

NZHEB + TPO Use Case Stories

Use Case 1 — Individual (Patient Journey)

Scenario: Hana, a 34-year-old patient in Wellington.

1. GP orders a blood test → Lab system publishes *LabResultReady* to NZHEB (FHIR DiagnosticReport event).
2. NZHEB pushes the event to:
 - GP EHR → inbox notification.
 - Patient portal → secure mobile app notification.
 - TPO → updates KPI “Lab→Clinician latency”.
3. Within 20 minutes, Hana and her GP both see the result.
4. **Outcome:** Hana starts treatment the same day, not 2 days later.

Benefit:

- Faster diagnosis → earlier treatment.
- Equity lens: TPO shows Maori patients average 24 min latency vs national 18 min → gap is visible.
- Transparent “receipt” shows latency formula + dataset anchors.

Use Case 2 — Employers (Workforce Productivity)

Scenario: A mid-size factory in Canterbury with 400 employees.

1. An employee, Rangi, had abdominal pain. In the old system, diagnosis took 4 days because results weren’t shared quickly.
2. With NZHEB:
 - *LabResultReady* is published instantly.
 - GP gets notified same day.
 - Treatment starts in 1 day, not 4.
3. TPO calculates:
 - Sick days avoided: 3 days saved for Rangi.
 - Formula: $\text{days_saved} \times \text{employees} \times \text{median_wage}$.
 - Employer dashboard shows “Estimated \$84,000/year savings” across workforce.

Benefit:

- Reduced absenteeism → productivity gains.
- Employers can see transparent ROI, not just “black-box” metrics.

Use Case 3 — Government (Equity & Policy Targets)

Scenario: Ministry of Health monitors 24-month immunisation rates.

1. Current system → data is delayed by weeks or months.
2. With NZHEB:
 - Every *ImmunisationUpdated* event is published in real time.
 - TPO aggregates and updates KPIs:
 - National immunisation = 82% (target 95%).
 - Maori immunisation = 75% (gap 7%).
3. Treasury dashboard shows:
 - Projected productivity loss (sick days, hospitalisations).
 - Cost of inequity = NZ\$X million/year.
4. Policy makers can intervene quickly (fund outreach, community clinics).

Benefit:

- Transparent, real-time equity reporting.
- Supports evidence-based decisions.
- Provides “receipts” for ROI claims (linked to Stats NZ and Te Whatu Ora datasets).