Capital & Coast District Health Board
ŪPOKO KI TE URU HAUORA

7 October 2008

Release of Ministry of Health reports on Cardiac Surgery

Ken Whelan, Chief Executive Officer, C&C DHB:

A Message to Families

Before saying anything else, I want to extend our sympathies to the families involved in this review. Their initial loss, followed by this review process, has no doubt been a source of stress and sadness to these families. We apologise unreservedly for any part we played in this, and in particular for our inability to more swiftly address the rise in waiting lists during 2006 and the first half of 2007.

The Two Reports

The Ministry of Health has today released two reports which reflect the fundamental challenges facing public providers of cardiac surgery in New Zealand.

One of these reports, which we will refer to as "*The Elliot Report*", is by two Christchurch cardiologists and examines deaths among people awaiting cardiac surgery in the Central Region of New Zealand.

The other report, which we will refer to as "*Cardiac Surgery in New Zealand*", is by a nationwide multidisciplinary team, and among other findings records that New Zealand's cardiac surgery intervention rates fall far short of international intervention rates.

While our primary focus is on *The Elliot Report*, **we will from time to time touch on** *Cardiac Surgery in New Zealand*, **as in many ways their findings are inter-related. We welcome both reports, and in particular applaud Cabinet's decision to boost resourcing so New Zealand's five cardiac centres can increase their rates of intervention.**

Heart Disease in Perspective

Cardiovascular disease is the number one cause of death in New Zealand – responsible for approximately 6,000 deaths each year. Around 1,300 of these deaths occur in the region served by Wellington's Cardiac Surgery centre (a region with a population of 900,000 spread across seven DHB areas in central New Zealand).

With around 1,300 heart disease deaths each year in the Central Region, it is not surprising that some of those who die are, at the time, awaiting heart surgery. Across the two-year period considered in *The Elliot Report* **there were approximately 2,600 heart disease deaths in the Central Region.**

***The Elliot Report* concludes that in up to 8 cases the length of time waited may have been a factor contributing to the patient's death.**

DHB staff are devoted to getting the best possible outcomes for patients, but it is clear that there were times when as an organisation we fell short in our efforts to tackle the growth in waiting times.

There is further discussion on how these delays developed, and on what has been done to address them in the two *Backgrounder* documents attached to this statement, in the comments by Drs Robinson and Mahon, and in the bulleted lists on pages 10 and 12 of *The Elliot Report*.

I stand behind our clinicians, who rightly earned praise in *The Elliot Report* **for doing their very best during 2006 and 2007 in what were, for all of us, deeply challenging times. They have my full support, respect and admiration.**

National Implications

The Elliot Report **notes that there is insufficient national data to reliably compare deaths on the Central Region waiting list for cardiac surgery with deaths in the other four cardiac surgery regions of New Zealand. For Wellington's centre the widest possible definition of "waiting for surgery" is used, whereas the report notes that "***at other units listing may not occur until physically seen by a cardiac surgeon***" (*page 8*) and that "***The differing processes compared with other cardiac units will confound comparisons***" (*ibid*). They add that "***patient classification and terminology have varied between the five centres***" (*page 14*) and that "***These confounding factors need to be borne in mind when comparing waiting list numbers between units***" (*ibid*). Again, on *page 36*, they note "***The reviewers are concerned that the rates can not be directly compared because of the different handling of patients on waiting lists, and classification of patients' deaths while waiting for cardiac surgery***".**

This theme culminates (on *page 39*) with the reviewer's finding:

> **"*The limited national data that is available on deaths of patients whilst on cardiac surgical waiting lists do not reassure the reviewers that long wait times, and potentially preventable deaths may not be occurring on cardiac waiting lists at other cardiac centres in New Zealand due to the same resource issues that have occurred at C&C DHB.*"**

In the event of a national case based audit of all cardiac centres, as recommended in *The Elliot Report*, **it is essential that a standardised definition of "waiting lists" be used - in order to obtain meaningful data.**

Agreed national prioritisation criteria – as recommended in *Cardiac Surgery in New Zealand* **– are another essential ingredient in going forward. Together we must create a more robust national array of cardiac services which can adapt to meet future challenges sparked by growth in the volume and complexity of demand for cardiac services.**

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Dr Geoff Robinson – Chief Medical Officer, C&C DHB:

Lowering Clinical Risk

There are many options for treating cardiovascular disease – including cardiology procedures, stents and medication. In a small set of patients surgery is the appropriate response.

Sudden death from heart disease is, by its very nature, difficult to predict. The sad reality is that people with heart disease can die at any time – before, during or after surgery.

We support the key thesis of *The Elliot Report*; **which is that reducing the length of time patients wait – by increasing access to surgery and the number of surgeries performed – is essential. By a separate mechanism** *Cardiac Surgery in New Zealand* **arrived at the same key conclusion, which has the endorsement of all parties, including Cabinet.**

The pressure on waiting lists was a significant issue at our DHB in 2006 and 2007, but it is not unique to this DHB.

At Capital & Coast DHB we have now turned a major corner, and the waiting list which rose to a peak of 120 waiting over 6 months in July 2007, has now reduced to a much more manageable 21 people waiting over 6 months – a number which continues to reduce.

In the same period, the total number of people waiting for cardiac surgery in the Central Region has reduced from 304 in July 2007, to 151 today.

What Caused Waiting Lists to Grow

Throughout New Zealand the system for cardiac surgery is a very delicately poised one. To function robustly, it relies on a complex combination of factors – availability of specialist cardiac surgeons, anaesthetists and anaesthetic technicians, qualified nurses (theatre, ICU and ward), resourced ICU bedspace, and so forth. If any one or more of those factors encounters difficulties, then the system can falter. This is true for all cardiac centres in New Zealand. *Cardiac Surgery in New Zealand* **discusses these factors, and the necessity for them to align, in considerable detail.**

In 2006 and 2007 Wellington's cardiac surgery center faced a perfect storm of problems, which impacted on our waiting list. These are identified in Backgrounder 1 (attached) and on *page 10* of *The Elliot Report*. **Key drivers of waiting list growth included a 40% increase in the number of patients referred to C&C DHB for elective cardiac surgery between 2004 and 2006, a simultaneous increase in the number of acute cases (requiring surgery within hours or days), and workforce issues (including vacancies, shortages and industrial action). These workforce factors also affected other cardiac centres, limiting their ability to assist us by sub-contracting.**

Rising to the Challenge

When the waiting list for cardiac surgery began to grow we put in place measures which had successfully addressed periods of waiting list growth in the past. However this time round they were not in themselves enough to reverse the growth. Working closely with clinicians we took our response to the next level, and put in place a Recovery Plan – which has enabled us to turn the corner. The focus throughout was to increase throughput, thereby reducing waiting lists.

I should note that the Recovery Plan was developed in early to mid-2007, many months before cardiac surgery at our center became a focus of media coverage, and months before *The Elliot Review* **was instituted.**

The reviewers themselves recognise the progress achieved in *The Elliot Report* **when they say: (*on page 36*):**

> ***"The public can have confidence in the clinicians involved in this service and the standard of cardiac assessment and cardiac surgery."***

They further recognise that the problems we experienced in 2006 and 2007 are historical, and that things have now significantly changed. On *page 37* of *The Elliot Report* **they say:**

> ***"The public can have confidence that the Wellington cardiac surgeons and cardiologists are aware of the long waiting times… and that C&CDHB has responded to these issues as demonstrated by the actions taken and the development and implementation of the recovery plan. It is reassuring to report that the C&CDHB have worked with the Department of Cardiothoracic Surgery to reduce waiting times for cardiac surgery and meaningful reductions have been achieved since the review period…***
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> ***"[C&C DHB] have increased the volumes of cardiac surgery at Wellington hospital by reducing theatre cancellations, extending theatre times, and adding additional theatre sessions. They are also actively recruiting additional staff in a number of key areas. In addition some patients have or will receive their cardiac surgery by contracting to other cardiac surgical units. Also effort has been put into improving the processing of, and monitoring of patients on cardiac surgical waiting lists. These strategies have been effective and resulted in the reduction in wait times during 2008."***

The last two years were a very difficult time for our clinicians and for patients, and we are pleased to be moving on from that situation.

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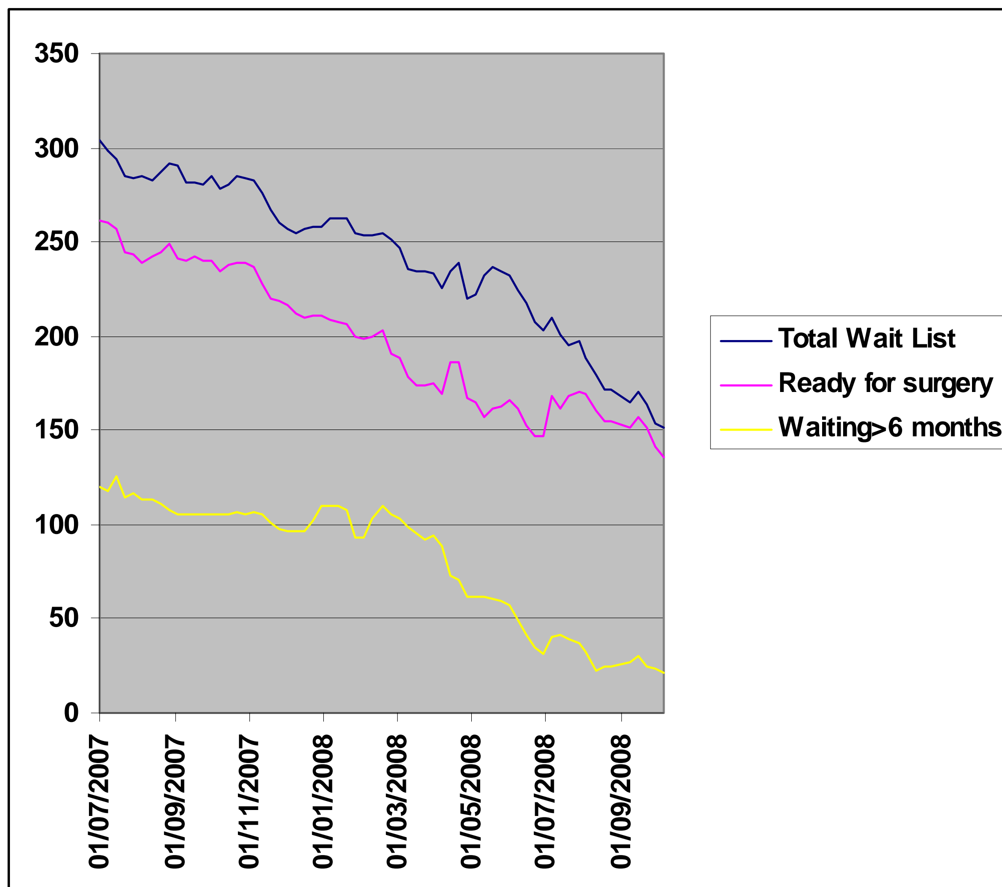
Mr Barry Mahon – Clinical Leader, Cardiothoracic Surgery, C&C DHB:

Although there will always be some patients that die while waiting for cardiac surgery, these deaths are a missed opportunity for intervention. These deaths are a reflection of the natural

history of cardiac disease and emphasise the need to provide appropriate cardiac surgical services to the patients in our region.

Having raised concerns regarding the number of deaths on waiting list for cardiac surgery in July 2007, I was heartened by the fact that a Cardiac Surgery Recovery Plan was initiated without delay.

At that stage (*July 2007*)the waiting list for cardiac surgery had grown to a total of 304 patients, 261 of whom were ready for surgery and 120 patients had waited more than 6 months. The recovery plan group has been meeting every 2 weeks since then and has contributed to the total waiting list being reduced from 304 to 151 patients. Those ready for surgery have been reduced from 261 to 136 patients, and the number waiting more than 6 months is down to 21.



This does not diminish the loss that various families have experienced, but the knowledge that their family member's deaths have been instrumental in improving the situation for others, may be of some consolation.

Despite my concern regarding the number of cases that died while waiting for cardiac surgery it is reassuring that on page 24, the reviewers conclude that ***"the annual mortality whilst awaiting cardiac surgery at C&CDHB was 4.1 deaths per 100 patient years"*** **and** ***"This annual mortality is comparable with that in other health systems of 4.2 to 5.8 deaths per 100 patient years"*****.**

This measure (deaths per 100 patient years) is the measure most commonly used for comparative purposes and suggests that the local experience was similar to published data in other parts of the world.

Comparison of C&C DHB outcomes with other New Zealand DHBs outcomes would have been a useful comparative performance measure. Unfortunately, as the reviewers note on ***page 25 of*** *The Elliot Report*: ***"Limited data was made available on the mortality of patients waiting for cardiac surgery at other centres in New Zealand over the review period. There is no national record of this data, and data was obtained as able from the other cardiac centres"*****. They conclude:** ***'The reviewers believe the data does not allow for comparisons to be made between cardiac surgical units as there is no certainty that either the deaths or the total numbers waiting for or receiving cardiac surgery are comparable"*****.**

BACKGROUNDER 1:

The challenges faced by C&C DHB in 2006 and 2007

Factors which contributed to a rapid growth in Wellington Hospital's cardiac surgery waiting list in 2006 and 2007 (which has since been reversed) included:

- **Increased demand**
  - **A nearly 40% increase in referrals for cardiac surgery:**
    2004 – 454 referrals
    2006 - 622 referrals
  - **Increased complexity of Cardiac cases requiring long theatre time and longer ICU stays.**

- **Reduced opportunity to operate**
  - **Increased competition of available theatres during the building of the New Regional Hospital reduced the number of theatre sessions available to perform cardiac surgery.**
  - **RMO strike June 2006**
  - **Laboratory workers strikes November 2006 and March 2007**
  - **(The complexity of cardiac surgery and the need for ICU and high dependency care following surgery, led to cancellation of elective cardiac surgery for up to five days prior, during and immediately post-strike.)**
  - **Insufficient ICU access**
  - **Limitations set by availability of Cardiac Theatre nurses**
  - **Limited number of Cardiac Anaesthetists**
  - **Cardiac Surgeon sick leave and resignation**
  - **Ongoing resourcing issues, including:**
    - **vacancies relating to Anaesthetic Technicians, Registrars and Anaesthetists in 2006, resulting in 10% of sessions being lost overall per week;**
    - **vacancies relating to Anaesthetic department staff, theatre nursing and ward nursing in early 2007 and ongoing..**

BACKGROUNDER 2:

What has Capital & Coast DHB done to address growing demand?

Capital & Coast DHB had a problem with an increasing waiting list over the 2006 and 2007 period, and has been vigorously working to improve the resourcing and throughput of our cardiac services to address this. The following actions have been taken:

Outsourcing / Other Providers:

- **A contract with Otago DHB was agreed and implemented in August 2006. This was extended into 2007. However, the ongoing nature of industrial action experienced by Otago District Health Board with both MRTs and lab workers, and more recently, issues relating to anaesthetic resourcing, has impacted on their ability to support this;**
- **Private options were explored, and a contract was agreed with a private provider in Christchurch which commenced at the end of May 2007;**
- **Further contracts were put in place with a private provider in Wellington, a private provider in Auckland and 2 private providers in Waikato in 2007/08;**
- **Other DHBs have been contacted regularly to identify any change in their capacity;**
- **The Australian option for patients, as announced in August 2008.**

Maximising our Facilities:

- **Saturday lists resumed and later increased in frequency, with one Saturday list every 2-3 weeks;**
- **Backfilling of sessions when a surgeon was on leave, to minimise the impact of the vacancy;**
- **Cardiothoracic beds were "quarantined" to support access for both inpatient acute and elective cases;**
- **An early start pilot was run in theatre and has continued;**
- **The theatre day has been extended to 10 hours;**
- **Cessation of the rolling theatre cancellation on cardiothoracic services;**

Workforce Strategies:

- **Active recruitment led to an increase in the number of Anaesthetic Technicians, Anaesthetists and Anaesthetic Registrars;**
- **Locum Anaesthetists were sourced from Waitemata DHB from June 2006 significantly reducing the number of lost theatre sessions resulting from '*no Anaesthetist*';**
- **An on call staffing option was implemented in ICU to provide more certainty of access to beds for cardiac patients;**
- **A fourth surgeon has been appointed to fill the vacancy;**
- **Surgeon rosters and theatre sessions have been aligned to maximise utilisation of all allocated lists;**
- **Additional resource to support the coordination and management of patients referred to other providers;**

Improving our Processes:

- **A project looking at the cardiac patient journey was commenced in early 2007, with a focus on referral and waiting list management, patient flow between the wards, theatre and ICU, and patient flow within theatres;**
- **A fast tracking pilot for appropriate patients was implemented in the first week of May 2007 with the aim of reducing the dependency on ICU for this group of patients;**
- **Processes within the cardiothoracic office have been reviewed, including referral, acceptance, scheduling and management of the wait list;**
- **All patients on the waiting list have been reviewed to ensure management plans were in place;**
- **Processes have been implemented to improve the monitoring of patients while on the waiting list;**
- **Processes regarding the management of patients requiring dental clearance have been improved to ensure the minimisation of delays which could impact on length of time waiting;**