

Title	Optimal Warfarin management for the prevention of thromboembolic events in patients with atrial fibrillation: A systematic review of the clinical evidence
Agency	Canadian Agency for Drugs and Technologies in Health (CADTH) Suite 600, 865 Carling Ave, Ottawa, ON Canada K1S 5S8, Phone: 1-613-226-2553 / Fax: 1-613-226-5392 E-mail: requests@cadth.ca / Web site: http://www.cadth.ca
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Aim

To compare the use of specialized services with usual care in adults receiving long-term warfarin therapy and to compare different models of specialized care with each other.

Conclusions and results

Specialized anticoagulation services improve time in therapeutic range (TTR) compared with usual care (UC). However, this improvement may not result in a reduction in hemorrhage, thromboembolism, or the need for additional medical care. Effects of patient self-testing (PST) or patient self-management (PSM) on TTR were mixed, with studies showing either improved TTR, or no difference between models of care. Effects on clinical outcomes were also mixed, but PST or PSM generally results in lower mortality rates and reduced incidence of thromboembolism. Neither PST nor PSM affected rates of bleeding events. A combination of patient self-testing and self-management (PST/PSM) may also improve quality of life and patient satisfaction. Use of computerized dosing algorithms is associated with improved TTR, but not with reductions in adverse event rates, compared with manual dosing by experienced medical staff.

Recommendations

Patients with non-valvular arterial fibrillation who require warfarin need a well-coordinated, structured approach to their anticoagulation therapy and most should not be self-managed. There is no evidence to make a recommendation on the role of warfarin management options in remote areas. Full recommendations are available from: http://www.cadth.ca/media/pdf/OP0508_warfarin_report_e.pdf

Methods

Peer-reviewed literature searches and consultations with experts in the field were used to identify potential studies related to specialized anticoagulation services for the management of warfarin dosing. Two reviewers independently screened citations, selected studies according to pre-defined criteria and assessed study quality of eligible studies. A meta-analysis could not be conducted due to heterogeneity across studies. Results are described using a narrative approach.

Written by

Jeannine Fraser