West Coast District Health Board

Draft Secondary Care Plan

Final Draft 25th May 2007

DRAFT

1. Introduction and Scope

The intent of this document is to plan out the specialised health services that will be needed for West Coasters in 10 – 15 years' time, and to set out a work programme for the next 3 years to prepare for these developments.

The scope of the plan is limited to hospital-based services. While some inpatient care and outpatient clinics and procedures are provided in Westport and Reefton, these are effectively 'super-primary' services. Secondary services are currently only provided from Grey Base Hospital, and it is not envisaged that this will change in the timeframe envisaged by this plan, although we do expect that some services currently provided from Grey Base Hospital will, in future, be provided as community-based services.

In general, mental health services are excluded from the scope of this plan. During the consultation period a number of DHB staff, working in mental health services and elsewhere, expressed the view that it would now be appropriate to plan for mental health services and other medical surgical services in an integrated way. While it is expected that this will occur increasingly it is currently still difficult to achieve this because of the external regulatory and funding environment. Nonetheless this plan now reflects a heightened intent to integrate services more closely.

Also the West Coast DHB has a number of other plans that impact on secondary care (such as the Chronic Conditions Plan, the Maori Health Plan and the WISE Plan). This plan needs to be read in conjunction with these as it does not set out to duplicate material already included in these others.

The West Coast faces twin massive challenges around both clinical and financial sustainability.

On the clinical side there are ongoing problems with recruitment and retention of clinical staff, increasing specialisation (and sub-specialisation) of healthcare leading to concentration of services in major urban centres, and volumes of work that, in some cases – make it difficult for clinical staff to maintain their skill levels.

On the financial side it already costs more to provide our services than the income we receive and this will worsen without radical intervention. There has been limited recognition of the elevated cost of providing high quality services to a sparsely and widely distributed population, and the DHB already has a significant accumulated deficit.

It is important that all DHB staff, and if possible the West Coast public, understand that if we continue to attempt to provide services in the way that we do now, these attempts will fail: individual services will become harder to sustain for all of the reasons listed above, resulting in unacceptable waiting times and more people needing treatment from other DHBs, with consequent exacerbation of the financial pressures, making our services even less viable: a vicious and unavoidable cycle. It may be that political or structural change could delay or mask some of these effects, but the underlying factors are fundamental and unavoidable: whatever the structure, West Coast services will need to be provided on a different model to survive.

There is, of course, a tension between our need to prepare and plan for the future and our short-term need to respond to urgent clinical or financial problems. Effectively a balance must be struck between these two imperatives, and this is likely

DRAFT

to be dynamic with trade-offs between short and long term consideration being struck in different positions depending on the circumstances. In general our operating principle is sequence as much of the longer term implementation work in such a way as to bring short term clinical and financial gain where this is possible.

This plan takes into account the historical pattern of high need for health services on the West Coast (well documented in the 2004 health profile of the West Coast) along with current trends, including stabilised or slightly growing population, rapidly increasing Maori population, and generally improving socioeconomic conditions. Once an updated set of information about demographics and health need is available it will be made an appendix to this plan.

The Way Forward

The central themes of this plan are:

- Huge emphasis on recruiting and retaining the future workforce
- A balance between generalists and specialists in the West Coast workforce
- West Coast returning to its past role as a major training site for health professionals
- A set of relationships with other DHBs and health professionals to have more complex services delivered to the Coast on a visiting basis
- Emphasis on high quality continuums of care, with less emphasis on designation of services as primary or secondary
- Multidisciplinary approaches
- Smaller, more efficient physical facility
- World-leading information technology platform to support this model

Overall the intent is to improve the quality and flexibility of our services, and to match the clinical intensity of services and spaces to patient need. Both of these developments should maximise efficiency and thus permit further services to be funded.

Consolidated Work Programme

Responsibility in this work programme indicates responsibility for leading projects, but for the sake of clarity, it should be noted that all tasks are expected to involve all managers and clinicians with a stake in the project, including joint leadership.

Timeframes are largely indicative, because of the co-dependence of many projects and the need to balance this forward-looking work with shorter term management considerations.

Task	Responsibility	Timeframe
work with providers to identify opportunities for strengthened community-based services that could eliminate or shorten hospital stays (admissions avoided and earlier discharge or transfer of care).	Planning & Funding	By end of 2007
work with residential care providers and A&E to clarify expectations of the	Planning & Funding	Before Winter 2007

DRAFT

level of care that is being funded in residential care facilities, in order to reduce presentations to A&E if possible.		
work with social workers, A&E and agencies from other sectors and use the planned community coordination service for older people to identify and collaboratively develop services better able to meet non-medical accommodation and support needs.	Planning & Funding	By end of October 2007
Urgent development of improved transport and accommodation options to shorten hospital stays	Planning & Funding to lead involving provider arm	Some reduction in ALOS during 07/08
Revise primary care plan to reflect the enhanced role that will be required	Planning & Funding	By end of August 2007
Task	Responsibility	Timeframe
Invest in community-based cardiac rehabilitation services	Planning & Funding	Already under way
Work with the West Coast Home Hospice Trust and community-based health services to reduce use of inpatient beds for palliative care.	Planning & Funding	Scoping by end of May 2007 with enhanced community service operating in 07/08 year
Increased use of day surgery and admission on day of surgery	GM Secondary Care	Funding methodology to support this in 07/08 DAP with significant progress to have been made in first half 07/08 year
Improved use of Buller Health, Reefton Hospital and residential care facilities for convalescent care, "slow stream rehabilitation" and investigation of other step down options	Provider arm to lead	Protocols to have been agreed by end June 2007
Commence process for funding new residential care beds in the community to facilitate provider arm exit from long stay.	Planning & Funding	ARC bed requirements and potential providers have been identified. End to new ARC admissions by end of June 07 at latest, with view to total exit in 2008/09
commence scoping of what will be required to provide AT&R service	GM Secondary Care & AT&R	Sustainable model of care and

DRAFT

across inpatient and community settings	multidisciplinary team with P&F input	transition plan developed by end of August 2007
scope what is required for establishment of centre of excellence for stroke management.	GM Secondary Care	Scoping completed by end of May 2007 with view to implementation in 07/08 year
Flexible use of inpatient space including potential merger of medical and surgical beds	GM Secondary Care & DON to lead	Scoping of risks and benefits of potential merger completed by end of May 2007
Establish Adult and Paediatric Assessment Unit if this can be achieved without compromising overall Grey Base 2020 project	GM Secondary Care, DON, CFM	Scoping completed, feasibility depends on outcomes of other projects, which should concluded by July 2007
Develop detailed specification of models of care to be used for each service	CQIT to lead	Completed by end of October 2007
Task	Responsibility	Timeframe
Review of admissions, transfers, and discharges policies, including implementation with a view to optimising quality of care and helping to implement new community coordinating service	DON to lead a team	Review under way, for completion by end of August 2007
Involvement of all staff in developing new patient journeys to improve process and facilitate early discharge or transfer of care	Provider arm GMs with DON, CMA	First projects under way early 2007, with at least 6 projects completed by end of 2008
Review efficiency of theatre utilisation with view to improvement	GM Secondary care	Review completed by end June 2007, with view to improvement in 07/08 year
Introduce reliable costing system, to enable adjustment of case mix for maximum allocative efficiency	GM Secondary Care with CFM	Most common procedures have now been costed and will influence final SLA for 07/08 year Full costing system in place by end of 08/09 year
Establish West Coast Health Innovation Awards	CEO	Awards announced by end of May

DRAFT

		2007, aiming to make awards in October
Task	Responsibility	Timeframe
Establish training centre	DON to lead	Development plan by end September 2007
All Departments to have in place collaborative arrangements with other DHBs	Department heads to take responsibility with GM Secondary care to coordinate	Arrangements in place before end of 2007
Implementation plan developed for collaboration agreement with CDHB	GM Planning and Funding, GM Secondary Care, DON	To be in place by end of September 2007
Relationship established with faculty and students from Diploma in Rural Hospital Medicine	CEO	By end of August 2007
Mix of medical cover reviewed with a view to replacing RMO cover with more senior medical Officers	GM Secondary Care to lead	Review completed before end September 2007
Full implementation of Recruitment and Retention and Workforce Development plans	HR Manager	Timeframes established in plans
Work with NZNO workplace committee to build generalist capability of nursing workforce	DON and HR Manager to lead	Plan in place by end of August 2007
Staff Learning and Development Plan to reflect need for appropriately and flexibly skilled workforce used as basis for budgeting and approval for training and development	HR Manager to lead	Overall Plan developed by end of September 2007. All department plans developed and approved by Committee before end of June 2008
Further development of the scholarships and incentives schemes established by WCDHB, including extension to other professions, better school-based initiatives, enhanced relationships with people undergoing professional training and collaboration with other West Coast employers	HR Manager to lead	Ongoing tasks, but all to be in place before end of 2007
Feasibility work undertaken to inform application to Minister for approval to establish capacity for privately-funded elective services	GM Secondary to lead	Feasibility work completed by end of June 2007, with view to submit application by end of 2007
Task	Responsibility	Timeframe
Update bed number projections based on new census data	CEO	Updated Ministry projections

DRAFT

		received. Projected admissions work under way, due by end June 2007
Consultants to develop new build and reconfiguration options	CEO	Basic options were developed and submitted to National Capital Committee in March 2007. Some further options being investigated, for completion June 2007
Preferred hospital options identified, including consultation	CEO	End July 2007
Preferred hospital options costed	CEO	End July 2007
Business case submitted to National Capital Committee if one or more of the hospital options is immediately viable (otherwise plan developed for when Case may be submitted)	CEO	August 2007 if all work completed, but August 2008 more likely
Task	Responsibility	Timeframe
Continue full integration of IT systems to complete single patient record	CFM	Ongoing, but intent is to have fully integrated patient record by end of 07/08 year
Use aggregated data from patient records to project need for service planning	GM Planning and Funding	First serious use for 08/09 DAP
Implementation of the Council of Medical Colleges report on telemedicine	GM Secondary Care/CFM	Implementation is likely to be at different rates dependent on individual departments. At least 3 pilots for enhanced use of telemedicine in place by end September 2007

DRAFT

2. **Themes**

This section is based on an extensive consultation with DHB staff concerning the trends they believed would or should affect the services that West Coast DHB would be providing from Grey Base Hospital in 2020:

Greatly strengthened primary and community sector
Much of the Government's strategy in health is premised on the idea that enhanced public health and primary care services will reduce the need for secondary care services. As secondary care services tend to be resource-intensive, this should be a more efficient configuration overall, as well as leading to better health outcomes. This does not generally apply on the West Coast, as reduced need for secondary care services does not actually reduce the cost of having them available. The redevelopment of Grey Base Hospital therefore provides a one-off opportunity to realise these gains, and staff believe that significant reduction in admissions can be achieved through enhanced community-based services.

Examples were offered in specialist respiratory nursing in the community, which had resulted in a substantial reduction in admissions for respiratory illness. Cardiac rehabilitation nursing was suggested as a new service that would lead to significant reduction in admissions and this is now being implemented.

Staff also sought much closer links between primary and secondary services, with many going so far as to suggest that the terms 'primary' and 'secondary' were not helpful. They felt that in some areas this could lead to a more seamless service that would be more responsive to client need. An example was medical assessment, treatment and rehabilitation services for older adults, where staff felt that some inpatient beds would need to be retained, but that many patients' needs could be met in the community by a multi-disciplinary team based at the inpatient unit.

West Coast DHB's ownership of many general practices on the West Coast provides a unique opportunity to build services that eliminate potential disconnections between primary and secondary sectors.

This perspective was also shared within the mental health staff of the DHB, who felt that enhanced community based services, particularly located in primary medical care settings had great potential to reduce the need for inpatient care.

There was strong support for the prospect of having general practice and other primary care services (perhaps the Greymouth Health Centre) physically on site and located alongside the emergency department and diagnostic services. Some outpatient clinics could be held in community-based settings rather than in the hospital.

This plan is likely to also require significant enhancement of allied health services in community settings.

Other admissions averted
Staff identified some other categories of admissions that could be avoided through enhanced service delivery by other providers. One example was the category of "social admissions" (patients who are admitted to hospital because of a need for social support rather than for clinical need). Clearly the existence of more effective services in the community, such as community based social workers or social service advocates and brokers and the improved assessment processes and coordination of

DRAFT

transfers of care planned with the Community Coordination Service for older people, will reduce this category of admissions. It is important to express the caution that sometimes individuals are admitted to inpatient care without a clear diagnosis because they have complex needs, and it will be important to ensure that these two groups are appropriately distinguished.

A number of beds in Grey Base Hospital are taken up by people receiving palliative care services. In general these services could be provided in people's own homes or in residential care facilities providing an appropriate level of care, provided that this is funded and capacity exists.

Grey Base Hospital is currently the provider of long stay aged residential care for a number of people. These individuals do not, in fact, need clinical care at the specialist level provided by Grey Base Hospital. There is a consensus of staff that these services should, instead, be provided in a community setting, as is the norm in New Zealand.

Some staff also identified an issue of older people using aged residential care services in the community being treated and admitted to Grey Base Hospital for conditions that should be treatable in their residential care facilities. It will be important to establish what is required to ensure this occurs.

Earlier discharges possible

Staff identified that another benefit of enhanced community services and better interface between hospital and community-based services was that patients could more confidently be transferred to community settings, allowing earlier discharge from acute beds. Staff often identified a need for a 'step down' or convalescent care facility. This would allow a service option for those individuals who require support, or ongoing "slow stream" rehabilitation but who no longer need the level of clinical care provided by the hospital.

An accommodation service may also assist earlier discharge for patients who live distant from Greymouth and who have not (or not been able to) organised transport home. Sometimes such patients stay longer that clinically necessary in hospital beds. Enhanced transport options may also help resolve this problem.

There was some disagreement, but most staff felt that there remained scope to improve planning for transfer of care, with clear plans for care and discharge established on admission and closely managed and monitored for compliance. Many staff felt that increased involvement of allied health professionals would also contribute to earlier discharge or transfer.

One particular category of patient journey improvement that could lead to shorter stays was increased use of admission on day of surgery (and many staff felt that in the timeframe of the project increased use of day surgery would also be likely).

Retention of medical and surgical services

There was widespread recognition that while trends in medicine (particularly increasing specialisation) would mean that it will be difficult to retain the existing range of services with our current staffing arrangements, it should be possible to retain a wide range of services by changing these arrangements. For example many surgical services may be provided in Grey Base operating theatres by visiting specialists from another DHB or from a regional service.

DRAFT

Everybody acknowledged that it may become necessary to transfer some more patients to other DHBs more often in the future (particularly for more complex acute medical and surgical need) but the DHB should plan for inpatient care and procedures to remain at similar volumes to the present.

Flexibility through generalisation
Staff saw specialisation (of both skills and space) to pose problems for a rural area such as ours, creating numerous critical mass thresholds to maintain services. While specialised staff are clearly necessary for some roles, in general the approach should be to employ generalists who have in their scopes of practice the specialised skills needed for the services to be provided here. For example the nursing workforce should generally be flexible enough to work across different wards, while retaining specialised skills where this is appropriate.

It is likely that Grey Base Hospital will become a significant employer of the Rural Hospital Doctors currently being trained at Otago and applying for vocational recognition with the Medical Council.

The same rule applies to space itself. Many spaces within a hospital are, by their nature, specialised in purpose, but where this is not the case then space in Grey Base Hospital should be designed for flexible use on a routine basis and to allow for changing styles of care over time (future proofing). For example an inpatient bed should generally be sufficiently flexible to be used for most kinds of inpatient, and this may well result in changes to the categories of ward. Many other hospitals have combined medical and surgical wards, for example. Merger of medical and surgical wards was one of the strategic recommendations of the 2004 Crown Health Financing Agency review of West Coast DHB, with significant savings and clinical gains identified.

Some new services
It is likely that changes to technology may make some services possible in a place like the West Coast that are not currently so. Grey Base Hospital needs to be sufficiently flexible to accommodate such new services if at all possible.

West Coast DHB has for some years planned to develop a specialised stroke service, and this will become more pressing with the increase in aged population that we expect by 2020.

Core services
There was very strong agreement indeed that the core, critically important services that Grey Base Hospital needed to provide were:

- A high quality emergency department that can operate like an acute admissions unit, holding patients for up to 24 hours for emergency treatment, observation and stabilisation.
- Ability to transfer (preferably in all weathers).
- High quality imaging and laboratory services with a robust IT platform to communicate with other centres.
- Maternity services.
- Ability to perform a range of emergency procedures that cannot wait for transfer or for a surgeon to come from elsewhere

DRAFT

In defining this core staff were not saying that other services were not important, but that these services were the most important and should be the highest priority for West Coast DHB to secure.

One helpful piece of work would be the investigation of whether there is value in locating air ambulance services on the Coast with our own transfer teams.

Training Centre
There was very strong support for the prospect that part of being a centre of excellence for rural health services was an active training programme. West Coast DHB should be the premier site where health professionals across a range of disciplines come to develop expertise in rural practice, and the new facilities should reflect this with adequate spaces for lectures, seminars, study etc.

Designing for Maori
West Coast DHB is already strongly committed to providing a culturally safe and high quality service for Maori community and patients and to developing our Maori workforce. The hospital redesign process provides an opportunity to create a layout that facilitates tikanga best practice and creates a better environment for Maori patients and staff. A particular design element that would assist this would be the creation of a space that can be used for powhiri, poroporoake and other Maori-oriented events.

Designing for staff
It will be important to design the facility in a way that provides a suitable work environment for staff. Some elements that were raised in this regard were adequate changing and showering facilities, use of an in-house gym, a space for eating and relaxing separate from the general public to ensure privacy and adequate car-parking.

High Dependency Unit
Some significant work has already been undertaken with regard to creating a High Dependency Unit that would co-locate a paediatric observation unit and CCU with the emergency department, to increase clinical safety of these services. There was staff support for this to be an element of the hospital of the future. In the interim the cost of moving CCU has been investigated and proves to be prohibitive. However, there is another option that would provide some of the benefits without incurring the major costs. An Adult and Paediatric Assessment Unit would co-locate an extended adult observation area and a paediatric assessment unit with ED. This is currently being evaluated.

Work Programme:

Task	Responsibility	Timeframe
work with providers to identify opportunities for strengthened community-based services that could eliminate or shorten hospital stays (admissions avoided and earlier discharge or transfer of care).	Planning & Funding	By end of 2007
work with residential care providers and A&E to clarify expectations of the level of care that is being funded in residential care facilities, in order to	Planning & Funding	Before Winter 2007

DRAFT

reduce presentations to A&E if possible.		
work with social workers, A&E and agencies from other sectors and use the planned community coordination service for older people to identify and collaboratively develop services better able to meet non-medical accommodation and support needs.	Planning & Funding	By end of October 2007
Urgent development of improved transport and accommodation options to shorten hospital stays	Planning & Funding to lead involving provider arm	Some reduction in ALOS during 07/08
Revise primary care plan to reflect the enhanced role that will be required	Planning & Funding	By end of August 2007

DRAFT

4. Changes to Models of Care

The Board of the West Coast DHB has adopted the following principles to guide development of our services and facilities:

Parameters for Models of Care Fundamentals

- Seamless continuum of care from public health through to tertiary and end-stage care is a key priority
- Models of care and service planning should aim to optimise health outcomes
- Services should be provided in ways that balance equity of access against other dimensions of quality (including safety and efficiency)
- All services should exemplify excellence through the highest possible quality given the constraints of the rural environment
- WCDHB will seek innovative solutions to service delivery and organisational problems
- WCDHB will seek to agree an equitable and reasonable basis for funding secondary care services on the West Coast with the Ministry of Health and then to manage services within this funding
- WCDHB will seek to collaborate with other DHBs where this will improve the quality of services available to West Coasters

Several particular changes to Models of Care are proposed:

Cardiac rehabilitation
The West Coast has had essentially no cardiac rehabilitation programme, and we believe that a consequence of this is that a number of unnecessary readmissions to Grey Base Hospital occur. A community-based cardiac rehabilitation programme has now been put in place, following the consultation on this plan. Community-based follow-up (perhaps through Green prescription) needs to be put in place for patients who have been through cardiac or pulmonary rehabilitation.

Palliative Care
Quite a number of inpatient beds are currently used for patients receiving palliative care. Sometimes inpatient care is appropriate for such patients, but more often such patients could receive the care they need either at home or in a community-based facility (e.g. a residential care facility) provided that appropriate services were available. It is proposed that the DHB works with both the West Coast Home Hospice Trust, other appropriate NGOs (e.g. Cancer Society) and with the Aged Residential Care sector to develop an appropriate range of services.

Assessment Treatment and Rehabilitation
Assessment, Treatment and Rehabilitation services are sometimes appropriately provided in inpatient settings but often would help produce better patient outcomes if provided from the patient's own home (or at least a more homelike environment, such as a residential care facility, Buller Health, or Reefton Hospital). It is proposed that West Coast DHB develop its AT&R multi-disciplinary team to the point where it is able to provide care across a variety of settings, with a view to matching the setting and service provided to individual patient need.

Aged Residential Care
West Coast DHB currently provides long-stay hospital beds in Grey Base Hospital. As it would be more appropriate to provide these in a less medicalised setting, the

DRAFT

DHB will close these beds and seek alternative community providers for them. The details of this planning are set out in the WISE Plan.

Stroke Management
Stroke is likely to be of increasing significance in the disease load being faced by Grey Base Hospital. The current intention is to develop a particular expertise around the management of stroke. It is possible that this may require dedicated beds, but more likely that it will involve implementation of best practice guidelines and close collaboration with Canterbury DHB. This may require a private area for assessment and treatment and will require prioritisation of training in this area and encouragement for staff to specialise in it.

Increased Day surgery and admission on day of surgery
If average length of stay can be reduced, fewer acute beds will be needed, driving down the size of facilities and cost required for inpatient (the most expensive) care and freeing up resources to use for other services. Shorter time away from home also leads to less disruption for the patient and better outcomes (provided that the patient still stays in hospital for as long as he or she has the clinical need to do so).

Use of step up/step down facility
Best use of resources results from matching a patient's level of clinical need to the appropriate level of support and professional expertise. Some patients require a level of support or long term rehabilitation greater than that which can be appropriately provided in their own home, but less than that routinely available in inpatient facilities. West Coast DHB will develop a facility well-matched to these patients' intermediate level needs, including some patients who are making a transition from inpatient care to home-based care more gradually.

Combined Medical and Surgical Ward
Provided that appropriate infection control policies and procedures are followed there is no sound clinical reason why medical and surgical beds should not be in the same ward. This is increasingly the norm in other similar sized hospitals, and has been our own common practice at times of short-staffing. A preliminary examination by the Crown Health Financing Agency in 2004 indicated that combining these wards is already clinically viable, but it should become more comfortably so as other measures outlined in this plan reduce demand for both medical and surgical bed-days. The plan is to investigate a merger of these wards.

High Dependency Unit
Co-location of paediatric beds, CCU and Emergency department has consistently been identified as a measure that would add significantly to clinical safety, particularly at nights and weekends, and that may also produce some staffing efficiencies. The work that has been undertaken to date indicates that the cost of moving CCU within the existing physical infrastructure is prohibitive, but a High Dependency Unit is very likely to be a feature in a new hospital. In the interim, a plan has been developed for an Adult and Paediatric Assessment Unit co-located with ED, which will gain some of the benefits of the HDU but at much less cost. The feasibility of this development is currently being tested, as it will depend on the success of several other projects.

Enhanced holding and observation in Emergency Department
Currently some patients are admitted to medical beds essentially for observation, usually taking an inpatient bed for a day at least. Resourcing Accident and Emergency Department to enhance its ability to act like an Acute Admissions Unit (able to hold and observe patients for up to 24 hours) should eliminate these

DRAFT

admissions with indeterminate need. This is being addressed in the proposal for an Adult and Paediatric Assessment Unit.

Collaboration with other DHBs
The ongoing problems with clinical sustainability will intensify in the future, particularly in an environment of increasing specialisation. When a resource is in short supply, making best use of that resource is always going to be stymied by the creation of multiple critical mass thresholds. Effectively this is what we do when we require each DHB to maintain its own team of specialists. From a system point of view, good use of resources requires that we develop means of applying a single pool of expertise (specialists) to diverse clients (patients in multiple DHBs). Some work is already under way on a small scale to look at the development of regional services and service networks (in which each node of the network has some combination of need and provision capacity, and resource is distributed across the network to equitably provide for need.

There are already quite a number of regional mental health services and these provide one of the possible forms such services could take. In the meantime it is immediately worth considering three categories of collaboration in the clinical sphere:

1. More provision by specialists from other DHBs travelling to the West Coast;
2. Enhanced provision by West Coast clinicians as a result of effective peer support from clinicians in other DHBs;
3. More provision by specialists from other DHBs with patients travelling.

It is essential for this thinking to be occurring now, so that it is incorporated into the plans of those other DHBs with whom we need to be collaborating. This thinking must also address how best to ensure the quality of care for patients following the departure of visiting surgeons.

One possibility that needs to be investigated is the use of ‘superclinics’ provided for outpatients by visiting clinicians.

Work is now under way to develop detailed specification of the models of care that we expect to use in each service.

Work Programme

Task	Responsibility	Timeframe
Invest in community-based cardiac rehabilitation services	Planning & Funding	Already under way
Work with the West Coast Home Hospice Trust and community-based health services to reduce use of inpatient beds for palliative care.	Planning & Funding	Scoping by end of May 2007 with enhanced community service operating in 07/08 year
Increased use of day surgery and admission on day of surgery	GM Secondary Care	Funding methodology to support this in 07/08 DAP with significant progress to have been made

DRAFT

		in first half 07/08 year
Improved use of Buller Health, Reefton Hospital and residential care facilities for convalescent care, “slow stream rehabilitation” and investigation of other step down options	Provider arm to lead	Protocols to have been agreed by end June 2007
Commence process for funding new residential care beds in the community to facilitate provider arm exit from long stay.	Planning & Funding	ARC bed requirements and potential providers have been identified. End to new ARC admissions by end of June 07 at latest, with view to total exit in 2008/09
commence scoping of what will be required to provide AT&R service across inpatient and community settings	GM Secondary Care & AT&R multidisciplinary team with P&F input	Sustainable model of care and transition plan developed by end of August 2007
scope what is required for establishment of centre of excellence for stroke management.	GM Secondary Care	Scoping completed by end of May 2007 with view to implementation in 07/08 year
Flexible use of inpatient space including potential merger of medical and surgical beds	GM Secondary Care & DON to lead	Scoping of risks and benefits of potential merger completed by end of May 2007
Establish Adult and Paediatric Assessment Unit if this can be achieved without compromising overall Grey Base 2020 project	GM Secondary Care, DON, CFM	Scoping completed, feasibility depends on outcomes of other projects, which should concluded by July 2007
Develop detailed specification of models of care to be used for each service	CQIT to lead	Completed by end of October 2007

DRAFT

5. Service Quality Improvement

The West Coast DHB's vision of becoming the New Zealand Centre of Excellence for Rural Health Services will be achieved principally through innovation, continuous quality improvement and leadership. This chapter provides a systematic overview of quality applied to health services and, while it appears in the secondary care plan, it applies more generally to all of the services provided by WCDHB.

Outside the scope of this chapter are some already established quality activities such as:

- Complaints management
- Credentialing (currently being reviewed)
- Certification (where we should be aiming for 3 year certification)

although all of these remain important to the achievement of our goals.

Governance for all clinical quality improvement activities will be provided by the Clinical Quality Improvement Team.

Framework for Planning

The purpose of resdesigning health services is inevitably compromised by what already exists. Partly this is because whatever our destination, we somehow have to get there from here, and we are inclined to look for the most practically achievable routes. Partly it is because our experience of what presently exists seems to make altogether different possibilities impossible to see for those working in a system.

Mindful of these difficulties, for the purposes of this project, our intent is to do our best to think in a completely different way. In the future hindsight will enable us to judge the extent to which we have been successful.

It is first necessary to conceive of the range of services that our customers (patients, clients, users, consumers) need:

- Public policy, environments and community empowerment that keep communities well.
- Development of individuals' skills or knowledge to keep well.
- Support services to maintain health or independence.
- Development of individual skills or knowledge to facilitate self care.
- Assessment of need for professional help.
- Advice to support self care.
- Diagnosis.
- Treatment.
- Referral to someone better able to help.
- Rehabilitation.
- Palliative care.

The intent of this list is to provide the independent and distinct categories of service that add value for our customers. None of these categories should overlap with any others, and all other services that currently exist should fit into one or more of these categories.

DRAFT

A requirement of our plan is to ensure that this range of services is available to all of our citizens. Part of the value of the broad conception of quality that has been used in the New Zealand health sector for the past decade or so is that it incorporates all of the dimensions that we are seeking in planning care. We therefore propose to use the quality framework as our basis for planning these services. The dimensions of this framework are:

- Accessibility
- Acceptability
- Effectiveness
- Efficiency
- Safety

It is well understood (or at least is becoming so) that application of the quality framework requires us to consider the services that we provide from our patients' point of view. What is perhaps less well understood is that the assumption of our health care system is that the funder acts as an agent for the consumer, or rather for the collectivity of consumers. For the most part this makes no difference, but on occasion this is a helpful equation.

We now explore these quality dimensions in some detail.

Accessibility

Most people now understand the principle of making buildings or services accessible to people with disabilities through the provision of ramps, interpreters and so on. These constitute accessibility on the micro scale. Other micro scale accessibility interventions include the times of day that a service is available. For example, a health service that is only open from 9am to 5 pm is relatively (and may be absolutely) inaccessible for people with daytime working hours.

While these micro scale accessibility issues are important in service planning, we are also concerned with the macroscale. In particular, for the West Coast there is a range of issues around the location of services. We have a small population, sparsely distributed over a large and stretched out area. In practice population density is often insufficient to sustain service delivery models that are standard elsewhere. This applies both within the West Coast and more broadly, with West Coasters often needing to travel outside the district to access specialised diagnosis and treatment services, in particular.

As a general principle health services should strive to provide services in locations, at times and in ways that are as easy to access as possible. This convenience should lead to maximal meeting of needs and therefore optimise health outcomes. While this is a guiding principle there is perhaps some debate as to whether people have this as a right, by virtue of citizenship. The counter argument would be that individuals make choices about where they live, and someone who chooses to live in a remote location ought not to have expectations for health services that are unsustainable in such a location.

There is also a tension between maximising accessibility and several other quality dimensions. In particular services provided (or service capacity provided) in locations where need for the service is less than its supply are wasteful of resources and, therefore, inefficient. Effectively resources are not available for the provision of service elsewhere. Further, some health services (for example some surgical

DRAFT

interventions) require a minimum volume or repetition to ensure both maximal effectiveness and safety.

Acceptability

New Zealand is fortunate in that a significant proportion of the issues we would typically consider in this dimension of quality has been codified in the Health and Disability Consumers' Code of Rights (although this also contains an overlap into some other dimensions of quality). Without repeating the entire code we can say here that the responsibilities amount to treating patients with respect, keeping them well informed about their health condition and the services they are (or could be) receiving, maximising their ability to control the situation they are in (including informed consent to procedures) and being responsive to their concerns and feedback.

This is also the dimension of quality that incorporates the idea of "cultural safety". The point of cultural safety is to be aware of and responsive to the culture, beliefs and values of each individual patient, bearing in mind that these may vary according to age, gender, religious belief, ethnicity, sexual orientation and a myriad of other factors. Providing services in ways that are maximally congruent with this individual culture (or at the least do not conflict with it unnecessarily) will minimise unnecessary "friction" in therapeutic encounters and maximise service effectiveness.

Effectiveness

Effectiveness is essentially the extent to which customer value is achieved. We are seeking to maximise it. When we talk about customer value we essentially mean:

Quantity	Cure Reduced severity
Quality	Understanding of condition and prognosis Symptom relief Reduced disability Greater sense of wellbeing

Typically we have not measured effectiveness in health care. To do this would need outcome measures. The difficulty here is that sometimes outcomes are hard to measure and also that our reasons for wishing to measure have typically been associated with wishing to know how well a particular service provider has done, and outcomes are likely to be attributable to a number of factors, rather than simply service provision. Instead we have tended to measure outputs – how many times we have provided a particular service – or even capacity – how much of a particular service was available.

The challenge in improving effectiveness is in knowing when we have done it (and therefore doing more of what works and less of what doesn't). This amounts to evidence-based practice, and requires that we become better at sourcing evidence (including best practice guidelines, where someone competent has already reviewed the evidence for us) and basing what we do on it. This is not currently something we are good at.

Efficiency

There are two types of efficiency that concern us. At a system level we are concerned to ensure that the mix of services that we put resources into is that which achieves the maximum customer value. In practice this is almost laughable as service mix is very largely driven by traditional patterns of service, political

DRAFT

considerations, and available capacity. Further, with the exception of pharmaceuticals we know almost nothing about the comparative cost:benefit ratios of different services, and so would not be in a position to adjust these in a meaningful way in any case. There are the beginnings of some new approaches (e.g. expanded scope for Pharmac, the SPNHIA framework) which allow for some improvement in this area.

More importantly, however, we are more likely to find easily achieved gains within individual patient care processes by eliminating waste. There are a number of different categories of waste. One conception comes from the Toyota Motor Company, for example, which uses the following categories:

- Overproduction
- Waiting
- Unnecessary transport or conveyance
- Overprocessing or incorrect processing
- Excess supplies
- Unnecessary movement
- Defects
- Unused employee creativity

A typical process for reducing waste is ask workers involved in providing a service to map out the existing “patient journey”, including steps or time periods where service is not being directly provided to the patient and identify those steps which “add value” for the patient, and those which do not. This same group then redesigns the process to minimise those steps that do not add value for the patient. The aim is to maximise flow.

This is not a one-off process, and lends itself to iteration to provide for continuous quality improvement.

Application of this technique should result in our being able to provide more service with existing resources or the same amount of service with less resource. It will also improve patient satisfaction by minimising steps that aren’t adding value from a patient perspective, and will increase safety of services. Where this technique has been applied in other health services, patient journeys have often been found to incorporate an extraordinary number of steps, including many “handovers” from one health care worker to another. As every step must contain some potential for making errors, and this is particularly so for steps requiring communication, such as handovers, the more steps a process requires the less likely it is that the overall process will be completed without errors.

Safety

The frequency of adverse events in general, and serious adverse events in particular, both in hospitals and in health services more generally is frighteningly high. One method for improving safety is discussed above: reducing the complexity of patient journeys will reduce the potential for errors and thereby make these services safer.

Another technique is to standardise patient journeys and processes as much as possible. Again this is an area where we may learn from industry. Even though there is significant variation in individual patient need and our response to that need, this variation is relatively small for the vast majority of patients, and may be effectively non-existent for many of the steps in our patient’s journey. The more we are able to

DRAFT

standardise the way that each step is actually carried out, the more we will have reduced the scope for error.

The establishment of standard processes both for the overall patient journey and for individual steps within it, provide us the possibility of then measuring the progress of our care for each patient against this plan, recoding and displaying this information to provide a further check against error and to assist in identifying problems.

While we have a large number of policies and procedures already at WCDHB, familiarity with these is highly variable, access to them is also variable, congruence of what actually occurs with our procedures is variable and we do not, in general, constantly monitor actual service delivery against the plan, and display this in a way that allows everyone to see what is going on (thereby minimising risk of errors) These are all areas of potential improvement in safety.

Redesign process

There are limitations to the application of these quality dimensions for personal health to public health interventions working at the community level, and it may be that a different framework for service improvement needs to be applied to these. However in all other cases this five dimension quality framework should provide a useful basis for determining our future models of care.

	Accessibility	Acceptability	Effectiveness	Efficiency	Safety
Public policy, environments and community empowerment that keep communities well.					
Development of individuals' skills or knowledge to keep well.					
Support services to maintain health or independence.					
Development of individual skills or knowledge to facilitate self care.					
Assessment of need for professional help.					
Advice to support self care.					
Diagnosis.					
Treatment.					
Referral to someone better able to help.					
Rehabilitation.					
Palliative care.					

There are two further points to make about this matrix. Firstly, if we were to think in three dimensions (as opposed to two) then a third axis could be added in which particular population groups are set out. In this extended model then there would be

a cell that considers, for example, the effectiveness of support services for Maori, or for young people or for people in South Westland. I propose that we do not add this complexity in a formal way, but rather that each service development group is required to consider any particular requirements of population groups as they develop their plans.

Secondly it will be evident that this categorisation of health services represents a generic version of a continuum of care. From a functional point of view, however, it will be noted that the support services intended to keep people well and independent are essentially provided by the same workers as rehabilitation services, and it probably makes sense to consider these two categories of service together, so long as we are mindful that there are actually different episodes of care under consideration: pre and post clinical interventions.

The intent is that we now ask those health professionals who are involved in providing these categories of service to plan both the long term arrangements for provision of these services and shorter term improvements.

We will form a series of steering groups whose task will be to consider groups of services from the perspective of patients and to develop internal patterns and procedures that will optimise the quality of services. More detail of possible scope and membership of these groups is included in Appendix 4.

Innovation

We need to continue to establish and consolidate an organisational culture in which innovation is encouraged and rewarded. The national Health Innovation Awards provide a useful focus, with WCDHB already performing well on this stage. Several other DHBs have been successful in establishing local 'feeder' competitions, and this would seem to be worth exploring.

Work Programme:

Task	Responsibility	Timeframe
Review of admissions, transfers, and discharges policies, including implementation with a view to optimising quality of care and helping to implement new community coordinating service	DON to lead a team	Review under way, for completion by end of August 2007
Involvement of all staff in developing new patient journeys to improve process and facilitate early discharge or transfer of care	Provider arm GMs with DON, CMA	First projects under way early 2007, with at least 6 projects completed by end of 2008
Review efficiency of theatre utilisation with view to improvement	GM Secondary care	Review completed by end June 2007, with view to improvement in 07/08 year
Introduce reliable costing system, to enable adjustment of case mix for maximum allocative efficiency	GM Secondary Care with CFM	Most common procedures have now been costed and will influence final SLA for 07/08

DRAFT

		year Full costing system in place by end of 08/09 year
Establish West Coast Health Innovation Awards	CEO	Awards announced by end of May 2007, aiming to make awards in October

DRAFT

6. Workforce

This section adds to without repeating the content of the WCDHB Recruitment and retention and Workforce Development plans (including Maori workforce development) that are already in place.

Continuum of Care

Government health strategies for at least the past fifteen years have focused on moving the point of intervention in a person's illness away from the highly specialised end of the continuum of care towards the public health end. Reasoning has been that this results in better outcomes for communities and for individual patients, while resolving their health problems in a less resource-intensive way, and thus making the health dollars go further.

This is a compelling logic. While there is a difficulty in implementing the strategy without hump funding for the West Coast (at least initially, keeping people out of hospital beds costs money in community services without reducing any costs in secondary care) this logic is nowhere more applicable than on the West Coast.

In an area the size and shape of the West Coast, hospital-based services are simply going to be too far away as a basis for a health strategy. The backbone of a health service response to people's need must therefore be in public health and community-based services.

One of our service change focuses, therefore, is on identifying people who are in hospital beds who would not need to be there if adequate community-based services were in place and developing the missing or inadequate services. Some initiatives under way in this category are:

- Clinical nurse specialist roles (most recently cardiac rehabilitation) to minimise the need for secondary admissions.
- Development of a comprehensive chronic conditions plan that better manages (including self management) patients' conditions in the community.
- Development of home-based palliative care options to minimise admissions to hospital for palliative care patients.
- Enhancement of mental health services in primary care environments to reduce secondary admissions.
- Identification of older patients whose assessment, treatment and rehabilitation services could be provided in their own homes.

Increasingly this work involves a more porous boundary between traditional primary and secondary care. For example, Clinical Nurse Specialists often work with patients in hospital and in the community. In the ATR example, the staff involved in providing this service are increasingly thinking about a single team that works across a variety of settings according to patient need.

Collaboration with other DHBs

Depending on where people live on the West Coast, their closest neighbouring DHB may be Nelson Marlborough, Canterbury or Otago. Historically our closest linkage has been with Canterbury, as the provider of the bulk of tertiary procedures and high-end secondary work beyond our scope (including some services that visit). It is evident that smaller DHBs require collaborative relationships with larger DHBs to meet Service Coverage Schedule requirements.

DRAFT

West Coast DHB does have a formal agreement and project structure with Canterbury to explore the extent of collaboration and our current perception is that, despite a slow start due to historic factors on both sides, progress is now starting to be made. Areas that West Coast is interested in exploring in this relationship include:

- Joint appointments of specialist staff;
- West Coast specialist services provided by Canterbury;
- Provision of electives to Canterbury people on the West Coast;
- Credentialing;
- Supervision;
- Peer support/CME;
- Secondment of Canterbury staff to work on West Coast projects and vice versa;
- Training;
- Conjoint or collaborative back-office functions,

as well as enhancement of areas where considerable collaboration is already occurring. NMDHB and ODHB have also expressed a willingness to assist us, and there are the beginnings of a South Island wide approach to service planning including the possibility of regional services (as already exist in mental health). West Coast DHB is strongly supportive of these.

West Coast DHB also needs to ensure that we take full advantage of the availability of those visiting specialists we already have coming to the Coast.

One problem that small DHBs face in seeking collaboration with larger DHBs is asymmetry of need – collaboration is likely to be very important to the small DHB and not that important at all for the larger of the two. In the absence of stronger imperatives, even the best of intentions do not necessarily translate into action.

Existing and currently proposed clinical collaboration at a secondary level is set out in the table below. The table does not exclude ad hoc collaboration that occurs from time to time. Nor does it include tertiary services, which are all provided by other DHBs.

It is intended that this table represents a "snapshot in time" and will change during the life of this document. The areas in which we collaborate will change and grow, and we will seek new collaborations as we become more aware of what may be possible.

Department	Existing Collaboration	Proposed collaboration
Accident & Emergency	Liaison over transfers	
Anaesthetics	Informal collaboration about all Perioperative patients.	Morbidity and Mortality meetings

DRAFT

Department	Existing Collaboration	Proposed collaboration
Anaesthetics	• CME • Informal - through medical staff links	• Anaesthetic Morbidity and Mortality - Preferably videoconferencing, but audio at a pinch. Major need for someone to set up the equipment for him in advance of the meeting as time problems • ICU meetings on a Tuesday…would like to physically go on occasions
Surgical Ward	Referrals for investigations and treatment.	
Theatre/CSSD	• Collaborative group of Nurse Managers and OR Managers in Wairau, Gisborne, Timaru, Nelson, Whakatane, Southland and Burwood and private hospitals in Christchurch and Christchurch public – sharing ideas, policies and seeking opinions. • CSSD – CSSD Managers Group / Network, mainly work with CDHB, Wellington and Wairau with ability to contact any one of the 15 members • Ability to utilise HR Network • Ability to contact Doctors in many DHBs • **Theatre** – Have contacted Royston (Private) Hastings, Middlemore, Tauranga, Wakefield Hospital Wellington, use the Special Interest group Contacts through out NZ. • **Endoscopy**-Christchurch Public, Wakefield, Oxford Clinic, Manuka Trust, Nelson, Wairau and can contact any other DHB/Private Hospitals within the Endoscopy Special Interest Group. Have regular contact.	
General surgery	• Urology, none (private contract) • Plastics,	Concern re quality of videoconferencing equipment for what we need to do especially issues such as real time supervision of surgery and also for frozen sections via telepathology
Orthopaedic	Discussion under way around supervision, peer support and acute cover	• Link to Medical School ChCh Wed 7 am for Journal club • Registrar Seminars/teaching Med School 3.00 pm Friday • Link to

DRAFT

Department	Existing Collaboration	Proposed collaboration
		Radiology/Orthopaedic meeting Wed 8 am…audit
Obstetrics & Gynaecology	• Some supervision • An invitation exists for us to attend these meetings, but it takes out a whole person for a day	• Video link to rolling half day meetings (teaching/audit/ morbidity and mortality) • Video link to Perinatal morbidity and mortality meetings • Video link to Colposcopy audit meeting (requirement for MDT approach through our contract for colposcopy)
Midwifery services	• Close collaboration with Neonatal Services at Christchurch Women's Hospital – this is pivotal to our service • CDHB Quality and Leadership Programme (QLP)	
Morice Ward	Referrals for tertiary care and investigations - Christchurch Hospital.	
Medical	• Cardiology, 6 clinics p.a. from CDHB • Haematology, 4 clinics p.a. from CDHB • Nephrology, 3-4 general clinics p.a. + 2-3 transplant clinics p.a., CDHB • Oncology, 1 day clinic every 3 weeks, CDHB • Respiratory, 2-3 clinics p.a., CDHB • Dermatology • ENT	
Paediatric	• CDHB we work very closely with paediatric and hand therapy service • NMDHB we work closely with paediatric services • All DHB Physiotherapy Managers and Paediatric email network • Liaison paediatrician 3 days/fortnight, CDHB • Paediatric surgery, CDHB • After hours second on call, CDHB • Paediatric link…knows what to do but concerned re acutely sick children that he does not do enough to maintain his skills which cannot be dealt with by video link…beaming technology required	Beaming technology required
Assessment Treatment & Rehabilitation	None	
Dietetics	• Any DHB for informal requests for information most often CDHB	

DRAFT

Department	Existing Collaboration	Proposed collaboration
	• No formal contract with any DHB • Shared study days with NMDB (3/year). • Opportunity to attend CDHB study days. • Have also arranged visits by WCDHB to see specialist dietitians in CDHB • Liaison over transfers with CDHB	
Laboratory	2/10th pathologist's time, CDHB Specialised testing	
Pharmacy	• Informal arrangements. • CDHB - stock- if we need it urgently or do not have a big enough order to place through supplier • Informal arrangements. • CDHB - - chemo- for patients undergoing trials via CDHB, unattainable commercial preparations or needed urgently • Informal arrangements. • CDHB - - base our PML and antibiotic guidelines on CDHBs • Other DHBs - in contact with drug information centres • Other DHBs - exchange of information and resources • Other DHBs - discuss clinical and service practise and guidelines	Would be good if we could have a formalised agreement regarding the PML and antibiotic guidelines, as we need to update the information we have on the intranet.
Radiology	None (contract with Canterbury Radiology group) There is a weekly radiology meeting provided onsite by the visiting radiologist (very valuable)	
Audiology	• CDHB, NMDHB and other DHBs Audiology Departments • CDHB Cardiology Department • Christchurch Respiratory clinic • War Pensions Department • ACC • Private Audiologist's • Canterbury DHB Orthopaedic Department • Pre-employment screens / Warrant of fitness work army / Air force civil aviation	
Ophthalmology	None (private contract)	
Rheumatology	None (private contract)	
Sexual Health	• Regular teleconferences between DHBs NCSP Register staff and Health Promoters • CPH (CDHB) Sexual Health Promoters – quarterly education sessions and phone contact • CPH (WC) Youth Sexual Health Promoter regular visits and	

DRAFT

Department	Existing Collaboration	Proposed collaboration
	phone contact • CDHB – Sexual Health Service – annual visit and phone contact • NMDHB Public Health Team (Sexual Health Promoter) – annual visit and phone contact	
Occupational Therapy	None	
Orthotics	None	
Physiotherapy	• Any DHB for informal requests for information • CDHB we work very closely with paediatric and hand therapy service • NMDHB we work closely with paediatric services • All DHB Physiotherapy Managers and Paediatric email network • No formal contract with any DHB	
Social Work	None	
Speech/language therapy	• SLT Leaders/Advisers in Health National Network –annual forum, 6 mthly Teleconference plus email network re professional/ Best Practise management issues/ collegial support • CDHB SLT liaison client specific referrals- Adult & Paeds • CDHB In-service opportunities • Starship SLT re Paeds • CDHB ENT referrals • Phone contact with SLT's in Health, as needed re Specialist queries / also providing inform/ support to other SLT's • Canterbury University, Auckland Uni. Massey Uni, re Prof Devpt, & re students • SLT Student training /placements provided here • NZSTA re Prof Issues/ Policy Dept	
RMO	Informal discussions and joint collaboration with road shows – CDHB	Provide rotation for CDHB RMOs to work at Grey Base and be paid from CDHB

Development of generalists
The profession of medicine is continuing to fragment into more and more sub-specialties. It will not be possible for health service providers in rural (and later provincial) areas to continue to provide the full range of specialist services using their own staff, and this problem will start to have a major effect very soon.

For example, even ten years ago the West Coast general surgeons used to do a bit of paediatrics, orthopaedics, gynaecology within their scope of practice, but this would be more or less unthinkable now. In ten years from now, the vocation of general surgery is unlikely still to exist, as it will have fragmented into vascular

DRAFT

surgery, breast surgery, colorectal surgery and so on. The probability that in ten years time we will be in a position to employ three each of the various sub-specialists that the vocation splinters into is zero. While this is the most graphic example, the same trend is also occurring in other vocations.

If we take as our assumptions that

(a) it will continue to be the intent of policy to provide specialised services relatively close to where patients live, provided that it is effective and safe to do so; and
(b) the trend towards sub-specialisation continues, in which only the larger urban centres will have enough resident patients to enable DHBs to employ the specialist staff;

then the challenge will be to find an efficient way of bringing expertise based in urban centres to other areas, and what to do when they aren't there.

The thinking done by West Coast DHB suggests that three levels of care will need to be provided:

1. Resident staffing in rural areas, comprising of generalists able to diagnose and treat (including at least emergency and minor surgery) to a moderate level of complexity across a wide range of conditions, and otherwise stabilise;
2. More highly specialised staff located elsewhere (either as part of an urban DHB's staffing or as part of some kind of regional service) who will provide remote support for the West Coast resident staff, and who will visit to provide visiting specialist services, including elective and arranged surgery;
3. Well developed systems for moving patients from the West Coast to more specialised centres if their needs cannot be appropriately met by 1 or 2.

In fact level 3 is already moderately well-developed, and versions of 2 are already in place in areas such as paediatrics and urology. What is still required, and it is required on a national basis actually, is development of level 1. This is an urgent priority that requires the Colleges, Medical Council, HDC, Ministry and DHBs to all be involved.

The West Coast DHB sees the development of the vocation of Rural Hospital Medicine as very helpful. As we face increasing difficulty in recruiting in recruitment of salaried Resident Medical Officers, opportunities may exist to change the mix of medical staffing within existing resources to better position us for coping with any future difficulties in providing specialist cover.

Within nursing our present system inhibits collaboration and the development of generalist skills, because of inflexibility of administrative arrangements and positions being tied to particular wards. West Coast DHB will work with the NZNO workplace committee to develop arrangements that encourage nurses to work in other areas with appropriate support and mentoring and that use our in-house clinical educators to develop more generalist skills.

Telemedicine
West Coast DHB is already a significant user of videoconferencing for internal communication, and uses the technology for clinical purposes in mental health and to some extent in paediatrics.

DRAFT

We believe that the further development of telemedicine is of crucial importance to rural areas, and highlight the following areas:

- Peer support, including participation in remote grand rounds, meetings, CME sessions;
- Training and supervision;
- Supporting better decisions about whether to retain a patient on the West Coast or transfer to another centre;
- Extending the scope of practice of West Coast based professionals by providing support at the margins

We are very supportive of the project funded by the Ministry to examine the potential of telemedicine to enhance collaboration between an urban DHB and a rural one, and of the particular role played in that project by the Council of Medical Colleges, and look forward to initiatives arising out of the project.

Undergraduate & postgrad GP training
West Coast is one of the rural sites for undergraduate placements for the Otago Medical School, and is shortly to extend this involvement with the pilot for the immersion option, in 2007.

Additionally West Coast DHB, in the absence of progress on any other front, has established a post-graduate training programme in rural general practice.

These initiatives reflect an intent by the DHB to carry through the idea of a Centre of Excellence into its expression in training and upskilling. We also believe that professionals who have trained on the West Coast may be more inclined to return to work here in the future.

Rural nursing education
The approach to rural medical education is paralleled by developments in nursing also, and the intent is to develop a role as the place where a whole range of health professionals undertakes their training in the rural or generalist aspect of their professional practice.

Scholarships and incentives
The West Coast DHB has just launched a new pilot programme of scholarships and financial incentives for trainees. The programme has two aims: to encourage young West Coasters into health careers, and to attract graduating health professionals to come and work on the West Coast. For some young people, both will apply. At this stage the financial contributions offered are modest, but advance publicity about the scheme has already attracted considerable interest.

It is already clear that future directions will include strengthening our relationship with secondary schools to identify and foster appropriate prospects at an early stage and to guide them appropriately, and broadening our approach to include other occupational groups in short supply (tradespeople, IT professionals, accountants for example.)

Staff Learning and Development
One of the difficulties of our isolated situation is the potential for isolation of our health professionals from their peers and from learning opportunities. A critical development, therefore, is for a Learning and Development programme (as opposed to an opportunistic ad hoc approach) that gives our clinical staff good opportunities to

DRAFT

interact with their peers elsewhere and to develop and maintain gold standard knowledge and skills. A Learning and Development Committee has been established and needs to assume greater importance in proactively planning the use of resources for learning and development to achieve these goals, and to ensure the best match of knowledge and skills to the models of care that will be implemented on the West Coast. In the future all departments will be required to develop their own learning and development plans for the Committee's approval based on fit with organisational needs.

Provision to see private patients

One of the issues faced by DHB-funded health services on the West Coast is that the absence of privately funded services means that the community is more reliant on the publicly-funded system for elective services. This is one of the factors that lies behind West Coast DHB's higher than average intervention rates. A corresponding difficulty exists for the health professionals who provide elective services: in almost all other parts of New Zealand they would be able to augment their public-sector incomes with private-sector work, which is generally more attractive. The absence of private work on the West Coast means that their income generation options are more limited, which in turn leads to recruitment and retention problems for the DHB, as well as pressure to offer unusually generous salary packages, creating affordability problems.

Several other DHBs, notably Nelson-Marlborough and Wairarapa, have well-established arrangements in which clinicians employed by the DHB also have opportunity to see private patients in beds located within DHB facilities. These arrangements have the potential to improve the availability of publicly-funded care for their communities while also extending the range of options available. There is very considerable support from within DHB staff for West Coast DHB to also explore this option, and it is thought that this could hold very significant benefits, although some hold the view that Grey Base Hospital would not attract either the surgeons or the patients needed to make private work a helpful addition. This will need to be fully considered in the investigation process.

Work Programme:

Task	Responsibility	Timeframe
Establish training centre	DON to lead	Development plan by end September 2007
All Departments to have in place collaborative arrangements with other DHBs	Department heads to take responsibility with GM Secondary care to coordinate	Arrangements in place before end of 2007
Implementation plan developed for collaboration agreement with CDHB	GM Planning and Funding, GM Secondary Care, DON	To be in place by end of September 2007
Relationship established with faculty and students from Diploma in Rural Hospital Medicine	CEO	By end of August 2007
Mix of medical cover reviewed with a view to replacing RMO cover with more senior medical Officers	GM Secondary Care to lead	Review completed before end September 2007

DRAFT

Full implementation of Recruitment and Retention and Workforce Development plans	HR Manager	Timeframes established in plans
Work with NZNO workplace committee to build generalist capability of nursing workforce	DON and HR Manager to lead	Plan in place by end of August 2007
Staff Learning and Development Plan to reflect need for appropriately and flexibly skilled workforce used as basis for budgeting and approval for training and development	HR Manager to lead	Overall Plan developed by end of September 2007. All department plans developed and approved by Committee before end of June 2008
Further development of the scholarships and incentives schemes established by WCDHB, including extension to other professions, better school-based initiatives, enhanced relationships with people undergoing professional training and collaboration with other West Coast employers	HR Manager to lead	Ongoing tasks, but all to be in place before end of 2007
Feasibility work undertaken to inform application to Minister for approval to establish capacity for privately-funded elective services	GM Secondary to lead	Feasibility work completed by end of June 2007, with view to submit application by end of 2007

DRAFT

7. Physical Infrastructure

Realignment of physical facilities to support models of care
Many of the physical facilities being used on the West Coast were built and configured to deliver a very different model of care from that proposed for the future (and to some extent from what is being delivered currently).

The DHB has a plan for systematic review of its facilities to identify means in which changes to building configuration or replacement of buildings can facilitate the new models of care. Our other concern in this work is to identify significant efficiency gains that could result from changes to buildings.

While, in some cases, building improvements may also be required to address facilities where physical deterioration has passed the point of being economic to repair, or for Health and Safety reasons, these are much less significant than drivers based on improving patient outcomes.

New Build or Reconfiguration
It is plain that a significantly different facility will be required to deliver secondary care services from Grey Base Hospital in the future, given the changes that are envisaged to the models of care being utilised. What is unclear is whether a new build will be preferable, or whether a major reconfiguration of the current facility will be the more prudent option. A completely new build has the particular advantage of enabling us to configure the facility in exactly the way that best supports the models of care we wish to deliver, and also causes the least disruption to services while under construction.

Expert advice received by the West Coast DHB is that for hospitals built in the era that ours was are often more economic to completely replace rather than reconfigure. This is because they typically have multiple issues that must be resolved if they are to be reconfigured, such as seismic compliance and dealing with asbestos.

Implications for Design
Each of the themes described earlier in this plan will be teased out into more detail and fine-tuned with the bed numbers modelling work being undertaken currently, but even at this stage they suggest a physical layout for Grey Base Hospital that incorporates:

- Emergency Department is the ‘front door’ of the hospital for patients and has increased capacity to hold/stabilise for 24 hours.
- High Dependency Unit co-located with Emergency Department incorporates CCU and paediatric observation beds
- Primary care (Greymouth Health Centre?) also located adjacent (and preferably physically connected) to Emergency Department
- Radiology, laboratory, pharmacy and allied health functions need to work across the primary/secondary interface and should be physically located to facilitate this.
- Possibly expanded outpatients department
- Significantly reduced inpatient bed numbers
- Inpatient beds as flexible as possible
- Private Ward
- Maternity service separately accessible and laid out as a ‘birthing centre’ but with good access to theatre and inpatient care

DRAFT

- Theatre
- Step down/up facility, including a rehabilitation unit
- Accommodation options (most likely motel/hostel type facilities colocated with step up/down)
- Co-located training centre, including training implications for other spaces
- Strongly Maori-themed flexible space for events and functions
- Good quality staff facilities (including car parking, showers, lockers, gym facilities, crèche, private cafeteria)
- Corporate and clinical office space integrated to facilitate integrated culture
- Ecumenical reflection space
- Morgue (appropriately positioned)
- Appropriate provision for kitchen, public cafeteria, cleaning equipment storage, trades, stores, garage etc.

This formula assumes that services will be delivered at Grey Base Hospital across more or less the same range that is currently provided. For the most part this sees clinical safety as the determinant of whether services are provided at Grey Base or off the Coast.

We understand that a business case for a new-build Grey Base Hospital or major reconfiguration will be required to consider whether or not it is necessary to retain Grey Base Hospital and whether the range of services offered from Grey Base Hospital should be significantly reduced. Analysis of these options has not yet been undertaken but it seems extremely unlikely that either of these would be viable when measured against usual criteria.

The physical configuration of the facility is thus independent of the employment arrangements for health professionals involved in delivering services: whether these professionals are employed by West Coast DHB, by another DHB, or by some sort of collaborative mechanism, our assumption is that the services will be provided at Grey Base Hospital provided that it is clinically safe and appropriate to do so.

Design criteria
Some other considerations for the design of the facility include:

- Design should consider the needs of children and young people,and young people consulted about design;
- Design should take opportunities to enhance WCDHB's policies on Smokefree environments, breastfeeding, healthy eating and physical activity;
- Design should reflect the DHB's statutory duty to be environmentally responsible;
- Design itself and process for change have potential to promote the mental health of staff and patients;
- Signage should be in English and Te Reo Maori.

Size of Facility
The number of beds required in Grey Base Hospital has been approached from two different directions.

In one of these staff have agreed the changes in inpatient numbers that might be expected from the changes to models of care, other changes are projected from

DRAFT

demographic and morbidity trends, and bed numbers determined with an appropriate margin for peaks above this expected average occupancy.

In the second approach, the Ministry of Health derives required bed numbers based on assuming compliance with national benchmarks of average length of stay and average occupancy, and projecting demographic change based on census data.

These projections are being updated to reflect new census data, and validation of the changes that we expect as a result of changed models of care, and the old projections have not been included in this plan because they will change.

The number of theatres required will be determined by the outcomes of the theatre utilisation review.

Planning Process
Substantial progress has already been made in the Grey Base 2020 project. Consultants have worked with DHB staff to develop clarity around the size requirements and relationships required between different areas in the hospital, and to develop some broad options for new build.

An initial strategic stage analysis has been put to the National Capital Committee, and guidance has now been received on the further work required to submit a full business case in either the 2007 or 2008 round.

Work Programme:

Task	Responsibility	Timeframe
Update bed number projections based on new census data	CEO	Updated Ministry projections received. Projected admissions work under way, due by end June 2007
Consultants to develop new build and reconfiguration options	CEO	Basic options were developed and submitted to National Capital Committee in March 2007. Some further options being investigated, for completion June 2007
Preferred hospital options identified, including consultation	CEO	End July 2007
Preferred hospital options costed	CEO	End July 2007
Business case submitted to National Capital Committee if one or more of the hospital options is immediately viable (otherwise plan developed for when Case may be submitted)	CEO	August 2007 if all work completed, but August 2008 more likely

DRAFT

8. Information Technology

The West Coast DHB's has a vision of achieving excellence in Health IT and in particular, we are close to achieving a completely integrated electronic health record for the West Coast population.

This vision has been aided by our unique position as a late starter (due to historical telecommunications challenges), with a small population base and our position as the direct provider of primary health services has allowed us to leap into the forefront of New Zealand Health IT.

Our Information Systems Strategy is centred around 3 core projects;

1. **PrISM (Primary Integration Systems Management).**
   The PrISM leveraged in telecommunication infrastructure put in place by the Ministry of Educations project PROBE initiative (aimed at providing broadband communications available to schools) to implement wide area network connecting the DHBs Primary Health Practices and to implement at shared patient administration system for them all. This system is scalable and over time it will can be made available to other health providers (GP Practices, NGOs, etc) as well as being applied to other areas of the heath system (school based dental services, for example). It's even feasible to make the system available to other DHBs and PHOs. PrISM was completed in late 2005 and won a "highly commended award" in the 2006 Health Innovation Awards.

2. **PACS (Picture Archiving and Communications System.**
   The PACS system allows the West Coast DHB to capture radiology images and diagnosis information electronically and share them with other clinicians within our own organization and with other DHBs. Clinicians no longer need to share the one X-ray film, images, images will no longer get lost and doctors can compare notes with one-another when considering treatment options. Sharing images with other DHBs allows doctors to discuss treatment plans and provides for improved referral decisions as well as improved patient treatment at referral hospitals as clinical staff can evaluate a patients condition and plan for their treatment while they're being transported. A major infrastructure upgrade (network upgrade, new server room, centralized storage system and a hierarchical storage management solution) was implemented in order to support the PACs system. The PACS system went live in April 2006.

3. **iSOFT PAS / CIS (Patient Administration and Clinical Information System).**
   The West Coast DHB is currently in the process of implementing a new Patient Administration System for its secondary hospital and mental health services. (Went live 1st of July 2006). The addition of a clinical viewer (went live in October) allows data from all of the West Coast DHBs systems to be integrated into a combined clinical view.

All of these systems share common indexes (based on national systems - NHI and HPI) and will eventually be integrated with one another (using HL7 standards). Adding in electronic ordering, electronic discharge summaries and electronic

referrals, will allow the formation of a single shared electronic health record for the West Coast population.

Each of these systems can be accessed from any location on the West Coast DHBs wide area network and can be made available to other DHBs and through the South Island regional shared “One Office” network or to other health providers through the installation of dedicated network circuits (using our PrISM system). These systems have been constructed in a manner that allows clinicians to access patient information where ever and when there is a relevant clinical need but to also protect individual rights to privacy and confidentiality with respect to individual health information

Together these projects lay the platform for the West Coast DHBs information technology strategy and form the infrastructural platform for our implementation of the New Zealand Health Information Strategy (HIS-NZ).

All systems need to help provide the platform for enhanced collaboration with other DHBs (especially Canterbury).

There is also the potential to use IT in allied health. For example, electronic storage of allied health information (development, gait etc) as part of the electronic patient record would provide good value.

An additional possibility for the process of health needs analysis, is that the West Coast DHB should, in future, be in the position to project health need not by interpolating and extending national data for the demographics of the West Coast, but by aggregating the known needs of each specific individual on the West Coast.

Work Programme:

Task	Responsibility	Timeframe
Continue full integration of IT systems to complete single patient record	CFM	Ongoing, but intent is to have fully integrated patient record by end of 07/08 year
Use aggregated data from patient records to project need for service planning	GM Planning and Funding	First serious use for 08/09 DAP
Implementation of the Council of Medical Colleges report on telemedicine	GM Secondary Care/CFM	Implementation is likely to be at different rates dependent on individual departments. At least 3 pilots for enhanced use of telemedicine in place by end September 2007

DRAFT

Appendix 1: Possible Work Groups for Improving Quality of Patient Journeys

<u>Group 1 – Health Education</u>

Scope:
- Development of individuals' skills or knowledge to keep well.
- Development of individual skills or knowledge to facilitate self care.
- Advice to support self care.

Membership:
- Community and Public Health
- Public Health Nurses
- West Coast PHO
- Rata Te Awhina Trust
- Disability Information Centre
- Coast Care Trust
- Healthline
- Coordinator for older people's health promotion

Tasks:
- Produce map of process for how people receive these services at present
- Review this map against quality dimensions
- Develop recommended new process to maximise customer value and minimise waste
- Describe how processes for interfaces with other services will need to work
- Recommend policy, procedures, structure and infrastructure (buildings, equipment, IT etc) required to provide this model.

<u>Group 2 – Clinical Services</u>

Scope:
- Assessment of need for professional help.
- Diagnosis.
- Treatment.
- Referral to someone better able to help.

Membership:
- Healthline
- St. John Ambulance
- Rural Nurse Specialists
- Neighbourhood Nurses
- West Coast PHO
- Laboratory providers
- Community pharmacists
- ED staff
- Senior Medical Officers
- Resident Medical Officers
- Radiology department
- Hospital pharmacy

DRAFT

- Nursing reps
- Midwives
- Medical admin
- Allied health professionals
- Visiting specialists
- Tertiary SMOs
- Midwives
- Family Planning Association
- Plunket
- Organisations providing screening services

Tasks:
- Produce map of process for how people receive these services at present
- Review this map against quality dimensions
- Develop recommended new process to maximise customer value and minimise waste
- Describe how processes for interfaces with other services will need to work
- Recommend policy, procedures, structure and infrastructure (buildings, equipment, IT etc) required to provide this model.

Note: The complexity of this stream indicates that it is probably important to develop sub-streams with appropriate working groups. Possible sub-streams might be:

- Acute medical
- Chronic medical
- Maternity
- Acute surgical/gynaecological
- Elective surgical/gynaecological
- Acute psychiatric
- Chronic psychiatric

However, it is important that the groups working on individual sub-streams work together both before and after the separate work: this is to ensure that the models are maximally consistent, and patients journeys are only separated where such separation adds value for patients.

<u>Group 3 – Rehabilitation and Support Services</u>

Scope:
- Support services to maintain health or independence.
- Rehabilitation.
- Palliative care.

Membership:
- District Nursing
- Palliative care nursing
- Community Coordinating Service for older people
- Mental Health CSWs
- Rata Te Awhina Trust
- Allied Health professionals
- West Coast PHO
- Hospice

DRAFT

- Aged residential and homecare providers

Tasks:

- Produce map of process for how people receive these services at present
- Review this map against quality dimensions
- Develop recommended new process to maximise customer value and minimise waste
- Describe how processes for interfaces with other services will need to work
- Recommend policy, procedures, structure and infrastructure (buildings, equipment, IT etc) required to provide this model.

DRAFT