

# Cardiovascular services development in the south of Ireland



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## Introduction

The story of the development of modern cardiac services in the south probably starts with the appointment of Maurice Hickey to Rialto Hospital in Dublin as thoracic surgeon. Maurice returned to Ireland in 1948 from the London Chest Hospital and operated in Rialto, Mallow and Castlereagh on a rotating basis on Tuesdays, Wednesdays and Thursdays, and back to Dublin at the weekend. With the appointment of Des Kneafsey to Galway and Keith Shaw to Dublin, this gave Maurice the opportunity to go south full time.

During the 1950s, he operated in Mallow in the Mallow Chest Hospital and in 1956 he relocated to the new St Stephen's Hospital in Glanmire. In the same year, Raymond Shanahan returned to Cork as registrar in St Finbarr's Hospital, having spent a year as the Ainsworth Scholar in Massachusetts General Hospital in Boston, working under Paul Dudley White. At that time, Sean O'Toole was providing a consulting cardiology service from Dublin. Maurice encouraged Raymond to come to St Stephen's Hospital, where he introduced cardiac catheterisation and, later, pacing.

## Surgical developments

The earliest heart operations performed were closing of patent ductus arteriosus, closed mitral valvotomy and pulmonary valvotomy, (under surface cooling) with excellent results. With the arrival of Des Gaffney as anaesthetist in 1960, they combined considerable animal laboratory work with their clinical work as they moved the frontiers forward. Together they had visited centres in the US, Scandinavia and the UK with the help of World Health Organisation-funded fellowships.

Subsequent developments with profound hypothermia allowed surgery for coarctation of the aorta and septal defects. However, haemolysis with profound bleeding hampered results and developments.

In 1968, Professor Michael Brady was appointed to St Finbarr's Hospital and introduced peripheral vascular surgery from aortic aneurysm repair to peripheral vascular reconstruction. Around the same time, Ted Buckley was appointed as the first neurosurgeon in the south and this allowed a surgical approach to vascular problems within the cranium.

Michael Brady soon saw the need for a team approach and

dispatched Joe O'Donnell to Massachusetts for vascular training. His return in 1978 consolidated further the development of vascular surgery and underlined the importance of teamwork in sub-speciality areas.

## Cardiology developments in Cork and Limerick

In 1978, Noel Cahill was appointed to the South Infirmary/Victoria Hospital as cardiologist and physician and introduced echocardiography to Cork. He had been at the forefront of the development of echocardiography in the United States as Director of the Echocardiographic Laboratory at the University of Chicago. Noel brought his patients to Baggot Street Hospital, Dublin, for diagnostic coronary angiography on a weekly basis. In 1978, the Cork Regional Hospital was opened but without provision for cardiac surgery, and investigations and pacing were carried out in a shared vascular radiology room.

With the unexpected and premature death of Raymond Shanahan in August 1980, service development was hindered. Noel Cahill single-handedly provided a city-wide service for two years until I took up post at the Regional Hospital in July 1982. Coronary angiography was introduced to Cork in October 1982 in the shared vascular room in radiology and 300 cases were performed in the first year. Until 1986, all patients referred for surgery had to be referred to Dublin where Maurice Neligan, Keith Shaw and Eoin O'Malley provided a willing and excellent service. Many telephone consultations were made after 10pm at night directly to their homes to facilitate the surgeon's timetable.

In 1983, Tom Ahern was appointed as cardiothoracic surgeon to the Cork Regional Hospital and, after two years at the University of California in San Francisco, he returned to take up his post in late 1985. This immediately reinvigorated the service development in Cork, with angiograms exceeding 600 per year, and he performed in excess of 200 open-heart procedures, many pacemaker implants and provided the thoracic surgical service for all of Munster on an annual basis, single-handed, until 1996. The results were outstanding from the start, facilitated by his colleagues in anaesthesia, Des Gaffney, John Keogh, Mike Harris, Peter Kenefick and Declan O'Brien.

John Erwin performed the first coronary artery angioplasty in

1986 while in Cork for a locum year. In 1987, John Kenny took up post in the Bon Secours Hospital, bringing the benefit of his outstanding non-invasive skills to the Cork region. Further developments had to wait until 1995, with the appointment of Brendan Meany in Limerick Regional Hospital, which was facilitated by generous support from JP McManus, and until 1996, with the appointment of Aonghus O'Donnell as the second cardiothoracic surgeon and, late in the same year, Peter Kearney as the interventional cardiologist at the Cork University Hospital (CUH; renamed 1994).

In 1996, the Minister for Health, Brian Cowen, launched a task force to advise on the development of cardiac services, which launched its recommendations in 1999 – 'Building Healthier Hearts'. This facilitated the introduction of cardiac rehabilitation in all of the region's hospitals and the appointment of a third cardiologist to CUH. Brendan Gunalingham from Australia and, later, Janet Kirwan, filled the position with distinction on a temporary basis until the arrival of Eugene McFadden in 2005.

### Specialist interests

In 1999, Gerry Fahy was appointed to the South Infirmary/Victoria Hospital and CUH in a joint appointment. This appointment had a specified special interest in cardiac electrophysiology and immediately Gerry proceeded to introduce electrophysiological studies, opening the way for ablation of atrial and ventricular arrhythmias and bypass pathways, and introducing automatic implantable cardiac defibrillators and resynchronisation therapy with biventricular pacing modalities. This has opened new vistas for patients with complex arrhythmias, conduction problems and left ventricular dysfunction, which has added enormously to the quality of life of many patients.

Carl Vaughan was appointed as consultant cardiologist to the Mercy University Hospital and CUH in 2004. Carl's special interest in secondary prevention and genetic conditions in cardiovascular disease have also helped to progress patient care in these areas. This was further consolidated with the arrival of David Kerins as Professor of Therapeutics in 2006. David has an outstanding background in imaging in cardiology, including echocardiography and magnetic resonance imaging.

In 2006 Noel Caplice returned from the Mayo Clinic as Professor of Cardiovascular Science and consultant cardiologist at CUH. This appointment was very much facilitated by local fundraising, money from Science Foundation Ireland and support by University College Cork.

This will provide an excellent basic science facility for the development of new specialised treatments, including stem cell therapy. This will also facilitate the introduction of structured research training for trainees in cardiology and vascular biology, encouraging clinical investigation in these areas.

### Other developments in the south

Other developments in the southern region were the appointments of Terry Hennessy to Limerick Regional Hospitals and Ennis General Hospital in 1998 and the appointment of Conor O'Shea to the Bon Secours Hospital as interventional cardiologist in 2003. Also, in 2006, Niall Colwell took up post in South Tipperary General Hospital in Clonmel, and S Abbas in Nenagh General and Limerick Regional Hospital. The appointment of permanent consultant cardiology positions to Waterford Regional Hospital and Kerry General Hospital is long overdue but will hopefully become a reality in 2007.

The above story shows a remarkable phase of development over a 50-year period, from the opening of St Stephen's Hospital in Glanmire in 1956. However, while much work has been done, the opportunities now are better than ever for managing and preventing cardiovascular disease in the population. So, while much work has been done, there is much more to do and there are even more exciting times ahead, with the planned cardiorenal development at CUH, to facilitate the centralisation of invasive facilities for the whole city and region, scheduled to open in 2009.

### Acknowledgements

While I have focused on the medical personnel in the development of cardiac services in the south of Ireland, it is clearly essential to acknowledge the help from all the other services, including nursing, radiology, cardiac technicians and administration, and the team work involved to bring the services to their present level. A few in particular deserve special mention: Denis O'Sullivan, Eileen Brosnan, Eleanor Mills, Catherine Keane, Martin Hargrove, Mary O'Byrne and Christy Walsh, whose contributions over many decades and difficult circumstances are much appreciated and were instrumental in keeping development on track.

In 2004, as part of Ireland's EU presidency initiative, the Minister for Health and Children, Micheál Martin, brought the European leaders in cardiology to Cork to discuss and advise on the means of standardising data collection across the enlarged EU for cardiac events and interventions to better inform government decision-making. Later in the same year, the Minister brought the Health Ministers from all the EU countries to Cork to copper-fasten the recommendations of the EU cardiology community and signed a memorandum of understanding with US Secretary of State for Health Thompson to facilitate EU-American collaboration in fighting cardiovascular disease. Both of these meetings were made possible by the government's initiative in launching 'Building Healthier Hearts' and Peter Kearney's membership of the Board of the European Society of Cardiology. All in the Irish cardiac community appreciate Peter Kearney's commitment to making the Irish voice heard in Europe. The Minister and Peter have together ensured that Ireland contributes beyond its size to the European effort, and must augur well for the future.