

Automated telephone communication systems promising for preventive health care and managing long-term conditions**Clinical Question**

How effective are automated telephone communication systems (ATCS) in preventive health care and for managing long-term conditions?

Bottom Line

ATCS interventions changed patients' health behaviours, improved clinical outcomes and increased health care uptake, with positive effects in several important areas including immunisation; screening for osteoporosis, cervical, breast and colorectal cancer; appointment attendance; and adherence to medications or tests. ATCS as part of a complex intervention probably decreased cancer pain and chronic pain as well as depression (moderate certainty).

Depending on the type of intervention, ATCS had small effects on outcomes for physical activity, weight management, alcohol consumption, and diabetes mellitus. ATCS had little or no effect on outcomes related to heart failure, hypertension, mental health or smoking cessation, and there was insufficient evidence to determine effects on preventing alcohol/substance misuse or managing illicit drug addiction, asthma, chronic obstructive pulmonary disease, HIV/AIDS, hypercholesterolaemia, obstructive sleep apnoea, spinal cord dysfunction or psychological stress in carers. Only four trials reported adverse events, and it was unclear whether these related to the interventions.

Caveat

There was insufficient evidence to determine which ATCS were most effective across all health areas. Due to several gaps in the evidence base, the use of ATCS is currently recommended for managing long-term conditions only in an evaluative context, as these conditions typically have multidimensional aetiology and pathogenesis and require more complex therapeutic solutions.

Context

ATCS can deliver voice messages and collect health-related information from patients using either their telephone's touch-tone keypad or voice recognition software. ATCS can supplement or replace some telephone contact between health professionals and patients.

Cochrane Systematic Review

[Posadzki P et al. Automated telephone communication systems for preventive healthcare and management of long-term conditions. Cochrane Reviews, 2016, Issue 12. Art. No.: CD009921.DOI: 10.1002/14651858.CD009921.pub2.](#) This review contains 132 studies involving 4,669,689 participants.