Can a two-way automated patient contact intervention improve adherence to medicines? A systematic review

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Background
Around half of medications for long term conditions (LTCs) are not taken by patients as directed. Text messaging (TM) is currently used for a variety of health purposes and software can now automate delivery and response to messages, making use of this technology more efficient. Reviews in this area to date have not focused on the potential impact of automation or which behavioural components may be contributing to the effectiveness or otherwise on this type of intervention in relation to adherence to medicines. Our aim was to examine the evidence for using automated two-way patient contact to support patients’ medicine-taking behaviour.

Methods
For inclusion in this narrative synthesis systematic review studies had to focus on adults self-caring for LTCs independently, the primary intervention should use automated TM (either via pager or short message service (SMS)) or Interactive Voice Response (IVR) (communication via voice recognition or keypad input) and aim to improve medicines adherence. All study designs except pilot and feasibility studies were included.

Outcomes of interest were adherence to medicines, clinical condition control and patient and acceptability. A comprehensive electronic search strategy will be used including databases such as PubMed, Embase, Cochrane Library and Web of Science.

Results
The PRISMA diagram for the search can be found in Figure 1. Automated patient contact interventions have been tested in a wide range of long term conditions (see Table 1) with mixed results.

Table 1: Summary of studies examining automated two-way patient contact interventions

For a copy of this poster and the list of studies included in the review scan here: