Assessing smoking cessation performance in NHS Stop Smoking Services: The Russell Standard (Clinical)

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Background

Variability in the criteria used for assessing throughput and success rates of the Stop Smoking Services (SSSs) is making it difficult to determine what constitutes best practice. Claims of large numbers of successful quitters or very high quit rates that are sometimes based on a very inclusive interpretation of the Department of Health monitoring guidance make it difficult for services to defend their use of more rigorous criteria. In particular, some SSSs are being put under pressure to count as successes, smokers who have not actually been treated by the specialist service.

Use of this document

A version of the standard was circulated to the SSSs and comments received. This version of the document has attempted to take on board as many of the comments as possible.

This document is promulgated via the network of English Stop Smoking Services. Services that subscribe to the criteria can cite this standard as the basis for their Department of Health monitoring returns and internal quality reviews. It can also provide a basis for outcome assessment in research involving the clinical services.

It is important to note that this is not a document about service delivery but only assessment. The standard model of service delivery, based on the Thorax guidelines remains multiple sessions, ideally face to face (but by telephone if necessary), either in groups or individually, extending for at least 4 weeks past a designated quit date and involving use of nicotine replacement therapy and/or bupropion, delivered by staff trained at least according to the HDA training standard who are themselves, or are supervised and supported by, experienced specialists.

Aims

The aim of the document is to set out an English national standard for criteria for throughput and success rates that will enable meaningful comparisons between the services. This set of criteria and the methods used to collect the data are referred to as the ‘Russell Standard (Clinical)’ because they represent a clinical version of the Russell Standard for outcome assessment in clinical trials of smoking cessation treatments[1].

The criteria

1. A 'treated smoker' (TS) is a smoker who undergoes at least one treatment session on or prior to the quit date and sets a firm quit date. Smokers who attend an assessment session but fail to attend thereafter would not be counted. Neither are smokers who have already stopped smoking at the time they first come to the attention of the services (but see note below about inpatients and pregnant smokers).
2. A smoker is counted as a 'self-reported 4-week quitter' (SR4WQ) if s/he is a 'treated smoker', is assessed (face to face, by postal questionnaire or by telephone) 4 weeks after the designated quit date (minus 3 days or plus 14 days) and declares that s/he has not smoked even a single puff on a cigarette in the past 2 weeks.

3. A smoker is counted as a 'CO-verified 4-week quitter' (4WQ) if s/he is a self-reported 4-week quitter and his/her expired-air CO is assessed 4 weeks after the designated quit date (minus 3 days or plus 14 days) and found to be less than 10ppm.
4. A treated smoker is counted as 'lost to follow up at 4-weeks' (LFU4W) if, on attempting to determine the 4-week quitter status s/he cannot be contacted.
5. A smoker is counted as a '52-week quitter' (52WQ) if s/he is a 'treated smoker', is assessed (face to face, by postal questionnaire or by telephone) 52 weeks after the designated quit date (plus or minus 30 days) and declares that s/he has not smoked more than 5 cigarettes in the past 50 weeks.
6. A treated smoker is counted as 'lost to follow up at 52-weeks' (LFU52W) if, on attempting to determine the 52-week quitter status s/he cannot be contacted.

Calculating success rates

1. The 4-week success rate (4WSR) is 4WQ/TS. This should generally be above 40%.
2. The self-reported 4-week success rate (SR4WSR) is SR4WQ/TS. This should generally be above 50%.
3. The 52-week success rate (52WSR) is 52WQ/TS. This should generally be at least 15%.

Key performance indicators

- The self-reported 4-week quit numbers (SR4WQ) that form the basis for current targets are not adequate for performance monitoring.
- The recommended minimum figures for monitoring are: TS (the measure of throughput) and 4WSR (the primary measure of success rates).
- It is helpful to have the 52 week success rates as well, at least on a sample, because this can provide information on the success of relapse prevention efforts and is also more convincing for stakeholders. However, it is recognised that not all services can devote the resources needed to undertake this.
- The figures on loss to follow-up are not used in the key performance indicators but are useful to help interpret them.

Data collection

These are just suggestions as to how the data might be collected. In practice each service will want to make its own arrangements. Whatever protocol is used for data collection should be recorded somewhere because it might affect the figures. For example, if services make 2 attempts at follow they will get different figures from those that make 4 attempts.

1. TS: It may be useful to include a field called ‘TS’ in each record of the SSS service database that is entered as 1 if the smoker fulfils the criteria and 0 otherwise. The database should also include the designated quit date.
2. SR4WQ: Smokers would normally be expected to attend a session 4 weeks after the quit date and SR4WQ would be coded as 1 if the smoker responds to the question ‘Have you smoked at all in the past 2 weeks’ with ‘No not a puff’ and 0 otherwise. If face-to-face attendance is not possible it is reasonable to telephone the client up to two times to determine smoking status or to email or write to the client once.
3. 4WQ: ALL smokers who attend the 4-week session should have their CO measured. SR4WQ who have a CO of less than 10ppm should be coded as 1; otherwise they should be coded as 0. Smokers should be advised when they start treatment that attendance at this session is extremely important.
4. 52WQ: All SR4WQ should be contacted by post, email or telephone. They will be coded as 1 if in response to the question: ‘Have you smoked at all in the past 50 weeks or so?’ they reply ‘No more than 5 cigarettes in total over the whole of that time’. If no response is received to the post

or email request, it is reasonable to try to telephone them up to two times. When they begin treatment and at the 4-week session clients should be told of the importance of the 52-week follow-up.

Notes

1. It can happen that a smoker attends a pre-quit session but is unable to attend the actual quit date and then attends one or more later sessions. Attendance at one or more post-quit sessions can be taken as having 'set a quit date'.
2. Some services may prefer to use 26 weeks instead of 52 weeks. If this is the case it should be specified and all other aspects of the criteria should be the same.
3. It would be useful for services to collect a parallel set of data in which the abstinence criterion is not a puff for the full 4 weeks following the quit date. This would provide useful information when examining relapse rates.
4. Most services offer weekly treatment sessions for at least 4 weeks after the quit date. Missing one of the sessions prior to the 4-week is not important purely from the data collection point of view; the key data are collected at the 4 week point. However, admission of smoking at 3 weeks would obviously mean that the smoker would be counted as a smoker for the purposes of the 4-week data.
5. The situation with hospital inpatients and pregnant smokers is somewhat special. In some cases, the first contact with the service will be after they have stopped smoking. Also, in the case of pregnant smokers it is important to record whether they are smoking at the birth of the child. The best approach is probably to be able to present figures with these clients classified separately.
6. Sometimes smokers are known to have moved away, died or are untraceable. It is reasonable to deduct these from the denominator when calculating success rates if the database allows this to be recorded. The numbers involved should be keep on record and presented in any reports.
7. Many services record additional information. For example it can be useful to record numbers attending assessment sessions even if they do not attend afterwards. It is also useful to keep data on factors that would affect success rates such as measures of dependence and previous smoking history.

Reference

1. West, R., et al., *Outcome criteria in smoking cessation trials: proposal for the common standard.* Addiction, 2005. 100, 299-303.