



British  
Thoracic  
Society

## Quality Improvement Tool – Smoking Cessation



**VERSION 1**





# CONTENTS

	Page
<b>PART 1 QUALITY IMPROVEMENT METHODOLOGY</b>	<b>4</b>
1.1 PRINCIPLES OF QUALITY IMPROVEMENT	4
1.2 VARIATIONS AS A FOCUS IN QUALITY IMPROVEMENT	5
1.3 QUALITY IMPROVEMENT APPROACHES	5
1.3.1 Model for improvement (including PDSA)	5
1.3.2 Statistical process control	6
1.3.3 Theory of constraints	7
1.4 BARRIERS TO QUALITY IMPROVEMENT	8
<b>PART 2 BTS NATIONAL TOBACCO AUDIT</b>	<b>8</b>
2.1 RESULTS FROM THE NATIONAL TOBACCO AUDIT 2016	8
2.2 APPLYING QI TECHNIQUES TO THE NATIONAL TOBACCO AUDIT	9
2.2.1 Referral of smokers to stop smoking services	10
2.2.2 Prescription of nicotine replacement therapy	12
2.2.3 Training of frontline staff	14
<b>PART 3 CQUINs</b>	<b>16</b>
3.1.1 Stop smoking CQUIN case study	16

© British Thoracic Society.

All BTS material is subject to copyright restrictions. Content from this document may be reproduced with permission as long as you conform to the following copyright conditions:

- The text must not be altered in any way.
- The correct copyright acknowledgement must be included.



## INTRODUCTION

The British Thoracic Society (BTS) has run a programme of national respiratory audits since 2009 with the aim of driving improvements in the quality of care and services provided for patients with respiratory conditions across the UK<sup>1</sup>. The programme now encompasses eleven adult and paediatric audits, including an audit of smoking cessation services – the “BTS national tobacco audit”.

The role of audit is to drive up quality of care by reviewing everyday practice against national standards and making interventions in pathways where required. This process has become embedded in health care practise as exemplified by the National Institute for Health and Care Excellence (NICE) audit tool programme<sup>2</sup>.

Clinical audit is a quality improvement (QI) process. Over recent years, QI methodology has been applied to improve specific pathways and interventions with aim to bring about measurable improvement<sup>3</sup>.

This document has been produced by the BTS Tobacco Specialist Advisory Group, under the auspices of the BTS Quality Improvement Committee, to bring together traditional audit results with an overview of QI methodologies, to help healthcare staff design and implement changes to drive up the quality of care in their own institutions, using the 2016 BTS national tobacco audit<sup>4</sup>.

---

## ACKNOWLEDGEMENTS

The British Thoracic Society would like to thank Dr Sanjay Agrawal (Leicester), Dr Alexander Hicks (Southampton), Dr Zaheer Mangera (London) and members of the BTS Tobacco Specialist Advisory Group and BTS Quality Improvement Committee for their work in developing this document. The Society is grateful to the following organisations for providing materials for inclusion in the document: Whittington Health NHS Trust; the Cure Project (Manchester); University Hospitals of Leicester NHS Trust; South London & Maudsley NHS Foundation Trust; and George Eliot Hospital NHS Trust.



## PART 1 – QUALITY IMPROVEMENT METHODOLOGY

Part 1 of this document provides an overview of some quality improvement methodologies and theory. There are many comprehensive sources of information on QI<sup>5-9</sup> – it is recommended that these resources are reviewed together with local expertise before embarking on QI activity.

Improving quality is about making healthcare safe, effective, patient-centred, timely, efficient and equitable. Quality improvement represents a systematic approach that uses specific techniques to improve quality.

### IMPROVEMENT JOURNEY

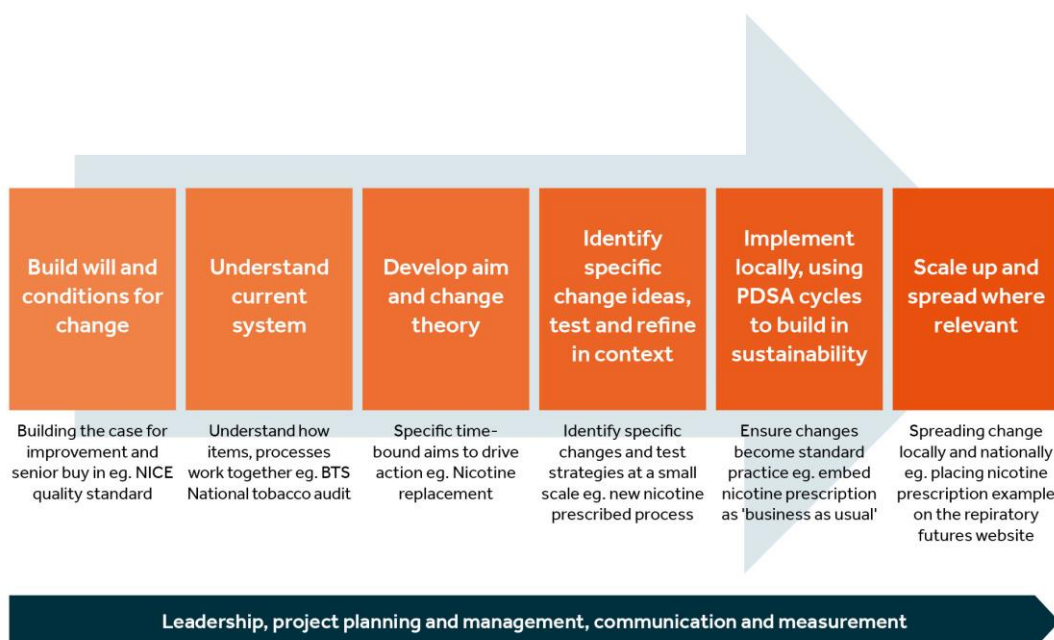


Figure 1: The Improvement Journey diagram is adapted from the original published by NHS Education for Scotland on the Quality Improvement Zone (2017)

### 1.1 PRINCIPLES OF QUALITY IMPROVEMENT

The underlying principles of quality improvement include:

- Understanding the problem, with emphasis on what the data tells you.
- Understanding the processes and systems within your organisation, especially the patient pathway and whether these can be simplified. Process mapping is commonly used to map the pathway or journey through part or all of a patient's journey and supporting processes. Process mapping is extremely useful as a tool to engage staff in understanding how the different steps fit together and which steps add value.
- Analysing demand, capacity and flow of the service. For a process improvement to be made there needs to be a detailed understanding of the variation and relationship between demand, capacity and flow. For example, demand is often stable and flow can be predicted in terms of peaks and troughs. In this case, it may be variation in capacity that causes the problem.



- Choosing the tools to bring about change including leadership and clinical engagement, skills development, and staff and patient participation. It is important not to underestimate the involvement of all relevant staff, including non-clinical staff, which are often the first point of contact for patients. Many clinicians will be keen to improve the quality of service they offer but may be unfamiliar with QI approaches. Patients and carers have a significant role to play and may define quality differently from clinicians and managers.
- Evaluating and measuring the impact of change. 'Measurement for improvement' asks how an intervention can be made to work in a given situation and what will constitute 'success.'

## 1.2 VARIATION AS A FOCUS IN QUALITY IMPROVEMENT

Two broad types of variation in healthcare include variation in the organisation of services or processes and variation in clinical practice. A certain amount of variation is considered normal and many quality improvement approaches assess whether the system, process or clinical practice is within control limits. They then use this as a key measurement tool, to help understand the level of variation in the system and to measure it over time. Unwarranted variation can lead to inefficiency, waste and harm or lost opportunities.

## 1.3 QUALITY IMPROVEMENT APPROACHES

There are many theories and approaches in quality improvement, some of the main models and concepts are summarised below.

### 1.3.1 Model for Improvement (including PDSA)

This is an approach to continuous improvement where changes are tested in small cycles that involve planning, doing, studying, acting (PDSA), before returning to planning, and so on. Each cycle starts with hunches, theories and ideas and helps to form them into knowledge that can inform action and ultimately, produce positive outcomes. The cycles use three key questions:

- 'What are we trying to accomplish?'
- 'How will we know that a change is an improvement?'
- 'What changes can we make that will result in improvement?'

### THE MODEL FOR IMPROVEMENT

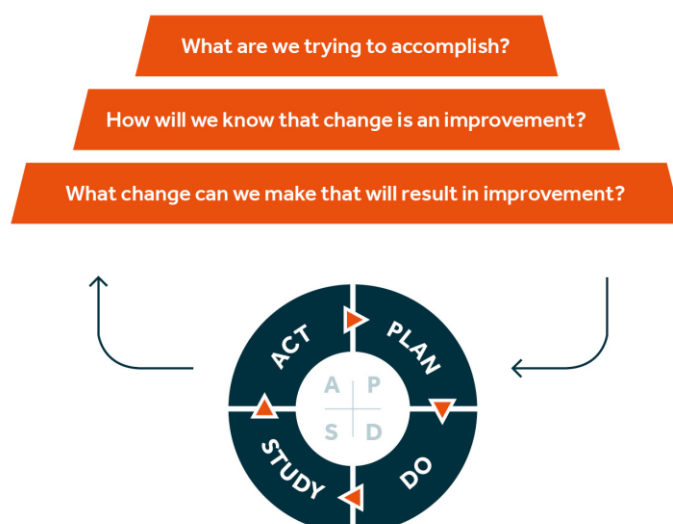


Figure 2: taken from *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*, 2<sup>ND</sup> edition, Gerald Langley, Ronald Moen, Kevin Nolan, Thomas Nolan, Clifford Norman, Lloyd Provost. Jossey-Bass Pub., San Francisco, 2009, p. 24



### 1.3.2 Statistical Process Control (SPC)

This approach examines the difference between natural variation (known as ‘random/common cause variation’) and variation that can be controlled (‘assignable/special cause variation’). The approach uses control charts that display boundaries for acceptable variation in a process. Data are collected over time to show whether a process is within control limits in order to detect poor or deteriorating performance and target where improvements are needed.

#### STATISTICAL PROCESS CONTROL CHART



Figure 3: SPC chart – The further a data point is from the centreline the more chance that there is an identifiable cause for the variation and the opportunity to intervene. These assignable variations therefore facilitate targeted interventions.

This process relies on several steps to produce a robust analysis. Data are collected over time to show whether a process is within control limits in order to detect poor or deteriorating performance and target where improvements are needed. The data itself needs to be normally distributed with measurements independent of each other. The mean value can then be calculated and the standard deviation of this. The upper and lower control limit is then usually set at 3 standard deviations above and below the mean. The data can then be plotted and the process assessed to determine whether it is out of control. Indications for this include:

- Any point falls beyond the above or below the control limits.
- 8 consecutive points fall on one side of the centreline.
- 2 of 3 consecutive points fall within a zone 3 sigma away from the mean.
- 4 of 5 consecutive points fall within a zone 2 to 3 sigma away from the mean.
- 15 consecutive points are within 1 sigma away from the mean.
- 8 consecutive points not within 1 sigma of the mean.

Further information on statistical methods that can be used to evaluate variation and identify outliers is available from the Healthcare Quality Improvement Partnership<sup>10</sup>.



### 1.3.3 Theory of Constraints

The theory of constraints came from a simple concept similar to the idea that a chain is only as strong as its weakest link. It recognises that movement along a process, or chain of tasks, will only flow at the rate of the task that has the least capacity. The approach involves:

- Identifying the constraint (or bottleneck) in the process and getting the most out of that constraint
- Recognising the impact of mismatches between the variations in demand and variations in capacity at the process constraint

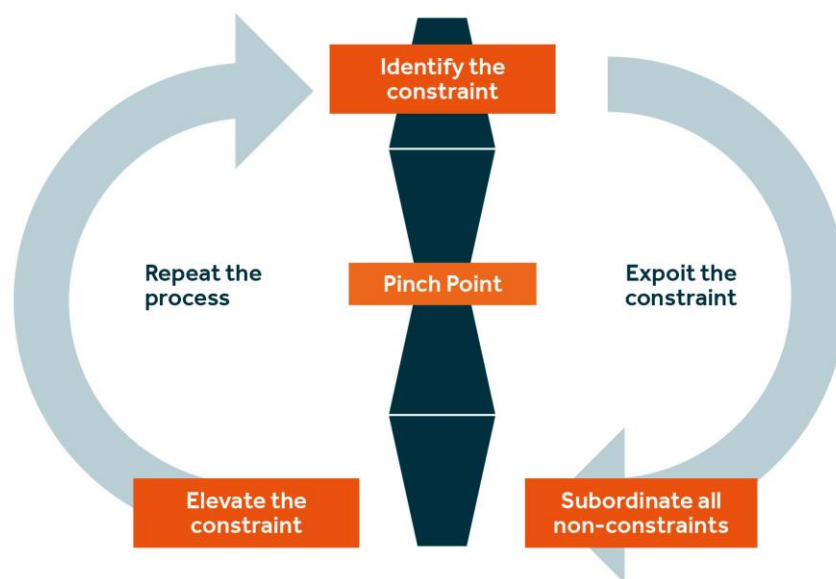


Figure 4: Theory of constraints cycle: 1 identify the system's constraint(s), 2 decide how to exploit the system's constraint(s), 3 subordinate everything else to the above decision(s), 4 elevate the system's constraint(s), 5 of in the previous steps a constraint has been broken, go back to step 1, but do not allow inertia to cause a system's constraint.

## 1.4 BARRIERS TO SUCCESSFUL QUALITY IMPROVEMENT

Many challenges have consistently been identified in QI programmes including<sup>11</sup>:

- A. Convincing people that there is a problem
- B. Convincing people that the solution chosen is the right one
- C. Getting the data collection and monitoring systems right
- D. Excess ambitions
- E. Organisational context, culture and capacities
- F. Lack of staff engagement
- G. Leadership
- H. Securing sustainability.

For further information on this topic and how to increase quality improvement capacity is available from The Health Foundation<sup>12</sup>.



## PART 2 – BTS NATIONAL TOBACCO AUDIT

In 2016, BTS introduced an audit of smoking cessation in secondary care (the “BTS national tobacco audit”). The audit assessed current practice against NICE guidance<sup>13</sup> and BTS recommendations for smoking cessation services<sup>14</sup> to help participants identify service deficiencies. It involved a retrospective audit of the notes of over 14,000 patients, as well as a one-off survey of the organisation of services at each participating hospital. The audit focused in particular on the key intervention of identifying people who smoke and offering help to stop. It aimed to provide both impetus and justification for healthcare providers to create an environment that is more conducive to helping smokers quit.

### 2.1 BTS NATIONAL TOBACCO AUDIT 2016 RESULTS

The audit identified that 25% of patients admitted to hospital were current smokers, higher than the 15.8 % prevalence of smoking in the general population<sup>15</sup>. Patients who smoke were found in similar proportions across all hospital specialties, elective and emergency admissions as well as surgical and medical specialties<sup>4</sup>.

#### Key findings from the audit

1. 25% of hospital in-patients were not asked if they smoked.
2. Electronic capture of smoking status was routinely captured in only 34% of organisations.
3. Only 25% of patients who smoked were asked if they would like to quit.
4. Only 1 in 13 smokers were referred to a stop smoking service for treatment of tobacco addiction.
5. Only 5% of patients were offered nicotine replacement therapy (NRT) of those patients not referred to smoking cessation services.
6. Comprehensive pharmacotherapy for smoking cessation was not available on formulary in many hospitals.
7. Formal referral pathways to hospital or community stop smoking services were not developed in 1 in 6 organisations.
8. Only 1 in 16 organisations completely enforced smoke-free grounds.
9. 50% of organisations had no regular smoking cessation training for staff.
10. 50% of organisations had no hospital based smoking cessation practitioners.

Improving the care given to patients with tobacco dependence is in the national tobacco control plans for England<sup>16</sup>, Wales<sup>17</sup>, Scotland<sup>18</sup> and Northern Ireland<sup>19</sup>. Results from this national audit highlighted that basic treatment for tobacco dependence for in-patients in NHS hospitals is poor and does not meet the standards specified in NICE guidance<sup>13</sup> or BTS recommendations for secondary care<sup>14</sup> and is unlikely to meet the standards specified in the tobacco CQUIN for acute trusts 2017-19<sup>20</sup>.

#### The four key recommendations from the national tobacco audit were:

1. All patients who smoke are referred to stop smoking support.
2. All patients who smoke are prescribed NRT unless contraindicated or opt out.
3. There is a clinical lead with designated time to lead the smoking cessation work of a Trust to drive improvement.
4. Regulatory agencies such as the Care Quality Commission in England hold hospital boards accountable for the enforcement of hospital smoke free grounds.





The BTS national tobacco audit identified key problems and recommended the above areas as a focus for improvement. Quality improvement methodology can be used to help achieve these aims prior to the next round of national audit. In the interim, the BTS on-line tobacco audit tool is available to support data collection and allows users to measure changes in practice over time.

## 2.2 APPLYING QI TECHNIQUES TO THE BTS NATIONAL TOBACCO AUDIT FINDINGS

The 2016 BTS national tobacco audit identified that there is considerable opportunity in clinical practice in acute hospitals across the United Kingdom to treat tobacco dependence.

Improving the treatment of patients who are tobacco dependent will reduce short and long term mortality, reduce hospital emergency admissions and readmissions whilst also being a highly cost effective intervention<sup>21</sup>.

A number of areas identified from the national tobacco audit could be used for quality improvement. Areas that could have a significant impact include:

- Recording of smoking status and referral of smokers to stop smoking support
- Prescription of nicotine replacement therapy to reduce nicotine withdrawal symptoms
- Training of frontline staff

A more detailed consideration of how to approach each of these topics is set out below. With each of these areas it is important to consider the underlying principles in quality improvement, namely: understanding the problem, the processes, the elements of demand, capacity and flow, choosing the tools to bring about change and evaluating and measuring the impact of change.

### 2.2.1 REFERRAL OF SMOKERS TO STOP SMOKING SERVICES

#### Problem

Data from the BTS national tobacco audit shows that only 1 in 13 smokers in hospital are referred to stop smoking services. Other data sources may include the national COPD audit although this will apply only to COPD patients. Systems may have been put in place in hospitals in England to gather data for the national tobacco CQUIN.

People who may be able to help identify useful sources of data on referrals locally include:

- Stop smoking services
- IT departments
- Business analysts
- Audit, governance, clinical effectiveness and or quality improvement departments.

#### Process

Process mapping should identify:

- How and where patients are admitted to the hospital?
- How smoking status is ascertained?
- By whom and where it is recorded?



- Is the recording done electronically and can it be collated into a daily hospital wide report to aid stop smoking specialists locate current smokers on in-patients wards?
- Who refers patients to the in-house or community stop smoking service (i.e. medics, nurses, AHP's, default electronic referral) and is there an electronic method of referral?
- Is there a specified hospital referral and treatment pathway that is regularly promoted that staff know and understand?
- How is referral recorded in notes and discharge summaries or as part of care bundles for specified disease?
- Can referral be automated in some way, to reduce reliance on individual action
- Is there a feedback mechanism so that specific individuals, wards or departments know how many referrals are being made by them as individuals or in their area?

People who may be able to help with process mapping include:

- Patients
- Ward nurses
- Pharmacists
- Stop smoking specialists
- Clinical leads
- The quality improvement/audit team
- Business analysts and general managers.
- Clinical coders
- Business analysts
- Electronic patients record or 'Patient administration system' IT specialists

## Demand, flow and capacity

Demand and flow of admission and in-patient areas should be relatively easy to assess. The capacity to treat and refer patients who are tobacco dependant will depend on the systems being in place to identify smokers, whether an electronic report can be created and the personnel identified to offer referral and treatment.

If the treatment and referral is deemed to be the responsibility of clinical staff, sufficient training of these staff will also need to be part of the consideration.

Other factors to consider when designing referral pathways to internal or external stop smoking practitioners include:

- Whether paper or electronic forms will be used?
- Is there sufficient access to forms or computers?
- Are the forms and IT systems updated regularly to reflect changes?
- Are there clear receiving centres for the referrals where referrals can be handled promptly?
- Suitable signposting to flag how referrals can be made with periodic reminders as new staff join.
- The process by which referrals can either be made or stored during nights and weekends.



## Choosing the tools to bring about change

Many of the elements for this will be considered in the above sections. Specific areas to consider include:

- Identifying key individuals for leadership roles. These individuals will need to have sufficient time and support to fulfil this role
- Providing sufficient and robust QI training.
- Ensuring staff and patient involvement.
- Recognising the right people to involve in delivery of the task.

## Evaluating the impact and measurement of change

Identifying what will constitute success will be important to define at the outset, but may change as 'plan-do-study-act' cycles proceed and hypotheses are amended or different elements of a process are changed.

For example initially it may be that 'how will we know a change is an improvement' may refer to recording of smoking status electronically and producing a daily report. Subsequently it may refer to patients being asked if they would like help to quit or measurement of exhaled carbon monoxide routinely or referral for treatment. Other measures may be referrals received by the stop smoking service or numbers of people identified as having quit smoking at 4 weeks. Measuring a sustained change using SPC charts will be important.

## Examples and resources:

- Example patient record used to record and treat tobacco dependence (see Appendix 1).
- Best practice case study: targeted intervention using electronic recording of smoking status (see Appendix 2).
- Example stickers for patient notes to act as a prompt to 'Ask, Advise, Refer', required for the Tobacco CQUIN 2017-19 (see Appendix 3).
- Example referral questions for an electronic patient record and referral system (see Appendix 4).

## 2.2.2 PRESCRIPTION OF NICOTINE REPLACEMENT THERAPY TO REDUCE WITHDRAWAL SYSTEMS

### Problem

Data from the BTS national tobacco audit shows that only 1 in 20 smokers in hospital who are not referred to stop smoking services, are prescribed nicotine replacement therapy. Other sources of data may include hospital electronic prescribing systems or hospital pharmacy data.

People who may be able to identify sources of data on prescribing of NRT include:

- Pharmacy.
- IT teams where electronic prescribing is present.
- Finance department.



## Process

Process mapping could identify opportunities and barriers for prescribing pharmacotherapy

- Where are the patients admitted as inpatients?
- How are they identified and recorded as smokers?
- Who is asking the patients about prescribing pharmacotherapy to prevent nicotine withdrawal and to promote a quit attempt.
- Who prescribes the treatments? (i.e. medics, nurses, physician assistants, pharmacists)
- Are there 'patient group directives' to support non-medical prescribing and administration?
- How quickly do patients receive prescribed cessation medications?
- Are smoking cessation pharmacotherapies available on all wards?
- Is there a comprehensive range on formulary?
- Is electronic prescribing used and what smoking cessation pharmacotherapies are prescribed on discharge?
- How are medicines continued and re-prescribed after discharge before the patient sees the smoking cessation specialist?
- Who teaches patients to use certain medications e.g. nicotine inhalator or buccal patch? What regular training is there for staff on smoking cessation pharmacotherapy?

For this issue people who may be able to help with process mapping include:

- Patients.
- Ward nurses
- Health care assistants.
- Ward clerks.
- Pharmacists.
- Stop smoking specialists.
- Clinical leads.
- The quality improvement/audit team.
- Business analysts and general managers.

## Demand, flow and capacity

Demand and flow of admission and in-patient areas through to discharge should be part of an acute hospitals routine data collection and therefore obtainable as part of a quality improvement process.

The capacity to treat with pharmacotherapy will depend on a variety of factors individual to each trust. Factors to consider in this process include:

- How patients are identified and located.
- Who is discussing options with patients?
- Available medications on formulary.
- Access to appropriate medications on the wards including nights and weekends.
- The number of prescribers with the various associated work patterns.
- Training for prescribers
- The availability of patient group directives
- The ability to prescribe smoking cessation pharmacotherapy at discharge.
- The agreement of funding for prescribing pharmacotherapy.



## Choosing the tools to bring about change

As with the previous section, many of the elements for this will be considered in the above sections. Specific areas to consider include:

- Identifying key individuals for leadership roles. These individuals will need to have sufficient time and support to fill this roll
- Providing sufficient and robust QI training.
- Ensuring staff and patient involvement.
- Recognising the right people to have involved in delivery of the task.

## Evaluating the impact and measurement of change

Again, as with the previous section, identifying what will constitute success will be important to define at the outset, but may change as 'plan-do-study-act' cycles proceed and hypotheses are amended or different elements of a process are changed.

For example initially it may be that 'how will we know a change is an improvement' may refer to identifying and recording in-patients who smoke or that have been asked about smoking cessation treatment and pharmacotherapy. Subsequently measuring prescriptions or time to pharmacotherapy could be measured as well as pharmacotherapy on discharge. Measuring a sustained change (after the initial project completion) using SPC charts will be important.

## Example and resources

- Example Patient Group Directive for prescribing NRT by non-medical prescribers (see Appendix 5)
- Free on-line training for healthcare professionals on smoking cessation medications from the National Centre for Smoking Cessation Training (NCSCT)<sup>22</sup>.
- Free downloadable resources on medications from NCSCT<sup>23</sup>.

## 2.2.3 TRAINING OF FRONTLINE STAFF

### Problem

Data from the BTS national tobacco audit shows that only 50% of frontline staff receive regular training in smoking cessation. Other sources of data may include hospital mandatory training databases or stop smoking service training data.

People who may be able to help identify training include:

- The mandatory training team.
- Clinical education departments.
- The stop smoking service.



## Process

Areas that will need to be considered for this issue include:

- How do frontline staff receive training on smoking cessation?
- Is it part of other mandatory training, or is it part of regular departmental post graduate education that is ad-hoc?
- What training do different staff groups get?
- What is the quality of the training, who delivers it and how engaging or effective is it?
- Are there BTS stop smoking champions or 'link nurses' delivering training?
- How is training publicised and recorded?

People who may be able to help with process mapping include:

- Ward nurses.
- Health care assistants.
- Pharmacists.
- Stop smoking specialists.
- Clinical leads.
- The quality improvement/audit team.
- The organisational development/human resource department.
- General managers.
- Hospital wide e-learning training department personnel

## Demand, flow and capacity

Demand and flow of staff should be predictable based on number of staff, professional background (i.e. nurses, doctors, allied health professionals etc.), and how they normally receive training.

The capacity to train will depend on the resources and skills available to individual trusts. Factors to consider include:

- The type of training delivered (i.e. on-line, face to face, ward based, departmental meetings)
- Number of trainers.
- Ability to cascade training into different clinical areas.
- Training resources.
- Time allocation for staff to receive training.
- Cost.

## Choosing the tools to bring about change

The tools described in the previous section will once again apply if the choice will depend on individual trusts own specific strengths and needs

## Evaluating the impact and measurement of change

Identifying what will constitute success will be important to define at the outset, but may change as 'plan-do-study-act' cycles proceed and hypotheses are amended or different elements of a process are changed.



For example, initially it may be that 'how will we know a change is an improvement' may refer to measuring teaching numbers such as:

- Teaching sessions
- Teaching hours
- Number of staff groups/departments reached

Subsequently measurement can expand to cover more refined teaching criteria including for example:

- Quality of teaching materials.
- Numbers of trainers
- Numbers of referrals from wards where staff have received training.
- Impact on smoking cessation rates.

Measuring a sustained change using SPC charts will be important.

### Resources and examples:

- NSCT free online training module: Very Brief Advice



## PART 3 – TOBACCO CQUINs

The Commissioning for Quality and Innovation (CQUIN) framework supports improvements in the quality of services and the creation of new, improved patterns of care. It provides financial incentives for meeting goals and aims to increase income for trusts through improving the care given to patients. In England, tackling tobacco addiction in hospitals has been identified as a key objective for 2017-2019 with financial rewards for hospitals that systematically record smoking status, provide brief advice, offer pharmacotherapy and refer patients for treatment<sup>25</sup>.

Set out below is a stop smoking CQUIN case study prepared by Dr Myra Stern, Integrated Respiratory Consultant Physician and Stop Smoking CQUIN Lead, Whittington Health.

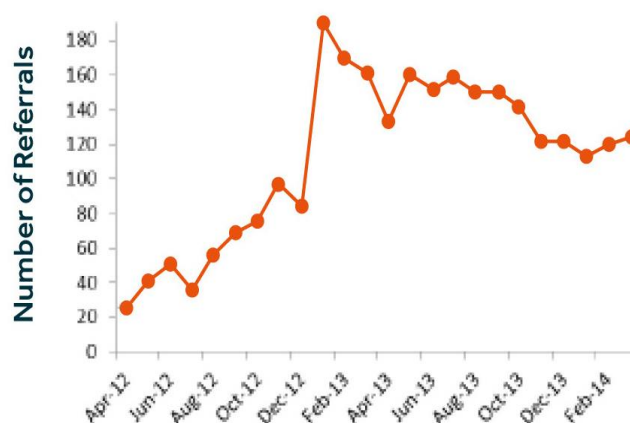
### 3.1 STOP SMOKING SQUIN CASE STUDY “INCENTIVISING AND EMBEDDING STOP SMOKING AS A TREATMENT IN AN INNER LONDON GENERAL HOSPITAL” (MAY 2014)

#### Introduction

“Smoking kills, stopping works” was the theme of Sir Richard Peto’s Harveian Oration in 2012. This simple statement captures the most important development that followed on from the link made between smoking and ill health: the knowledge that stopping smoking has profound effects on life span and morbidity and that evidence-based stop smoking interventions are the single most cost-effective life-saving intervention provided by the NHS. Thus, the role of smoking cessation as core treatment for sick smokers admitted to hospital has growing support and has been underpinned by the British Thoracic Society ‘Case for Change’(2013)<sup>26</sup> and the NICE Guidelines (Smoking cessation – acute, maternity and mental health services (PH48), November 2013)<sup>13</sup> on smoking cessation in secondary care.

How do you normalise and embed – at scale and pace – the practice of supporting evidence-based smoking cessation in hospital, when historically, stop smoking has been the domain of public health, delivered in the community and seen to be marginal to the business of acute care of inpatients? The CQUIN payment framework has provided important incentives for improving quality of practice in many areas of hospital practice.

The CQUIN Indicators include documenting the smoking status of every adult inpatient, offering brief advice to sick smokers, offering and prescribing stop smoking pharmacotherapy to alleviate nicotine withdrawal, referring (on an opt-out basis) to Stop Smoking Services and training frontline medical and clinical staff to support and deliver stop smoking interventions. 90% of adult inpatients had to have these indicators documented in order to achieve the payment - worth ~£350K/year for the trust!



Graph 1: Referrals to Stop Smoking Services





## Outcomes

Although seemingly impossible at the launch in April 2012, the indicator targets were achieved by December 2012, and have been maintained to the present. Referrals to Stop Smoking Services quadrupled in the first six months of the CQUIN and have been maintained at a level 3-4 x higher than observed in the years prior to the CQUIN (graph 1). Prescribing of NRT and Varenicline doubled in the first year of the CQUIN and has continued to increase since then. Stop Smoking Training (brief advice or level 1) has been delivered to >300 frontline staff, including nurses, doctors, therapists and medical students.

## Enablers

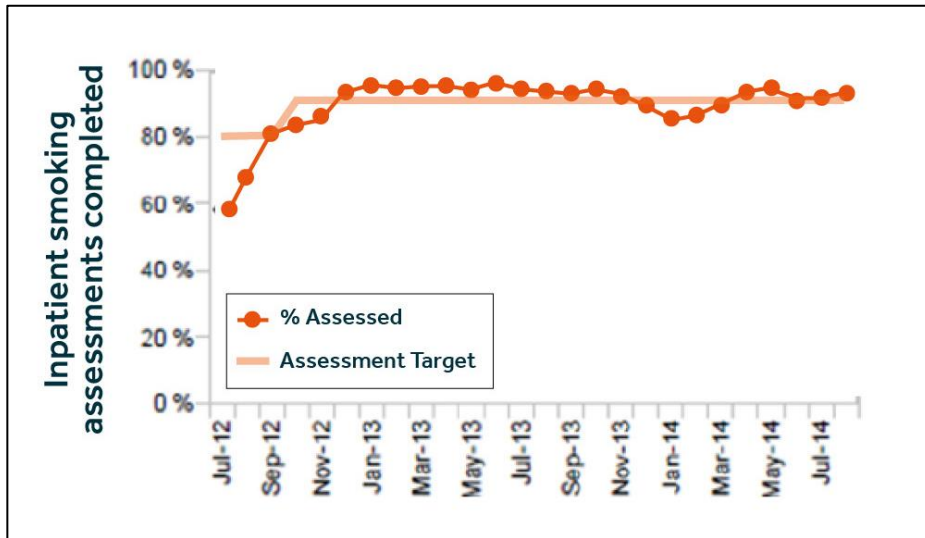
A number of enablers have contributed to the success of the CQUIN. These include ongoing clinical leadership by a respiratory consultant with sufficient professional credibility with management and consultant colleagues to champion the process, 'sign up' from the Hospital Executive Management and Trust Board, genuinely committed to the idea of the hospital as an institution of health care promotion, a committed multidisciplinary working committee that meets regularly (1 x week) and includes the consultant lead, a senior hospital manager, a CQUIN administration manager, a Clinical Lead (responsible for on-the-ground direction, an IT Data Analyst, the hospital Stop Smoking Specialist, the Community Stop Smoking manager and a pharmacist to support the pharmacotherapy on the wards. Daily, monthly and quarterly audit through strong IT support has underpinned the management and delivery of the CQUIN.

## Challenges

Sustaining the intensity of support to keep the process to target and to embed it sufficiently to eventually sustain itself remains our long term goal. In the shorter term, the most pressing challenges have included an ongoing campaign to incorporate stop smoking training into staff induction and mandatory training, and to 'find' the funding for more specialist stop smoking advisors to support the increase in referrals resulting from the CQUIN, and thus deliver the service to patients – preferably while in hospital.

## A final observation

Although less easily measurable, one of the most important outcomes of the CQUIN years has been a change in attitude amongst hospital staff about the role of stop smoking and the stop smoking advisor. Documentation of smoking status, giving brief advice and making a referral for stop smoking interventions (graphs 2 & 3) – as often as possible to occur DURING admission – has become a routine component of basic clerking for the junior doctors and carefully checked at each morning 'board round'. Not getting an immediate response from the stop smoking specialist to come and see a sick smoker on the ward can be a real source of frustration for a ward sister who previously might never have considered stop smoking as part of ward activity!



Graph 2: Inpatient smoking assessments completed



Graph 3: Inpatient smokers given advice

A prompt for Very Brief Advice:



Key messages for organisational 'buy-in':

**WHAT EVERY CLINICIAN SHOULD KNOW**

- Half of all smokers die from smoking related disease
- Supporting people to smoking is TREATMENT not prevention

*Supporting smokers to quit smoking is every clinician's business*



## APPENDICES

1. Example patient record used to record and treat tobacco dependence
2. Best practice case study: targeted intervention using electronic recording of smoking status
3. Example stickers for patient notes to act as a prompt to 'Ask, Advise, Refer'
4. Example referral questions for an electronic patient record and referral system
5. Example Patient Group Directive for prescribing NRT by non-medical prescribers

## REFERENCES

1. <https://www.brit-thoracic.org.uk/standards-of-care/audit/>
2. <https://www.nice.org.uk/about/what-we-do/into-practice/audit-and-service-improvement/audit-tools>
3. Langley G, Nolan T, Norman C, Provost L. (1996 ) The Improvement Guide: a practical approach to enhancing organisational performance, Jossey Bass Publishers, San Francisco
4. <https://www.brit-thoracic.org.uk/document-library/audit-and-quality-improvement/audit-reports/bts-smoking-cessation-audit-report-2016/>
5. <http://www.health.org.uk/publication/quality-improvement-made-simple>
6. <http://www.1000livesplus.wales.nhs.uk/home>
7. <https://www.rcplondon.ac.uk/guidelines-policy/ltmd-quality-improvement>
8. <https://learn.nes.nhs.scot/741/quality-improvement-zone>
9. <http://www2.le.ac.uk/partnership/liips/resources-to-support-you/measurment>
10. <https://www.hqip.org.uk/resources/detection-and-management-outliers-national-clinical-audits/>
11. <http://qualitysafety.bmj.com/content/qhc/21/10/876.full.pdf>
12. <http://www.health.org.uk/publication/what's-getting-way-barriers-improvement-nhs>
13. <https://www.nice.org.uk/guidance/ph48>
14. <https://www.brit-thoracic.org.uk/document-library/clinical-information/smoking-cessation/bts-recommendations-for-smoking-cessation-services/>
15. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2016>
16. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/630217/Towards\\_a\\_Smoke\\_free\\_Generation\\_-\\_A\\_Tobacco\\_Control\\_Plan\\_for\\_England\\_2017-2022\\_\\_2\\_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630217/Towards_a_Smoke_free_Generation_-_A_Tobacco_Control_Plan_for_England_2017-2022__2_.pdf)
17. <https://gov.wales/docs/phhs/publications/120202planen.pdf>
18. <http://www.gov.scot/Publications/2013/03/3766/0>
19. <http://www.publichealth.hscni.net/sites/default/files/Tobacco%20Control%20Northern%20Ireland%202015.pdf>
20. <https://www.england.nhs.uk/nhs-standard-contract/cquin/cquin-17-19/>
21. <http://tobaccocontrol.bmj.com/content/early/2016/05/17/tobaccocontrol-2015-052728.full>
22. [http://elearning.ncsct.co.uk/stop\\_smoking\\_medications-launch](http://elearning.ncsct.co.uk/stop_smoking_medications-launch)
23. [http://www.ncsct.co.uk/pub\\_stop-smoking-medications.php](http://www.ncsct.co.uk/pub_stop-smoking-medications.php)
24. [http://www.ncsct.co.uk/publication\\_very-brief-advice.php](http://www.ncsct.co.uk/publication_very-brief-advice.php)
25. <https://www.england.nhs.uk/wp-content/uploads/2017/08/prevention-cquin-supplmnt-guid-july-2017.pdf>
26. <https://www.brit-thoracic.org.uk/document-library/clinical-information/smoking-cessation/bts-case-for-change/>