NSW Health

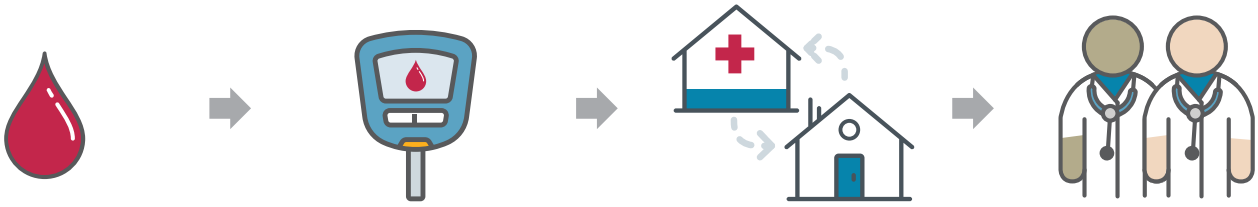
Leading Better Value Care

Inpatient management of diabetes mellitus

Organisational models

This document provides decision-makers with options to improve care in different service delivery settings. Building on *Inpatient management of diabetes mellitus: Clinical priorities* (2018) which described *what* to improve in hospital care for people with existing diabetes, the focus here is on *how* to improve care. Together these documents are informed by: research evidence about best clinical care and the effectiveness of different delivery models; empirical evidence about current service delivery levels; experiential evidence from clinicians and patients.

IMPROVING KEY PRIORITY AREAS



Identification and testing

- Ensure blood glucose testing is established into emergency department (ED) processes
- Build the capability of staff to understand risk factors for glycaemic instability
- Request HbA1c (if unknown)
- Ensure regular blood glucose monitoring on ward

Insulin management

- Enhance eMeds with Glucose Management View (using the *NSW Subcutaneous Insulin Chart* until available)
- Provide junior medical officer (JMO) and nursing capability building
- Develop protocols for glycaemic management (hyper- and hypo-glycaemia management)

Access to specialist care

- Triage and refer to specialist care for management
- Use eMR solutions to proactively identify patients requiring specialist care
- Ensure assessment and referral of patients to outpatient diabetes care into patient flow processes

Optimising health

- Conduct glycaemic review prior to discharge
- Include a Diabetes Management Plan in discharge communications
- Implement referral criteria and processes to refer to outpatient diabetes services or community-based integrated care programs

IMPROVING THE OVERALL PATIENT JOURNEY

- Provide continuity, integration and coordination of seamless care through primary care and community-based services, supporting patients across the continuum of care (self-management, reducing the risk of secondary complications, and improving quality of life)
- Arrange early post discharge review for patients who have had a change to diabetes management, including medication changes
- Support self-management through provision of patient oriented diabetes management plan
- Consider referral to diabetes outpatient or chronic care service, such as Integrated Care for People with Chronic Conditions
- Incorporate the general practitioner (GP) as an integral part of the patient's care journey
- Establish data collection and monitoring through audit and feedback processes
- Measure and act upon patient reported experience and outcome measures (PROMIS-29; and either Problem Areas in Diabetes (PAID) or Diabetes Distress Scale (DDS)).

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AGENCY FOR CLINICAL INNOVATION

● Potential location(s) for implementation

OPTIONS FOR ORGANISATIONAL CONFIGURATIONS

A coordinated multidisciplinary team-based approach delivers core components of diabetes care. The composition of the team may vary across sites. The options below outline different organisational models which sites can use to tailor their clinical services to fit with local requirements:

Option 1: Dedicated inpatient diabetes team

A dedicated interdisciplinary team establishes proactive referral pathways for patients who require access to specialist diabetes care. Teams also educate and empower nursing and medical staff about diabetes management. Proactive identification of patients is supported by technologically-enabled solutions. This model is suited to large, tertiary hospitals. There is a strong evidence base linking this organisational model with better patient outcomes.

	Emergency department	Early admission	Late admission	Transition to discharge	Community
Proactive case-finding		●			
Interdisciplinary team oversees diabetes care		●	●		
Pre-discharge glycaemic review			●	●	
Diabetes Management Plan				●	●
Communication with GP	●	●		●	●
Follow-up care				●	●

Option 2: Access to specialist diabetes care

The treating team manages diabetes care and identifies when a referral to diabetes specialist care is required. It is underpinned by clear referral criteria and processes to access specialist care and enhanced capability of the treating team in inpatient diabetes management. This should include access to technology to support appropriate referral (e.g. EMR applications) and glycaemic management (e.g. Thinksulin).

	Emergency department	Early admission	Late admission	Transition to discharge	Community
Treating team refers according to referral guidelines		●			
Treating team coordinates diabetes care		●	●		
Pre-discharge glycaemic review			●	●	
Diabetes Management Plan				●	●
Communication with GP	●	●		●	●
Follow-up care				●	●

Option 3: Access to senior physician with expertise in diabetes management

In sites without access to specialist diabetes services, this model centres on a senior physician, such as a general physician, with expertise in diabetes management. It requires clear referral criteria and enhanced capability of the treating team in diabetes management. This should include access to technology to support glycaemic management (e.g. Thinksulin). Processes to refer to outpatient or community diabetes services are in place. Telehealth access can provide endocrinology input from a tertiary hospital. Suited to small rural hospitals.

	Emergency department	Early admission	Late admission	Transition to discharge	Community
Treating team refers to senior physician		●			
Telehealth access to specialist diabetes care		●	●		
Pre-discharge glycaemic review			●	●	
Diabetes Management Plan				●	●
Communication with GP	●	●		●	●
Follow-up care				●	●

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