

DCD protocols for Beaumont

AILBHE JORDAN

Beaumont Hospital has introduced Ireland's first national protocol on organ donations after cardiac death, the **Medical Independent (MI)** has learned.

Donation after cardiac death (DCD), where the organ comes from a deceased patient whose heart has stopped, was widely abandoned after 1968. However, the last two decades have seen the reintroduction of DCD as an important source of donor organs, as improved road safety has reduced the number of brain death donors from RTAs. The first cardiac death donation in this country took place last year.

Donations after cardiac death protocols have been introduced in 11 European countries. In the UK, cardiac death donations account for 38 per cent of all donations, and in the

Netherlands, more than half of deceased organ donations are DCDs.

Dr James O'Rourke, Consultant in Anaesthesia and Intensive Care Medicine in Beaumont Hospital, has been instrumental in establishing and implementing Beaumont's DCD protocol over the last three years. He believes that DCD could complement and boost overall deceased donation rates by at least 10 per cent in Beaumont.

"In Beaumont we would certainly hope to maybe get 10 per cent of our donors from cardiac death and, in time, repeat that on a national basis," Dr O'Rourke told **MI**.

The protocols were endorsed earlier this year by the Intensive Care Society of Ireland and have the support of the Medical Council. Dr O'Rourke said the next step is to implement the protocols on a nationwide basis.

ED study finds high elderly fracture risk

AILBHE JORDAN

Two-thirds of older patients admitted through hospital emergency departments (EDs) are at a high risk of developing fracture, a recent study has found.

A group of 46 patients presenting at the ED of a university teaching hospital in Cork under four general consultant physicians during October 2011 were asked to fill out a questionnaire.

Their height and weight measurements were taken and the 10-year probability of major osteoporotic fracture was calculated using the FRAX tool without a bone density scan (BDS). The mean age was 67.2 years and 28 per cent of respondents were female.

The results found that 66 per cent had at least one risk factor for osteoporosis or fracture. A potential 19 per cent of untreated patients required osteoporosis/risk fracture prevention treatment.

Implementation of FRAX and the National Osteoporosis



Dr Mortimer O'Connor

Guideline Group (NOGG) guidelines advised offering treatment to two patients, DEXA imaging to four patients and osteoporosis/fracture risk lifestyle advice to 26, without the need for a BDS.

"A large proportion of patients admitted through the ED are at high fracture risk and potentially require treatment for same," concluded lead author Dr Mortimer O'Connor, at the Department of Rheumatology, South Infirmary Victoria University Hospital, Cork.

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The report said that it is difficult to assess whether value for money was achieved given that no other bids existed, but concluded that the final cost of the report was below that cited in the Terms of Engagement.

The report said that for goods and services in excess

of €50,000, a formal tendering process involving at least three quotations, is required. However, given the media attention, political pressure and patient safety risk, it was felt that the hospital had not a moment to "waste in terms of a long drawn out procurement exercise".

Generic drugs fall into short supply at Mullingar hospital

JAMES FOGARTY

The Midlands Regional Hospital Mullingar has been forced to use more expensive branded medications as a result of a serious shortage of generic drugs.

The situation was brought to the attention of the hospital's governance committee at a meeting on 26 July. According to the minutes of the meeting, the committee

was concerned at the development.

Ms Joanne Moran, Acting Chief Pharmacist at the hospital, told the meeting that "generic drugs are going into short supply as they cannot meet demand and licensing". She added that the development would be an issue for the wards as it would necessitate a change in products.

She also highlighted that the pharmacy department would have to revert to more expen-

sive drugs if necessary. She agreed that cost savings could still be achieved in this area but that the savings would not be in the region initially hoped for.

A spokesperson for Dublin Mid Leinster told the **Medical Independent (MI)** that the hospital is working with colleagues in the pharmacy department to ensure a comprehensive, consistent supply of medication to patients.

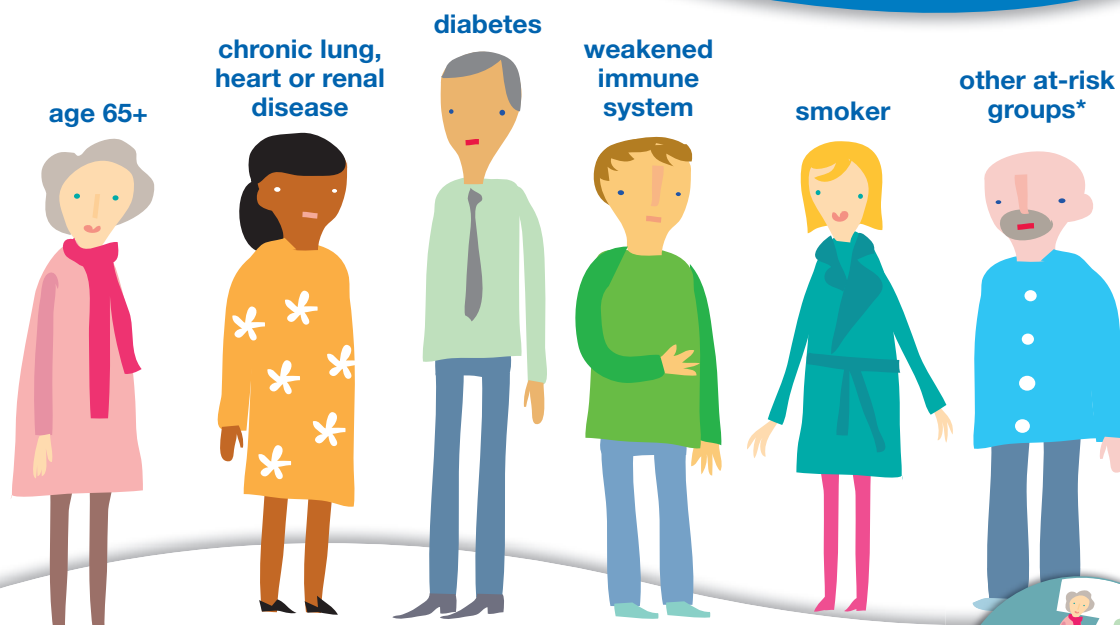
"Shortages arise from time

to time but these are managed at a local level by using an alternative supplier where appropriate, or further discussion with the clinician treating the patient," the spokesperson said.

She added that shortages are arising with many medications across the board, not just generics.

"Any issues with regard to supply and licensing is a matter for the Irish Medicines Board," she said.

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Information about adverse event reporting can be found at www.imb.ie. Adverse events and inadvertent vaccination during pregnancy should also be reported to Sanofi Pasteur MSD by calling 00 44 1628 785291.

* See Immunisation Guidelines for Ireland www.immunisation.ie

08/12 IR00150



Ailbhe Jordan

The heart of the matter

The number of organ transplants in Ireland is low compared to many of our European counterparts. It is not a lack of donors, but the need for a coordinated approach that is the problem, **Ailbhe Jordan** reports

Demand for organs has ballooned across Europe in the last decade. Last year, for example, the number of hearts which became available equated to less than half the number of people on the heart transplant waiting list.

Close to 62,000 patients in the EU are on a waiting list for an organ transplant. Approximately two-thirds of these patients are awaiting a kidney transplant.

Approximately 5,500 people died while waiting for an organ last year, which equates to more than 10 people each day. Many more did not survive long enough to be placed on a waiting list.

The European Commission has used every available opportunity this year to highlight this worrying issue.

Cyprus, which currently holds the EU presidency, is using its six-month term to highlight the need for coordinated actions in the field of organ donation and transplantations.

A 2010 EU Directive required all member states to pass legislation regulating donation, procurement, testing, characterisation, transport and transplantation of organs. It set out a "clear legal framework for the application of quality and safety standards for human organs intended for transplantation". The legislation was seen as a vehicle for EU states to implement a detailed 10-point action plan to improve donation and transplantation rates that the European Commission published in 2008.

Days before European Transplant Day last month, the Commission announced a new EU directive to implement a common framework to improve communication around the transfer of organs between member states, and to increase the availability of organs for patients.

As Europe pulls out all the stops to encourage more organ donation and transplantation, Ireland continues to perform disappointingly amongst other EU states, as our rates fluctuate significantly from year to year.

Leading clinicians in transplant and intensive care have identified a lack of dedicated medical personnel as a major stumbling block, while patient advocacy groups, desperate to make progress, are full of ideas and initiatives to boost donation rates. However, in the current economic climate, do we have the resources or the political will to address these issues?

Cardiac donation

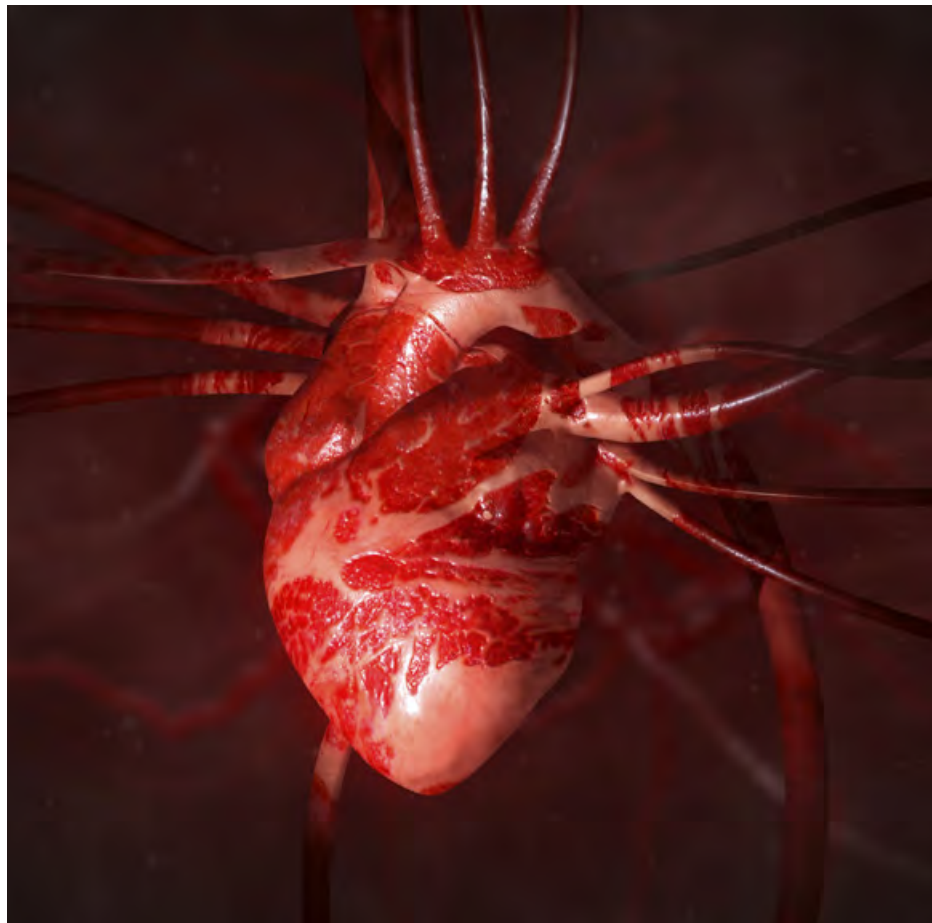
European Transplant Day 2012 brought with it some good news for Ireland as the latest statistics confirmed that the first donation after cardiac death (DCD) took place in this country last year.

Cardiac death donation, where the organ comes from a deceased patient whose heart has stopped, was widely abandoned after 1968, when a Harvard ad hoc committee introduced the first brain stem death criteria. However, the last two decades have seen the reintroduction of DCD as an important source of donor organs, particularly since road safety has improved globally, reducing the number of brain death donors from road traffic accidents.

Donations after cardiac death protocols are employed in 11 European countries. In the UK, cardiac death donations account for 38 per cent of total donations. In the Netherlands more than half of deceased organ donations are cardiac death donations.

Protocols have been introduced in many countries regulating DCD donation and the *Medical Independent (MI)* has learned that Beaumont Hospital this year introduced Ireland's first national protocol on cardiac death donations.

Dr James O'Rourke, Consultant in Anaesthesia and Intensive Care Medicine in Beaumont Hospital, has been instrumental in establishing and implementing Beaumont's DCD protocol over the last three years. He believes that DCD could compliment and boost overall deceased donation rates by at least 10 per cent in Beaumont.



"In Beaumont certainly we would hope to maybe get 10 per cent of our donors from cardiac death and in time, repeat that on a national basis," Dr O'Rourke told *MI*.

The protocols were endorsed earlier this year by the Intensive Care Society of Ireland and have the support of the Medical Council. Dr O'Rourke said the next step is to implement the protocols on a nationwide basis and, ultimately, to publish national standards on cardiac death donation within the existing standards on intensive care.

Ireland

Last year was a good year for deceased donation and transplantation in Ireland, which is in 9th position amongst EU countries.

In terms of kidney transplantations, Ireland lies in 12th position in Europe. The previous year saw the highest number of kidney transplants from deceased donors (165) and living donors (27) in Irish history. This came as welcome news after 2010 saw the greatest decline in organ do-

nation in Ireland on record, with just 58 deceased donors and 23 living kidney donors.

Ireland also ranks 12th in Europe for liver transplantation rates, with 61 transplants carried out last year.

But while Ireland's overall position is above average, it still compares poorly with top ranked countries such as Croatia, Spain and Belgium. For example, the number of kidney transplants from deceased donors last year in Croatia was 51.8 per million population (pmp) compared to 36.7 pmp in Ireland. Ireland's rate of liver transplantation, at 13.6 pmp, was less than half that of Croatia at 28.2 pmp.

MI has learned that the National Heart Lung Transplant Programme, based in the Mater Hospital, has carried out 10 heart and 12 lung transplants to date this year, the highest number ever recorded.

However, Ireland's low rates of heart and lung transplants continue to be a cause for concern. Just six heart transplantations were carried out in this

country last year, leaving Ireland ranked 24th out of 31 EU countries. Ireland was also ranked 24th for lung transplantation, with just eight operations carried out. This country has fallen to 12th place for pancreas transplantation in 2011, compared with a high of 4th place in 2008.

Ireland's low rates of donation and transplantation in 2010 expedited the establishment of a National Organ Donation and Transplantation Office in the HSE. Prof Jim Egan, Consultant Respiratory Physician with the National Heart and Lung Transplant Unit in the Mater Hospital, was appointed clinical lead of the programme in April 2011.

The goals of the office were manifold, but first and foremost it focused on legislating for and implementing the 2010 EU Directive and progressing the 2008 EU 10-point action plan for organ donation.

Prof Egan quickly set about establishing a group in infrastructure, appointing a national transplant advisory group of relevant experts in renal, liver, lung and heart transplanta-

tion, to "inform the strategy for the office from an organisational perspective".

The establishment of this office is seen as an important step forward and the first of a number of key areas which need to be addressed in order to improve organ donation and transplantation rates in this country.

Recruitment

Chief among these, Prof Egan believes, is the recruitment of highly-trained, specialist transplant and intensive care medical and nursing staff.

"Deploying the 10-point action plan fundamentally involves allocating key donation personnel across the health service," he told *MI*.

"We're talking about intensive care specialists with an interest in organ donation – medical and nursing personnel. As such they don't exist in Ireland versus say Australia or the UK or Croatia, so we are in the process of trying to navigate that through the system. This is unequivocally the most important step that will help to address to some extent the weak rates of lung and heart transplant activity."

Mr Mark Murphy, Chief Executive of the Irish Kidney Association (IKA), also believes that employing more specialist personnel in intensive care units would maximise proper management of potential organ donors so that "all the organs would be retrieved".

He is deeply concerned about Ireland's poor heart transplant rates.

"Our heart transplant rates are dismal and it requires investigation into why we're not transplanting more hearts. Countries the same size as us are carrying out three-times as many heart transplants as we are. Indeed we have had years where hearts were exported to the UK because we couldn't use them on the day. There's something amiss there."

A spokesperson for the Mater Hospital confirmed to *MI* that there are 3.8 WTE transplant surgeons currently working in the National Heart and Lung Transplant Programme.

97:

Percentage of ED trainees who said they intend to go abroad after training, leave early next year or change specialty in Ireland

€163m:

Projected HSE deficit at the end of 2012, in spite of radical cost-cutting measures announced in August

400:

Percentage increase in the number of women visiting the Galway rape crisis centre over the last seven years

€10,000:

The minimum amount of overtime earned by each of 8,718 HSE staff last year in addition to their basic salaries

“Organ transplantation is a function of many factors including availability, suitability and resources,” the spokesperson said.

“The rate of heart transplantation is decreasing across the Western World due to lower numbers of suitable donors (reduction in fatal car crashes especially involving young males), improved drugs and mechanical heart devices. The number on the Mater’s heart transplant list is now only seven, however all have the same blood type so hearts donated that have other blood types will be offered to the UK where there is also a number of Irish patients on the Irish national transplant programme list where they will be treated by the Freeman Hospital. If such hearts are not suited to Irish patients, then they will be offered to UK nationals.”

Kidney donation

The deceased and live kidney donor programme is administered in Beaumont Hospital, the nation’s largest organ transplant centre. Beaumont also coordinates the National Organ Procurement Service. Last year was a record one for kidney donations and transplantations. Indeed, such is the supply that the hospital announced a three-year plan aimed at increasing live kidney donation rates to 100 per year earlier this year. However, the centre’s facilities are straining to cope with the demand. In January 2010, this led to an unfortunate situation where two viable kidneys and a pancreas had to be sent to the UK because there were no facilities available for patients to recuperate after the operation. Prof Egan says that supporting Beaumont is a priority for his office.

“The third goal of our office is to support the organ procurement group in Beaumont hospital because they have a huge job and so they tend to multitask. We are currently in the process of trying to enhance their infrastructure,” Prof Egan said.

“We are awash with people wanting to donate through their family. The problem is that Beaumont can’t manage them,” according to Mr Murphy.

“Beaumont has a plan now to bring living transplantations to 100 per annum but they haven’t got the wherewithal to do it. They don’t have the infrastructure to add that many transplants to their pool.”

He believes that centralising all transplant services into a single location like Beaumont could be an effective model for a country of Ireland’s size.

“Norway is a similar size country and they do all their transplants – hearts, lungs etc – in the one hospital so that the organs are all going in one direction,” he said.

“That would be a super model but there is too much politics in Ireland for us to ever consider merging the Mater, Vincent’s and Beaumont ideologies together. It would be easier to solve the dispute in Palestine.”

The importance of developing networks of trained, professional transplant coordinators and support teams in intensive care units to approach families of potential donors is acknowledged at EU level.

Speaking ahead of European Transplant Day last month in Brussels, European Commission policy officer Helene Le Bourgne said “transplant coordinators are the key element to improve organ donation”.

Spain has pioneered the role of the professionally trained transplant coordinator and in the process, has seen its donor rate jump from 14 donors pmp 10 years ago to 35 pmp last year, the highest number of deceased donors in the EU.

Interestingly, the percentage of families who decline organ donation has not changed during that time, nor is it significantly different than in countries with lower donor rates such as the UK.

“There has not been an epidemic, we have not changed the mindset of the Spanish,” explained Rafael Matesanz, Director and founder of the Spanish National Transplant Authority, speaking in Brussels last month.

“We went from 500 donors in 1999 to 1,600 in 2006, but the percentage of people who say, ‘yes I want to donate organs’ has remained the same during the last 20 years. The perception of the Spanish population towards organ donation has not changed. What has really improved over the last few years has been the presence of transplant coordinators who can really detect every potential organ donor and approach the family in the right way in order to get the approval.”

A UK study presented at the International Conference on Emergency Medicine in Dublin last June found that a dedicated bereavement and

donor support team significantly increases the number and range of tissue and organ donations. In one UK hospital, between 2004 and 2009, prior to the team’s introduction, there were 41 eye donors and six full tissue donors. The two years following the team’s introduction in the hospital ED saw rates increase to 80 eye donors, two multi-organ donors, three tissue donors, three brain donors and one breast milk donation, the researchers found.

In 2009, an IMO submission to the Department of Health and Children on Consent for Organ Donation after Death for Transplantation found that there were just three dedicated transplant coordinators in Ireland. The submission recommended that the number should be increased and their role should be expanded to allow access to the electronic register to determine if the prospective donor is suitable or not.

Ireland’s lack of trained, dedicated transplant coordinators is “the piece that everyone knows lets down the system”, according to Mr Murphy.

“They have a university qualification in Barcelona now for these people. It’s very sophisticated and it works. It is somebody’s job to help families, not what we would have, which is a voluntary role within the intensive care unit. These are very busy places and you’ll volunteer to do this if you have the time. Spain’s refusal rate is about 15 per cent, and so is ours, but the point is that they spot the opportunity for organ donation much more than Ireland does. And they have the donor coordinator asking twice if not three-times as many people about potential donors.”

Legislation

The 2010 EU Directive was put into Irish law on 25 August. However, Fianna Fail Senator Mark Daly argued that the legislation was introduced without adequate consultation and debate and exercised a 1972 EU communities act requesting that the Cathaoirleach of the Seanad bring in the Health Minister to debate the issue further.

“This is important. This is the first piece of legislation to do with organ transplantation in the history of the State,” Senator Daly told *MI*.

“And here it is without a debate in the Seanad or the Dail. I wrote to the Minister looking for it to be debated at the

Health Committee and it never got to be debated, because there was no draft available. You can’t suggest changes without a draft. The draft only became available with a matter of weeks to go, but it was during the summer recess when you can’t get everybody in the room to discuss it.”

The IKA too expressed its disappointment that the legislation represented a missed opportunity to become a vehicle for the 10-point action plan as it has in other EU countries, leading to financial savings and improved donation rates.

‘There is too much politics in Ireland for us to even consider merging the Mater, Vincent’s and Beaumont ideologies together’

“Only the bare requirements of the EU Directive were introduced in this legislation. The more important 10-point action plan published in 2008 by the EU commission was largely ignored,” the Association said.

Prof Egan believes that implementing the action plan properly “will require some resources but it will undoubtedly be cost effective”.

The second EU directive announced last month covers procedures for member states with organ transfer agreements to inform each other of organ characteristics so that the suitability of an organ can be quickly assessed. It is hoped that the directive will have a positive impact on patients in need of a lung or heart transplant as not all member states have centres for lung and heart transplantation. Mr Murphy believes that this directive, if properly implemented, could improve the two-way transfer of hearts and lungs between Ireland, the North and the rest of the UK.

“An organ in the north will go to Scotland, it won’t come south,” he said.

“Livers go both ways. The liver unit has a super urgent list and we’re part of it, so if

there’s a matching organ elsewhere in the UK, we will get it. We can use all of our kidneys, although we did have a situation a couple of years ago where two kidneys had to be sent to the UK, but none come back. There is no way a kidney from the UK will come to Ireland because they can use all they have, and they have 22 transplant centres. A lot of hearts and lungs go from Ireland to the UK and none come back, although Newcastle hospital will transplant some of our people with lungs.”

It would also formalise the transfer system, which sees Irish children who need organ transplants accommodated in the UK. The system works well, but is unregulated, according to Mr Murphy.

“We don’t have any liver, heart or lung transplant programmes for children because it’s so rare,” he said.

“It makes perfect sense that our children go to centres of excellence in the UK and that does happen. It happens because some of the organs that we can’t use go to the UK and we get them back, if you like, in paediatric transplants. That arrangement probably has to be more regulated now because of the EU directive, but it was always good practice the way it was done.”

Opt out

Fine Gael has pledged to introduce opt-out legislation for organ donation, where the law assumes every individual is a donor unless they have explicitly expressed that they do not wish to be one. The legislation aims to boost donation rates.

However, the significance of such legislation, which is in place in countries with high donation rates such as Spain, Belgium and France, is overstated according to Stefaan Van der Spiegel of the European Commission’s Substances of Human Origin Directorate.

“In practice it doesn’t make that much difference because with any potential donor, there will always be dialogue with the family and the wish the family has is always respected, even if it would have been a presumed consent already,” he said in Brussels last month.

“We need to stop thinking about legislation for organ donation, it doesn’t help,” Mr Murphy said.

“Tracking changing clinical practice inside intensive care units; that’s what changes it,” he added.

Mr Murphy, who has spent

many years campaigning for the establishment of a national transplant authority in Ireland similar to that in Spain, does not feel confident that the HSE’s National Organ Donation and Transplantation Office, which works together with the Irish Medicines Board, has the capacity to act as a competent authority on organ donation.

“We have no singular competent authority on organ donation and transplantation; the job is divided amongst two organisations. I just think it’s a recipe for no advancement,” he said.

“One can blame the other happily for the rest of eternity for not doing certain things. There’s no leadership in that.”

He pointed to Spain, saying its Director of the national transplant authority is “an example of an individual with the power of his or her government, being able to drive organ donation and sell the idea”.

Costs

Improving organ donation transplant rates in this country will require significant investment, which our deeply indebted health system simply cannot afford. However, the long-term savings will far outweigh the initial costs, Dr O’Rourke believes.

“In terms of monetary value, to get a kidney transplant becomes cost neutral after one year,” Dr O’Rourke said.

“It costs €75,000 to transplant a kidney and it costs €75,000 to dialyse somebody for a year. After transplantation, you’re looking at between €4,000 and €5,000 a year in immunosuppression drugs and out-patient visits and things like that. In 2003 there were 895 patients on dialysis in Ireland and in 2012 there were 1,795. That is a big change. There are 600 people on the waiting list and we’re transplanting just about 230 organs per year, so there is a huge need. It makes economic sense; not just that, but it improves the quality of life for many patients.”

With all eyes on us when Ireland takes over the EU presidency next January, Prof Egan believes that “in a European context, there’s an expectation that we would match our efforts in transplantation to the other countries. Virtually every other country has taken these actions other than ourselves”.

The question is, can we afford not to address this important issue?

€1.5bn:

The annual cost to Irish business of employees taking sick days

7:

People across Europe who die from TB every hour

41:

per cent of people are unaware of the link between red meat and cancer

30:

Percentage of Irish men and women who received no sexual health education at school