

# SUSTAINABILITY FINANCIAL ANALYSIS

**TO:** Chair and Members  
West Coast District Health Board

**FROM:** Wayne Champion  
General Manager – Corporate Services

**DATE:** 19 November 2008

---

## BACKGROUND

This paper gives a “plain english” overview of the financial analysis of the Grey Base Hospital Business Case and is intended to encourage discussion about this strategically important topic. The paper deliberately avoids political elements of the ‘do we need a new hospital’ debate but does touch on some of the social elements.

### Overview

The business case identifies three different Grey Base Hospital Model of Care Options. These are;

- Model of Care Option 1: As close to the patient as possible
- Model of Care Option Two: Low complexity services on the West Coast
- Model of Care Option Three: Rural outpost

Each of the Model of Care Options involves the continued provision of acute stabilisation, prior to either treating (Model of Care Option 1) or transferring (Model of Care Options 2 and 3) acutely unwell patients to an alternate facility. Option 3 involves transferring all elective surgery off the West Coast.

## DISCUSSION

### Model of Care Option One

Several facilities options have been explored for Model of Care Option One, the preferred and most economic option being Brownfield Option 5 (the preferred option indicated in the business case document). This option would increase the West Coast DHB’s annual operating costs by \$6.8M per annum compared to the clinically and practically unsustainable status quo.

Brownfield Option 5 has the advantages of co-locating primary health with secondary care and creating an integrated flexible ward structure but does not replace a number of existing buildings on the Grey Base Hospital campus and so perpetuates some of Grey Base Hospital’s existing facility issues.

### Model of Care Option Two

As a hybrid option, Model of Care Option Two involves the provision of a similar level for hospital infrastructure as Model of Care Option One but involves sending patients off the West Coast for

treatment for a wider range of services or on a more frequent basis than would be planned for under Model of Care Option One.

Several facilities options have been explored for Model of Care Option Two, with the preferred and most economic option being Brownfield Option 5. The provision of Model of Care Option Two would increase the West Coast DHB's annual operating costs by \$12.0M per annum compared to the clinically and practically unsustainable status quo.

There is a concern that 24x5 on the Coast will actually mean 24x4, as doctors will manage risk and case mix by transferring out patients on the day before a planned service gap, or not operating or treating them at all, requiring transfer as well. This would further decrease the financial viability of Model of Care Option Two.

### **Model of Care Option Three**

Model of Care Option Three would require more clinical staff and incur significantly more cost than would be required if services were retained on the West Coast.

From a practical perspective;

- The number of patients being transferred by air would require two additional retrieval planes operating 24x7. (Based on information from Garden City Helicopters and Canterbury DHB's air retrieval team).
- The increased number of road transfers would also require additional road transport capacity with 24x7 availability, so there would also be the capital costs of buying and fitting out these ambulances and their operating costs (drivers, fuel, maintenance, etc).
- Other South Island DHB(s) would need to construct additional theatre and ward capacity in order to cater for the West Coast patients transferred to them under this scenario. The capital cost of new ward space (presumably in Christchurch) would be dearer than the cost of seismically upgrading Greymouth's existing ward space, though the cost of building theatres is likely to be cheaper (due to the seismic zoning of the West Coast).
- There would be a need for 5 additional anaesthetists in the South Island under Model of Care Option Three compared with status quo or to Model of Care Option One (in order to staff retrieval teams), however this will be matched by a reduction in the need for other Senior Medical Officers, such that the overall number of Senior Medical Officers remains unchanged but the mix changes.
- We estimate that the South Island would need 12 additional registered nurses under Model of Care Option Three compared with status quo or Model of Care Option One (to support both air and ground based patient transfers). Given West Coast DHB's current difficulty in attracting nurses, Model of Care Option Three is likely to be clinically unsustainable.

There are a number of ways in which clinical risk will increase if Model of Care Option Three were to be implemented.

- Delays on clinical intervention will occur due to the need for patient transportation.
- There is an increased risk from moving patients while ill and in post operative and discharge states.
- There would be reduced disaster response capacity on the West Coast. This could have significant impacts on the number of lives saved and / or other health outcomes for those affected by a major disaster.
- There may also be increased clinical risk arising from complications in the DHB's ability to engage the right mix of staff with the reduced level of service provided under Model of Care Option Three.

With an estimated increased volume of 400 patient transfers for Model of Care Option Two and 1,850 for Model of Care Option Three, there are significant social and other economic impact costs for family / whanau and the West Coast community if either of these two options were to be selected.

- It is estimated that there would be up to 5,000 additional family / whanau accommodation nights required off the West Coast for Model of Care Option Two and 12,250 accommodation nights for Model of Care Option Three than are currently required. These incur direct financial costs associated with travel and accommodation assistance payments, however there are also indirect costs to the West Coast economy from the lost employment time for those patients who are in employment.
- There is also the increased stress and inconvenience to family.
- There will be increased demand for support services such as child minding and other arrangements when parents are required to travel to support a patient. These demands will be difficult to meet along the geography of the West Coast.

Model of Care Option Three would contribute to Health Inequality

- Demographically the Maori population is young (roughly 50% are under 24 years of age) and so, with young people needing treatment their whanau/family and/or whanau/whanui (wider family connections) would generally wish to travel in support (potentially at a personal cost).
- Maori already access services far too late. A concern would be that Maori are likely be even more reluctant to access services if these are not available locally and so Model of Care Option Three would contribute to health inequality.

The estimated capital cost of a new facility for Model of Care Option Three is \$74 million, driven largely by the seismic requirement for buildings that have a specific post disaster function (emergency department, radiology and some theatre capacity for stabilisation of acutely unwell patients).

Two facilities options have been explored for Model of Care Option Three. The more efficient of the two options and would increase the West Coast DHB's annual operating costs by \$21.7M per annum compared to the clinically and practically unsustainable status quo.

## Retaining Status Quo

Retaining the status quo configuration of Grey Base Hospital is not a viable long term option so has been excluded as an option in our analysis.

- The existing hospital facility does not meet building act requirements.
- West Coast DHB cannot attract sufficient staff for the current facility. The collaboration and co-operation of other DHBs (including shared service development, collaborative staffing arrangements and other share activities i.e. Model of Care Option One) is essential to the clinical viability of services on the West Coast.
- Model of Care Option One requires 14 fewer registered nurses than status quo (partially offset by an increase of 7.7 enrolled nurses and hospital aides) so actually helps alleviate the West Coast DHBs current staffing issues. Furthermore, the fact that this reduction can be managed within the West Coast DHB's current short staffing vacancies means that the change process can be managed through attrition rather than a messy redundancy process.

## RECOMMENDATION

For discussion.

<b>Author:</b>	<b>General Manager - Corporate Services – 19 November 2008</b>
----------------	----------------------------------------------------------------

<b>Approved:</b>	<b>Acting Chief Executive – 20 November 2008</b>
------------------	--------------------------------------------------