Quality Improvement Scenario 2: Patients Indicated Chronic Kidney Disease (CKD) with No Coded Diagnosis

A **Practice's Data Dashboard** provided by **HNECCPHN** (based on **PenCS CAT4** data) indicates that 369 patients are indicated to have Chronic Kidney Disease, but do not have a coded diagnosis. This is risky as Patients who have Chronic Kidney Disease may not appear in lists, be searchable, nor be communicated in health summaries. Opportunities for patient care and practice sustainability may be missed.

Requirement:

eHealth PIP Requirement 3 is:
"*Practices must ensure that where clinically relevant, they are working towards recording the majority of diagnoses for active patients electronically, using a **medical vocabulary that can be mapped against a nationally recognised disease classification or terminology system**.*" Practice Incentives Program - eHealth Incentive - Services Australia
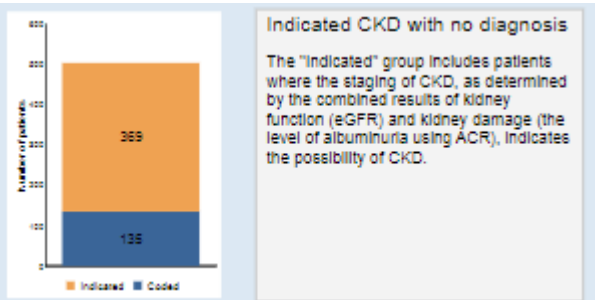
Requirement:

*Also, **eHealth PIP Requirement 3** is that "Practices must provide a **written policy** to this effect to all GPs within the practice."* Practice Incentives Program - eHealth Incentive - Services Australia

Requirement:

RACGP 5th Standards for General Practice Indicator QI1.3A requires that "Our practice team uses a **nationally recognised medical vocabulary for coding**." Standards-for-general-practice-5th-edition.pdf (racgp.org.au)

Practice's CAT4 Dashboard CKD Indicator

Indicated CKD with no diagnosis

The "Indicated" group includes patients where the staging of CKD, as determined by the combined results of kidney function (eGFR) and kidney damage (the level of albuminuria using ACR), indicates the possibility of CKD.

TIP: **How to Code Diagnoses**
MD: Pick diagnosis from drop-down coded vocabulary List in Summary, Past History or Reason for Contact (can save as past medical history) MD Online Help (medicaldirector.com)

BP: Search for condition from coded vocabulary in Diagnosis Tab in Today's Notes when adding new clinical history to Past History Tab Recording Today's Notes (bpsoftware.net)

TIP: Chronic Renal Failure is the CAT4 condition category title. Many names of CKD coded diagnoses, of both active and inactive status, are mapped from history in patient record, as per PenCS CAT4 Clinical Data

The Practice's Quality Improvement Team pick this topic for improvement and create a **Plan-Did-Study-Act Cycle** for this QI PIP Quarter.

Data Baseline: 369 patients indicated to have Chronic Kidney Disease diagnosis at beginning of quarter.

SMART goal is "0" patients will be on the indicated Chronic Kidney Disease Diagnosis list by end of quarter.

Review Date: end of QI PIP Quarter.

PLAN:

Idea 1: Use **PenCS CAT4 Cleansing CAT Module** to identify patients who are indicated by combined eGFR and ACR pathology results to have Chronic Kidney Disease without a Coded Diagnosis. Patients coded for Dialysis are listed as Stage 5. [Data Cleansing - CAT GUIDES - PenCS Help]

Surname	First Name	DOB	Indication Date	Sex	eGFR	ACR	CKD	BSL	FBG	Smoking	Diabetes (Dx or HbA1c >= 6.5, BSL > 11.1 or FBG > 7)	Hypertension (Dx or BP > 140/90)	Obesity (BMI > 30)	CVD Dx	Indigenous and Age > 30	Assigned Provider	Confirm Condition Does Not Exist
Surname	Firstname_1...	10/05/2001	05/05/2020	M	48.0		Stage ...	4.1		Never smo...						Surname_0	☐
Surname	Firstname_1...	10/05/1944	23/06/2017	M	48.0	53	Stage ...	4.6	6.2	Ex smoker	Y	Y					☐
Surname	Firstname_1...	10/05/1950	13/11/2019	F	89.0	3.8	Stage 2	5.9	6.9	Never smo...	Y	Y	Y				☐
Surname	Firstname_1...	10/05/1954	08/02/2021	F	53.0	0.6	Stage ...	4.9		Never smo...		Y	Y			Surname_5	☐
Surname	Firstname_1...	10/05/1946	15/05/2020	F	59.0		Stage ...	5.1		Never smo...		Y				Surname_25	☐

> **TIP**: GPs must clinically assess the patient record. GP can double-click patient name to access and update CKD diagnosis in Patient Record within a **logged-on CIS** immediately. Alternatively, tick "Confirm condition does not exist" box and click "Save and Remove" button which removes patient from Cleansing CAT list (patient will appear again when new pathology results are added) and adds patient to Reviewed Patient Report. **Ensure preferences in CAT4 are linked to practice's TopBar server.**

> **TIP**: Patient names with an eGFR = 0 or <60 and no ACR are displayed with the word 'Stage' but without a coloured action plan level to indicate that results require review. CAT4 reads only the most recent eGFR and ACR. 3 results over a 3-month period are required to inform diagnosis.

Idea 2: Use **PenCS TopBar Data Cleansing App** opportunistically while patient is in a consultation to aid coding a CKD diagnosis. [Data Cleansing App - USER GUIDES TOPBAR - PenCS Help]

Idea 3: Alternatively, the **Diagnosis Coding Clean-up Tool** in Clinical Information Systems can convert free-typed entries to a coded Diagnosis automatically. [MD Online Help (medicaldirector.com)] [Cleaning up uncoded and free text data (bpsoftware.net)]

> **TIP: BP-Utilities App**: User will need permissions set to allow Past History Add/Edit/Delete.
> **MD Maintenance App**: Enter username and password when prompted.

Idea 4: Run **PenCS CAT4 Data Quality Report** to identify any duplicate patient records by name or number and merge to lessen clinical risk. [Data Quality (CDSA) - CAT GUIDES - PenCS Help]
MD: [MD Online Help (medicaldirector.com)]   **BP:** [Merge patient records (bpsoftware.net)]

At end of quarter, the Quality Improvement Team complete the Improvement Cycle:

DID: What Idea(s) did Practice do?

STUDY: What improvement is there of Data Results of the same measure on the Review Date?

ACT: What can be added, continued, and/or removed from the Improvement Activities?