NORTHLAND DISTRICT HEALTH BOARD

Te Poari Hauora Á Rohe O Te Tai Tokerau

The Mid-North Health Services Review

Findings and Options

Final Paper

September 2009

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Executive Summary

Introduction and Background

The Mid North region is part of the Northland District Health Board district and encompasses the areas of Hokianga, Whangaroa, Kerikeri, Bay of Islands, Kawakawa and Kaikohe. It has high health needs and is rural, high in deprivation in most areas and has a high percentage of Maori. The current Bay of Islands Hospital facility will not be fit for purpose for future models of care and needs reviewing in light of future service delivery plans. This is the third review of services in the Mid North and encompasses all health services.

Methodology

This review of the Mid North health services was initiated in January 2009 and ran till October 2009. An independent contractor was engaged to project manage the review. A Steering Group made up of representatives from the Northland District Health Board, Primary Health Organisations, Clinicians, MAPO and the Ngati Hine Health Trust was established to guide the project, and was chaired by the Chief Executive Officer of the Northland District Health Board. The Steering Group established a set of principles with which to evaluate the options and also advised on stakeholder engagement requirements and priorities. Stakeholder engagement was broad and went wider than health services per se.

The Steering Group received the findings of the review and discussed options. The preferred option was put to the Northland District Health Board in October 2009.

The Mid North

The Mid North has a 2031 year projected population of 43,930. It is characterised by large variations in socioeconomic status with the highest deprivation (least well off) living in the Hokianga, Kaikohe, Kawakawa and parts of Whangaroa. The lowest deprivation levels (the most well off) are in the Kerikeri area. 60% of the Mid North is classed as rural compared to 15% national average. All except Kerikeri have a high Maori population between 45% and 60%, with Kerikeri having 19%. Kerikeri has an older population with 16% of their population over age 65 years compared to 10% to 13% elsewhere.

There are several high risk and high prevalence disease states in the Mid North namely diabetes, cardiovascular disease, cancer, respiratory diseases, accidents, injuries and renal failure. Oral health and issues related to mental health and alcohol and other drug issues are also major issues.

Political and Strategic Context

Three key directions needed to be considered from a national perspective politically namely (1) “Better, Sooner, More Convenient”, (2) Integrated Family Health Centres and (3) Whanau Ora as a priority. The Northland District Health Board adopted strategies and population health priories were also key considerations in evaluating a preferred option.

What was Being Reviewed and Why

Current services and whether they are fit for future needs and challenges required testing, especially with the relative high health needs of the population. A new model of care for future needs needed to be identified and described. In addition to considering the needs of the population in the future, this included looking at the number of sites where there were clusters of health services, whether or not there should be inpatient medical beds in the Mid North (currently delivered from the Bay of Islands Hospital) and what services and workforce will be needed. The most contentious question related to the inpatient medical beds and the related services, e.g. emergency services, after hours and diagnostics and where they might be located.

Findings

There was general consensus on most factors except the location of future inpatient medical beds. Overall acknowledgement of the population needs and the barriers created by the geography and sparsely populated communities meant there was an emphasis on improving and building on local primary and community care focused services. This needs to be supported by workforce and information technology developments as well as improved collaboration and cooperation in both service planning and delivery, at all levels.

The model of the Integrated Family Health Centre was acknowledged as a vehicle to achieve the desired outcomes.

Preferred Option

The preferred option, for an integrated health service, recognises the diverse population needs and addresses these uniquely, yet in a joined up district wide approach. This means a health of older people focus in the Kerikeri area and a high Maori and chronic illness and related disease approach in the Hokianga, Kaikohe and Kawakawa area. It means mainly status quo, with improved planning for Hokianga and Whangaroa.

There is a need to blur the boundary between traditional primary and secondary care models to change scopes of practice for both regulated and non regulated workforce to improve access.

Inpatient medical beds and related diagnostic facilities as well as the renal unit should be retained based out of the Bay of Islands Hospital in Kawakawa.

Innovative ownership and governance models should be explored for all Integrated Family Health centres including with a range of public, NGO and private as well as clinical governance options.

Next Steps

Once the NDHB Board has made their decision this will direct the next steps to be taken. If the preferred model is agreed then the next steps are to develop a more detailed set of plans for each area, working in partnership with local stakeholders.

1 Introduction and Background

1.1 Overview

The Mid North area of the Northland District Health Board has a range of significant health needs and barriers to providing effective care, such as a large geographic area sparsely populated in small pockets with a very high rural and Maori population. For the purposes of the review the Mid-North has a 2031 year projected population of 43,930 and is defined as the areas and catchments of:

- Hokianga (South)
- Whangaroa
- Kerikeri
- Bay of Islands
- Kawakawa
- Kaikohe

This is the third review of health services in the Mid North. This review has been driven by a need to review the current situation and services in order to inform planning for the future of health services in the Mid North, where population needs can be best met. It has been acknowledged there are current unmet health needs, workforce challenges and facility issues, especially at the current Kawakawa site of the Bay of Islands Hospital.

The objective of the review was:

> "*To consider current and future services and options in the Mid-North and propose a range of options, undertake analysis and then develop and recommend to the Northland DHB Board a best fit sustainable option for all health services in the Mid-North*".

Source: Mid North Health Services Review Project Plan 24th February 2009

The purpose of this is to make sure future services can meet the priority health needs of the population.

1.2 Factors to Consider

In planning for future health services and the model of care various factors have been considered. These include:

- Population health needs and location(s)

- Geography and access enablers and barriers

- Rurality

- Service types

- Workforce type, scope of practice and availability

- Linkages with other services – locally, district wide and nationally

- Affordability

- Information technology opportunities

- Facilities

1.2.1 Political Context

There was a broad set of national political directions that guided the Mid North review. These were:

1. "Better, Sooner, More Convenient", a clear direction and priority for the Minister of Health
2. Development of Integrated Family Health Centres
3. Whanau ora as a priority

All of these were considered as part of the options planning for the future of the health services in the Mid North.

1.2.2 Strategic and Population Context

Drawn from the range of Northland District Health Board (NDHB) approved strategic plans are a set of strategic and population health priorities that the Mid North project Steering Group worked to. These are detailed in Table 1.

Table 1 Strategic and Population Health Priorities

Strategic Priorities	Population Priorities
1. Diabetes 2. Cardiovascular disease 3. Cancer 4. Oral health 5. Elective surgery 6. Mental health and addiction	1. Maori Health 2. Pacific Peoples 3. Children and Youth 4. Older People 5. People with Disabilities

1.2.3 Future Challenges for the Mid North

Based on the two previous reviews of the Mid North and the data and information gathered in this review there are a set of identified challenges for the future. These are detailed in Table 2.

Table 2 Future Challenges for the Mid North

Challenge	Description
Chronic and long term condition management	There is an expected increase in the number of people living with long term chronic conditions e.g. diabetes, renal failure. There is a challenge in how best to treat and support these conditions and how to improve self management to improve health outcomes and reduce demand on health services
Aged residential care	There is a challenge with the ageing population in how best to support older people. Already there is high demand for the number of residential beds in the Mid North especially for dementia care
Primary mental health	The demand for acute assessment and crisis respite services has been growing. Improved primary mental health services will help prevent this level of need
Mental health and alcohol and other drugs	There is a high incidence of mental health and alcohol and other drug use in the Mid North. This puts additional demand on both acute and non acute mental health services. There are current gaps in some services in the Mid North, e.g. respite beds
Maternity	Internationally there are increasing challenges with the maternity workforce. How many locations birthing can continue in will be a challenge in to the future
Enablers • Information technology • Workforce	There is a changing environment in both the information technology and workforce arenas. Developments with technology will allow professional health staff to work more remotely being supported by more senior staff in other locations. In addition over time it will allow for specialist staff to "see" their patients for follow up appointments, for example, without the patients having to travel to the main centre (Whangarei). Health workforce, particularly in rural settings, is difficult to attract and retain. Workforce type (what skills etc) and location will be a key consideration for the future

2 Methodology

2.1 Project Process

An independent contractor was engaged to project manage the review. The review ran over the period from project establishment in January 2009 to reporting to the Board in October 2009. Originally it was expected the project would report in June 2009. However the need for additional stakeholder engagement was identified and undertaken. Therefore dates were adjusted to allow the extra time required. However some stakeholders were still not able to participate within these timeframes.

A Steering Group was established and met monthly to advise on process, comment on findings and guide and recommend options. The Steering Group was chaired by Karen Roach, Chief Executive Officer (CEO) of the NDHB, with membership comprising representation from:

- General practitioners
- Paediatric services
- Mental health services
- Chronic illness services
- Primary Health Organisations (PHO)
- MAPO
- Ngati Hine Health Trust
- DHB planning and funding
- DHB Public Relations

The full Terms of Reference for the Steering Group are attached as Appendix One.

The Steering Group was not a decision making body but:

- Agreed their Terms of Reference
- Developed and agreed a set of Principles to be used in the evaluation phase
- Approved the Project Plan and the Communication Plan
- Received the monthly Progress Reports
- Received findings and discussed options
- Advised the project manager
- Recommended the preferred service option for the CEO to put to the Board

Project phases included data capture, stakeholder interviews, analysis (including evaluation), presentation of findings and conclusions. The full data capture paper *Service Overview in the Mid North, September 2009* and is available from the NDHB as a Companion Paper to this final paper.

The principles the Steering Group adopted for evaluation were:

Table 3 **Mid North Project Principles**

Principles	
1. Acceptability	5. Workforce sustainability
2. Responsiveness to Maori	6. Financial sustainability
3. Accessibility	7. Integration and coordination
4. Quality	8. Efficiency
	9. Effectiveness

A range of options for service development was put to the Steering Group by the project manager. The Steering Group made a recommendation on a preferred option. The CEO then put that option to the NDHB Board.

2.2 Stakeholder Engagement

An important part of the project was to engage with key stakeholders. Stakeholders were identified via the development of the Communication Plan and advice was taken from the Steering Group as to who to engage with and in what priority order. In summary the stakeholders included:

- NDHB staff and management
- Primary health care staff and management, including PHO managers
- Maori health providers
- Related health services - NDHB, private and NGOs
- Runanga
- The Far North District Mayor
- A private health consortium
- Emergency transport providers

The full list of those met with is attached as Appendix Two. It is to be noted that stakeholder engagement was a fact finding activity not a consultation process as might be required by DHBs if they are planning to make substantial changes to health services. Once the Board has reached a decision it will be decided if consultation is required, based on the Board's decision.

All input from stakeholders was considered and put in to the mix for analysis and option development.

3 Geographic Boundaries and Description of the "Mid-North"

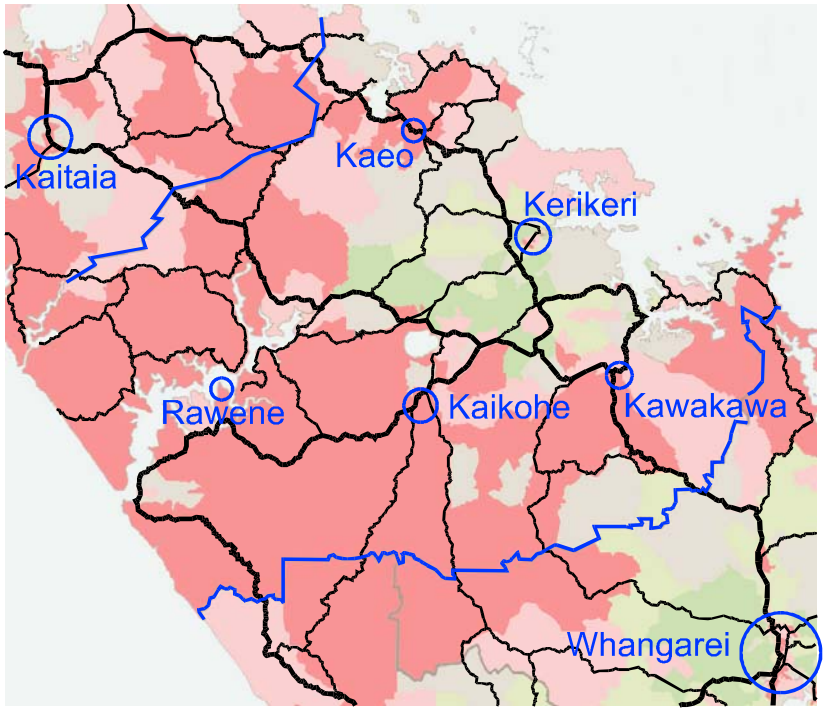
3.1 Geographic Boundaries

For the purposes of this review the geographic boundaries were determined through census area units of the Mid North. On the map this is roughly north of the Far North District Council line up to the

Hokianga harbour and across up to Whangaroa. In addition the North Hokianga will be taken into consideration as at times they may access services in the Mid North.

The map below details the region with the main roads mapped across it. The heavy blue lines indicate the Mid North region and the heavy black lines are the main roads.

Map 1 Mid North with Roads Mapped



The population of the Mid North is projected to be 43,930 by 2031 as detailed in the Table 4.

Table 4 Population by Sub Region

Stats NZ	2006 (actual)	2031 (projected)	Change	
			No.	%
Hokianga area	5,682	5,960	278	4.9
Whangaroa area	3,156	3,390	234	7.4
Kerikeri area	16,059	20,730	4,671	29.1
Kawakawa area	5,376	5,125	-251	-4.7
Kaikohe area	8,055	8,725	670	8.3
Mid-North area	**38,328**	**43,930**	**5,602**	**14.6**

Source: Statistis New Zealand

The population can be roughly divided into two geographic corridoors; the west with 19,810 projected (Hokianga, Kawakawa and Kaikohe) and the east with 24,120 projected (Whangaroa and Kerikeri). This is noteworthy as it influences how the population flows (travels) to servcies and amenitites. In general a population will not choose to flow backwards in terms of geography.

3.2 Population Description and Data

3.2.1 Overview

This section summarises the data of the Mid North region. For the full data set see the companion paper *Service Overview in the Mid North, September 2009*, available from the NDHB.

The Mid North is characterised by large variations in socioeconomic status with the highest New Zealand deprivation (the least well off) living in the Hokianga, Kaikohe, Kawakawa and parts of the Whangaroa areas and the lowest level of New Zealand deprivation (the more well off) living in the Kerikeri area.

For all households who are usually resident the percentage of households with a cell phone ranges from the highest of 72% (Kerikeri) to the lowest of 38% (Hokianga South). For land lines the range is highest of 90% (Kerikeri) to the lowest of 62% (Kaikohe).

60% of the Mid-North population is classed as living in a rural area. The national level is around 15%.

All areas except Kerikeri have between 45% - 60% Maori. Kerikeri has 19% Maori. The deprivation levels and high ratios of Maori have implications for health status and therefore health services development and delivery. There are health disparities between Maori (lower health) and non-Maori (better health).

Age bands are more evenly spread across all the Mid-North. The exception is Kerikeri which has a higher older population.

There are several high risk and high prevalence disease states in the Mid-North namely:

- diabetes (4% of the population)
- cardiovascular disease (10 – 16% of the population)
- cancer (6-8%)
- respiratory diseases, accidents, injuries and renal failure.

Oral health is also poor and there are high levels of mental illness especially alcohol and other drug related illnesses.

3.2.2 Population and Ethnicity Statistics

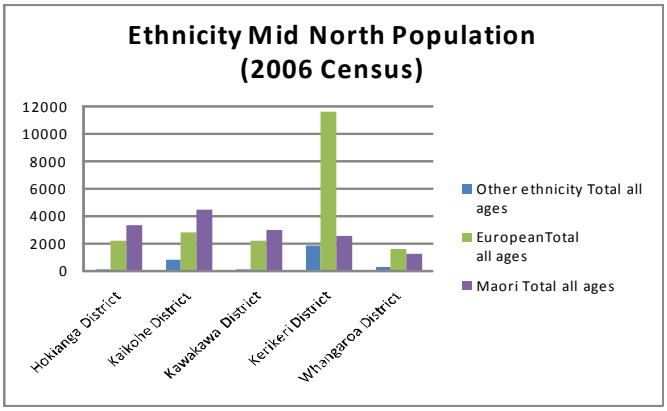
There are notable differences in the population mix of each area in the Mid-North in terms of:

- Ethnicity – all areas except Kerikeri have between 45-60% Maori. The ethnicity mix in Kerikeri is notably significant with a 19% - 81% split for Maori and Non-Maori respectively.

  Note that the high Maori population has implications for health services. A report prepared by Deloitte in 2006 for Northland DHB found that the average age for a Maori patient discharged from hospital was 30 years old; 19 years younger than the average age of 'other' patients. The average age per caseweight was 16 years younger for Maori compared with 'other'. 50 % of the cost of treating Maori relates to patients under 40 years old compared to 'other' where 50 % of the cost relates to patients over 64 years old.

- Age Mix - all areas have 20-30% of their population under the age of 14 years, 61-64% between 15–64 years, and 10-13% over 65 years except for Kerikeri. Kerikeri has 16% over 65 years of age; this is significant as it represents 2,637 people as the population of Kerikeri is 42% of the Mid North population.

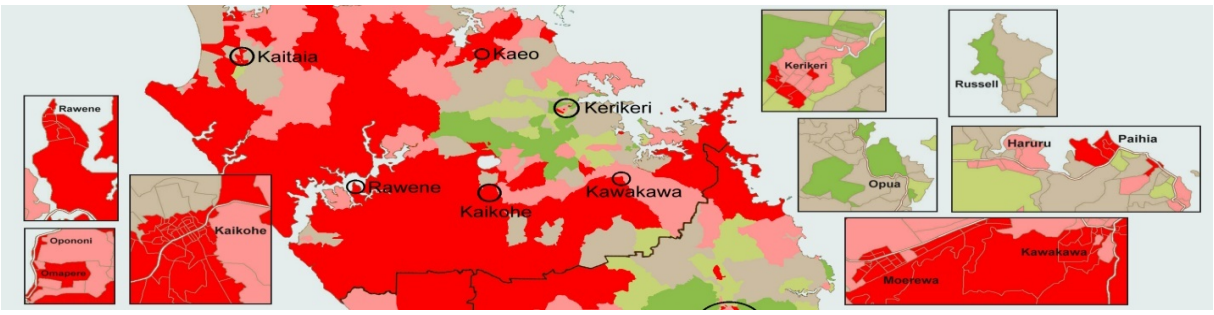
Graph 2 Ethnicity

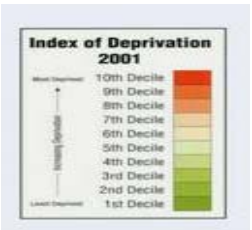


3.2.3 Deprivation

The following deprivation map shows that the highest deprivation levels are in the Western corridor. Northland has a low overall level of health and a high degree of inequality in life expectancy resulting in a low health inequality status compared to the rest of New Zealand. Contributors to this occur through deprivation in socio-economic status. Additionally, deprivation among Maori is disproportionately represented. In Map 2 red areas are deprived in terms of housing, drinking water quality, educational achievement, income level, employment, educational achievement, and transport difficulties with poor quality roads and lack of public transport.

Map 2 Deprivation in the Mid North





3.2.4 Primary Health Organisations

There are four PHOs covering the Mid North region and they are detailed in Table 5.

Table 5 PHO Enrolled populations as January 2009[1]

Primary Health Care Organisation	Number of general practitioners working for this PHO in the Mid North Region	Enrolled Population
Te Tai Tokerau	17	23475[2]
Whangaroa	3	3139
Hokianga Health Enterprise Trust	7	6139
Tihewa Mauriora Charitable Trust	8	8324
TOTAL	**35**	41077[3]

Primary health care is a focus for the future of health care services in the Mid North so the role of the PHOs in planning services is vital.

4 Project Findings

4.1 General agreement

It was concluded that stakeholder interviews resulted in general agreement, rather than a consensus across a range factors and aspects of a future model of care. It must be acknowledged that the greatest point of difference was that a minority interviewed preferred that if there were to be any new inpatient beds they should to be nearer to Kerikeri than Kawakawa, the rationale being twofold:

- A higher ageing population
- Greater economic and population projected growth in that area

The counter argument was that the difference in catchment numbers between the West and East geographic corridors are only a few thousand. The burden of health disparity and high deprivation in the West corridor leant to future investment in inpatient beds in the Western corridor.

General agreement was on the following points in Table 6.

[1] From Ministry of Health data base as reported through NZHIS

[2] Note that Te Tai Tokerau also includes a proportion of the Far North population due to boundaries between Mid North and Far North medical centres

[3] Note that this may also include dual enrolments.

Table 6 Points of General Agreement

Topic	General Agreement	Rationale
Services close to people	Services should be as close to the people as possible. This is especially important for those who have trouble travelling to services, i.e. low socio economic, no public transport options	Where the health disparities of the people are greatest they generally have more difficulty in travelling to services themselves. This causes more "do not attends" which in turn increases the disparity
Should inpatient medical beds be retained in the Mid North or all shifted to Whangarei	Inpatient medical beds should be retained in the Mid North – however there was some dissention on the location of those beds. The majority wanted them to be retained in Kawakawa, however some in the Kerikeri district wanted them built there	As above – those who have the most difficulty getting to services are usually those with the greatest need and who could benefit from services close at hand. Also there was a general agreement about the geographic flow of people (south) as they sought services (more detail below)
Bay of Island Hospital facility	The current Bay of Islands Kawakawa Hospital is not fit for purpose for the future – it cannot support staff and patient flow and the required integration of services that is required to safeguard and develop quality of care and sustainable workforce options. It is also not fit for purpose for the vision for integrated technology services of the future such as telemedicine	Increasingly the workforce will need to co-locate to work together, change scopes of practice, share skills, activities, supervision and patient information.
Integration and co-location	There is a need to integrate services, and for some level of co-location, across Primary Health Organisation, Iwi, the DHB, Non Government Organisations (NGOs) and other key stakeholders including private providers e.g. physiotherapy, laboratory, pharmacy, surgery etc	As above but in more settings other than the Bay of Islands Hospital including Hokianga, Whangaroa, Kaikohe and Kerikeri.
Pragmatic and realistic options	Solutions need to be pragmatic and workable. This means considering workforce, location and affordability.	A solution can only be found if the design of it is actually able to be implemented

Affordability	The solutions need to be affordable and financially sustainable over time	Consideration of all aspects of care should be included such as workforce costs, overheads, patient transport, cost of avoidable hospital admissions, do not attends etc. Consideration needs to be for medium and longer term forecasts.
Financial sustainability	The option must be affordable.	The NDHB has to be able to sustain the services that it plans for and invests in. For any development work this includes looking at the short, medium and long term.
Access: Transport	Consideration of the transport options and "natural flow" of people – i.e. the Kawakawa funnel from northern parts through to Whangarei	People in higher deprivation areas (lower socio economic) have fewer reliable (or any) transport options to get to health services. Therefore services have to go to them or be in the most easy to access, logical place. People will not travel (i.e. "flow backwards") if services are thought to be behind them. For example if inpatient services are shifted to Kerikeri them people from Kaikohe, Moerewa and Kawakawa will then flow to Whangarei not Kerikeri.
Natural geographic "funnel" flow through Kawakawa	There was general agreement that people will choose to travel in the direction they feel is "forward" not "sideways" or "back". There was no consensus on this point. Some in Kerikeri felt that people would travel from other areas e.g. Kaikohe, Moerewa or Kawakawa, if services were in Kerikeri. However many more felt this was not the case and that if secondary services were established in Kerikeri then people would flow to Whangarei instead.	The "forward" rationale was about travelling towards more acute level health care services in case a person needed to be transferred, not further away. Also some rationale was around where people see their natural "centre" to travel towards.
More mobile / outreach services needed	If a goal was to have services as close to people as possible then some specialist services should be able to travel to the people, rather than the people travelling to the services.	Current travelling clinics can be cancelled at short notice and it was felt that a wider range of clinics and use of the mobile surgical bus could be made. For the future the use of information technology will increase access further without even the specialist having to travel, in some instances.

Prevention and management are important	More investment should be undertaken in preventing disease or the burden of disease, and in assisting with education so people can more self manage.	Keeping people well, or less unwell, can assist with freeing up resources to use for other services or supports. Educating people how to self manage their health will over time reduce some demand on services as well as improving quality of life
Workforce sustainability needs considered	Attracting and retaining the right mix of workforce is a challenge especially in a rural setting. The future model of care needs to acknowledge this.	The best designed model will not be able to work if there is no workforce to deliver it
Planners, providers and services need to work together	Part of the issue of service fragmentation is a lack of coordinated planning across all levels.	Improved coordinated planning and incentives for effective service delivery could lead to improved health outcomes.

4.2 What works well and not so well, currently

The following list is what individual stakeholders felt was working well now. This is not a consensus list, but a majority agreement list, as different people or services had different experiences and impressions.

Works well

- General practice in local communities (including the breadth of services available through PHO's)
- New afterhours roster (from a sustainable workforce point of view. Consumers were not so happy with having to travel further)
- Renal unit being located in the Mid North
- Community based services, locally
- Visiting specialist visits when they occur
- Maternity choices and midwifery services
- Paramedic services
- Laboratory services at Bay of Islands Hospital
- High dependency unit at Bay of Islands Hospital (especially for acute coronary syndromes)
- Medical Officers of Special Scale located at Bay of Islands Hospital providing accident and acute medical care, fracture clinic care
- PACs system for plain film radiology at Bay of Islands Hospital

- Paediatric outreach clinics

Not so well

- Some services lack coordination and collaboration
- Lack of traction in delivering inter-agency services
- Patient transport services
- Delays for treatment
- Short notice cancellation of specialist clinics
- Lack of regular outreach clinics, other than paediatrics
- Diagnostic services, particularly the low use of ultra sound
- Fragile workforce, not uncommon to a rural community though
- Mental health services (gaps particularly for young people and youth) including alcohol and other drug services with residential options or respite options
- Volumes of avoidable hospital admissions e.g. for cellulitis
- Limited access to surgical bus/mobile specialist services
- Lack of dementia care services
- Health services involvement in the wider community

4.3 The Diverse Population and Geography

The review found that due to the diverse needs of the population groups and the geography of the Mid North that there was no homogenous service model that could be applied across the whole area.

There is a larger ageing, non Maori dominated and a relatively well population centered on the Kerikeri area. This population will require services targeted to health of older people needs and chronic long term illnesses.

The population in the Western corridor is younger than that of Kerikeri, with a very high percentage of Maori, high deprivation levels and higher health related needs. This population requires a range of services to address chronic illnesses and their impacts. For example diabetes and the associated renal care needs.

There are five current clusters of population around Hokianga, Kaikohe, Kawakawa, Kerikeri and Whangaroa. Geography and high deprivation levels mean access and transport barriers for many.

There was consensus that the different needs will require varying health professional skill sets and approaches in the models of care and service design for the future.

5 Options

5.1 Future Model of Care Features

Looking forward to future services meant considering options for a model of care. A model of care includes all aspects of services including what services should be where, volumes, who does what and professional scopes of practice. It is the what, where, how and who of a health services model.

The review discussed models of care and options for the future. There were six common factors for a model of care that sat across all possible service options. These are listed below in Table 7.

Table 7 Future Model of Care Features

Model of Care Features	Rationale
1. Develop general practitioners and nurse practitioners with special interests, e.g. in gerontology, health of older people wellness, chronic disease, mental health	Each pocket of population has a right to have skilled staff to meet their specific needs For example focusing on gerontology and health of older people wellness in the Kerikeri area where the ageing population is, is different than focusing on the needs of a highly deprived and unwell young Maori population
2. Improve access to specialist services in local areas, including improve the use of information technology options	This is becoming more possible with changes to medical and nursing practices and with the increased use of information technology. Having services closer to the person reduces "do not attend" behaviour and increases the support to local practitioners e.g. supporting those in the Bay of Islands emergency services via tele-medicine to the Whangarei emergency department
3. Flexible solution to adjust to population needs over time	No one model can be static and needs to respond to changing health needs, demographics and workforce challenges

4. Plan and enhance services to prevent and address chronic conditions and reduce disparities; and enhance the health of older people approaches in Kerikeri	Linked to the idea of developing special interests, this reinforces the need also for prevention and management of conditions
5. Stronger links and coordinated planning	Improved linkages and planning are needed across all planners and providers including NDHB planning and funding and provider arm, PHOs, NGOs, Iwi mandated providers. This can include improving clinical networks, paramedic services, intersectoral partners (e.g. housing) and working with Police
6. Integrated Family Health Centres	In line with national policy develop the five geographic locations into Family Health Centre hubs, with co-location of services and virtual or actual joint governance and management

5.2 Additional Aspects Explored and Agreed

5.2.1 Inpatient Medical Beds in the Mid North

In addition to the model of care features a critical decision factor was whether or not to continue to have inpatient medical beds in the Mid North, and if so, where. Currently there are inpatient medical beds located at the Bay of Islands Hospital at Kawakawa. The places where the population of the Mid North received inpatient services for the last three years are noted below in Table 8. This shows that 26% of all Mid North people receive inpatient care at the Bay of Islands Hospital.

Table 8 Where Residents of the Mid North Receive Inpatient Care in Northland

Financial year	Bay of Islands Hospital	Dargaville Hospital	Kaitaia Hospital	Whangarei Area Hospital	Grand Total
2005/06 Total	**1,494**	**3**	**308**	**3,862**	**5,667**
2006/07 Total	**1,509**	**4**	**292**	**4,052**	**5,857**
2007/08 Total	**1,534**	**5**	**331**	**3,846**	**5,716**

In addition emergency (assessment, triage and stabilisation) services are provided from Hokianga, Whangaroa and the Bay of Islands Hospital. There were a total of 3,952 emergency department presentations in the 2008 fiscal year to Bay of Islands Hospital.

By far the majority of the people interviewed agreed that there should be inpatient beds retained somewhere in the Mid North, but there was varying opinion on where they should be. Three of the five current geographic locations were considered as options to explore namely Kerikeri, Kaikohe and

Kawakawa. Hokianga and Whangaroa were discounted early due to their relative distance from the majority of the population.

The deliberations of each of the three options considered:

- Population size – current and future estimates
- Population health need
- Access barriers and enablers for those with greatest health need, including distance and transport options
- Patient flow towards higher acuity services
- Potential for impact on change to GP referral behaviour in to medical beds or to Whangarei hospital
- Interviewees input
- Points put forward by the Bay of Islands Health Trust for a Kerikeri location

On balance the Steering Group agreed:

1. To retain inpatient beds in the Mid North and
2. For the inpatient beds to be at Kawakawa

The rationale for the Kawakawa location for the inpatient beds includes:

- A feeder site closer to higher acuity facilities than other sites
- To shift would reduce access for those with the greatest need and a change in patient journey behaviour
- To shift would create a change in GP referral behaviour with increased earlier referral to Whangarei
- Those with less deprivation levels can more easily mobilise to access services elsewhere if needed

5.2.2 Five Health Service Clusters

One consideration was whether five geographic service clusters (Hokianga, Whangaroa, Kaikohe, Kerikeri and Kawakawa), albeit with a different range and level of services between them, are too many for the Mid North.

It was agreed by the Steering Group that these are natural population clusters which increase access and that they should be supported. It was agreed to recommend to the NDHB Board that Whangaroa and Hokianga remain as status quo, but with improved coordinated planning and working together as already noted in this paper in the Models of Care (Section 5.2).

It was also agreed that the other three centres undergo development work to create Integrated Family Health Centres with co-located services and innovative ways of working across and within services.

5.3 Summary of Preferred Option

In summary the Steering Group agreed to recommend to the NDHB Board the following:

1. **Foster and build on the general agreements (in Section 4.1 of this paper)**
2. **Recognise and work towards meeting the needs of the diverse populations**
3. **Develop a planning and service culture to meet different needs and to be flexible over time**
4. **Adopt all the model of care features (in Section 5.2 of this paper)**
5. **Blur the boundary between traditional primary and secondary services and develop workforce to work in those alternative ways**
6. **Invest in a community health services platform and develop Integrated Family Health Centres with co-location and innovative integration of services in Kerikeri, Kaikohe and Kawakawa**
7. **That the Kawakawa site have inpatient medical beds and associated services e.g. diagnostics as well as emergency services and retention of the renal unit**
8. **Status quo service range at Hokianga and Whangaroa but improved coordinated planning**
9. **Develop the workforce to have specialist skills to meet local needs and grow the workforce from local intakes especially to grow the indigenous workforce**
10. **Explore partnership options for each site**

5.4 Preferred Option and Evaluation Against Project Principles

The preferred option was evaluated against the agreed project principles. Overall the recommended option meets all but two of the principles, with a mixed outcome for the remaining two.

Table 9 Evaluation of the Preferred Model Against the Principles

Criteria	Description	Evaluation
Acceptability	The model will find acceptability among the key stakeholders and the community. The successful model will need to show how it builds on the strengths and outcomes of current strategic service directions and demonstrate how benefits justify any change through clear and transparent rationale and objectives.	Mixed As there was no consensus on where the inpatient beds should be in the Mid North there will be some people who find the preferred option unacceptable.
Responsiveness to Maori	From the Te Tai Tokerau Maori Health Strategic Plan: **Kotahitanga** – collaboration or working together to achieve improved Maori health outcomes. This is an acknowledgment that the success of this plan relies on the combined efforts of many. **Whakapiki ake** – building capacity within and across sectors to improve Maori health outcomes. The aspirations of this plan will not be realised without developing the appropriate capacity and capability requirements across the region. Most importantly, this plan asserts the need for improved and equitable resourcing to improve Maori health gain in the region. **Nga tumanako me nga whakapaunga kaha a te kawanatanga** – a commitment to reduce health inequities, inequalities and disparities between Maori and non Maori so that there are no differences in health outcomes.	Yes Many of the features of the model of care and other aspects of the preferred model fit with the directions in the Te Tai Tokerau Maori Health Strategic Plan including focusing on growing the Maori workforce and reducing Maori health disparities.

Accessibility	The model will ensure timely, affordable and appropriate access to appropriate levels of care particularly for those with the greatest health needs. Services will be located where there is the greatest need where greatest need is determined by health status and volume.	Yes Locating the Integrated Family Health Centres in several locations, and the inpatient beds in Kawakawa this will give the greatest access to those with the greatest need
Quality	The model will deliver good health outcomes by supporting high levels of technical quality and client satisfaction from services provided in suitable locations and premises by well-trained practitioners of a range of disciplines working within their full scope of practice. There will be an improvement in life expectancy, particularly for Maori. The model should also be flexible enough to support continuous quality improvement and development over time as new ways of delivering care evolve. To achieve quality the models of care should have good clinical governance[4] as well as organisational or business governance.	Yes A focus on flexibility, continuous planning that is linked up and coordinated will improve quality inputs and outcomes.
Workforce	The model should aim to attract and retain the range of practitioners needed recognising that evidence shows that practitioners from rural backgrounds or who are exposed to rural practice in training are more likely to practice in rural areas. Recognising the difficulties of attracting health workers the model should ensure that scarce skills are used to best effect and fully use the capabilities of all workers.	Yes The model is about innovation and specialist skills in to the future. It will foster indigenous workforce development and will create a hub, which is more likely to attract staff. It will enable development and change of scopes of practice that will incentivise some of the workforce.

[4] See the recent Government-commissioned report *In Good Hands,* Ministerial Task Group on Clinical Leadership, February 2009.

Financial Sustainability	The model must be affordable and sustainable over time.	Yes Until decisions have been taken by the NDHB Board no detailed financial analysis will be undertaken. Implementation planning will work to timeframes that make it affordable.
Integration and Coordination	The model should improve linkages, coordination, collocation or integration between health services to the extent that this will improve health care effectiveness.	Yes The model is about improving linkages and integration via co-location and working together across an Integrated Family Health Centre model.
Efficiency	The model will encourage efficiency by being flexible enough to respond to changes in technology or service requirements in the future.	Mixed Maintaining services in a rural setting is more expensive than in an urban setting due to economies of scale. However the use of improved information technology options and flexible models will assist with counteracting this. Overall improvement in health outcomes and reduction of disparities will also reduce costs over time.
Effectiveness	The services purchased and delivered deliver the expected outcome	Yes Improved planning will also lead to improved scrutiny and evaluation of the impact of interventions and services. Flexibility will allow more changes as required.

6 Next Steps

Once the NDHB Board has made their decision this will direct next steps. If the preferred model is agreed then the next steps are to develop a more detailed set of plans for each area, working in partnership with local stakeholders.

Appendix One Steering Group Terms of Reference

NORTHLAND DHB

MID NORTH HEALTH SERVICES REVIEW

STEERING GROUP

TERMS OF REFERENCE

Document Control	
Status	FINAL

Date	24th February 2009
Approved	Steering Group
Author	Jo Esplin, Acqumen

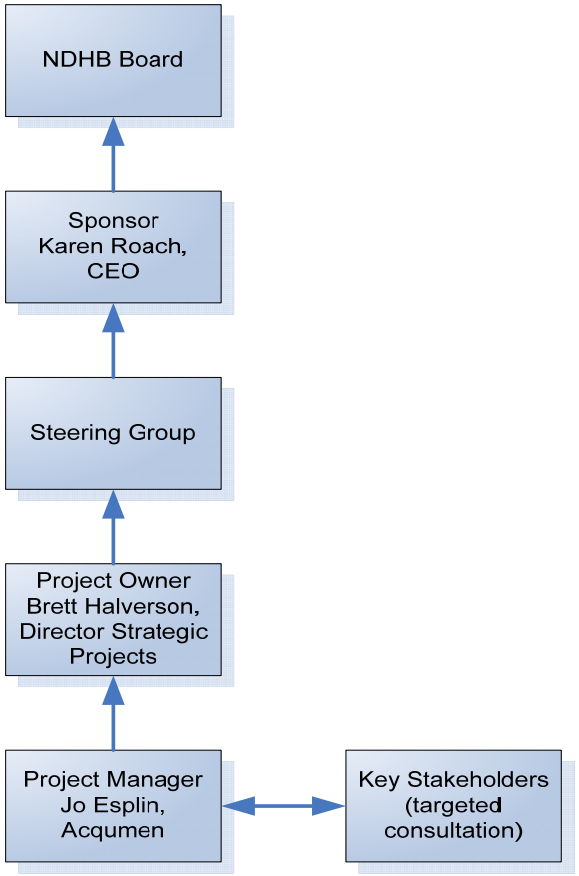
1 FUNCTION

The primary function of the Northland DHB Mid North Review Steering Group is to provide expert advice that leads to the development of

- Strategy
- Service delivery options that inform models of care

The role of the group is to give advice and make recommendation, via the Project Sponsor, to the Northland DHB Board, who will make the ultimate decision on the options and outcomes of the project.

2 PROJECT STRUCTURE



3 SCOPE

In Scope

- Members to represent and feedback to their respective teams / organisations
- Give guidance and leadership to the design of the Mid-North Model(s) of Care
- Advice on stakeholder engagement and approval of a Communication Plan
- Receive options and recommendations from Project Managers and / or Sponsor
- Make recommendations to the Sponsor to put to the Board re preferred Model(s) of Care

Out of Scope

- Decision making
- Development of the communication strategy and plan
- Media management

4 PRINCIPLES

1. All material requiring discussion and input will be distributed in reasonable timeframes to allow adequate consideration before discussion at meetings
2. Agreed confidentiality will be adhered to
3. Members will declare any actual or potential conflicts of interest at any stage of the project
4. Action points rather than minutes will be recorded
5. Members will accept responsibility for and undertake actions as delegated and agreed
6. Meetings will commence and end on time
7. Where clarification is sought that cannot be adequately addressed through the Steering Group, the matter will be escalated to Sponsor for comment or decision.

5 MEMBERSHIP

1. Karen Roach, CEO (Project Sponsor), Northland DHB
2. Brett Halverson, Director Strategic Projects, Northland DHB
3. Kim Tito, General Manager Service Development and Funding and Maori Health, Northland DHB
4. Sue Wyeth, General Manager Mental Health and District Hospitals, Northland DHB
5. Neil Beney, General Manager Chronic and Complex Care, Northland DHB
6. Dr Roger Tuck, Clinical Director, Child and Maternal Health, Northland DHB
7. Louise Kuraia, Strategic Projects Manager, Te Tai Tokerau, MAPO, Northland
8. Fleur King, Communications Manager, Northland DHB
9. Peter Vujcich, GP Liaison
10. Rob Cooper, CEO Ngati Hine Trust

11. Catherine Turner, CEO Tihewa Mauriora PHO, as representative from the four Mid-North PHOs (Tihewa Mauriora; Te Tai Tokerau PHO, Hokianga Health Enterprises Trust/ Integrated PHO and Whangaroa Health Services Trust/ PHO)

Where it is identified that additional skill or expertise is required within the Steering Group, the sponsor will approve expansion of the group or the formation of sub-groups co-opting members as required.

Where a member of the Steering Group cannot attend a particular meeting, they may nominate an existing Steering Group member, or a delegate, to attend and report back to them.

6 MEETING VENUE AND FREQUENCY

Meeting frequency to be monthly. There may be communication and / or work to attend to between meetings. This will be coordinated via the Project Manager.

7 AGENDA AND CIRCULATION OF MEETING PAPERS

The agenda will be:

- Developed by the Project Manager with input from the Steering Group members via email
- Circulated at least three days before the meeting

Any large documents (greater than half an hours reading) will be provided at least five days before the meeting or they will be deferred to the next meeting unless there is agreement that there is urgency.

All meeting materials will be provided in an electronic format only – it is the responsibility of individual members to print copies if they need printed format documents in meetings.

All documents should be treated as non confidential, unless otherwise stated, for reasons of an item requiring discussion before being circulated to a wider group. For example at times the Project Manager may seek guidance on a specific issue before distributing it.

8 RECORDING

Key points and action points from meetings will be recorded and circulated no later than 2 working days post the meeting. Any points of contention or where consensus cannot be reached will be noted.

9 CONFIDENTIALITY

All information will be open unless, in an unusual circumstance, it is otherwise stated.

10 CONFLICT OF INTEREST

All actual or potential conflicts of interest must be noted by the affected individual and recorded in meeting notes.

11 TIMEFRAMES

The Mid North Project is set to end in June 2009 with a detailed Model of Care document as the output. A summary of timeframes is below:

Stage	Date
1: Project start	Dec / Jan
2: Begin MoC design - Framework - Inputs	Feb / March
3: Develop up MoC	March
4: Further develop and complete - Impact and sensitivity analysis - Implications - Recommendations to Northland DHB Board	June

12 RELATED DOCUMENTS

The key related documents guiding the development of the Models of Care are:

Documents

1. The New Zealand Health Strategy
2. The New Zealand Disability Strategy
3. He Korowai Oranga: Maori Health Strategy
4. The Primary Care Strategy
5. Whangarei Hospital Site Master Plan
6. District Annual Plan 2008/09
7. District Strategic Plan 2005

Projects

1. The Long Term Sector Framework led by the Ministry of Health
2. Work on Models of Care

Appendix Two Stakeholder Engagement List

Stakeholder Meetings

Audience	Venue
NDHB, Jeanette Wedding	Teleconference
NDHB, Neil Beney	NDHB
NDHB, Sue Wyeth	NDHB
Ngati Hine Health Trust, Rob Cooper and their communications manager	Ngati Hine, Whangarei
NDHB, Dr Roger Tuck	NDHB
NDHB, Stephen Jackson	NDHB
NDHB, Kim Tito and staff	NDHB
NDHB, Shirley August	BOI Hospital
NDHB, Karen Roach	NDHB
NDHB, Nick Chamberlain and staff	NDHB
Hokianga Health Services Trust, John Wigglesworth	Tihewa Mauriora PHO, Kaikohe
Tihewa Mauriora PHO	Tihewa Mauriora PHO, Kaikohe
Dr Ratana Walker	Tihewa Mauriora PHO, Kaikohe
General Practitioners in Kaikohe	Tihewa Mauriora PHO, Kaikohe
MAPO, Lynette Stewart, CEO,	MAPO Offices
NZ Police, Chris Scahill, Area Commander	Teleconference
Te Runanga O Ngati Whatua, Allan Pivac, CEO Te Runanga O Te Rarawa, Kevin Robinson, CEO Ngati Wai Trust Board, Adie Smith, CEO Kim Tito, NDHB and matua Te Ihi Tito, Kaumatua NDHB	Runanga meeting rooms, Whangarei
St John Ambulance Service Tony Devanney – Operations Manager,	Teleconference
Guardian Healthcare, Dwayne Crombie, CEO	Teleconference
BOI Hospital - Shirley August & selected staff	BOI Hospital
Independent Midwife, Sue Bree	BOI Hospital
NDHB, Denise Brewster-Webb (Director of Nursing and Midwifery), NDHB, Gloria Johnson (Director Medical Services)	Teleconference
Hokianga Health Services Trust, John Wigglesworth	Kaikohe and Email
Judy McHardy, Well Child Services	Bay of Islands Hospital rooms
NDHB, Karen Roach, CEO	NDHB
MAPO, Lynette Stewart, CEO	MAPO Offices
Te Tai Tokerau PHO, Rose Lightfoot, CEO	PHO Office, Kerikeri
Whangaroa Health Services Trust, Garry Were, CEO	Whangaroa Health Services
Joan and Peter Honeyfield, BOI Health Trust	Kerikeri
Far North District Council, Mayor, Wayne Brown	Teleconference

Sarah Prentice, NDSA	Penrose Auckland
Te Tai Tokerau PHO GP meeting (9 GPs)	Kerikeri
Moerewa GP	Teleconference
Catherine Turner, PHO representative on the Steering Group	Teleconference
Karen Roach, CEO, NDHB	Teleconference
Raiha Fedricson, and Hauora/Waiora, subcommittee, Whangaroa Runanga	Runanga Offices, Kaeo
Teresa Tepania- Ashton, CEO and Sonny Tau, Chair, Ngapuhi Runanga	Kaikohe
Ngati Hine x 2 public Hui	1 x Kaikohe RSA, 1 x Marae

Note: This table does not include “business as usual” discussions with various internal NDHB people