Allied health core data set specification

1. Quality patient care

1.1 Patient experience

Definition	Results from the patient experience survey as defined by the Health Quality Safety Commission. Reported as a total score (/10) from each of the four domains Patient experience is an indicator of the quality of care provided to patients		
Data source	Source: http://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/publications-and-resources/publication/2812/		
Unit of measure	Numerical count for each of the four domains, by DHB	Frequency	Quarterly
Calculation	As per Health Quality Safety Commission		
Guide for use	Patient experience directly highlights which aspects of allied health services are providing efficient and effective patient centred care. This cannot be drilled down to a team level - reported by DHB only		
Interpretation	Trending ↑ = Positive/improving. Review with caution against other core data set measures as patient experience domains are not specific to allied health. Could be viewed alongside unmet need, patient discharged prior to AH service completed, clinical responsiveness, capacity measures, demand measures, variance indicator score and roster gaps		

1.2 Unmet need

Definition	Any allied health interventions required for the day, which are not completed		
Data source	Data collection tool, electronic referral management system (if available)		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	The difference between the total number of referrals received and the total patients seen, in line with prioritisation guidelines (i.e. care unable to be provided or delayed due to a mismatch between capacity and demand)		
Guide for use	Unmet need is a direct outcome of allied health services which are required to prioritise and ration care. Unmet need will ultimately impact on patient experience, outcomes and best use of resources		
Interpretation	Trending ↑ = Negative. Could be viewed alongside clinical responsiveness, variance indicator score, staff mix, total clinical hours provided, total referrals, priority level, patient clinical complexity level, roster gaps, patient		

	experience, patient discharged prior to AH service completed, acute readmissions, long stay, late discharges and personnel costs

1.3 Staff Mix

Definition	The mix of clinical staff and support staff (e.g. assistants) as determined by the model of care (i.e. contracted FTE)		
Data source	Data collection tool, DHB pay roll or human resources system		
Unit of measure	Percentage	Frequency	Monthly
Calculation	The number of registered clinical staff divided by number of staff x 100		
Guide for use	Staff mix is an important factor in models of care and the ability to be responsive to service requirements. Staff mix has two considerations: teams that would benefit from support staff, but do not employ them, and teams that have support staff, when not conducive to clinical care requirements on the day		
Interpretation	Trending ↑ or ↓ = Positive or Negative, dependent on pre-determined model of care. Staff mix could be reviewed alongside total clinical hours, variance indicator score, roster gaps, unplanned leave, hours worked above contracted FTE, excess accrued leave, clinical responsiveness, staff incidents, unmet need, patient experience, patient discharged prior to AH service completed, long stay, late discharges and personnel costs		

1.4 Total referrals

Definition	The total number of referrals accepted for allied health intervention for each service		
Data source	Data collection tool, electronic referral management system (if available)		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Total number of referrals		
Guide for use	Referral volume is a direct measure of service demand and is therefore required to determine match against capacity. Increased referral volumes may impact on service delivery capability and quality of patient care		
Interpretation	Trending ↑ = Negative. Increased referral volume may result in a compromised ability to provide any/ quality intervention to all referred patients (dependent on service capacity). Could be viewed alongside priority level, patient clinical complexity level, variance indicator score, total clinical hours, clinical responsiveness, patient experience, unmet need, staff incidents, long stay and late discharges		

1.5 Total clinical hours

Definition	The total amount of direct and indirect clinical time provided to patients by each allied health service		
Data source	Data collection tool		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Total number of clinical hours provided		
Guide for use	The total amount of clinical time provided to patients is a measure of service demand and patient complexity. Includes group activities		
Interpretation	Trending ↑ = Negative. Could be viewed alongside staff mix, variance indicator score, total referrals, priority level, patient clinical complexity level, roster gaps, hours worked above contracted FTW, clinical responsiveness and unmet need		

1.6 Priority level

Definition	The intensity and urgency of care required to meet the needs of a patient, as defined by priority level (P1, 2 and 3)		
Data source	Prioritisation guidelines, data collection tool, electronic referral management system (if available)		
Unit of measure	Percentage	Frequency	Monthly
Calculation	Number of P1 (high), 2 (medium) and 3 (low) referrals, divided by total referrals		
Guide for use	Priority level volumes is a measure of service demand and complexity. Higher volumes of priority 1 patients will increase clinical demands due to intensity and urgency care requirements		
Interpretation	Trending ↑ = Negative. Could be viewed alongside total referrals, patient clinical complexity level, variance indicator score, clinical responsiveness, patient experience, unmet need and patient discharged prior to AH service completed, long stay, late discharges and personnel costs		

1.7 Clinical responsiveness

Definition	The ability to provide initial allied health assessment/ intervention, following a new referral, in a timely manner (determined by the time parameters set out in the clinical access criteria and prioritisation guidelines)		
Data source	Data collection tool, electronic referral management system (if available)		
Unit of measure	Percentage	Frequency	Monthly
Calculation	Number of referrals seen within priority level timeframes, divided by total referrals received		

Guide for use	Responding in an appropriate timeframe to a patients' needs increases positive outcomes for the patient, MDT functionality, patient flow and best use of resources
Interpretation	Trending ↑ = Positive. Could be viewed alongside roster gaps, variance indicator score, priority level, total referrals, patient clinical complexity level, staff mix, total clinical hours, patient experience, unmet need, patient discharged prior to AH service being completed, staff incidents, acute readmissions, long stay, late discharges and personnel costs

1.8 Patient discharged prior to service being complete

Definition	The total number of accepted patients that are discharged prior to completion of indicated allied health interventions		
Data source	Data collection tool, electronic referral management system (if available)		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	The sum of patients discharged prior to completion of intervention		
Guide for use	A patient medically discharged before identified allied health assessment/ intervention has been completed may increase the risk of post-discharge complications, poorer health outcomes, increased service demand in other settings (i.e. community) or acute re-admission		
Interpretation	Trending ↑ = Negative. Could be viewed alongside roster gaps, staff mix, total clinical hours, variance indicator score, total referrals, priority level, patient clinical complexity level, clinical responsiveness, patient experience, unmet need and acute re-admissions		

2. Quality work environment for staff

2.1 Variance indicator score

Definition	An early warning score alerting the hospital to a care capacity demand mismatch (surplus or deficit) in a team. There are 5 colours that indicate the team's current state from surplus capacity (mauve) to serious shortfall in capacity (red). The variance indicator scoring system is a combination of subjective and objective measures, which should be displayed electronically to provide immediate visibility		
Data source	DHB variance indicator system		
Unit of measure	Percentage	Frequency	Monthly
Calculation	Number of times each traffic light colour is reported divided by the total number of times VIS tool completed		
Guide for use	Significant shortfalls in capacity will adversely impact the ability to meet demand, and will have impacts on patients, staff and the wider system		

Interpretation	Trending ↑ = Negative. Increasing variance indicator scores for red + orange may be caused by poor staff/ skill mix, roster gaps, increasing referrals and priority level. Could be viewed alongside roster gaps, staff mix, total clinical hours, total referrals, priority level, patient clinical complexity level, clinical responsiveness, patient experience, unmet need, patient discharged prior to AH service being completed, staff incidents, long stay, late discharges and personnel costs

2.2 Roster gaps

Definition	Roster gaps are any variation from the contracted FTE to the worked hours (i.e. planned leave, unplanned leave and vacancy)		
Data source	Data collection tool, DHB roster system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Total shifts with roster gaps		
Guide for use	In the absence of a staffing methodology, the contracted roster is the base line of capacity provision. Roster gaps highlight the deficiencies in capacity provision		
Interpretation	Trending ↑ = Negative. Could be viewed alongside unplanned leave, professional development, hours worked above contracted FTE, contracted staff hours, excess accrued leave, staff mix, variance indicator score, clinical responsiveness, patient experience, unmet need, patient discharged prior to AH service completed, staff incidents, acute readmissions, long stay and late discharges		

2.3 Hours worked above contracted FTE

Definition	All additional staff hours worked that are over and above their normal contracted hours of work. This may apply to full and part time staff and can include re-allocation of resources from one work area to another, overtime and on-call		
Data source	DHB pay roll system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum of all paid hours, minus sum of all contracted hours		
Guide for use	Working additional hours may place the staff member under undue pressure to support their team in times of need and adversely affect work-life balance, fatigue, reduced resilience and increased stress. Working over contract costs more and may increase sick leave taken. There may also be a legitimate challenge to the contracted hours when compared with custom and practice		
Interpretation	Trending ↑ = Negative. Staff routinely undertaking extra hours indicates a mismatch between capacity and demand. The consequences may		

	result in staff dissatisfaction or disengagement. Could be viewed alongside roster gaps, unplanned leave, contracted staff hours, excess accrued leave, total clinical hours, staff mix, total referrals, priority level, patient clinical complexity level, clinical responsiveness, unmet need and staff incidents

2.4 Staff incidents

Definition	Any staff incident that is reported (could include adverse event, near miss, reportable event). Examples include: accidents, injuries, verbal or physical abuse etc		
Data source	DHB incident reporting system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum all reported staff incidents		
Guide for use	Staff incidents are multi-factorial but may be one indicator of a mismatch between service demand and capacity. Complementary narrative about the nature and volume of the reported incidents is vital. A high number of incidents may simply be an outcome of an effective and trusted reporting system		
Interpretation	Trending ↑ or ↓ = Positive or Negative. Could be viewed alongside other contributing factors including total referrals, priority level, patient clinical complexity, staff mix, total clinical hours, variance indicator score, clinical responsiveness, roster gaps and hours worked over contracted FTE		

2.5 Staff unplanned leave

Definition	The total unplanned or short notice leave hours taken by staff e.g. sick, domestic, bereavement, ACC. This includes sick leave hours paid, unpaid or paid as annual leave. Includes staff on permanent contracts only		
Data source	Data collection tool or DHB pay roll system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum of hours taken for unplanned leave		
Guide for use	Sick leave is one indicator of the health of the workplace. Burnout and job stress increase staff absenteeism due to sickness		
Interpretation	Trending ↑ = Negative. Staff unplanned leave could be viewed alongside excess accrued annual leave, hours worked above contracted FTE, contracted staff hours, roster gaps, total clinical hours, variance indicator score, total referrals, priority level and patient clinical complexity		

2.6 Staff professional development

Definition	All paid hours for staff to attend professional development activities (excludes mandatory training)		
Data source	DHB pay roll system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum of paid professional development hours		
Guide for use	Ongoing professional training and education are fundamental to allied health staff providing safe and effective patient care. Reducing amounts of time for professional development may indicate a lack of capacity to meet demand. This will ultimately impact on the best available staff skill mix, patient outcomes and staff satisfaction		
Interpretation	Trending ↑ or ↓ = Positive or Negative. Caution with very high or very low levels. Could be viewed in conjunction with unplanned leave, roster gaps, hours worked above contracted FTE, staff mix, total clinical hours, total referrals, priority level, patient clinical complexity level, variance indicator score and clinical responsiveness		

3. Best use of health resources

3.1 Total staff hours

Definition	The total amount of hours paid to staff (including permanent, casual and locum staff)		
Data source	DHB pay roll system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum of all hours paid to staff on casual and permanent contracts		
Guide for use	It is important to see the total hours so that the dollar spend can be accounted for in terms of all contracted hours		
Interpretation	Trending ↑ = Positive or Negative. Depends on cause and source of increase e.g. increasing part-time staff or locum staff. Significant increases and/ or decreases from one month to another requires further investigation of the cause. Could be viewed alongside excess accrued leave, personnel costs, unplanned leave, professional development, roster gaps, variance indicator score, total clinical hours and total referrals		

3.2 Personnel costs

Definition	The dollar amount spent per month on personnel costs. Includes personnel costs for casual staff
Data source	DHB pay roll system

Unit of measure	Dollar amount	Frequency	Monthly
Calculation	Sum of all dollars paid to staff		
Guide for use	DHBs are responsible for best value for public health system resources. A logical step in achieving this is to monitor the spend on personnel costs. Some studies suggest higher staff costs are offset by better patient or system outcomes. Higher staffing levels are associated with lower hospital use in terms of length of stay and re-admission		
Interpretation	Trending ↑ = Negative if not justifiable Personnel costs are best interpreted alongside other measures including unplanned leave, professional development, excess accrued leave, contracted staff hours, hours worked above contracted FTE, staff mix, total clinical hours, variance indicator score, total referrals, long stay and late discharges		

3.3 Excess accrued leave

Definition	Excess accrued leave is an annual leave balance in excess of 24 months' worth of the current annual entitlement. Example: Total Annual Leave balance = 240 hours		
Data source	DHB pay roll or human resource system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Total annual leave balance - (annual entitlement x 2 x FTE)		
Guide for use	A healthy work environment has the health and wellbeing of the person as its primary objective (1). Annual leave entitlements exist to support staff take adequate breaks from work. Excess annual leave indicates staff are not taking or unable to take their annual leave. Excess annual leave is a financial liability for the DHB. Excess accrued leave may also impact on staff fatigue satisfaction and engagement		
Interpretation	Trending ↑ = Negative. Excess annual leave accrual may be due to insufficient budgeted FTE. Could be viewed alongside roster gaps, unplanned leave, hours worked above contracted FTE, professional development, contracted staff hours, variance indicator score, staff mix, total clinical hours, total referrals, priority level, patient clinical complexity level and personnel costs		

3.4 Acute readmissions

Definition	An acute readmission is usually an unexpected emergency or acute return of a patient to hospital		
Data source	Data collection tool, hospital patient management system		
Unit of measure	Numerical count	Frequency	Monthly

Calculation	Total acute readmissions, within 28 days post-discharge
Guide for use	Readmissions up to 3 and 7 days are likely to be associated with clinical and discharge issues. The 8 to 28 day interval can be associated with a combination of discharge and coordination issues.
Interpretation	Trending ↑ = Negative. Could be viewed alongside variance indicator score, clinical responsiveness, unmet need, patient discharged prior to AH service being completed

3.5 Long stay

Definition	An episode of care that is 10 days or longer		
Data source	Data collection tool, hospital patient management system		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum of all patients who have a long stay of 10 days or more		
Guide for use	Unnecessarily prolonged stays in hospital are bad for patients. This is due to the risk of unnecessary waiting, sleep deprivation, increased risk of falls and fracture, prolonging episodes of acute confusion and catching health care associated infections. All can cause an avoidable loss of muscle strength leading to greater physical dependency and impacts post discharge		
Interpretation	Trending ↑ = Negative. Could be viewed alongside roster gaps, variance indicator score, patient experience, unmet need, late discharges, acute readmissions and personnel costs		

3.6 Late discharges

Definition	A discharge time beyond the target discharge time set by the hospital or ward		
Data source	Data collection tool		
Unit of measure	Numerical count	Frequency	Monthly
Calculation	Sum of all patients discharged after the target discharge time		
Guide for use	Late discharges have been shown to impact negatively on quality patient care and efficient use of resources (i.e. patient flow)		
Interpretation	Trending ↑ = Negative. Could be viewed alongside roster gaps, variance indicator score, clinical responsiveness, patient experience, unmet need, acute readmissions and long stay		