Background
Pancreas transplantation was developed as a replacement for insulin and diet therapy in insulin dependent diabetics. The procedure was first performed in Australia in 1984, and since that time has been considered experimental. In 1992, Westmead Hospital in Sydney was designated as the Nationally Funded Centre (NFC) to provide this service on a national basis.

For Western Australian residents, the location of the Westmead unit means having to relocate to Sydney for many months to await a suitable donor. The psycho-social consequences of being separated from the support of family and friends are compounded by the frail physical condition of such patients.

These concerns have resulted in the HDWA receiving a submission from a local hospital to establish a pancreas transplantation unit in WA. While the Department is generally in favour of locally developed and maintained services, planning for services such as pancreas transplantation must be assessed in line with national policy on NFC’s, to which the HDWA is a party.

In 1995, in response to a request from another State, the Australian Health Ministers’ Advisory Committee (AHMAC) requested that the Australian Health Technology Advisory Committee (AHTAC) review the NFC status of the Westmead unit. The report of this review was released in March 1996.

The review found that pancreas transplantation should continue to be regarded as an experimental procedure because:
- the current data on the long term effects of pancreas transplantation on life expectancy and diabetic complications are insufficient and, per se, do not justify pancreas transplantation;
- improvements have not been demonstrated in objective measures of quality of life such as return to employment or school, reduction in medical care requirements, days spent in hospital, or physical or social activity;
- the procedure is associated with relatively high complication rates; and
- developments in surgical technique and immunosuppressive therapy are still occurring.

It is the committee’s view, therefore, that the procedure should remain within the NFC programme. AHTAC estimated that the number of Australians who could potentially benefit from pancreas transplantation is approximately twenty a year and that at least ten and preferably twenty transplants a year are required to develop and maintain adequate expertise. The report therefore recommends that the Westmead Hospital unit should remain the sole NFC in pancreas transplantation in Australia for the next three years, particularly given that it is achieving outcomes equivalent to, or better than, those achieved in other countries.
The report also recommends that the number of procedures performed by the Westmead unit should be increased from 10 to 15 a year immediately to satisfy national demand for the service and to address the problem of access by WA residents.

At the Westmead unit, pancreas transplantation patients currently wait at home for approximately twelve months after assessment and then at Westmead for approximately three months. This waiting period does, however, compare favourably with a two to four year waiting time for a kidney only transplant. It is thought that an increase to fifteen transplants a year at the Westmead unit should reduce the waiting time and provide improved access to the service.

To assess the impact of increasing throughput to 15 patients a year and the findings of the unit’s research work, AHTAC has recommended that a report be provided by Westmead in 18 months time, on access to the service, the quality of life outcomes achieved by patients and the results of the unit’s research programme on the effects of pancreas transplants on the secondary complications of diabetes.

AHTAC’s findings on the experimental nature of pancreas transplantation are supported by a recent study reported in The Lancet, which found that mortality following pancreas transplantation may be greater than previously thought. The study also found that a randomised trial is needed to compare the long-term outcomes of kidney transplantation versus combined kidney-pancreas transplantation.

Recommendation
In view of AHTAC’s findings, and those of independent researchers, on pancreas transplantation complication rates and patient outcomes, the HDWA does not endorse the establishment of a local pancreas transplantation unit at this time. However, the Department will review its position on this matter following the release of AHTAC’s next review of the Westmead centre in 18 month’s time.