Smoking is the largest single preventable cause of death and disease in Australia. No other single avoidable factor accounts for such a high proportion of deaths, hospital admissions or general practitioner consultations. Smoking is a major risk factor for a number of diseases and disabling conditions (Figure 1).

Life long smokers have a 50% chance of dying from a tobacco related disease, half of these deaths will occur in middle age (25–54 years). Approximately 22% of the population are smokers; of these, just over half are seriously thinking about quitting in the next six months and a similar number have made a quit attempt in the past 12 months. A strong case has been made to regard smoking as a chronic relapsing drug dependency.

**Why GPs?**

General practitioners can have a significant impact on assisting patients who smoke to quit. General practitioners have the:

- opportunity – 80% of Australians visit their GP at least once per year and, on average, make five visits in this time period
- credibility – patients see GPs as having a key and supportive role in smoking cessation and expect advice from them
- effectiveness – a range of systematic reviews have shown that brief, repeated, nonjudgmental advice by a primary care physician is effective in assisting patients who smoke to quit. The unsupported quit rate is approximately 3%; GPs can improve this 8-fold (up to 24%) by using a combination of the strategies listed below over several visits
- feasibility – brief advice is feasible and can take less than one minute
- efficiency – smoking cessation counselling is both cost effective and worthwhile and can be incorporated into the practice routine

**BACKGROUND** General practitioners have the opportunity, credibility and authority to provide smoking cessation advice and are effective in assisting smokers to quit. Despite their potential, GPs identify just over half the smokers in their practice and counsel approximately one-third to quit. Implementation of smoking cessation advice has not improved in the past 10 years despite the availability of evidence based guidelines. Effective smoking cessation advice should include both the 5As (Ask, Assess, Advise, Assist, Arrange) and the development of a supportive infrastructure within the practice setting.

**OBJECTIVE** This article outlines the rationale for GP involvement in assisting smokers to quit, advises how GPs can provide smoking cessation advice in less than a minute, the main barriers to quitting smoking, and the core activities in the 5As.

**DISCUSSION** General practitioner effectiveness in smoking cessation can be improved by adopting a systematic approach to identifying smoking status, more effective engagement of smokers by separating information from the ‘moral imperative’, use of brief motivational interviewing techniques and appropriate pharmacotherapy, and use of the QUIT line and other smoking cessation resources.

**IMPLEMENTATION** General practitioners can have a significant impact on assisting patients who smoke to quit. General practitioners have the:
How to provide effective smoking cessation advice in less than a minute

Tobacco smoke contains more than 4000 chemical compounds. Many of these agents are toxic and at least 43 can cause cancer. Tobacco is a known or probable cause of at least 25 diseases, including lung and other cancers, heart disease, stroke, emphysema and other chronic lung diseases. Tobacco is also a major cause of morbidity and disability. Smoking related diseases account for between 6 and 15% of all annual healthcare costs. (From: www.Treatobacco.net)

Reprinted with permission: GPs Assisting Smokers Program (GASP)

Figure 1. The health effects of smoking

Table 1. The decisional balance

<table>
<thead>
<tr>
<th></th>
<th>Likes</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quitting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental tobacco smoke
- Otitis media
- SIDS
- Congenital malformation, cleft lip/palate
- Respiratory infections
- Asthma
- Poor lung function
- Greater chance of becoming a smoker

What are the barriers?

System barriers
- Adhoc approach. Only half of patients are asked about their smoking and only a third of this group are counselled.
- Limited GP disposable time (on average, 30–60 seconds with a range of minus 2 hours to 5
minutes at best) to address smoking cessation affectively when it is not on the patient agenda.\textsuperscript{11,14}

- Lack of supportive infrastructure\textsuperscript{15} to assist GPs to:
  - identify ALL patients who smoke
  - determine interest in quitting
  - target advice to those most receptive
  - provide QUIT materials to complement advice to quit

- The limited awareness and use of referral options such as the QUIT line.\textsuperscript{15}

**Patient barriers**

- Smoking cessation is both complex and difficult\textsuperscript{1,16}
  - nicotine is more addictive than heroin\textsuperscript{17}
  - most patients make 5–8 quit attempts before they finally succeed
  - the unsupported quit rate success is approximately 3%\textsuperscript{1}
  - less than half of smokers ultimately succeed in quitting before they reach 60 years of age\textsuperscript{1}

- Cigarettes become an integral part of a smoker’s life making it difficult for smokers to imagine life without cigarettes\textsuperscript{16}

- Only half the smoking population consistently express an interest in quitting\textsuperscript{16}

- Reluctance to seek assistance even when interested in quitting\textsuperscript{16}

  - concern about being judged when they do seek help
  - a belief that they should be able to quit without help
  - seeking help is often seen as using a crutch or a sign of no willpower.\textsuperscript{16}

**GP barriers**

- Low yield from intervening\textsuperscript{1}

- Reluctance to upset patients due to patient sensitivity about smoking\textsuperscript{19}

- Perceived lack of patient motivation\textsuperscript{19}

- Lack of GPs’ time\textsuperscript{20}

- Lack of skills: only 50% of GPs believe they are effective in assisting smokers to quit\textsuperscript{19}

- Failure to use effective strategies (eg. pharmacotherapy, motivational interviewing, setting a quit date) or use of ineffective strategies (eg. nicotine fading, acupuncture).\textsuperscript{15}

**What works?**

Effective smoking cessation by GPs require two sets of interrelated activities:

1. Using effective smoking cessation strategies, eg. the 5As\textsuperscript{19}
2. Embedding smoking cessation within a supportive practice infrastructure.\textsuperscript{21-23}

---

**Table 2. Symptoms of quitting**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Effect on body</th>
<th>Coping strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craving</td>
<td>Intense desire to smoke declines over 4 weeks</td>
<td>Consider pharmacotherapy, brief distractions, eg. 4Ds: drink water, deep breathe, do something else, delay urge to smoke. Ring the Quitline 131 848</td>
</tr>
<tr>
<td>Coughing</td>
<td>Worse initially body clearing respiratory tract</td>
<td>Settles after first 2-3 weeks</td>
</tr>
<tr>
<td>Hunger</td>
<td>Possibly intense, may persist</td>
<td>Start regular exercise program. Eat sensibly, but no serious dieting until a less stressful period. Moderate alcohol consumption</td>
</tr>
<tr>
<td>Bowel upsets</td>
<td>Possible constipation or diarrhea</td>
<td>Settles over 2-3 weeks</td>
</tr>
<tr>
<td>Sleep disturbances</td>
<td>Sleep patterns altered, insomnia or tiredness</td>
<td>Settles over 2–4 weeks</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Caused by improved tissue oxygenation</td>
<td>Passes spontaneously</td>
</tr>
<tr>
<td>Mood alteration</td>
<td>Reflections of grief and (mainly) nicotine withdrawal on neurotransmitters</td>
<td>Consider pharmacotherapy. An old support system has been lost, find new ways to handle stress, eg. talk to a friend. Transient mood, returns to normal after 4 weeks.</td>
</tr>
</tbody>
</table>

Reprinted with permission: GASP
The 5As

The core elements of effective brief interventions by GPs (and other primary health care professionals) are captured in the 5As.

Ask

- Ask about smoking status (and interest in quitting) on ALL patients who attend the practice by handing out a case note sticker (or brief prevention questionnaire) and asking the patient to complete it. (A brief prevention questionnaire is provided as an appendix in the RACGP ‘Green book’ www.racgp.org.au/publications)
- Document tobacco use in the case notes (or electronic record) in every patient.

Assess

- The smoker’s interest in quitting, eg. ‘How do you feel about your smoking? How important is quitting for you right now?’
- Their motivation to quit, eg. ‘On a scale of 1–10 where 1 = not interested in quitting and 10 = very interested, where would you place yourself right now?’

If patients rate themselves low, eg. 3 or 4 ask: ‘What would need to happen to make this a score of 9 or 10?’ If they rate themselves high, eg. score 8–9 ask: ‘What makes this score 8–9 rather than 3–4?’

The decisional balance can be used to better understand their motivation (Table 1). Exploring both the likes and dislikes about smoking and quit-

Table 3. Pharmacotherapy for smoking cessation – dosing guidelines*

<table>
<thead>
<tr>
<th>Type</th>
<th>Low dependence 10–20 cigarettes per day</th>
<th>Moderate dependence 20–30 cigarettes per day</th>
<th>High dependence Over 30 cigarettes per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine patch</td>
<td>Nicabate 14 mg or Nicorette 10 mg (aim to cease within 12 weeks)</td>
<td>Nicabate 21 mg or Nicorette 15 mg (aim to cease within 12 weeks)</td>
<td>Nicabate 21 mg or Nicorette 15 mg (aim to cease within 12 weeks)</td>
</tr>
<tr>
<td>Gum</td>
<td>Not usually recommended for low dependent smokers</td>
<td>8–12 pieces of 2 mg gum daily, taper after 4–8 weeks</td>
<td>6–10 pieces of 4 mg daily, 2 mg after 4–8 weeks, taper for further 4 weeks</td>
</tr>
<tr>
<td>Inhaler</td>
<td>6–12 cartridges inhaled daily for 8 weeks. Taper over further 4 weeks to 0</td>
<td>Nicabate CQ 2 mg lozenge (if time to first cigarette is more than 30 minutes)</td>
<td>Nicabate CQ 4 mg lozenge (if time to first cigarette is less than 30 minutes)</td>
</tr>
<tr>
<td>Lozenge</td>
<td>Nicabate CQ 2 mg lozenge</td>
<td>Nicabate CQ 4 mg lozenge</td>
<td></td>
</tr>
<tr>
<td>Zyban</td>
<td>150 mg daily for 3 days, increasing to bd on day 4. Set quit date in first 14 days of treatment. Continue treatment for at least 7 weeks</td>
<td></td>
<td>Week 1–6: 1 lozenge every 1–2 hours Week 7–9: 1 lozenge every 2–4 hours Week 10–12: 1 lozenge every 4–8 hours</td>
</tr>
</tbody>
</table>

*Refer to respective PI for side effects, contraindications. Doses are guidelines only

Coordinate your efforts

Develop a practice plan for smoking cessation. Involve the whole practice but nominate one member of staff to take overall responsibility. Set clear goals and allocate tasks and responsibilities for the implementation of the key elements of the 5As.

Receptive

Ensure that your plan is consistent/congruent with your professional and practice goals. In order to increase receptivity ensure that there are adequate rewards/incentives for the effort, that your plan is realistic (achievable, appropriate time-frame, tailored) and that feedback/review is included as an integral part of the process.

Effective

There is very strong evidence that the 5As framework is effective and will result in more of your patients who smoke successfully quitting. Monitoring your effectiveness is essential to determine if you are having an impact. Assess initially how you are doing. Try out a strategy, and then remeasure to monitor your progress.

Ability

Be realistic in developing your plan. Is now the right time? Do GPs and practice staff have the capacity to take on this process (ie the knowledge, attitudes, skills, time and resources)? Has a supportive organisational infrastructure been developed? If not, can the gaps be filled?

Targeted

Target your plan to the specific needs of your practice. Identify and work through potential barriers.

Efficient

If your plan is to become part of practice routine all staff will need to believe and see that it is worthwhile and ‘do-able’/efficient for all concerned.

Figure 2. The CREATE framework

Reprinted with permission: GASP

Reprinted from Australian Family Physician Vol. 31, No. 12, December 2002
Meeting gives the doctor a snapshot of the patient’s likelihood of changing.

- Their confidence to quit on a scale of 1–10 (follow ‘motivation scale’ process)²⁴
- Their dependence on nicotine. This can be achieved by asking two questions from the Fagerstrom Nicotine Dependence Questionnaire.²⁵

‘How many cigarettes do you smoke a day? How long after you wake do you have your first cigarette?’ Those smoking more than 15 cigarettes a day and having their first cigarette within half an hour of waking are likely to be dependent on nicotine (approximately two-thirds of all smokers). This group are candidates for pharmacotherapy.

- Previous quit attempts. ‘What is the longest time you managed to quit? What helped you at this time? What tipped you back?’
- High risk situations, eg. ‘Which cigarette would be the hardest to give up? What situations are you most likely to smoke?’

Advise

- Provide brief, clear, nonjudgmental advice to quit. Smokers are sensitive about their habit and react to being cajoled or ‘told’ to quit. Provide the information they need without the ‘moral imperative’ that they must do it. Remember the adolescent myth: adolescents usually do y when asked to do x. This myth continues past the age of 20 years. Think about the last time your partner really insisted that you do something. What did you do? While you probably complied, what you thought at the time was probably quite different!
- Set a quit date
- Give practical advice about coping with withdrawal symptoms (Table 2)
- Highlight the benefits of quitting (see Patient education). Smokers often focus on the negative aspects of quitting, eg. withdrawal symptoms (craving, irritability, sleep disturbance), initial worsening cough, weight gain. It is important to provide some balance. Many of the positive aspects are not visible, eg. improved arterial circulation, declining risk of a heart attack or lung cancer, improved wound healing. Give them the Patient education hand-out to highlight the many advantages that accrue with continuing abstinence.

Assist

- Offer self help material, eg. quit book or QUIT line card
- Assist in setting a quit date and helping the patient develop a plan
- Explore potential barriers and difficulties and brainstorm solutions. Address the three areas that undermine success: withdrawal symptoms, the habit and dealing with negative emotions
- Review the need for pharmacotherapy and discuss type, common side effects and dosage. Remember that most NRT products deliver less nicotine than cigarettes (Table 3).

Arrange

- Referral to a QUIT line 131 848
- Support. If the person’s partner is also a smoker then a quit attempt by both at the same time doubles the success rate for both
- A follow up appointment. The relapse rate is highest in the first seven days. Offering a follow up appointment helps shore up the patient’s resolve to get over this immediate period. Use the follow up appointment to adjust pharmacotherapy or deal with high risk situations.

Developing a supportive organisational infrastructure

While all practices have an organised billing system to ensure they get paid, few translate this systematic approach to ensuring the delivery of high quality clinical care.²¹,²²,²⁶ The RACGP²³ have assisted GPs in this area with the publication of the evidence based monograph Putting Prevention into Practice (also known as the ‘Green book’). The CREATE framework operationalises the core tasks and activities that are required for effective implementation of preventive activities, including smoking cessation (Figure 2).²⁷,²⁸

Conclusion

General practitioners can provide effective advice to smokers in less than one minute in the general practice setting. The 5As encapsulate the core activities necessary for smoking cessation, while the RACGP ‘Green book’ and the CREATE framework provide the supportive environment to make smoking cessation possible.
How to provide effective smoking cessation advice in less than a minute

Acknowledgments
Tania Shelby-James (Senior Project Officer with GASP: GPs Assisting Smokers Program) and David Edwards (Senior Project Officer, QUIT SA) helped to set up the GASP Consortium and assisted with the development of the GASP materials. The GASP consortium included representatives from a range of groups (RACGP, AMA, Flinders and Adelaide Universities, QUIT SA, Anti Cancer Council, Asthma Foundation, National Heart Foundation, SA Divisions Inc, Rural Doctors Association and DATIS) with an interest in assisting clinicians to be more effective in smoking cessation. Many of the practical suggestions outlined in this article emerged from this group. The GP Reference Group who reviewed earlier versions of the material are: Dr Cathy Sanders, Dr Michael Taylor, Dr James Asimakopulos, Dr Bob Reissen, Dr Georgina Moore, Dr Peter Morton and Dr Deborah Kerrigan.

Conflict of interest: none declared.

Further resources
www.quitsa.org.au

SUMMARY OF IMPORTANT POINTS

- Smoking cessation should include the 5As (Ask, Assess, Advise, Assist, Arrange).
- GPs have the opportunity and credibility to assist and support patients who smoke to quit.
- A supportive practice infrastructure is necessary for GPs to assist patients who smoke to quit.
- The CREATE framework operationalises the core tasks and activities required for effective implementation of preventive activities.
- Highlight to the patient the benefits of quitting (Patient education hand-out).

References


REPRINT REQUESTS OR FURTHER INFORMATION ON GASP

John Litt
Department of Emergency and Primary Care
Noarlunga Hospital
Noarlunga, SA 5168
Email: jlitt@flinders.edu.au