PREPARING WALES FOR LUNG CANCER SCREENING

A toolkit to update primary care smoking records by text message

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BACKGROUND

Targeted lung cancer screening has been recommended by the UK National Screening Committee.[1] Effective screening depends on accurate and efficient identification of the target population.[2]

The screening process involves identifying current and ex-smokers ("ever-smokers") in a target age range, followed by risk assessment +/- low-dose CT screening.[3]

GP records can be used to identify ever-smokers but the completeness of this data is uncertain[4-6] and updating of records can be resource-intense.[7,8]

OBJECTIVES

Search GP records to assess the completeness of smoking data (recorded as "tobacco codes").

Develop a toolkit for GP practices to update missing smoking data via a text message system.

METHODS

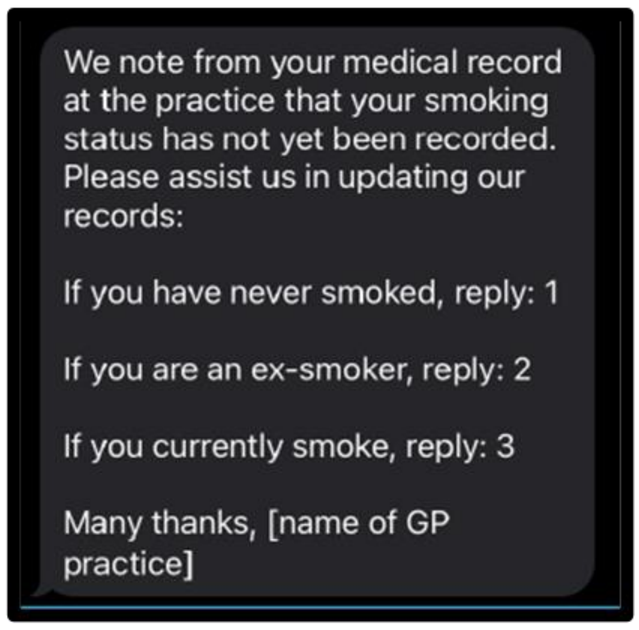
Following proof-of-concept work,[9] a toolkit was developed for the VISION360 patient administration system (used by 54% of GP practices in Wales, with the remainder using EMIS) giving step-by-step instructions for practices to:

Identify 50-74-year-olds with no tobacco code recorded

Create a text message template to be sent to patients with no tobacco code recorded

Set up an automated system to record the reply directly into patients' records as a tobacco code indicating whether they are a current, ex- or never-smoker

Re-audit data completeness one week later to determine the impact of the toolkit.



Text message template

12 practices participated in the first phase of the project, assessing the completeness of smoking data and testing the toolkit. Following an interim analysis, revisions were made to the toolkit and a streamlined version was tested by a further two practices.

KEY RESULTS

Smoking status data completion increased from **96.5% to 98.0%**

Streamlined toolkit took average of **30 minutes** to complete

RESULTS

All participating practices **successfully used the toolkit** to update smoking records. During the first phase of testing, use of the toolkit increased data completeness from 96.5% to 98.0% (+1.5% absolute change; 331 additional tobacco codes recorded).

The majority of feedback reported that the toolkit was **easy to use**. Issues identified at the interim analysis included data errors related to manual calculation of results by users, and some frustration with instructions asking to repeat previous steps.

The revised streamline version of the toolkit was successfully used by two further practices, taking practice managers an average of 30 minutes to complete (range 20-40 minutes).

DISCUSSION

An improvement in data completeness of +1.5% across Wales would equate to **an additional 5,934 people across Wales** being eligible for targeted lung cancer screening who may otherwise not been invited, depending on the invitation strategy used in a future programme.

Data completion for smoking status **was high** at participating practices prior to intervention, which is reassuring in the context of a future national lung cancer screening programme.

The toolkit is a **resource-sparing option** to allow **rapid updating of smoking status records**.

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SCAN to see:

Proof-of-concept paper for updating tobacco codes using text messages

Updates on the Lung Health Check Wales programme

Information on the Lung Health Check Wales Operational Pilot