**Covid in the Community Model of Care.**

**Rationale :**

We can anticipate that within the next 2-3 months a “surge” of covid cases will occur across our rohe, impacting all communities, with a disproportionate impact on the marginalised, rural, poor, Māori and Pacific Island people in our care.

The anticipated numbers across the Midlands region were shared by the Lakes DHB planners on October 26th 2021 ( table 1 )

Table 1 Midlands region predicted covid cases 2022

Table, calendar

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The assumptions underpinning these numbers are detailed in appendix 1.

Cases will rise to a peak which is predicted to last for 4-12 weeks and then settle into a steady state, the level of which will depend on the number of unvaccinated people in the community and the transmissibility of the virus at the time. ( figure 1)

The course of the illness is such that 80 – 95% of patients depending on vaccination status do not need hospital level care, this is more likely in Māori and Pacific Island peoples, people over 65 and people with one or more comorbidity.

10-30% of people develop “long covid” symptoms but the majority or people recover completely after 10-14 days.

Around day 5-6 a proportion of people will develop pneumonia, around day 10-12 a proportion of people will develop a septic shock syndrome.

Figure 1 The course of the expected covid surge.



The implications of these predicted numbers, and shared experience from colleagues in Waikato and Auckland are that :

1. Public Health will rapidly be overwhelmed by the number of cases that they need to contact trace
2. Community Supported Isolation and Quarantine Facilities will be rapidly overwhelmed and people will be self isolating at home by preference
3. Specialised support GP teams will be rapidly overwhelmed by the number of cases in the community
4. Wrap-around services will be complex to deliver and extremely stressed, as a result people are likely to not adhere to home isolation contributing to a rise in case numbers.
5. Out of hours services will be able to cope with a small numbers of calls
6. Hospital services will be stressed but are likely to cope as only 5-10% of cases will need admission

**Key enablers of continuity of care :**

1. A shared IT platform allowing sharing of information 24/7 between providers, ability to prescribe and order delivery of medications to the patient, ability to make appointments and perform telehealth consultations, ability to make referrals.

This is under rapid development expanding from the Border Clinical Management System, if required this can be set up within 24 hours in a particular area. The accompanying BCMS guide can help with familiarisation to this tool.

1. A common clinical care pathway with risk stratification, advice on clinical assessment any treatments that might become available and an escalation pathway.

This is to be published on Healthpathways in late October in the interim the accompanying clinical care guide is available.

1. Appropriate funding

This has been released in Auckland and Waikato, it is able to be “switched on” in other regions as it is needed.

In order to mitigate the risks of the system collapsing the following model of care is recommended.

Diagram

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**In our region:**

1. **Covid 19 positive test result is received :**

Public Health have the prime responsibility to contact the patient, inform them of the result, assess suitable place for isolation and arrange “wrap-around” services and ongoing clinical care services.

For enrolled patients the preferred clinical care service is their enrolled GP, for others an alternative service which is focussed on immediate needs, but also has the additional task of engaging the patient with a local general practice for ongoing care.

1. **First contact:**

When the result is received by the clinical care team or GP team, contact the patient and offer your advice and support. If an alternative clinical care service has been engaged by the public health unit defer ongoing clinical care to that service, but remain in touch with your patient.

If the patient has not yet been contacted by public health patient advise them to isolate at home, check their contact details, make an initial risk stratification ( see clinical guide ) for clinical care and offer ongoing appropriate clinical monitoring. Inform public health of the patient with updated contact details.

1. **Clinical care**

The clinical care provider or GP team will supply the patient with a “support pack” ( see patient booklet ) containing information about self-isolation, information about wrap-around services, information about clinical expectations and signs of deterioration, and if appropriate to the risk stratification a pulse oximeter and instructions for how to use the pulse oximeter.

Pulse oximeters can be ordered from a centralised supply which has the ability to recycle, and to order more as required, this is a DHB procurement function. Ordering must be rational and linked to patient need.

Clinical care providers and GP teams should have a small stock of pulse oximeters on hand, provide one pulse oximeter per household, seek to return and recycle oximeters when patients recover.

Following the national clinical guidelines the clinical care provider undertakes the recommended clinical health checks throughout the course of the illness.

Part of these checks is to ensure wrap-around services are involved and providing the needed support and if necessary advocacy and referral to wrap-around services.

If the patient recovers at the time of discharge from the service equipment is to be returned and recycled where possible.

Long covid multidisciplinary clinics will be developed in each district in the near future.

1. **Care escalation and after hours support**

If the patients condition deteriorates their care is escalated to the specialist covid team and hospital transfer and care arranged.

If the patient has comorbidities that mean they are not likely to benefit from hospital care their care is escalated to a palliative care team and in home palliative care services are activated.

After hours calls from patients under active surveillance are like to be rarely needed by an individual patient, however the number of patients is large and it is important to have a 24/7 service available.

Where possible GP teams should make themselves available to their own enrolled patients for these calls, however for self-care and wellbeing no one provider should be on call more than one night in four, or more than one weekend in four.

Alternative arrangements for patients to raise concerns need to be arranged using local resources, these may include urgent care providers, hospital services, or contracted telehealth providers.

**Locality based plans**

District <name>

Healthpathways login details :

Shared IT system login details :

Public health unit contact details :

Wrap-around services contact details :

Pulse oximeter ordering details :

Courier details for deliver and collection of equipment :

After hours arrangements :

* Weekdays after 5 pm
* Weekends and public holidays

Escalation details :

* Hospital team for admission
* Palliative care team for home care

**Appendix 1**

Assumptions underpinning volume prediction in table 1.

* 90% adult vaccination rate by Dec 2021.
* Children ages 12-15 are vaccinated.
* 0-11 year olds not vaccinated.
* Borders are opened 1 Jan 2022.
* Restrictions remain on travel to some countries, but otherwise quarantine-free travel is occurring.
* Assume Delta variant is main issue, medium R0 = 4.5 per REF.
* Assume variation in coverage by community around the average vaccination coverages.
* Vaccine efficacy (Pfizer) against Delta = 88%, against severe disease 94%.
* Assume severity proportions as per REF.
* Vaccine reduction in transmission - 85%.
* No further community lockdowns, but case isolation and contact tracing e.g. as measles is managed now, drops R0 44% .
* Health care workers at 93% coverage - assume other groups slightly lower.
* M + P have 2.5 and 3x the rate of hospitalisation as European/Other.
* Planned Care will be managed based on current occupancy and a decision matrix
* Some communities in the Midland region are particularly vulnerable and will need additional resources and support.