Universal support to help inpatients quit smoking: HosQuit
Part 2: Uncontrolled before and after study of systems change intervention pilot

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Introduction

Despite declining prevalence, smoking remains the most preventable cause of disease and death in Australia [1] As a result of smoking NSW hospitals see 44,000 hospitalisations a year [2]. Clinical practice guidelines recommend that all hospital patients who smoke receive brief cessation advice to quit, are offered Nicotine Replacement Therapy (NRT) and are offered follow-up support post-discharge [3]. However, research suggests the levels of NRT and follow up smoking cessation support being offered to hospital patients is low, with clinical practice guidelines having little effect on nursing practice [4]

Smoking cessation interventions begun in hospital are known to improve quit rates[5] . Evidence shows that NRT is effective in supporting smokers with nicotine withdrawal symptoms [6] and Quitline telephone counselling services work in supporting smokers to quit smoking [3] .

A recent review of health care interventions to promote and assist tobacco cessation [7] noted that recording tobacco use in all medical notes and integrating brief smoking cessation advice into routine clinical practice were some of the most affordable effective interventions. Ways to increase systematic identification of smokers and subsequent offer of evidence-based cessation care would constitute a systems change intervention.

Aim

HosQuit aimed to improve the recording of patient smoking status and the offer of best practice smoking cessation care through the implementation of a systems change intervention. We targeted the intervention at nurses as they have the greatest frequency of contact with inpatients and play a prominent role in providing preventative health information to patients [8]

Method

A before and after study design was used to pilot a systems change intervention on one inpatient medical ward at St Vincent's Hospital Sydney over a four week period in March 2016.

The systems change intervention was developed after analysis of qualitative work undertaken in HosQuit Part 1 and consisted of:

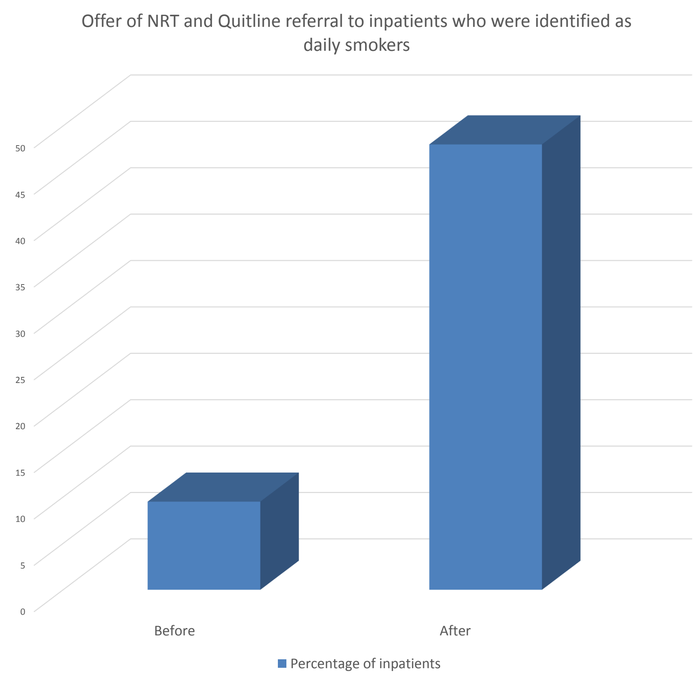
- Increased range of Nicotine Replacement Therapy (NRT) available on the ward
- Adapted nursing care plan to include a check box for smoking status assessment and whether NRT and/or Quitline was offered.
- Nurse training on NRT and smoking cessation
- NSW government smoking cessation information posters and leaflets on the ward
- Clinical web referral link to Quitline

A clinical audit of medical records of patients admitted to the pilot ward one month before and one month after implementation evaluated improvements in recording smoking status, offer and patient uptake of NRT and referral to Quitline using descriptive statistics.

Focus groups and semi structured interviews were conducted with nurses from the pilot ward to assess acceptability to nursing staff post implementation. Data from the focus groups and interviews was analysed thematically with the aid of using NVivo© 10 software (QSR International P/L, 2012), noting emergent themes and sub-themes to code the data.

Results

The study audited 287 medical records of patients admitted to the pilot ward (135 pre and 152 post intervention). Results showed over a four week period after the implementation of the systems change intervention nurse recording of smoking status increased from 0% to 10%, the offer of NRT and Quitline increased from 9.5% to 44% and all patients who accepted NRT post implementation accepted combination therapy (use of a nicotine patch with a faster acting oral NRT).



Post implementation focus group and interview data analysis showed the intervention was acceptable to nursing staff. Three themes emerged from the post-implementation qualitative research; need for adaptation of training to include the delivery of training from pharmacy and smoking cessation support services; the importance of nurse leadership; and the difficulty in balancing the promotion of abstinence to patients who did not want to or were not ready to quit with the need to build rapport to gain adherence to life saving medical treatment.

Conclusion

This systems change intervention pilot shows promise by increasing the identification of inpatients who smoke and increasing the offer of best practice smoking cessation care. Qualitative data suggests the importance of nurse leadership roles to promote the continued implementation and sustainability of smoking cessation support to inpatients who smoke.

Further research needs to be undertaken in how to best support those who did not wish to or are not ready to quit smoking.

Implications for practice

HosQuit demonstrates the development of resourceful ways to increase the inclusion of smoking cessation support into routine clinical care and drive practice change to improve health outcomes in tobacco related preventable disease.

Findings will inform changes to hospital policy and practice, and may have wider reaching relevance to other hospital settings.

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