Train IT Medical

Leading Your Practice Into The Digital Future

Data Aggregation

for

Business & Clinical Quality Improvement

using Pen CAT4

NWMPHN 2017

Practice Managers Conference

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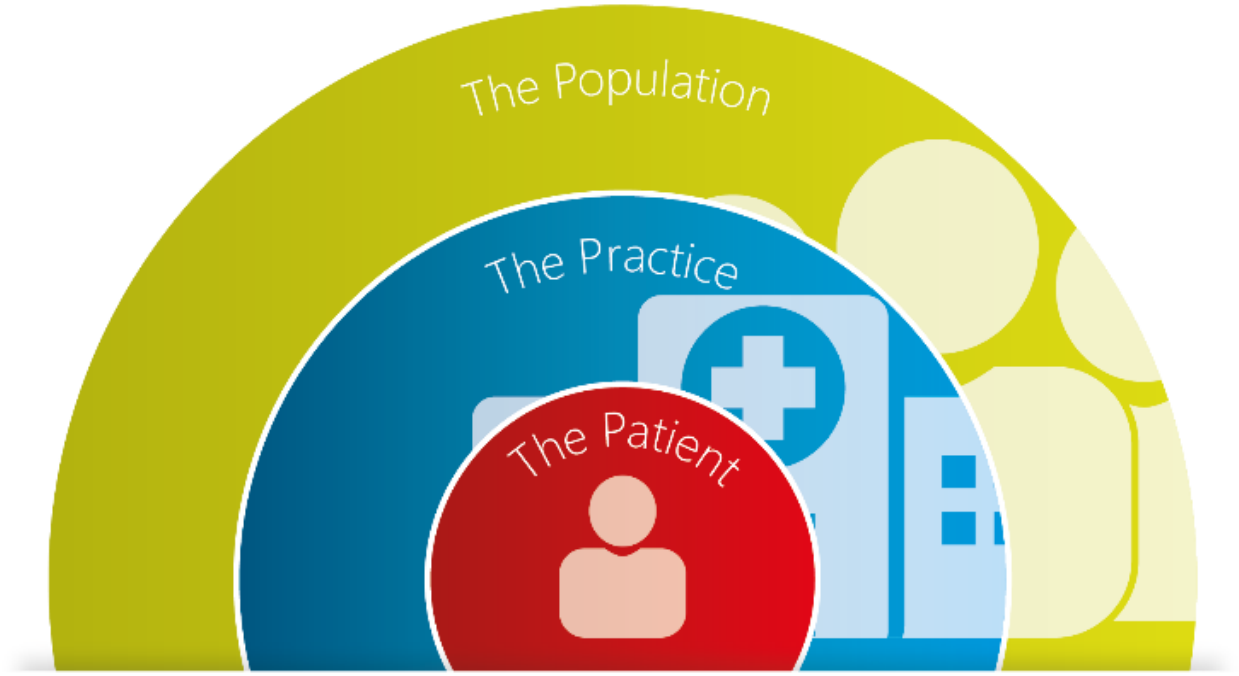
Let’s aim to:

- Improve our data quality - patient safety
- Easily meet accreditation standards
- Identify health issues in our practice population
- Monitor & improve clinical performance
- Improve business performance - maximise revenue

“Hiding within those mounds of data is knowledge that could change the life of a patient, or change the world.”

Atul Butte, Stanford School of Medicine

Data Aggregation Tools – Pen Suite of Tools



PAT CAT

CAT4

Top Bar

These tools work at all 3 levels to improve data capture at point of care, analyse data at practice level and aggregate data for service planning at a population level.

Data is a hot topic for Practice Managers

Accreditation Changes:

- linked to data

GPA Accreditationplus

AGPAL · Accreditation for Practices

Practice Incentive Payment (PIP) changes:

- linked to data

Australian Government
Department of Human Services

Accreditation: Quality Improvement (QI) Module

QI	1.1 ► C	**Our practice seeks feedback from the team about our quality improvement systems and the performance of these systems.**	This Criterion in the 4th edition did not have any Indicators associated with it. Indicators have now been created from the explanatory notes. This Indicator has been included in response to that identified gap in the 4th edition Standards.
QI	1.3 B	**Our practice team implements activities aimed at improving clinical practice.**	This Criterion in the 4th edition did not have any Indicators associated with it. Indicators have now been created from the explanatory notes. This Indicator has been included in response to that identified gap in the 4th edition Standards.

5th Standards for Accreditation - RACGP Third Consultation phase - summary
5th Standards for Accreditation - RACGP Webinar Slides

PIP payment changes:

Australian Government
Department of Human Services

Q: “How will the new PIP Incentive Payment work?

A: Practices will be paid for focusing on quality.

The quality will be determined by the information (i.e. data) about the care that has been provided.

With time, practices will be paid for demonstrating data driven quality improvement.”

PIP Redesign FAQs
Webinar recording

“If you can’t measure it, you can’t improve it”

Peter Drucker

Clean up in your clinical software:

1. Inactivate patients by searching for patients not seen for two years.
2. Mark deceased patients as ‘deceased’ not ‘inactive’.
3. Delete Sample patients.
4. Delete records with no clinical data.
5. Merge duplicate patient records.

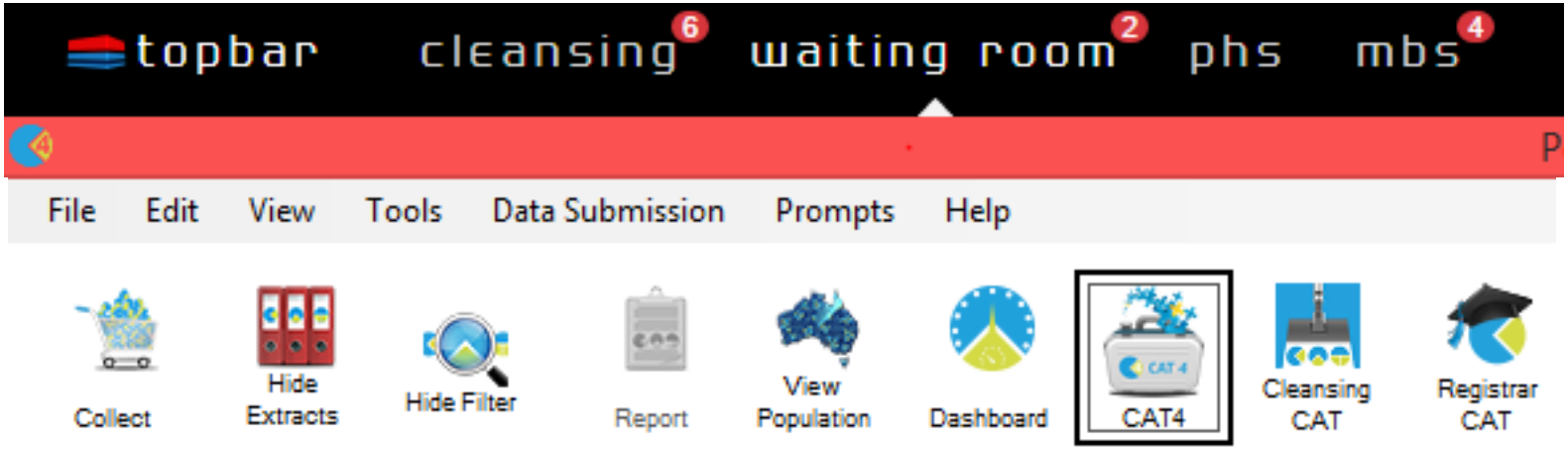
MedicalDirector

ZEDMED
Focused Innovation

Bp Premier

Use the Pen suite of Clinical Audit Tools

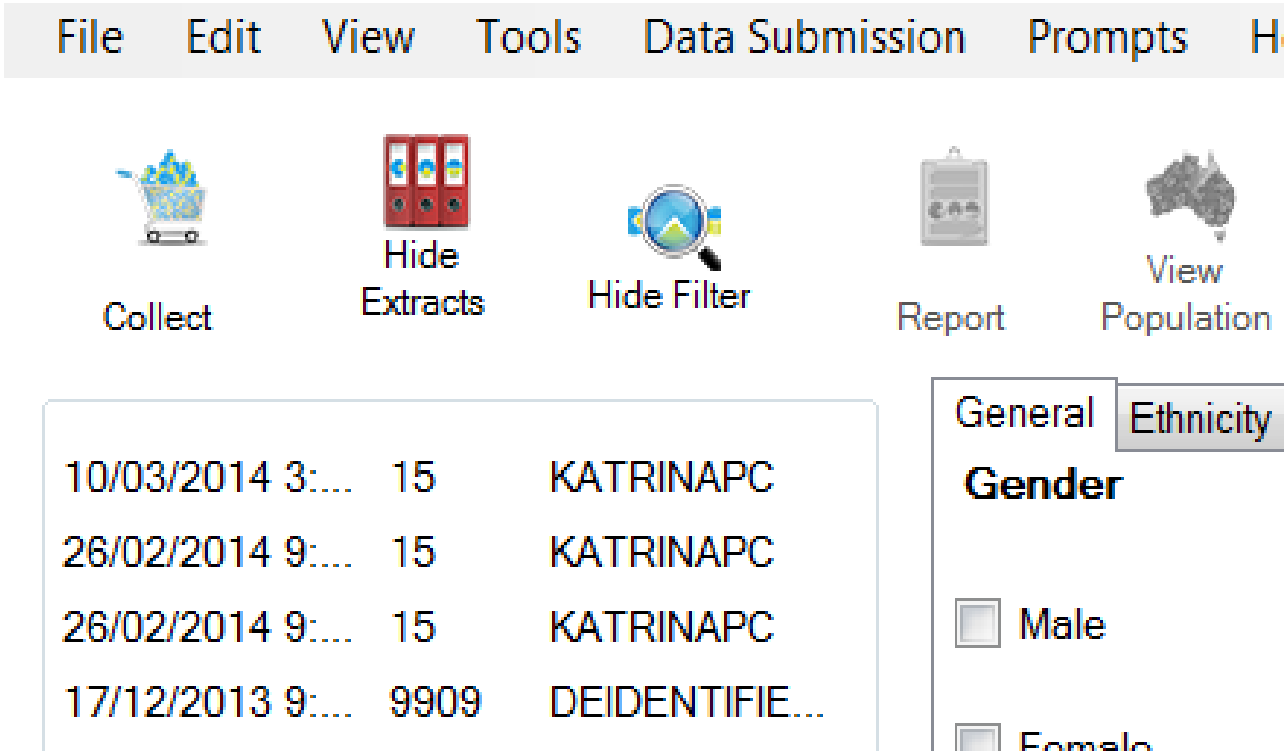
CAT4, Cleansing CAT & topbar



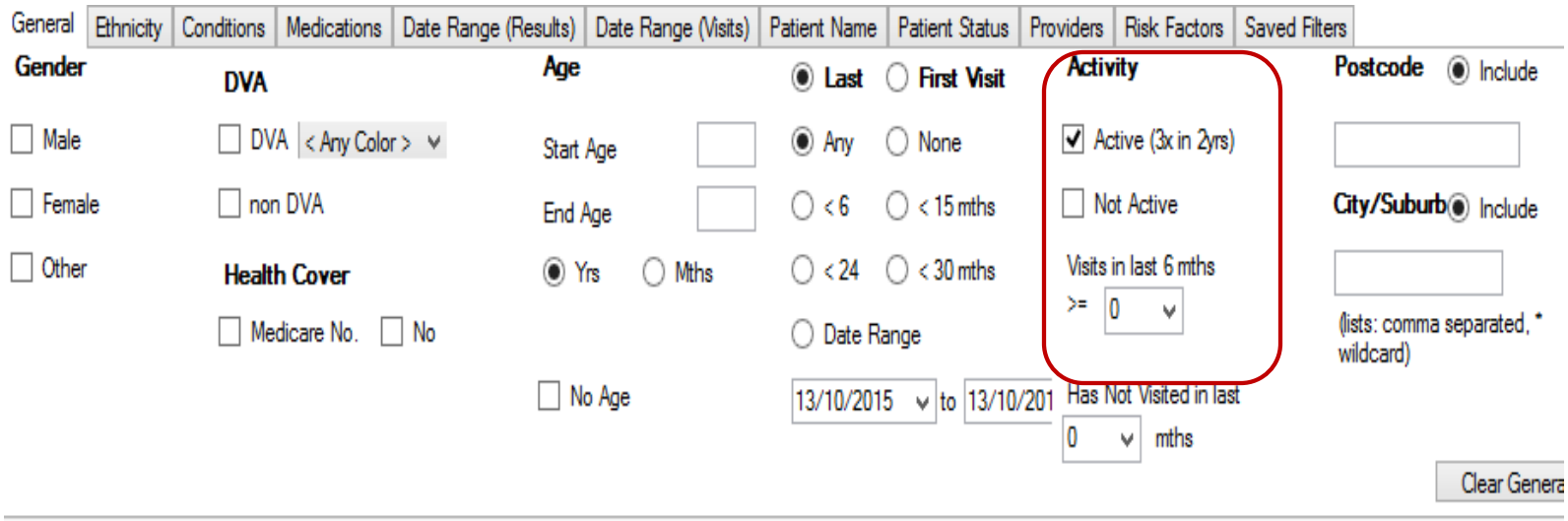
Use CAT4 to analyse your data

1. Collect an Extract
2. Apply filters
3. Analyse the Extract

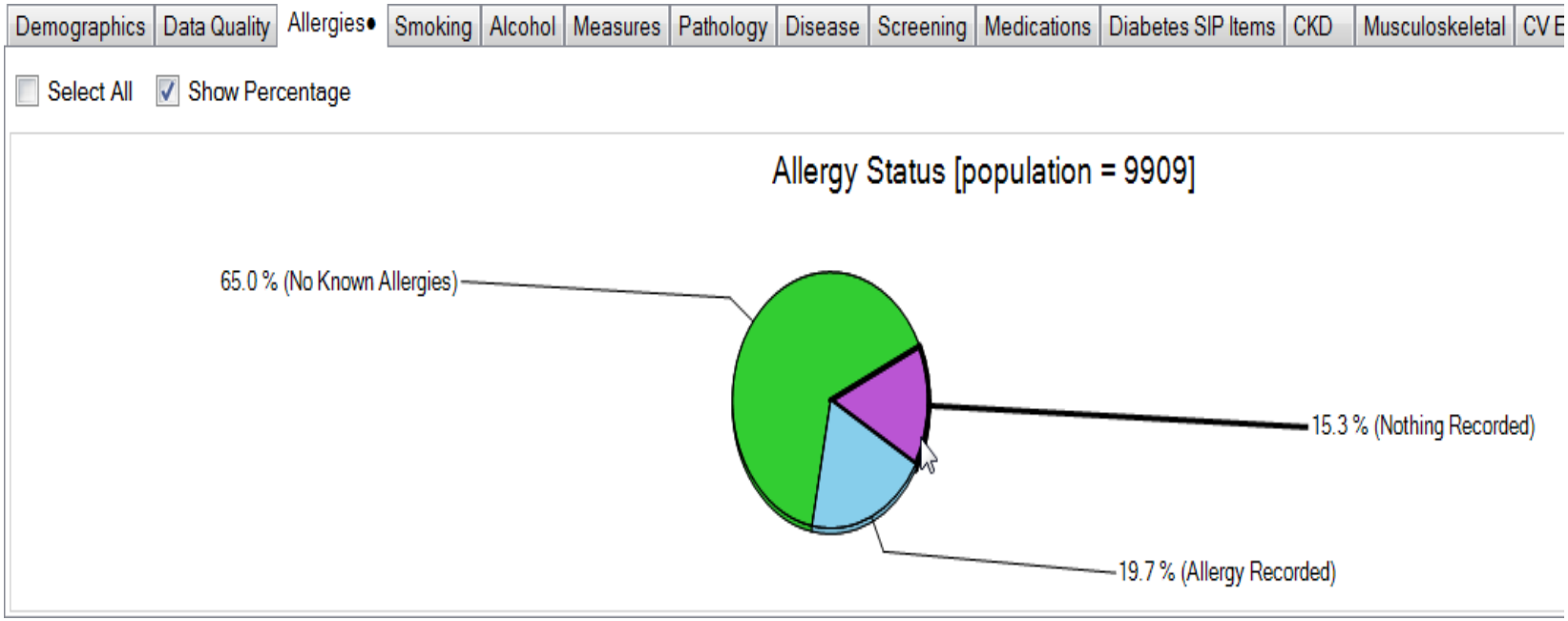
1. CAT4 – Collect an Extract



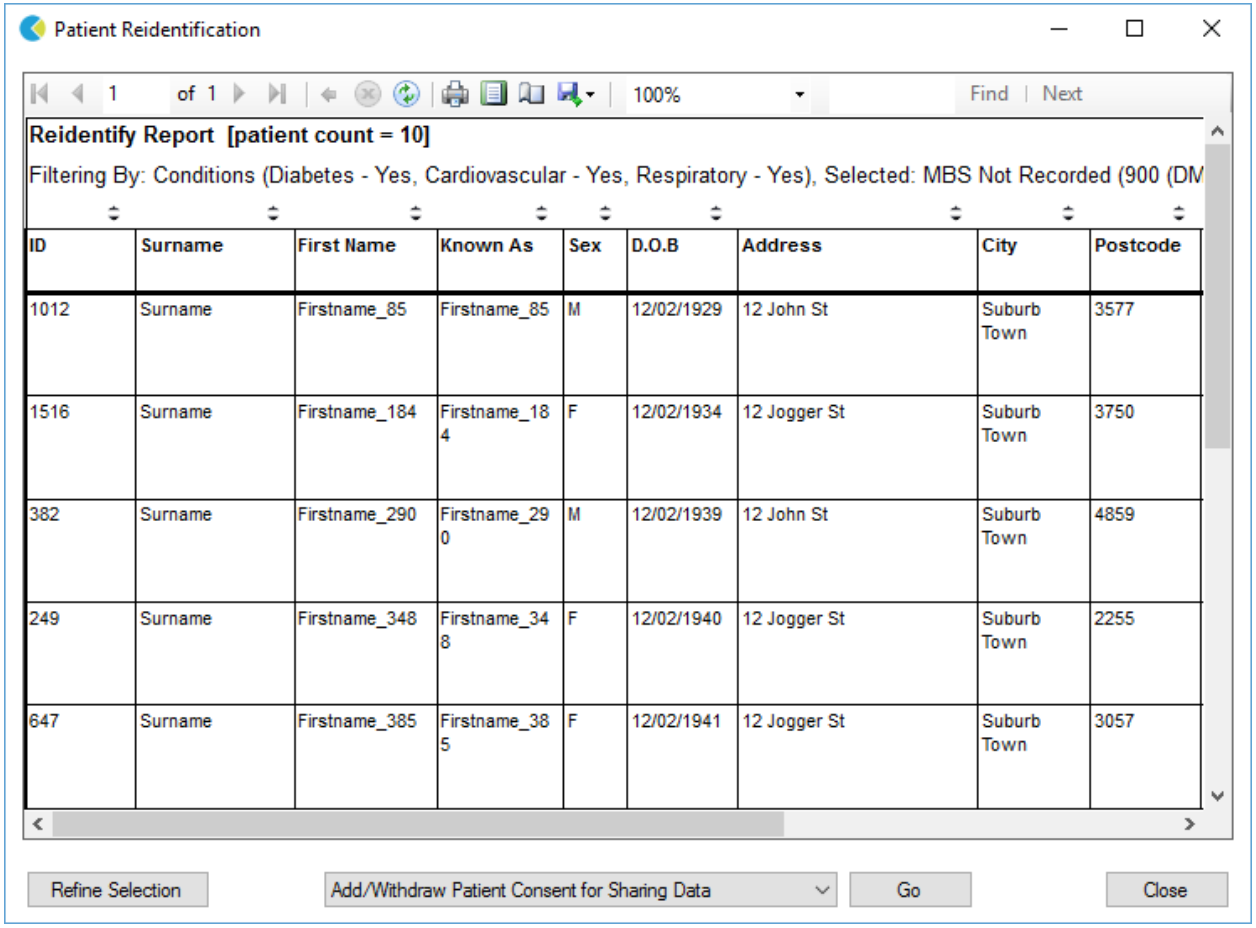
2. CAT4 – Apply Filters to an Extract



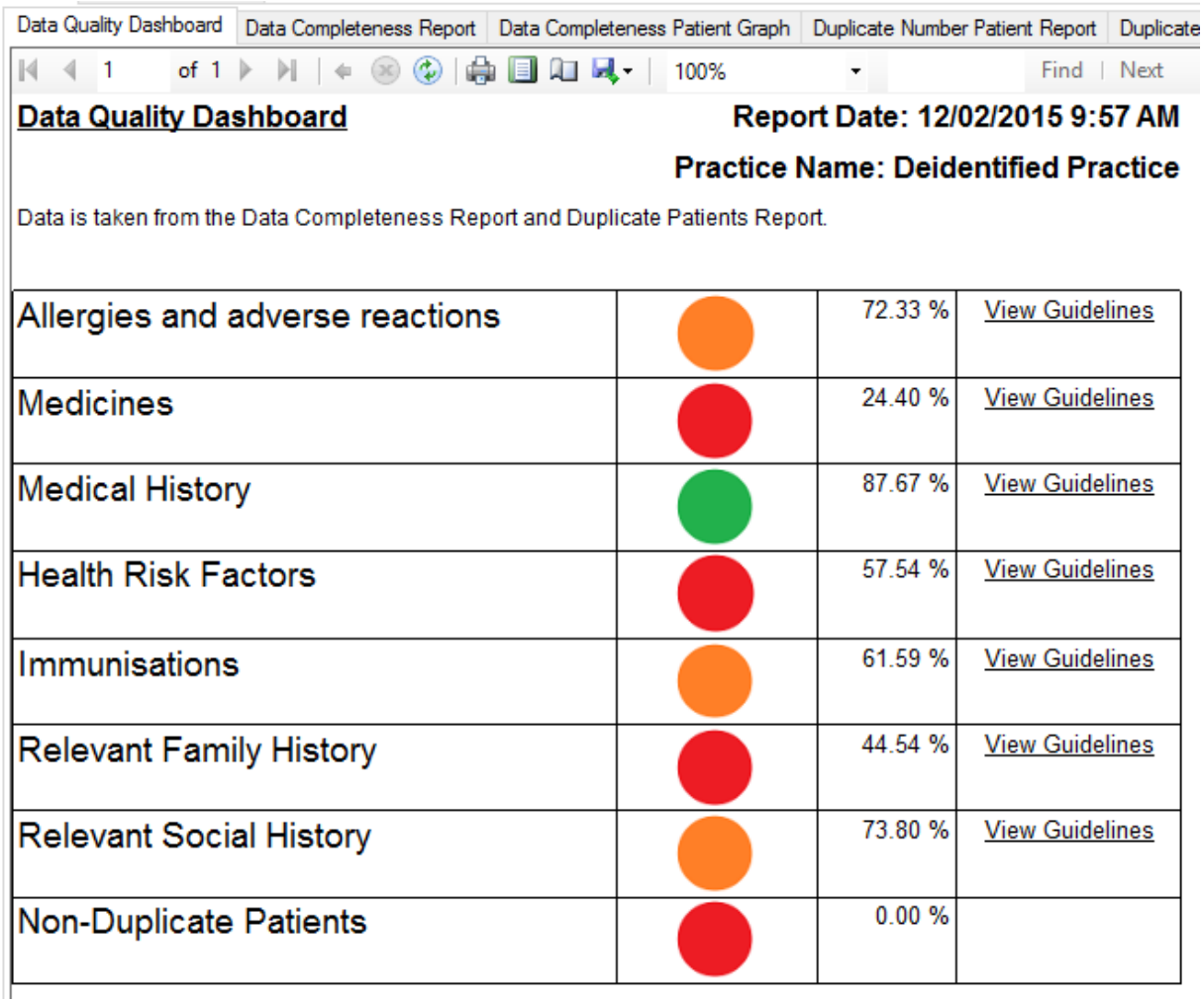
3. CAT4 – Analyse the Extract



Export to a spreadsheet (or set prompts for topbar)



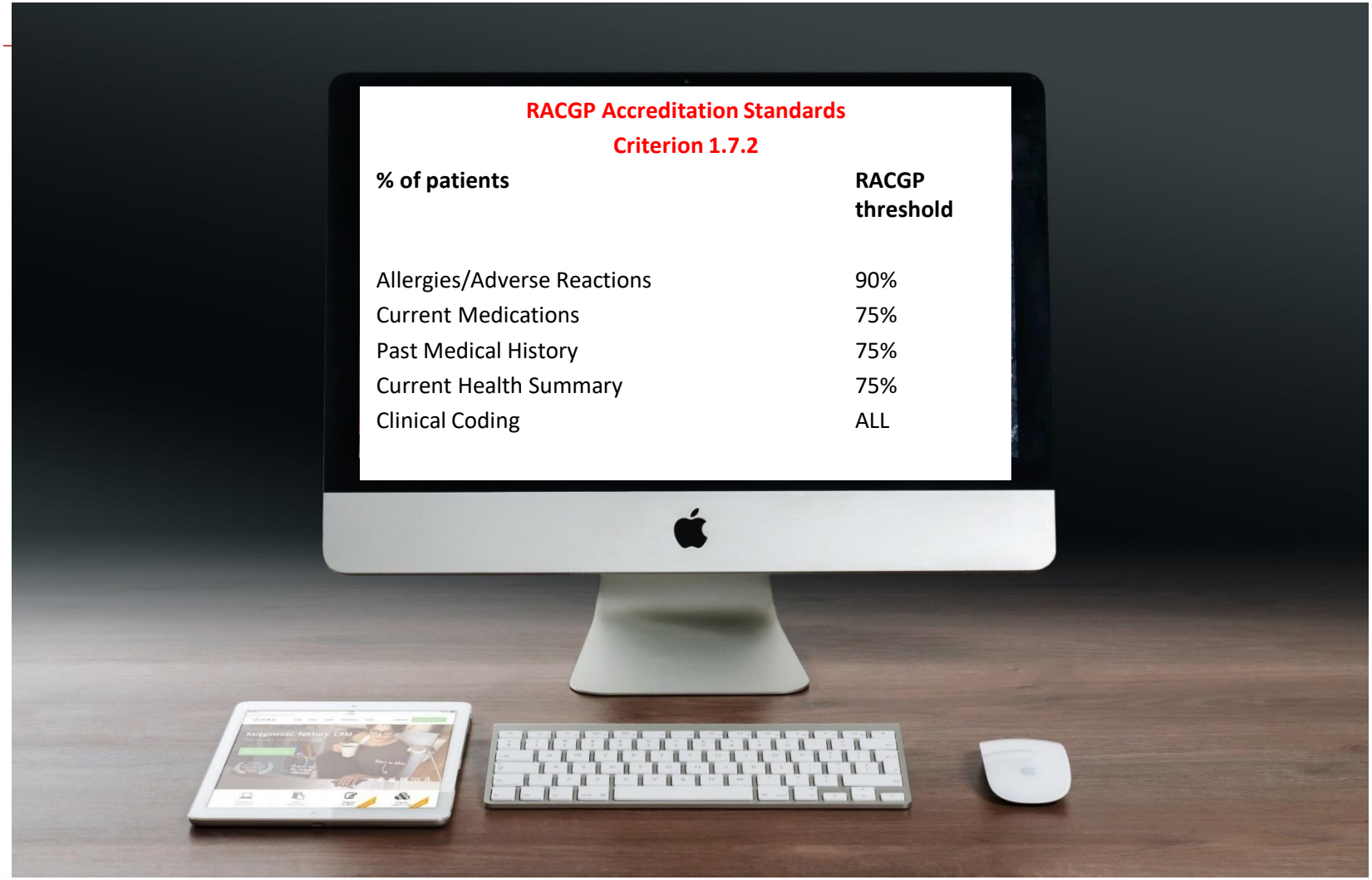
Data Quality Dashboard



Why Improve Data Quality?

1. Improved Patient Safety
2. To enable sharing of data (My Health Record, eReferrals etc)
3. Proactive population vs episodic care
4. For analysis and to identify exceptions
5. To improve process quality & financial opportunities

Accreditation Standards



RACGP Accreditation Standards

Criterion 1.7.2

% of patients	RACGP threshold
Allergies/Adverse Reactions	90%
Current Medications	75%
Past Medical History	75%
Current Health Summary	75%
Clinical Coding	ALL

Accreditation Compliance

Data Quality Report Card ie Allergies, Smoking Status etc

File Edit View Tools Data Submission Prompts Help

Collect | View Extracts | View Filter | Report | View Population | Dashboard | CAT4 | Cleansing CAT | Registrar CAT

Medical Director 3, HCN Sample Data; Extract Date: 12/02/2015 9:57 AM; Filtering By: Conditions (Asthma - Yes)

Data Cleansing

Missing Demographics | Missing Clinical/Accreditation Items | Indicated CKD with no diagnosis | Indicated Diabetes with no diagnosis | Indicated Mental Health with no diagnosis | Indicated COPD with no diagnosis | Medication Review

Patient List [count = 4]

Show/Hide Columns | Export

Double-click a patient to open it in your clinical system (MD,BP,Zedmed)

Page No. | Go | Prev Page | Next Page

Surname	Firstname	Date of Birth	Sex	Allergies	Height	Weight	Alcohol	Smoking	Assigned Provider
Surname	Firstname_1442	12/02/1955	M	Recorded	171.5	115		Ex smoker	Surname
Surname	Firstname_184	12/02/1934	F	NKA	152	102.9		Smoker	Surname
Surname	Firstname_385	12/02/1941	F	Recorded	166.5	100		Ex smoker	Surname
Surname	Firstname_858	12/02/1949	M	Recorded	182	88		Never smoked	Surname

Let’s make some quality improvements


GOAL

Patient Safety: Cleansing CAT

Identify patients on **5 or more medications** who might benefit from a **Medication Review.**

File Edit View Tools Data Submission Prompts Scheduler Help

Collect | View Extracts | View Filter | Report | View Population | Dashboard | CAT4 | Cleansing CAT | Registrar CAT

Medical Director 3, MD Live Data; Extract Date: 01/03/2017 7:33 AM; Filtering By: Conditions (Diabetes - Yes, Cardiovascular - Yes, Respiratory - Yes)

Data Cleansing

Missing Demographics | Missing Clinical/Accreditation Items | Indicated CKD with no diagnosis | Indicated Diabetes with no diagnosis | Indicated Mental Health with no diagnosis | Indicated COPD with no diagnosis | Medication Review

Diabetes with elevated HbA1c > 8%

Patient List page 1 of 3 [count = 44]

Export

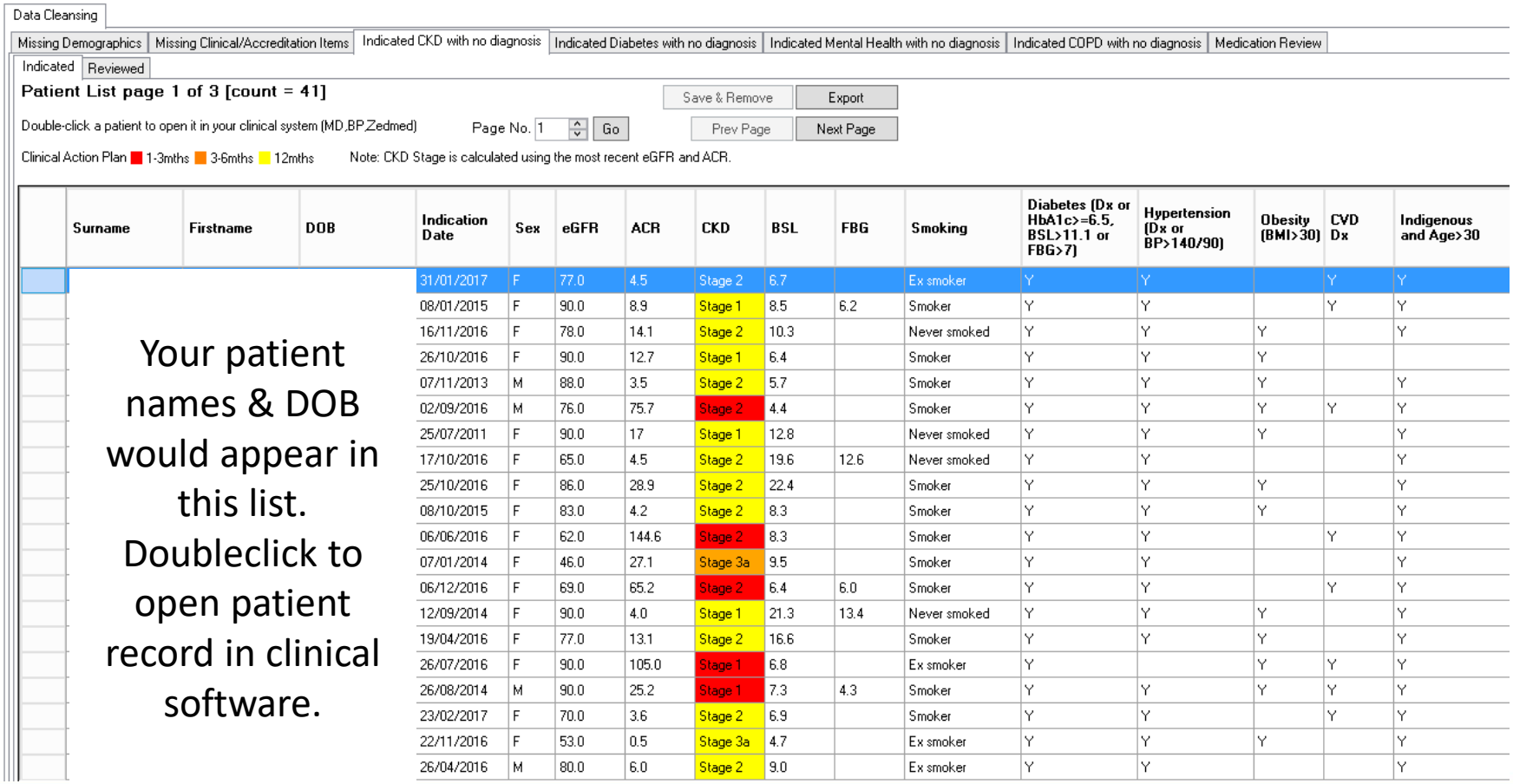
Double-click a patient to open it in your clinical system (MD,BP,Zedmed) Page No. 1 Go Prev Page Next Page

Surname	Firstname	DOB	Sex	HbA1c	Number of OHA Classes	List of OHA Classes	GLP1	Insulin	Assigned Provider
		9	F	10.2	2	Metformin,Sulfonylurea	Y	N	
		6	M	14.4	1	Metformin	N	N	
		4	F	9.7	0		N	N	
		0	M	8.4	2	Metformin,Sulfonylurea	N	N	
		9	F	11.8	0		N	N	
		8	F	8.0	1	Metformin	Y	N	
		4	F	8.0	1	Metformin	N	N	
		5	F	9.8	1	Metformin	N	N	
		7	M	10.5	0		N	N	
		3	M	11.7	2	Metformin,DPP-4	N	Y	

Your patient names & dob would appear in this list.

Patient Safety

Cleansing CAT – Identify patients with indicated CKD but no diagnosis



Data Cleansing

Missing Demographics | Missing Clinical/Accreditation Items | Indicated CKD with no diagnosis | Indicated Diabetes with no diagnosis | Indicated Mental Health with no diagnosis | Indicated COPD with no diagnosis | Medication Review

Indicated | Reviewed

Patient List page 1 of 3 [count = 41]

Save & Remove | Export

Double-click a patient to open it in your clinical system (MD,BP,Zedmed) Page No. 1 Go Prev Page Next Page

Clinical Action Plan 1-3mths 3-6mths 12mths Note: CKD Stage is calculated using the most recent eGFR and ACR.

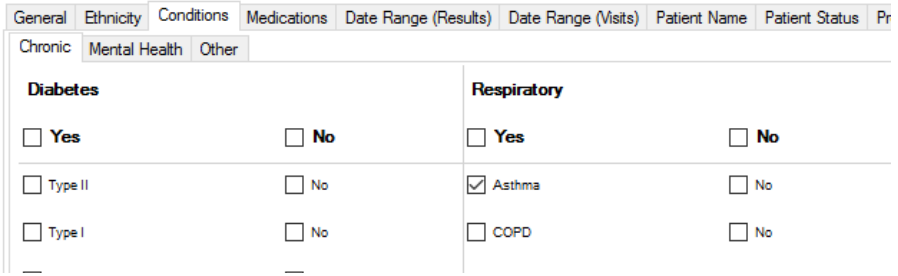
Surname	Firstname	DOB	Indication Date	Sex	eGFR	ACR	CKD	BSL	FBG	Smoking	Diabetes (Dx or HbA1c>=6.5, BSL>11.1 or FBG>7)	Hypertension (Dx or BP>140/90)	Obesity (BMI>30)	CVD Dx	Indigenous and Age>30
			31/01/2017	F	77.0	4.5	Stage 2	6.7		Ex smoker	Y	Y		Y	Y
			08/01/2015	F	90.0	8.9	Stage 1	8.5	6.2	Smoker	Y	Y		Y	Y
			16/11/2016	F	78.0	14.1	Stage 2	10.3		Never smoked	Y	Y	Y		Y
			26/10/2016	F	90.0	12.7	Stage 1	6.4		Smoker	Y	Y	Y		
			07/11/2013	M	88.0	3.5	Stage 2	5.7		Smoker	Y	Y	Y		Y
			02/09/2016	M	76.0	75.7	Stage 2	4.4		Smoker	Y	Y	Y	Y	Y
			25/07/2011	F	90.0	17	Stage 1	12.8		Never smoked	Y	Y	Y		Y
			17/10/2016	F	65.0	4.5	Stage 2	19.6	12.6	Never smoked	Y	Y			Y
			25/10/2016	F	86.0	28.9	Stage 2	22.4		Smoker	Y	Y	Y		Y
			08/10/2015	F	83.0	4.2	Stage 2	8.3		Smoker	Y	Y	Y		Y
			06/06/2016	F	62.0	144.6	Stage 2	8.3		Smoker	Y	Y		Y	Y
			07/01/2014	F	46.0	27.1	Stage 3a	9.5		Smoker	Y	Y			Y
			06/12/2016	F	69.0	65.2	Stage 2	6.4	6.0	Smoker	Y	Y		Y	Y
			12/09/2014	F	90.0	4.0	Stage 1	21.3	13.4	Never smoked	Y	Y	Y		Y
			19/04/2016	F	77.0	13.1	Stage 2	16.6		Smoker	Y	Y	Y		Y
			26/07/2016	F	90.0	105.0	Stage 1	6.8		Ex smoker	Y		Y	Y	Y
			26/08/2014	M	90.0	25.2	Stage 1	7.3	4.3	Smoker	Y	Y	Y	Y	Y
			23/02/2017	F	70.0	3.6	Stage 2	6.9		Smoker	Y	Y		Y	Y
			22/11/2016	F	53.0	0.5	Stage 3a	4.7		Ex smoker	Y	Y	Y		Y
			26/04/2016	M	80.0	6.0	Stage 2	9.0		Ex smoker	Y	Y			Y

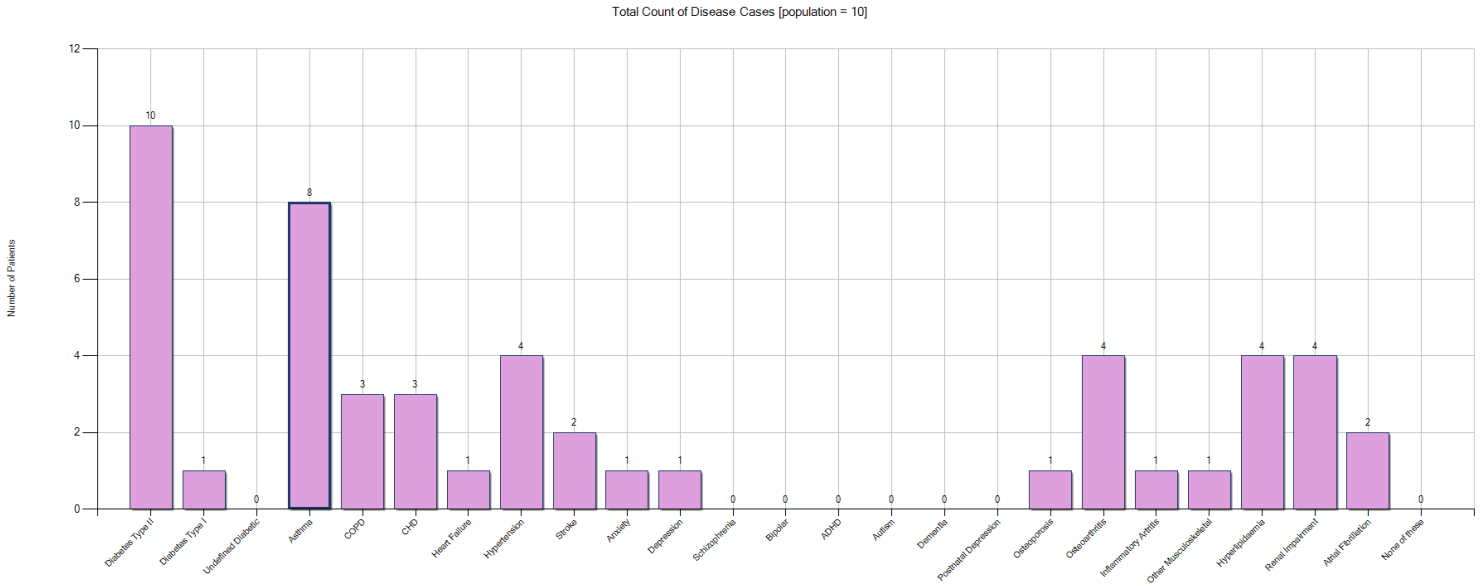
Your patient names & DOB would appear in this list. Doubleclick to open patient record in clinical software.

Proactive Population Based Approach

Proactive Population Based Approach

Build a Register of patients with a particular condition e.g. Asthma or Diabetes etc





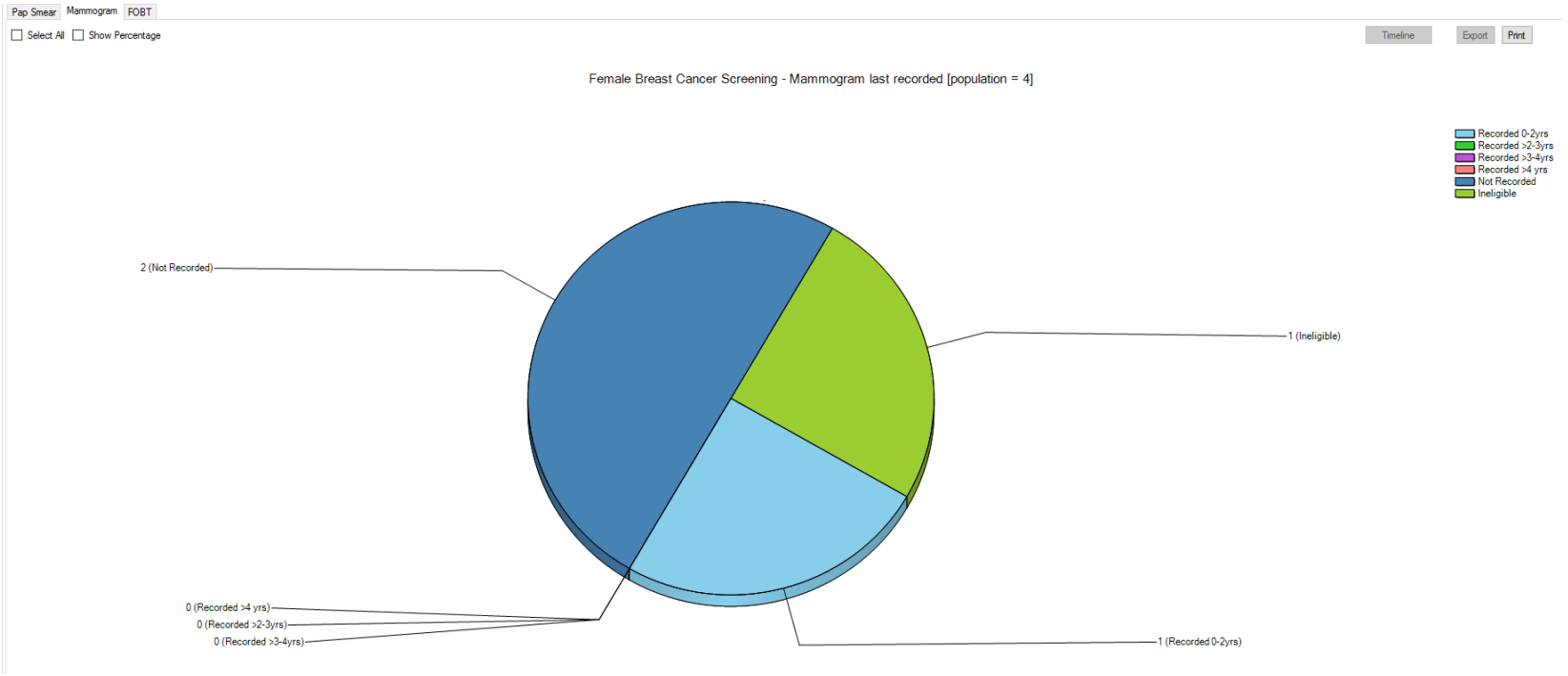
Analyse, de-identify & report

	Whole Practice	GP 1	GP 2	GP 3	GP 4	GP 5	GP 6	GP 7	GP 8	GP 9
1. Allergy Recorded										
Total population	13697	2488	1996	921	1718	1839	936	604	686	43
Nothing recorded	28.8%	16.4	36.5	28.1	51.2	9.4	21.5	24.3	4.1	30.2
Active population	9576	1866	1628	684	1192	1445	795	397	514	30
Nothing recorded	17.7	29.5	28.5	19.7	39.9	4.2	13.8	14.9	01.0	10.0
2. Gender not recorded										
Total population	141	28	11	13	21	6	12	5	6	0
Active population	35	5	2	3	11	2	7	0	3	0
3. Smoking – nothing recorded										
Active population over 16 (Active (3x > 2 years)	27%	15.7	63.9	60.4	76.4	11.5	44.6	41.0	21.2	39.7
4. Recording of ATSI patients										
Total population	0	0	0	1	0	0	0	0	0	0
Active population (Active (3x > 2 years)	1	0	0	1	0	0	0	0	0	0
5. Diabetes Prevalence										
Total population	3.5%	2.9	2.8	1.4	8.8	5.1	2.5	1.2	4.2	4.7
Active population (Active (3x > 2 years)	4.6%	3.8	3.2	1.9	11.7	6.2	2.9	1.8	5.5	6.7
Diabetics 65+, 8+ medications	60.9 %	61.4	74.2%	50%	77.8%	63.6%	81.3%	60%	62.5%	100%
Diabetics 65+, 5+ medications	90.9%	88.7	93.6%	83.4%	92.9%	90.8%	100%	80%	75%	100%
6. Diabetes "at risk" *										
40-49 year olds	94	5	2	3	0	12	2	1	2	0
50+ year olds	288	29	55	6	8	131	10	6	17	1

Screening and Prevention

Screening and Prevention

Identify all eligible patients NOT screened for FOBT, Mammograms or PAP Smears



Accreditation & PATCAT

Criterion 3.1.1

Quality improvement activities

Our practice participates in quality improvement activities.

Indicators

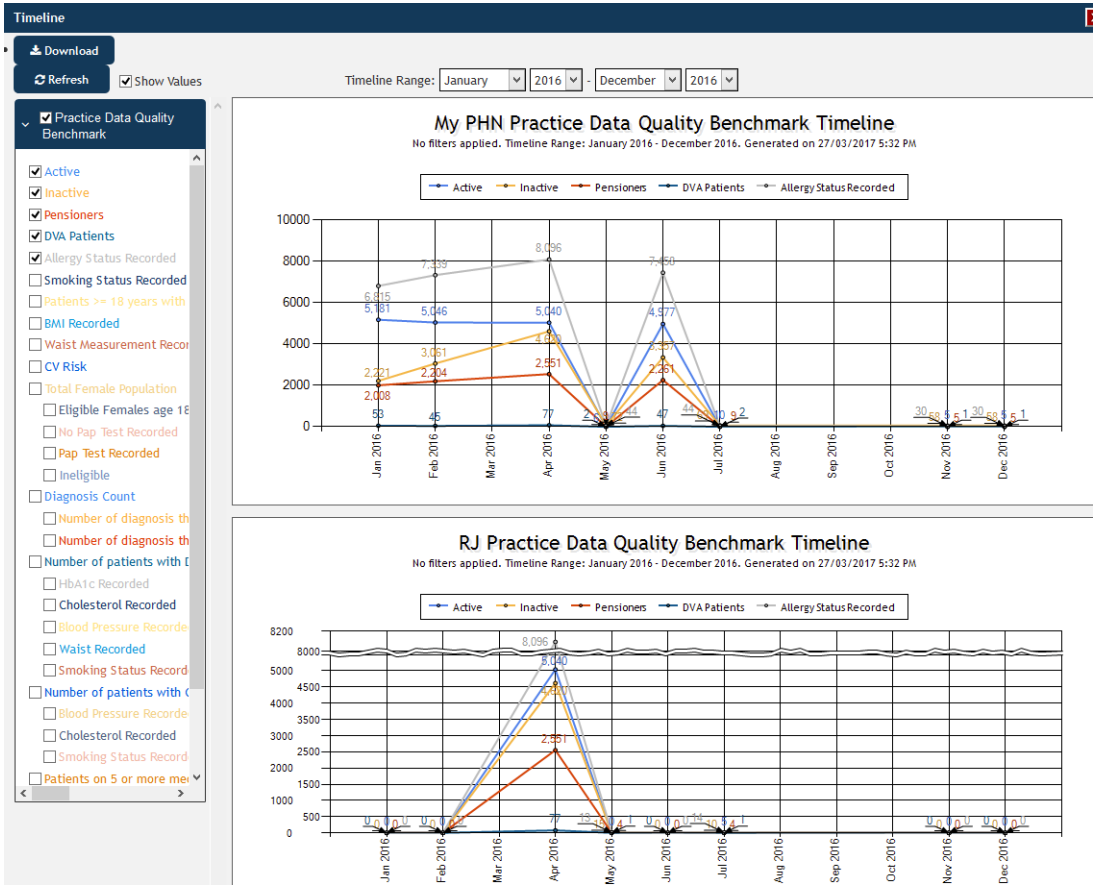
► A. Our practice team can describe aspects of our practice that we have improved in the past three years.

► B. Our practice uses relevant patient and practice data for quality improvement (eg. patient access, chronic disease management, preventive health).

PAT CAT

PAT CAT provides an opportunity for practices to see how the practice is performing and how they perform relative to other practices in the PHN area.

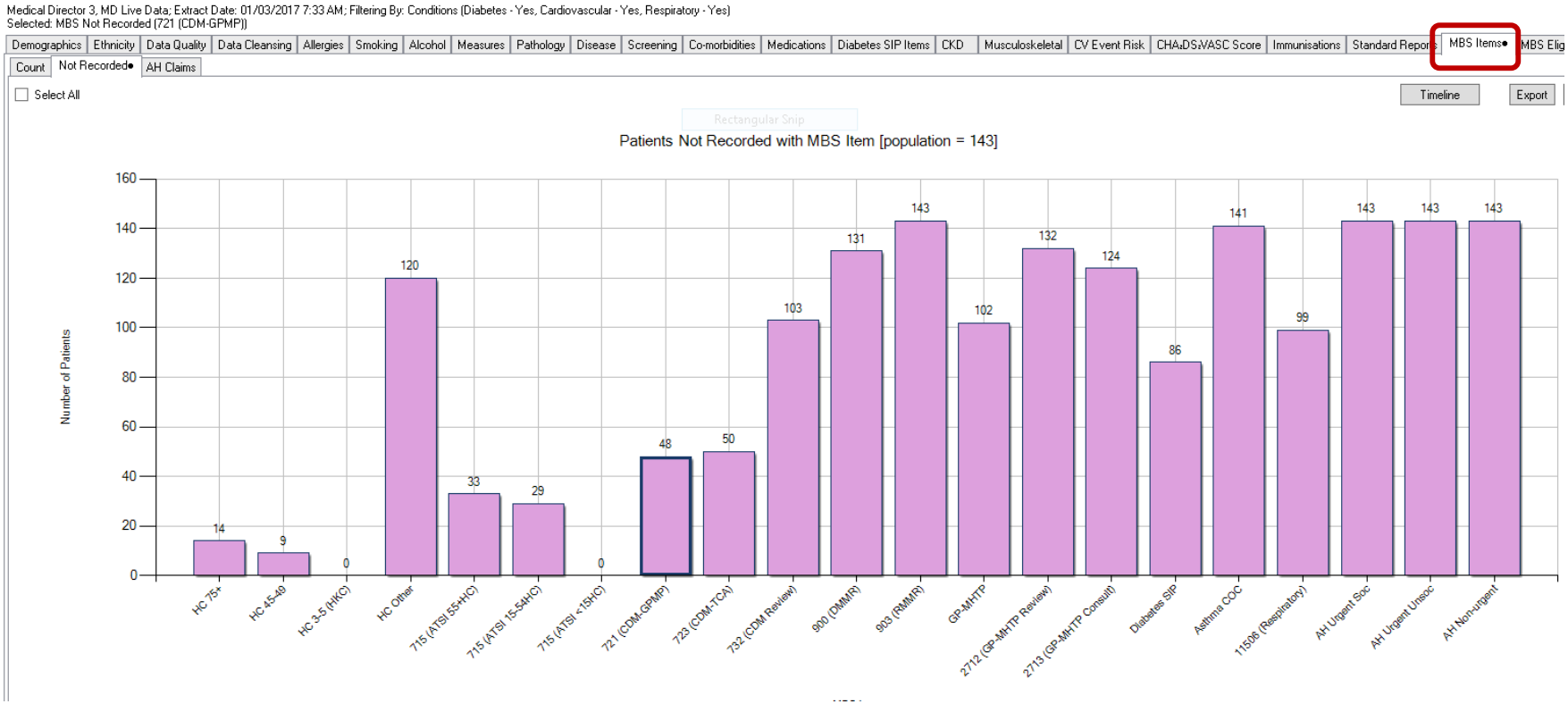
They can also see a timeline of how their data has changed over the time they have been sending data to the PHN.



Your patients

Business Process Improvements

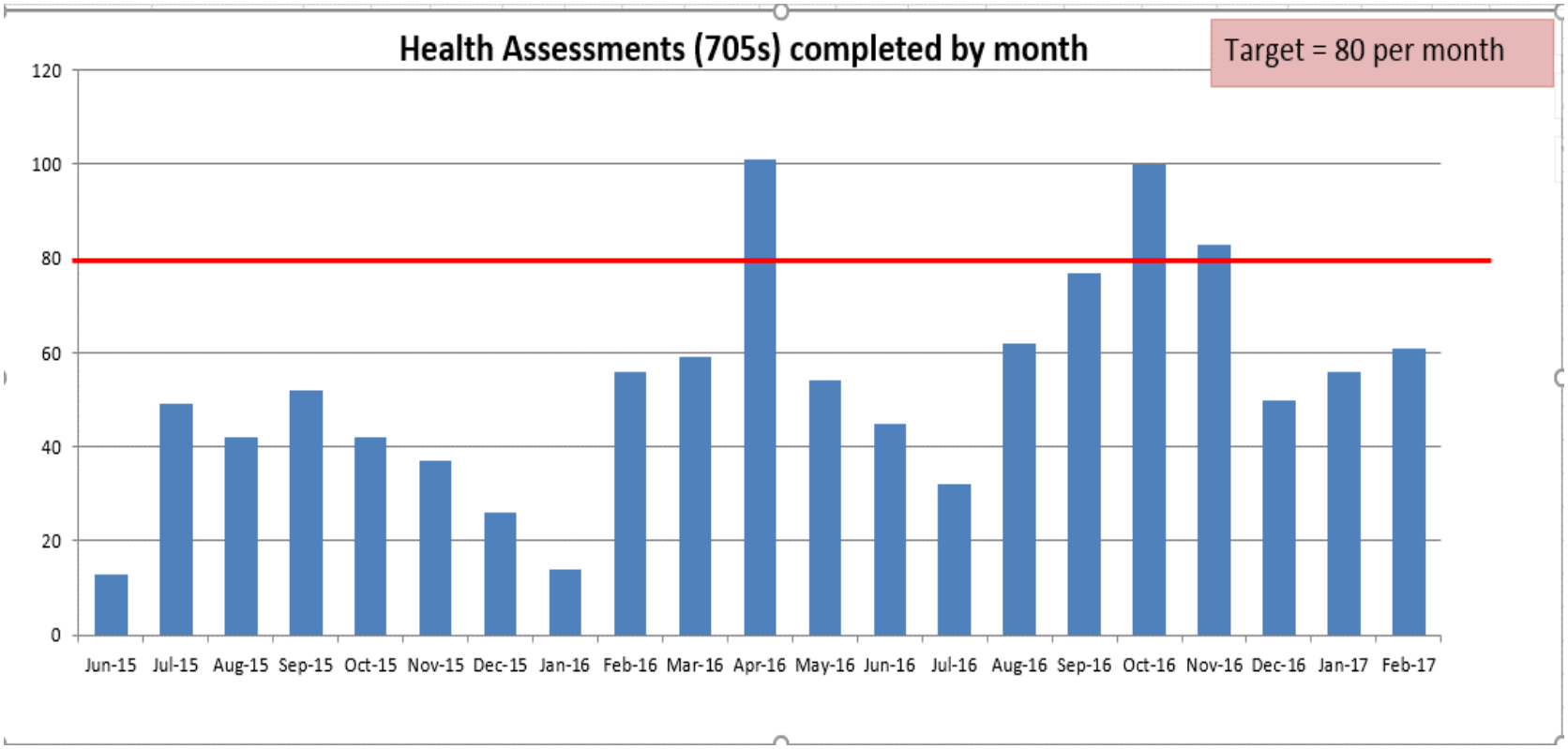
Identify all patients with a chronic condition without a GP Management Plan



Analyse & set your improvement goals

Total Patients seen		1652	1749	1771	1798	1720	1735	1339	1490	1811	1866
705	Long Health Assessment (45-60 mins) Non-ATSI	0	0	42	52	42	37	26	14	40	50
715	ATSI Health Assessment	13	49	0	0	0	5	19	22	25	23
721	Prepare GPMP	12	23						70	80	105
723	Prepare TCA	12	23						9	12	40
732	Review of GPGMP/TCA	0	4						5	8	2
739	Organise CC 20-40 mins								0	0	3
743	Organise CC > 40 mins								1	0	1
3	short consult	9	21						15	21	28
23	< 20 mins consult	522	1174						900	816	667
36	>20 mins consult	304	497						350	339	279
44	>40 mins consult	52	112						74	76	56
52	Brief consult (non VR GP's)										
53	Standard consult (5-25 mins) (Non-VR)										
54	Long Consult (25-45 mins) (Non-VR)										
57	Prolonged consult (>45 mins) (Non-VR)										
10962 (Podiatry)											
10988	Immunisation	1	7						41	42	
10989	Wound care	0	2						43	26	
10990	Under 16 YO OR Concession Card Holder Add on Fee	619	1316						1088	1036	
2700	GP Mental Health Care Plan (not trained) > 20 mins		4								
2701	GP MH Plan > 40 mins										
2712	GP MH Plan review		7								
2713	MH Surgery Consult > 20 mins		10								
2715	Prep GP MH Plan > 20 mins	5	9								
2717	Prep GP MH Plan > 40 mins	8	8								
2504 (PAP > 4 years)	PAP > 4 years since last, Level C	0	1								
2521	Annual C of C Level C										
2525	Annual C of C Level D										
30026	(sutures)										
30061	(removal foreign body)										
11506 (Spirometry)			6								
11700 (ECG)											

Your KPIs



Tips: Encourage a team effort to achieve the goals by setting a target on the graph & place graph in the staff room/noticeboard to encourage a proactive approach.

Recipes – Maximise Business Potential

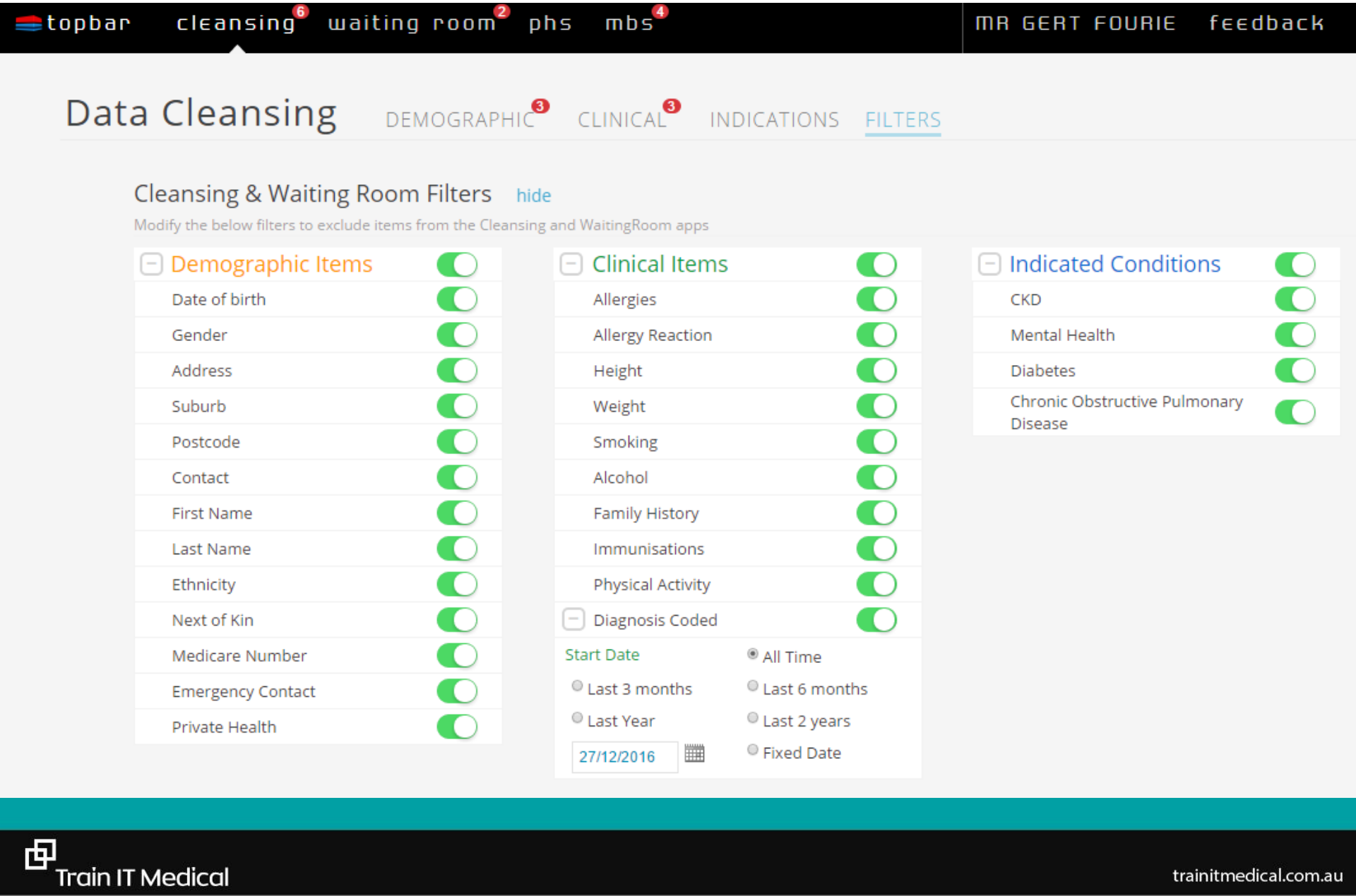
- Identify all active stroke/TIA patients who are eligible for a GPMP
- Identify children eligible for a Healthy Start for School Assessment
- Identify DVA patients eligible for Coordinated Veterans Care
- Identify Indigenous patients eligible for PBS Co-payment Measure
- Identifying Home Medication Review candidates: Heart Failure patients who are not on ACE inhibitors
- Identifying patients eligible for a Mental Health Treatment Plan
- Identifying patients eligible for a Mental Health Treatment Plan Review
- Identify patients eligible for a 45 - 49 Health Assessment with lifestyle or biomedical risk factors
- Identify patients eligible for an annual 75+ Health Assessment
- Identify patients eligible for an annual 715 Aboriginal and Torres Strait Islander Health Assessment
- Identify patients eligible for an Annual Asthma Cycle of Care
- Identify patients eligible for an Annual Diabetes Cycle of Care
- Identify patients with a chronic disease eligible for a GP Management Plan and/or Team Care Arrangement
- Identify patients with diabetes, CVD or CKD who never had a GPMP/TCA claimed
- Shared Health Summaries (SHS) uploaded by the practice

http://help.pencs.com.au/

Tips for Data Quality Success

- Celebrate progress
  – no matter how small
- Set small (achievable) clean-up goals (eg PMH, results)
- Review & document key processes
- Train all Staff on software & new processes
- Focus on key data items
- Create a team spirit
- Monitor and communicate performance
- Celebrate progess (yes – again!)

Use topbar for proactive reminders



topbar

MBS

GUIDELINES 4 | ACTIVITIES 11 | CLAIMS 4

Recommended hide

The following activities are recommended for this patient, based on the Medicare guidelines

ACTIVITY	RECOMMENDATION	CLAIM ELIGIBILITY
ATSI Health Assessment	✗	✗
Blood Pressure	✓	✗
BMI	✓	✗
eGFR	✗	✗
Foot Exam	✗	✗
GPMP	✗	✗
HbA1c	✗	✗
HDL	✗	✗
Medication Review	✗	✗
Microalbuminuria	✗	✗
TCA	✗	✗
Total Cholesterol	✗	✗
Triglycerides	✗	✗
Eye Examination	✓	✓

topbar

Mr John Andrews

Action Required hide

Patient demographic data status is shown as follows:

ITEM	STATUS	ACTION	
Next of Kin	✗ Missing	ADD IN CLINICAL SYSTEM	DEFER
Emergency Contact	✗ Missing	ADD IN CLINICAL SYSTEM	DEFER

Completed hide

Following patient demographic data is completed:

ITEM	VALUE	STATUS
Last Name	Andrews	✓
First Name	John	✓
Date of birth	10 Oct 1968	✓
Gender	Male	✓
Address	2 Kennedy Road	✓
Suburb	Bundaberg	✓
Postcode	4670	✓

Improvements - one step at a time

Extra learning resources:

Pen Clinical Systems

CAT4 Recipes

RACGP

5th Standards for Accreditation - RACGP Third Consultation phase – summary

5th Standards for Accreditation - RACGP Webinar Slides

Using Data for Better Health Outcomes

Australian Digital Health Agency:

Importance of Data Quality

Practice Incentive Payment Re-design:

Webinar

Webinar slides

Australian Digital Health Agency:

Data Cleansing & Clinical Coding

Data Quality Checklist

Train IT Medical

Practice Management Free Resources

Digital Health Free Resources including Pen CAT4

Thanks for inviting me

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