascular surgical service that meets the standards of the Vascular Society for Great Britain and Ireland (VSGBI). The service is required to demonstrate an acceptable peri-operative mortality rate and turn down rate (the proportion of AAA referrals not offered surgery). In addition, vascular centres offering treatment to men with large aneurysms identified through the screening programme must be able to offer open and endovascular repair. In addition, NICE guidance on endovascular stent-grafts for the treatment of AAA states that it should be performed in specialist centres by clinical teams experienced in the management of abdominal aortic aneurysms.

Most patients with vascular disease are managed in the community, with support from a variety of disciplines and specialities. Patients who require more specialist care or vascular intervention can expect to have that care provided by a specialist multidisciplinary team within a dedicated vascular service. This team should provide for the holistic treatment of the vascular patient, with direct access to allied specialties including cardiology, stroke medicine, and interventional radiology. A key requirement for a 'specialist vascular centre' is the availability of a 24/7 on-site vascular on-call rota for vascular emergencies, supported by a 24/7 interventional radiology service.

Vascular surgery has now been recognised as a separate surgical specialty. The application for speciality status was approved by Parliament in March 2012, and this will enhance the development of a separate, integrated specialist vascular service in each region.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

This section sets out a series of standards designed to reduce mortality and morbidity from vascular disease, enhance the quality of care for patients with established peripheral vascular disease and to reduce their risks of further cardiovascular disease.

Overarching standard 23: Abdominal Aortic Aneurysm

All patients with an abdominal aortic aneurysm (AAA) > 5.5cms should have 24/7 access to a specialist vascular service in a vascular centre that meets the requirements set by the Vascular Society of Great Britain & Ireland for The Provision of Services for Patients with Vascular Disease.

Rationale:

A variety of initiatives have been developed to reduce mortality from elective AAA repair following the publication of the VASCUNET report in 2008. This highlighted the excessive mortality from the procedure in the UK. The Vascular Society of Great Britain and Ireland (VSGBI) developed a national AAA quality improvement programme in 2008 and published its interim report in June 2011. Building on evidence showing a relationship between volume and outcome in AAA surgery, in 2011 The Society also published its *Framework for Improving the Results of Elective AAA Repair* with the aim of halving the elective mortality rate for AAA surgery in the UK (to 3.5%) by 2014. The following year it published guidance on the *Provision of Services for Patients with Vascular Disease*. This publication recommends changes to the way vascular services are organized and delivered. Its aim is to ensure patients with vascular disease have the lowest possible elective and emergency morbidity and mortality rates in the developed world. This is to be achieved by delivering world class care from a smaller number of higher volume arterial centres.

In March 2012 vascular surgery became a recognised surgical specialty; separate from general surgery. A reconfiguration of vascular services, already underway in England, is required in Northern Ireland to provide sustainable 24/7 specialist vascular and endovascular cover for the local population. The introduction of the Northern Ireland AAA Screening Programme in June 2012 requires men identified with an AAA to be referred to a vascular centre that meets the Vascular Society's standards. The same level of care needs to be expected for all patients diagnosed with an AAA.

Evidence:

National Confidential Enquiry into Patient Outcome and Death. AAA: A service in need of surgery. London: NCEPOD, 2005.

<http://www.ncepod.org.uk/2005aaa.htm>

The European Society for Vascular Surgery. Second Vascular Surgery Database Report 2008. Dendrite Clinical Systems Ltd, Henley-on-Thames, United Kingdom: VASCUNET, 2008. Available at

<http://www.esvs.org/sites/default/files/file/Vascunet/Vascunet%20report%202008.pdf>

The Vascular Society of Great Britain and Ireland. National AAA QIP Interim Report. London: VSGBI, 2011. Available at

<http://www.vascularsociety.org.uk/vascular/wp-content/uploads/2012/11/National->

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

[AAA-QIP-Interim-Report.pdf](#)

The Vascular Society of Great Britain and Ireland. Framework for improving the results of elective AAA repair 2011. London: VSGBI, 2011. Available at <http://www.vascularsociety.org.uk/vascular/wp-content/uploads/2012/11/VSGBI-AAA-QIF-2011-v4.pdf>

Holt PJ, Poloniecki JD, Gerrard D, Loftus IM, Thompson MM. Meta-analysis and systematic review of the relationship between volume and outcome in abdominal aortic aneurysm surgery. Br J Surg 2007;94:395-403. Available at <http://www.ncbi.nlm.nih.gov/pubmed/17380547>

The Vascular Society of Great Britain and Ireland. Provision of Services for Patients with Vascular Disease 2012. London: VSGBI, 2012. Available at <http://www.vascularsociety.org.uk/vascular/wp-content/uploads/2012/11/Provision-of-Services-for-Patients-with-Vascular-Disease.pdf>

NHS Abdominal Aortic Aneurysm Screening Programme. Essential Elements in Developing an Abdominal Aortic Aneurysm (AAA) Screening and Surveillance Programme. Version 3. Gloucester: NAAASP, 2011. Available at <http://aaa.screening.nhs.uk/sops>

Joint Working Group to produce guidance on delivering an Endovascular Aneurysm Repair (EVAR) Service. Delivering An Endovascular Aneurysm Repair (EVAR) Service. London: Medicines and Healthcare products Regulatory Agency, 2010. Available at [http://www.bsir.org/Images/Members/administrator/File/joint_working_group_to_produce_guidance_on_delivering_an_endovascular_aneurysm_repair_\(evan\)_service\[1\].pdf](http://www.bsir.org/Images/Members/administrator/File/joint_working_group_to_produce_guidance_on_delivering_an_endovascular_aneurysm_repair_(evan)_service[1].pdf)

Responsibility for delivery / implementation

Health and Social Care Board
Public Health Agency
HSC Trusts
Local Commissioning Groups
NIVASC

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

Reduction in morbidity and mortality associated with AAA surgery

All AAA surgery performed in vascular centres that meet national standards

Appropriate standard of pre-operative assessment and recording of turnaround rates

Accessible

Accurate monitoring and audit of patient time line from referral to definitive treatment

Effective

All data will be entered onto the National Vascular Database to enable monitoring

Management of AAA will conform with the evidence linking volume and outcome

Efficient

Monitor use of local imaging facilities for diagnostic purposes

Wider use of local pre-assessment facilities

Equitable

There will be equal access to high quality care

Person Centred

Improved formalised patient feedback to be developed

Improved consent process to be developed

Consider developing an annual quality improvement programme involving patient representatives

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
The elective (open and EVAR) AAA mortality rate	National Vascular Database (NVD)	3.5% 3.25% 3%	March 2014 March 2015 March 2016
Time between diagnosis and treatment	National Vascular Database (NVD)	8 weeks for screen detected AAAs 8 weeks for all AAAs Maintain 8 weeks for all AAAs	March 2014 March 2015 March 2016
Formal identification of appropriate vascular centres that meet the requirements set by the Vascular Society of Great Britain & Ireland for The Provision of Services for Patients with Vascular Disease	Revision of Vascular Services	Centres identified	March 2014

Overarching standard 24: Carotid Artery Stenosis

Everyone who has had a stroke or a transient ischaemic attack (TIA) should have their risk factors investigated and managed; and helped to adopt a healthy lifestyle.

Rationale:

Stroke is a major health problem in the UK. It is the third most common cause of death worldwide; after ischemic heart disease and cancer. Each year approximately 4,000 people in Northern Ireland have a stroke. Of those affected around:

- 1300 will make a full recovery;
- 1300 will die in the first month; and
- 1300 will have substantial disability and to varying extents, be left dependent on others for everyday activities for the rest of their lives (65 will need institutional care)

A further 1,700 people in Northern Ireland have a TIA each year.

Symptoms of stroke include numbness, weakness or paralysis, slurred speech, blurred vision, confusion and severe headache. Stroke is defined by the World Health Organization as a clinical syndrome consisting of rapidly developing clinical signs of focal (at times global) disturbance of cerebral function, lasting more than 24 hours or leading to death with no apparent cause other than that of vascular origin.

A transient ischaemic attack (TIA) is defined as stroke symptoms and signs that resolve within 24 hours. However, there are limitations to these definitions. For example, they do not include retinal (eye) symptoms (sudden onset of visual loss in one eye), which should be considered as part of the definition of stroke and TIA. The symptoms of a TIA usually resolve within minutes or a few hours at most. Anyone with continuing neurological signs when first assessed should be assumed to have had a stroke.

Carotid artery stenosis (CS) is a narrowing of one or both of the large carotid arteries in the neck that provide most of the blood supply to the brain. Also known as carotid artery disease, it is a major risk factor for the most common type of stroke, ischaemic, which cuts off blood flow to the brain. Patients with carotid artery stenosis (CS), including those who are asymptomatic, have an increased risk of mortality from cardio-vascular disease (CVD) due to myocardial infarction and stroke. The relative risks of all cause mortality are two to three times that of age and sex matched to groups without CS.

Cardiovascular risk factor management has been proven to reduce the risk of

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

cardiovascular events, such as myocardial infarction and stroke, and all cause mortality. Important established risk factors for CVD include: smoking; hypertension; hyperlipidaemia; diabetes mellitus; age and male gender.

Promoting healthy living is vital in helping to prevent stroke, particularly in disadvantaged groups. Healthy lifestyles and management of specific risk factors reduce the risk of an initial stroke and the risk of a second or subsequent stroke. The Royal College of Physicians stroke guidelines state that: “all patients will require regular review and appropriate treatment of risk factors for vascular disease lifelong after stroke.

All GP’s should keep a register of stroke patients and conduct regular audit of secondary prevention.”

For patients with carotid artery stenosis (CAS) the following guidance is relevant for the secondary prevention of cardiovascular disease:

Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack (TIA) NICE clinical guideline 68 (2010). Available from

<http://publications.nice.org.uk/>

Prevention of cardiovascular disease. NICE public health guidance 25 (2010).

Available from <http://publications.nice.org.uk/prevention-of-cardiovascular-disease-ph25>

Smoking cessation services. NICE public health guidance 10 (2008). Available from <http://publications.nice.org.uk/smoking-cessation-services-in-primary-care-pharmacies-local-authorities-and-workplaces-ph10>

Clopidogrel and modified-release dipyridamole for the prevention of occlusive vascular events. NICE technology appraisal guidance 210 (2010). Available from <http://guidance.nice.org.uk/TA210>.

Lipid modification. NICE clinical guideline 67 (2008). Available from

<http://publications.nice.org.uk/lipid-modification-cg67>.

Hypertension: Clinical management of primary hypertension in adults. NICE clinical guideline CG127 (2011). Available from

<http://publications.nice.org.uk/hypertension-cg127>.

Smoking Cessation: Smoking is the most important risk factor for the development of CVD and even passive smoking increases cardiovascular risk. Excess cardiovascular risk is halved within one year of cessation and is the same as non-smokers within 5 years in those patients that successfully give up smoking. Smoking cessation advice when combined with nicotine replacement therapy improves quit rates to around 30%

The Antithrombotic Trialists’ Collaboration meta-analysis found that antiplatelet agents (predominantly aspirin, a cyclo-oxygenase inhibitor) reduced the risk of cardiovascular events by 23% in people with CVD - 75mg was as effective as

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

higher doses. Approximately 20% of patients are unable to take aspirin, largely due to gastrointestinal disturbance, and a similar proportion of patients have aspirin resistance. In these patients clopidogrel should be used. Clopidogrel is a thienopyridine derivative that blocks ADP induced platelet activity. In the Caprie study, clopidogrel was shown to further reduce cardiovascular events compared to aspirin (particularly in the PAD group) with a relative risk reduction of 8.7%. The NICE TA 210 states that:

1 Clopidogrel is recommended as an option to prevent occlusive vascular events: for people who have

had an ischaemic stroke; or who have peripheral arterial disease or multivascular disease

2 Modified-release dipyridamole in combination with aspirin is recommended as an option to prevent occlusive vascular events: for people who have had a transient ischaemic attack or who have had an ischaemic stroke only if clopidogrel is contraindicated or not tolerated.

3 Modified-release dipyridamole alone is recommended as an option to prevent occlusive vascular events:

for people who have had an ischaemic stroke only if aspirin and clopidogrel are contraindicated or not tolerated or who have had a transient ischaemic attack only if aspirin is contraindicated or not tolerated.

Lipid-Lowering Therapy: There is overwhelming evidence for the benefits of lowering cholesterol in patients with CVD. In the Heart Protection Study (2002), people with CVD with a total cholesterol over 3.5 mmol/l who took simvastatin (a HMG-CoA reductase inhibitor) had a 17.6% reduction in cardiovascular events compared to those on placebo. There was also a reduction in the subsequent need for both cardiac and non-cardiac revascularisation procedures. Based on these results, nearly all people with CVD should be prescribed statin therapy. There is also emerging evidence that statins have a direct effect on atherosclerotic plaque, stabilising it and possibly causing plaque regression in high doses.

Anti-Hypertensive Therapy: Up to 24% of the adult population are hypertensive and hypertension is associated with a 3 fold increase risk of CVD, as well as being strongly associated with stroke and myocardial infarction. Treatment of hypertension will reduce stroke rates by 38% and cardiovascular deaths by 14%. In the Heart Outcomes Study²⁹, the angiotensin converting enzyme inhibitor, ramipril, demonstrated an advantage in reducing cardiovascular events, even in those patients whose blood pressure was not elevated.

Diabetes Mellitus: Diabetes is an important risk factor for CVD and the incidence and prevalence of CVD increases with duration of both Type 1 and Type 2 diabetes. There is evidence that improved glycaemic control influences

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

cardiovascular disease progression.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2008) Clinical Guideline CG68 - Diagnosis and initial management of acute stroke and transient ischaemic attack <http://guidance.nice.org.uk/CG68>

DoH (2007) National Stroke Strategy

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081062

UK Carotid Endarterectomy Audit (Round 3). Prepared on behalf of The CIA Steering Group, Royal College of Physicians of London (2011)

Guidelines for Carotid Endarterectomy: A Statement for Healthcare Professionals from a Special Writing Group of the Stroke Council, American Heart Association Circulation. 1998;97:501-509.

National Clinical Guidelines for Stroke, 4th edition (2012)

<http://www.rcplondon.ac.uk/resources/stroke-guidelines>

Inter-society Consensus for the management of peripheral arterial disease (TASC II), 2005.

GP Quality and Outcomes Framework: Guidance for PCOs and practices, Stroke. 2012.

Responsibility for delivery / implementation

HSC Trusts

ICPs

Local Commissioning Groups

Primary Care teams

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of new patients with stroke or TIA who have been referred for further investigation	QOF Stroke Indicators 13	60% 80% 90%	March 2014 March 2015 March 2016
Percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that they are taking an anti-platelet agent (aspirin, clopidogrel, dipyridamole or a combination), or an anticoagulant.	QOF Stroke Indicators 12	70% 80% 90%	March 2014 March 2015 March 2016
Percentage of patients with a stroke or TIA whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less	QOF Stroke Indicators 8	55% 65% 70%	March 2014 March 2015 March 2016
Percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less	QOF Stroke Indicators 6	60% 70% 80%	March 2014 March 2015 March 2016

Overarching standard 25: Carotid Artery Stenosis

People with symptomatic carotid artery stenosis should have rapid access to high quality carotid imaging and carotid revascularisation, in accordance with their risk of subsequent stroke.

Rationale:

The carotid arteries are large arteries in the neck that provide most of the blood supply to the brain. Patients with significant narrowing of their carotid arteries, carotid stenosis (CS), are at increased risk of stroke. Some people who have had a stroke or TIA and have narrowing of the carotid artery may require carotid revascularisation; most commonly by surgical carotid endarterectomy (CEA), but occasionally by endovascular carotid angioplasty and stent (CAS). CEA involves surgical removal of the fatty (atherosclerotic) plaque causing the narrowing from the inside of the artery. Reconstruction of the artery often involves the placement of a surgical patch (vein or plastic material) on the artery wall to increase the size of the vessel and reduce the risk of re-narrowing. CAS usually involves the placement of a balloon inflatable wire mesh stent into the artery using a catheter which is inserted into an artery in the groin. The stent dilates the artery and is left in place to keep it open. Carotid imaging is required, prior to surgery, to define the extent of the carotid artery narrowing. There is a large body of evidence showing that the greatest benefit from carotid revascularisation is seen if the procedure is carried out quickly following the onset of symptoms.

NICE recommends that all people with suspected non-disabling stroke or TIA, who after specialist assessment are considered as candidates for carotid endarterectomy, should have carotid imaging, using duplex ultrasound scanning (DUS), within 1 week of onset of symptoms; or within 24 hours for high risk cases. People with stable neurological symptoms from acute non-disabling stroke or TIA who have symptomatic carotid stenosis of 50–99% according to the NASCET (North American Symptomatic Carotid Endarterectomy Trial) criteria, or 70–99% according to the ECST (European Carotid Surgery Trialists' Collaborative Group) criteria, should:

- be assessed and referred for carotid endarterectomy within 1 week of onset of stroke or TIA symptoms
- undergo surgery within a maximum of 2 weeks of onset of stroke or TIA symptoms
- Receive best medical treatment (control of blood pressure, antiplatelet agents, cholesterol lowering through diet and drugs & lifestyle advice).

Carotid imaging reports should clearly state which criteria (NASCET or ECST) were used when measuring the extent of carotid stenosis.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

People with stable neurological symptoms from acute non-disabling stroke or TIA who have symptomatic carotid stenosis of less than 50% according to the NASCET criteria, or less than 70% according to the ECST criteria, should:

- not undergo surgery
- receive best medical treatment (control of blood pressure, antiplatelet agents, cholesterol lowering through diet and drugs & lifestyle advice).

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2008) Clinical Guideline CG68 - Diagnosis and initial management of acute stroke and transient ischaemic attack <http://guidance.nice.org.uk/CG68>

DoH (2007) National Stroke Strategy

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081062

UK Carotid Endarterectomy Audit. Round 4 Public Report. Prepared on behalf of the Carotid Interventions Audit (CIA) Steering Group by the Royal College of Physicians Clinical Standards Department. 2012.

<http://www.rcplondon.ac.uk/projects/uk-carotid-interventions-audit>

Guidelines for Carotid Endarterectomy: A Statement for Healthcare Professionals from a Special Writing Group of the Stroke Council, American Heart Association *Circulation*. 1998; 97:501-509.

<http://circ.ahajournals.org/content/97/5/501.full>

National Clinical Guidelines for Stroke, 4th edition (2012)

<http://www.rcplondon.ac.uk/resources/stroke-guidelines>

Responsibility for delivery / implementation

HSC Board

Public Health Agency

HSC Trusts

Vascular teams

Primary care teams

Secondary care physicians

Integrated care partnerships

Local Commissioning Groups

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

Mortality and morbidity associated with carotid stenosis and its treatment will be reduced.

Accessible

Rapid access to carotid duplex ultrasound scanning and carotid revascularisation will be facilitated.

Effective

This will be monitored through the UK carotid endarterectomy audit.

Efficient

Faster access to a high quality surgical service produces better outcomes.

Equitable

Current inequities in access between local trusts and providers in Great Britain will be addressed.

Person centred

For the pathway of care to work well, it requires many stakeholders to co-ordinate care delivery. The general public and healthcare professionals need to be aware of the symptoms of stroke and TIA, general practitioners need to refer promptly and NHS trusts need to have organised stroke services with rapid access to specialist clinicians, imaging and surgery. Feedback from patients should be sought to help improve the quality of care.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who had a duplex ultrasound scan (DUS) of carotid artery within 1 week of onset of stroke or TIA symptoms.	National Vascular Database (NVD)	70% 75% 80%	March 2014 March 2015 March 2016
Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who underwent surgery within a maximum of 2 weeks of onset of stroke or TIA symptoms	National Vascular Database (NVD)	80% 90% 95%	March 2014 March 2015 March 2016
Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who have a complication during inpatient stay recorded as stroke or TIA during/after the procedure and prior to discharge.	National Vascular Database (NVD)	<4% <3% <2%	March 2014 March 2015 March 2016

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who have a complication during inpatient stay recorded as cranial nerve injury (includes neuropraxia) during/after the procedure and prior to discharge.</p>	<p>National Vascular Database (NVD)</p>	<p><5% <4% <3%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who have a complication during inpatient stay recorded as patient returned to theatre for bleeding during/after the procedure and prior to discharge.</p>	<p>National Vascular Database (NVD)</p>	<p><5% <4% <3%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with severe (>50% NASCET) carotid artery stenosis and stroke or TIA (symptomatic) and interventional therapy (carotid endarterectomy) who died during the inpatient stay.</p>			<p>March 2014 March 2015 March 2016</p>

Overarching standard 26: Diabetic Foot

All people with diabetes should have a foot care pathway updated on an annual basis. Risk stratification should direct onward referral and an appropriately constituted multidisciplinary team should be in place to triage and manage major complications of diabetic foot disease.

Rationale:

In Northern Ireland 73,500 people live with diabetes. The diabetic foot may be defined as a group of syndromes in which neuropathy, ischaemia, and infection lead to tissue breakdown resulting in morbidity and possible amputation (World Health Organisation, 1995).

Disease of the foot remains a major threat to people with diabetes with a management cost estimated to account for 20 per cent of the total cost of diabetes care in the UK. Patients with diabetic foot ulcers require more frequent hospital visits, are more commonly admitted to hospital and require longer lengths of stay when compared with diabetic patients without foot ulcers

More than 60% of non-traumatic lower limb amputations occur in diabetic individuals, and at least 80% of amputations are preceded by an ulcer. In Northern Ireland (2010/11) there were 199 major amputations attributable to diabetes.

Common complications of diabetes affecting the foot include peripheral neuropathy, ulceration, infection and peripheral vascular disease. Early recognition of foot problems through an annual screening programme and effective intervention along the causative pathways would improve outcomes by reducing major amputations and improving quality of life and also reduce costs related to diabetic foot complications.

Standards for the delivery of high quality diabetic foot services have already been defined by the National Institute for Clinical Excellence (NICE) in 2004 and 2011. For such clinical standards to be achieved they must be delivered by appropriately skilled healthcare professionals

An increasing incidence of diabetes will result in growing pressure on specialist foot services. As recommended in *Transforming Your Care* (December 2011) services should be delivered locally with access to specialist hospital care if required. The development of a regional foot care pathway will enable modernisation and standardisation of diabetic foot services.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Evidence:

The International Consensus on the Diabetic Foot. By the International Working Group on the Diabetic Foot, 2007.

National Institute for Health and Clinical Excellence (NICE) (2004) Clinical Guideline CG10 - Type 2 diabetes: prevention and management of foot problems
<http://guidance.nice.org.uk/CG10>

Scottish Intercollegiate Guidelines Network (SIGN) (2010) Guideline No.116 Management of diabetes
<http://www.sign.ac.uk/guidelines/fulltext/116/index.html>

Putting feet first: National Minimum Skills Framework for the commissioning of footcare services (2011)
http://uk.sitestat.com/diabetes/website-uk/s?Feet-skills-framework&ns_type=pdf

Putting feet first: Commissioning specialist services for the management and prevention of diabetic foot disease in hospital.
http://uk.sitestat.com/diabetes/website-uk/s?Feet-hospital-prevention&ns_type=pdf

Putting feet first: commissioning a care Pathway for foot care services for people with diabetes.
http://uk.sitestat.com/diabetes/website-uk/s?Feet-care-pathway&ns_type=pdf

DoH (2012) The Management of Adult Diabetes Services in the NHS
<http://www.nao.org.uk/report/department-of-health-the-management-of-adult-diabetes-services-in-the-nhs/>

Responsibility for delivery / implementation

HSC Trusts
Integrated Care Partnerships
Local Commissioning Groups
Primary Care teams
GAIN

Quality Dimension

Safe

The regional diabetic foot care pathway will be developed by a multi professional group who specialise in management of the diabetic foot. Each profession will be guided by their own professional standards and accountability framework.

Accessible

The regional diabetic foot care pathway will describe what care will be provided, when, by whom and where this should occur.

Effective

The regional diabetic foot care pathway will be based on current national and international evidence/guidelines.

Efficient

Mechanisms will be put in place to monitor implementation and audit adherence to the diabetic foot care pathway.

Equitable

All patients with diabetes should have access to appropriate diabetic foot services, reducing health inequalities, improving clinical outcomes and quality of life by reducing major amputations.

Person Centred

Membership of the group developing the regional diabetic foot care pathway should include representation from user organisations such as Diabetes UK.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
The development and implementation of guidance including development of a regional diabetic foot care pathway	Published Guidance	Develop a regional diabetic foot care guidance in conjunction with GAIN	March 2014
		3 Trusts 5 Trusts	March 2015 March 2016
Number of hospital admissions with diabetic foot disease per 1000 population	PAS	Establish baseline Performance levels to be determined once baseline established	March 2014
The number of people with diabetes who have undergone amputation surgery per 1000 population	PAS	Establish baseline Performance levels to be determined once baseline established	March 2014
Percentage of people with diabetes who are recorded as having a foot assessment and risk stratification	QOF DM 29	60%	March 2014
		80%	March 2015
		90%	March 2016

Overarching standard 27: Amputations

All patients requiring major lower limb amputation should be individually managed by a specialist multidisciplinary vascular team, which regularly undertakes limb amputation, to ensure that mobility is maximised and perioperative mortality rates are minimised.

Rationale:

Amputation for vascular disease and diabetes should only be undertaken after formal investigation of the arterial system by angiography (DSA, CTA or MRA) or specialist ultrasound imaging, except when the leg is clearly beyond salvage.

Major amputation is indicated when:

1. Revascularisation is not a realistic option
2. Amputation is expected to save or prolong life and/or improve quality of life

The Quality Improvement Framework for Major Amputation Surgery published by the Vascular Society of Great Britain and Ireland makes a number of recommendations to reduce the morbidity and mortality associated with major lower limb amputation. It aims to reduce the perioperative mortality rate to less than 5% by 2015.

The most distal type of major lower limb amputation allows for better mobility both indoors and outdoors. A transtibial amputation allows for much greater ease of putting on a prosthesis; compared to a through knee or transfemoral amputation. It also requires less energy to walk with and affords the patient a better quality of life in terms of mobility. Better mobility will have implications for risk factor control in patients with peripheral vascular disease. A below knee amputation should be undertaken wherever appropriate; with the aim of achieving a below knee: above knee ratio > 1 , with continuous audit of outcomes and revision rates.

A multidisciplinary assessment by the Regional Amputee Unit for all patients with major lower limb amputation is recommended - not all amputees will benefit from a prosthesis; but they may benefit from an electric wheelchair, phantom pain treatment and transfer practice/advice.

Evidence:

Quality Improvement Framework for Major Amputation Surgery (2010). Vascular Society of Great Britain and Ireland.

<http://www.vascularsociety.org.uk/library/quality-improvement.html>

British Society of Rehabilitation Medicine (2003). Amputee and Prosthetic Rehabilitation Standards and Guidelines (2nd edition).

<http://www.bsrm.co.uk/ClinicalGuidance/StdAmpProsRehab.pdf>

Datta D, Nair PN, Payne J. Outcome of prosthetic lower limb amputees. Disabil Rehabil 1992; 14 (2):98-102.

<http://www.ncbi.nlm.nih.gov/pubmed/1600189>

Responsibility for delivery / implementation

Commissioners

HSC Trusts

Vascular teams

Quality Dimension

Safe

Mortality and morbidity associated with major lower limb amputation surgery will be reduced.

Accessible

All patients should be assessed and managed by a multidisciplinary vascular specialist team (that regularly undertakes limb amputation)

Effective

This will be monitored through the National Vascular Database

Efficient

Around 50% of below knee amputees become independently mobile, compared to only 25% of above knee amputees.

Equitable

All patients requiring major lower limb amputation will be managed in accordance with the Quality Improvement Framework published by the Vascular Society.

Person centred

Multidisciplinary management will ensure that each patient is managed according to individual need. A named individual should be allocated preoperatively to each patient for support, and to co-ordinate care, rehabilitation and discharge planning

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of below knee amputations carried out each year on new patients requiring major lower limb amputation.	National Vascular Database (NVD) PAS	Establish baseline Interim performance level to be determined once baseline established Transtibial: transfemoral ratio >1	March 2014 March 2015 March 2016
Percentage of major lower limb amputees who are referred for multidisciplinary assessment to the Regional Amputee Unit, Musgrave Park Hospital, Belfast.	National Vascular Database (NVD) PAS Clinical & Information Management System (CIMS), Musgrave Pk. Hospital	Establish baseline Performance level to be determined once baseline established	March 2014
Perioperative mortality rate for major lower limb amputation	National Vascular Database (NVD) PAS	<7% <6% <5%	March 2014 March 2015 March 2016

Overarching standard 28: Lymphoedema

All patients who have developed lymphoedema should have local access to specialist treatment and, in accordance with best practice, be offered the most appropriate treatment for their individual condition within the DHSSPSNI 9 week access target.

Rationale:

The estimated lymphoedema incidence (cited by CREST (2008)) has been exceeded and the incidence/prevalence figures continue to increase; despite continued modernisation, all services are under pressure to deliver quality care.

Conservative lymphoedema management is evolving with new technologies entering the market to support the traditional therapies recognised by NICE (2004 & 2009) and CREST (2008). Lymphoedema services must consider all new treatment advances which have an evidence base, including liposuction for end stage lymphoedema (ILF, 2012), low level laser (Omar et al, 2011) and pneumatic compression/laser (Kozanoglu et al, 2009) whilst maintaining the principles of the CREST guidelines and ensuring the most appropriate care is offered to all service users.

Prevention, awareness education (referrers and potential service users) and screening are an essential part of the lymphoedema care pathway. Screening is currently being established for some cancer-related lymphoedemas, but has potential for other secondary types e.g. post DVT, bypass grafts etc. Referral of the acute condition will enhance the treatment outcome using fewer resources than required for the chronic condition (as directed by Transforming Your Care (DHSSPSNI, 2011) and QICR (DHSSPSNI, 2012)). The surveillance model for conditions at high risk of lymphoedema development is therefore recommended (Stout, 2012).

Regionally, high risk conditions are agreed as: family history of lymphoedema, node dissection, recurrent cellulitis, obesity, recurrent ulceration, DVTs, reduced mobility and coronary artery by-pass graft (LNNI, 2009).

This patient population is also changing; increasing levels of obesity (NICE (2006)) are noted to significantly decrease both the outcome of lymphoedema management intervention and period of improvement. The 2010/11 NHS figures show that 59% of the general population have a BMI greater than or equal to 25 (overweight/obese); the LNNI figures show that 86.4% of registered lymphoedema patients have a similar BMI score. Recent research suggests that lymphoedema will naturally occur if the BMI increases above 59 (Greene et al (2012)) as a result of physiological pressures. This also impacts on the Health and Safety of both the service users and providers with regard to equipment and

clinical handling.

These clinical changes have created a new caseload, unrecognised pre-2008, of complex patients which will impact on access targets and current resources. Access to bariatric support prior to/concurrent with lymphoedema management, would improve the impact of treatment.

Services are out-patient or domiciliary based; bariatric scales are not feasible for use in a domiciliary setting.

Evidence:

Clinical Resources Efficiency Support Team (CREST) (2008) Guidelines for the diagnosis, assessment and management of Lymphoedema

<http://gain-ni.org/images/Uploads/Guidelines/CrestGuidelines.pdf>

National Institute for Health and Clinical Excellence (NICE) (2004) Cancer Service Guidance CSGSP - Improving Supportive and Palliative Care for Patients with Cancer

<http://guidance.nice.org.uk/CSGSP>

National Institute for Health and Clinical Excellence (NICE) (2009) Clinical Guideline CG80 - Breast cancer (early & locally advanced): section 6.1 - lymphoedema

<http://guidance.nice.org.uk/CG80>

International Lymphoedema Framework (ILF) (2012) Best Practice: Surgical Intervention –a position document (2nd edition) <http://www.lympho.org>

Omar MTA, Abd-El-Gayed Ebid, El Morsy AM, (2011) Treatment of post-mastectomy lymphoedema with laser therapy: double blind placebo control randomised study, J of Surgical Research , 165 (1), 82-90

Kozanoglu et al (2009), Efficacy of pneumatic compression and low-level laser therapy in the treatment of post-mastectomy lymphoedema: a randomised controlled trial, Clinical rehabilitation, 23 (2) 117-124

Stout et al (2012) A prospective surveillance model for rehabilitation for women with breast cancer. Cancer April 15; 118 (8 Suppl)

DHSSPS (2011) Transforming Your Care: A Review of Health and Social Care in Northern Ireland <http://www.dhsspsni.gov.uk/transforming-your-care-review-of-hsc-ni-final-report.pdf>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

DHSSPS (2012) Quality Improvement Cost reduction (QICR)

National Institute for Health and Clinical Excellence (NICE) (2006) Clinical Guideline CG43 - Obesity <http://guidance.nice.org.uk/CG43>

Greene AK, Grant FD and Slavin SA (Lower-Extremity Lymphoedema and Elevated Body-Mass Index - N Engl J Med 2012; 366:2136-2137 May 31, 2012)

Responsibility for delivery / implementation

Lymphoedema Network for Northern Ireland

HSC Trusts (Service Managers and Lymphoedema Team Leads)

GPs

Local Commissioning Groups

Integrated Care Pathways

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

All lymphoedema teams will promote new techniques and technologies (using evidence based practice) whilst maintaining the principles of the CREST 2008 guideline. Teams must monitor BMI levels to ensure appropriate equipment and clinical handling is used to manage risk for the service users and the providers.

Accessible

Lymphoedema service users should be offered the most appropriate treatment for their individual condition at assessment. Lymphoedema services should meet the 9 week access target set by the DHSSPSNI.

Reasons for lack of adherence should be monitored, discussed and an action plan agreed with trust service managers and commissioners.

Effective

Lymphoedema interventions must be recognised by research and peer review as efficient and effective methods of management.

Trust lymphoedema teams should adhere to the LNNI bariatric (BMI>40) pathway.

The Lymphoedema Network Northern Ireland project team should monitor research to review new evidence regarding potential new techniques.

Efficient

Trusts must ensure that lymphoedema teams monitor the BMI levels of all service users to ensure the correct care pathway is implemented and to provide information to commissioners regarding this new patient population. Use of additional trust/council resources, such as activity and weight management schemes, should be utilised.

Equitable

Lymphoedema services across the Province should be easily accessible to all patients to ensure early treatment, and prevent deterioration and chronicity. Local and timely access is essential as lymphoedema management is intensive requiring (at times) daily treatments for extended periods. Early referral (of the acute condition) will produce a more positive outcome, promote recovery and improve the experience of both the service user and provider.

Person Centred

The long term condition's model should be utilised from point of assessment to promote independent (supervised) self-management with the option of facilitated re-entry to the service as needed.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data Source	Anticipated Performance Level	Date to be achieved by
<p>Percentage of patients being offered the most appropriate treatment, on original assessment, for their individual condition (in the previous year).</p> <ul style="list-style-type: none"> • Reasoning behind treatment modification to be stated: <ul style="list-style-type: none"> - Co-morbidities - Clinical decision - Patient choice - New technology (including surgery) - Resources • Subdivide for patients with BMI ≤ 40 and with a BMI > 40 (patients with a BMI > 40 follow an amended care pathway) 	Lymphdat	90% 95% 97.5%	March 2014 March 2015 March 2016
<p>Percentage of lymphoedema registered out-patients having BMI recorded by Lymphdat</p>	Lymphdat	35% 50% 75%	March 2014 March 2015 March 2016

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Percentage of outpatients waiting no longer than nine weeks for their first appointment	Lymphoedema Network Northern Ireland (LLNI), rolling waiting list audit and annual report	80% of outpatients waiting no longer than 9 weeks for their first appointment	March 2014
		80% of outpatients waiting no longer than 9 weeks for their first appointment	March 2015
		Performance levels to be set in 2014/15	March 2016
Number of patients waiting longer than a specified number of weeks for their first outpatient appointment	LLNI, rolling waiting list audit and annual report	No outpatients waiting longer than 18 weeks for their first appointment	March 2014
		No outpatients waiting longer than 15 weeks for their first outpatient appointment	March 2015
		Performance levels to be set in 2014/15	March 2016
Number of patients waiting longer than nine weeks for their first AHP outpatient treatment	LLNI, rolling waiting list audit and annual report	No outpatients waiting more than 9 weeks for first AHP outpatient treatment.	March 2014
		No outpatients waiting more than 9 weeks for first AHP outpatient treatment.	March 2015
		Performance levels to be set in 2014/15	March 2016

Overarching standard 29: Varicose Veins

A full range of treatment modalities should be available for patients with symptomatic venous disease that has failed conservative measures, or patients with chronic venous insufficiency and skin changes, to ensure that a cost-effective and timely treatment plan is offered.

Rationale:

Modern management of varicose veins has shown a move towards “Office based practice.” With the advent of thermal ablation of veins by Laser (EVLA) and Radiofrequency Ablation (RFA) and the modernisation of the old technique of chemical sclerotherapy into Ultrasound Guided foam sclerotherapy (USGF), the treatment of veins can be moved from the operating theatre to a treatment room and rather than the traditional general anaesthetic for most varicose vein operations, local anaesthetic can be used for these techniques enabling a walk-in walk-out service. The outcomes from these techniques are favourable and there are cost savings to be made by reducing the demand on theatres. Patient satisfaction is also generally higher as these treatments produce smaller and cosmetically more acceptable scars and the post operative pain and recovery is greatly reduced, generally leading to an earlier return to work.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2001) Referral Advice - Varicose Veins <http://www.nice.org.uk/nicemedia/pdf/Referraladvice.pdf>

Vascular Society of Great Britain and Ireland (2012) The provision of services for patients with vascular disease
http://www.wales.nhs.uk/sitesplus/documents/861/vsgbi_patient_s2.pdf

Venous Forum of the Royal Society of Medicine (2009) Venous Intervention VEIN Project http://www.rsm.ac.uk/academ/downloads/veg102_apr09.pdf

National Institute for Health and Clinical Excellence (NICE) (2009) Interventional Procedure Guidance IPG440 - Ultrasound-guided foam sclerotherapy for varicose veins <http://guidance.nice.org.uk/IPG440>

National Institute for Health and Clinical Excellence (NICE) (2004) Interventional Procedure Guidance IPG52 - Endovenous laser treatment for the long saphenous vein <http://guidance.nice.org.uk/IPG52>

National Institute for Health and Clinical Excellence (NICE) (2003) Interventional Procedure Guidance IPG8 - Radiofrequency ablation of varicose veins
<http://guidance.nice.org.uk/IPG8>

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American Venous Forum and the Society for Vascular Surgery (2012): guidelines for the management of varicose veins

<http://www.ncbi.nlm.nih.gov/pubmed/22312060>

Responsibility for delivery / implementation

HSC Board

HSC Trusts

Local Commissioning Groups

Quality Dimension

Safe

Appropriate training and mentorship is required for the introduction of new therapy. Open surgery has previously been the mainstay of treatment for varicose veins under GA. however new office based local anaesthetic procedures are coming more to the fore and new skills are required to perform these safely. Nice offers suggestions for appropriate governance of such procedures as those in the provision of bus services document. It is also suggested appropriate audit is undertaken and follow-up of cases contribution to the international Venus register would cover this aspect. With more and more reliance being placed on duplex imaging either rapid centre access to venous lab is required or surgeons performing their own duplex scan. If surgeons are to perform their own duplex, appropriate training and mentorship is required.

Accessible

Assessment of patients should take place locally by Vascular surgeons with duplex imaging skills or by that surgeons with immediate same day access to a vascular lab. A decision on whether to and how to treat should be made for most patients that that 1st visit. There should be access to treatment room procedures operating theatres with anaesthetic support.

Effective

NICE continues to monitor modern therapies but there is growing evidence that in the short to medium term local anaesthetic endovenous modalities offer equal or superior outcomes to traditional open surgery. Contributions and International readers' registry will audit outcomes. Participation in Proms will monitor patient outcomes.

Efficient

For those patients offered treatments for their systematic varicose veins there should be a swing towards office based practice under local anaesthetic and away from traditional general anaesthetic open surgery. As well as offering equitable or improved results for treatment there are potential significant cost savings.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Equitable

All trusts offering venous interventions should have the resources to offer duplex ultrasound and endovenous therapies as well as open surgery.

Person Centred

Education for GPs should be undertaken to demonstrate the evidence for the treatment of varicose veins and also the modalities now available to treat.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Intervention offered only to symptomatic C2 and above varicose veins.	Local (Trust) audit of referrals and outcomes. International Venous Registry	50% 70% 90%	March 2014 March 2015 March 2016
Percentage of varicose veins treated in a treatment room setting under local anaesthetic in Northern Ireland	Local (Trust) audit of referrals and outcomes. International Venous Registry	30% 50% 70%	March 2014 March 2015 March 2016

Overarching standard 30: Lower Limb Ulceration

All patients with lower limb ulceration should have their condition diagnosed and managed in accordance with the Venous Leg Ulcers Map of Medicine by appropriately trained staff.

Rationale:

Ulceration below the knee, usually in the 'gaiter' area, and excluding 'diabetic foot' ulceration.

- Estimated prevalence 600,000 leg ulcers (inc. Diabetic foot ulcers) in the UK
- Estimated £2.3 - £3.1 billion total cost of treating chronic leg wounds in England and Wales in 2005
- In N.I, estimated prevalence 10,000 leg ulcers
- Consumes estimated 40% primary care / community nursing budget

Aetiological Factors

- Diabetes, >5%
- Vasculitis / Rheumatoid 10%
- Arterial 25%
- Chronic Venous Insufficiency 80%

"natural history of the disease is of a continuous cycle of healing and breakdown over decades..."

Chronic venous leg ulcers are associated with considerable morbidity and impaired quality of life

Leg ulcers in patients from the most deprived communities (social classes IV and V) take longer to heal and are more likely to be recurrent (SIGN 2010)

Leg ulcer care in Northern Ireland involves:

- Practice nurses – increasingly private
- District nurses – attending nursing homes
- Treatment room nurses in Health Centres
- Tissue viability nurse specialists
- Private nursing home nurses
- General practitioners
- Dermatology
- Vascular

Problems include: 1) Data-free zone, 2) No referral criteria between groups & 3) No Trust policies

GAIN – Current Audit

1. To ascertain the number of patients presenting with lower leg ulceration,
2. To assess the standard of care provided to patients with lower leg ulceration
3. To the provision and uptake of training amongst health care professionals
4. To determine if HSC Trusts have policies and documentation in place for the treatment of lower leg ulceration

Evidence:

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Guideline No. 89
Diagnosis and management of Peripheral Arterial Disease

<http://www.sign.ac.uk/guidelines/fulltext/89/index.html>

Royal College of Nursing (RCN) (2006) The Nursing Management of People with Venous Leg Ulceration

[http://www.rcn.org.uk/development/practice/clinicalguidelines/venous leg ulcers](http://www.rcn.org.uk/development/practice/clinicalguidelines/venous_leg_ulcers)

Caruana MF, Bradbury AW, Adam DJ. The validity, reliability, reproducibility and extended utility of ankle to brachial pressure index in current vascular surgical practice. *Eur J Vasc Endovasc Surg* 2005;29(5):443-51.

Iglesias C, Nelson EA, Cullum NA, Torgerson DJ. VenUS I: A randomised controlled trial of two types of bandage for treating venous leg ulcers. *Health Technol Assess* 2004;8(29).

O'Meara S, Tierney J, Cullum N, Bland JM, Franks PJ, Mole T, et al. Four layer bandage compared with short stretch bandage for venous leg ulcers: Systematic review and meta-analysis of randomised controlled trials with data from individual patients. *BMJ* 2009;338(7702):1054-57.

Scottish Intercollegiate Guidelines Network (2010) Guideline No. 120
Management of Chronic Venous Leg Ulcers

<http://www.sign.ac.uk/guidelines/fulltext/120/index.html>

Barwell JR, Davies CE, Deacon J, Harvey K, Minor J, Sassano A, et al. Comparison of surgery and compression with compression alone in chronic venous ulceration (ESCHAR study): randomised controlled trial. *Lancet* 2004;363(9424):1854-9.

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O'Meara S, Cullum NA, Nelson EA. Compression for venous leg ulcers. Cochrane Database of Systematic Reviews 2009

National Institute for Health and Clinical Excellence (NICE) (2012) Clinical Guideline CG147 - Lower limb peripheral arterial disease: Diagnosis and management <http://guidance.nice.org.uk/CG147>

Hirsch AT et al. ACC/AHA 2005 Practice Guidelines for the Management of Patients With Peripheral Arterial Disease. Circulation, 2006;113:e463-e654. <http://circ.ahajournals.org/content/113/11/e463.full.pdf+html>

Norgen L et al. Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II). Journal of Vascular Surgery, 2007; 45(1):S5A-S67A. <http://vascular.stanford.edu/endovasc/documents/PIIS0741521406022968.pdf>

Nelson EA, Bell-Syer SEM, Cullum NA. Compression for preventing recurrence of venous ulcers. Cochrane Database of Systematic Reviews 2000.

Responsibility for delivery / implementation

HSC Trusts
Integrated Care Partnerships
Local Commissioning Groups
Primary Care teams

Quality Dimension

Safe

Evidence-based management will reduce morbidity from, and recurrence of, venous leg ulcers.

Accessible

Patients managed by appropriately trained staff with timely referral following ABPI measurement in accordance with national guidance.

Effective

People with venous ulcers will be managed in accordance with national guidance and Map of Medicine.

Efficient

Patients diagnosed and managed in the community with referral to secondary care in keeping with Map of Medicine.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Equitable

All patients being managed in primary care in accordance with national guidance, by appropriately trained staff. Agreed Trust policies in place for the management of patients referred to secondary care.

Person Centred

Focus on providing treatment and support in accordance with individual need; including prevention of recurrence.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of lower limb ulceration referrals to secondary care where the patient has had an Ankle Brachial Pressure Index performed in primary care.	Audit of referrals	Establish baseline Performance level to be determined once baseline established	March 2014
Percentage of all GP practices who have a minimum of 1 registered nurse who has successfully completed a recognised post-graduate lower limb ulceration course, which includes holistic assessment and compression bandaging.	Nurse training records	Establish baseline Performance level to be determined once baseline established	March 2014
Percentage of patients with lower limb ulceration, where the ulcer has not responded to 12 weeks of adequate treatment, who are referred within 16 weeks of the start of that treatment for specialist intervention (i.e. referral to vascular service, tissue viability service or dermatology service).	Audit of referrals	Establish baseline Performance level to be determined once baseline established	March 2014

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

<p>Percentage of patients with healed lower limb venous ulceration who are provided with graduated compression hosiery</p>		<p>Establish baseline Performance level to be determined once baseline established</p>	<p>March 2014</p>
<p>Number of Trusts who have up-to-date policies and documentation in place for the treatment and management of lower limb ulceration.</p>	<p>HSC Trusts</p>	<p>3 Trusts 4 Trusts 5 Trusts</p>	<p>March 2014 March 2015 March 2016</p>

Overarching standard 31: Vascular malformations

All patients with complex vascular malformations should have their case discussed at an appropriate multidisciplinary meeting prior to intervention being performed.

Rationale:

Vascular malformations are a complex group of conditions which affect around 1.5% of the population (1). They are congenital lesions of abnormal vascular development which may occur anywhere on the body and are present at birth. They grow, infiltrate neighbouring soft tissue and destroy it. Almost all vascular malformations eventually require intervention

They are classified into high flow and low flow lesions by Mulliken and Glowacki (2,3). They can be further sub-classified into arteriovenous malformations (high flow); and lymphatic, venous, and capillary malformations (all low flow). The management strategy will differ depending upon the nature of the malformation.

Classification of vascular malformations is reliant on both clinical examination and imaging, both invasive and non-invasive. It is essential that access to comprehensive imaging is available to enable appropriate treatment to be planned.

Given the multiple clinical manifestations of vascular malformations, they are best managed by a multidisciplinary team (4). This should have input from dermatology; plastic surgery; interventional radiology; paediatrics; orthopaedic and vascular surgery: as well as access to allied specialist services, such as the regional lymphoedema network, podiatry and orthotics(5,6).

Multiple treatment modalities may be utilised to improve patients' symptoms, and there should be access to a full range of services enabling best patient care.

Evidence:

- (1) Eifert, S., et al., Prevalence of deep venous anomalies in congenital vascular malformations of venous predominance. *J Vasc Surg*, 2000. 31(3): p. 462-71.
- (2) Mulliken JB, Glowacki J. Haemangiomas and vascular malformations in infants and children, a classification based on endothelial characteristics *Plast Reconstr Surg*.1982; 69:412-422
- (3) Enjolvas O, Mulliken JB. Vascular tumors and vascular malformations (new issues) *Adv Dermatol*. 1997; 13: 375-423
- (4) Richter GT, Friedman AB. Hemangiomas and Vascular Malformations:Current Theory and Management. Review article. *International Journal of Pediatrics*, 2012. 2012: Article ID 645678, 10 pages.

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doi:10.1155/2012/645678

- (5) Lee BB, Bergan JB. Advanced management of congenital vascular malformations: a multidisciplinary approach. *Cardiovascular Surg* 2002; 10(6): 523-533
- (6) Mathes ED, Haggstrom AN, Dowd C, Hoffman WY, Frieden IJ. Clinical Characteristics and Management of Vascular Anomalies: Findings of a Multidisciplinary Vascular Anomalies Clinic. *Arch Dermatol.* 2004;140(8):979-983.

Responsibility for delivery / implementation

HSC Trusts

Quality Dimension

Safe

Use of imaging modalities should be appropriate to the patient, with non-invasive methods used where these will give relevant information. Interventional treatment should be offered in a timely fashion where this is likely to lead to a significant improvement in patient symptoms, with due consideration given to the risks of intervention.

Accessible

Patients should be discussed with the multidisciplinary team promptly on referral, and an assessment made of the urgency of intervention.

Effective

With these complex conditions effective management requires a multidisciplinary approach. Where guidelines are available on the management of vascular malformations, these should be followed.

Efficient

A single multidisciplinary meeting with input from all relevant disciplines will enable the efficient use of resources.

Equitable

Referral pathways should be put in place to enable straightforward access to services for patients throughout Northern Ireland.

Person Centred

Patients should be fully informed regarding their diagnosis, and given readily understandable information to enable them to actively participate in decision-making.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients undergoing intervention to vascular malformation discussed at multidisciplinary vascular malformation meeting	MDT records NIPACS	Establish baseline Performance levels to be determined once baseline established	March 2014

Overarching standard 32: Peripheral Arterial Disease

People diagnosed with peripheral arterial disease (PAD) should have their cardiovascular risk factors assessed and managed

Rationale:

About 20% of people aged over 60 years have some degree of peripheral arterial disease (PAD). PAD reduces quality of life. The most common initial symptom is pain in the leg on walking; known as intermittent claudication (IC). This is a tight, cramp like pain in the muscles of the calf, thigh or buttock which comes on only after walking and is relieved by resting. The pain is caused by diminished circulation

People with PAD have an increased risk of morbidity and mortality from cardiovascular disease. The severity of PAD is a prognostic indicator of cardiovascular risk; those with the most severe symptoms faring worse. PAD is a marker for increased risk of cardiovascular events even when it is asymptomatic. This observation has led to the main focus of treatment shifting to address cardiovascular risk in people with PAD by attempting to modify their risk factors to reduce the risk of cardiovascular events, such as myocardial infarction and stroke, and all cause mortality.

NICE Recommends that all people with peripheral arterial disease should be offered appropriate verbal and written information, advice and support in line with NICE guidance on: smoking cessation; diet, weight management and exercise; lipid modification and statin therapy; the prevention, diagnosis and management of diabetes; the prevention, diagnosis and management of high blood pressure; drug therapy with antiplatelet agents.

Critical limb ischaemia (CLI) is a severe manifestation of PAD, and is characterised by severely diminished circulation, ischaemic pain, ulceration, tissue loss and/or gangrene. Major limb amputation as a result of PAD is a significant cause of disability and carries a high social and-economic cost. In people with CLI, the cardiovascular mortality rate is even higher, with a one in five mortality rate within one year of diagnosis.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2012) Clinical Guideline CG147 - Lower limb peripheral arterial disease: Diagnosis and management <http://guidance.nice.org.uk/CG147>

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Guideline No. 89 Diagnosis and management of Peripheral Arterial Disease <http://www.sign.ac.uk/guidelines/fulltext/89/index.html>

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Hirsch AT et al. ACC/AHA 2005 Practice Guidelines for the Management of Patients With Peripheral Arterial Disease. Circulation, 2006;113:e463-e654.
<http://circ.ahajournals.org/content/113/11/e463.full.pdf+html>

Norgen L et al. Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II). Journal of Vascular Surgery, 2007; 45(1):S5A-S67A.
<http://vascular.stanford.edu/endovasc/documents/PIIS0741521406022968.pdf>

BMA, NHS Employers. Quality and Outcomes Framework for 2012/13. Guidance for PCOs and practices
<http://www.nhsemployers.org/PayAndContracts/GeneralMedicalServicesContract/QOF/Pages/QualityOutcomesFramework.aspx>

National Institute for Health and Clinical Excellence (NICE) (2010) Public Health Guidance PHG25 - Prevention of cardiovascular disease
<http://guidance.nice.org.uk/PH25>

Responsibility for delivery / implementation

HSC Board
Primary Care

Quality Dimension

Safe

Appropriate identification and management of cardiovascular risk factors will reduce morbidity and mortality from cardiovascular disease.

Accessible

Most cases of PAD are managed in primary care. The focus of management is on the secondary prevention of cardiovascular disease.

Effective

NICE guidance on the management of cardiovascular risk factors in individual patients and on the prevention of cardiovascular disease at population level should be followed.

Efficient

The focus is on secondary prevention of cardiovascular disease and PAD progression.

Equitable

QOF monitoring should help to reduce inequities.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Person Centred

People with peripheral arterial disease should be offered oral and written information about their condition. Clinicians need to discuss it with them so they can share decision-making, and understand the course of the disease and what they can do to help prevent disease progression.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with PAD with a record in the preceding 15 months that aspirin or an alternative anti-platelet is being taken.	QOF PAD 2	50% 70% 90%	March 2014 March 2015 March 2016
Percentage of patients with PAD in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.	QOF PAD 3	50% 70% 90%	March 2014 March 2015 March 2016
Percentage of patients with PAD in whom the last total cholesterol (measured in the preceding 15 months) is 5.0mmol/l or less.	QOF PAD 4	50% 70% 90%	March 2014 March 2015 March 2016
Percentage of patients with PAD and diabetes mellitus who have a record of a foot assessment within the preceding 15 months.	QOF PAD 1 QOF DM 29	50% 70% 90%	March 2014 March 2015 March 2016

Overarching standard 33: Peripheral Arterial Disease

All people who have peripheral arterial disease (PAD) and are being considered for revascularisation should have appropriate imaging carried out.

Rationale:

People with PAD require further assessment by diagnostic imaging when interventional treatment is being considered. The purpose of imaging people with PAD is to determine the severity and distribution of the lesions affecting the arterial tree and to plan and optimise any therapeutic intervention. As a result of imaging some people may be excluded from further intervention, while others may be selected for surgical or endovascular management to improve the blood flow (revascularisation).

Available diagnostic imaging modalities include duplex ultrasound scanning (DUS), magnetic resonance angiography (MRA), computed tomographic angiography (CTA) and digital subtraction angiography (DSA). DUS and MRA imaging offer the least invasive options and avoid the use of ionising radiation. DUS offers the unique advantage of functional assessment of arterial stenosis, but it is the most operator dependent of the available techniques. MRA imaging provides a three dimensional map of the imaged vessels and is able to image the pelvic vessels with more reproducibly than DUS. However, MRA may be contraindicated in some patients, for instance those with pacemakers and advanced renal insufficiency. CTA and DSA both require injection of contrast media, with attendant risks to renal function, and exposure to ionising radiation. DSA requires insertion of a catheter usually via the femoral artery and is now infrequently performed as a primary imaging modality.

NICE recommends that all people with symptomatic peripheral arterial disease (PAD) whose symptoms have not responded to / or have not been adequately controlled by a reasonable trial of best medical therapy (see PAD Standard 1), in whom interventional treatment is being considered, should have further assessment by diagnostic imaging indicated. The following should be considered:

- Offer duplex ultrasound as first-line imaging to all people with peripheral arterial disease in whom revascularisation is being considered.
- Offer contrast-enhanced magnetic resonance angiography to people with peripheral arterial disease who need further imaging before considering an intervention.
- Offer computed tomography angiography in people with peripheral arterial disease where contrast-enhanced magnetic resonance angiography is contraindicated or not tolerated.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2012) Clinical Guideline CG147 - Lower limb peripheral arterial disease: Diagnosis and management <http://guidance.nice.org.uk/CG147>

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Guideline No. 89 Diagnosis and management of Peripheral Arterial Disease <http://www.sign.ac.uk/guidelines/fulltext/89/index.html>

Hirsch AT et al. ACC/AHA 2005 Practice Guidelines for the Management of Patients With Peripheral Arterial Disease. Circulation, 2006;113:e463-e654. <http://circ.ahajournals.org/content/113/11/e463.full.pdf+html>

Norgen L et al. Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II). Journal of Vascular Surgery, 2007; 45(1):S5A-S67A. <http://vascular.stanford.edu/endovasc/documents/PIIS0741521406022968.pdf>

Responsibility for delivery / implementation

HSC Trusts
NIVASC

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension			
<p>Safe NICE guidance on an imaging strategy for PAD (as described above) is designed to minimise risk.</p> <p>Accessible Timely access to the necessary imaging will facilitate timely treatment.</p> <p>Effective The standard and KPI are aligned with NICE guidance.</p> <p>Efficient Appropriate investigation informs the optimum treatment plan.</p> <p>Equitable Everyone being considered for revascularisation for PAD should have access to appropriate imaging</p> <p>Person Centred Appropriate imaging allows an individual treatment plan, and options, to be discussed.</p>			
Performance Indicator	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with symptomatic PAD who have undergone interventional treatment (endovascular or open surgical) and who had prior assessment by diagnostic imaging.	National Vascular Database	90% 95% 99%	March 2014 March 2015 March 2016

Overarching standard 34: Peripheral Arterial Disease

All people with symptomatic peripheral arterial disease (intermittent claudication) who undergo interventional treatment should be managed in a vascular unit that promotes the secondary prevention of cardiovascular disease and can demonstrate good surgical outcomes.

Rationale:

Interventional treatment to relieve symptoms and improve walking distance may be considered in patients with symptomatic PAD whose symptoms have not responded to, or have not been adequately controlled by, a reasonable trial of best medical therapy (see PAD Standard 1).

Intermittent claudication (IC) can be treated using endovascular procedures (angioplasty +/- stent placement) or bypass surgery, both of which constitute a more direct means of addressing the problem since they are directed at the arterial lesions causing the symptoms.

Endovascular procedures: The most common technique is the use of an inflatable balloon to dilate an area of artery (angioplasty) which is kept open with a stent. Stents are small spring like structures that are usually made of metal (known as bare metal stents) and can be placed within the artery.

Bypass surgery: The most common operations are bypass grafts in which a new blood vessel is created by joining a conduit (vein or plastic tube) to above and below the blocked artery.

NICE recommends that all people with symptomatic peripheral arterial disease (IC) whose symptoms have not responded to / or have not been adequately controlled by a reasonable trial of best medical therapy (see PAD Standard 2), should be consideration for interventional treatment to relieve symptoms and improve walking distance.

Offer angioplasty for the treatment of intermittent claudication when:

- advice on the benefits of modifying risk factors has been reinforced (see PAD Standard 2)
- supervised exercise has not led to a satisfactory improvement in symptoms
- imaging has confirmed the person as appropriate for angioplasty

Offer bypass surgery for the treatment of severe lifestyle-limiting intermittent claudication only when:

- angioplasty has been unsuccessful or is unsuitable
- imaging has confirmed that the person is suitable for bypass surgery

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2012) Clinical Guideline CG147 - Lower limb peripheral arterial disease: Diagnosis and management <http://guidance.nice.org.uk/CG147>

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Guideline No. 89 Diagnosis and management of Peripheral Arterial Disease <http://www.sign.ac.uk/guidelines/fulltext/89/index.html>

Hirsch AT et al. ACC/AHA 2005 Practice Guidelines for the Management of Patients With Peripheral Arterial Disease. Circulation, 2006;113:e463-e654. <http://circ.ahajournals.org/content/113/11/e463.full.pdf+html>

Norgen L et al. Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II). Journal of Vascular Surgery, 2007; 45(1):S5A-S67A. <http://vascular.stanford.edu/endovasc/documents/PIIS0741521406022968.pdf>

Responsibility for delivery / implementation

Health and Social Care Trusts
NIVASC

Quality Dimension

Safe

Morbidity and mortality outcomes data will be monitored

Person Centred

First line treatment for Intermittent Claudication is a reasonable trial of best medical therapy. The decision to directly attempt to improve walking distance should be decided by the patient, balancing the impact their symptoms have on their day to day life, and the chance of success versus the risks of treatment

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Performance Indicator:	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who had been current smoker (up to within 2 months)	National Vascular Database	15% 10% 5%	March 2014 March 2015 March 2016
Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who had been prescribed aspirin or clopidogrel (or an alternative anti-platelet or anticoagulant) at time of intervention	National Vascular Database	80% 85% 90%	March 2014 March 2015 March 2016
Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who had been prescribed lipid-lowering statin therapy at time of intervention	National Vascular Database	75% 80% 85%	March 2014 March 2015 March 2016
Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy	National Vascular Database	90% 93% 95%	March 2014 March 2015 March 2016

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

<p>(bypass surgery) who have a “Complications: graft/anastomotic complications status as none”</p>	<p>National Vascular Database</p>	<p><7% <6% <5%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who have a “Complications: limb ischaemia status as amputation”</p>	<p>National Vascular Database</p>	<p>93% 95% 97%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with symptomatic PAD (Intermittent Claudication) and interventional therapy (bypass surgery) who have a “Patient status at discharge alive”</p>			

Overarching standard 35: Peripheral Arterial Disease

All people with critical limb ischaemia should be managed in a vascular unit that promotes the secondary prevention of cardiovascular disease and can demonstrate good surgical outcomes.

Rationale:

Critical limb ischaemia (CLI) is a severe manifestation of PAD, and is characterised by severely diminished circulation (ABPI<0.5), ischaemic rest pain, ischaemic ulceration, tissue loss and/or gangrene.

People with CLI face an enormous cardiovascular risk and there is a 50% mortality rate within 1 year of diagnosis. These patients also tend to be older and have significant co-morbidities. They require prompt referral to specialist services to be assessed for revascularisation. Delays in referral and treatment can result in poorer outcomes for people with CLI, including major amputation. People with critical limb ischaemia should be encouraged to manage cardiovascular disease through the secondary prevention measures as described in PAD Standard 1.

Options for revascularisation include angioplasty or bypass surgery. The risks of these procedures (mortality and limb amputation) are considerably higher in people with CLI.

NICE recommends that all people with critical limb ischaemia should be offered appropriate information, advice and support in line with NICE guidance.

Furthermore people with CLI should be:

- Reviewed by a vascular multidisciplinary team before treatment decisions are made.
- Offered interventional therapy (endovascular procedures or bypass surgery) taking account of: co-morbidities; pattern of disease; availability of a vein and patient preference.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2012) Clinical Guideline CG147 - Lower limb peripheral arterial disease: Diagnosis and management <http://guidance.nice.org.uk/CG147>

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Guideline No. 89 Diagnosis and management of Peripheral Arterial Disease <http://www.sign.ac.uk/guidelines/fulltext/89/index.html>

Hirsch AT et al. ACC/AHA 2005 Practice Guidelines for the Management of Patients With Peripheral Arterial Disease. Circulation, 2006;113:e463-e654. <http://circ.ahajournals.org/content/113/11/e463.full.pdf+html>

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Norgen L et al. Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II). Journal of Vascular Surgery, 2007; 45(1):S5A-S67A. <http://vascular.stanford.edu/endovasc/documents/PIIS0741521406022968.pdf>

Responsibility for delivery / implementation

HSC Trusts
Primary care
NIVASC

Quality Dimension

Safe and Person centred

Major amputation should not be offered to people with critical limb ischaemia unless all options for revascularisation have been considered by a vascular multidisciplinary team. There will be patients in whom revascularisation has not been possible or has been unsuccessful. In such cases, patients may proceed to amputation.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who had been current smoker (up to within 2 months)	National Vascular Database	35% 30% 25%	March 2014 March 2015 March 2016
Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who had been prescribed aspirin or clopidogrel (or an alternative anti-platelet or anticoagulant) at time of intervention	National Vascular Database	80% 85% 90%	March 2014 March 2015 March 2016

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who had been prescribed lipid-lowering statin therapy at time of intervention</p>	<p>National Vascular Database</p>	<p>75% 80% 85%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who have a “Mode of Admission status as emergency”</p>	<p>National Vascular Database</p>	<p>36% 33% 30%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who have a “Complications: limb ischaemia status as amputation”</p>	<p>National Vascular Database</p>	<p>36% 33% 30%</p>	<p>March 2014 March 2015 March 2016</p>
<p>Percentage of patients with critical limb ischaemia and interventional therapy (bypass surgery) who have a “Patient status at discharge alive”</p>	<p>National Vascular Database</p>	<p>80% 83% 85%</p>	<p>March 2014 March 2015 March 2016</p>

5.6 RENAL DISEASE

Chronic kidney disease (CKD) is a term that amalgamates a number of primary disease processes; clinical management therefore starts often before there is decline in renal function as measured by glomerular filtration rate (GFR).

In many patients the risk of cardiovascular disease outweighs that of end-stage renal failure. There is either evidence or strong consensus to support the surveillance and aggressive management of risk factors in persons being treated for any of the following conditions that lead to CKD, hypertension, diabetes, vascular disease, heart failure, urological and multi-system diseases. There is worldwide recognition of the importance of early detection of CKD to facilitate interventions that slow decline in renal function and reduce the high risk of cardiovascular disease.

Established renal failure (ERF) is an irreversible, long-term condition for which regular dialysis or transplantation is required if the individual is to survive. The most common causes of ERF are diabetes, hypertensive vascular disease, glomerulonephritis, pyelonephritis and cystic kidney disease. The risk of renal failure increases with age.

Most patients with ERF will receive different types of Renal Replacement Therapy (RRT) during their lifetime. The various forms of dialysis therapies are complementary and the best way of managing RRT is through an integrated approach to dialysis and transplantation. Service planning and delivery should promote seamless integrated care which is safe, effective and efficient, to enhance the patient experience and improve clinical outcomes.

Overarching standard 36: Diagnosis of Chronic Kidney Disease

All patients with a diagnosis of chronic kidney disease (CKD) should receive timely, appropriate and effective investigation, treatment and follow-up to reduce the risk of progression and complications.

Rationale:

There is worldwide recognition of the importance of early detection of CKD to facilitate interventions that slow decline in renal function and reduce the high risk of cardiovascular disease. This is supported by the inclusion of specific sections on CKD in the National Service Framework for Renal Services and the Quality and Outcomes Framework of the General Medical Services contract for General Practitioners. These clinical practice guidelines are intended to provide clear advice on key aspects of the management of patients with CKD. The associated audit measures are a means whereby hospitals and primary care can assess their performance against a nationally agreed set of outcome indices.

All performance indicators refer to GP registers of patients with CKD (stages 3-5) and are in line with maximal QOF scoring.

Evidence:

UK Guidelines for the management of Chronic Kidney Disease

<http://www.renal.org/CKDguide/ckd.html>

Hallan S, Dahl K, Oien CM et al. Screening strategies for chronic kidney disease in the general population: follow-up of cross sectional health survey. British Medical Journal 2006;333:1047

<http://www.bmj.com/cgi/content/full/333/7577/1047>

Clinical Practice Guidelines for the Care of Patients with Chronic Kidney Disease
UK Renal Association Clinical Practice Guidelines. 4th Edition 2007

<http://www.renal.org/guidelines/print/CKDfinalMar07.pdf>

National Institute for Health and Clinical Excellence (NICE) (2006) Clinical Guideline CG39 - Anaemia management in chronic kidney disease

<http://guidance.nice.org.uk/CG39>

Responsibility for delivery / implementation

HSC Trusts

Renal multidisciplinary teams

Primary Care

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Quality Dimension

Safe

Interventions to reduce the incidence of CKD and progression to end-stage kidney disease have evidence that they are safe and their application is supported by relevant professional bodies.

Accessible

CKD is generally a slowly progressive disease over a time period of years to decades. This allows for early intervention to prevent Cardiovascular and Renal events.

Effective

There is an excellent evidence base for the interventions that impact and reduce progression and cardiovascular events.

Efficient

These interventions are relatively inexpensive and efficient with less patients requiring treatment to avoid progression than many other accepted interventions.

Equitable

The interventions are equally useful in all races and in most patients studied to date up to age 80. Evidence in patients older than this is somewhat lacking.

Person centred

Interventions are well tolerated and welcome to patients as the risks of progressive CKD are serious and contribute to significant disability.

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Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of CKD patients with a record of blood pressure in the previous 15 months and whose blood pressure is 140/85 mmHg or less	QOF	80% 82% 85%	March 2013 March 2014 March 2015
Percentage of hypertensive and proteinuric CKD patients treated with an angiotensin converting enzyme inhibitor (ACE-I) or, if a patient is intolerant to an ACE inhibitor, angiotensin receptor blocker (ARB) (unless a contraindication or side effects are recorded)	QOF	95% 95% 95%	March 2013 March 2014 March 2015
Percentage of patients with CKD who have a quantitative record of a proteinuria test in the previous 15 months	QOF	82% 85% 85%	March 2013 March 2014 March 2015

Overarching standard 37: Dialysis Care

Renal services should ensure the delivery of high quality, safe and effective dialysis care which is designed around the individual's needs and preferences and is available to all patients of all ages.

Rationale:

Most patients with ERF will receive different types of Renal Replacement Therapy (RRT) during their lifetime. The various forms of dialysis therapies are complementary and the best way of managing RRT is through an integrated approach to dialysis and transplantation. For the majority of patients renal replacement therapy is as hospital-based haemodialysis. Provision of a native arterio-venous (AV) fistula is the best form of access to reduce health-care associated infections. The latter are highest in those patients treated with long-term central venous catheters. AV fistulae need time to mature before cannulation (at least one month, preferably 3 months).

Haemodialysis should be delivered by a highly skilled multiprofessional workforce to maximise dialysis capacity, improve quality of life and reduce complications.

Evidence:

The National Service Framework for Renal Services. Part One: Dialysis and Transplantation (2004)

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAnd Guidance/DH_4070359](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4070359)

The Renal Association Clinical Practice Guidelines 3a/3b (2007)

<http://www.renal.org/guidelines>

The Renal Association UK Renal Registry, The Tenth Annual Report, December 2007 <http://www.renalreg.com/reports/renal-registry-reports/2007/>

National Institute for Health and Clinical Excellence (NICE) (2002) Technology Appraisal TA48 - Renal failure – home versus hospital haemodialysis

<http://guidance.nice.org.uk/TA48>

Renal Association Standards & Audit Subcommittee

<http://www.renal.org/Standards/standards.html>

European Best Practice Guidelines for haemodialysis Part 1. Nephrol Dial Transplant 2002; 17: Supplement 7 S1-S111

http://ndt.oupjournals.org/content/vol17/suppl_7/index.shtml

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Responsibility for delivery / implementation			
HSC Trusts Hospital renal units Vascular and transplant surgical teams Multidisciplinary renal teams			
Quality Dimension			
Safe Patients receiving HD via permanent vascular access have a lower incidence of septicaemia.			
Accessible All surgically suitable patients will have timely and appropriate surgery for permanent vascular access or peritoneal dialysis access.			
Effective Renal replacement therapy regimes should comply with national guidelines and standards which promote permanent vascular access.			
Efficiency Costs of delivering HD via permanent vascular access are lower than using central venous catheters.			
Equitable All patients who are deemed medically fit should be eligible for permanent vascular access.			
Person centred All patients will have timely education, preparation and be offered vascular access. They will be supported in their informed decision making about modality choice and in managing their condition to achieve the best possible quality of life.			
Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients who have been on HD for more than 90 days and less than 1 year who receive dialysis via permanent vascular access.	Hospital Patient Administration System (PAS) and eMed	70% 75% 80%	March 2014 March 2015 March 2016

Overarching standard 38: Kidney Transplant

All children, young people and adults likely to benefit from a kidney transplant should receive a high quality service which maximises their opportunities to obtain a transplant and enables them to achieve the best possible quality of life.

Rationale:

A successful kidney transplant is the most clinically appropriate and cost-effective treatment for many patients with established renal failure; it is associated with significantly improved survival versus continued dialysis in suitable patients (1-3). However, it is recognised that there are difficulties in securing enough kidneys to meet demand. There are ongoing efforts to improve deceased donor rates, including promotion of the Organ Donor Register, appointment of medical and nursing leads for organ donation in critical care units and commencement of a donation after circulatory death (DCD) programme. There is also a strong living donation programme in NI.

Prior to joining the transplant waiting list patients require counseling, including consideration of living donor options as well as assessment of cardiovascular and surgical risks to the recipient. The possibility of pre-emptive transplantation (before the initiation of dialysis) should be considered as this offers additional long-term benefits. Patients may be placed on the waiting list for a renal transplant up to 6 months before the expected start of dialysis. This reinforces the need for evaluation and preparation for possible transplantation to begin prior to initiation of dialysis in order to minimize the time that dialysis is required prior to transplantation and to facilitate pre-emptive transplantation.

Evidence:

Clinical Practice Guidelines: assessment for renal transplantation. UK Renal Association (2008)

<http://www.bts.org.uk/Documents/Guidelines/Active/transplantationguidelinesFINALApril08>

Multi-professional criteria for monitoring implementation of the National Service Framework for Renal Services, British Renal Society

<http://www.britishrenal.org/Other/Criteria%20for%20success.pdf>

National Service Framework for Renal Services. Part One: Dialysis and Transplantation

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4070359

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Responsibility for delivery / implementation

HSC Trusts
Renal Teams
Multidisciplinary Transplant Team

Quality Dimension

Safe

Patient outcomes following transplantation are better than those on dialysis.

Accessible

Early introduction of transplantation consideration by the renal team, to include living donation, with culturally appropriate information, discussion and psychological/preparation regarding the risks and benefits of transplantation.

Effective

NICE guidance should be followed for immunosuppressive therapy and the treatment of acute rejection episodes.

Efficiency

All donated kidneys should be adequately matched to the recipient blood and tissue type and be in the best possible condition with a short ischaemic time.

Equitable

All patients who are deemed medically fit should be eligible for transplantation.

Person centred

All non-English speaking patients being counselled about risks and benefits of transplantation should have availability of translator services. Visually impaired patients should have information available in large print and audio tape.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of dialysis and CKD Stage 5 patients who are medically suitable and have evidence of transplant discussion and education.	Clinical Information System eMed	70% 75% 80%	March 2014 March 2015 March 2016
Percentage of patients on transplant list who have evidence of an annual review of ongoing clinical suitability.	eMed	75% 80% 85%	March 2014 March 2015 March 2016
Maintain living donation kidney transplants in line with demand.	UK Transplant (http://www.uktransplant.org.uk)	50/year (estimated) TBC TBC	March 2014 March 2015 March 2016
Establish a transplant programme to maximise use of donation after cardiac death (DCD) kidneys in NI. (Percentage of DCD Kidneys retrieved in NI to be transplanted in NI*)		30% 50% 50%	March 2014 March 2015 March 2016
Establish a robust MDT system to review all kidney offers to the NI team and identify any avoidable reasons for refusal			June 2013

* Subject to National matching system rules in force at the time. Assumes if two kidneys are retrieved from a donor, one will go into the GB pool and one may be offered for use locally. Reflects need to strengthen team with new consultant appointments in year 1.

Overarching standard 39: Acute Kidney Injury

All people at risk of, or suffering from, acute kidney injury / acute renal failure should be identified promptly, with hospital services delivering high quality, clinically appropriate care in partnership with specialized renal teams. Prevention of AKI should be a priority for all clinicians in both primary and secondary care.

Rationale:

Acute kidney injury (AKI) (formerly acute renal failure) is sudden decline in kidney function, often occurring over hours or days. AKI is potentially fatal but in many cases reversible if appropriately treated. It can occur in people with previously normal kidney function or in those who have background CKD, which may or may not have been previously identified. If it is severe, emergency extra-corporeal therapies such as haemodialysis are required to keep the person alive.

AKI most frequently occurs with injuries and diseases having a secondary effect of damaging the kidneys. Pre-existing CKD has been identified as a major factor contributing to the development of AKI though often in the setting of other risk factors known to reduce the reserve of renal function such as age, diabetes and reduced cardiac function.

Severe infection and low blood pressure (such as due to infection or blood loss) are among the commonest causes of AKI and this often happens post-operatively. Where AKI does occur it is frequently compounded by prescribed medicines. Rare but important forms of AKI are important causes of long-term kidney damage (CKD) so it is important to identify this quickly, as early treatment may slow or even reverse the kidney failure. There are problems with the definition of AKI and lack of good epidemiological data outside of intensive care and renal units. Regional and/or trust based clinical information systems are urgently required to assess the local epidemiology of AKI and thus develop systems to best treat such patients.

Evidence:

The National Service Framework for Renal Services. Part two. Quality requirement three: Acute renal failure

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4101902

The Renal Association Clinical Practice Guidelines 3a/3b (2007)

<http://www.renal.org/guidelines>

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Bellomo R, Ronco C, Kellum JA, Mehta RL, Palevsky P, the ADQI workgroup: Acute renal failure - definition, outcome measures, animal models, fluid therapy and information technology needs: the Second International Consensus Conference of the Acute Dialysis Quality Initiative (ADQI) Group. Crit Care 2004, 8:R204-R212 <http://bmc.ub.uni-potsdam.de/cc2872/cc2872.pdf>

Kidney Disease. Improving global outcomes (KDIGO) <http://www.kdigo.org>

Abosaif NY, Tolba YA, Heap M, Russell J, El Nahas AM: The outcome of acute renal failure in the intensive care unit according to RIFLE: model application, sensitivity, and predictability. Am J Kidney Dis 2005, 46:1038-1048 <http://www.ncbi.nlm.nih.gov/pubmed/16310569>

Responsibility for delivery / implementation

Health and Social Care Trusts

Quality Dimension

Safe

Prevention and early detection of AKI will avoid long-term morbidity and mortality.

Effective

Appropriate pre-operative testing and interventions, in accordance with the NICE guideline on pre-operative testing.

Efficient

Early preventative action to avoid need for dialysis or admission to critical care units will reduce in cost-savings to the HSC.

Equitable

Secondary Care systems should deliver a systematic approach which will ensure that all patients with, or at risk of, acute kidney injury, irrespective of age and comorbidities, should have early diagnosis and intervention.

Person centred

When patients have complex comorbidities, decisions about commencing dialysis should be made following discussion with patients, where possible, and their relatives.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
<p>Implement GAIN evidence-based consensus guidance on the prevention and management of AKI. All FY2 doctors in NI to have access to training on AKI recognition.</p>	<p>Annual report</p>	<p>95% 98% 98%</p>	<p>Dec 2014 Dec 2015 Dec 2016</p>
<p>Develop the eMed system, or its replacement, so that it can identify patients who entered the long-term HD programme following AKI. Contribute to national audit programme, using the information to identify avoidable causes, and develop an action plan to minimise AKI incidence</p>		<p>Obtain baseline by March 2014 with a view to setting performance targets</p>	
<p>Explore development of an e-alert system, via routine laboratory results, to flag inpatients at potential risk of AKI requiring clinical review and intervention as appropriate.</p>	<p>Renal clinical information systems (eMed), Intensive Care Clinical Information systems and Trust Laboratory Information Systems</p>	<p>Feasibility report by December 2013 Implementation to follow depending on outcome.</p>	

SECTION 6 – MEDICINES MANAGEMENT IN CARDIOVASCULAR DISEASE

Prescribing is a common medical intervention in people with cardiovascular disease. Medicines for the treatment of cardiovascular disease account for 24% of all prescribed medicines in Northern Ireland. Patients are often required to take multiple medicines at the same time but unfortunately people often don't take their medicines as prescribed. The consequence of non-adherence is that a person's illness may not be relieved or cured e.g. in the USA, it is estimated that 125,000 deaths each year from cardiovascular disease are due to non-adherence as well as 10% hospital admissions, 23% nursing home admissions and many diagnostic tests, unnecessary treatments and visits to GPs. It is important to have good medicines management systems in place across all healthcare settings to ensure that people receive the right medicines at the right dose in the right form at the right time.

Prescribing medicines in accordance with local national guidelines offers an assurance of high quality care and maximum health gains from medicines. In addition, in order to encourage better medicines-taking, people and where appropriate, their carers, should have an opportunity to participate in decision making about their treatment.

Compiling and keeping accurate records of medicines taken reduces the risk of errors especially when people are transferring from one care setting to another. Regular review of all medicines taken ensures that all medicines taken by people remain appropriate, safe and effective in the longer term and minimises medicines waste.

There are two areas the following standards focus on:

1. Medicines Management. In partnership with healthcare professionals, people should be provided with appropriate, safe and effective medicines to enable them to gain maximum benefits from medicines to maintain or increase their quality and duration of life.
2. Medicines Review. People should have a systematic review of all their medicines at appropriate intervals along the patient pathway to ensure

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

that their medicines continue to be appropriate and that they participate in the treatment as prescribed.

Overarching standard 40: Medicines Management

In partnership with healthcare professionals all patients with cardiovascular disease should be provided with appropriate, safe and effective medicines to enable them to gain maximum benefits from medicines to maintain or increase their quality and duration of life.

Rationale:

Medicines management processes should ensure that the right person receives the right medicine in the right dose in the right formulation at the right time. People should be provided with medicines, if appropriate, that are prescribed in accordance with local and national guidelines, offering assurance of high quality of care.

Good documentation of prescribing decisions, recording of reported side effects and an assessment of whether medicines have been effective is necessary to ensure safe and effective care.

As populations age, use of medicines increases due to the development of long-term medical conditions and prescribing to prevent disease. When used appropriately, medicines can improve both functioning and quality of life.

Research shows that around 50% of medicines for long-term conditions are not taken as prescribed and this leads to medicines wastage and sub-optimal patient outcomes. Peoples' beliefs and preferences about medicines are the most important factor in how they use them. Prescribers should work with the support and advice of appropriately trained pharmacists to provide support for people taking medicines through a partnership approach with patients and their associated carers. Partnership working should mean that an informed dialogue takes place about the choice of medicines. This enables people to make an informed decision about their medicines and encourages adherence with the agreed treatment plan. Patients should have timely access to safe, effective, quality assured medicines supplied with relevant advice and information from a pharmacist, in accordance with their clinical needs. Patients should have their medicines regularly reviewed and have access to medicines management services that aim to optimise the benefits of their prescribed treatments.

Evidence:

DoH (2005). The National Service Framework for Long Term Conditions. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4105361

Pharmaceutical Society of Australia (2010). Professional Practice Standards. Version 4. <http://www.psa.org.au>

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Sabate E. (2003). Adherence to long-term therapies: Evidence for action. Switzerland: World Health Organization.

Stevenson F. The patient's perspective. (2004). In: Bond C, editor. Concordance, a partnership in medicine taking. Pharmaceutical Press.

Wynne HA, Blagburn J. Drug treatment in an ageing population: practical implications

Prescribing database, Business Services Organisation, Health & Social Care Northern Ireland.

Responsibility for delivery / implementation

HSC Board

Public Health Agency

Local Commissioning Groups/ Primary Care Partnerships

Health and Social Care Trusts

General Practitioners/ Primary Care /Community Pharmacists

Quality Dimension

Safe

The right medicine in the right dose in the right formulation at the right time for the individual minimises the risk of adverse side effects. Medicines should be prescribed, administered, supplied and monitored in accordance with local and national guidelines to assure patients of quality care.

Accessible

Timely access to appropriate treatment promotes recovery.

Effective

Prescribing decisions should be evidence-based and in accordance with local and national guidance where available. Individual prescribing decisions must be recorded. Properly managed, prescribed medication can improve health outcomes and the quality of life.

Efficiency

Prescribing the appropriate medicine with relevant advice and support to promote adherence for an individual reduces unwanted and unused medicines.

Equitable

All patients should receive appropriate medicines for cardiovascular disease.

Person centred

People should be active partners in decisions about medicines prescribed and supplied to them.

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Level of cardiovascular prescribing in concordance with local medicines formulary	BSO	Current baseline – 87% Ongoing in tandem with the development of the NI formulary	March 2014 March 2015 March 2016
Proportion of people with cardiovascular disease accessing a specific medicines management support programme for concordance	Medicines management support programme administration – this is currently under development as part of community pharmacy contract negotiations	Establish baseline Performance levels to be determined once baseline established	March 2014

Overarching standard 41: Medicines Management

Patients with cardiovascular disease should have a systematic review of all their medicines at appropriate intervals along the patient pathway to ensure that their medicines continue to be appropriate, and that they participate in the treatment as prescribed.

Rationale:

Cardiovascular disease is associated with the use of medicines. Amongst many people the concurrent use of multiple medicines is common and may cause problems through drug interactions. There may also be instances where appropriate medicines are under-used. People with cardiovascular disease and older people are often those at highest risk of significant morbidity or mortality and are most likely to benefit from preventative medicines; however there is a risk of adverse drug events. Regular medicines review ensures that people receive appropriate medicines and minimises medicines waste.

When people move across care settings there is a risk of medicines-related errors due to inaccuracies in the medicines list. It is essential that every time a person moves to another care setting, accurate and reliable information about their medicines is transferred at the same time. Errors in taking medicines are an important cause of admission to hospital. Records of medicines are kept in a range of formats in a variety of settings and are not easily shared. Therefore, any individual record will only be as accurate as the last update and may not reflect all the medicines that a person is taking. A medicines review is best performed once an accurate list of medicines has been compiled from a number of sources.

Medicines reviews vary in complexity ranging from an opportunistic discussion with a healthcare professional to a more comprehensive and proactive approach by the prescriber. Different approaches are taken in practice for different purposes. Prescribers conducting face to face clinical medicine reviews with patients should include all medicines prescribed or bought over the counter, seek the person's (or their carer's) consent to any changes made and aim to achieve concordance about medicines-taking. The outcome of the review should be documented in the person's records and the impact of any changes should be monitored.

Evidence:

Clyne W, Blenkinsopp A, Seal R. (2008) National Prescribing Centre. A guide to medication review. Liverpool: National Prescribing Centre. <http://www.npc.co.uk>

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National Collaborative Medicines Management Services Programme (2002). Briefing: Room for Review. A Summary Guide to Medication Review: The Agenda for Patients, Practitioners and Managers. Task Force on Medicines Partnership. <http://www.npc.nhs.uk>

Institute for Healthcare Improvement (2011). Innovation at Its Best: Medication Reconciliation. <http://www.ihl.org>

National Prescribing Centre (2008). Medicines Reconciliation: a guide to implementation. <http://www.npc.nhs.uk>

Pharmaceutical Society of Australia (2010). Professional Practice Standards. Version 4. <http://www.psa.org.au>

Responsibility for delivery / implementation

HSC Board

Public Health Agency

Local Commissioning Groups/ Primary Care Partnerships

HSC Trusts

General Practitioners/ Primary Care /Community Pharmacists

Quality Dimension

Safe

Medicines review has numerous potential benefits for patient safety including improving the current and future management of their medical condition, improving health outcomes through optimal medication, reduction in adverse effects and reduction in unwanted or unused medicines.

Accessible

Prescription of the right medicine at the right time improves the current and future management of their medical condition.

Effective

Prescribing decisions should be evidence-based and in accordance with local and national guidance where available. Individual prescribing decisions must be recorded. Properly managed, prescribed medication can improve health outcomes and the quality of life.

Efficiency

Prescribing the appropriate medicine for an individual reduces unwanted and unused medicines.

Equitable

All patients should have medicines reviewed regularly.

Person centred

People should be active partners in decisions about medicine prescribed for them.

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Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of cardiovascular patients receiving four or more medicines who are offered a medicines review annually	To be developed	80% 80% 80%	March 2014 March 2015 March 2016
Percentage of cardiovascular patients in secondary care who have had their medicines list checked and verified as accurate on admission	To be developed	Establish baseline Performance levels to be determined once baseline established	March 2014

SECTION 7: PALLIATIVE AND END OF LIFE CARE

Palliative and end of life care focuses on all aspects of care needed by patients and their families, physical, emotional and spiritual. It involves relief of symptoms, making thoughtful decisions, supporting families and providing ongoing care in the appropriate setting. It is important that people in the last phase of life get the appropriate care, at the right time, in the right place, in a way that they can rely on. The following standards are designed to improve the patient and family experience of palliative and end of life care through *holistic assessment* of need, improved coordination of care and a greater focus on choice at end of life.

Overarching standard 42: Palliative and End of Life Care* (Generic)

All people with advanced progressive incurable conditions, in conjunction with their carers, should be supported to have their end of life care needs expressed and to die in their preferred place of care.

Rationale:

Most people would prefer to die at home (including residential and nursing home where this is the person's usual home) where this is possible.

In order to support this, identification of the possible last year/months/weeks of life should take place. Evidence shows that when end of life care needs are identified there is improved quality of life and even prolonged life, compared to when this stage of illness is not identified, particular in non-cancer conditions.

Advanced care planning allows more informed choice of care and enables people to be more supported to die in their preferred place of care.

*Palliative care is the active holistic care of patients with advanced, progressive illness. Management of pain and other symptoms and provision of psychological, social and spiritual support is paramount. The goal of palliative care is achievement of the best quality of life for patients and their families. Many aspects of palliative care are also applicable earlier in the course of the illness in conjunction with other treatments. (WHO, 2002)

*End of life care refers to the possible last year of life. It helps all those with advanced, progressive, incurable conditions to live as well as possible until they die. It enables the supportive and palliative care needs of both the patient and the family to be identified and met throughout the last phase of life and into bereavement. At this stage however it is often still appropriate to provide acute treatment in conjunction with palliative care, particularly in long term conditions. It includes physical care, management of pain and other symptoms and provision of psychological, social, spiritual and practical support. (National Council for Palliative Care, Focus on Commissioning, Feb 2007).

Evidence:

Living matters, Dying Matters. A Palliative and End of Life Care Strategy for Adults in Northern Ireland, March 2010.

http://www.dhsspsni.gov.uk/8555_palliative_final.pdf

National Institute for Health and Clinical Excellence (NICE) Improving Supportive and Palliative Care for Adults with Cancer (2004)

<http://www.nice.org.uk/Guidance/CSGSP>

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Supportive and Palliative Care for Advanced Heart Failure, Coronary Heart Disease Collaborative, NHS Modernisation Agency (2004)

<http://www.library.nhs.uk/cardiovascular/ViewResource.aspx?resID=78319>

NICE Chronic Heart Failure; Management of Chronic Heart Failure in Adults in Primary and Secondary Care (2003) <http://www.nice.org.uk/Guidance/CG5>

NICE Chronic Obstructive Pulmonary Disease; Management of Chronic Obstructive Pulmonary Disease in Adults in Primary and Secondary Care (2010) <http://www.nice.org.uk/Guidance/CG12>

NICE Chronic Obstructive Pulmonary Disease; Quality Standards (2011) <http://guidance.nice.org.uk/qualitystandards/qualitystandards.jsp>

Regional Cancer Framework: A Cancer Control Programme for Northern Ireland DHSSPSNI (2006)

http://www.dhsspsni.gov.uk/eeu_cancer_control_programme_eqia.pdf

NICE Cancer Service Guidance (CSGSP): Improving supportive and palliative care for patients with cancer, March 2004

<http://www.nice.org.uk/Guidance/CSGSP>

Definitions of levels of palliative care, National Council for Palliative Care

<http://www.ncpc.org.uk/site/professionals/explained>

Gold Standards Prognostic Framework Programme, NHS End of Life Care programme (2006) Prognostic Indicator Paper vs 2.25

www.goldstandardsframework.nhs.uk

Ellershaw, J.E & Wilkinson, S, (2003), Care of the Dying: a Pathway to Excellence, Oxford University Press Foote, C & Stanners, S, (2002), Integrating Care for Older People – New Care for Old – A Systems Approach, London, Jessica Kingsley

Khan, SA; Tarver, K; Fisher S; Butler C (2007), Inappropriate Admissions of Palliative Care Patients to Hospital: A Prospective Audit, London, Pilgrims Hospices

Harrison, S et al, (2008), Identifying Alternatives to Hospital for People at the End of Life, The Balance of Care Group / National Audit Office

www.balanceofcare.co.uk

SERVICE FRAMEWORK FOR CARDIOVASCULAR HEALTH AND WELL BEING

Pleschberger, S, (2007), Dignity and the Challenge of Dying in Nursing Homes: The Residents' View <http://ageing.oxfordjournals.org/content/36/2/197.short>

Responsibility for delivery / implementation

HSC Trusts
 Primary Care (including community pharmacy)
 Voluntary palliative care providers
 Private nursing homes

Quality Dimension

Person Centred: Earlier identification of palliative care needs and advance care planning will help improve quality of life and support a good death.

Effectiveness: Inappropriate admissions to hospital at the very end of life will be avoided.

Equity: People with non cancer conditions will have access to care and services traditionally available mainly to those with cancer conditions only.

Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of the population that is enabled to die in their preferred place of care.	NISRA survey for baseline of the population's preference Registrar General and PAS information for actual place of death	Establish baseline	March 2013
		Performance indicator to be determined when baseline established	March 2014
Percentage of population with a understanding of advance care planning	NISRA survey for baseline levels	Establish baseline	March 2013
		Performance indicator to be determined when baseline established	March 2014

SECTION 8 - RESEARCH

Overarching standard 43: Research

All HSC services promote, conduct and use research to improve the current and future health and wellbeing of the population.

Rationale:

Research generates evidence to help improve health and wellbeing by increasing understanding of prevention, diagnosis and management of disease. Research has the potential to benefit organisations, staff and patients alike in that it aims to bring improvements but also motivates, drives innovation and supports excellence. Research should therefore be a core HSC activity funded by both commercial and non-commercial organisations. If successful, application of research findings contributes to increasing quality of health and social services, including safety, timeliness, effectiveness, efficiency, equity and person centredness.

Transforming Your Care advocates research as a driver for the improvement of care through better safety and quality and through the reconfiguration of the acute services. Fit and Well: Changing Lives 2012 -2022, on the other hand, sets the context for the forthcoming period for Public Health in Northern Ireland. It has a strong emphasis on research and development and the key role that appropriate, agreed high level indicators will have in ensuring that policy, research and practice are supported by a robust data and evidence base.

The Northern Ireland Clinical Research Network (NICRN) is part of a UK-wide initiative that aims to ensure that patients and healthcare professionals from all parts of the country are able to participate in and benefit from clinical research. The NICRN supports clinical trials and other high quality research across a number of areas. Within the NICRN, a number of interest groups undertake research that is relevant to the cardiovascular framework. These include NICRN (Cardiovascular), NICRN (Stroke), NICRN (Primary Care) and NICRN (Renal).

Evidence:

DoH (2012) The NHS Constitution for England

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132961

DHSSPS (2012) Fit and Well: Changing Lives 2012-2022

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DHSSPS (2011) Transforming your Care: A Review of Health and Social Care in Northern Ireland

<http://www.dhsspsni.gov.uk/transforming-your-care-review-of-hsc-ni-final-report.pdf>

Research and Development Office for the Health and Personal Services in Northern Ireland. Research for Health and Wellbeing 2007- 2012

Responsibility for delivery / implementation

Directors for Research in the HSC Trust

HSC R&D Division of the Public Health Agency

Northern Ireland Public Health Research Network

Quality Dimension

Safe

Research is highly regulated to ensure compliance with ethical and governance standards to safeguard participants in what by its nature is often experimental health and social care activity. Its outputs lead to service improvements aimed at increased patient safety amongst other dimensions of quality.

Accessible

Translational research and knowledge management increasingly endeavour to bring research findings into practice in a timely manner and aid service delivery improvements.

Effective

Research provides evidence and the basis for health and social care decision making, should this be at organisational, service, community and individual practitioner and patient level.

Efficient

Health and social care research strategic direction in Northern Ireland is provided throughout the HSC organisational landscape to optimise best use of limited resources and address priority areas for investigation. Application of research findings in form of new treatments or forms of interventions is normally subject to health technology assessment and other forms of scrutiny to establish cost effectiveness before introduction into policy and practice

Equitable

With growing awareness of the detrimental effects of social disadvantage on health and wellbeing, research increasingly endeavours to address inequalities in access to and outcomes from health and social care interventions.

Person centred

The HSC R&D PPI (Personal and Public Involvement) Strategy advocates the involvement of service users and the public as equal partners in the research process. In line with this strategy, PPI representatives are now involved in all HSC R&D funding and evaluation panels and researchers must demonstrate how they will involve service users and the public throughout the research process as a prerequisite in all applications for funding.

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Performance Indicator:	Data source	Anticipated Performance Level	Date to be achieved by
Number of research studies (active for all or part of the monitoring period) under the auspices of NICRN cardiovascular, primary care, renal, stroke interest groups.	NICRN HSC Trusts	Establish baseline Performance levels to be determined once baseline established	March 2014
Percentage of commercial studies	NICRN HSC Trusts	Establish baseline Performance levels to be determined once baseline established	March 2014
Number of patients screened for participation in research studies during the monitoring period under the auspices of NICRN cardiovascular, primary care, renal, stroke interest groups.	NICRN HSC Trusts	Establish baseline Performance levels to be determined once baseline established	March 2014
Numbers of patients recruited into research studies during the monitoring period under the auspices of NICRN cardiovascular, primary care, renal, stroke interest groups.	NICRN HSC Trusts	Establish baseline Performance levels to be determined once baseline established	March 2014
Numbers of patients participating in research studies (active for all or part of the monitoring period) under the auspices of NICRN cardiovascular, primary care, renal, stroke interest groups.	NICRN HSC Trusts	Establish baseline Performance levels to be determined once baseline established	March 2014

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Appendix 1 – Substantive review – Section Leads

No.	Section	Lead
1	Personal & Public Involvement	Roisin Kelly
2	Health Improvement	Elaine O'Doherty
3	Hypertension	Dr Christine McMaster
4	Hyperlipidaemia	Dr Adrian Mairs
5	Cardiology	Gillian Wells
6	Stroke	Dr Brid Farrell
7	Vascular Disease	Dr Adrian Mairs
8	Renal	Dr Diane Corrigan
9	Medicines Management	Joe Brogan
10	Research	Dr Nicola Armstrong
11	Palliative Care	Dr Jenny Gingles

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Appendix 2: Glossary of Terms

Angina	Heaviness or tightness in the centre of the chest, which may spread to the arms, neck, jaw, back or stomach. Angina is caused when the arteries become so narrow due to atheroma that not enough oxygen-rich blood can reach the heart muscle when the body is making high demands on it such as during exercise. The pain can also occur when a person is resting.
Angiogram	An x-ray picture of the blood vessels which shows whether the arteries are narrowed and, if so, how narrow they have become. A fine, flexible, hollow, plastic tube called a catheter is passed into an artery either in the groin or arm and is gently guided through the blood vessels. X-ray films are taken by putting a dye down the catheter and then taking a series of pictures. This means that a 'road map' of the blood vessels can be drawn showing where blood vessels are narrowed and how narrow they have become. This procedure can also be used to examine the coronary arteries (coronary angiogram) or other arteries in the body.
Angiography	A test to show whether arteries are narrowed and how narrow they have become. See 'angiogram' for more information.
Angioplasty with stent	A catheter (a fine, hollow tube) with a small inflatable balloon at its tip is passed into an artery in either the groin or arm. The operator then uses x ray screening to direct the catheter to a coronary artery until its tip reaches the narrowed or blocked section. The balloon is then gently inflated so that it squashes the fatty tissue against the artery wall. As a result, this widens the artery. The catheter contains a stent which is a short tube of stainless steel mesh. As the balloon is inflated, the stent expands so that it holds open the narrowed blood vessel. The balloon is then let down and removed, leaving the stent in place and allowing the blood to flow freely through the artery.

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Aneurysm	If there is a progressive weakening of the wall of the aorta, it begins to 'balloon'. This is called an aneurysm. It will grow bigger and eventually rupture (usually fatal) if it is not diagnosed and treated.
Aorta	The large artery leading out of the left side of the heart which supplies the body with blood.
Aortic valve	The valve which regulates the flow of blood from the left ventricle into the aorta.
Arrhythmia	An abnormal heart rhythm.
Artery	A blood vessel carrying blood from the heart to the rest of the body.
Atheroma	This is fatty material that can build up within the walls of the arteries. When atheroma affects the coronary arteries, it can cause angina, heart attack or sudden death. When it affects the arteries to the brain it may cause a stroke. When it affects the leg arteries, it causes peripheral arterial disease. Atheroma can build up for many years before it causes problems.
Atherosclerosis	The build up of fatty materials within the walls of the arteries.
Atria	The two upper chambers of the heart. They act as collecting chambers to fill the ventricles (the two lower chambers of the heart).
Atrial fibrillation	A type of arrhythmia (abnormal heart rhythm) in which the atria (the upper two chambers of the heart) beat very rapidly. Atrial fibrillation can cause quite unpleasant palpitations and sometimes breathlessness. In some cases, the fast irregular rhythm may cause a clot to form in the heart.
Beta blocker	Beta blockers are drugs that block the actions of the hormone adrenaline which makes the heart beat faster and more vigorously. They are used to help prevent attacks of angina, to lower blood pressure, to help control abnormal heart rhythms and to reduce the risk of a further heart attack in people who have already had one.

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Cardiac rehabilitation	The process which helps people with heart disease to regain and, if possible, improve their health. Ideally cardiac rehabilitation should start when, or even before, the person is admitted to hospital, and continue when they are in hospital and after they have been discharged. Cardiac rehabilitation involves explaining what has happened to the heart, doing exercise or physical activity, and support and education to encourage long term lifestyle changes. This may be run as a team based approach, including a range of health professionals such as nurses, physiotherapists, pharmacists and dietician.
Cardiomyopathy	A disease of the heart muscle.
Carotid artery stenosis	Carotid artery stenosis is a narrowing of the carotid arteries. These are the main arteries in the neck that supply blood to the brain. Carotid artery stenosis is a major risk factor for ischaemic stroke.
Diabetes	A disease caused when the body does not produce enough insulin, or when the cells of the body can no longer use the insulin
Hypertension	High blood pressure.
Myocardial infarction	A heart attack
Peripheral arterial disease	This occurs when fatty acids (atheroma) build up in the inner walls of arteries and affect blood circulation. This is most common in the arteries to the legs and feet.
Pulmonary	To do with the lungs
Revascularisation	Any procedure that restores blood flow to a part of the body.
Stent	A short tube of expandable mesh which is inserted at the part of the artery which is to be widened by coronary angioplasty (see angioplasty with stenting). The stent helps to support the artery wall (see also drug eluting stent)
Stroke	A stroke is a localised neurological deficit with a vascular cause, lasting longer than 24 hours. It is usually due to either a blockage of the blood vessels to the brain, or by a bleed into the brain.

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Thrombolysis	Drug treatment to help dissolve a clot which is blocking an artery.
Transient Ischaemic Attack (TIA)	A transient ischaemic attack (TIA) causes similar symptoms as a stroke but lasts less than 24 hours. This is a strong indicator of the risk of a more serious stroke.

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