

Transforming Diabetes Care in Western Sydney

The prevalence of diabetes in Western Sydney highlights a critical need for structured quality improvement (QI) in primary care. The Continuous Quality Improvement (CQI) toolkit, developed by WentWest, is rooted in the Patient-Centred Medical Home (PCMH) Framework and its 10 Building Blocks of a High-Performing Primary Care. Case study practices implemented the PCMH framework to activate the CQI diabetes project, focusing on the four foundational building blocks—Engaged Leadership, Quality Improvement, Patient Registration, and Team-Based Care. Aligned with the Quintuple Aim and WentWest’s Strategic Plan, this initiative prioritises improving health outcomes, enhancing patient experiences, advancing care team wellbeing, promoting health equity, and ensuring financial sustainability.

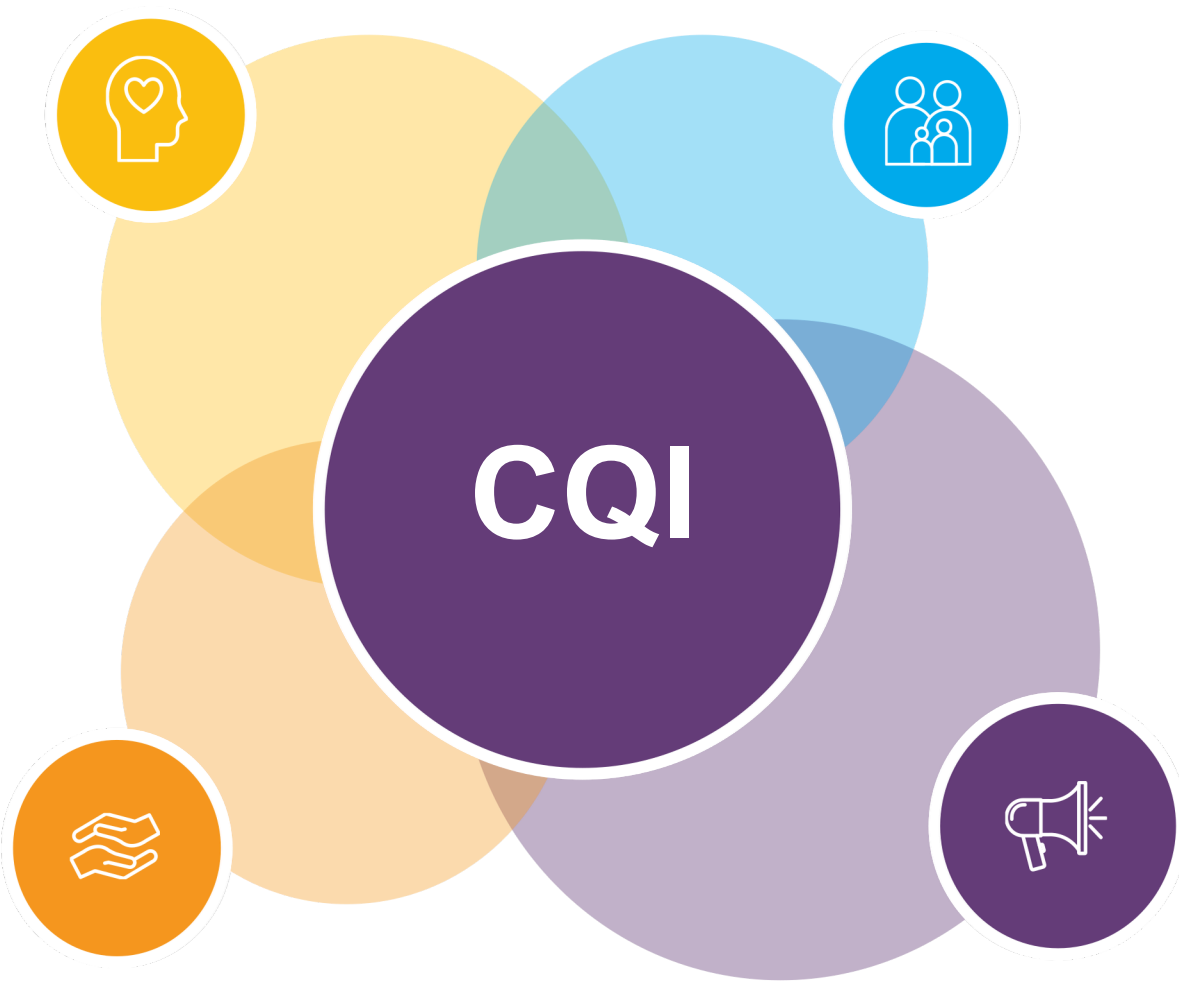
Problem Identification

Diabetes is a significant and underdiagnosed issue in Australia, with prevalence rates in areas including **Blacktown at 7.5%, surpassing the national average of 6.1%**. This highlights the need for early detection and intervention to prevent long-term complications. As these numbers grow, so does the demand for better, more consistent care.

Methodology and Implementation

To address these challenges, Western Sydney Primary Health Network applied Improvement Science In Action and Institute Healthcare Improvement principles to deliver Diabetes CQI initiatives. A step-by-step approach using:

- **Model for Improvement, Plan-Do-Study-Act (PDSA) cycles** for testing changes
- **Data-driven reports** for cohort identification
- **Collaboration with practice teams** to lead CQI activities
- **Driver diagrams** for mapping practice goals and workflows



Measures and Outcomes

- Enhance the accuracy of **diabetes registers** to improve clinical decision-making
- Increase **early detection of pre-diabetes** through screening
- **Optimise HbA1c recording** and facilitate proactive intervention through data analysis
- Enhanced engagement through **MyMedicare registration and MBS optimisation**

Learning and Reflections

- **Leadership and Engagement:** Strong leadership and Primary Health Network support were key in reassessing workflows and driving Diabetes CQI initiatives
- **Team Involvement:** Regular team meetings and PDSA cycles ensured continuous progress in QI activities
- **Data and Technology:** Data cleansing and using tools like CAT4 enabled early identification of pre-diabetes and improved patient care

Change of Practice: Case Studies

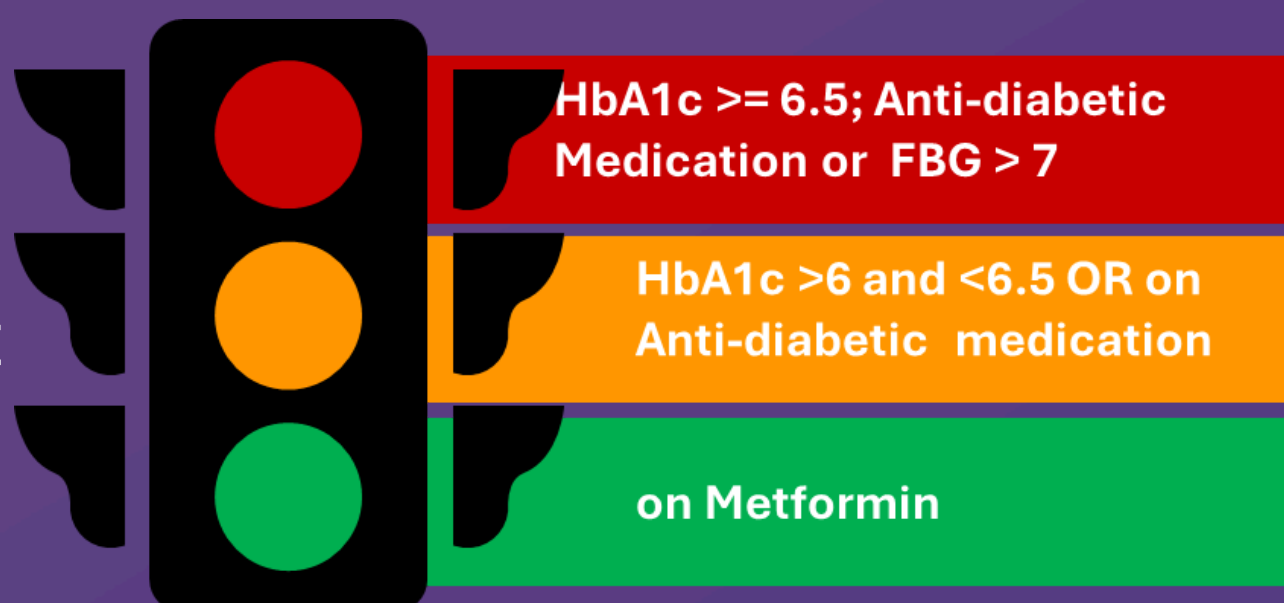
Case Study 1: Lejeune Family Practice – Data Cleansing for Undiagnosed Diabetes

Lejeune Family Practice identified a significant number of patients who potentially had undiagnosed diabetes based on high-risk indicators (for example, using CAT4 helped identify patients undiagnosed diabetes).

The QI team initiated a data cleansing process that adopted a collaborative approach involving the entire team, including the pharmacist in general practice and general practitioner (GP) registrars, to review a CAT4 list of 204 patients. The practice manager, who led the CQI efforts, acknowledged the workload and in collaboration with Western Sydney Primary Health Network, mapped out the current workflow. Responsibilities for the CQI activities were distributed among health care professionals from various disciplines, including GPs, practice nurses, receptionists, a pharmacist and a non-clinical QI champion from a general practice. The activities also aimed to optimise existing processes, such as MyMedicare registration and MBS (Medicare Benefits Schedule) optimisation.

Following the review, the patient list was reduced to 57 patients with a high proportion of patients were pre-diabetic. This process created a watchlist of patients who may not have been previously flagged as at-risk. Additionally, these patients were invited to participate in the 2kg Challenge aimed at reducing their risk of developing diabetes.

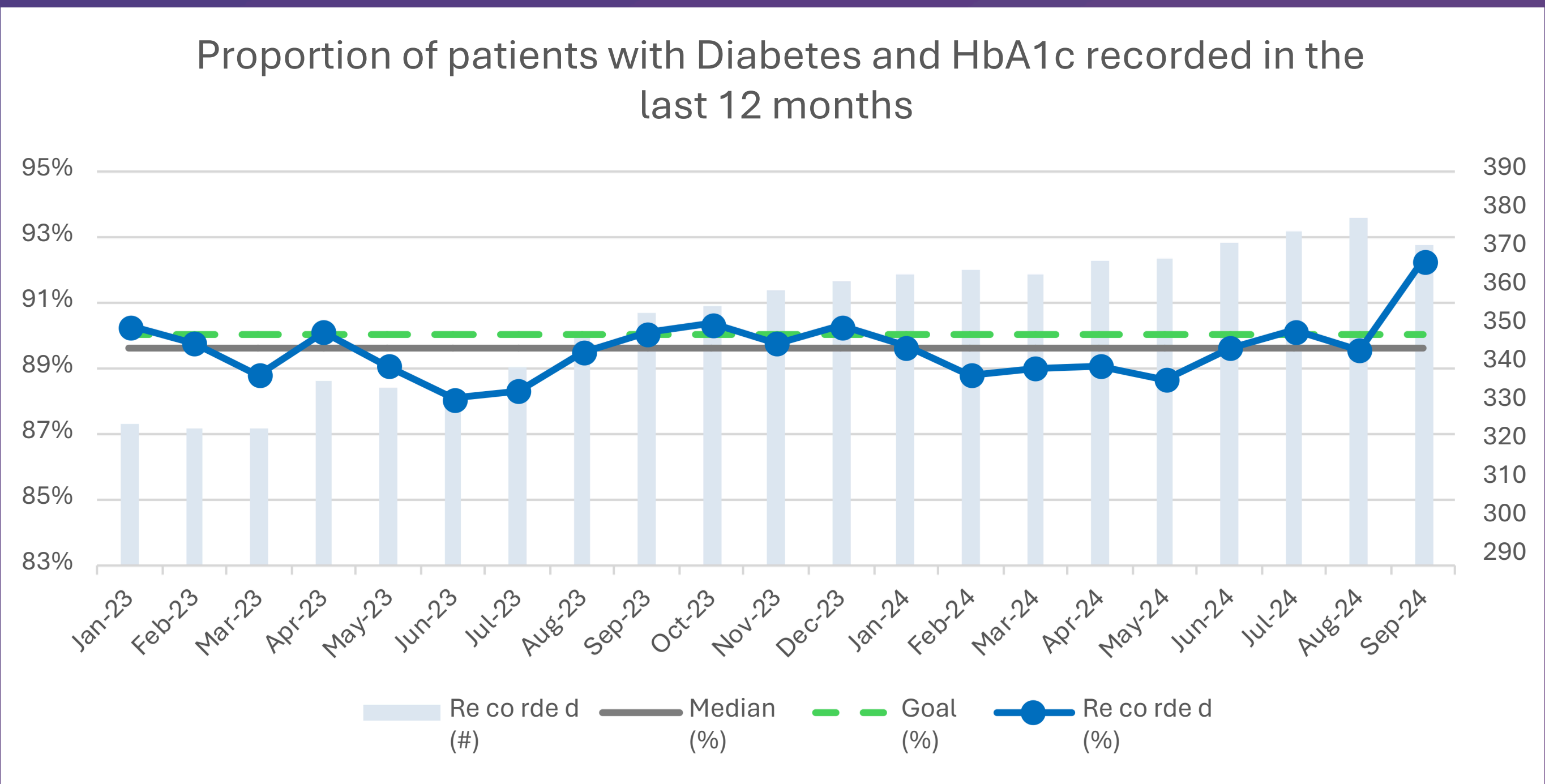
As a result of these activities, Lejeune Family Practice now has an accurate diabetes register, improved coding practices and a proactive process for identifying pre-diabetes. This led to earlier interventions and improved patient outcomes, fostering a comprehensive approach to diabetes management that ultimately benefits patient health and wellbeing.



Case Study 2: Hills Family General Practice – Driving Diabetes Improvement Using Run Charts

Hills Family General Practice has been using run charts to track HbA1c levels in patients with type 2 diabetes for many years. By visualising trends and identifying outliers, the team made informed adjustments, such as enhancing patient education and setting timely testing reminders. The goal was to improve the consistency of HbA1c recording among the practice’s GPs, as individual management led to variations in monitoring and control levels.

This approach led to improvements and subsequent maintenance of these improvements in the last 12 months, with 93% of patients now having an up-to-date HbA1c. This demonstrates the effectiveness of data-driven interventions in diabetes care quality. Regular QI meeting and monitoring the data has kept the entire team engaged. This included regularly reviewing their patients’ HbA1c levels, using PDSA cycles to maintain targets. Monthly practice-level data reviews provided individual GPs with feedback on their patients’ HbA1c control.



Impact

The initiative has successfully improved patient outcomes, particularly in HbA1c control, and increased efficiency through MyMedicare and MBS optimisation while identifying high-risk diabetes patients. By adopting a CQI approach, the Western Sydney Primary Health Network collaborated with Local Health Districts and other partners on the Western Sydney 2kg Challenge. This program promotes health coaching, exercise and healthy eating, targets pre-diabetic individuals and has demonstrated that losing just two kilograms can reduce diabetes risk by 30%. The initiative is currently being rolled out in high-risk areas like the Blacktown local government area.

Additionally, a comprehensive data dashboard has been developed using the Qlik Data Visualisation system to guide targeted QI activities and interventions. This dashboard is in a pilot phase to assess its effectiveness in enhancing diabetes management in primary care. Run charts have also been implemented to monitor key diabetes measures and HbA1c control, providing continuous feedback for performance improvement.