such provision exists, the purchaser will have an obligation to provide organs and a powerful motive for discharging the obligation. This affords the would be vendor a degree of bargaining power over the price he or she can demand for his or her organ. There is an analogy here with the NHS purchasing drugs and other equipment in the current system: in the United Kingdom, even before the growth of private health care, the position of the NHS as the lone major purchaser of pharmaceuticals did not afford it the power to dictate the prices of the drugs it purchased.

It seems only right that people who contribute to the scheme and run the risks entailed in organ supply, however small these risks may be, should also be in a position to benefit from the scheme if they one day require an organ—justice demands no less. People who sell their organs and tissues into the marketplace should perhaps be afforded greater priority in the allocation of organs if they become patients in need of organs than people who do not, and the responsibility for ensuring priority allocation should lie with the system.

Since there is no direct purchasing rich people cannot prey upon poor people in our scheme; all stand an equal chance of benefiting. One way of preventing rich nations preying on poor ones would be to confine the marketplace, perhaps to a particular nation state, but just as reasonably to a regional bloc of states. We could thus imagine various marketplaces facilitating commerce in live organs and tissues while restricting such commerce to a nation state or grouping of states such as the European Union.

Confining the marketplace also overcomes the problem of organ vendors or their families not being eligible as organ recipients because they do not reside in the catchment area of a health service managed by the relevant monopsonist. In our scheme those who sell into the market have an equal chance of benefiting from the increase in available organs that is the sole justification for the market. Allowing payment to living persons for organs could lead society to view poor people as having capital and consequently being ineligible for welfare payments.[4] The legislation that introduced a monopsonistic market would have to rule this out as effectively coercing poor people into donation. Nothing we have said rules out altruistic donation as a mode of organ procurement alongside a commercial scheme—we would not wish to discourage donation.

The situation changes only when the individual avails him- or herself of the option to sell his or her organs. Depending on the price he or she has been paid for the organ, he or she might then be liable to a loss of welfare benefits and also to tax. While we note this as a possibility, our suggestion at both a practical and an ethical level would be to exempt the profits from organ and tissue sale from tax and also from benefit reduction—an added incentive to sell and a recognition of the residual altruism involved. It should be recognised that when a person sells an organ he or she acts both selfishly, in advantaging him- or herself, and altruistically, in contributing to a public good.

John Harris *Sir David Alliance professor of bioethics*
john.m.harris@man.ac.uk

Charles Erin *senior lecturer in applied philosophy*
Institute of Medicine, Law and Bioethics, School of Law, University of Manchester, Manchester M13 9PL
charles.erin@man.ac.uk

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Magnetic resonance imaging of the knee

Is accurate and helps in making therapeutic decisions

Magnetic resonance imaging has had an enormous impact on musculoskeletal imaging and in this area the knee is the most frequently imaged joint. The steadily increasing availability of magnetic resonance imaging is moving the investigation from the realms of the last resort of the hospital specialist to part of the diagnostic evaluation by the general practitioner.

Magnetic resonance imaging of the knee is most commonly indicated in patients with suspected injuries of the menisci and cruciate ligaments. Plain radiographs have little value unless there has been an injury due to direct impact. In teaching centres where dedicated musculoskeletal radiologists report on images, diagnostic accuracy of 90% can be achieved for damage to the medial meniscus and anterior cruciate ligaments, slightly less for the lateral meniscus and slightly more for the posterior cruciate ligament.[1–6]

The contribution that this level of accuracy can make to therapeutic decisions has been shown in several studies. MacKenzie et al studied orthopaedic diagnoses before and after magnetic resonance imaging in 332 patients.[7] Clinicians were asked to indicate their clinical diagnosis, level of confidence, and the proposal for management before imaging. In meniscal tears, 57 of 113 pre-imaging diagnoses were no longer considered after imaging, resulting in a change in management in 62% of patients. For confirmed diagnoses, confidence in the diagnosis improved significantly. The proportion of patients for whom arthroscopy was being considered changed considerably, with only 38% proceeding to arthroscopy after imaging.

Carmichael and Warwick have reported similar results in smaller studies.[8 9] Weinstabl et al randomised patients with positive clinical tests for meniscal tears into two groups.[10] In one group all patients underwent preliminary magnetic resonance imaging, which determined the need for arthroscopy. In this group only 2% of the patients who subsequently underwent arthroscopy had findings of importance at surgery. Patients in

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the second group were managed on the basis of their clinical findings alone. Of patients who had arthroscopy on the basis of positive clinical tests 30% were found to have no finding of importance. These findings confirm that magnetic resonance imaging is indicated even if clinical signs point to an important internal derangement.

Preliminary data from a multicentre trial in the Netherlands also show that management is changed in patients with persistent knee pain in whom clinical findings are minimal and important disease is not expected.[11] Even in the acutely locked knee, a condition where early arthroscopy has been the norm, preliminary magnetic resonance imaging can reduce the need for arthroscopy in the acute period by 45% (unpublished personal observation).

Magnetic resonance imaging of the knee may also be considered in patients with persistent pain, especially at night; a mass lesion; an acutely swollen joint; and osteoarthritis. In patients with nocturnal pain, a tumour needs to be considered. Plain radiography remains the mainstay in the diagnosis of bone tumours, followed by magnetic resonance imaging for staging if a lesion is detected.[12] If plain films are negative and symptoms persist, magnetic resonance imaging is a more sensitive investigation. Isotope bone scans are also a sensitive way of detecting tumours but do not provide the same anatomical detail as magnetic resonance imaging and carry a noteworthy load of radiation.

Similarly magnetic resonance imaging is more sensitive than plain films in detecting stress fractures, particularly in the early stages, and should replace isotope bone scans.[13] In patients suspected of having soft tissue masses ultrasonography is recommended as an initial screening test, followed by magnetic resonance imaging should a mass be found.

Magnetic resonance imaging, however, usually has a limited role in patients in whom plain *x* rays show evidence of osteoarthritis. The extent of anatomical damage does not correlate with symptoms, which are the primary determinants in the timing of arthroplasty. An exception is when a unicompartmental (that is medial compartment) rather than a total knee replacement is proposed. Here magnetic resonance imaging can confirm that the other compartments are normal.

In inflammatory synovitis, magnetic resonance imaging can confirm the extent of involvement; distinguish between effusion and synovitis, particularly when intravascular enhancement agents are used; and determine synovial bulk where surgical synovectomy is being considered. It is less common for magnetic resonance imaging to yield a specific diagnosis, though on occasion entities such as pigmented villonodular synovitis can be diagnosed owing to their specific characteristics on imaging.[14] Septic arthritis is usually associated with marked inflammatory reaction in the underlying bone, and a synovial biopsy is recommended to confirm it. Subsequent magnetic resonance imaging is needed to exclude osteomyelitis.

Eugene G McNally *consultant musculoskeletal radiologist*

Nuffield Orthopaedic Centre, Oxford OX3 7LE
(eugene.mcnally@radiology.ox.ac.uk)

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Chest pain units

Evidence of their usefulness is limited but encouraging

Patients presenting to hospital with chest pain represent a substantial burden to the NHS. About 500 000 patients attend emergency departments in the United Kingdom each year with chest pain,[1 2] and 20-30% of all medical admissions are for acute chest pain.[3] Currently most clinicians working in emergency departments rely on the history, clinical examination, and electrocardiogram (ECG) to decide which patients have acute coronary syndromes and need admission and which to send home. Given the unreliability of these tools alone to either rule in or rule out the diagnosis of acute myocardial infarction[4] and unstable angina, it is not surprising that 2-4% of patients with acute myocardial infarction have been sent home from American emergency departments with a high case fatality rate and medicolegal costs.[5 6] The position in the United Kingdom is uncertain, but a recent study identified that 6% of patients who were discharged from an emergency department had prognostically significant myocardial damage.[7] Equally, of those patients admitted for further investigation of their chest pain, fewer than half will have acute coronary syndromes.[8] The possible inappropriate admission of the majority of these

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