6

Emergency medical evacuations

Background

6.1 Because of the small population and the nature of the 'cottage hospital'[1] on Norfolk Island, only a limited range of medical services can be provided in the case of acute health problems. The nearest major hospital is over 1500 kilometres away. Several witnesses likened the hospital's role in a medical emergency to that of a clearing station where patients are stabilised until they can be transported back to the mainland for specialist treatment. Several generations ago people took their chances and lived or died according to the skill of the doctor and luck, but such a lifestyle has long passed, and patients expect appropriate specialist treatment in a life or death situation. Tourists, the economic lifeblood of the Island, have the same expectations.

6.2 The Defence Department submission advised that until several years ago the Royal Australian Air Force was the sole provider of aeromedical evacuation (AME) support for critical patients on Norfolk Island. The Air Force provided the service because no other aircraft operator had the capacity either to deliver a rapid response surgical team to the Island or to evacuate a stretcher patient who required in-flight care.[2] However, the Committee was advised that about twenty years ago:

> Norfolk Island airlines always had a KingAir on the ground on Norfolk Island and they used to use that with the staff at Norfolk Island to evacuate people to Brisbane. The RAAF became involved

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1 Department of Transport and Regional Services, Submissions, p. 86.

2 Department of Defence, Submissions, p. 138.

> and it was easier to make a phone call to the RAAF rather than look around and see what alternatives were available.[3]

6.3 Given Norfolk Island's remoteness and total isolation, a dependable, fast evacuation service can be seen as an essential service which should be available to anyone on the Island on a basis of medical need. A patient's ability to pay for the service should not be an important consideration. There is a need for universal cover for the cost of a medical evacuation.

The present situation

6.4 According to the Defence Department submission, the advent of civilian aeromedical retrieval services which have aircraft capable of operating into Norfolk Island has resulted in a significant reduction in the demand for RAAF AME services.[4] Private, chartered services with purpose designed aircraft are seen to be faster, cheaper and easier to arrange. However, the RAAF continues to provide the majority of emergency evacuations from Norfolk Island, free of charge. In 1999 there were three private medivacs, provided by Careflight, compared with six RAAF medivacs. In 2000 there were six emergency medivacs, three by the RAAF, and in the first half of 2001 five, none of them undertaken by the RAAF.

RAAF medivacs

6.5 The policy for using RAAF planes for aeromedical evacuations is covered by Defence Instruction (General) Operations 5-1: Defence Assistance to the Civil Community. It states that Defence Force aid should not be used as a substitute for capabilities available from other government agencies or the private sector, but may be provided where such resources are inadequate or not available. Defence policy is that it will continue to provide this kind of assistance to Norfolk Island in times of genuine need, but it should be seen as the exception rather than the rule. Defence supports any measures to provide alternatives through other government agencies and / or the private sector.[5]

6.6 Under RAAF AME procedures, if a civilian alternative is available, AME missions require formal authorisation from the Minister for Defence, or his delegate. The authorisation process can encounter considerable delay. The

3 Mr Clyde Thomson, Royal Flying Doctor Service, Transcript, p. 229.

4 Department of Defence, Submissions, p. 138.

5 Department of Transport and Regional Services, Submissions, p. 96.

Government Medical Officer at the Norfolk Island Hospital, Dr Fletcher, advised the Committee that the medical staff have great problems arranging emergency medivacs. For locals or visitors without insurance, it may take many hours to get approval granted by the Minister for Defence:

> and then we have to debate with the Air Force for a Hercules … The Air Force are under instructions not to come to our aid for this unless circumstances are such that we cannot get any other transport or there is some dire circumstance that warrants getting in the Air Force.[6]

6.7 The Defence Department advised that where there is no civilian alternative, the Air Commander Australia at Air Headquarters has the authority to order an AME mission.[7] While there are guidelines for the approval process, approval would always be given in a life or death situation and where evacuation by other means would cause unacceptable delay. Authorisation has also been given in the case of a resident or visitor who has no medical insurance or other means of paying for a commercial evacuation.

6.8 However, the necessity of proving the inability to pay causes potentially life threatening delays as well as unacceptable moral dilemmas and wasted time for medical staff trying to organise the evacuation. Witnesses have described the procedures for authorising a medical evacuation, either RAAF or civilian, as time consuming, disruptive and an extra burden on medical staff. Mr Hughes, Chairman of the Hospital Board said:

> we all feel very strongly about that, and the board is quite definite that procedures for medivac are cumbersome and time consuming, quite often to the extent of putting patients at risk. There is a great need for a formulated and simple approach that can deliver the service in a reasonable time frame.

6.9 He added that:

> It can take three to nine hours before we get permission for an aircraft to leave the tarmac, and then you have the flying time from Australia to here. … Whilst that is happening, the time of the doctor and other people is taken up, probably - or possibly - to the detriment of patients and certainly to the detriment of the good doctor and staff concerned because they then have to catch up on their backlog of work.[8]

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6 Dr Lloyd Fletcher, Transcript, p. 47.

7 Department of Defence, Submissions, p. 138.

8 Mr John Hughes, Transcript, p. 50.

6.10 The Department of Transport and Regional Services also advised the Committee of the concern that Norfolk Island medical staff have at being required to assess a patient's ability to pay in an emergency medical situation.[9] The Department recommended that the protocols for emergency medical evacuations be reviewed and agreed by all parties, and details circulated to all residents and visitors. The approval process for evacuations should be expeditious to avoid any risk to the patient associated with time delays.

6.11 Since providing assistance to civilians in an emergency is not a primary role for the Defence Forces, there is no dedicated aircraft or crew for this purpose. Hence, there is always some uncertainty as to whether an aircraft will be available in the case of an emergency. Dr Fletcher related an incident when he requested a RAAF medivac and was told:

> You're lucky you caught us. We've just got a plane come in, otherwise we wouldn't be able to do it. And, in any case, we would not have been able to do it for the previous three weeks because of the Timor incidents.[10]

6.12 Air crew are on twelve hour stand-by. The Defence witness advised that:

> We see that as the worst case in that from notification we can redeploy an aircraft back into Richmond ready to go and organise a crew and a medical team in that time frame.[11]

6.13 The implication is that it can take up to twelve hours for a plane to take off, especially if a reservist medical specialist is required and has to be called in. However, the RAAF prides itself on achieving a turnaround time considerably less than twelve hours, including the time taken to set up the aircraft as an ambulance.[12] Flying time to Norfolk Island is then between three and four hours.

6.14 The aircraft used for medical evacuations, the C130 (Hercules), is a heavy duty cargo craft built to military standards, with a capacity vastly larger than is necessary for a single patient AME. The interior, although air-conditioned and pressurised, is less than ideal for a critically ill patient. It is noisy to the extent that normal conversation is impossible, as well as very bumpy. However, the Defence witness told the Committee at the April 2000 public hearing that the Hercules is the only RAAF plane suitable for evacuations from Norfolk Island when factors such as

9 Department of Transport and Regional Services, Submissions, p. 87.

10 Dr Lloyd Fletcher, Transcript, p. 47.

11 Group Captain Roberts, RAAF, Transcript, p. 170.

12 Group Captain Roberts, RAAF, Transcript, p. 163.

distance, the length of the airstrip, time spent flying over ocean and the need to carry a stretcher, high tech medical equipment and personnel are considered.[13]

6.15 Based on the policy of full cost recovery, the cost to the RAAF for each flight is estimated at $131 000. This costing is based on about eight hours flying time for a Hercules aircraft, with an air crew of five plus a medical team of five or six, depending on the type of medivac. This figure includes a component for maintenance and depreciation of the aircraft. There is also the possibility that a relief aircrew must be sent if take-off occurs well into the shift of the first crew.[14]

6.16 The RAAF normally charge the State or Territory health authorities concerned a fee for an emergency medical evacuation. This is the case with medivacs from Australia's other inhabited External Territories but not with Norfolk Island. None of the cost is recovered from any outside source at present, nor do there appear to be any plans at present to charge in the immediate future.

6.17 However, the Norfolk Island Minister for Health, Mr Gardner, advised the Committee that at the Intergovernmental Meeting in August 1999 the Federal Minister for Territories had raised the issue of RAAF medivacs, leading to an impression that there might be a policy change. Mr Gardner said that:

> The changes to policy when they affect long-established arrangements are difficult to accept and understand, especially with regard to such a vital matter that has provided, until recently, certainty and peace of mind. As a result we have turned our minds to the options. Are we able to improve and cement in place current arrangements? How can we ensure services for local residents and visitors in the event of current services not being continued or being unavailable? What funding alternatives are available?[15]

6.18 The RAAF base at Richmond conducts on average twenty AMEs each year. In early 2000 there were six doctors, 23 nurses and 30 medical assistants based at Richmond. Missions to Norfolk Island represent approximately ten to fifteen per cent of all AMEs.

6.19 The Defence Department submission observed that the arrangement has, in the past, been of mutual benefit, as the Island has received an excellent aeromedical evacuation service and the RAAF medical teams have gained

13 Group Captain Roberts, RAAF, Transcript, p. 166.

14 Group Captain Roberts, RAAF, Transcript, p. 162.

15 Mr Geoffrey Gardner MLA, Transcript, p. 10.

valuable training experience.[16] There is minimal training benefit to the aircraft crew. The main disadvantages to Norfolk Islanders are that the RAAF cannot guarantee that an aircraft and trained medical team will be available at the squadron's home base at Richmond, NSW, when a request for an AME is received, and that each case must be negotiated, often a lengthy and stressful process. The disadvantage to Australia is the significant cost to taxpayers.

6.20 An example of the expense incurred was provided by a witness who advised of a recent RAAF evacuation which involved the Hercules plane flying from Sydney to Newcastle and Brisbane to pick up two doctors, then to Norfolk Island and back to Sydney with the patient, then on to Newcastle and the Sunshine Coast to return the two doctors to their homes and finally back to the Richmond base.[17] Such a flight plan might double the flying time and would almost certainly involve two separate flight crews.

6.21 DOTRS expressed concern at the 'significant reliance' of the Norfolk Island Government on the RAAF for emergency medical evacuations:

> particularly in light the Federal Government's move to 'user pays' principles; the lack of alternative health insurance coverage for emergency patient transport; and the trauma to Island residents and visitors when faced with the exorbitant cost of evacuation at the time of a medical crisis.[18]

Careflight medivacs

6.22 Careflight, a commercial medivac company which made submissions to the inquiry, undertook four medical evacuations between August 1998 and June 2000, two for insured patients, one at the Norfolk Island Government's expense and one at the patient's expense.[19] Careflight was established in 1986 to provide a helicopter rescue service out of Westmead Hospital in Sydney, but now also provides urgent medical support and evacuation in the South Pacific, using charter jet aircraft on rapid-response out of Sydney. It advised that its jet aircraft, with a critical care team on board, can be in the air within 2.5 hours of activation, and would then be able to reach Norfolk Island in 2 hours 25 minutes.[20]

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16 Department of Defence, Submissions, p. 138.

17 Mr Ian Badham, Careflight, Transcript, p. 238.

18 Department of Transport and Regional Services, Submissions, p. 86.

19 Ms Catharine Carruthers, Careflight, Transcript, p. 240.

20 Careflight, Submissions, p. 165.

6.23 Doctors employed by Careflight are sourced from a pool of more than 25 specialists or advanced trainees in anaesthesia, emergency medicine and intensive care. Most have completed at least 50-100 critical care retrievals and all practice in major teaching hospitals in Sydney. They are assisted by nurses with intensive care certification or by paramedics.

6.24 As a specialist medical retrieval service, Careflight believes its expertise lies in the depth of specialist knowledge available within its large group of retrieval specialists as well as systems it has developed to ensure access to an aircraft and to minimise response time. Careflight advised at the June 1999 public hearing that it has:

- sufficient numbers of retrieval specialists to ensure that a team with appropriate skills can be supplied at very short notice;
- dedicated equipment for international retrievals, including a purpose designed stretcher bridge with built-in intensive-care equipment which enables a very fast response;
- access to a large number of suitable aircraft through various operators to ensure that a plane can always be sourced and adapted rapidly;
- a dedicated international phone number that is diverted to the duty officer at all hours;
- medical specialists who provide preliminary advice and support by phone; and
- the advantages of being based within the grounds of a major teaching hospital, such as very rapid access to blood transfusion products.

6.25 Although Careflight is a registered charity, its international arm operates on a fee-for-service basis and receives no subsidy from the Commonwealth. It has provided the Norfolk Island Government with fixed prices for periods of six months in the past, although it is an infrequent client. Negotiating on a job-by-job basis increases both the cost and 'scramble' time. Non-regular clients must make arrangements for payment in full before an aircraft is dispatched. A prior arrangement with the Norfolk Island Government could enable it to be invoiced.[21]

6.26 Dr Fletcher told the Committee:

> I personally think the private way is the way to go – they are a far more speedy, efficient service, and the Air Force agrees with me on that.[22]

21 Ms Catharine Carruthers, Careflight, Transcript, pp. 245-246.

22 Dr Lloyd Fletcher, Transcript, p. 47.

6.27 The advantages of using a commercial medivac company include the dependability, the speed of response and access to highly specialised skills. The disadvantage, in the present situation, where few Islanders or visitors are covered by insurance, is the cost. If the Norfolk Island Government can find a solution to providing universal cover for medivacs this option would be invaluable in the event of critical emergencies.

The lack of insurance cover

6.28 Statistics indicate that so far the cost of a service provided by a private operator such as Careflight, estimated in mid-2000 at approximately $25 000, is prohibitive for the many residents and visitors who do not have private health insurance that covers medical evacuations by air. Evidence from the November 1999 hearing, as well as anecdotal evidence provided to the Committee, indicates that the requirement that payment be guaranteed at the outset has been the cause of serious distress to patients and families. At present, where a resident or a visitor without insurance cannot afford this amount, negotiations are begun with the RAAF to send a Hercules.

6.29 Norfolk Island's health insurance scheme, Healthcare, covers only $200 of the transport costs associated with medical treatment. Very few Island residents have private medical insurance that covers medical evacuation as it is almost impossible to obtain or prohibitively expensive. The Norfolk Island Minister for Health informed the Committee that probably only four or five people on the Island had insurance to cover the cost of a private medical evacuation. The company providing the service has a very strict qualifying regime, including holding all of a customer's insurance policies. The annual cost is about $1000.[23]

6.30 DOTRS advised that insurance companies will not provide acceptable global insurance to the Norfolk Island Government to cover medivacs from Norfolk Island. The premium that would be set would merely equate to the expected annual cost.[24]

6.31 The Department of Veterans' Affairs referred to a case in which the cost of a single private medivac for a fractured neck and femur equalled two thirds of the annual amount spent on veterans' and war widows' travel for medical treatment. As people age and the risk of accidental falls increases, the likelihood of an emergency evacuation increases.[25] The doctors

23 Mr Geoffrey Gardner MLA, Transcript, p. 11.

24 Department of Transport and Regional Services, Submissions, p. 86.

25 Ms Janet Anderson, Department of Veterans' Affairs, Transcript, p. 144.

advised the Committee during its inspection that orthopaedic surgery is not undertaken on the Island, primarily because of a lack of diagnostic equipment and post-operative care facilities.

6.32 The Norfolk Island Government has not in the past covered the cost of commercial evacuations, arguing that the community cannot afford to cover the costs. Imposing a 'medivac levy' in addition to the Healthcare levy is not deemed feasible.[26]

6.33 The Norfolk Island Government could exercise its revenue raising authority to impose a new tax, other than one based on expenditure, which would ensure it had the finances to fund satisfactorily one of its most essential services.

6.34 As noted in Chapter 3, in March 2001 the new Hospital Director proposed that if all visitors to Norfolk Island were required to take out health and travel insurance, the fees levied would provide the NIHE with a substantial amount of funding to seek capital improvements and address the issue of medivacs and the associated costs.[27]

Non-critical medivacs

6.35 Medivacs on commercial passenger flights are used for patients who can be monitored by a single doctor or nurse and who require minimal medical assistance. In 1999 nineteen patients were evacuated using regular passenger transport.[28] However, commercial flights are not always available and at present only one aircraft type can be reconfigured for stretcher retrievals. Dr Davie advised the Committee that if a stretcher has to be installed, notice must be given to the airline (Flight West) three days before the scheduled flight.[29] Commercial flights are not always scheduled on every week day.

6.36 The service, at a cost of $8 000, which is roughly equivalent to the cost of the eight seats that must be removed to install a stretcher and used to seat medical attendants, is still very expensive for patients who are not covered by insurance. A major disadvantage is that this arrangement can leave the Island short of medical personnel and essential equipment.

6.37 The suggestion has been made that a statutory obligation to transport patients in an emergency be made part of an airline's landing agreement.

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26 Department of Transport and Regional Services, Submissions, p. 86.

27 Ms Christine Sullivan, Submissions, p. 196.

28 Department of Transport and Regional Services, Submissions, p. 86.

29 Dr John Davie, Transcript, p. 33.

The Norfolk Island Government has informed the Committee that no such obligation exists at present.[30] It appears that even if an airline were willing to undertake an emergency stretcher evacuation without notice, there are not the facilities at Norfolk Island airport to carry out a seating reconfiguration.

The Royal Flying Doctor Service

6.38 The Royal Flying Doctor Service (RFDS) does not at present provide any form of health services, either emergency or primary health care, to Norfolk Island. However the RFDS attended the June 2000 public hearing for this inquiry and subsequently submitted to the Committee a proposal of services which it would be interested in providing to Norfolk Island. This proposal was forwarded to the Norfolk Island Government and discussions began between the Chief Medical Officer of the South Eastern Section, New South Wales Operations, and the Director of the Norfolk Island Hospital. The RFDS has provided preliminary costings for the various services.

6.39 When asked why the Flying Doctor had never conducted medical evacuations out of Norfolk Island Captain Clyde Thomson, Executive Director, South Eastern Section, replied:

> I think that the arrangements they had with the Air Force worked pretty well for the people on Norfolk and there was no need, because there was no cost impost to them, to change them.[31]

6.40 The RFDS, which provides aeromedical services through eighty per cent of Australia, also contracts its services and would be willing to enter into a formal arrangement with the Commonwealth or the Norfolk Island Government for the evacuation of patients from Norfolk Island. Like the commercial operators, the RFDS charters jet aircraft, and with one of its critical care teams on board can dispatch an emergency flight within 2.5 hours of activation. Flying time is the same as for commercial operators, which is up to an hour and a half less than the RAAF flying time.

6.41 In addition to an evacuation service the RFDS could provide other services such as:

- a medical officer with primary healthcare focus and emergency aeromedical transfer experience, on a six month rotation;

30 Government of Norfolk Island, Submissions, p. 146.

31 Mr Clyde Thomson, Royal Flying Doctor Service, Transcript, p. 232.

- a remote consultation service to relieve the Island medical officers from non-urgent consultations after hours;
- semi-urgent medical evacuations using the RFDS doctor and commercial aircraft (in addition to a Sydney-based retrieval team);
- community-based registered nurses and allied health workers on three to six month rotations;
- visiting specialists;
- links with the Sydney University Department of Rural Health and the College of General Practice; and
- expertise in the implementation and development of telemedicine.

6.42 The RFDS witnesses emphasised that the Flying Doctor has moved towards a primary health model, working in an integrated way with other health service providers. Captain Thomson said that forming linkages with universities, colleges and other providers of health services to develop a primary health care model embodying the use of emergency medicine was a very efficient approach. He added that:

> the least effective model is a model which relies totally on evacuation. That is a very expensive use of resources and really should be used as a last resort.[32]

6.43 He stressed the importance of a formal arrangement that specified the standard and range of services required:

> if you come to us and say, 'We would like you to do approximately 16 evacuations to Norfolk Island per year, we would like them done to this standard and this is the response,' we could respond to that. We would meet it, and then we would run a quality assurance program over that to make sure that we were responding within the parameters that we said we would. You have a range of expertise required. You can arrange for a neonatal emergency service down to emergency medicine, and neurologists and so forth can go in that service.[33]

6.44 The advantages of using the RFDS include dependability, long experience in the field, the offer of a package of useful services to support primary health care on the Island and the fact that its cost per emergency evacuation would be significantly cheaper than a commercial operator could offer. The RFDS receives Commonwealth and state government

32 Mr Clyde Thomson, Transcript, p. 228.

33 Mr Clyde Thomson, Royal Flying Doctor Service, Transcript, p. 231.

funding in addition to its own significant fundraising efforts. Another advantage of a formal arrangement with the RFDS is that it would be possible to provide emergency evacuations for tourists and bill the home state for the service in the same way as on the mainland.

6.45 The disadvantage to the Norfolk Island Government is that RFDS services, although less expensive than a commercial operator, would not be free like a RAAF medivac, but would attract a cost that would require a new source of funding.

6.46 The Indian Ocean Territories Health Service (IOHS) made a submission to the inquiry outlining the arrangements under which the RFDS flies to Christmas Island. Urgent medivacs may be undertaken either by commercial aircraft, if the flight schedule is appropriate and a stretcher can be installed in Perth, or by charter flight. The IOHS normally contacts the RFDS to ask for assistance in securing a charter flight. The RFDS contacts aircraft operators who may be able to assist since the RFDS does not own a suitable aircraft for this long-haul flight. If both these avenues fail the IOHS will try to secure an aircraft through Jakarta or Singapore which can cost up to $85 000. There is an average of six urgent medivacs a year from Christmas Island.

6.47 Captain Thomson of the RFDS explained that the reason why it is sometimes difficult for the RFDS to secure a plane to fly to Christmas Island or the Cocos (Keeling) Islands is that the arrangements about response times, level of service and price have not been formalised.[34] With a formal arrangement in place with Norfolk Island, the RFDS could provide a response within three hours.[35]

6.48 Dr Davie referred to 'an enormous amount of controversy' over the question of emergency evacuations. While he expressed his opinion that 'the RAAF would never let us down', he believed the ad hoc arrangement that seems to exist with the RAAF is not tenable:

> We need to know for the security of the population on this island that we have a guaranteed system.

He believed it was time for some strong initiative to be taken such as compulsory insurance for aero-medical evacuation. The situation:

> has to be addressed and I believe it is a considerable priority.[36]

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34 Mr Clyde Thomson, Royal Flying Doctor Service, Transcript, p. 231.

35 Mr Clyde Thomson, Royal Flying Doctor Service, Transcript, p. 229.

36 Dr John Davie, Transcript, p. 32.

6.49 Dr Davie also thought that Norfolk Island should be making it far more obvious to tourists that there could be problems with regard to health and that the Island Hospital cannot cope with many emergency situations:

> Therefore, we must encourage them all to take out travel insurance, for example, when they come. This should be made available proactively - not retroactively.[37]

Recommendations

Recommendation 26

6.50 **The Committee recommends that the Norfolk Island Government provide universal cover for the cost of medivacs by:**

- **raising funds to pay for all medivacs;**
- **sourcing a private insurer, possibly through the use of incentives; and**
- **exploring the possibility of a cost-sharing arrangement with the Commonwealth for the provision of medical evacuations from Norfolk Island.**

Recommendation 27

6.51 **The Committee recommends that the Norfolk Island Government actively pursue negotiations with the Royal Flying Doctor Service for the provision of an emergency evacuation service under a formal arrangement.**

37 Dr John Davie, Transcript, p. 32.