National Laboratory Engagement Group

System Integration Aug 2013

NZMLWU and DHBs Heads of Agreement 13 February 2012

The parties are committed to the following desired future states:

Interest – The future

Both parties desire:
a) input into and commitment to delivering a national strategy for pathology services that meets stakeholder needs, and
b) to create and maintain a workforce that meets stakeholder needs that will:

- attract and retain medical laboratory staff; and
- deliver work/life balance for medical laboratory staff; and
- provide a clear and visible career path.

Interest – The parties Engagement/Relationship

Both parties want a relationship based on high mutual trust at all levels where:

- effective processes facilitate engagement; and
- all stakeholders perceive the medical laboratory workforce as an important and credible component in the provision of an effective health system.

Interest – Medical laboratory staff are acknowledged and recognised for the skill and expertise they bring to timely and effective patient interventions

Both parties desire medical laboratory staff to be willing and able to add value to clinical services, adapt to a changing, and more complex environment, whilst contributing to the improvement of patient outcomes. Similarly, both parties recognise the benefits of a medical laboratory workforce that feels motivated and valued and are committed to pursuing the tangible and intangible rewards that deliver the outcomes specified.

Interest – Affordable solutions

Both parties recognise that decisions on funding and resource allocation:
Need to be sustainable and balanced in the use of available resources; and
Recognise the importance in striving for efficiency and the need to balance increasing demands on the medical laboratory workforce with incentives that the workforce values

Interest - Changing to suit clinical demand

Adequately resourced pathology service will be proactive, integrated, collaborative and responsive to the changing clinical demand based on valid shared information. In responding to the changing clinical demand the parties recognise the benefits of retaining and retraining medical laboratory staff.

Interest – Support for Training and development

The parties want to be able to meet current and future demand for services that entails a robust forecasting methodology and variance plan, integrated with what is happening elsewhere in the organisation, where demand and the supply of resources are matched.

Processes are developed and implemented to assist with the forecasting of changing demand any potential resource impacts, and improved organisation-wide awareness of priorities;

Flexibility, including effective teamwork to maximize the use of resources, including effective coordination of service delivery;

Processes to measure and reduce waste of resources;

Areas of concerns over resourcing and investment are highlighted.

System Integration Laboratory and the Health Sector Scoping Paper

The laboratory performs essential functions directly in multiple areas of the health sector such as:

Primary Health
Secondary Health
Tertiary Health
Health Research
Population Screening
Government Priorities/Trials eg. Colonoscopy, Prostate
Training health professionals – replacement/other practitioners
Other ……..

Laboratories are structured in a variety of ways but all aim to service patient's populations within a larger health environment. The key stakeholders of the laboratory (in no particular order) are:

- the government,
- owner,
- patients who use the services, (directly or indirectly)
- other clients who use the services (eg. workplace testing),
- staff who work in the laboratory,
- physicians who order tests,
- Health and disability commission,
- Other government departments, (Immigration, Ministry of social development, …)
- other health services that depend on laboratory patient specific information (such as
- maternity, radiology, patient records dept, wards …)
- Other …

Laboratory departments and/or disciplines produce data from patients. Each result feeds health information into LIS that is used in many different ways. These vary from:

- Patient results
    - Diagnosis
    - Treatment
    - Prognosis
- Cumulative trends
- Population trends
- Measures of resource utilisation/allocation through mining/matching/comparing
- Person/population wellbeing
- Resourcing
- Outbreak trends
- Research through data mining/matching/comparing

- Other …

The laboratory registers and reviews adverse events. Serious and sentinel events records highlight how embedded the laboratory is in the health event of any patient. (1) *(A serious event is one which has led to significant additional treatment and a sentinel event is life threatening or has led to an unexpected death or major loss of function.)*

The Laboratory is intimately involved in 4/6 heath targets below and has a large role in managing workload resulting from volumes/time constraints that result from them.

Health Targets 2013/2014

1. Shorter stays in emergency departments
2. Improved access to elective surgery
3. Shorter waits for cancer treatment
4. Increased Immunisation
5. Better help for smokers to quit
6. More heart and diabetes checks

1. Shorter stays in ED has a commensurate effect on the laboratory that must ensure any resulting specimens clear through the laboratory in an accurate and timely fashion. Examples of such testing may include Cardiac event markers, drugs of abuse, Haemoglobin, renal function, microbiology (blood culture,CSF) etc.

2. Improved access to elective surgery will necessarily require a higher throughput of laboratory pre-surgery testing and post surgery testing including increased resourcing for blood products depending on priorities.

3. Shorter waits for Cancer treatment will no doubt increase demand in many areas of the laboratory. The laboratories diagnostic window for the whichever cancer it is will decrease. There are many tests in cancer diagnosis to treatment. These vary from the more routine tests such as haemoglobin to more complicated surface marker, cytogenetic and molecular tests.

4. The laboratory may be involved in monitoring increased rates by providing information, testing results. The significance of this will depend on immunisation protocols etc.

5. Monitoring compliance where applicable such a CDT testing.

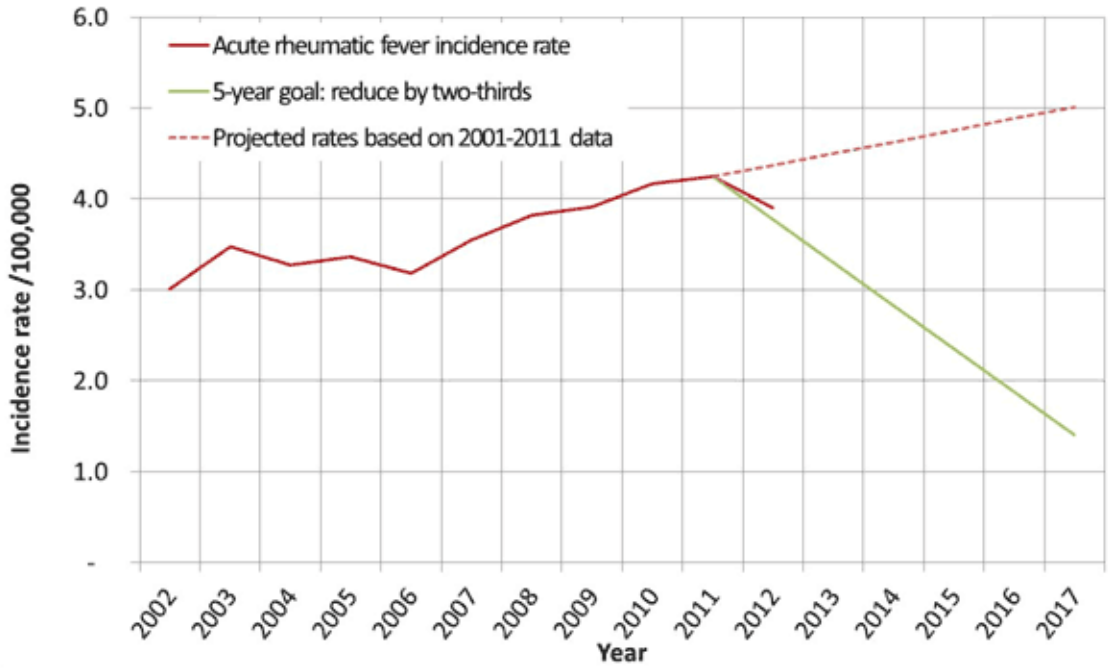
6. More Heart and Diabetes checks will be required as rates of these diseases continue to rise. If rates of Diabetes continue to rise testing resulting from the complications of Diabetes etc will also rise and the laboratory will be challenged with higher resourcing needs.

EXAMPLE

Child/Infant Health: Increase infant immunisation rates and reduce the incidence of rheumatic fever

Targets: Increase infant immunisation rates so that 95 percent of eight-month-olds are fully immunised by December 2014 and this is maintained through to 30 June 2017 and reduce the incidence of rheumatic fever by two thirds to 1.4 cases per 100,000 people by June 2017.

Eg. Annual incidence rate of acute rheumatic fever (initial hospitalisations) per 100,000 and 5-year goal



To maintain a consistently low incidence of rheumatic fever for instance surveillance will need to be maintained at high levels for the foreseeable future along with the attendant costs to the laboratory this brings.

Telemedicine – Information regarding interpretation of testing. Complexity requiring specialist knowledge.

POCT – Coordination of testing and functions as backup, QC monitor functions may operate under the auspices of a laboratory or have links to a laboratory for oversight.

PHARMAC

Pharmac is involved in authorising laboratory POCT equipment

Media articles relating to introduction of CareSens meter 28 Jul 2013

Hundreds of diabetics are concerned at the new blood testing meters introduced by the Government's drug-buying agency Pharmac. The new meters are reading different and unpredictable results, which type 1 diabetics say can be extremely dangerous if they're inaccurate. Suzy McCaughan and her daughter, Madison, use the electronic meters to test their blood-glucose levels and how much insulin they need.
The type 1 diabetics used the same device for 13 years, until earlier this year when Pharmac switched its subsidy to a new brand – CareSens. "There's a huge difference in the results that we're getting from the CareSens," says Ms McCaughan. "The results are ranging five or six points off what our blood-glucose levels should be."

Read more: http://www.3news.co.nz/Diabetics-angered-by-new-Pharmac-monitors/tabid/423/articleID/306681/Default.aspx#ixzz2cVfG6mVC

I WAS ALMOST KILLED! Hi I am a 37year old male who has been type 1 since I was 18 and have had many health complications due to unstable blood sugars. This in itself makes me absolutely dependent on the accuracy of my meter. I went into a diabetic coma whilst doing an estimated 30km/h up my driveway into a tree, and have no recollection at all of the previous 10mins driving before crashed. Due to my hypoglaecimic state I had not put on my seatbelt which in turn did not arm my airbags. Due to this I broke my front tooth clean off on my dash, split my face open, scalped myself had a massive hematoma on my inside thigh from bending my steering wheel in half.....it goes on. All this despite my blood sugar being 10.3 only a half hour prior. …….

Pharmacy - community pharmacy Services agreement

Information Technology

Electronic Health records available to patients through health portal.
Health services are clinically integrated and better coordinated.
Personal health information is readily available to patients and clinicians, no matter where care is delivered, by 2014.

1. Liabilities
2. Policy setting
3. ePrescribing and eOrdering for lab-tests data match etc
4. Privacy Issues

Laboratory Service collaborations between laboratories and/or DHB's

1. Clinical and financial gains from DHBs working together, delivering regional workforce, IT and capital.

   By 2016:
   100% of DHBs will be on a Regional Clinical Workstation and Clinical Data Repository

Legacy Patient Administration Systems (in the eight DHBs) will be replaced: 50% of DHBs will be on a regional Patient Administration System and 80% of DHBs will have implemented electronic prescribing and administration (ePA) and electronic Medicines Reconciliation (eMR).

Patient Centred care

1. Home Bleeds for care closer to the patient
2. Integrated home care services for older people 65+
3. POCT

Resource allocations eg. Changes in wards –notification to phlebotomy/other departments. This is on-going as wards commission and patients move to other wards or locations.

ACC – Data matching, Testing eg. Radiology support (contrast x-rays. Renal function)

Workplace Testing

Drug programme compliance – Legal ramifications/Policy/Financial

1 A new regulatory regime for low-risk psychoactive substances is implemented as well as the establishment of the Psychoactive Substance Regulatory Authority.

2 Natural Health and Supplementary Products legislation and amendments to the Medicines Act 1981 are developed and implemented as well establishment of the new Natural Health and Supplementary Products Regulatory Authority.

3 work with other agencies to help the Government to address Better Public Services Drivers of Crime initiatives by providing:
- brief alcohol interventions in primary care
- improved access to treatment for youth with alcohol issues
- drink-driver treatment programmes
- more treatment for community-based offenders

4 National Drug Strategy, which will be consulted on and finalised by the end of 2013

5 continue to implement the Tackling Methamphetamine: An Action Plan to control supply, reduce demand and reduce the number of frequent users

Work with DHB staff to ensure that internal data collection systems are in place to facilitate accurate reporting.

Whanau Ora – IT, Information. Measurement tools will need full engagement of the laboratory in the philosophy of Whanau Ora.

Ministry of social development

1. Who/where/what resources are being allocated for drug/alcohol testing for beneficiaries
2. National child protection alert system.
3. Information sharing processes and protocols to support frontline professionals record and share concerns about a childs welfare.

Regulatory

Establishment of the following three new regulatory authorities/agencies:

– Australia New Zealand Therapeutic Products Agency to regulate medicines, biological and medical devices and move towards a common regulatory framework with Medsafe and Australia's Therapeutic Goods Administration

Trans-Pacific Partnership trade negotiations TPPA – policy setting

ANZTPA – laboratories are a key stakeholder. A test is a medical device and it is currently unknown how this will impact on costs in the laboratory.

Environment and disease hazard testing.

1. at least 40 communities assisted to improve drinking water quality by 2015.

Surveillance of population for epidemics, new diseases, Pandemic warning etc

Data mining etc for use in policy setting.

Laboratory can explain difficulties with labelling, labels such as communicable or non-communicable may obscure thinking.

BSMC

Overarching Policy framework contains higher levels expectations from which goals such as more community based care are derived.

Authors

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MOH Website: Published online: 06 September 2012

2. **Statement of Intent 2013 to 2016: Ministry of Health**
Presented to the House of Representatives pursuant to section 39 of the Public Finance Act 1989; 16 May 2013.

3. News Reports
http://www.3news.co.nz/Diabetics-angered-by-new-Pharmac-monitors/tabid/423/articleID/306681/Default.aspx#ixzz2cVfG6mVC

4. Faster cancer treatment MOH **Presentation to NLEG, Nov 2012**