Big demand expected for hi-tech cancer scan service

Nuclear New Zealand!

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Wellington cancer specialists say patients in other regions are likely to seek access to potentially life-saving scans about to be provided in New Zealand for the first time.

They expect the availability of positron emission tomography (PET) scans in Wellington will trigger demands for access to the technology, which can pinpoint some types of tumours even when they are tiny.

Pacific Radiology Ltd said yesterday it will start providing $2000 PET scans at the private Wakefield Hospital in the capital from January 28 to cancer patients, particularly those with lung cancer, melanoma and cancer in the lymphatic system.

To avoid spending $5 million on a cyclotron device to manufacture isotopes needed for the scanner, the company will simply fly in radioactive glucose mixtures from Melbourne.

After threes years of discussions by district health boards (DHBs), the Ministry of Health set up a national committee last year to investigate how the provide the scans.

"Most cancer patients are DHB patients. . .this may stimulate them to find solutions in other regions," said Pacific Radiology managing director Lance Lawler, of Wellington.

He said the process for negotiating with DHBs was convoluted and slow, and because Pacific Radiology had the expertise and the equipment "we're just going to go ahead and do it".

The scans will enable doctors to examine activity in suspected tumours, to locate secondary cancers not visible on other scans and earlier detect recurring cancers.

Only a few cancer patients in some health districts have been funded by DHBs to fly to Australia to have $2000 PET (positron emission tomography) scan in recent years, and Auckland patients have missed out on funding altogether. Growing numbers have been paying their own way across the Tasman to be scanned.

Cancer specialists from throughout the country have unsuccessfully called to have the Ministry of Health buy scanners for three or four hospitals and a $5 million cyclotron to provide radioactive isotopes for them.

Dr Lawler said the company had upgraded an existing scanner at Wakefield to create a combined PET-CT scanner with computed tomography to provide a cross-section of images which will pinpoint tumours.

It had cut capital costs by buying isotopes from a Melbourne company, Cyclotek, for a radioactive glucose mixture used in patients. The isotope has a half-life of only 109 minutes, which means the strength of its emissions halve in less than two hours, and then halve again two hours later.

The rapidly-degrading isotopes have until now been seen as a barrier to transporting them to New Zealand, but Pacific Radiology chairman Trevor Fitzjohn said that Cyclotek had successfully flown isotopes to Western Australia for three years, and Perth was the same distance from Melbourne as Wellington.

Dr Fitzjohn said the system was very wasteful but cost-effective: on a per-dose basis, it would cost about the same as isotope from a cyclotron set up in this country.

"People wanted to fly from scratch with a fully-developed service," he said. "If you can supply the isotope from overseas, we can minimise any delays. It's just basically thinking outside the box, with a bit of No 8 fencing wire going on as well".

It was possible that Pacific Radiology would eventually import a dedicated PET scanner. If it could persuade Cyclotek to build a cyclotron in Wellington, it could provide isotopes to scanners in Auckland, Christchurch and possibly Dunedin. Eventually the scanners could also be used for non-cancer conditions, such as epilepsy and heart disease.

Dr John Childs, the MOH's main adviser on cancer control, said there was not a nationally-consistent policy for the use of PET. The ministry had developed a framework, the Service Planning and New Health Intervention Assessment (SPNIA) "to enable national equity and collective decision-making about new health interventions".

Asked why the MOH had not considered flying in isotopes and adapting existing equipment, he said funding for diagnostic services such as PET was not a ministry decision.

"It is a DHB decision as to whether they use the Wakefield service or send patients to Australia," he said.