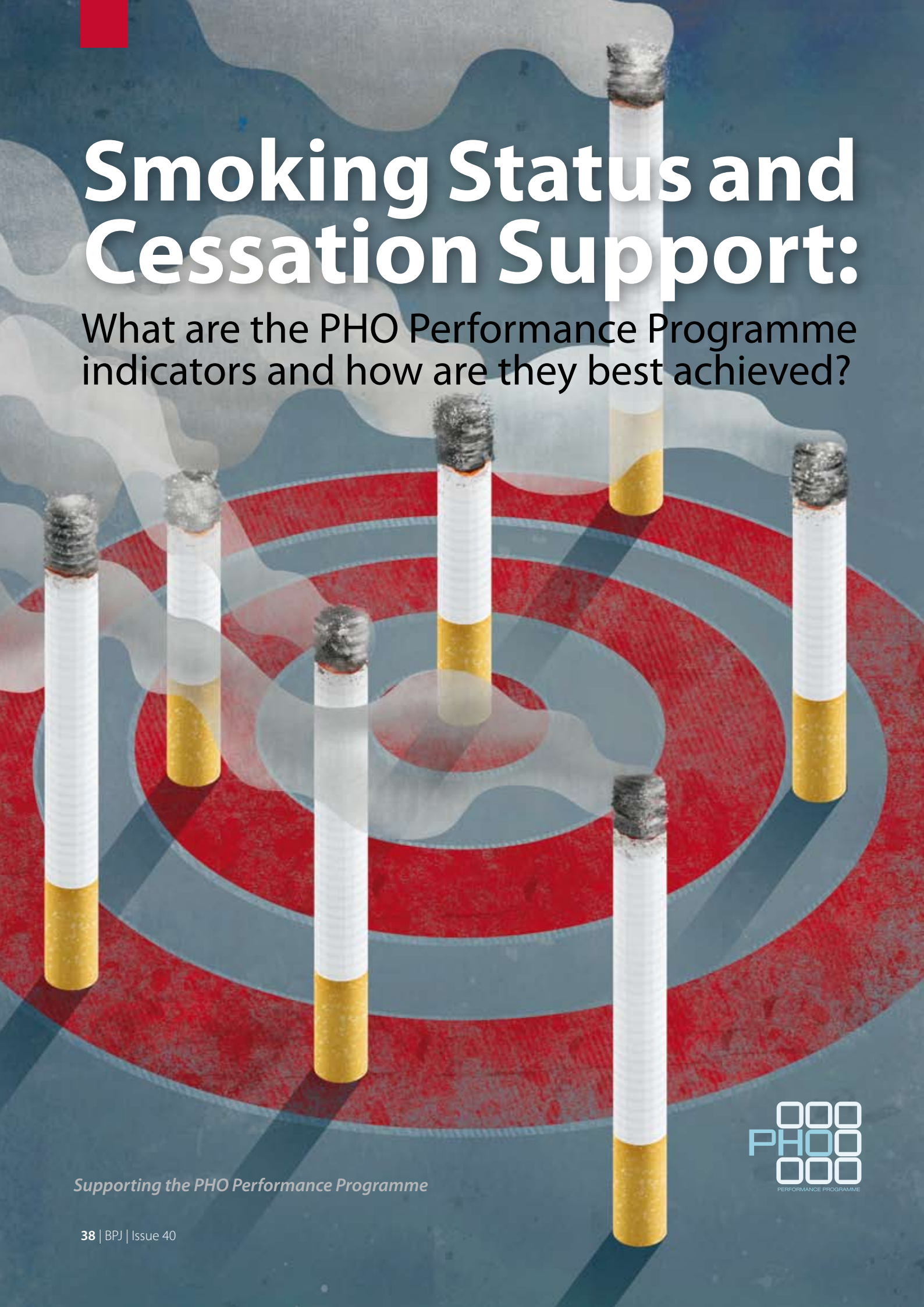
Smoking Status and Cessation Support:

What are the PHO Performance Programme indicators and how are they best achieved?



Supporting the PHO Performance Programme

Programme objectives

The PHO Performance Programme has now been running for five years. It was established to pursue two primary objectives:

1. To encourage and reward improved performance by PHOs in line with evidence based guidelines
2. To measure and reward progress in reducing health inequalities by including a focus on high need populations

PHOs receive performance based payments which are linked to key performance indicators. These indicators are reviewed annually and adjusted to take into account factors which may vary from region to region, such as age and ethnicity. The indicators which have been funded since 1 July are shown in Table 1.

Smoking status recorded

The purpose of the smoking status indicator is to encourage health providers to ask about and record the smoking status of their patients.[1]

Targets and funding

The PHO Performance Indicator and target is: For at least 90% of the number of enrolled people aged 15 to 74 years to have had their smoking status recorded.[1]

Recording of smoking status accounts for 7% of a PHO's performance payment, with 5% allocated for achieving the target in the high needs population,* and 2% for achieving the target amongst the rest of the population.[1]

* High needs is defined as Māori and Pacific peoples and people living in New Zealand deprivation decile 9 or 10 socioeconomic areas (most deprived).

Table 1: Funded PHO Performance Indicators with annual weighting for the period commencing 1 July, 2011[1]

Chronic conditions	Cervical cancer screening	9%
	Breast cancer screening	6%
	Ischaemic cardiovascular disease detection	9%
	Cardiovascular disease risk assessment	20%
	Diabetes detection	9%
	Diabetes follow-up after detection	9%
	Smoking status	**7%**
	Smoking advice and/or cessation support	**13%**
Infectious disease	Influenza vaccine in people aged over 65 years	9%
	Age appropriate vaccinations for children aged two years	9%

How is it calculated?

The number of people enrolled in the PHO who have ever had a smoking status recorded (numerator) is divided by the number of people enrolled aged 15 to 74 years within the PHO (denominator).

How should smoking status be recorded?

In order for smoking status records to be retrieved from the Practice Management System (PMS) an appropriate Read code needs to be entered (Table 2).

How to achieve the target

The recording of smoking status can be achieved simply. For this reason, it is important that every practice meets the performance target in order for the PHO to receive maximum funding. A simple routine of checking and if necessary recording or updating the patient's current smoking status, at the start of every consultation is all that is required.

Table 2: Read codes for smoking status[2]

Category	Read code
Never smoked tobacco	1371
Current smoker status	1372–137S (excluding 137D, 137E and 137I)
Tobacco dependence	E251.
Smoking history	ZPSA.

Smoking advice and cessation support

This indicator was funded in July 2011 for the purpose of prompting providers to give brief advice to stop smoking to all current smokers, and to provide evidence-based cessation support. There is a natural progression between the two smoking indicators. Once smoking status has been recorded, where applicable, a discussion can be initiated on smoking behaviour and smoking cessation following the ABC format (see below).

Targets and funding

The PHO Performance Indicator and target is: For at least 90% of enrolled patients, who are current smokers and have been seen in general practice, to have been given brief advice and/or provided with cessation support in the last 12 months.[1]

A minimum threshold applies

The smoking advice and cessation support indicator is categorised as phase two. Once 70% of the eligible population has had their smoking status coded, funding is then made available to the PHO.

When a PHO is eligible for funding the weighting is 13%, with 9% allocated for high needs and 4% for the rest of the population.

What qualifies as brief advice and cessation support?

Brief advice: Any documentation that a patient who currently smokes was advised to stop smoking. In many cases this will take the form of consultation notes relating to a smokers willingness to quit. If any offer of cessation support – whether it was accepted or refused - is documented then it is considered brief advice to quit was also given.

Cessation support: Any referral made to a smoking cessation support programme, prescribing of nicotine replacement therapy (NRT) and/or smoking cessation

pharmacotherapy, or provision of behavioural support either face to face or via the telephone.

How is it calculated?

The number of enrolled patients with a smoking status of current smoker recorded within the last 15 months, that have been given smoking advice and/or cessation support in the last 12 months (numerator) is divided by the denominator. The denominator is the number of enrolled people in the PHO who have had a smoking status of current smoker in the last 15 months, adjusted to account for the number of people aged 15 to 74 years expected to have presented to general practice in the last 12 months.

How should brief advice and cessation support be recorded?

To allow information to be extracted from a PMS an appropriate Read code must be entered for every patient who is given smoking advice and offered cessation support (Table 3).

How to achieve to the targets with the ABC

New Zealand guidelines recommend that smoking cessation advice should be strongly and repeatedly recommended to all people who smoke.[3] The ABC is an evidence-based, best practice smoking cessation intervention promoted for use in general practice. The aim is to gather information in order to provide advice and support to the patient.

A = **A**sk the patient about their smoking

B = Give **b**rief advice to quit

C = Offer evidence based **c**essation support

Health professionals are encouraged to use their judgement when implementing the ABC. Strategies that are personally relevant and emphasise the benefits to the patient and their family are more likely to be effective.

Table 3: Read codes included for brief advice to stop smoking and smoking cessation support or referral[2]

Brief advice to stop smoking	Read code
Health education – smoking	6791.00
Brief cessation advice given	ZPSB10
Patient refused cessation support	ZPSC90
Smoking cessation support or referral	
Referral to cessation support	ZPSC10*
Prescribed cessation medication	ZPSC20*
Provided cessation behavioural support	ZPSC30*

* If a brief advice to stop smoking Read code is not entered, however, a smoking cessation support or referral Read code is, then, it will automatically be assumed that brief advice to stop smoking has been given.

The benefits of participation

The proportion of smokers in New Zealand declined from 24.4% in 2006 to 21.8% in 2009.[4] In order to continue this trend it is important that primary care continues to push the "quit smoking" message. It is known that advice from a health professional increases the likelihood of a person quitting smoking.[5] In addition, providing appropriate access to resources such as nicotine replacement therapy (NRT), pharmacotherapy and specialist counselling services has been shown to further increase the chances of success of any quit attempt.[5]

A focus on smoking cessation

Case Study 1

A 20 year old female presents for a routine visit. The patient has a two-year-old child and she mentions that she is pregnant again. As part of a general health assessment, you ask her about her smoking status, she confirms she still smokes and her flatmates smoke. She is very reluctant to try to quit as she believes that smoking is safer for her baby than taking "chemicals" like NRT.

The risks of smoking while pregnant far outweigh any risk that NRT treatment presents. The adverse effects of smoking while pregnant include low birth weight, pre-term delivery, childhood respiratory disease and attention deficit hyperactivity disorder. In particular, children exposed to cigarette smoke in the womb are at much higher risk from sudden infant death syndrome (SIDS). Compared to smoking, NRT results in the foetus being exposed to less nicotine.

It is recommended that NRT products such as gum, lozenges, sublingual tablets and inhalers are used in preference to patches, as the amount of nicotine delivered is less.[6] NRT is available at a subsidised rate to the patient of $3 for an eight week supply through Quitline, a Quit Card provider or on prescription from a General Practitioner.

There is insufficient evidence to recommend the use of nortriptyline, bupropion or varenicline to women who are pregnant.[6]

It is important that this patient is given the opportunity to benefit from education, support, cessation strategies and NRT at a time when her foetus is particularly vulnerable to the harmful effects of smoking. Highlighting the benefits that her and her family would gain by quitting may motivate the mother to quit. These benefits include:

- Presenting a positive role model to her children of a parent who does not smoke will reduce the chances that her children will smoke
- Improving the health outcomes for her baby through reduced risk of still birth, postnatal complications and SIDS
- Improving the health of her children through reduced risk of asthma and bronchial complications
- Increasing the family's ability to save money
- Improving the patient's health
- Reducing the risk of dying early

It can often be worthwhile reminding patients that although it is nicotine which causes the addiction, it is the >5000 compounds that are inhaled during smoking that damages the body.[7] NRT in comparison is relatively harmless.

Case Study 2

A 56 year old Māori male patient has recently had a heart attack (15 days ago). He has been discharged from hospital and has not smoked since. The patient is now highly motivated to stop smoking completely. You discuss the range of treatment options available to the patient.

Often highly motivated people will want to quit by "going cold turkey". It is important that these people understand that this is one of a number of options available – it is also the least likely to succeed.[6] A good idea is to discuss the potential for a relapse with people considering quitting by "cold-turkey". One possibility for a person who wishes to avoid medication, is to prescribe NRT and to advise use only if they are strongly tempted to smoke again.

NRT can be safely used by almost anyone who wants to quit smoking. NRT approximately doubles a person's likelihood of quitting and is an appropriate cessation aid for this patient.[6] There is no evidence that one NRT product is more effective than any other and patient preference should be the primary consideration in treatment choice. However, heavier smokers do benefit from a higher steady-state dose (e.g. 24 hour 21 mg patches and 4 mg gum). Nicotine, by itself, is not a risk factor for cardiovascular disease (CVD) or acute cardiovascular events. Oral NRT is the preferred treatment option in this circumstance as nicotine levels can be reduced more rapidly if complications arise.[8]

Both bupropion and varenicline can be safely prescribed following a serious cardiovascular event. The possible adverse effects of these medicines need to be balanced against the risk of the patient relapsing into smoking. Uncommon cardiovascular adverse effects of varenicline include atrial fibrillation and palpitations.[9] The possible adverse cardiovascular effects of bupropion include; tachycardia, palpitations, vasodilation, postural hypotension, hypertension (severe in some case), flushing and syncope.[9]

Varenicline is available under Special Authority and in order to qualify, amongst other criteria, patients must first have made two or more unsuccessful quit attempts using NRT, or a failed attempt with bupropion or nortriptyline. Patients considering varenicline, particularly those with a history of mental illness, need to be advised of the possibility of personality and mood disorders developing, including suicidal ideation (see Case study 3).

Nortriptyline is contraindicated during the acute recovery period following myocardial infarction. Known adverse effects of nortriptyline include; hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block and stroke.[10]

The assistance of cessation support services such as Quitline, also increase the chances of becoming smoke-free. When cessation support is combined with NRT a person is four to five times more likely to quit.[6] Smoking cessation services available include:

- Quitline Ph. 0800 778 778 six days a week. For further information see: **www.quit.org.nz**
- Aukati Kai Paipa a service provided by Māori health providers for Māori who smoke. For further information see: **www.tehotumanawa.org.nz**
- DHBs and practices which have implemented their own cessation services

Case Study 3

A 53 year old man with depression who smokes 30 cigarettes a day is currently taking fluoxetine and attending counselling sessions. The patient is now motivated to make further changes in his life.

New Zealand guidelines report that quitting smoking does not worsen a mental health disorder, although close monitoring of a patient's mental health status is advised whenever behavioural changes are undertaken.[5] Given that the patient appears motivated, his depression is likely to be well controlled and counselling sessions are likely to reduce the impact his quit attempt might have on his depression. However, it would be advisable to ask about the frequency of counselling and confirm that the patient will also be supported by family and friends.

Smoking is known to induce some liver enzymes (e.g. CYP 1A2). When people stop smoking, some medicines are

metabolised more slowly and dosages may need to be reduced. Medicines that may be metabolised at different rates when a person quits smoking include; clozapine, olanzapine, chlorpromazine, imipramine and haloperidol.

For an extensive list of medicines affected by smoking (or cessation) see Appendix 9 of the New Zealand smoking cessation guidelines.[6]

The rate of smoking among people with mental health disorders is higher than the rest of the population. This group also appear to benefit from more intensive cessation interventions such as multi-session support.[6]

NRT can be safely used to assist people who have a history of mental illness to quit smoking, and in general, should be considered first line treatment for this patient group.

Caution is advised when prescribing nortriptyline, bupropion or varenicline to patients with a history of mental illness due to the potential effect on the underlying condition, adverse effects and possible interactions with other medicines. N.B. in the present scenario, fluoxetine does not have any clinically significant interaction with smoking cessation medicines.

Nortriptyline is contraindicated in patients taking other tricyclic antidepressants or monoamine oxidase inhibitors (MAOI), due to an increased risk of serotonin syndrome.[10] Bupropion is contraindicated in patients taking MAOIs and a minimum of 14 days needs to elapse between discontinuation of a MAOI and the beginning of bupropion treatment.[11] Bupropion and to a lesser extent nortriptyline may cause adverse effects in patients with a low seizure threshold.[11]

Varenicline has been associated with increased suicidal ideation. Patients taking this medicine (and their families), must be told of the need to monitor for serious changes in thoughts or behaviour, including; anxiety, psychosis, mood swings, agitation, aggression, depression and suicidal ideation. Further studies are required to understand the effect of varenicline in patients with serious psychiatric illnesses such as schizophrenia, bipolar disorder and major depressive disorder.[9]

For further information see “Smoking cessation – pharmacological therapy”, BPJ 20 (Apr, 2009).

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"The capacity to blunder slightly is the real marvel of DNA. Without this special attribute, we would still be anaerobic bacteria and there would be no music." — Lewis Thomas

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