



Population Health Module  
Domain 3

A GPTT Learning Module

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# **RACGP Domain 3: Population health**

## **1. Introduction**

While much of general practice is conducted through the forum of an individual patient consultation there is an increasing demand for GPs to provide a population health approach in the provision of effective primary health care. This population health approach includes the effective management chronic diseases (which includes primary & secondary prevention & screening), communicable diseases and their prevention (including immunization), aspects of environmental health and health promotion (including promotion of health lifestyles).

To deliver a population based primary health care the GP needs to be aware of the structure of the health system, community resources, health professional linkages and other resources available to promote healthy lifestyles. GPs can deliver health promotion through a medical model, via lifestyle interventions or using a community development approach. GPs need to be aware of the changing infrastructure to the provision of population health eg New Medicare incentives, practice reforms (eg increasing roles of teams and nurses, recall systems and computerization) and legislation (eg notifiable diseases, environmental).

In the past GP registrars have paid less emphasis on Domain 3 Population health than other aspects of the Curriculum. This has partly been due to lack of teaching resources, but also due to the perceived lack of relevance to their training. This is changing particularly with the use of New Medicare item numbers associated with chronic disease management.

### **Domain 3: Population Health & the Context of General Practice**

*Population health, in the context of general practice, is an essential component of primary health care. The general practitioner has an evolving role, with the potential to change at the individual patient, practice, and community levels within the health care system. This requires knowledge of the socio-political, economic, geographical, cultural, and family influences on the health of patient groups in their communities.*

#### **Scope**

Registrars who are competent in this domain will:

- have an understanding of demographics, epidemiology, public health problems, and the health needs of special groups;
- be aware of the patterns and prevalence of disease and be able to participate in population based preventive strategies;
- have a critical appreciation of the impact on the health of the patient of their Socio-political, economic, work, spiritual, and cultural background and needs, and their relationships with family and significant others;
- possess skills in advocacy and in using community resources, and
- appreciate the importance of a public health perspective in general practice.

#### **Minimum and essential knowledge and skills**

The registrar will be able to:

- (i) elicit and take into account a patient's socio-political, economic, work, spiritual and cultural background and needs, and their relationships with family and significant others in relation to their health;
- (ii) understand and respond to the special needs and characteristics of their practice population, including:
  - disease prevention and health promotion;
  - screening and recall systems,
  - and access and equity issues.
- (iii) use a working knowledge of, and be involved in assisting the health of the community locally, regionally and nationally, including:
  - participation in community-based prevention and education strategies. ,
  - accessing available health services;
  - networking with other general practitioners, GP organisations and health care providers, and
  - involvement in public health systems and strategies (e.g. notifiable diseases and environmental issues);
- (iv) understand and utilise the Australian health care system (including its funding planning, services, policies and community resources).

The RACGP Draft Curriculum 2007 has the following to say about population health:

## DEFINITION

The consensus statement of the Joint Advisory Group on General Practice and Population Health has defined general practice and population health as:

*"The prevention of illness, injury and disability, reduction in the burden of illness and rehabilitation of those with a chronic disease. This recognises the social, cultural and political determinants of health. This is achieved through the organised and systematic responses to improve, protect and restore the health of populations and individuals. This includes both opportunistic and planned interventions in the general practice setting."*<sup>1</sup>

**Population health** is the study of health and disease in a population as specified by geographical, cultural or political guidelines. This includes defining health problems and needs, identifying the means by which these needs may be met, and providing the health services required to meet these needs.<sup>2</sup> Other related terms commonly used in general practice include: **community medicine**, which tends to apply more to the integration of population based health interventions in a clinical context; and **community health** which is often used to describe the application of broad based public health interventions at a community or individual level.

**Public health** is the efforts organised by a society to protect, promote and restore the people's health.

Population and public health are the combination of sciences, skills and beliefs directed to the maintenance and improvement of the health of all people through collective or social actions.

There is considerable overlap between population and public health, and differing models of this interface have been developed. A continuum can be considered between population health activities within general practices, public health activities with the community, and what have been termed 'new public health' movements, which include the engagement of communities, organisational development, and specialisation or leadership in fields such as policy development. Some health professionals use the terms population health and public health interchangeably but there are subtle nuances between these two disciplines.<sup>3,4,5,6,7</sup>

**Preventive medicine** is the application of preventive measures into medical practice by focusing clinical skills on the health of defined populations in order to promote and maintain health and wellbeing, and prevent disease, disability and premature death.

**Health promotion** is a range of practices including health education, community development, preventive services, policy advocacy and regulations which seek to better health at the individual and population level, and goes beyond simple prevention.

In general practice, population health represents an extension and expansion of existing clinical roles towards an emphasis on prevention and a focus on groups or populations rather than on individual patients. This may involve activities, such as immunisation, risk assessment and management, patient education and screening, in which general practitioners are already engaged within their practice. General practice public health also involves notification of diseases of public health importance to the relevant government agency.

## RATIONALE

General practice care goes beyond the individual patient to involve patient populations.

"General practice is the provision of primary continuing comprehensive whole patient medical care to individuals, families and their communities."<sup>8</sup>

General practitioners are ideally placed to implement population based health activities as about 85% of Australians attend a general practitioner at least once during any one year.<sup>9</sup> In the 2004–05 financial year, there were about 94 million unreferral Medicare attendances at an average rate of 4.5 GP visits per person.<sup>10</sup>

## **VOCATIONAL**

Assumed level of knowledge — prevocational doctor

- **Communication skills and the patient - doctor relationship**

- give focused brief advice and consider the appropriateness of other strategies such as cognitive behavioural therapy and motivational interviewing in consultations about the common lifestyle factors of smoking, nutrition alcohol and physical activities;
- explain to patients that lifestyle factors may cause many common illnesses and modification of these risk factors needs to be part of the management plan of these patients;
- counsel patients about recommended screening tests including tests which are not universally recommended but which patients may requests, for example, prostatic specific antigen or chest x-ray;
- describe methods for liaising with other health professionals with in the health care system to optimise health care and advocate on behalf of the patient; and
- describe strategies for implementing a public health approach in the general practice setting.

- **Applied professional knowledge and skills**

- describe preventive guidelines in Australian general practice and the rationale and evidence for their development;
- undertake a needs assessment in a community to identify health priorities. This could include capacity to interpret printed information and papers, interpreting health data and skills in liaising with key stakeholders in a community;
- apply principles of epidemiology and biostatistics sufficient to critically interpret papers;
- describe the epidemiology of illness in special populations including rural areas of Australia; and
- describe the impact of rural and remote practice on equity and access to health services.

- **Population health and the context of general practice**

- describe the roles of different parts of the health system in conducting screening and surveillance for diseases in the general practice context;
- develop recall systems and other measures in the general practice setting to implement preventive guidelines including electronic systems;
- audit performance of self and practice in relation to population health activities especially immunisation, screening and management of lifestyle risk factors;
- conduct an assessment of the health needs within a the general practice and the local community;
- discuss the advantages and disadvantages of preventive practices and individualise this advice to the patient's needs;
- work with a multidisciplinary team to implement preventive strategies in a practice or community; and
- identify occupational health factors, which may influence disease.

- **Professional and ethical role**

- differentiate between clinical and public health roles to the broader community (disease notification, involvement in surveillance networks) in general practice;
- describe specific public health issues relevant to rural practice and other close communities such as confidentiality and the fact small population may be identified in research undertaken by the general practitioner; and
- manage patients found to have infectious disease, including notification requirements.

- **Organisational and legal dimensions**

- be conversant with aspects of public health legislation relevant to general practice.
- implement population approaches in their general practice work;
- discuss the advantages and disadvantages of implementing population health approaches into general practice activities;
- develop strategies to overcome barriers to implementing population health approaches in general practice as in RACGP Green Book<sup>15</sup>;
- evaluate recall systems to ensure patients at risk receive necessary followup;
- describe the role of general practitioner as part of a larger health care system;
- explain the role of health informatics in improving the general practice contribution to population health; and
- develop skills in evaluation (clinical audit) to assess the process indicators, impact and outcomes of population health strategies implemented in practice.

There are 4 sections in this module:

1. Chronic diseases
2. Communicable diseases
3. Environmental health
4. Health promotion

Each section has 2 or 3 case studies which illustrate the theme of that section. The reader is guided through the case with questions to reflect upon, some exercise and some hyperlinks to useful resources.

Firstly open the section of the module you want to start with. It is helpful if you at least open and briefly browse the References (gold hyperlink on the right hand side of the page) before you read the case. These references are also hyperlinked within the body of the case. Then click the underlined Click to read the case which will open the case. Learning objectives accompany the case. Any theory will be written in red. The case history will be in black. Spend time reflecting on the questions. You may wish to discuss them with your supervisor.

This module aims to provide GP registrars with a comprehensive resource to study and reflect on population health as it applies to general practice. While the module can be undertaken either in a paper or web based form it is easiest to use on the web at [www.gptt.com.au](http://www.gptt.com.au)

It is recommended that this module is undertaken during Subsequent or Extended Skills time in general practice.

There are also 5 assessment tools (see section 4) which can be used by GP registrars & supervisors to measure the competency of the GP registrar. Each tool has a different approach to learning so as to cater for registrars with varying learning styles.

Your GP supervisor is the key person who can assist you in completing this module. In addition the other GPs, and practice nurses may also be an invaluable resource.

Registrars may also supplement this self directed learning module by attending additional courses on chronic disease management run by your Division of General Practice

## **RACGP Domain 5: Population Health**

### **2. Clinical Case Studies**

There are 6 detailed clinical cases which cover all the key topics in this Domain. Each has associated questions which act as a trigger for raising the issues relevant to the case.

The case studies can be worked through individually or can be used to complete one or more of the assessment tools (see section 4)

Some of the questions will probably prompt you to want to read further and this is where the attached links will provide you with resources using the web links.

## **RACGP Domain 3: Population Health**

### **3. Web links to resources**

It is recommended that you read all the Essential Resources for topics you do not feel confident. Reading all the Essential Resources would provide an excellent base line preparation for the RACGP exam. These resources are underlined on the right hand side of the page in yellow of the web page.

Other resources such as reference papers are listed at the end of the Case (PDF document).

## **4. Assessment Tools & Requirements**

**There are 5 assessment tools available:**

1. Registrar Confidence Rating Scale of Curriculum Competencies
2. Clinical Audit. (targeted audit of 50 cases/ 1 week of consulting)
3. Systematic review & rating of self confidence to manage mock clinical scenarios in Module 3
4. Case discussion with supervisor a) registrar cases b) mock clinical scenario discussion. Supervisor provides feedback using a formal feedback form.
5. Practice nurse interview

### **Requirements:**

All registrars are expected to complete assessment tools 1 & 4. The assessment tools 2, 3 & 5 are optional but are encouraged if you have identified deficiencies in competencies in this Domain. The more assessments performed the more reliable the overall assessment of competence.

It is recommended that this module is undertaken during Subsequent or Extended Skills time in general practice but it can be completed at any time during training.

# RACGP Domain 3: Population health

## Assessment Tool # 1

### Registrar Confidence Rating Scale of Curriculum Competencies

**Instructions:** Listed below are the curriculum competencies for the RACGP Domain 3: Population health. Reflect on your own level of competency to undertake the skills listed below and tick the *yes* column if you feel you are at an acceptable standard. If you are not sure of your competency it is worth asking your supervisor or practice manager as to their assessment of your competency. You may also use prior feedback or reports from previous hospital or GP rotations or courses/workshops you have attended

I feel I am able to:	Yes	No	Not Sure
<b>• Communication skills and the patient/doctor relationship</b>			
Give focused brief advice and consider the appropriateness of other strategies such as cognitive behavioural therapy and motivational interviewing in consultation about the common lifestyle factors of smoking, nutrition, alcohol and physical activities.			
Explain to patients that lifestyle factors may cause many common illnesses and modification of these risk factors needs to be part of the management plan of these patients.			
Counsel patients about recommended screening tests including tests which are not universally recommended but which patients may request, for example, prostatic specific antigen or chest x-ray.			
Describe methods for liaising with other health professionals within the health care system to optimise health care and advocate on behalf of the patient.			
Describe strategies for implementing a public health approach in the general practice setting.			
<b>• Applied professional knowledge and skills</b>			
Describe preventative guidelines in Australian general practice and the rationale and evidence for their development.			
Undertake a needs assessment in a community to identify health priorities. This could include capacity to interpret printed information and papers, interpreting health data and skills in liaising with key stakeholders in a community.			
Apply principles of epidemiology and biostatistics sufficient to critically interpret papers.			
Describe the epidemiology of illness in special populations including rural areas of Australia.			
Describe the impact of rural and remote practice on equity and access to health services.			
<b>• Population health and the context of general practice</b>			
Describe the roles of different parts of the health system in conducting screening and surveillance for diseases in the general practice context.			
Develop recall systems and other measures in the general practice setting to implement preventative guidelines including electronic systems.			
Audit performance of self and practice in relation to population health			

activities especially immunisation, screening and management of lifestyle risk factors.			
Conduct an assessment of the health needs within general practice and the local community.			
Discuss the advantages and disadvantages of preventative practices and individualise this advice to the patient's needs.			
Work with a multidisciplinary team to implement preventative strategies in a practice or community.			
Identify occupational health factors which may influence disease.			
<b>• Professional and ethical role</b>			
Differentiate between clinical and public health roles to the broader community (disease notification, involvement in surveillance networks) in general practice.			
Describe specific public health issues relevant to rural practice and other close communities such as confidentiality and the fact small population may be identified in research undertaken by the general practitioner.			
Manage patients found to have infectious disease, including notification requirements.			
<b>• Organisational and legal dimensions</b>			
Be conversant with aspects of public health legislation relevant to general practice.			
Implement population approaches in their general practice work.			
Discuss the advantages and disadvantages of implementing population health approaches into general practice activities.			
Develop strategies to overcome barriers to implementing population health approaches in general practice as in RACGP Green Book <sup>15</sup> .			
Evaluate recall systems to ensure patients at risk receive necessary follow-up.			
Describe the role of general practitioner as part of a larger health care system.			
Explain the role of health informatics in improving the general practice contribution to population health.			
Develop skills in evaluation (clinical audit) to assess the process indicators, impact and outcomes of population health strategies implemented in practice.			

# **RACGP Domain 5: Population Health**

## **Assessment Tool # 2**

### Clinical Audit

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A clinical audit of from 20-100 consecutive patients orientated towards detecting the public health aspects of the case can be performed using the RACGP framework:

<http://www.racgp.org.au/downloads/pdf/20041019clinicalauditguide.pdf>

Or you could use the following table:

<b>Patient UR number</b>	<b>Presenting problems</b>	<b>Population health issue (health promotion, environmental health, communicable disease, chronic disease)</b>	<b>Needs further reflection/reading/discussion with supervisor?</b>

You could make some time to discuss those cases (indicated in the final column) that raised some challenging or interesting population health issues with your GP supervisor.

It may be especially useful to discuss those issues which appear to be raised frequently.

## RACGP Domain 5: Population health

### Assessment Tool # 3

Self confidence audit of mock cases in each topic provided in Module

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Read a sample of *issues to be considered* provided under topic heading in module and use the form below to rate your confidence in managing the problem. Provide comments if there are certain aspects of the case/question which you find difficult or challenging.

No	Topic	Confidence rating 1 – low 2- mod 3-high	Comments
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			

## **RACGP Domain 5: Organisational and Legal Dimensions**

### **Assessment Tool # 4**

Case discussion with supervisor

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Cases relevant to this Domain, which are suitable for discussion with your GP supervisor, may be obtained from:

- a) Any case during your consulting which is challenging or interesting
- b) Clinical cases, identified by audit, which illustrate a challenge in population health (Tool 2)
- c) Mock case studies where you self report lack of confidence in managing (Tool 3)

Then the GP registrar and supervisor can discuss the case. The GP supervisor can use the form below to structure his/her feedback

## **RACGP Domain 5: Organisational and Legal Dimensions**

### **Case Discussions: Supervisor feedback form**

Date:

Supervisor:

Registrar:

Case No (if mock case from module) or brief description of case:

Did the registrar display sufficient competence, for their stage of training, in their approach to the managing the case?

Did the registrar display evidence they knew where to find more information about the topic related to the case?

Do you have any further suggestions for learning related to this case?

Other comments:

## RACGP Domain 5: Population health

### Assessment Tool # 5

#### Practice Nurse Interview

Date:

GP registrar:

Practice Nurse:

Practice:

Competency/Task	Yes (fully)	Yes but needs more work	No	Not sure*	Comments
Explaining to patients about lifestyle factors that may cause common illnesses.					
Liaising with you regarding optimizing health care and advocacy on behalf of the patient.					
Discussing any public health approaches to patient care (e.g. support groups, linkage with community organisations etc. )					
Understand immunisation relevant to the general practice setting including national immunisation schedules.					
Has demonstrated preventative strategies in the GP setting (e.g. use of pamphlets, posters, health promotion strategies within the practice).					
Works with a multi-disciplinary team to implement preventative strategies in the practice.					
Is involved with recall systems and understands their use for patients to receive necessary follow-up.					

\* this could mean the task was not observed , you are unable for other reasons to make an opinion or you feel you need to observe on more occasions in which to be more confident of your assessment.

**Instructions:**

It is useful to recruit a variety of people who work with the GP registrar to provide an assessment of the GP registrar's performance. This approach pertains to a 360 degree assessment which increases its reliability.

The GP supervisor should decide whether it is appropriate if the GP registrar would benefit from an interview by the practice nurse. This will depend on various factors including whether the nurse has significantly observed the registrar, whether the practice manager feels comfortable to provide an assessment and whether the registrar is willing to engage in the process.

The GP supervisor should provide the feedback to the GP registrar about the nurse