Welcome to our CPD module series for community pharmacy technicians. Written in conjunction with the Pharmacy Magazine CPD series, it will mirror the magazine's programme throughout the year. The series has been designed for you to use as part of your continuing professional development. Reflection exercises have been included to help start you off in the CPD learning cycle.

**Contributing author:** Andrea Tarr, BPharm, MSc, MRPharmS, clinical and medical writer

Tobacco harm reduction

Smoking remains the biggest cause of preventable illness and early death in the UK. One in five adults in the UK (about 10 million people) are smokers and second-hand exposure to smoke in the home affects an estimated five million children under the age of 16. Unemployed people (i.e. those not working but seeking work) are around twice as likely to smoke as those who are either in employment or economically inactive (e.g. students or retired people). Regions in the north of England and Scotland have the highest proportions of smokers in the UK.

In the 50 or so years since a causal link between lung cancer and smoking was first established, there has been a decrease in smoking prevalence. This has been achieved through a combination of tobacco control measures and the development of stop smoking services and treatments for smokers who want to quit. About 67 per cent of people who smoke say they would like to stop.

In the year from April 2013 to March 2014, around half a million people had set a quit date through the NHS Stop Smoking Service in England and around half had successfully quit at a four-week follow-up, mainly with the use of smoking cessation therapies. However, the number of people giving up smoking has been gradually falling in recent years and this has prompted the introduction of harm reduction approaches.

What is meant by tobacco harm reduction?

Although nicotine itself is not altogether harmless (it is addictive, has cardiovascular effects and can cause minor effects such as throat, nose and skin irritation, depending on the method of administration), it is tobacco that causes the major harm associated with smoking.

Tobacco harm reduction means reducing the illnesses and death caused by smoking tobacco among people who smoke and those around them, but recognising that people may not be able, or want, to stop using nicotine completely. People who smoke can reduce the harm from tobacco by stopping smoking altogether, cutting down before quitting, smoking less, or abstaining from smoking temporarily. These changes in behaviour might involve completely or partially substituting the nicotine from smoking with nicotine from less hazardous sources that do not contain tobacco.

In 2013, the National Institute for Health and Care Excellence (NICE) published guidance on harm reduction approaches to smoking. In the guidance, NICE recommends the wider use of licensed nicotine-containing products for smokers who struggle to quit.

The guidance also outlines how healthcare professionals should help smokers who find it difficult to give up. The recommendations outlined in the NICE guidance on harm reduction are designed to help people who:

- May not be able (or do not want) to stop smoking in one step
- Want to stop smoking, without necessarily giving up nicotine
- May not be ready to stop smoking, but want to reduce the amount they smoke.

Harm reduction approaches

There are several approaches to harm reduction:

**Stopping smoking**

Stopping smoking and using one or more licensed nicotine-containing products as long as needed to prevent relapse.

**Cutting down before stopping smoking (cutting down to quit)**

- With the help of one or more...
**Smoking causes a range of diseases and conditions, including chronic obstructive pulmonary disease and cardiovascular disease. Most health problems are caused by other components in tobacco smoke, rather than nicotine. Smoking is highly addictive largely because it delivers nicotine very quickly to the brain and this makes stopping smoking difficult.**

**Nicotine levels in licensed nicotine-containing products are much lower than in tobacco, and the way these products deliver nicotine makes them less addictive than smoking.**

**Licensed nicotine-containing products are an effective way of reducing the harm from tobacco for both the person smoking and those around them.**

**It is safer to use licensed nicotine-containing products than to smoke.**

**Licensed nicotine replacement therapy (NRT) products have been shown in trials to be safe to use for at least five years.**

**There is reason to believe that lifetime use of licensed nicotine-containing products will be considerably less harmful than smoking.**

**There is little direct evidence available on the effectiveness, quality and efficacy of nicotine-containing products that are not regulated by the MHRA (e.g. e-cigarettes). However, they are expected to be less harmful than tobacco.**

**key points about reducing harm from smoking**

- Smoking causes a range of diseases and conditions, including chronic obstructive pulmonary disease and cardiovascular disease.
- Most health problems are caused by other components in tobacco smoke, rather than nicotine.
- Smoking is highly addictive largely because it delivers nicotine very quickly to the brain and this makes stopping smoking difficult.
- Nicotine levels in licensed nicotine-containing products are much lower than in tobacco, and the way these products deliver nicotine makes them less addictive than smoking.
- Licensed nicotine-containing products are an effective way of reducing the harm from tobacco for both the person smoking and those around them.
- It is safer to use licensed nicotine-containing products than to smoke.
- Licensed nicotine replacement therapy (NRT) products have been shown in trials to be safe to use for at least five years.
- There is reason to believe that lifetime use of licensed nicotine-containing products will be considerably less harmful than smoking.
- There is little direct evidence available on the effectiveness, quality and efficacy of nicotine-containing products that are not regulated by the MHRA (e.g. e-cigarettes). However, they are expected to be less harmful than tobacco.

**Smoking reduction**

- **With the help of one or more licensed nicotine-containing products for as long as needed to prevent relapse.**
- **Without using licensed nicotine-containing products.**

**Temporary abstinence from smoking**

- **With the help of one or more licensed nicotine-containing products.**
- **Without using licensed nicotine-containing products.**

In their daily practice, pharmacies should continue to identify people who smoke, advise them to stop smoking and explain that stopping in one step is the best approach. However, if a person indicates that they are unable to do so, do not want to, or are not ready to stop in one step, they can be asked if they would consider a harm reduction approach.

**Advising on licensed NCPs**

Licensed nicotine-containing products (NCPs) are defined as any product with a marketing authorisation for use as a smoking cessation aid for and harm reduction. The use of licensed NCPs is a key part of tobacco harm reduction approaches. People taking a harm reduction approach should be advised that:

- Licensed NCPs are a safe and effective way of reducing the amount they smoke.
- Licensed NCPs can be used as a complete or partial substitute for tobacco, either in the short or long term.
- It is better to use these products and reduce the amount smoked than to continue smoking at their current level.
- One product or a combination of different products can be used. For example, a fast-acting product such as a lozenge will deal with immediate cravings and a longer-acting product like a nicotine patch will give a steadier supply of nicotine.
- If possible, each cigarette should be replaced with a licensed NCP (e.g. a lozenge or a patch). Ideally, this should be used before the usual time they would have smoked the cigarette, to allow for the slower nicotine release from the product.
- Licensed NCPs can be used for as long as they help to reduce the desire to smoke and for the long term if necessary to prevent relapse.
- Some NCPs, such as e-cigarettes, are not regulated, so their effectiveness, safety and quality cannot be assured. However, you can advise that these products are likely to be less harmful than cigarettes.

**When counselling patients, explain how to use licensed NCPs correctly and ensure they know how to achieve a sufficiently high dose to control cravings, prevent compensatory smoking and achieve their goals on stopping or reducing the amount they smoke.**

**E-cigarettes**

Use of e-cigarettes (known as “vaping”) is becoming increasingly popular, with an estimated one to two million users in the UK. E-cigarettes are also known as vapourisers or electronic nicotine delivery systems, and there are three main types:

1. Disposable products (non-rechargeable)
2. Electronic cigarette kits that are rechargeable and have replaceable, pre-filled cartridges
3. Electronic cigarettes that are rechargeable and have a tank or reservoir that has to be filled with liquid nicotine.

E-cigarettes are targeted at adult smokers as a cheaper and healthier alternative to smoking. Although they are not marketed as smoking cessation aids (as this would make them medicinal by function and require marketing authorisation), people do use them to support a quit or cut-down attempt. So far, there is little formal evidence that they are effective in helping with smoking cessation and we do not know about their long-term safety.

Currently, electronic cigarettes are only covered by consumer product regulation and there is no standardisation of products. In May 2016, the EU Tobacco Products Directive comes into effect in member states. Electronic cigarettes containing up to a certain concentration of nicotine will come under the Directive, which will require products on sale to conform to certain standards (relating to ingredient purity, dose delivery, child-proof packaging, etc.).

For products containing higher levels of nicotine, manufacturers and importers will have to decide to opt into medicines regulation and require authorisation by the MHRA as over-the-counter medicines.

There are several advantages associated with the products becoming medicines that might be attractive to companies (e.g. the ability to make health claims, the potential for products to be prescribed). In the meantime, the MHRA is encouraging companies to obtain marketing authorisation.

So far, unlicensed e-cigarettes have no formal role in tobacco harm reduction approaches. That said, the NICE guidance states that even though people should be told that e-cigarettes are not regulated by the MHRA and so their effectiveness, safety and quality cannot be assured, they should be advised that these products are likely to be less harmful than cigarettes.

Nonetheless, the message should be that licensed NCPs are an effective way of reducing tobacco harm and should be the product used in any harm reduction approach.

**Record your learning**

Once you have read this article, use the following CPD questions to help you reflect on what you have learned and how it might affect your everyday work.

**Remember to record your learning on the GPhC website if you are registered (www.uptodate.org.uk). Otherwise, it is good practice to record it in your ongoing learning and development folder.**

- What did I learn that was new? (Evaluate)
- How have I put this into practice? (Provide examples of how learning has been applied.) (Evaluate)
- Do I need to learn anything else in this area? (Reflect)

**Next month: we focus on the management of arthritis.**