CURE: Comprehensive Secondary Care Treatment Programme for Tobacco Addiction

Background

Greater Manchester (GM) published its cancer plan 'Achieving World Class Cancer Outcomes: Taking Charge in Greater Manchester 2017-2021', which clearly sets out programmes of work, from prevention to end-of-life care that taken together will transform cancer care for local patients.

The NHS planning guidance 2017–2019 published in September 2016 set out the 'must dos' for 2017-19 for every local system. In respect of cancer one of its main targets is reduction of smoking prevalence.

In response The Greater Manchester Health and Social Care Partnership's tobacco control plan Making Smoking History, published in July 2017, has set ambitious targets for the health economy to reduce smoking rates across Greater Manchester.

Achieving the tobacco control plan objectives will require a structured, multi-faceted approach including secondary care smoking cessation, which is also a newly specified CQUIN programme. Patients admitted to hospital are more likely to be smokers than the general population. This programme aims to use the unique teachable moment of a hospital admission to improve rates of smoking cessation during and immediately following hospital visits.

Tobacco Addiction - Scale of Problem

- Tobacco addiction is the single greatest cause of preventable death, disability, ill-health and social inequality
- Smoking causes 16 different forms of cancer and damages every organ in the body
- There are approximately 8 million smokers in the UK (2016 Office for National Statistics, Adult Smoking Habits)
- Half of all smokers will die prematurely of a smoking related illness & lose average of 10 years of life (Doll et al BMJ 2004, Pirie et al The Lancet 2013)
- Costs of smoking illnesses to the NHS (Public Health England 2015: Costs of Smoking to the NHS):
- £850 million per year inpatient costs
- £1.1 billion per year in primary care costs
- £696 million per year in secondary care services

"Tobacco is the most effective agent of death ever developed and deployed on a worldwide scale"

- Highly effective initial attraction & temptation
- Usually at a young age
- Rapid and efficient path to an incredibly powerful addiction
- Ultimately, nicotine is a relatively harmless substance
- The addiction, as a by-product, exposes smokers to significant risk of serious illness and death
- Carbon monoxide, tar, arsenic, polonium, formaldehyde, 5000 chemicals
- By the time of addiction, society still judges the initial attraction and temptation – viewed as a lifestyle choice

Overview - The CURE Model

Introduction

The CURE project is a comprehensive secondary care treatment programme for tobacco addiction. At its heart is systematically identifying all active smokers admitted to secondary care and immediately providing nicotine replacement therapy for the duration of the admission. This is supplemented by a consultation with an expert tobacco addiction team to construct a long term treatment plan after discharge. The term 'CURE' has been specifically chosen to 'medicalise' tobacco addiction and move away from the stigma of a lifestyle choice to disease treatment.

Evidence Base

There is strong evidence that secondary care represents a unique teachable moment when a smoker is admitted to hospital to seed the concept of a quit attempt and achieve successful long term abstinence. Data from Canada has demonstrated that comprehensive secondary care treatment programmes for tobacco addiction deliver immediate and highly significant reductions in admission rates and mortality.



The CURE project will begin with a 6 month phase 1 implementation at Wythenshawe Hospital, part of Manchester University NHS Foundation Trust, followed by wider implementation across Greater Manchester. Phase 1 will provide vital information on the prevalence of active smokers in acute admissions, uptake, pharmacy impact and outcomes.

The key estimated costs and expected benefits of the project for Greater Manchester are outlined below.

Main Costs

Costs: Inpatient Pharmacotherapy

Cost per patient – this is a worst case scenario assuming all patients use maximal dose and most expensive combination nicotine replacement therapy and 25% of all smokers use varenicline (in addition to Nicotine Replacement Therapy). It is likely to be an overestimation of the actual cost.

- Nicotine lozenges 2 x £9.58 = £19.16
- Nicotine patch 25mch 2 x £11.71 = £23.42
- Varenicline £2.73 x 0.25 = 0.68

Total costs per patient = £43.26

Costs: CURE specialist team

The estimated time requirements for the specialist CURE team for each smoker treated through the CURE programme are:

- Inpatient specialist assessment and treatment plan (40mins)
- Telephone Follow Up 1-2 weeks post discharge (20mins)
- Outpatient Clinic 4 weeks post discharge (20mins)

Total time per patient 1.3 hours = 1.5hrs including admin time

Specialist nurses provide 1672.5 hours of patient care /year

This equates to 1115 patients per year for a full time specialist nurse (1672.5/1.5).

This nursing team will need to be supported by an administrative post.

Key benefits and outcomes

Greater Manchester

If the more conservative estimation of 263,900 adult admissions to hospital across GM (excluding Maternity, Paediatrics and ICU) per year is used, the key benefits are as follows:

Assuming 20% were active smokers = 52,780 smokers.

- If 13.3% were readmitted at 30 days and we reduced that to 7.1% we would save 3273 admissions at 30 days
- If 38.4% were readmitted within 1 year and we reduced it to 26.7% we would save 6176 admissions at 1 year
- If 11.4% died within 1 year and we reduced that to 5.45% we would save 3141 lives in 1 year

• If a 35% quit rate is achieved this would mean 18,473 successful quitters in the first year

The 2015 Department of Health Reference Costs state an average non-elective hospital admission costs £1609. Therefore, the estimated savings from prevention of readmissions by applying the Ottawa Model to Greater Manchester is therefore £9,937,184 per year (6,176 readmissions saved x £1,609).

Furthermore, the average length of hospital stay in England is 5 days (NGS Digital Data 2015-2016) The CURE project is estimated to save 30,880 bed days per year, equivalent to freeing up 84 additional beds per day across Greater Manchester.

The average cost of admission and length of stay in Greater Manchester may be higher than the national average (at Wythenshawe Hospital it is £2776 and 7.8 days receptively).

Therefore benefits could be significantly underestimated!!

Resources

Treating to bacco addiction is the single most effective intervention a smoker can do for their health and the single most cost effective and lifesaving intervention the NHS can provide. It is clear that hospitals are a critically important location for treating to bacco addiction and fighting this terrible disease.

The pilot, whilst providing a robust evaluation and cost benefit analysis, will also inform future commissioning and contracting discussions on smoking cessation services in acute and primary care, to ensure the CURE model remains sustainable and supported.

There are a number of resources available on request for any Provider who wants to implement the CURE Programme:

- Full CURE Programme Business Case
- High Level Project Plan
- Service Modelling Calculations Specialist Nursing Team
- Patient Pathway, Assessment Forms & Protocols

Please see below contact information of the Programme Team if you have any queries:

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