PRIMARY HEALTH NETWORK

Quality Improvement in Diabetes

Deborah Walganski, RN, RM,
Primary Care Improvement Officer

WE ACKNOWLEDGE THE TRADITIONAL OWNERS & CUSTODIANS OF THE LAND THAT WE LIVE & WORK ON AS THE FIRST PEOPLE OF THIS COUNTRY.

QUALITY IMPROVEMENT LEARNING OUTCOMES

1. **De-identified Data Sources**

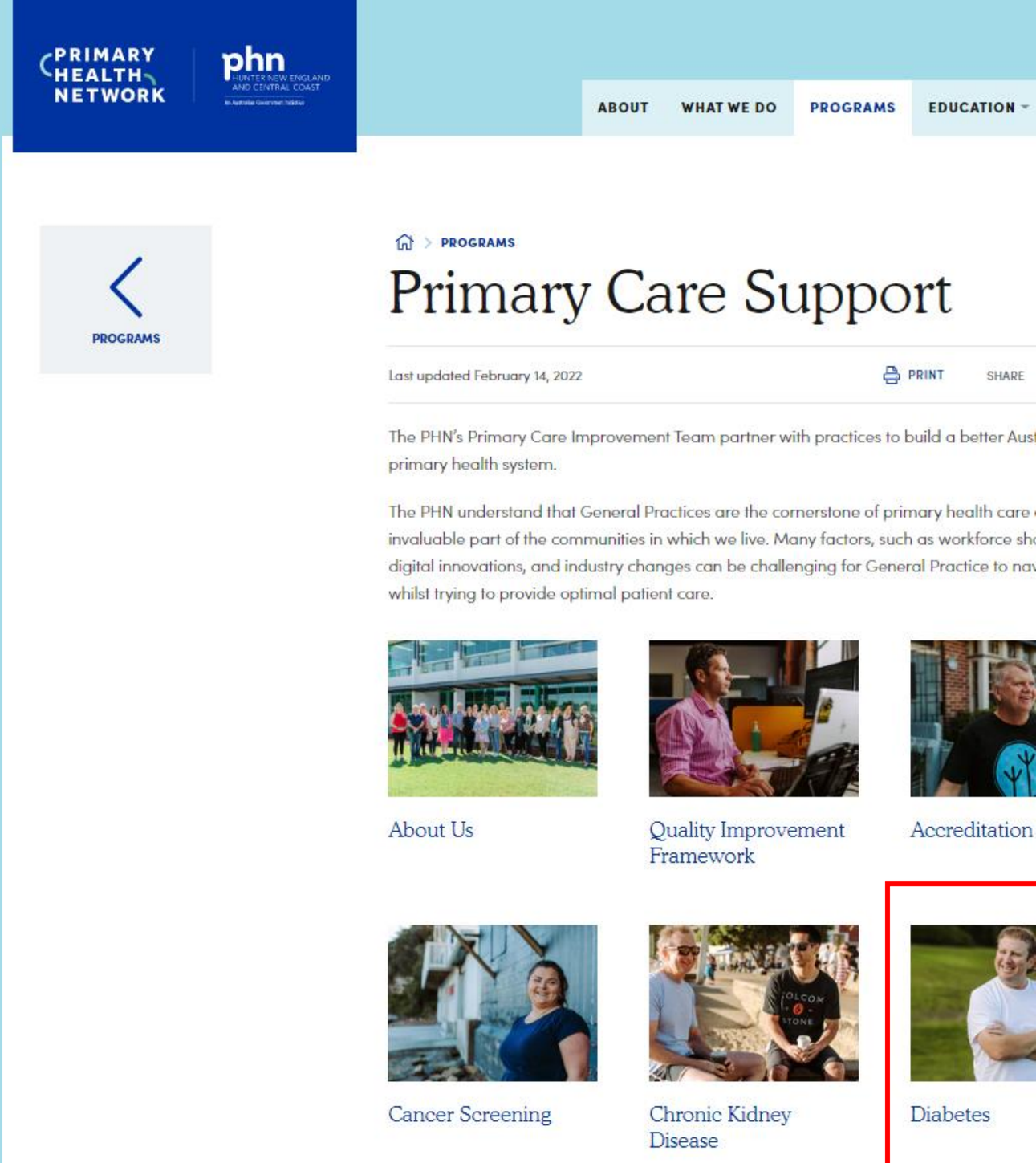
- HNE Diabetes Alliance Program - Managing Type 2 Diabetes Summary Report
- The PHN - General Practice Summary

2. **Quality Improvement Activities**

- Primary Care Support
- Plan Did Study Act Model for Improvement Cycles
- PenCS CAT4 – Re-identify patients

3. **Practice Clinical Information System (CIS)**

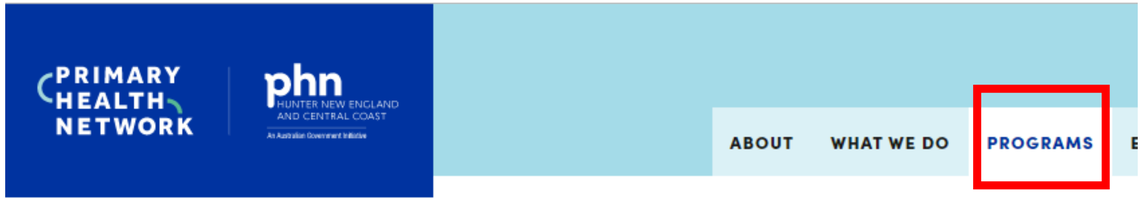
- Diabetes Register
- Diabetes Record / Cycle of Care

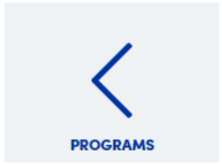


HNELHD & HNECCPHN Diabetes Alliance Program (DAP+) “The Alliance”

- HNELHD
- The PHN
- General Practice / AMS
  - > Data for Quality Improvement
  - > MBS Case Conferencing Model
  - > Chronic Disease Management
  - > Continuity of Carer/Practice for patient
  - > Multi-disciplinary team
  - > Integration between primary secondary tertiary sectors
  - > Health Professional transfer of knowledge (CPD)

THE PHN WEBSITE – PROGRAMS - EOI





PROGRAMS

Diabetes Alliance

Your Primary Care Improvement Officer can assist.

HNE Diabetes Alliance - YouTube

Diabetes Alliance Expression of Interest Form

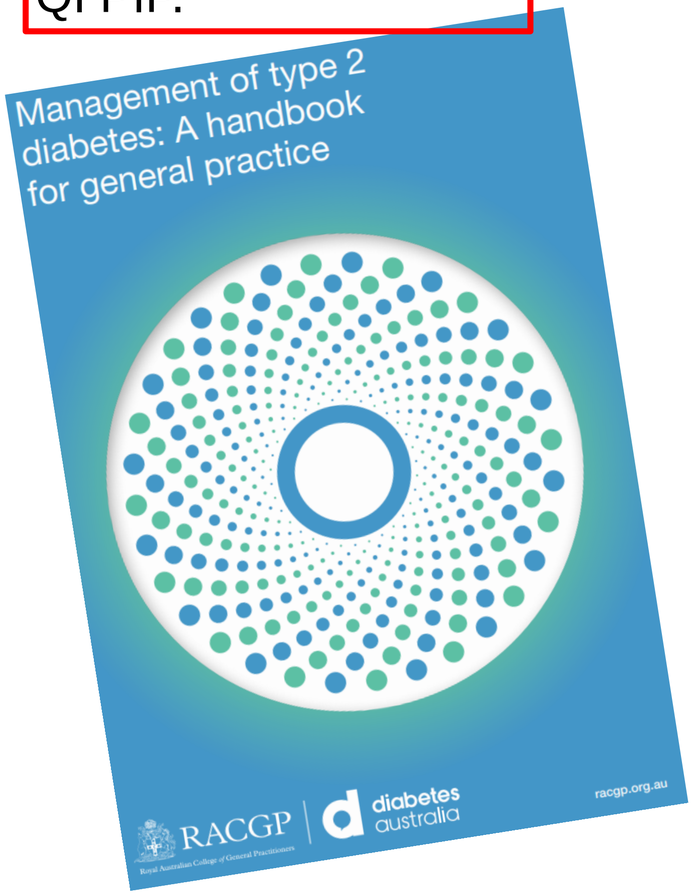
Practice name	
Address	
Email	
Phone number	
Fax number	
Contact name	
Contact's position	
Contact phone number	
Primary Care Improvement Officer (PCIO)	
Month preferred	
Days of week preferred	
Number of GP's participating	
Number of Practice Nurse's participating	
Electronic Referrals available?	

Diabetes Alliance Plus (DAP+) CONFERENCE

“Ensuring Equitable Access to Diabetes Care”

Friday 17 November – Sunday 19 November
Hunter Valley

Hot Tip: Diabetes Cycle of Care remains best practice.
MBS Item numbers and SIP replaced by QI PIP.



Diabetes Cycle of Care

Box 1. Medicare Benefits Schedule (MBS) diabetes 'cycle of care' minimum requirements[2]

At least six-monthly:

- Measure weight, height and body mass index (BMI)
- Measure blood pressure
- Assess feet for complications

At least annually:

- Review and discuss diet, physical activity, smoking status, medications (need for more frequent review should be individualised, as outlined in Table 1)
- Assess diabetes management by measuring HbA1c
- Review and discuss complication prevention – eyes, feet, kidneys cardiovascular disease (CVD)
- Measure total cholesterol, triglycerides and high-density lipoprotein (HDL) cholesterol
- Assess for microalbuminuria

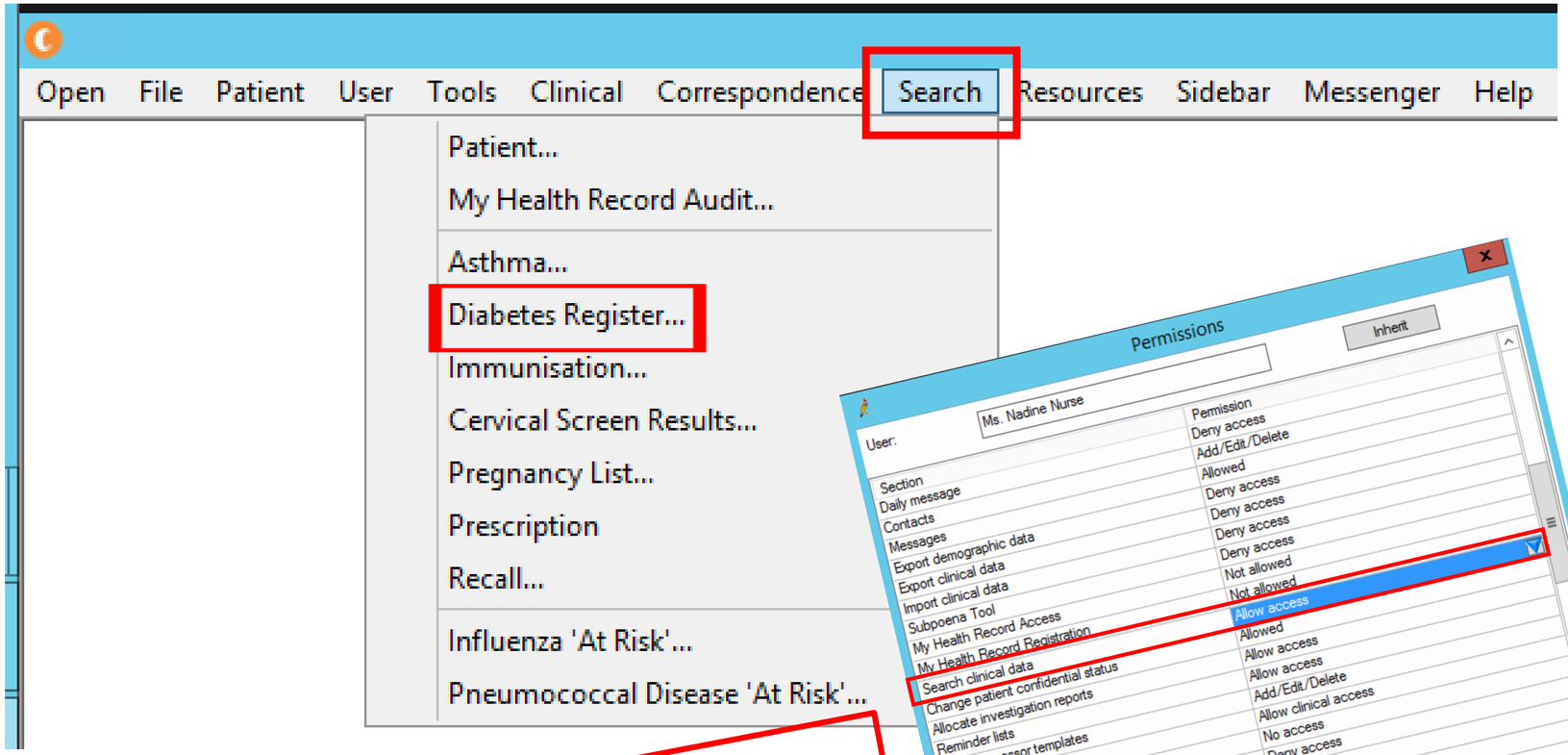
At least every two years:

- Comprehensive eye examination (more frequently for those at high risk)

Royal Australian College of General Practitioners. Management of type 2 diabetes: A handbook for general practice. [Online].; 2020 [cited 2023 July 11. Available from: https://www.racgp.org.au/getattachment/41fee8dc-7f97-4f87-9d90-b7af337af778/Management-of-type-2-diabetes-A-handbook-for-general-practice.aspx.

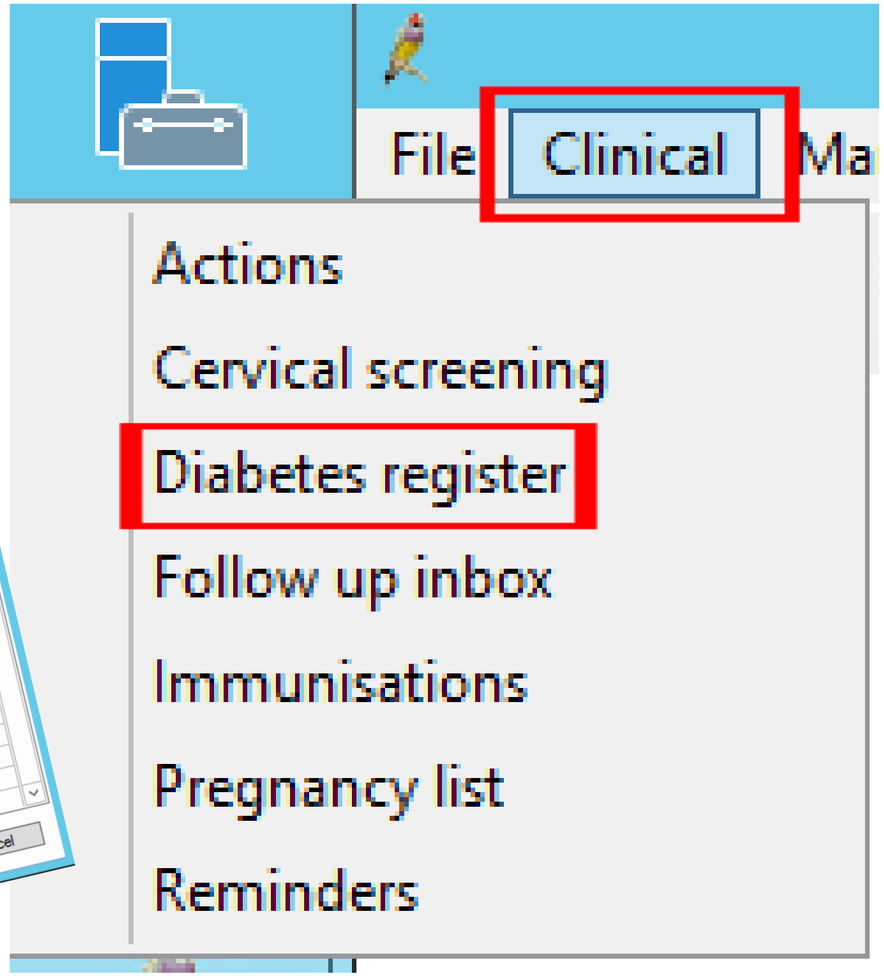
DIABETES REGISTER

Medical Director



HOT TIP: Check that your User Permissions are set to allow access, e.g., Practice Nurse.

Best Practice

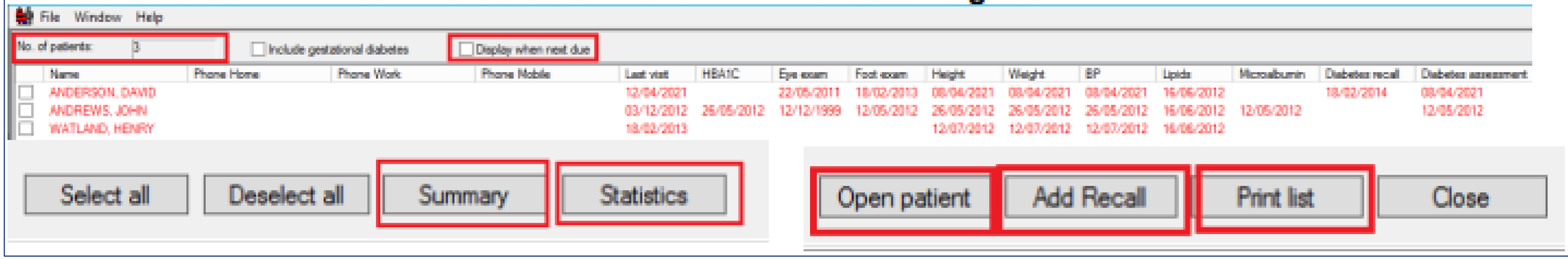


Medical Director. Diabetes Register Searches. [Online].; n.d. [cited 2023 July 11. Available from: https://www.medicaldirector.com/help/index.htm#t=topics-clinical%2FDiabetes_Register_Searches.htm.

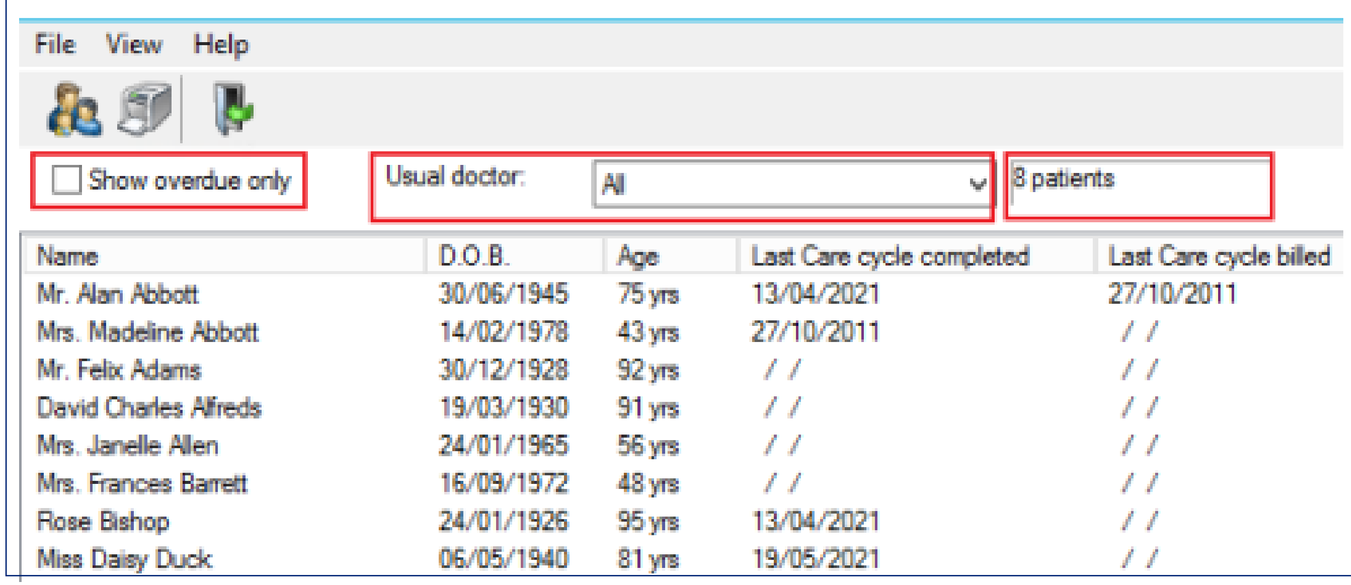
Best Practice. Diabetes Register. [Online].; 2020 [cited 2023 July 11. Available from: https://kb.bpsoftware.net/bppremier/saffron/Clinical/Diabetes/DiabetesRegister.htm?Highlight=diabetes.

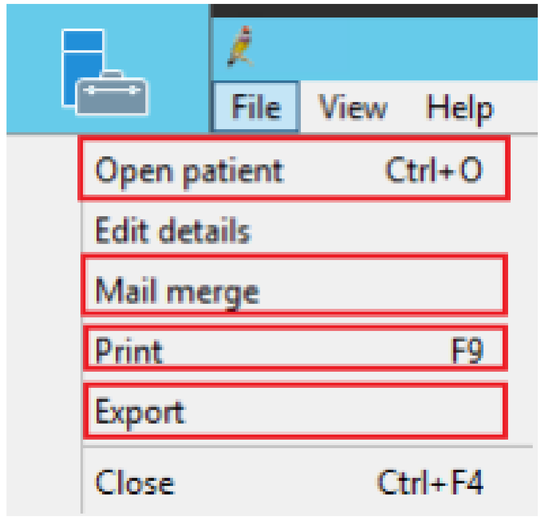
DIABETES REGISTER

Medical Director Clinical Front Screen < Search < Diabetes Register



Best Practice Main Screen < Clinical < Diabetes Register





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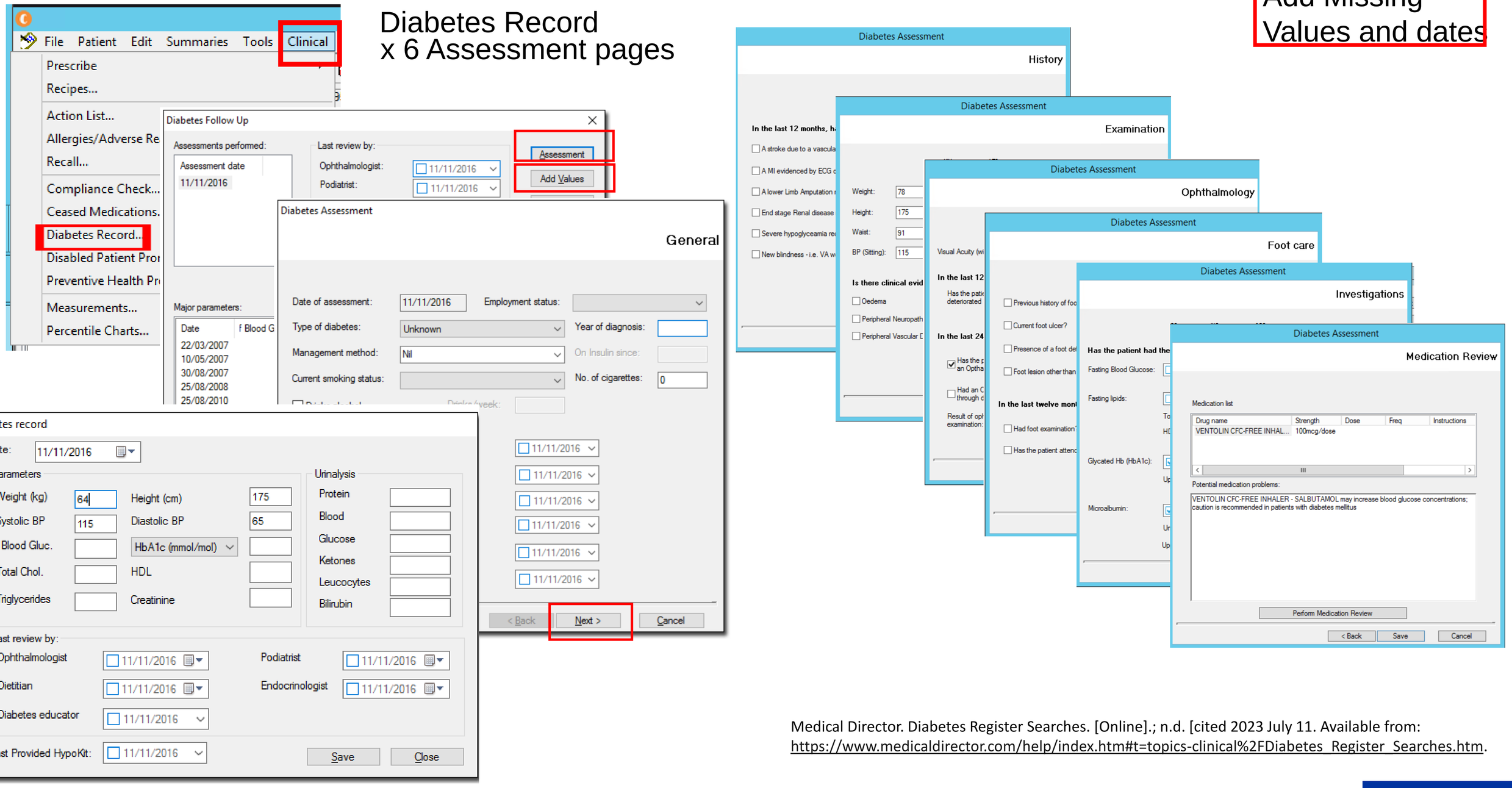
Best Practice. Diabetes Register. [Online].; 2020 [cited 2023 July 11. Available from: https://kb.bpsoftware.net/bppremier/saffron/Clinical/Diabetes/DiabetesRegister.htm?Highlight=diabetes.

Medical Director Diabetes Record and Assessment

Diabetes Record
x 6 Assessment pages

Add Missing Values and dates



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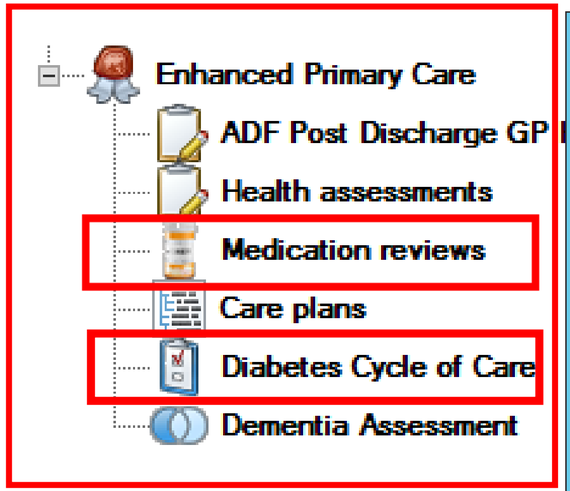
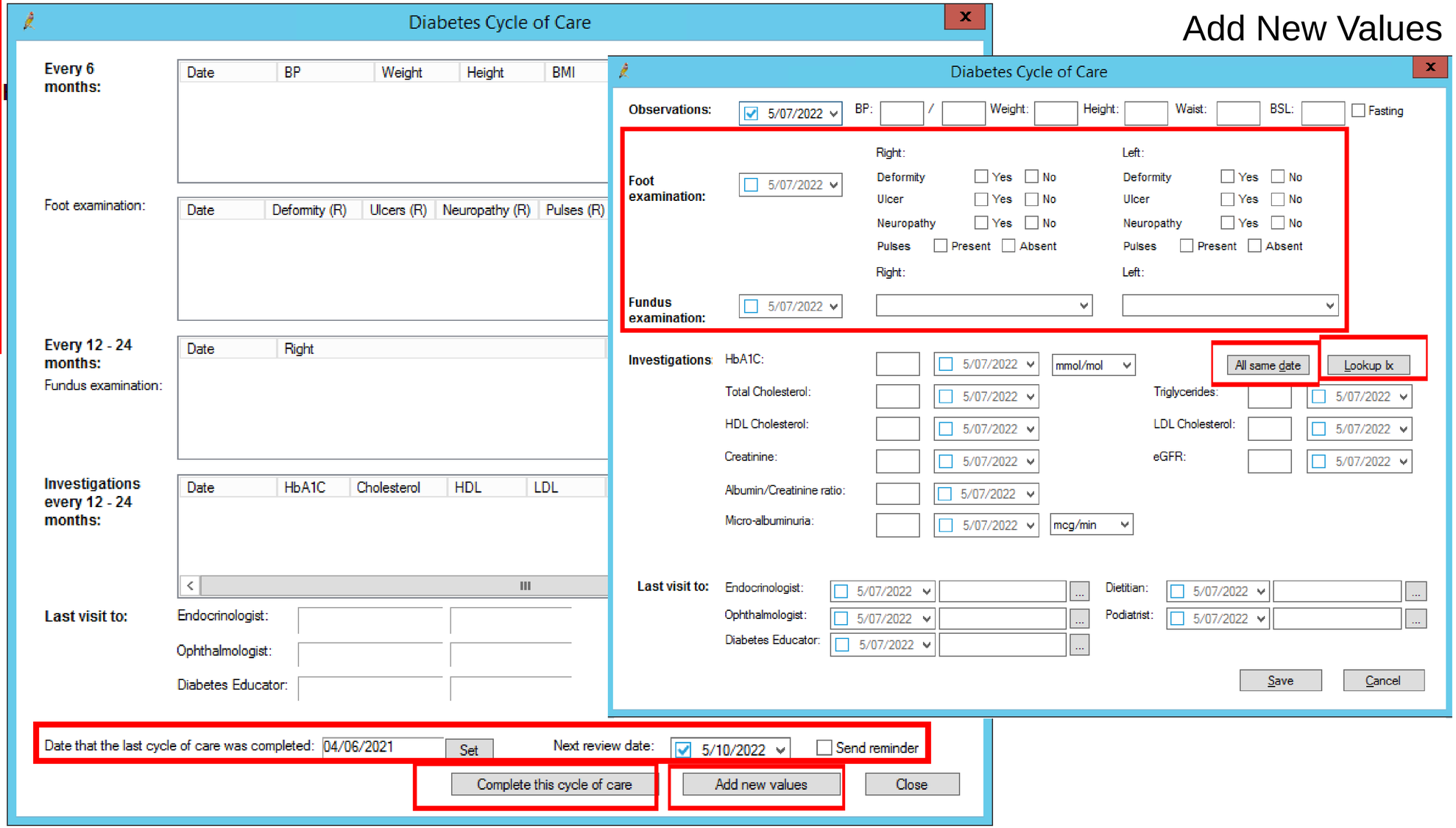
Best Practice - Diabetes Cycle of Care



Add New Values



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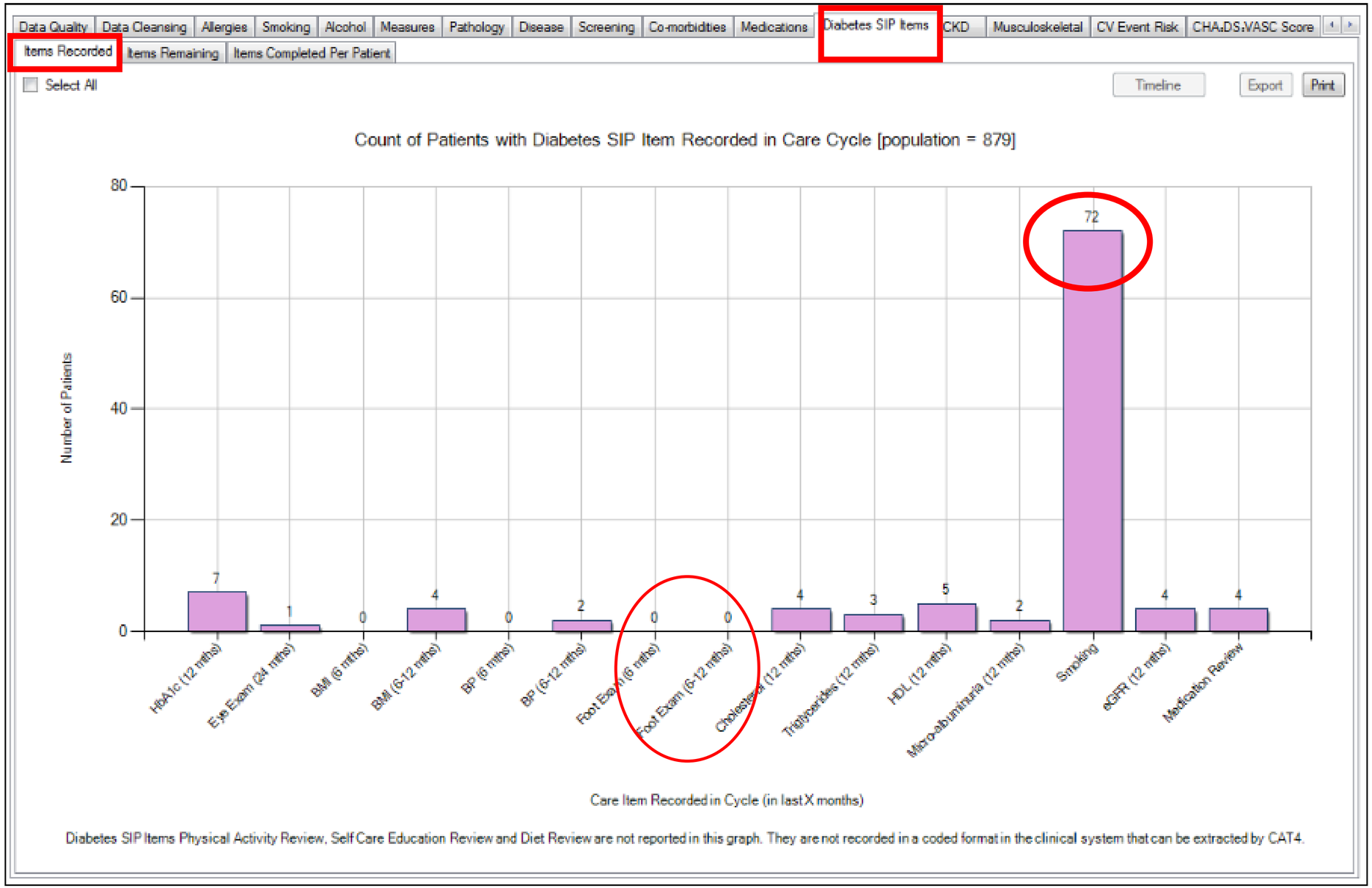
CAT4

Practice-level

Diabetes Cycle of Care (SIP) Items Recorded Across Practice

Strengths & Opportunities



PenCS. Diabetes SIP (Service Incentive Payments) Items. [Online].; 2017 [cited 2023 July 11. Available from: https://help.pencs.com.au/display/CG/Diabetes+SIP+%28Service+Incentive+Payment%29+Items.

CAT4

Reidentify patients

Diabetes CoC Items Completed Per Patient

Patients with almost complete Diabetes Cycle of Care

Hot Tip: Start at the right of chart!

PenCS. Diabetes SIP (Service Incentive Payments) Items. [Online].; 2017 [cited 2023 July 11. Available from: https://help.pencs.com.au/display/CG/Diabetes+SIP+%28Service+Incentive+Payment%29+Items.

Item	Best Practice Mapping
HbA1c	Patient Record > Main Patient screen > Enhanced Primary Care > Diabetes Cycle of Care screen. OR Pathology HL7 results OR manually entered result OR Additional test name 'Blood haemoglobin A 1 c'
Eye Exam	Enhanced Primary Care > Diabetes Cycle of Care
BMI	Observations
Waist	Observations Or Enhanced Primary Care > Diabetes Cycle of Care
BSLF	Observations screen OR Enhanced Primary Care > Diabetes Cycle of Care screen. OR Pathology HL7 results with LOINC codes 14771-0, 14996-3
BP	Observations Or Enhanced Primary Care > Diabetes Cycle of Care
Foot Exam	Enhanced Primary Care > Diabetes Cycle of Care
Cholesterol	Enhanced Primary Care > Diabetes Cycle of Care OR Pathology HL7 results
Triglycerides	Enhanced Primary Care > Diabetes Cycle of Care OR Pathology HL7 results
HDL	Enhanced Primary Care > Diabetes Cycle of Care OR Pathology HL7 results
Microalbuminuria	Enhanced Primary Care > Diabetes Cycle of Care OR Pathology HL7 results This indicator uses both the Microalbumin and/or the ACR test results
Smoking	Open > Alcohol and Smoking History > Tobacco
eGFR	Enhanced Primary Care > Diabetes Cycle of Care OR Pathology HL7 results
Medication Review	Enhanced Primary Care > Medication Reviews

pencs

CAT4

Diabetes Cycle of Care items

Mapping to data location within Practice Clinical Information System (BP,MD, etc.)

PenCS. Diabetes SIP Mappings with clinical systems. [Online].; 2017 [cited 2023 July 11. Available from: https://help.pencs.com.au/display/CG/Diabetes+SIP+Mappings+with+clinical+systems.

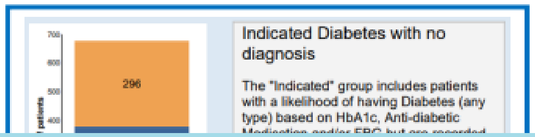
QUALITY IMPROVEMENT ACTIVITIES X 4 QUARTERS 1 YEAR

Quality Improvement Scenario 1: Patients Indicated Diabetes with No Diagnosis

A **Practice's Data Dashboard** example provided by **HNECCPHN** (based on **PenCS CAT4** data) indicates that 296 patients are indicated as likely or possible to have diabetes, but do not have a coded diagnosis. Patients who have diabetes 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*



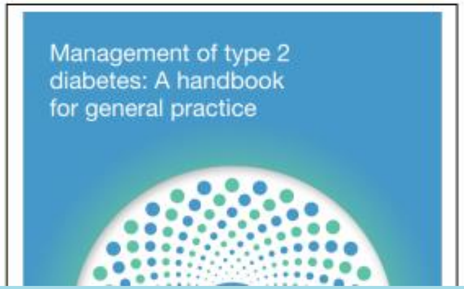
Quality Improvement Scenario 2: Chronic Disease Management

Using **Chronic Disease Management** enablers assists practice health professionals to provide appropriate care to patients. **Medical Benefit Schedule (MBS) Attendances** such as GP Management Plan (GPMP), Team Care Arrangement (TCA), Reviews of both, and Allied Health Consultations are beneficial to a patient's management of Diabetes. A GPMP provides the

Quality Improvement Scenario 4: Diabetes Cycle of Care completion

Evidence-based care guidelines state that a **Diabetes Cycle of Care** should be completed every year. Management-of-type-2-diabetes-A-handbook-for-general-practice.aspx (racgp.org.au)

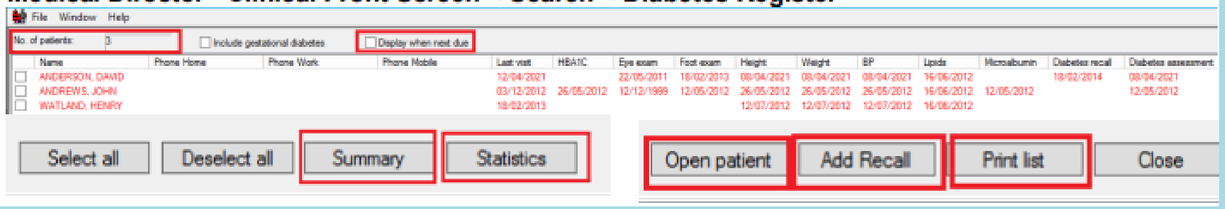
Your practice's **PenCS CAT4** tool can determine the number of patients remaining eligible for an annual diabetes cycle of care. Identify patients eligible for an Annual Diabetes Cycle of Care - CAT Recipes - PenCS Help



Quality Improvement Scenario 3: Diabetes Register in CIS

While looking at the **Diabetes Register list of all patients diagnosed with diabetes** in the Practice's clinical system, the Practice Nurse notices that there are patients whose Diabetes Cycle of Care is overdue (red font-**MD**), or without a completion date or a completion date more than 12 months ago (**BP**).

Medical Director Clinical Front Screen < Search < Diabetes Register



QUALITY IMPROVEMENT ACTIVITIES

phn HUNTER NEW ENGLAND AND CENTRAL COAST
An Australian Government Initiative

Sample report

Agreed Clinical Practice Improvement

NSW GOVERNMENT Health
Hunter New England
Local Health District

Item	Action	Notes	Agreed
1	To improve screening and diagnosis of type 2 diabetes	1.1 Use AUSDIAB risk engine and selectively screen 1.2 Consider annual HbA1c testing with fasting BGL 1.3 OGTT though useful, for practical reasons uptake may be limited 1.4 Consider regular screening for Aboriginal and Torres Strait Islander people	✓
2	Consider identifying women of child bearing age and advise them of the importance of pre-conception planning and contraception	2.1 Do not use teratogenic medications prior to conceptions (most antihypertensive therapy except methyldopa, statins, oral hypoglycaemic agents except metformin should be stopped) 2.2 HbA1c should be <6-6.5% before conception and use folic acid 5mg daily from preconception till 12 weeks of gestation 2.3 Insulin therapy is strongly recommended to keep BGL in target (fasting BGL 4-5.5, 2HR post prandial <6.7mmol/l)	✓
3	Improve BMI recording and waist circumference measurement	3.1 Most practices enter weight but not height which means BMI is not calculated 3.2 Waist measurement helps to monitor overall metabolic profile	✓

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An Australian Government Initiative

QUARTERLY IMPROVEMENT MODEL – PLAN DO STUDY ACT

Hot Tip: Documentation useful for Accreditation and QI PIP.

The Thinking Part

Goal *What are we trying to accomplish? SMARTA*

Increase recording of Foot Check by 50% by Sept 2023

Measure *How will we know that a change is an improvement?*

Baseline:	1 August 2023
Re-measure:	30 Oct 2023
Numerator:	Patients w/ T2DM without foot check
Denominator:	All Patients with Type 2 Diabetes Mellitus

Idea *What can we do to achieve the goal?*

1 – Commence Nurse-led Diabetes clinic, Training in foot check

2 – Keep CIS Diabetes Register up to date

3 – Check with Allied Podiatrist and Correspondence-in

The Doing Part

Idea

Plan

What?	2-Check/update Diabetes Register
Who?	Nurse Jane
Where?	Nurses Room PC
When?	Protected time Wed 12-1
What?	Update Diabetes Register
Predictions?	Diabetes Register is updated by by 5

Did *Was the plan executed? Any unexpected events or problems?*

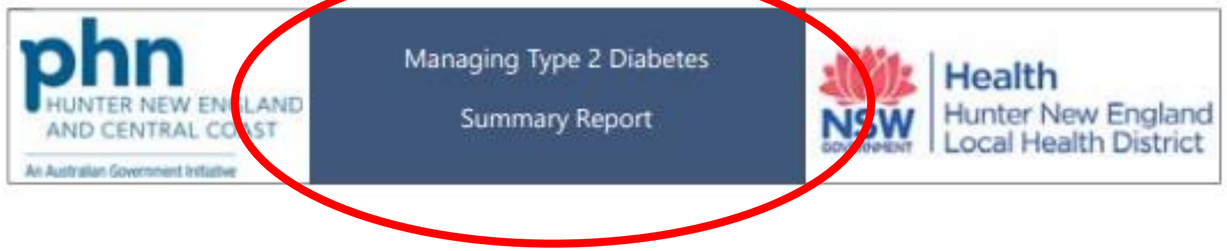
Yes, was executed as planned

Study *Analysis of actions and data. Reflection on the results*

Foot check recording increased by 25%

Act *What will we take forward what is the next step or cycle?*

Continue.
Increase nurse time to second day.



HNE Diabetes Alliance

Case Conferencing Program

- Diabetes-specific Data Report
- Practice entries in Clinical Information System (CIS)
- Extracted by PenCS CAT4
- Interpretation by Endocrinologist at Diabetes Alliance Case Conferences
- Apply to Quality Improvement activities

This document contains confidential practice data

Please maintain data security

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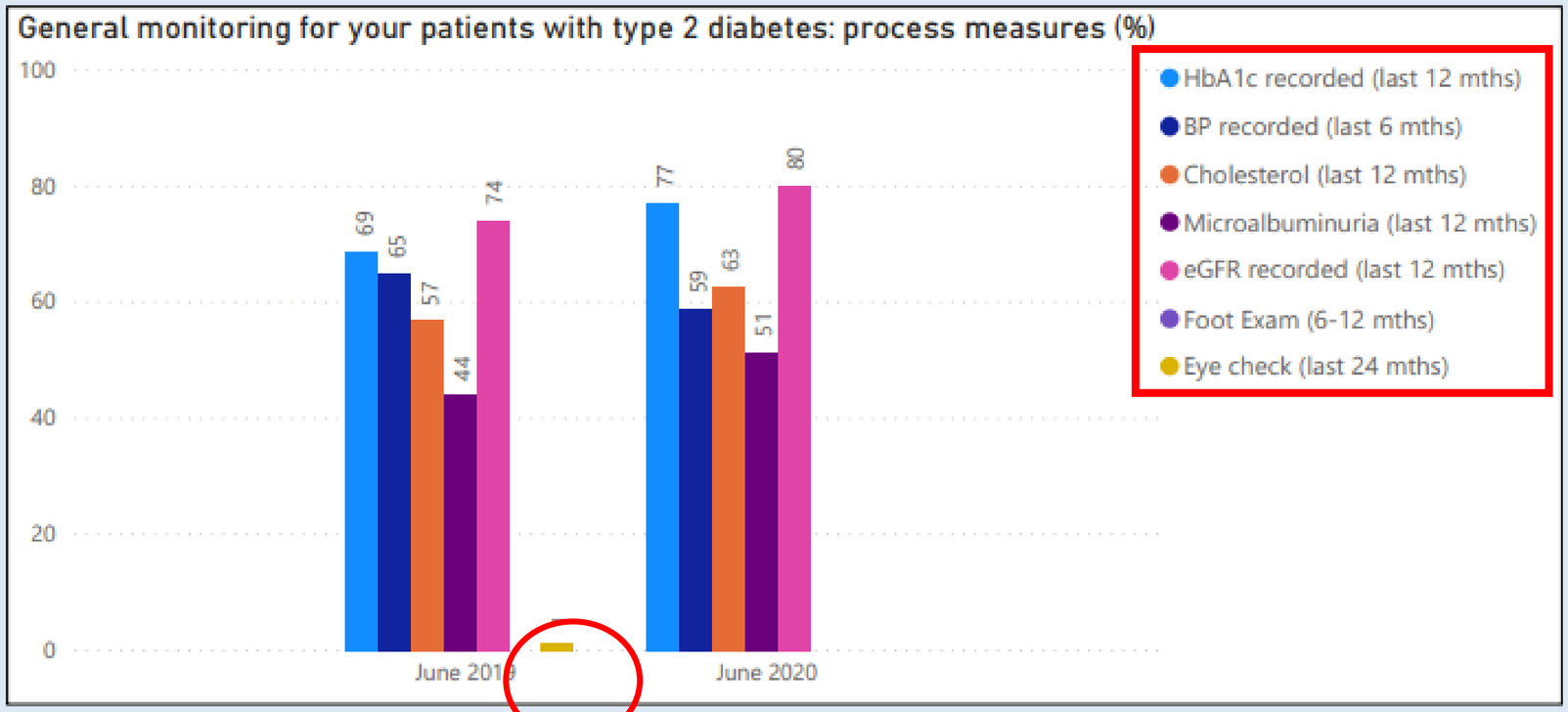
The PHN General Practice Summary

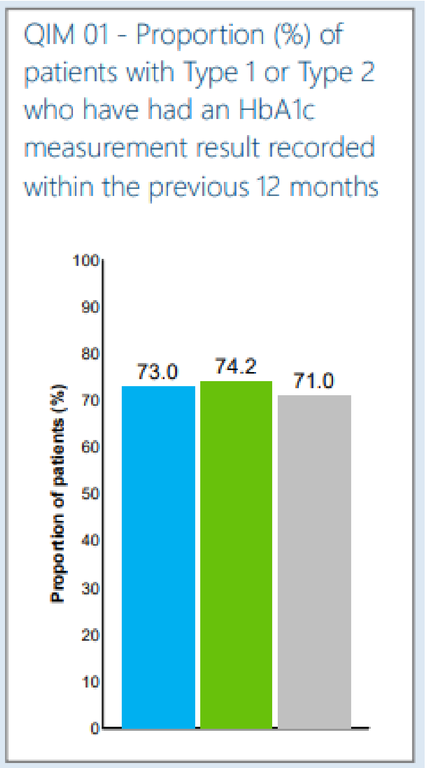
Diabetes Cycle of Care (7 of 14 activities)

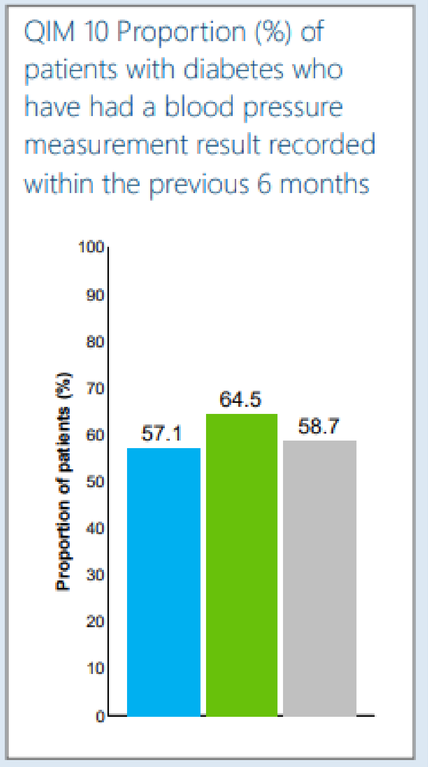


Process measures: all practices (%)

Period	HbA1c (<12 mths)	BP (<6 mths)	Cholesterol (<12 mths)	Microalbuminuria (<12 mths)	eGFR (<12 mths)	Foot exam (6-12 mths)	Eye check (<24 mths)
June 2019	73.8	68.2	68.4	51.0	76.5	15.0	23.8
June 2020	74.7	64.9	68.3	49.5	76.8	13.0	20.5

HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report





The PHN General Practice Summary

Hot Tip: Code Foot and Eye Checks as the Correspondence mail arrives.

ETHNICITY

Active Aboriginal and Torres Strait Islander patients at your practice

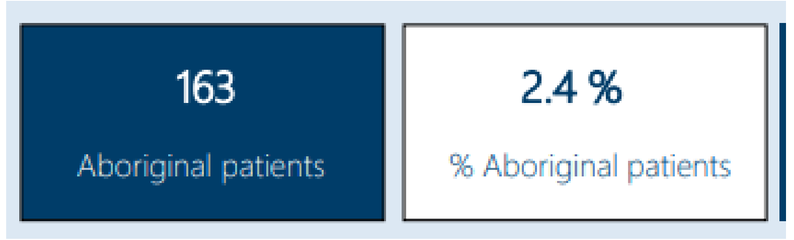
Period	All Aboriginal patients**	Type 2 (including type 2 and 'undefined')	% of Aboriginal patients***	* all practices
June 2020	882	104	11.79	6.41
June 2019	993	98	9.87	6.37

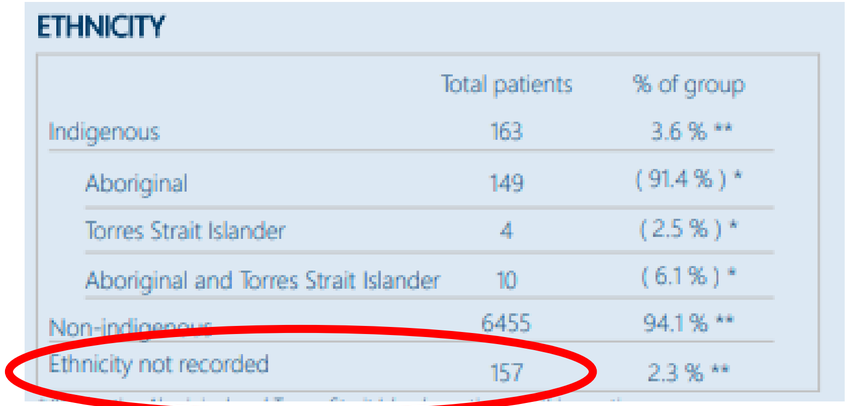
HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report

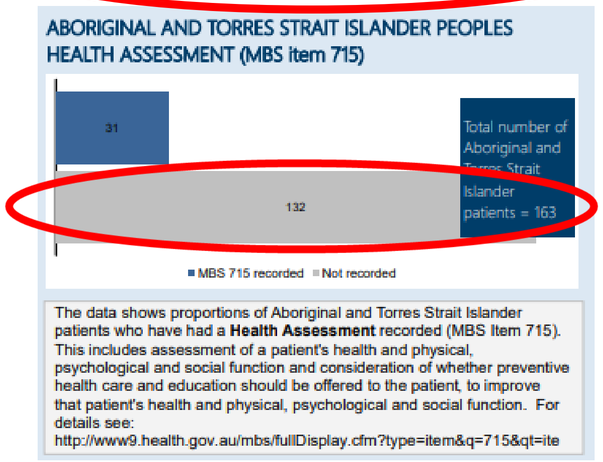
Hot Tip:

Increased risk of Diabetes in First Nations population.

Screening is important via AUSDRISK, 715 Health Assessment

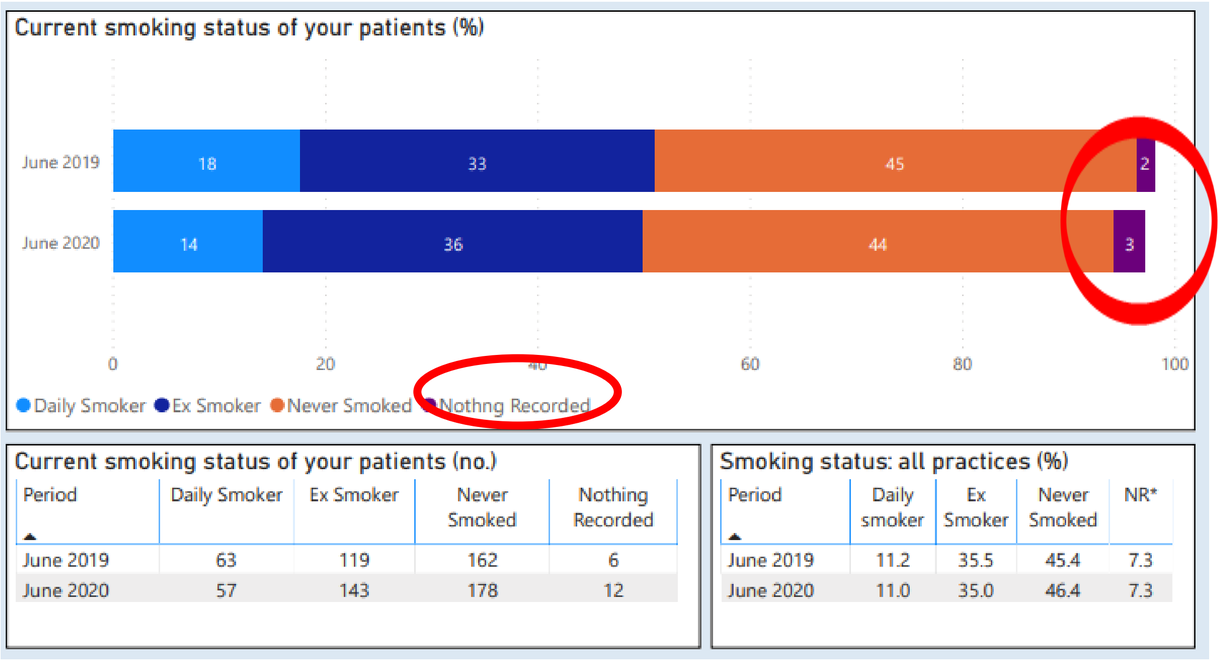






The PHN General Practice Summary

SMOKING



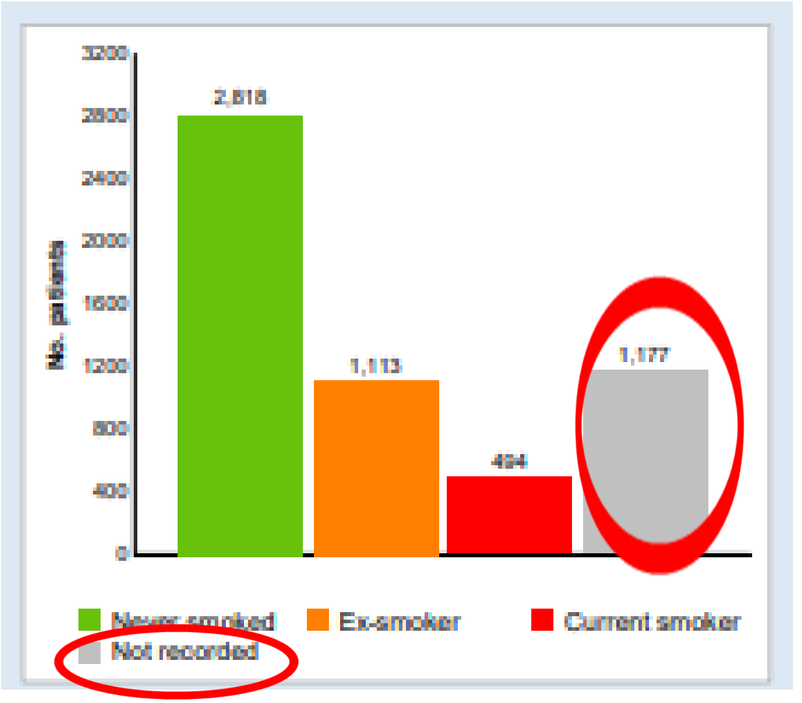
Current smoking status of your patients (no.)

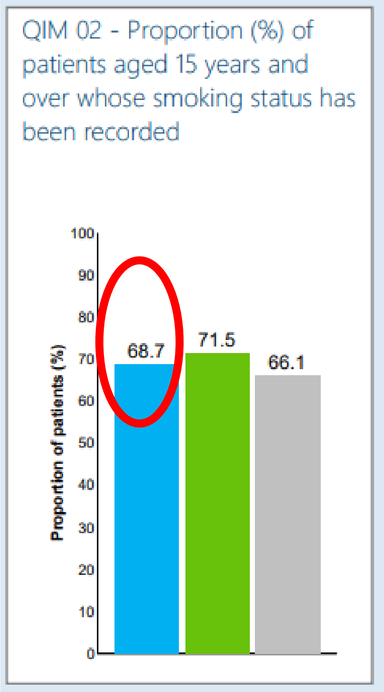
Period	Daily Smoker	Ex Smoker	Never Smoked	Nothing Recorded
June 2019	63	119	162	6
June 2020	57	143	178	12

Smoking status: all practices (%)

Period	Daily smoker	Ex Smoker	Never Smoked	NR*
June 2019	11.2	35.5	45.4	7.3
June 2020	11.0	35.0	46.4	7.3

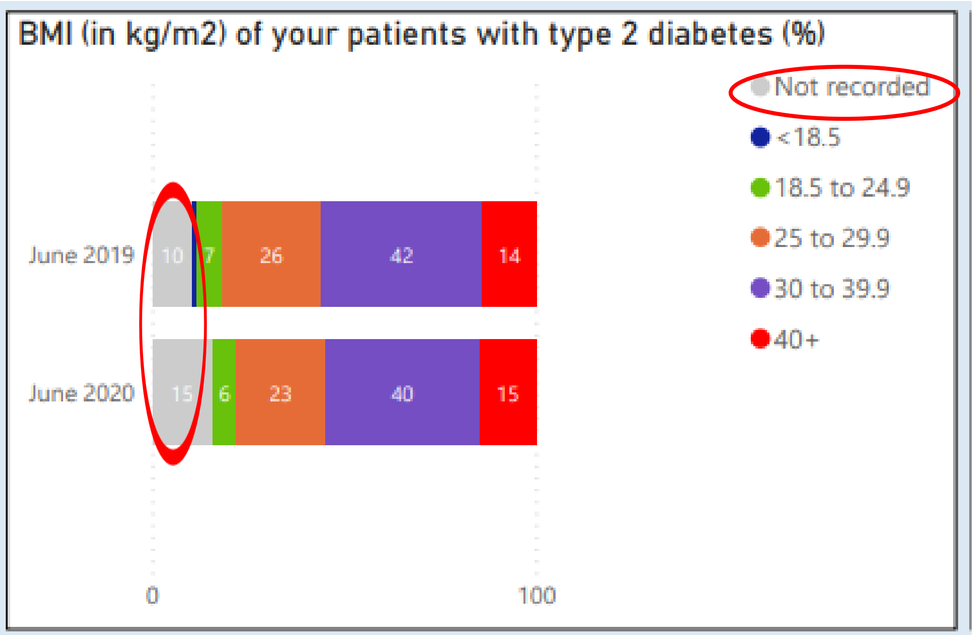
HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report





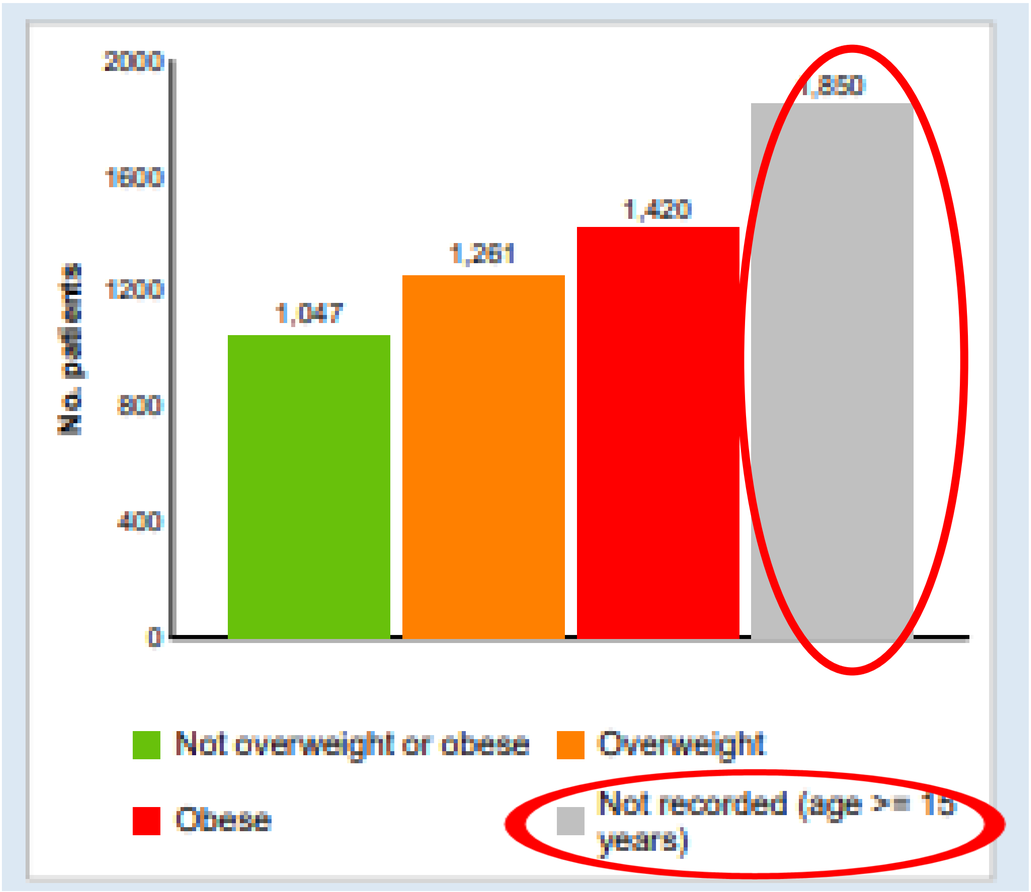
The PHN General Practice Summary

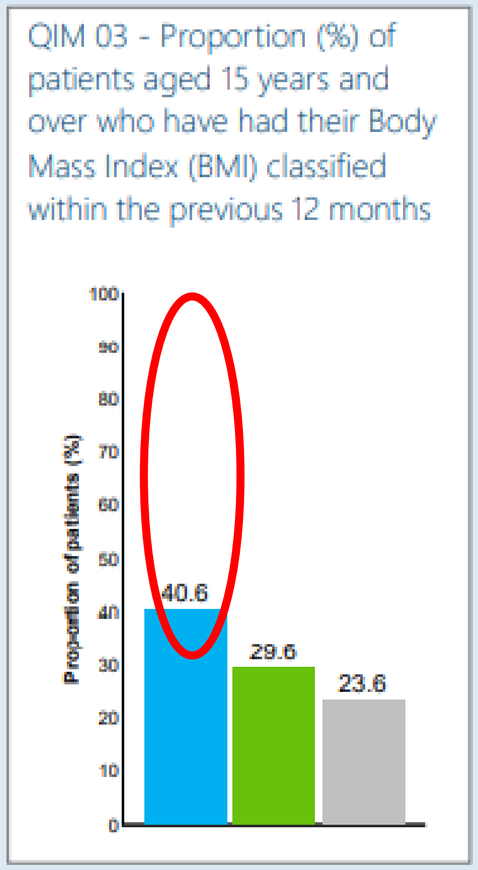
BMI



BMI (in kg/m2) of your patients (no.)

Period	<18.5	18.5-24.9	25-29.9	30-39.9	40+	Not recorded
June 2019	4	25	92	150	50	36
June 2020	2	23	94	160	60	62



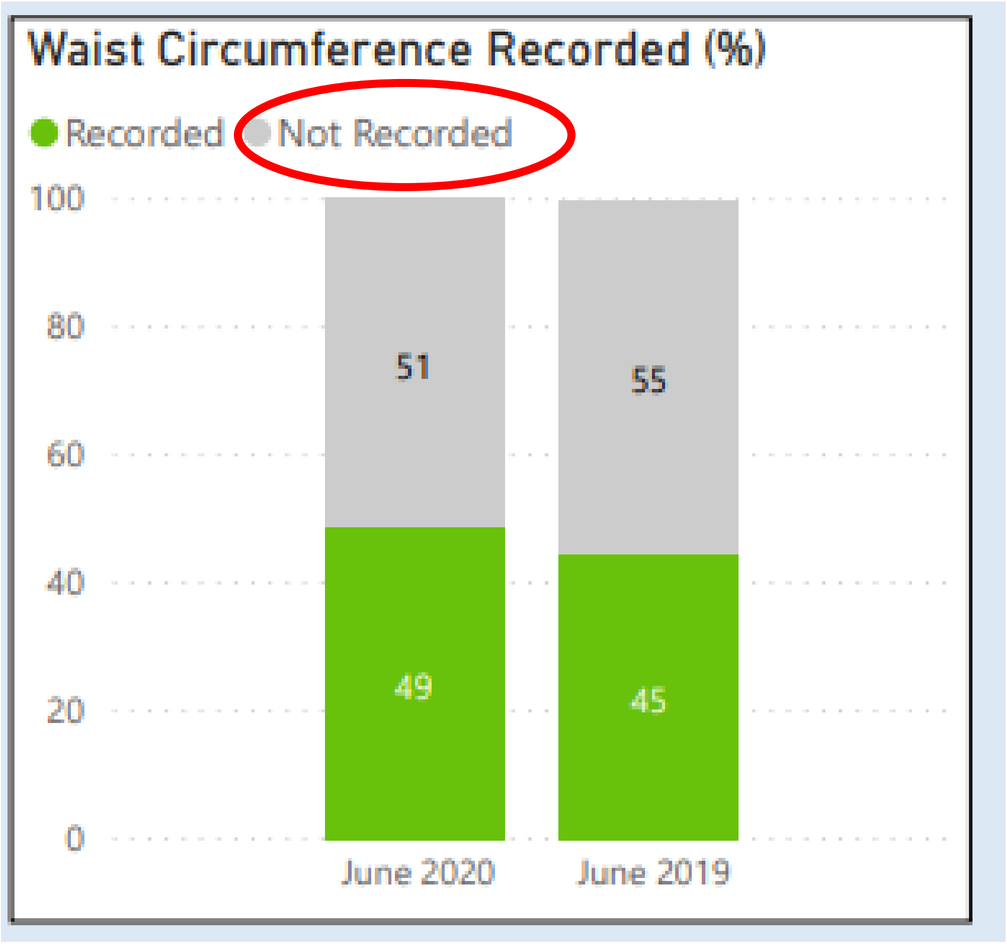


HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report

The PHN General Practice Summary

WAIST CIRCUMFERENCE

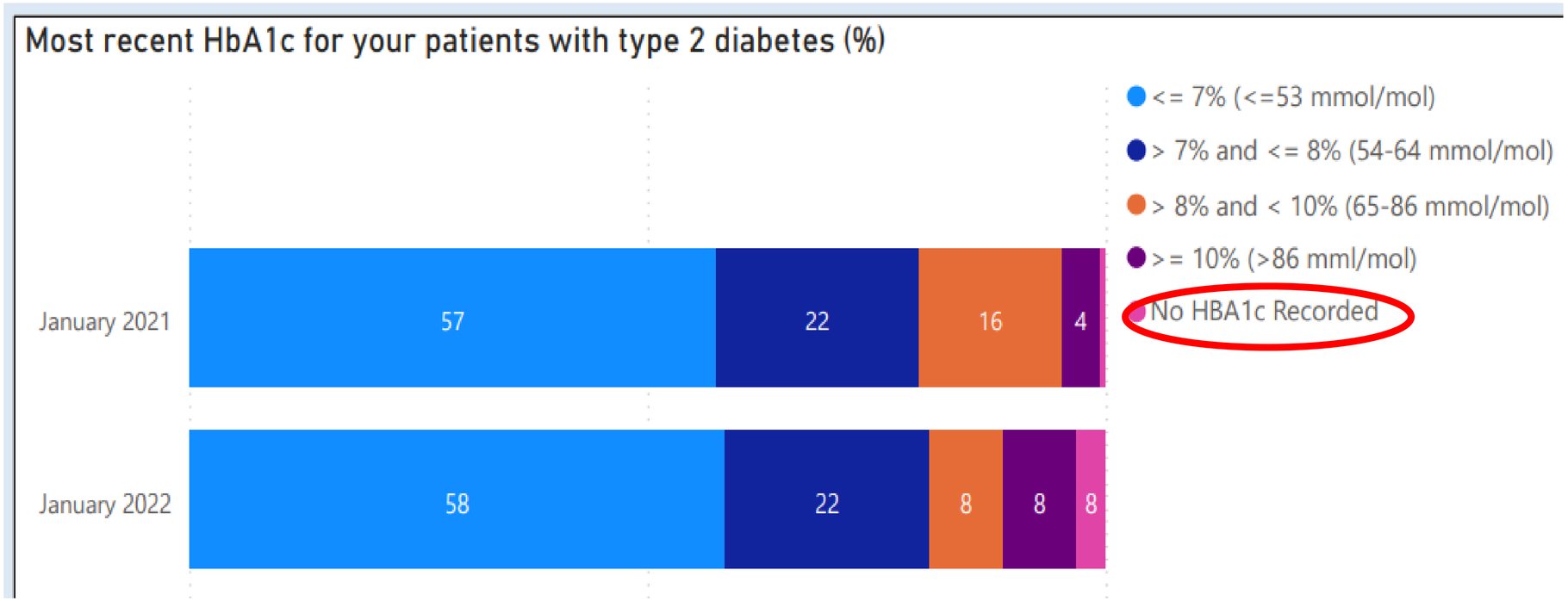
Central adiposity indicates risk of CVD



Hot Tip: Consider a practice blitz – every patient every time.

HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report

PATHOLOGY - HbA1c



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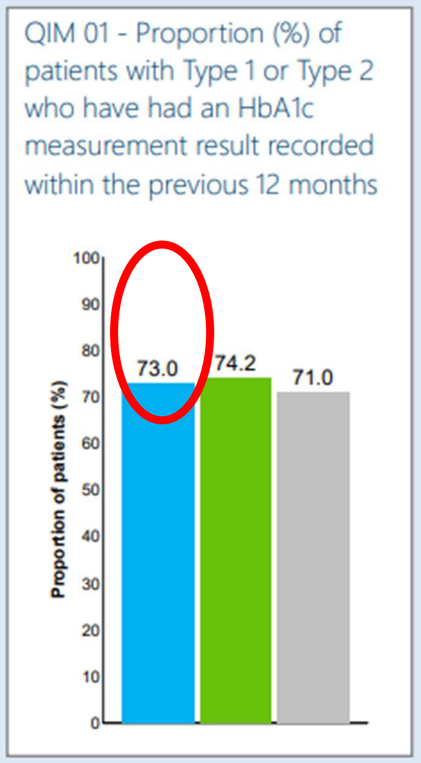
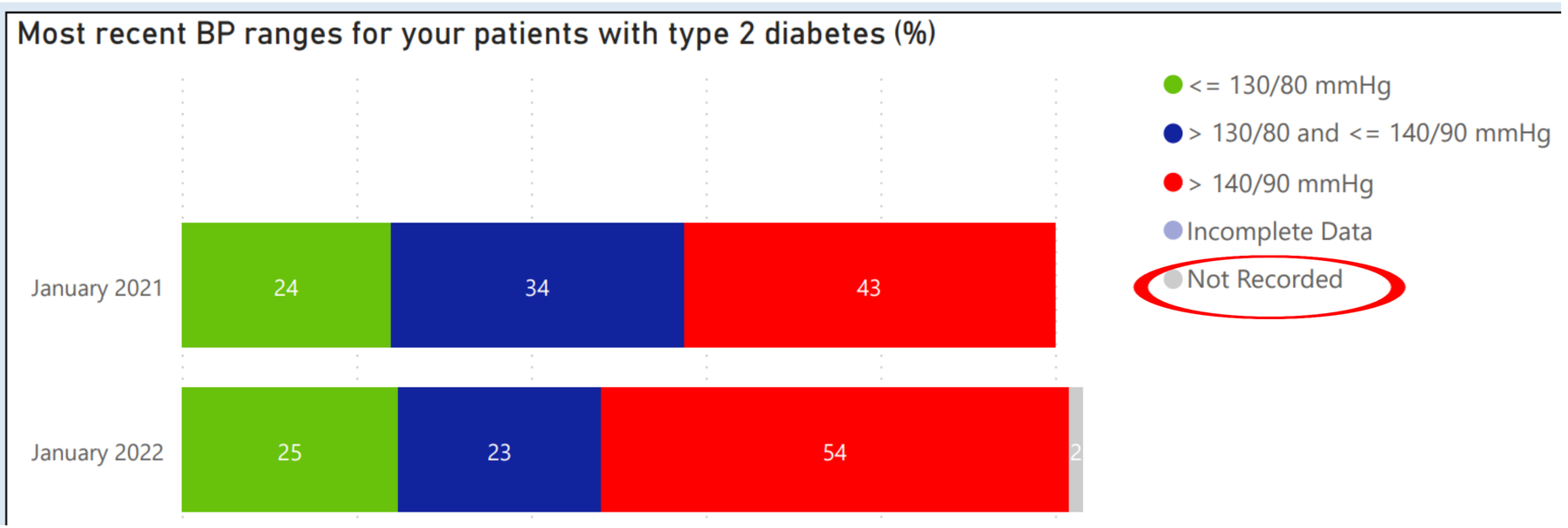
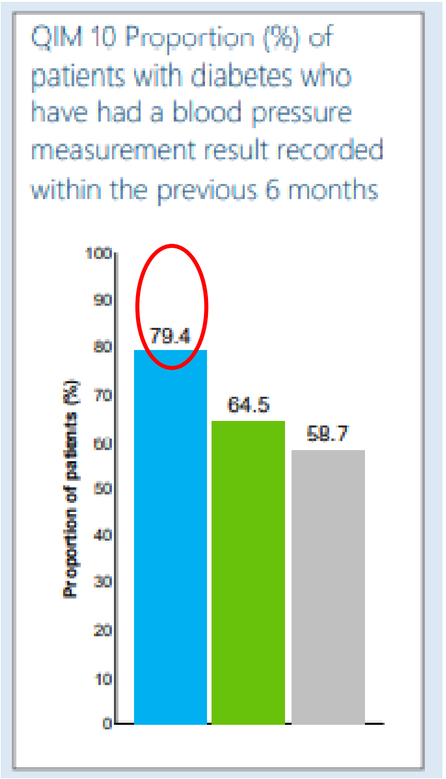


The PHN General Practice Summary

Hot Tip:
Consider prescribing after HbA1c attended.

Blood Pressure Recording

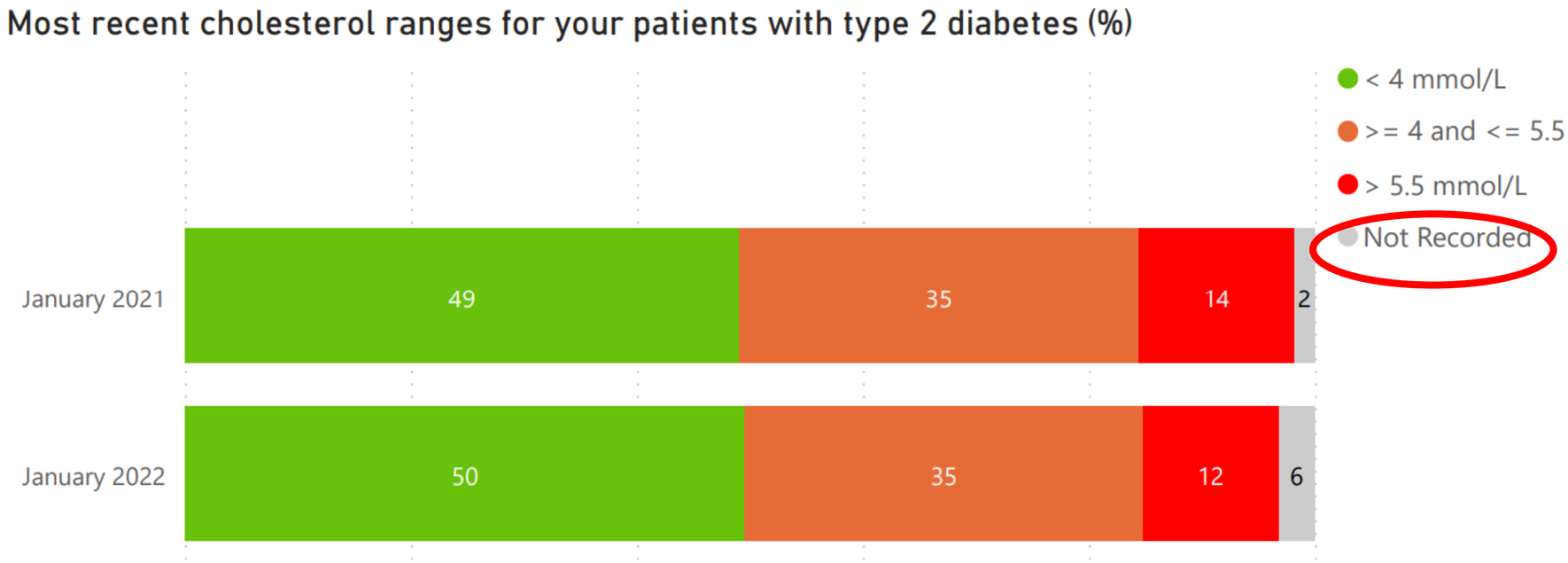




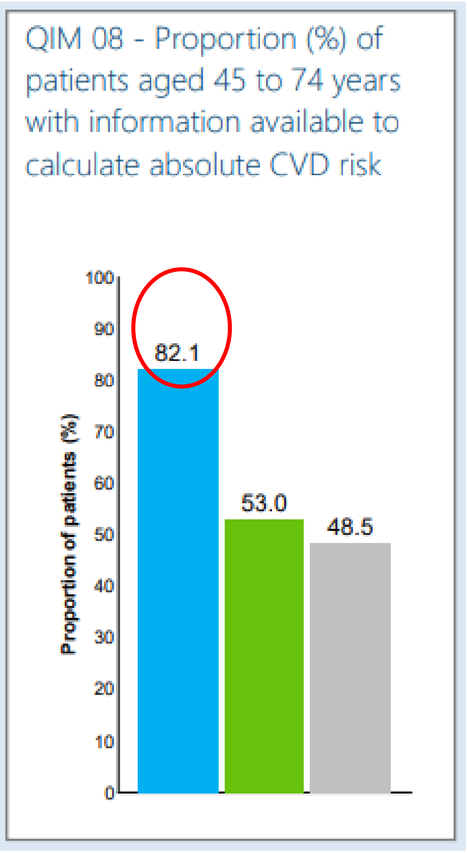
HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report

Hot Tip: Code in Observations field, not just progress notes.

Cholesterol Results



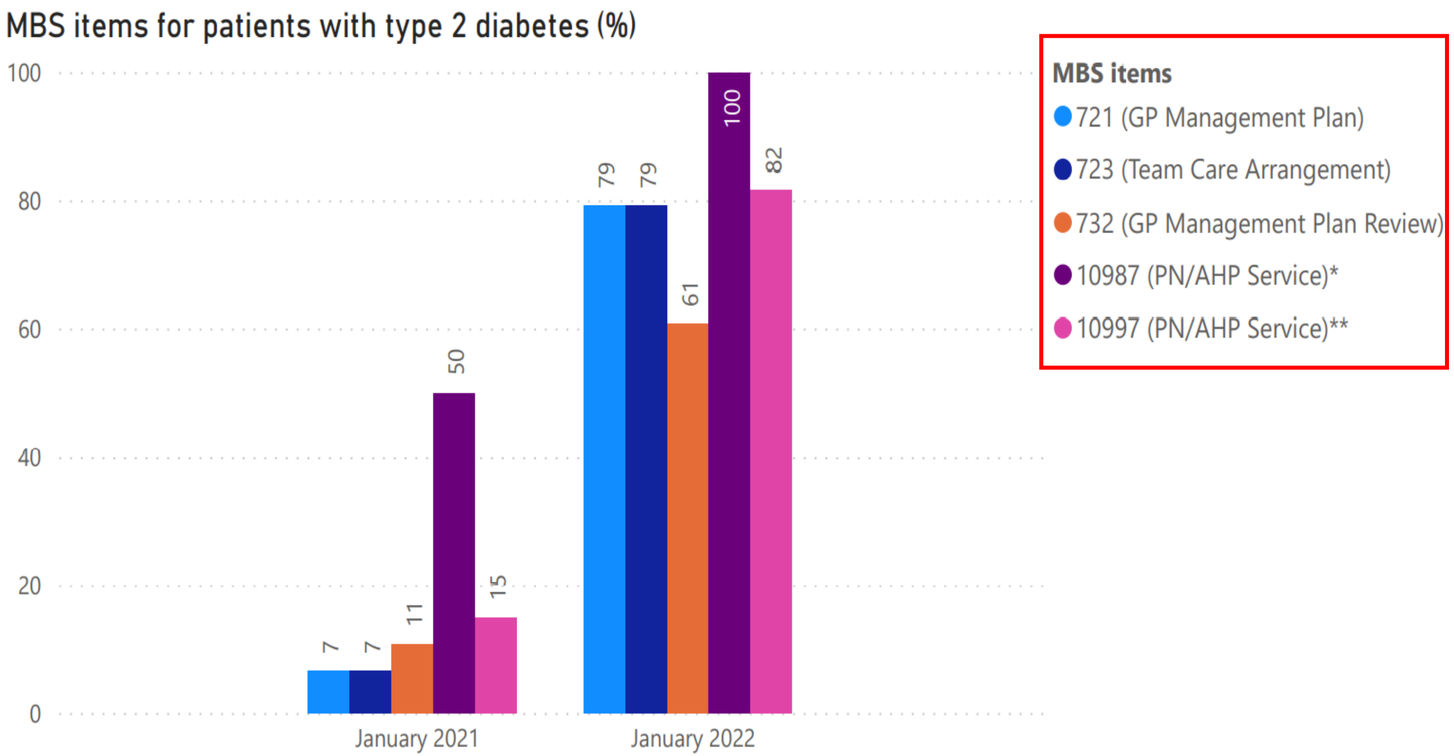
HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report



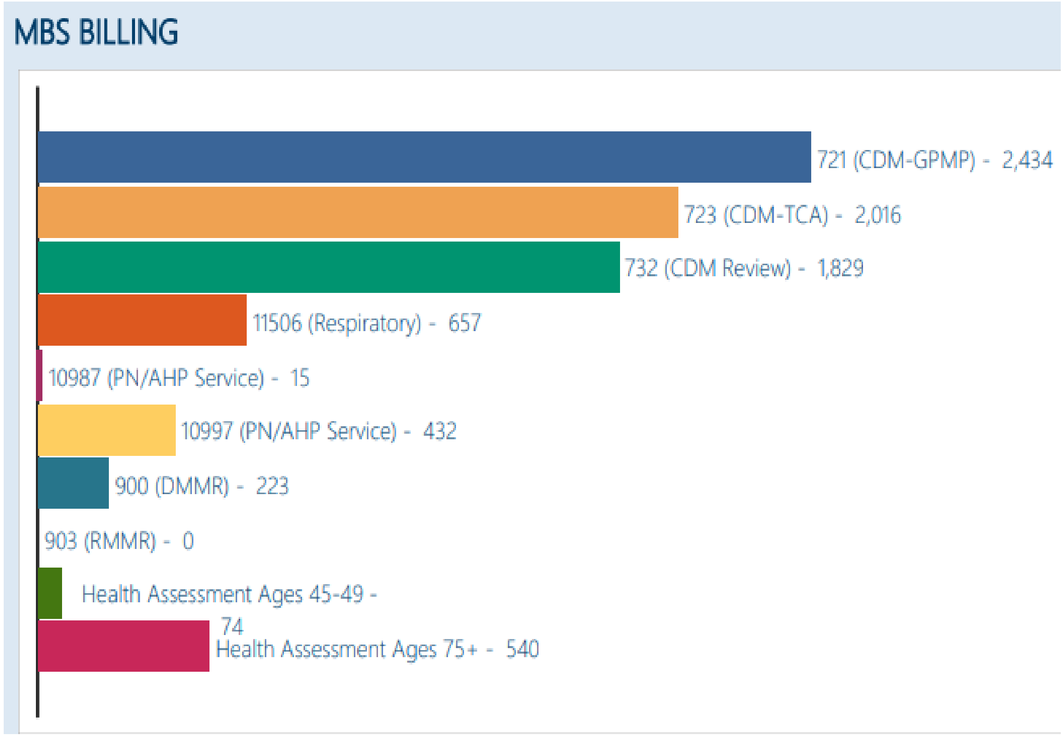
Hot Tip: Put Cholesterol request in your Diabetes pathology favourites.

The PHN General Practice Summary

MBS Items Chronic Disease Management Health Care & Billing



HNE Diabetes Alliance Managing Type 2 Diabetes Summary Report



The PHN General Practice Summary

Hot Tip: Maximise care and billings……..you are doing the work.
Consider Practice Nurse, MPA, AHW/AHP maintaining Diabetes Cycle of Care.

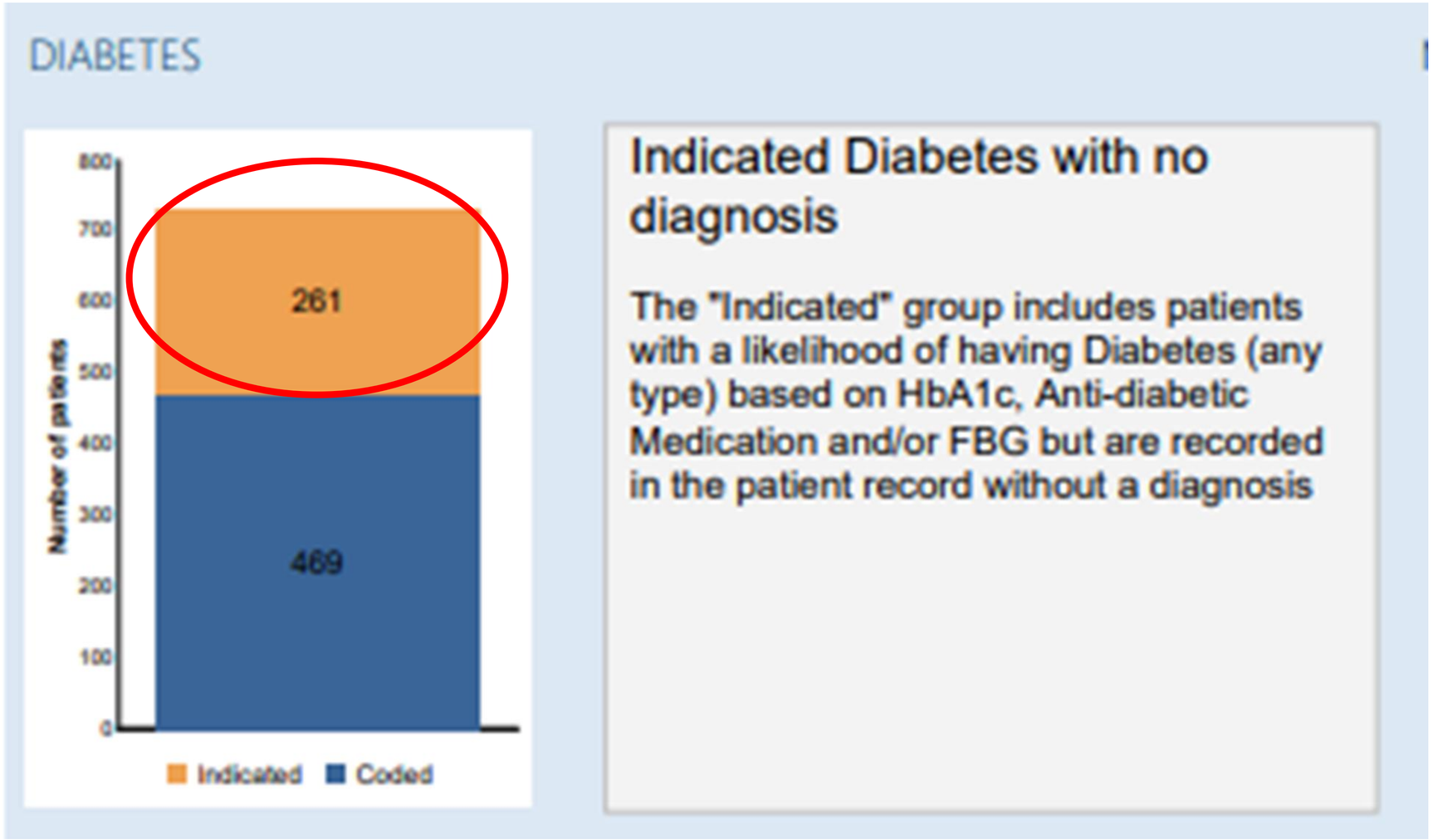
INDICATED BUT NOT CODED DIAGNOSIS

Hot Tip:

Coding is required by eHealth and Accreditation Standards.

Cease free-typing. Choose from diagnosis list.

Practice Clinical Info System (MD, BP, etc.) is populated with acceptable **National Medical Vocabulary** e.g., Sno-Med, Docle, Pye-finch.



The PHN General Practice Summary

INDICATED BUT NOT CODED DIAGNOSIS

Data Cleansing

Missing Demographics | Missing Clinical/Accreditation Items | Indicated CKD with No Diagnosis | Indicated Diabetes with No Diagnosis | ndicated Mental Health with No Diagnosis | Indicated COPD with No Diagnosis | Indicated Osteoporosis with No

Indicated | Reviewed

Patient List page 1 of 9 [Count = 167]

Save & Remove | Save As | Export | Page No. 1

Double-click a patient to open it in your clinical system (MD, BP, Zedmed).
Click on Column Heading to sort

Likely | Possible | Review

Surname	First Name	DOB	Indication Date	Sex	Anti-diabetic Medication	HbA1c	FBG	Eye Exam	BMI	BP	Foot Exam	Chol	Trig	HDL	Malb	Smoking	eGFR	Assigned Provider	Confirm Condition Does Not Exis
Surname	Firstname_1015	01/11/1948	30/11/2020	M			7.2		29.4	125/70		4.0	1.3	1.29		Never smoked	67	Surname_6	
Surname	Firstname_1023	01/11/1975	18/01/2018	F	Y	5.8	5.2		44.5	135/93		6.6	1.7	1.12	0	Ex smoker	105.547		
Surname	Firstname_10315	01/11/1935	20/07/2017	M		6.7			22.3	138/70		4.2	1.2	1.41		Ex smoker	67	Surname_8	
Surname	Firstname_10435	01/11/1943	04/06/2021	F			9.3		23.7	127/76		5.7	2.1	1.19		Never smoked	65	Surname_6	
Surname	Firstname_10520	01/11/1960	15/03/2019	F		6.2	6.1		27.8	144/68		5.1	5.3	0.94		Never smoked	97.799		
Surname	Firstname_10599	01/11/1929	05/10/2021	F		5.8	7.4		24.9			3.4	0.6				76	Surname_3	
Surname	Firstname_1061	01/11/1949	24/09/2021	F	Y		5.5		42.4	132/95		4.8	2.1	1.73		Ex smoker	84	Surname_5	

Likely:
HbA1c >6.5
OR HbA1c recorded AND prescribed an anti-diabetic medication
OR FBG >7.

Possible:
HbA1c >6 and <6.5
OR prescribed an anti-diabetic medication excluding metformin.

Review: Prescribed metformin.

Condition Does Not Exist Option

CAT4 has an option to remove a patient from the Cleansing View reports by confirming that a particular condition does not exist. This will stop the patient from appearing on the Cleansing View and Cleansing App in Topbar. Only users of Topbar and CAT4 can use this option as it uses the Topbar server to store the information. CAT4 needs to be linked to Topbar in the Edit/Preferences/Topbar settings to activate this function, the details are provided here: Linking CAT4 to Topbar

Accessing a Patient Record (All Reports)

To access a patient record, double-click anywhere on the row containing the patient's details within the displayed report. This will open the patient record within the appropriate clinical system.
Note: The clinical system must be open and logged in for the above step to complete. If the clinical system is not open, an alert message will pop up requesting the clinical system be started.
Clinical systems where this functionality is currently provided are
•Medical Director
•Best Practice
•Zedmed
Other clinical systems are planned to be added.

PenCS. Indicated Conditions Report Details. [Online].; 2017 [cited 2023 July 11. Available from: https://help.pencs.com.au/display/CG/Indicated+Conditions+Report+Details.

QUALITY IMPROVEMENT LEARNING OUTCOMES

1. De-identified Data Sources

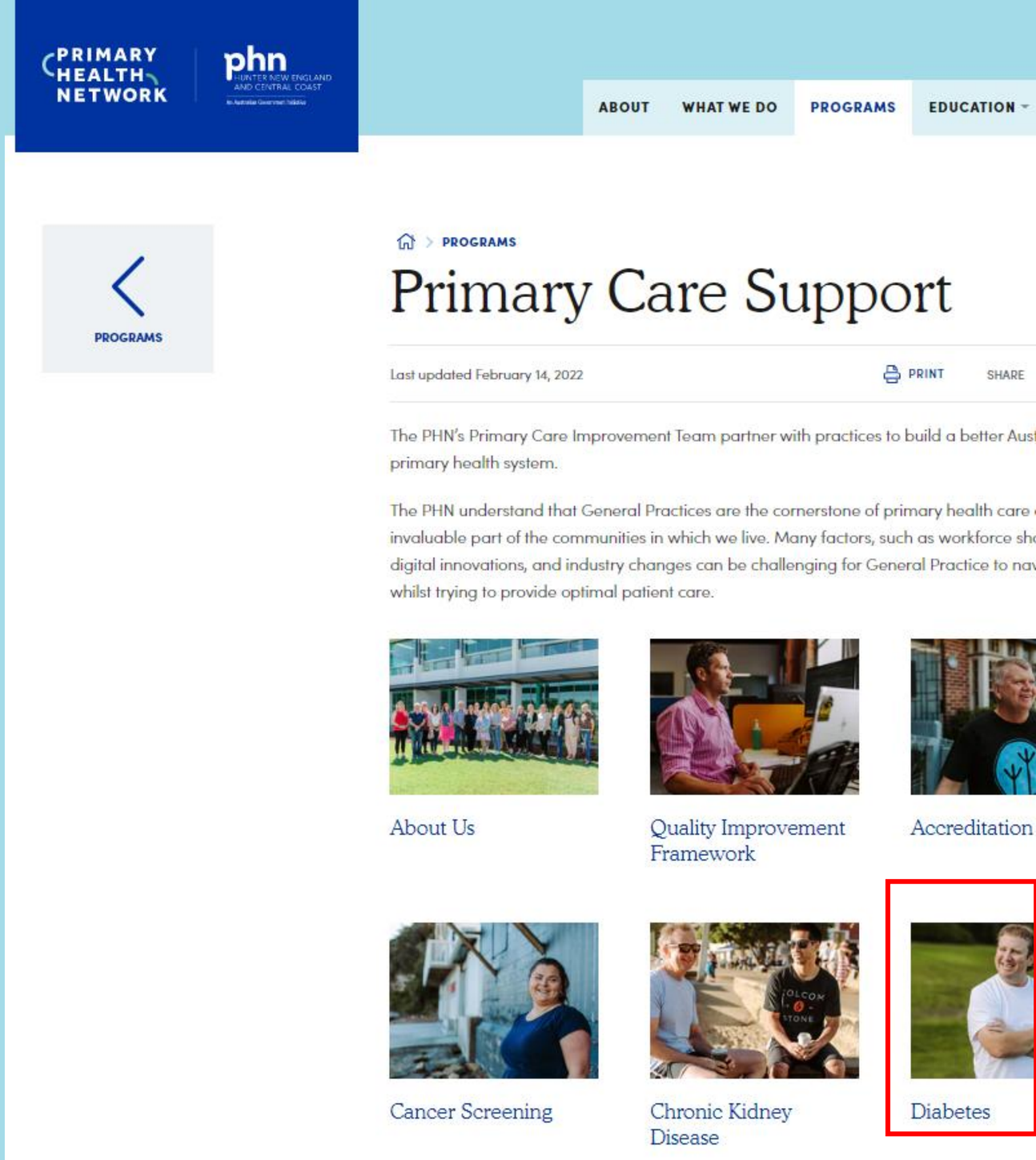
- HNE Diabetes Alliance Program+ Managing Type 2 Diabetes Summary Report
- The PHN - General Practice Summary

2. Quality Improvement Activities

- Primary Care Support
- Plan-Did-Study-Act Cycle Model for Improvement
- PenCS CAT4

3. Practice Clinical Information System (CIS)

- Diabetes Register
- Diabetes Cycle of Care Assessment



Questions

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Your PHN PCIO -1300 859 028

PRIMARY HEALTH NETWORK

phn HUNTER NEW ENGLAND AND CENTRAL COAST
An Australian Government Initiative