Welcome to smoking cessation – an interactive workshop designed to assist general practitioners and their practice staff to effectively identify smokers contemplating quitting and to help them stop smoking.







QUIZ

Question 1

What proportion of Australian adults are current daily smokers?

A. 21%

B. 42%

C. 63%

D. 84%.







How many of these smokers are identified by their GP?

A. 10%

B. 33%

C. 66%

D. 75%.







One smoking myth is that the chemicals in cigarettes are not dangerous, 'smoking can't cause me harm'. There are up to 4000 chemicals in tobacco smoke. Match each of the following substances with its effect(s):

	Cancer inducing	Damages cilia	Reduced oxygenation	Raise blood pressure	Addiction	Damages endothelium
Nicotine						
Carbon monoxide						
Tar						
Hydrogen cyanide						







Tobacco smoking is a major risk factor for (one or more answer is correct):

- A. Stroke
- B. Pancreatic cancer
- C. Colorectal cancer
- D. Low birth weight babies
- E. Sudden infant death syndrome
- F. Ischaemic heart disease
- G. Chronic obstructive pulmonary disease.







Which of the following statements are true?

- A. The majority of men smoke
- B. Male smokers have a higher relative risk of developing cardiovascular disease than female smokers
- C. Women who smoke at the same level as men have the same risk of developing lung cancer
- D. Cervical and vulval cancer risk is increased in women smokers.







Which of the following statements are true?

- A. Smoking has no effect on a woman's fertility
- B. Natural menopause occurs up to 2 years later in women who smoke
- C. Exposure to tobacco smoke may increase the likelihood of breast cancer
- D. Smoking protects against the development of dementia.







Despite being aware that smoking is a significant problem, many GPs do not identify smokers and do not give smoking cessation advice when they do identify a smoker

What are the barriers to GPs doing brief interventions?







Which of the following are true effective strategies for helping patients to quit?

- A. Brief one off advice from physicians
- B. Bupropion
- C. Nicotine replacement in smokers who smoke more than 10 cigarettes per day
- D. Acupuncture
- E. Practice support systems such as computer reminders
- F. Arranging follow up
- G. Telephone counselling
- H. Self help materials for people who want to quit smoking
- I. Hypnotherapy.







Which of the following statements are true regarding nicotine gum?

- A. It is not addictive
- B. Side effects include mouth ulcers and indigestion
- C. Nicotine gum and cigarettes can be used together
- D. Hiccups are a common side effect.







Which of the following statements are true regarding nicotine patches?

- A. They are available in 12 or 18 hour patches
- B. A common side effect is a generalised skin reaction
- C. Use of the patches can interfere with sleep
- D. Patches are more effective than gum.







Which of the following statements are true regarding bupropion?

- A. Smoking should cease once bupropion is commenced
- B. Seizures are a side effect of bupropion
- C. Unstable angina is a contraindication to the use of bupropion
- D. Nicotine patches can be used concurrently with bupropion.







Select which of the following diseases are known to be associated with smoking cigarettes:

- glaucoma
- COPD
- erectile dysfunction
- laryngeal cancer
- coronary heart disease
- age related macular degeneration
- phaeochromocytoma
- bronchitis
- pancreatic cancer
- peripheral vascular disease.







Which of the following statements about smoking in pregnancy are true:

- A. Increased risk of miscarriage
- B. Increased risk of multiple birth
- C. Increased risk of prematurity
- D. Decreased risk of low birth weight
- E. Decreased risk of perinatal health problems
- F. SIDS.







SLIDE PRESENTATION

Effects of smoking







Smoking prevalence

In 2001:

- 21% of Australians (or 3.6 million) are daily or weekly smokers
- 21% of men and 18% of women are daily smokers
- 26% of Australians considered themselves ex-smokers
- Smoking rates peaked in the 20–29 years age group
- The mean number of cigarettes smoked per day is 16.







Health effects of smoking

Eyes	Macular degeneration			
Hair	Hair loss			
Skin	Aging, wrinkles, wound infection			
Brain	Stroke			
Mouth and pharynx	Cancer, gum disease			
Lungs	Cancer, chronic obstructive pulmonary disease (emphysema and chronic bronchitis), pneumonia, asthma			
Heart	Coronary artery disease, raised blood pressure			
Stomach	Cancer, ulcer			
Pancreas	Cancer, increase blood glucose levels and less control over blood glucose levels			
Bladder	Cancer			
Women	Cervical cancer, early menopause, irregular and painful periods, infertility			
Men	Impotence			
Arteries	Peripheral vascular disease			
Bone	Osteoporosis			







Smoking during pregnancy

Increased risk of:

- miscarriage
- premature birth
- low birth weight infant
- SIDS.







Effect of tobacco smoke on children

Increases the risk of:

- respiratory infections
- middle ear infections
- meningococcal infections
- asthma.







Health benefits of quitting

12 hours	Blood levels of carbon monoxide are significantly decreased		
5 days	Improvements in the sense of taste and smell		
6 weeks	Risk of wound infection after surgery substantially reduced		
3 months	Lung function is improving as cilia recover		
1 year	Risk of coronary heart disease is halved after one year compared to continuing smokers		
10 years	Risk of lung cancer is halved and continues to decline		
15 years	All cause mortality falls to the same level as for those who have never smoked		







A GP approach to smoking cessation







Should I ask about smoking?

- The GP has a legitimate role in asking patients if they smoke
- Shows concern about the patient's health
- Smoking can affect/interact with some medications
- Generally patients find that a GP asking about smoking is acceptable.







Should I ask about smoking?

- Patient coughing
- Recurrent/chronic bronchitis
- Affecting sleep
- Productive cough.







For discussion

Do you think this clinical presentation is an opportunity to address the issue of smoking with this patient?

Would you normally address the issue of smoking with this patient?







Does it matter how we describe a smoker?

Smokers

Recent quitters

Ex-smokers

Never smokers

Irregular smokers

Weekly smokers

Daily smokers







The role of the GP in smoking cessation

- GPs are uniquely placed to assist smokers quit smoking: 80% of Australians visit their GP at least once per year and most smokers have several visits
- Patients see GPs as having a key and supportive role in smoking cessation
- Advice can take less than 1 minute
- Brief, repeated, nonjudgmental advice is effective.







A brief intervention can be defined as:

- recognition of a problem, or potential problem
- intervention to stop the harm
- an activity of primary health care workers
- a brief, structured form of advice.







Key factors of a brief intervention

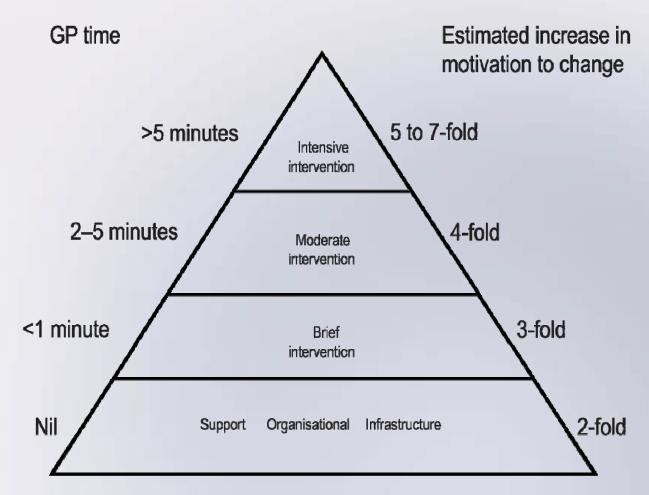
Feedback	Providing comprehensive feedback based on good assessment procedures			
Responsibility	Place emphasis on the client's own responsibility for change. Self help manuals can assist in this process			
Advice	Provide clear advice on the need to change and, if necessary, to seek further treatment			
Menu	Offer a menu of alternative strategies for change. Choices of treatment method and goal should be informed choices. This is likely to enhance perceived personal choice and control, thereby improving the likelihood of the client persisting and succeeding with their goal			
Empathy	Therapist empathy (skills) is a potent determinant of client motivation and change			
Self efficacy	A person's belief in the ability to carry out a specific task is important			







The reality pyramid









The 5As approach

Ask	Assess	Advise	Assist	Arrange
Establish patient's smoking status	Determine amount smoked and readiness to quit	Information and motivational interviewing	Develop a quit plan	Arrange follow up with GP or refer to Quit groups or Quitline







Case study: Peter

- 30 years of age
- New patient
- 40 year old cousin suddenly died of MI.







For discussion

How would you continue the consultation?







Case study: Peter

- Considers himself fit and healthy
- He has a strong family history of IHD and diabetes
- Blood pressure 140/90 mmHg.







Ask

Should you ask about Peter's smoking status?







Case study: Peter

- Smokes 15—20 cigarettes/day
- Smoked since age 17 or 18 years.







Assess

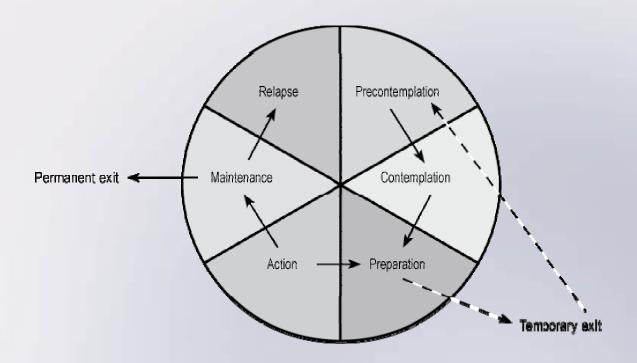
How would you assess Peter's interest and motivation with regard to quitting?







Stages of change in smoking cessation



Adapted from Prochaska and DiClemente, 1983.







Stages of change in smoking cessation – Precontemplation

Stage	Behaviour	Intervention	Questions to ask
Precontemplation – no thoughts about changing behaviour	Not considering stopping smoking in the next 6 months	Discuss negative consequences of smoking. Provide information rather than be judgmental.	Are you thinking of quitting in the near future?







Stages of change in smoking cessation – Contemplation

Stage	Behaviour	Intervention	Questions to ask
Contemplation – thoughts about the need to change but no action taken yet	Considering quitting in the next 6 months but no action taken yet	Raise patient's consciousness of smoking through information; give emotional support and assist in identifying people who will be supportive (eg. offer Quit kit literature)	Why do you want to quit? What things have stopped you from trying to quit? How confident are you that you can quit? Who can you ask to support you during this time?







Stages of change in smoking cessation – Preparation

Stage	Behaviour	Intervention	Questions to ask
Action – attempts made to change behaviour and avoid environmental 'triggers'	Attempt made to quit smoking in the last 6 months	Provide emotional support and encouragement; help identify triggers for smoking and promote new behaviours to take the place of smoking	Are you confident you can continue not smoking? What situations make you feel like smoking? How do you deal with these situations?







Stages of change in smoking cessation — Action

Stage	Behaviour	Intervention	Questions to ask
Action – attempts made to change behaviour and avoid environmental 'triggers'	Attempt made to quit smoking in the last 6 months	Provide emotional support and encouragement; help identify triggers for smoking and promote new behaviours to take the place of smoking	Are you confident you can continue not smoking? What situations make you feel like smoking? How do you deal with these situations?







Stages of change in smoking cessation — Maintenance

Stage	Behaviour	Intervention	Questions to ask
Maintenance – behaviour has been changed and person is adjusting to these changes and working to prevent relapse	Has not smoked for at least 6 months; the person is adjusting to change and working to prevent relapse	Continue supportive approach; discuss possible problems that may lead to relapse	Do you see yourself as a nonsmoker? What do you do when you feel like smoking? What have been the benefits of quitting?







Behavioural change

- Complex and difficult
- Relapse is common
- Does not occur in a linear fashion
- One intervention cannot be applied to all patients.







For discussion

What other information would you like to get from Peter?

Determine like and dislikes of smoking and quitting.

Rate his confidence to quit.

Assess his level of nicotine dependence.

Enquire about previous quit attempts.

Determine what Peter considers high risk situations for relapsing.

Also assess Peter for other cardiovascular risk factors.







Case study: Peter

- Is interested in quitting
- Attempted quitting 5 years ago.







Decision balance table

- A decision balance can highlight discrepancies
- Systematically explore the patient's likes and dislikes about smoking and quitting:
 - What is it that you like about smoking?
 (Benefits of continuing to smoke)
 - What is it that you do not like about smoking?
 (Costs of continuing to smoke)
 - What is it that you like about stopping smoking?
 (Benefits of stopping smoking)
 - What is it that you do not like about stopping smoking?
 (Costs of stopping smoking).







For discussion

Think about your patients who smoke and complete the decision balance table according to how they would have responded. How could you use this tool in your practice?

	Like	Dislike
Smoking		
Quitting		







Nicotine dependence

Nicotine is addictive but is not responsible for the harmful health effects of smoking

Central nervous system	Pleasure, arousal, improved short term memory, improved concentration and decreased anxiety
Cardiovascular system	Increased heart rate and blood pressure and peripheral vasoconstriction
Endocrine system	Increased circulating catecholamines (eg. adrenaline and noradrenalin) and increased cortisol levels
Metabolic system	Increased basal metabolic rate
Gastrointestinal system	Decreased appetite, nausea
Skeletal muscle	Decreased tone







Assess: Fagerstrom Nicotine Dependence Questionnaire

Questions	Answer	Score
1. How soon after you wake up do you smoke your first cigarette?	Within 5 min	3
	6–30 min	2
	31–60 min	1
	after 60 min	0
2. Do you find it difficult to refrain from smoking in public?	Yes	1
	No	0
3. Which cigarette would you hate to give up most?	The first one in the morning	1
	Any other	0
4. How many cigarettes a day do you smoke?	31 or more	3
	21–30	2
	11–20	1
	10 or less	0
5. Do you smoke more frequently during the first hours after waking than during the rest of the day?	Yes	1
waking than during the rest of the day?	No	0
		Total







Case study: Peter

- Smokes his first cigarette within 30 minutes of getting up
- Would find the first cigarette of the day the hardest to give up
- Is relatively confident he can give up cigarettes. (confidence rating 6 or 7).







Case study: Peter

- What stage of change is Peter currently in?
- Peter appears to be in the contemplation or preparation stage.







For discussion

What advice would you give Peter?
What are the main aspects of giving advice to smokers?







Case study: Ron

- 50 years of age
- Previous MI
- Quit smoking last year
- Has apparently relapsed
- Wants to quit again.







Case study on Ron's stage of change

What stage of change is Ron in?
What intervention strategies regarding smoking would you consider with Ron at this stage?







Case study: Murali

- Decided to give up smoking 8 months ago
- Has tried several times
- Successfully quit 6 months ago with the aid of nicotine patches
- Is not confident he can remain a nonsmoker
- Turns to cigarettes to deal with stress.







Case study on Murali's stage of change

- What stage of change is Murali in?
- What intervention strategies would you consider with Murali at this stage?







Coping with cravings — the 4 Ds

Delay	Delay acting on the urge to smoke. After 5 minutes, the urge to smoke weakens and your resolve to quit will come back
Deep breathe	Take a long slow breath in and slowly release it out again. Repeat three times
Drink water	Drink water slowly holding it in your mouth a little longer to savour the taste
Do something else	Do something else to take your mind off smoking. Exercise is a good alternative







Case study: Anne

- 40 years of age
- Single parent
- Undergoing stressful issues with ex-husband
- Has mostly avoided smoking for 3 months
- Still craves for a cigarette at night.







Case study on Anne's stage of change

- What stage of change is Anne in?
- What intervention strategies would you consider with Anne at this stage?







Case study: Phillip

- 45 years of age
- Presents with nasal discharge, low grade fever and sore throat
- New patient
- Smokes 20 cigarettes/day
- Not interested in quitting at moment.







Case study on Phillip's stage of change

- What stage of change is Phillip in?
- What intervention strategies would you consider with Phillip at this stage?







Case study: Cassie

- Age 27 years
- Smokes 10 cigarettes/day
- Interested in quitting but finds it hard.







Case study on Cassie's stage of change

- What stage of change is Cassie in?
- What intervention strategies would you consider with Cassie at this stage?







Withdrawal symptoms

- Cravings
- Headaches
- Gastrointestinal problems (eg. constipation, diarrhoea, nausea)
- Changed sleeping patterns with unusual or strong dreams
- Cough
- Irritability, depression or anxiety
- Increase in appetite and possible weight gain
- Can be minimised or eliminated by pharmacotherapy.







For discussion

If during his attempt to quit smoking Peter presented to you with the following list of symptoms, which of them are likely to be due to nicotine withdrawal?

- Depressed mood
- Insomnia
- Sweating
- Difficulty concentrating
- Increased heart rate
- Increased appetite
- Restlessness.

How long do withdrawal symptoms last?







Case study: Peter

How would you assist Peter to quit?







Pharmacotherapy

- Currently available options: NRT and bupropion
- Not usually recommended for those who smoke <10 cigarettes/day
- Can double success rates.







Nicotine replacement therapy

- The aim of NRT is to replace nicotine from cigarettes without other harmful components of tobacco smoke
- Reduces withdrawal symptoms.







For discussion

What delivery methods of NRT are you aware of?







Nicotine transdermal patch

- Usually first choice, simple to use
- Can be combined with an intermittent form of NRT
- Initial recommended dosage:

Patient group	Initial dose	Duration
>10 cigarettes/day or weight >45 kg	21 mg/24 hour patch or 15 mg/16 hours	At least 8 weeks
<10 cigarettes/day or weight <45 kg or cardiovascular disease	14 mg/24 hour patch or 10 mg/16 hours	At least 8 weeks

 Most common adverse effects: skin irritation an sleep disturbance.







Inhaler

- Useful for patients who miss the 'hand to mouth' action of smoking
- Initial recommended dosage: 6—12 cartridges/day for 12 weeks followed by 3—6/day for 2 weeks and 1—3/day for 2 weeks
- Most common adverse effect: throat irritation.







Gum

- Useful for those who cannot tolerate patches or who require combination therapy
- Initial recommended dosage:

Patients who smoke <20 cigarettes/day	2 mg	Use one piece of gum/hour. Should be tapered over 3 months
Patients who smoke >20 cigarettes/day	4 mg	Use one piece of gum/hour. Should be tapered over 3 months

 Most common adverse effects: gastrointestinal disturbances, dyspepsia, nausea and hiccups, occasional headache if the gum is chewed too quickly, jaw pain and dental problems.







Lozenge

- Useful for patients who cannot use patches, need combination therapy or do not wish to use nicotine gum
- Initial recommended dosage:

Patients who smoke their first cigarette >30 minutes after waking	2 mg lozenge	One lozenge can be used every 1–2 hours to a maximum of 15 20 or 4mg lozenges/day
Patients who smoke their first cigarette within 30 minutes of waking	4 mg lozenge	One lozenge can be used every 1–2 hours to a maximum of 15 20 or 4mg lozenges/day

Most common adverse effects: gastric and throat irritation.







Microtabs

- Also known as sublingual tablet
- Useful for patients who cannot use patches or those needing combination therapy; may be particularly useful for mothers who are breastfeeding
- Initial recommended dosage:

Patients who smoke their first cigarette >30 minutes after waking	1 x 2 mg microtab	1–2 microtabs can be used every 1–2 hours to a maximum of 40 microtabs/day
Patients who smoke their first cigarette within 30 minutes of waking	2 x 2 mg microtabs	1–2 microtabs can be used every 1–2 hours to a maximum of 40 microtabs/day

 Most common adverse effects: mouth and throat irritation, gastrointestinal upset and cough.







Cut down and quit

Step	When	Goal
Step 1	0-6 weeks	Cut down to 50% of baseline cigarette consumption
Step 2	6 weeks to 6 months	Continue to cut down; stop completely by 6 months
Step 3	6–9 months	Stop smoking completely, continue NRT
Step 4	within 12 months	Stop using NRT by 12 months







Nicotine replacement therapy: cautions and contraindications

Contraindicated	Nonsmokers; those with sensitivity to nicotine; children aged less than 12 years
Use with caution under medical supervision in hospital	Dependent smokers with recent myocardial infarction, severe cardiac arrhythmias or with recent cerebrovascular accident
Use with care only when benefits outweigh risks	Patients who weigh <45 kg; patients with recent or planned angioplasty, bypass grafting or stenting; patients with unstable angina; pregnant or lactating women







Bupropion

- Non-nicotine oral therapy
- Unknown mechanism of action
- Helps to reduce withdrawal symptoms
- Recommended dose: 150 mg once per day for 3 days, increasing to 150 mg twice per day with an 8 hour interval between doses
- Main adverse effects: insomnia, headache, dry mouth, nausea, dizziness and anxiety
- Serious adverse events: rare incidences of seizures.







Bupropion: contraindications

Bupropion is contraindicated in the following patients:

- allergy to bupropion
- past or current seizures
- known central nervous system tumours
- patients undergoing abrupt withdrawal from alcohol or benzodiazepines
- current or previous history of bulimia or anorexia nervosa
- use of monoamine oxidase inhibitors within the past 14 days.







Other or future options

- Clonidine
- Nortryptiline
- Varenicline.







Case study: Peter

How would you advise Peter to quit?

Which of the following options are suitable forms of management for a nicotine dependent patient who is considering quitting?

- Cut down using Nicotine replacement therapy, then quit
- Hypnotherapy
- Commence NRT and cease smoking
- Acupuncture
- Commence bupropion then cease smoking
- In-patient withdrawal treatment.







Arrange

- Make follow up appointments (the first week is the most vulnerable time)
- Refer to Quitline
- Seek support from other sources (eg. social support patient's friends and family).







Case study: Peter

What other resources may be useful in helping Peter in his efforts to quit?







Case study: Peter

Outline the steps you would include in a Quit plan for Peter.







For discussion

Outline the steps you would take to help prevent relapse once Peter has quit.







Case study: Peter – follow up

- Reassess Peter's cardiovascular risk
- Review quitting progress and problems
- Assess pharmacotherapy use including adherence
- Discuss relapse prevention.







Case study: Meg

- Peter's sister, Meg, quit smoking during pregnancy
- How could you assist Meg in continuing as a nonsmoker?







Conclusion

- Smoking is a major contributor to the disease burden in Australia
- General practitioners have the opportunity to significantly lessen this burden by addressing the issue of smoking with their patients
- Using the 5As approach, providing appropriate support to patients depending on their 'stage of change', recommending suitable medications and referring to organisations, such as Quitline, will enable doctors to more effectively help their patients to quit smoking.





