

Understanding general practice activity at national, state/territory & local levels

Bettering the Evaluation and Care of Health (BEACH)

SYDNEY MEDICAL SCHOOL



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THE UNIVERSITY OF
SYDNEY



Today's agenda

- BEACH national study of general practice
- What the BEACH program can tell a PHN
- Other ways we can help you
 - Data integration
 - Encouraging standards



What is BEACH?

- A continuous national study of general practice activity
- Highest quality data -- our interest is scientific rigour
- Nearing end of 18th Year (31 March 16)– have data for:
 - ~ 1.76 million encounters from
 - ~ 17,600 participating GPs to date (~ 10,600 individuals)
- Data used by governments, industry, health planners, researchers, students
- Continuity allows measures of change over time



BEACH methods

- **Paper based** data collection
- National active GP random sample (drawn by DoH)
- ~1,000 GPs per year- ever changing
- 20 per week x 50 weeks a year
- 100 consecutive encounters per GP
- All types of encounters included
- National data ~100,000 encounter records p.a.



Types of *BEACH* data

- Two main sets of data
 - *BEACH* – encounter data
... cross-sectional
 - *SAND* – data about the patient



BEACH data

- Encounter based
 - about today's visit only
 - why they attended
 - what was managed
 - how each problem was managed



SAND data

Supplementary Analysis of Nominated Data

- Measures aspects of patient health which may not be managed at the encounter
- Investigates patient risk factors and health states in relation to morbidity and health service activity



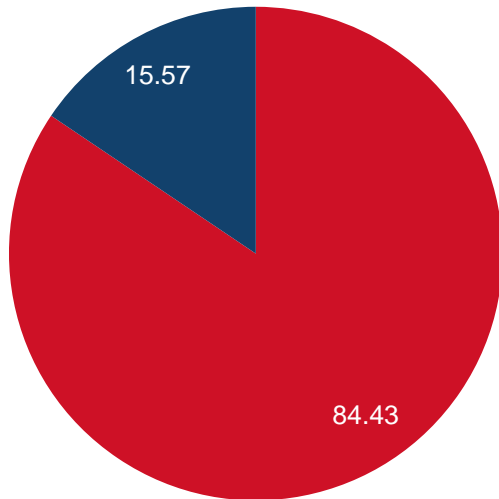
What can BEACH provide PHNs?

- Inflow and outflow of patients to/from PHN
- Prevalence of 24 diagnosed common conditions & Prevalence of multimorbidity and complex multimorbidity
 - in sampled patients; attending population; PHN population.
- Patient risk factors in adults 18 years+
 - smoking; at risk alcohol consumption; obesity (3 levels)
- Adverse pharmacological events, polypharmacy
- Average length of consultations
- Content of encounters (patients, problems, management)
- Measurement of quality indicators
- Pre-post measurement of effect of intervention



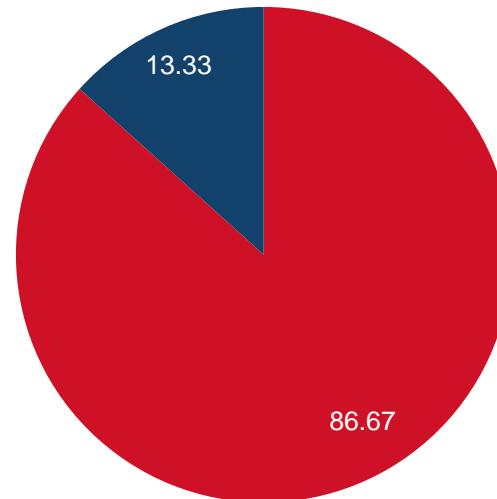
Patient migration PHN X

In Flow



- Proportion of encounters in PHN X that were with patients living in PHN X
- Proportion of patient encounters in PHNX that were with patients living outside PHN X

Out Flow



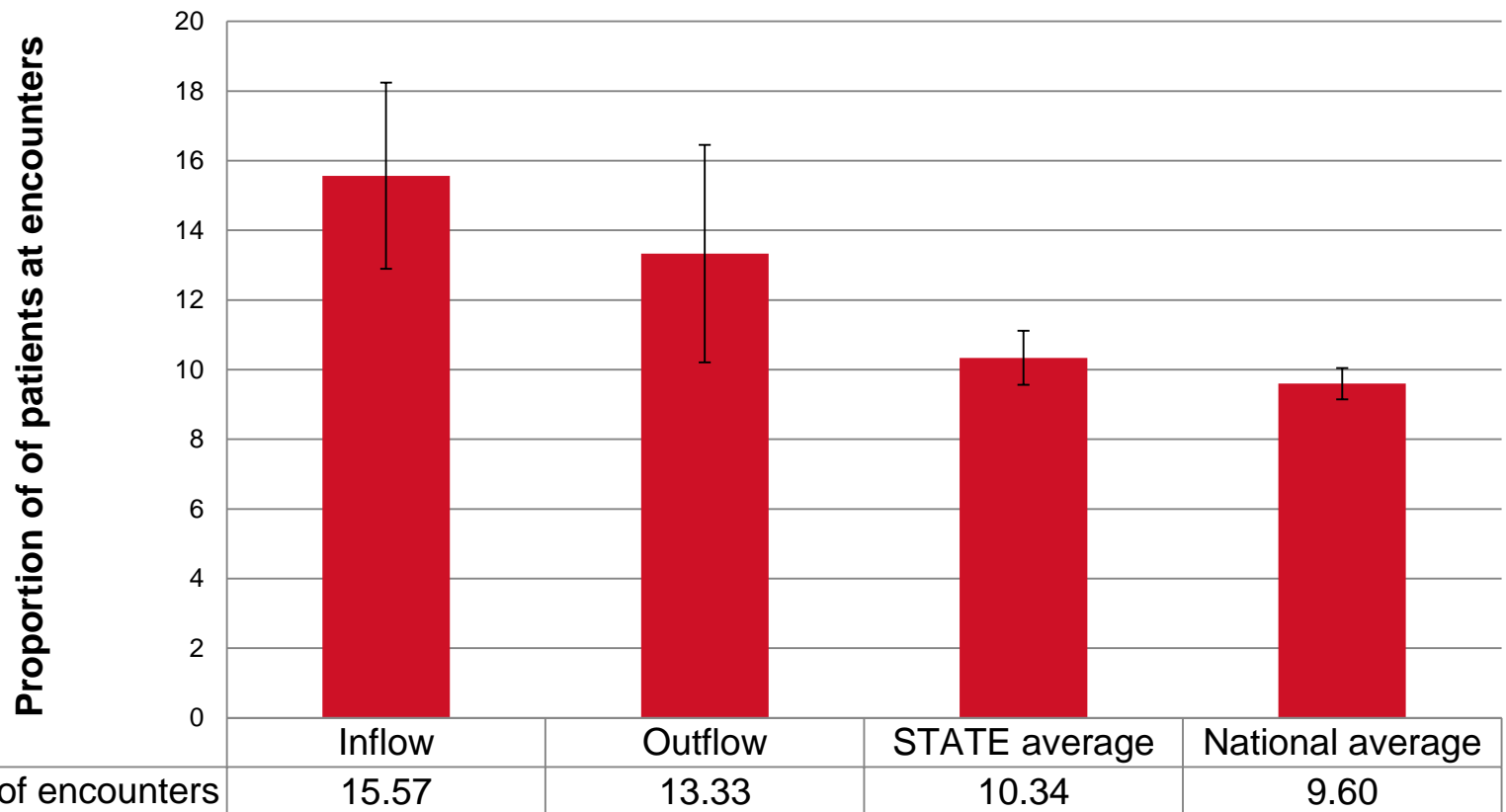
- Proportion of encounters PHN X that were with patients who live in PHN X
- Proportion of encounters PHN X that were with patients who do NOT live in PHN X



Comparative patient migration data

Comparison of PHN X with STATE X and National averages

Proportion of encounters that are with patients who are at consultations in PHNs other than those they live in

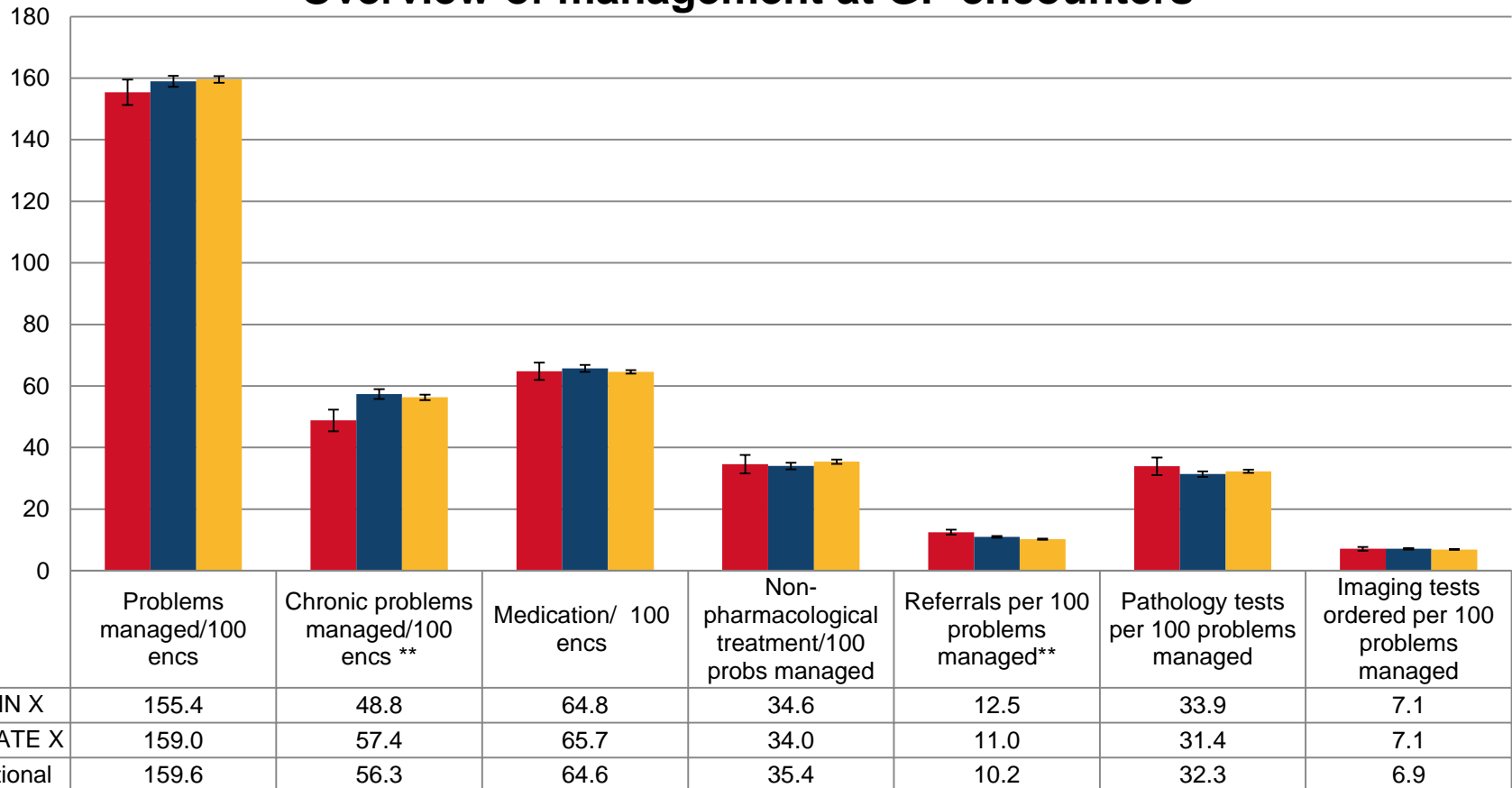




Content of encounters

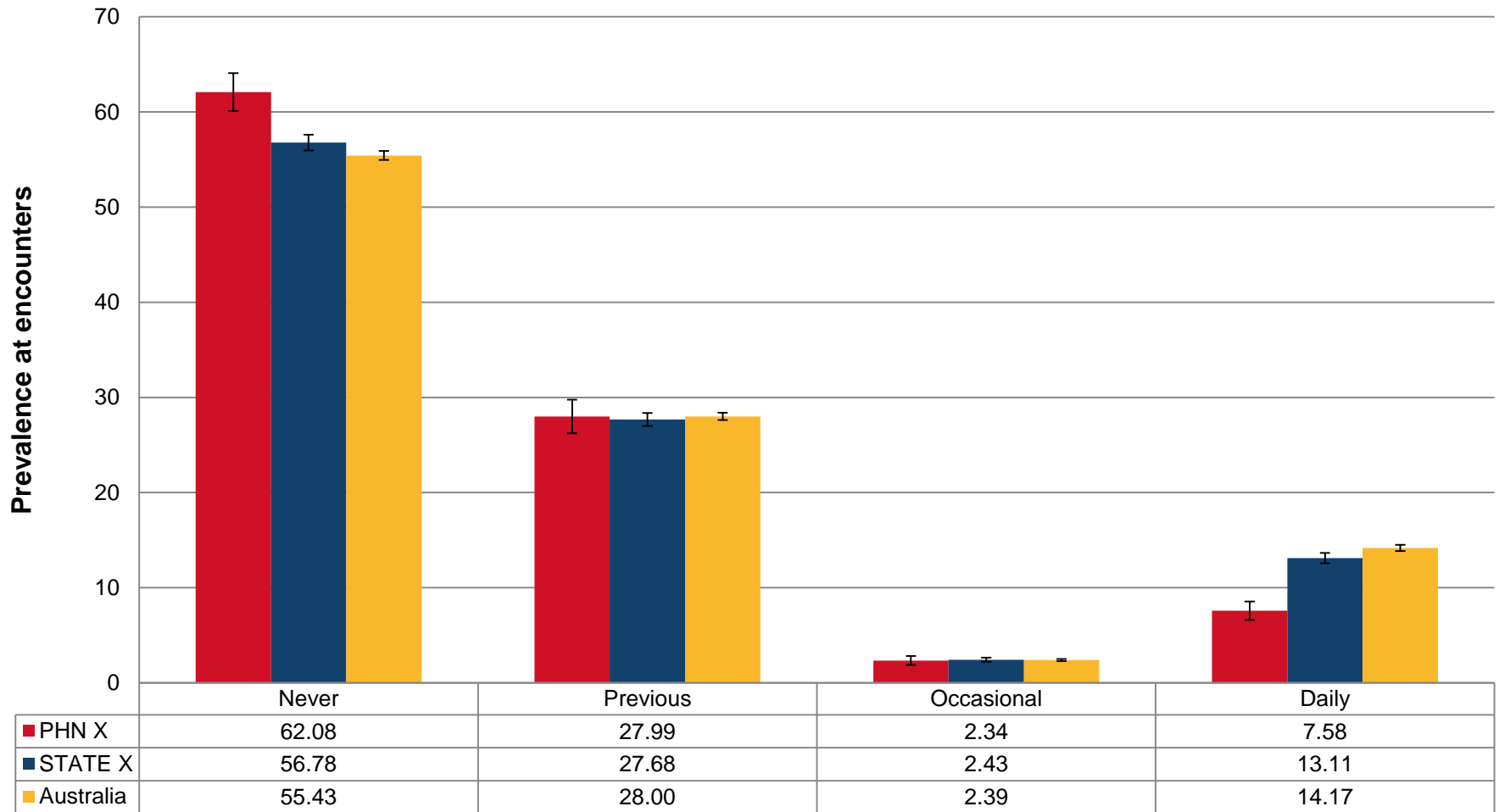
** PHN X significantly different from both State X and national average

Overview of management at GP encounters



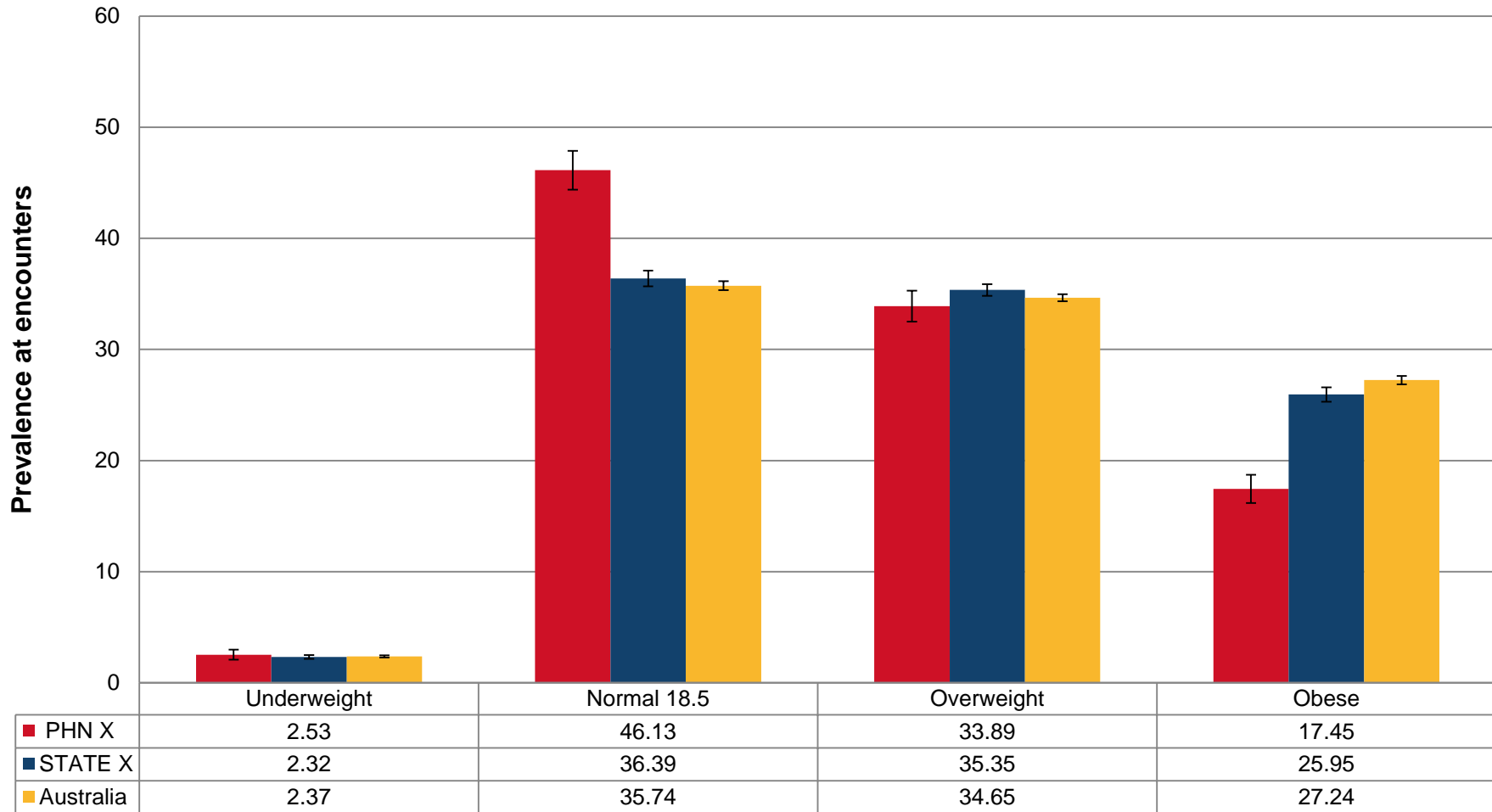


Smoking status of adult patients at GP encounters



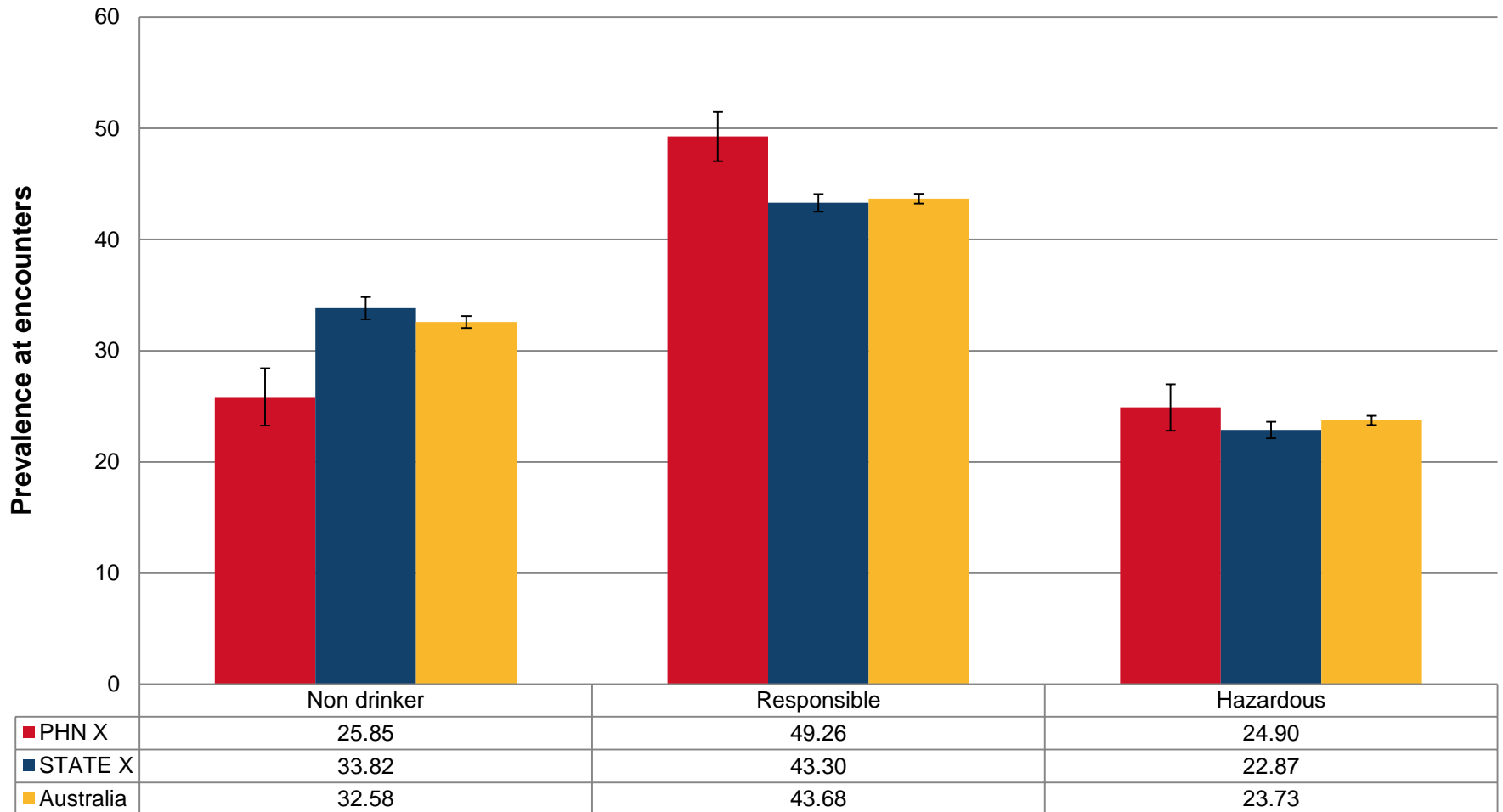


BMI status of adult patients at GP encounters





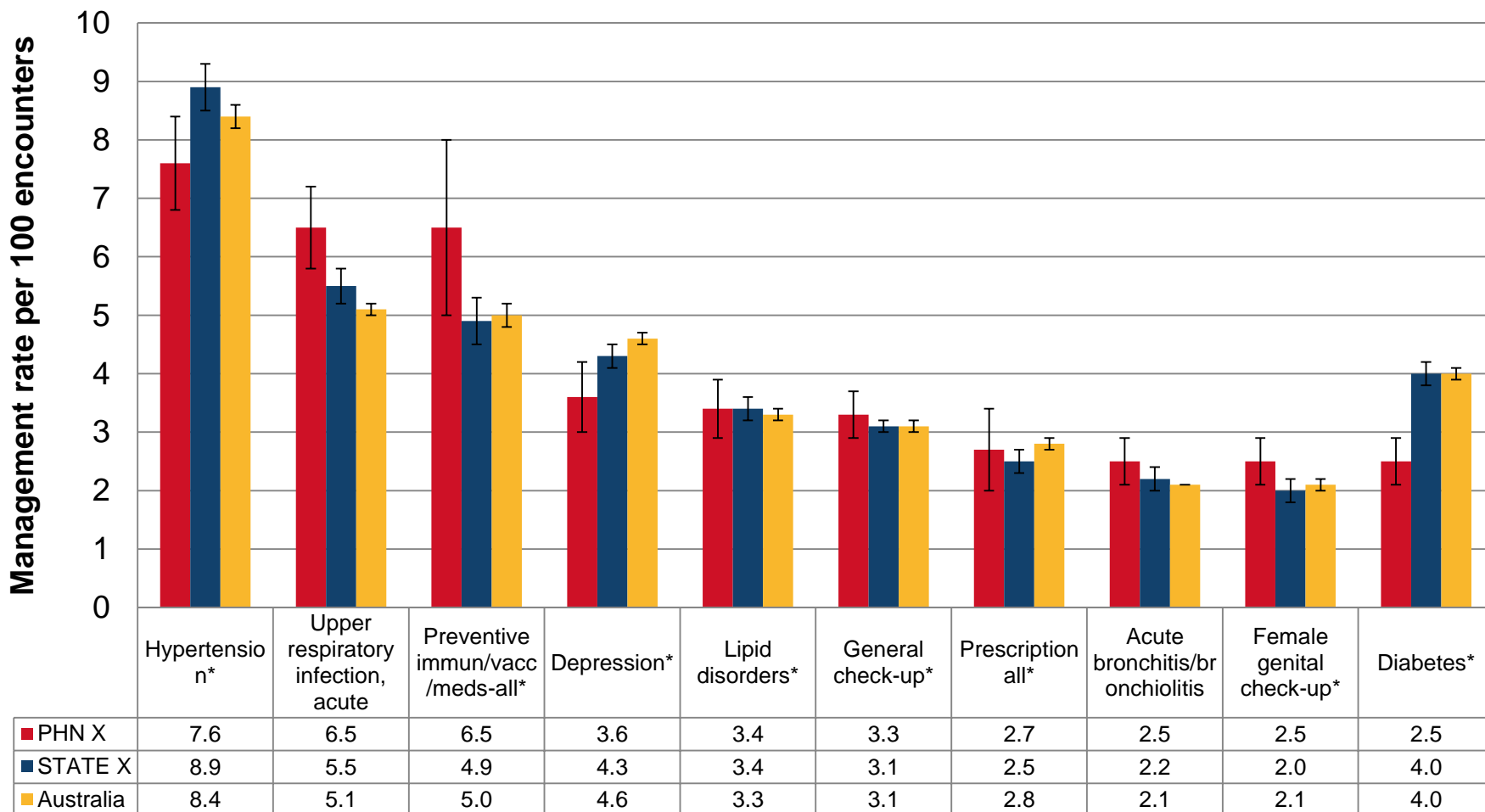
Alcohol consumption status of adult patients at GP encounters





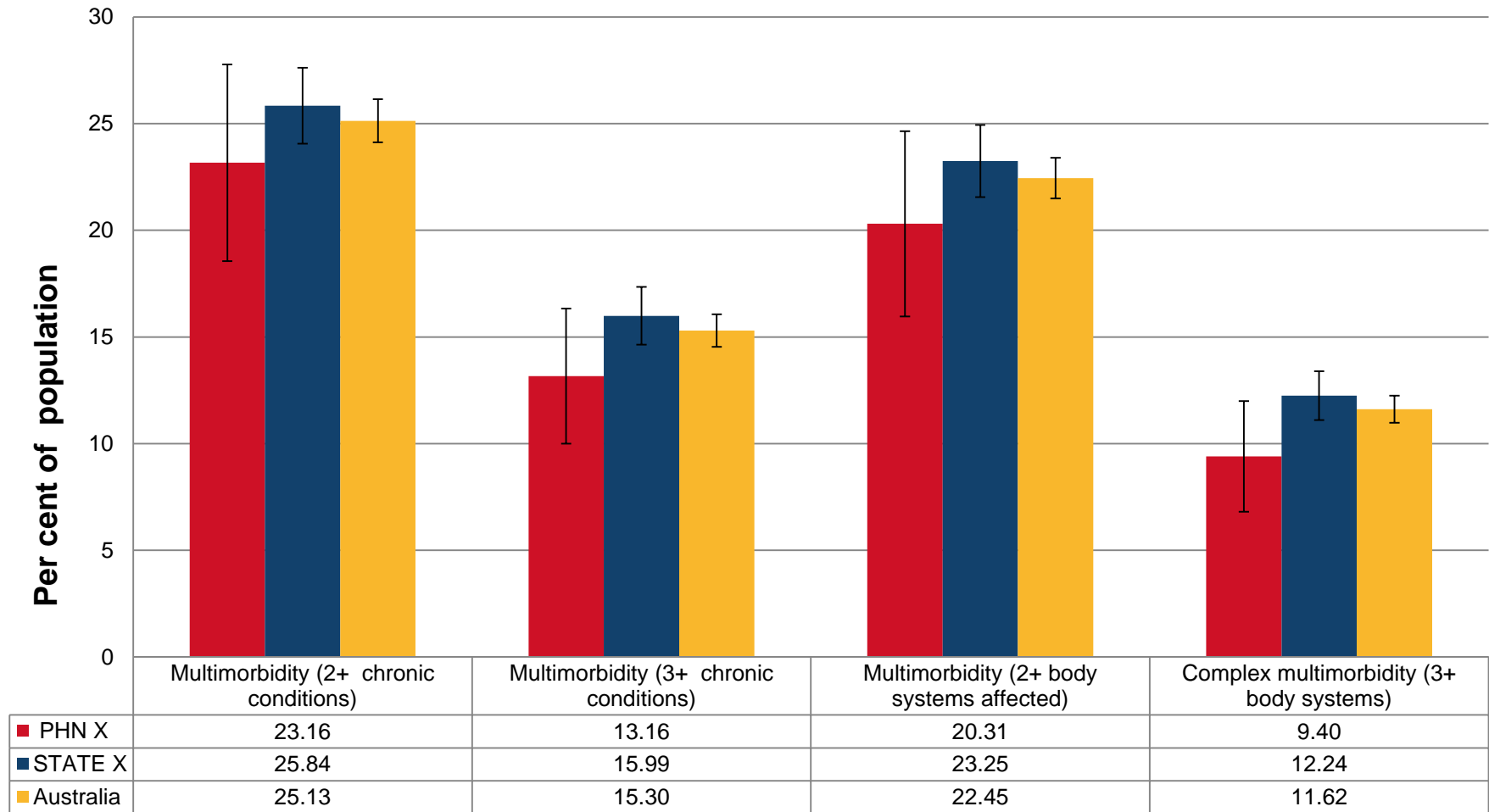
Top 10 most frequently managed problems in PHN X (Rate per 100 encounters)

* = grouped ICPC-2 codes (e.g. Diabetes = Type 1 +Type 2)





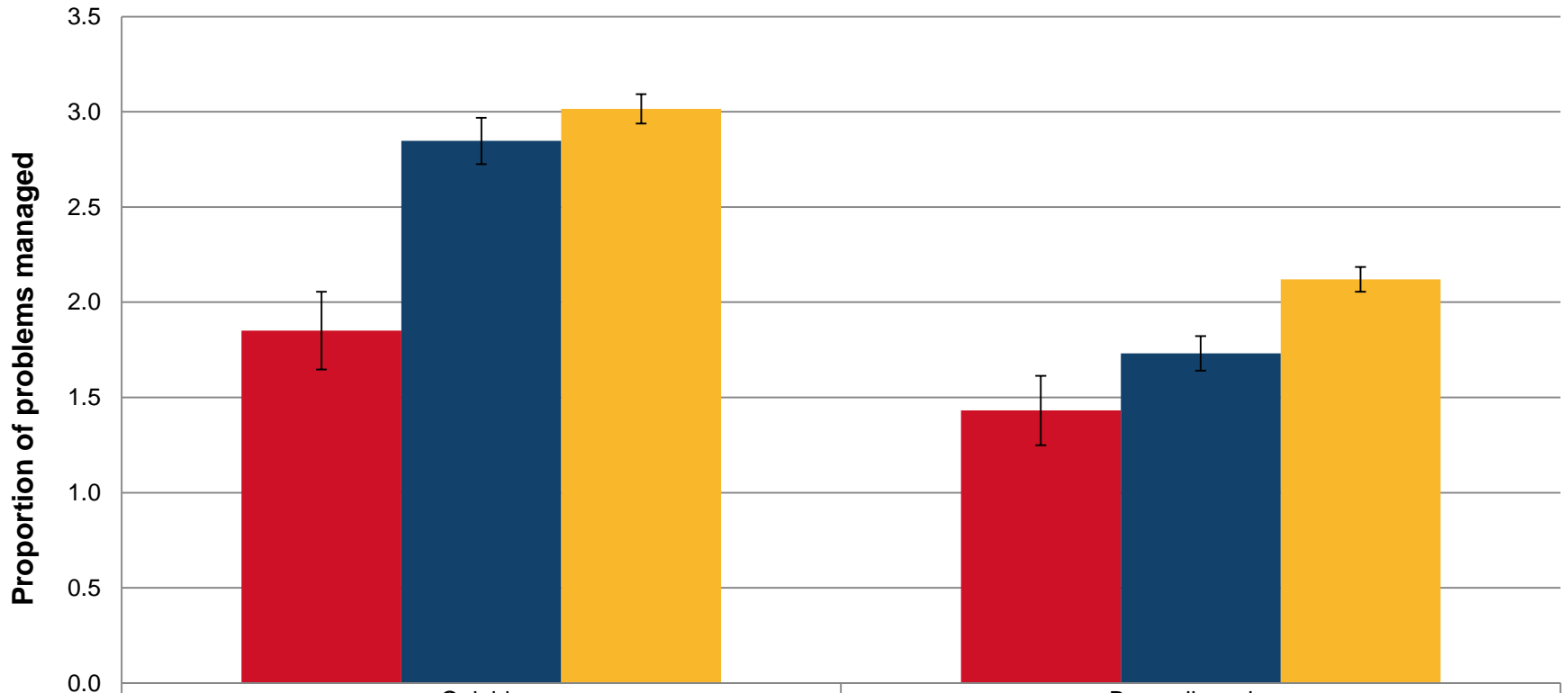
Prevalence of multimorbidity in the population





Quality indicator 1: opioids and benzos

Proportion of problems managed →: opioids; benzodiazapines scripts

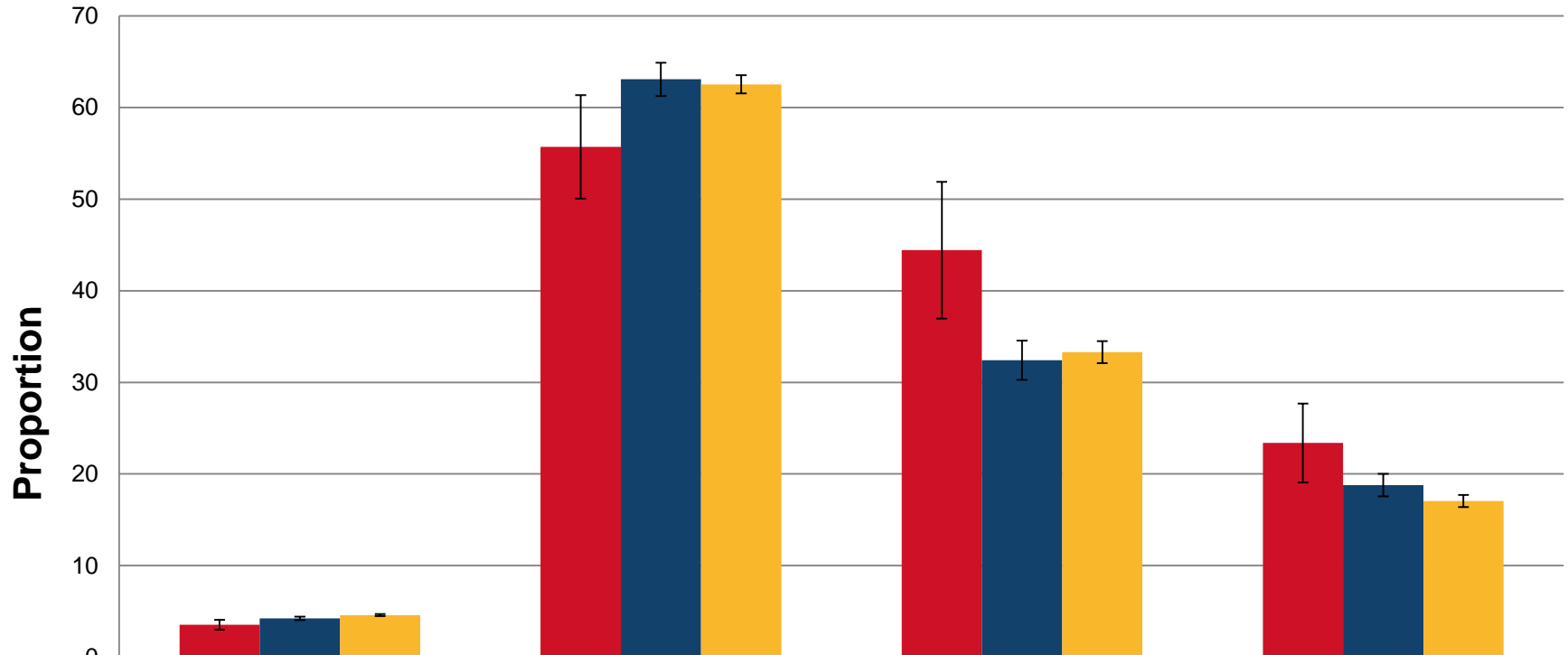


	Opioids	Benzodiazepines
■ PHN X	1.850785	1.431316
■ STATE X	2.847338	1.731223
■ Australia	3.015585	2.120665



Proportion of encounters where depression managed; management actions

Psychotropic medication prescribed/supplied; psychological counselling given; referred.



	Proportion of encs where depression managed	Psychotropic medication prescribed/ supplied/advised?	Psychological counselling	Referral made
■ PHN X	3.5	55.7	44.4	23.4
■ STATE X	4.2	63.1	32.4	18.8
■ National	4.6	62.5	33.3	17.0



Why is it so useful?

- Fills in the gaps:
 - MBS – purely attendance, no content/morbidity
 - PBS = biased **40%** of all prescribed medications
 - with no recorded morbidity under management
- AHS = patient self report, limited morbidities
- ABS population statistics are for those residing in your PHN ≠ those seeing the GPs in the PHN.



Why does BEACH work so well,?

Why does it provide such reliable data?

- All data are classified to international standards:
 - RFEs, problems managed; pathology; imaging; referrals; to the International Classification of primary care- Version 2 (ICPC-2). *Wonca*
 - Pharmaceuticals to the Anatomical Therapeutic Chemical (ATC) classification (*WHO*)
- Linkage of management actions to the problem under management – no guess work..because...

Encounter Number	Date of encounter ____/____/____	Date of Birth ____/____/____	Sex M <input type="checkbox"/> F <input type="checkbox"/>	Patient Postcode _____	Yes / No		PATIENT SEEN BY GP..... <input type="checkbox"/>
					New Patient..... <input type="checkbox"/> <input type="checkbox"/>		PATIENT NOT SEEN BY GP..... <input type="checkbox"/>
					Health Care/Benefits Card..... <input type="checkbox"/> <input type="checkbox"/>		Medicare Item Nos: Home visit (not RACF)..... <input type="checkbox"/>
					Veterans Affairs Card..... <input type="checkbox"/> <input type="checkbox"/>		(if applicable) 1. _____ Workers comp paid..... <input type="checkbox"/>
					NESB..... <input type="checkbox"/> <input type="checkbox"/>		2. _____ Other paid..... <input type="checkbox"/>
					Aboriginal..... <input type="checkbox"/> <input type="checkbox"/>		3. _____ No charge..... <input type="checkbox"/>
					Torres Strait Islander..... <input type="checkbox"/> <input type="checkbox"/>		

START Time ____ : ____ AM / PM (please circle)	Patient Reasons for Encounter 1. _____ 2. _____ 3. _____	Diagnosis/ Problem ①: _____ Problem Status New <input type="checkbox"/> Old <input type="checkbox"/>	Diagnosis/ Problem ②: _____ Problem Status New <input type="checkbox"/> Old <input type="checkbox"/>																																																																																
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NEW REFERRALS, ADMISSIONS	IMAGING/Other tests	PATHOLOGY	PATHOLOGY (cont)																																																																										
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Patient reported Height ____ cm	To the patient if 18+: Which best describes your smoking status?	To the patient if 18+: How often do you have a drink containing alcohol?	How many 'standard' drinks do you have on a typical day when you are drinking? _____	How often do you have 6 or more standard drinks on one occasion?	FINISH Time ____ : ____ AM / PM (please circle)
	Smoke daily..... <input type="checkbox"/>	Never..... <input type="checkbox"/>		Never..... <input type="checkbox"/>	
	Smoke occasionally..... <input type="checkbox"/>	Monthly or less..... <input type="checkbox"/>		Less than monthly..... <input type="checkbox"/>	
	Previous smoker..... <input type="checkbox"/>	Once a week/fortnight..... <input type="checkbox"/>		Monthly..... <input type="checkbox"/>	
	Never smoked..... <input type="checkbox"/>	2-3 times a week..... <input type="checkbox"/>		Weekly..... <input type="checkbox"/>	
		4+ times a week..... <input type="checkbox"/>		Daily or almost daily..... <input type="checkbox"/>	



How else can FMRC assist PHNs?

Professor Graeme Miller will talk about

Collection, integration and analysis
of patient clinical data