General Practice Data: For your patients, business and the community
Presentation outline

Learning objectives

• The use and benefits of POLAR GP and data extraction tools for general practices in Gippsland.
• How data extraction tools can support general practice in, person-centred care, quality improvement and business development
• How data extraction can support the community through population health planning and research opportunities.
• A demonstration of POLAR GP
Practice benefits

Increasing:
• Patient-centred care
• Quality improvement
• Business development
• Relevant population health planning
• Local research opportunities
Knowledge management
Data Extraction: What is it?

- Data extraction is the process of retrieving data out of one data source to another.
- The extracting software system is usually followed by data transformation and possibly the addition of metadata prior to export to another software and/or storage system.
Data Extraction in General Practice

• Extraction software is run on clinical/billing software and pulls all data identified in the code into tables.

Example

• Searches in Best Practice/Medical Director for particular information. This includes diagnoses, medications, appointment details, patient details, vaccinations, patient clinical measures, etc.

• The program extracts this information and puts it into tables, which are used as base information for new programs—such as POLAR GP.
GRHANITE and Security

• GRHANITE originally developed for research at Melbourne University with ethics approval.

• Extensive security protections on the data extracted with GRHANITE.

• No identified data leaves the practice—only practice has access to patient and provider information on POLAR GP

• PHNs only have access to de-identified aggregated data of an entire practice
Why should practices extract and analyse the data?

1. Patient-centred care
2. Quality improvement
3. Business development
Patient-centred care

Identify:

• patients who need immunisations
• patients who are due for health assessments or cancer screening
• patients who need items completed for their cycle of care
• patients on multiple medications who need a review
• patients with particular diagnoses who are not on medications or vice versa
• patients with high risk factors who require interventions

Export these patient lists for recalls, warnings or data cleansing activities.
Quality improvement

Identify:
• patients whose data is not complete or inaccurate
• GPs with a particular strength to educate in-house
• changes in patient outcomes over time
• practice activities that may need improving as a whole (i.e. antibiotics prescribing, pap smears, immunisations, etc)
Business development

Identify:
- where current MBS revenue is coming from
- what MBS opportunities are being lost
- when visits are most commonly occurring - staffing and open hours
- accreditation readiness (patient health records)
- review relevant actions for practice incentive payments (PIPs)
- Track changes in business outcomes over time
Why should PHNs extract and analyse General Practice data?

• Population Health
• Research
Population Health

The study of population health is focused on understanding health and disease in community, and on improving health and well-being through priority health approaches addressing the disparities in health status between social groups. (AIHW, 2016)

- Population health planning is one of the 6 key pillars of PHNs.
- It develops local understanding and the commissioning/coordination of appropriate local solutions.
- PHNs have access to larger scale survey statistics, but aggregated general practice data can offer a deeper and comprehensive view of population health needs and service delivery.
Research

• GRHANITE extraction software and POLAR have determined a way to link patient data across services.

• A hash key can be created from multiple variables of identifiable data (name, date of birth, etc) that is unrecognisable.

• This can be transmitted from the practice/hospital/CHS to ensure patient/practitioner data cannot be identified, but that service use data can be linked.

• Research possibilities about understanding patient journeys through the different levels of the health system is critical to providing best practice care for all patients.

• Combined practices who use POLAR and PHNs will have the opportunity to partner on research activities that are relevant for their patients and communities.
# POLAR GP Demonstration

## Summary

**Patient Count**
- **9,569** Patients
- **280,809** Visits
- **276,698** Scripts
- **156,683** Tests
- **24,684** Immunisations

**Visits per Doctor**

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**Patient Status**
- Active
- Inactive