National Institute for Health and Clinical Excellence

Clinical guideline: Chest pain/discomfort of recent onset

PRE-PUBLICATION CHECK ERROR TABLE

Organisation	Order number	Section number in FULL guideline	Page number	ERROR REPORT	RESPONSE
British Society of Cardiovascular Magnetic Resonance (BSCMR)	1	General		The current draft has been considerably re-written following the consultation exercise in August 2009. The current document is considerably improved both in terms of its clarity and style. However, the underlying diagnostic strategy has not changed at all, despite extensive expert reviewer comments from the major Cardiology stakeholders. In particular, those of the British Cardiovascular Society (BCS), British Society of Cardiovascular Magnetic Resonance (BSCMR), British Society of Echocardiography (BSE), and British Nuclear Medicine Society all advocated a strategy based on functional assessment of disease rather than anatomical assessment. These comments appeared to have been largely disregarded, despite both European and American cardiology guidelines advocating this approach. The additional radiation burden at a population level proposed by this strategy of cardiac CT cannot be ignored, and its use in medicine is enshrined in UK legislation. Whilst the dose may become acceptably lower in the future, this is not the case at present and so it is perhaps premature to place this technology at the core of cardiology practice guidelines. Even a simple calcium score carries a dose of 1-2mSv; recent evidence suggests this may be associated with harm	Thank you for your comment. However, your comment relates to an issue other than a factual error. Therefore we cannot respond to it. However the NICE implementation team will be addressing your concerns and ensuring adequate information is provided.

				at a population level.	
				It is now also becoming apparent that in North America, where cardiac CT has been widely adopted, there has been an <u>increase</u> in invasive diagnostic coronary angiography rates, due to the significant rate of calcium related artefacts and indeterminate results on the Cardiac CT. This would result in additional diagnostic costs, more patient visits, and increasing doses of ionising radiation (particularly if patients re- present many times over the course of their lifetime as is often the case). The FDA are aware of this and are investigating. In summary, we anticipate that the cardiology community will challenge these recommendations of a first line cardiac CT based strategy for the assessment of lower risk patients presenting with stable chest pain.	
Department of Health	1	General		I wish to confirm that the Department of Health has no substantive comments to make, regarding this review	
KCI Medical Ltd	1	General		we have no comments to put forward	
Royal College of Nursing	1	General		No comment	
Royal College of Paediatrics and Child Health	1	General		we will not be responding to this consultation.	
British Cardiovascular Society and endorsed by the Royal College of Physicians	1	1.3.4	24	The radiation aspect of CT coronary angiography continues to be underplayed. Coronary calcification imparts only a very small radiation dose. However for those patient going on to full CT coronary angiography the NICE suggested dose of 7-10milliSeiverts relates to an ideal dose. Dose should be referenced to real life audit data so an estimate of the real radiation risk can be assessed. The 1 in 2000 risk cited also does not impart sufficient detail. The radiation risk is age	Thank you for your comment. However, your comment relates to an issue other than a factual error. Therefore we cannot respond to it. However the NICE implementation team will be addressing your concerns and

and sex related, the risk being significantly higher in females because of breast irradiation. The figures below are illustrations from Einstein AJ et al. Estimating Risk of Cancer Associated With Radiation Exposure From 64-Slice CT Coronary Angiography. JAMA. 2007;298:317-323. In this study the lifetime cancer risk from CT coronary angiography was assessed.	ensuring adequate information is provided.
The findings of the study were that in an 80 year old man the average lifetime radiation risk from a single CT coronary angiogram was about 1 in 2000 while in a 20 year old woman it was about 1 in 100. A typical patient with a low risk of chest pain might be a middle aged woman with a couple of risk factors. Her life time cancer risk from a CT study might be about 1 in 300. Often these patients present multiple times over the course of a few years and may end up having multiple studies. Remember these aren't patients likely to have coronary disease and have a high risk of dying of a cardiovascular cause. These are generally healthy people and we should think very hard before imparting significant ionising radiation to this group of people. This of course holds true for all ionising radiation but we are considering a specific circumstance in this review.	
To replace the current treatment pathway for patients at low risk of coronary disease where a high proportion of patients can have coronary disease excluded by simple non-invasive (no radiation) testing, with a pathway which involves significant radiation, is a big step to take. There are significant arguments against taking this step. If NICE are to persist with this recommendation the section on radiation risk should include real life audit doses from our current large CTCA centres and should include more detail on the age/sex radiation risks rather than quoting a single figure.	