



Title	Point-of-Care Monitoring Devices for Long-Term Oral Anticoagulation Therapy: Clinical and Cost Effectiveness
Agency	CADTH, Canadian Agency for Drugs and Technologies in Health Suite 600, 865 Carling Ave, Ottawa, Ontario K1S 5S8, Canada; Tel: +1 613 226 2553, Fax: +1 613 226 5392; publications@cadth.ca, www.cadth.ca
Reference	CADTH Technology Report, Issue 72. February 2007. ISBN 1-897257-64-3 (print), 1-897257-65-1 (electronic)

Aim

To assess the clinical and economic implications of point-of-care (POC) devices for monitoring long-term oral anticoagulation therapy (OAT).

Conclusions and results

Using POC devices to manage OAT results in significantly fewer deaths, fewer thromboembolic events, and better international normalized ration (INR) control than conventional laboratory testing, with no significant difference in hemorrhagic events. Compared to laboratory testing, using POC devices in anticoagulation clinics saves costs compared with conventional testing for healthcare payers. It is also cost effective if society is willing to pay 50 000 Canadian dollars for a quality-adjusted life-year (QALY). Self testing by patients compared to laboratory testing does not seem to be cost effective from a publicly funded healthcare perspective.

Recommendations

Not applicable.

Methods

We systematically reviewed the clinical and economic literature. For the clinical review, multiple databases were searched. Two reviewers independently assessed quality after extracting data from the 16 eligible articles. A meta-analysis was conducted. Seven articles describing six unique studies were reviewed and used in the primary economic evaluation.