The winds of change are blowing through the field of cardiac imaging, and for those of us involved in cardiovascular magnetic resonance (CMR), it is more akin to the fragrant datoo from Gibraltar than the arid Saharan simoom referred to by Michael Ondaatje in the book *English Patient*. Progress is occurring at a pace not dreamt of since intense interest was aroused by the pioneering images of the human heart published around 1983 (1–13*). The evidence for this is abundant, including the tremendous success of the Society for Cardiovascular Magnetic Resonance (SCMR) in raising the profile of CMR among clinicians. This has culminated recently with the formation of a new CMR working group of the European Society of Cardiology and SCMR representation on the Subspecialities Committee on the American College of Cardiology alongside the American Society of Nuclear Cardiology and the American Society of Echocardiography. The decision by four major equipment manufacturers to design and market dedicated CMR scanners also clearly signals their intent to invest in the field and develop this large new opportunity. Finally, the applications of CMR in the largest field of cardiology, ischemic heart disease, are growing rapidly with volumetric and mass analysis already established and stress and perfusion imaging close to clinical reality. These are major forces at work, but we still have to recognize the enormous amount of work to be done to make CMR a mainstream modality. What can we do all together and as individuals to help build the momentum of this change, nurture the field, and enhance our identity in the wider field of cardiac imaging? These are marketing issues that form the subject of this editorial.

How should we set about marketing CMR? First, can we give CMR an identity of its own in the new millennium for immediate recognition, allowing its name to be associated with important attributes in a brandlike fashion? Second, what is uniquely special about CMR that differentiates it from the other modalities already available and why is it the diagnostic procedure of the future? Third, how do we create the best promotional strategy to create a demand? Fourth, how do we package CMR most attractively to show it at its best?

First, we need to consider the subject of branding. Branding is concerned with identification, recognition, characterization, and association. The most famous examples of brands occur with items where the brand name has evolved into a household word. In the United Kingdom, this has occurred with Hoover and Sellotape, where the meaning of these brand names has become synonymous with any generic vacuum cleaner and transparent sticky tape, respectively. Other brands are famous elsewhere; for example, Windows, McDonalds, and Harley-Davidson are easily associated with computer operating systems, hamburgers, and motorcycles. Brand names can have tremendous value as was graphically demonstrated in July 1998 when Volkswagen bought the manufacturing facilities of Rolls Royce for £479M but the actual right to use the name of Rolls Royce was sold to BMW for £40M. Consider how odd it would be to see a world-famous car modeled like a Rolls Royce but not bearing the brand name, and likewise how odd it would be to see a BMW model with the Rolls Royce name and the Spirit of Ecstasy silver statue on the front.

Generally, brand names are important because they add value to a product and allow a general public to iden-

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* These references were found using a MEDLINE search up to 1983 (searching for “magnetic resonance imaging” and “heart”) and reflect the activity of the pioneers of cardiac magnetic resonance imaging in humans, many of whom are now well known and members of the Society of Cardiovascular Magnetic Resonance. This illustrative list may not be exhaustive, and it should be noted that spectroscopy in animal hearts was reported earlier.
tify and distinguish it from similar products. The brand name can be used in advertising to characterize the product’s function and add associations with laudable attributes that purchasers consider desirable. Here then is an area where we can truly help ourselves, each and every enthusiast of this new field of cardiovascular magnetic resonance. Let us all use the same description of “CMR” when we write articles, when we discuss machine purchase with manufacturers or administrators, when we start local or national working groups, and when we communicate in any way about this field and thus give ourselves a brand. CMR has many attributes in that it is short and simple and identifiable different from MRI (magnetic resonance imaging) and NMR (nuclear magnetic resonance), neither of which are suitable because MRI excludes spectroscopy and NMR carries the stigma of “nuclear” with which the general public has never been at ease. It is important to note that CMR includes the relevant areas of MRI, MRA (magnetic resonance angiography), and MRS (magnetic resonance spectroscopy) that in addition to its outstanding research is now starting to yield results directly applicable to clinical cardiology (14). CMR also has important advantages in the wider world because it is a new term. It signals that evolution and advancement of MRI is occurring, that dedicated scanners should be targeted for this field, and that there is a clear demarcation between the general and the specific, allowing a real focus on the particular needs of this emerging speciality. As a new term, CMR is also not prejudicial or pejorative. CMR is, and should stay, a plural discipline practiced by cardiologists, radiologists, and scientists.

Second, what is the most unique feature of CMR? The answer to my mind is versatility. Clearly, CMR is a fully three-dimensional technique, has no problems with ionizing radiation or limited acoustic windows, there is high resolution with freely definable imaging planes, and all this with metabolic/tissue characterization. But just how special are these individually when compared with the totality of other cardiac imaging techniques? Echocardiography is free of x-rays and has multiplane imaging, whereas computed tomography has excellent resolution, and positron emission tomography is used to probe metabolic pathways. So it is not the fact that CMR has any one of several attributes, it is the fact that it has the best fusion of many features that makes it special. This is why we can realistically conceive of a comprehensive CMR evaluation of angiography, perfusion, viability, contractility, and metabolism unlike other techniques. There are few limitations that our scientists and industrial colleagues believe are ultimately beyond their wit, and the problem lies only in realizing in actuality what we can readily envision from what is known to be feasible. This reminds me of the now famous Audi advertising catch phrase widely quoted in the United Kingdom: “Vorsprung durch Technik” (advantage through technology). The dazzling advances in technology in CMR over the last few years have already allowed a catching up with much longer established modalities, and these are continuing apace. This is one reason why the future lies with CMR.

Third, what is our best promotional strategy? Here, we need to know our market. Who will want their patients referred for CMR? There is little argument that this will be the cardiologist. Referrals will come from other sources, but this will always be in the minority. Therefore, we must target our promotion at cardiologists to create the demand for CMR. This requires education to ensure that when a cardiologist is faced with a decision of how best to investigate his or her patient, the value of CMR comes freely to mind. The field needs to be presented in its best light at major cardiology meetings such as the American College of Cardiology, American Heart Association, and European Society of Cardiology. This should be presented both in the scientific content of the main sessions and with promotional symposia organized at minimum cost to delegates at a time convenient for their attendance. For some time now, CMR has promoted itself like a cathedral choir practicing with the singing of beautiful hymns and descants before the altar but with few parishioners in the pews. Now is the time to throw open the church doors and invite others in to enjoy the music. Improved demand leads to expansion in research at meetings, faster scientific advancement, increased contrast agent and machine sales, and the chance to perform sizable multicenter clinical studies with patient outcome data to further our cause in the wider scientific community. In today’s healthcare environment, it is not enough to perform a study of sensitivity and specificity in selected patients with a sample size of around 20, we must think more like heart failure or thrombolysis aficionados who rarely study less than 1000 patients and create the outcome data to establish if the parameter under investigation actually creates clinical benefit. This is the only way to influence the wider decision-makers in health care that CMR is a credible alternative to other techniques.

Finally, how do we package CMR? As attractively as possible is the obvious reply. However, there are a number of areas where this packaging occurs in practice once we consider both the patient and the cardiologist. Patient considerations should come first, because we will rely on public support if CMR is to grow into mainstream prac-
tice. The first area to package is the totality of the patient’s experience of CMR. It must never be "never again" if we are to compete for patient loyalty with echocardiography or single-photon emission computed tomography. CMR units need to create clean, well-lit, and clinically impressive environments that inspire patient confidence and reduce patient anxiety regarding the confines of the magnet bore. Feet-first scanning seems like an attractive option, because patients may become anxious on passing through the scanner bore, even if their head exits on the far side. With the head closer to the technologist, there is a reduced sense of isolation for the patient, and conversation within the scanning room is no longer from a distance. Suitable mirrors allow patients to see the activity behind them, not a blank wall, or alternatively magnetic resonance-compatible video playback apparatus should be considered, which is commercially available. Long experience shows the success of other simple strategies in helping patient worries, including asking the patient beforehand if they are concerned and allowing them to visit before their scan and on the day asking them to attend with a friend either on public transport or with the friend driving so that small doses of benzodiazepine for anxiolysis can be used if necessary. This is highly effective and has the added amnesic benefit well known to practitioners of transeosophageal echocardiography. The manufacturers of CMR scanners are starting to help with appealing scanner shells in more soothing colors, flared ends, and shorter bore designs. Open magnet technology that works with the demands of CMR would be very valuable but seems some way off. Noise reduction technology, especially for the faster imaging sequences, would certainly be welcome and especially so for the patients attending for vasodilator perfusion studies for whom a preexisting headache resulting from the necessary caffeine withdrawal seems ubiquitous.

For the cardiologist, packaging serves both to flatter and to aid. We have seen the inexorable evolution of dedicated cardiovascular ultrasound machines, and this has also occurred with nuclear cardiology. There seems every reason to encourage the same with CMR. I have said in lighter moments in the marketing debate, "To get started, why not call it a cardiology scanner and paint an ECG trace on the side." The point is to make the cardiologist feel comfortable in, what to some is, an unfamiliar environment and to tailor it to his or her needs. This involves the first rule of marketing, which is to listen to customer wants. The echocardiography companies have certainly learned that lesson, and our CMR industry needs to do the same. The packaging also needs to aid the cardiologist. Robust, simple, and safe cardiac monitoring is not an option but a necessity for stress testing or for when patients with acute coronary syndromes or arrhythmias are to be managed safely in the scanner. Large wall-mounted displays of vital parameters would be helpful, as we have with monitors in the catheter laboratory. Resuscitation equipment needs to have careful thought for magnetic compatibility, as does the ability to move the patient quickly away from the scanner if necessary. Detachable scanning tables may be a good idea for this. The entire design of the CMR suite could be designed with the cardiologist in mind, so that the overall package answers these basic questions before the questions begin or problems occur. Starting with a well-thought-out safety design solution, it would then be possible to modify it on reasoned request.

Thus, as I have discussed in this editorial, branding and promotion is an important way to grow our field, and SCMR rightly considers this an important component of its overall strategy. Emphasizing the versatility of CMR among its many strengths and focusing on the needs of cardiology are important areas. Defining the important benefits of CMR for patients, cardiologists, and payers is critical, and we need to learn from other fields as to how this can best be achieved. In addition, we need to address issues that might hinder CMR in realizing its full potential in the coming years. Finally, as individuals around the world, we may believe that such weighty issues are beyond our direct personal influence, but I believe that it is possible for us all to contribute to the success of CMR in a small way by branding the field with a new name. For CMR, I believe the name has a future and the future is in no small part in the name.

Dudley Pennell, MD, FRCP, FACC, FESC

REFERENCES


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