Point-of-Care Anticoagulation Monitoring Devices: Economic Findings

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Overview

- Economic results
  - Canadian
  - International
- Budget Impact
Economic Results – Canadian

- Economic model developed in a Canadian context to compare:
  - usual care (standard laboratory test with venipuncture blood draw)
  - anticoagulation clinic testing using point-of-care (POC) monitor
  - patient self-testing using POC monitor

Economic Results – Canadian (cont’d)

- Target population: patients on long-term (>3 months) oral anticoagulation therapy (OAT)
- Perspective:
  - Health care provider
  - Societal
- Devices: ProTime® (clinic testing only at time of analysis) and CoaguChek®
Economic Results – Canadian (cont’d)

• POC in anticoagulation clinics: COST SAVING from health provider perspective
• Patient self-testing: NOT COST SAVING from health provider perspective
  BUT
• From societal perspective, patient self-testing may be cost-effective when patient and caregiver time and travel costs are considered

Cost saving $57,595
POC self-testing by patient

Cost saving
$10,808
POC in anticoagulation clinic

Comparison

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Cost per QALY for CoaguChek® (health provider perspective)</th>
<th>Cost per QALY for CoaguChek® (societal perspective)</th>
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<td>POC in anticoagulation clinic</td>
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<td>$15,966</td>
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Economic Results – International

- As well as our own economic evaluation, we surveyed the existing economic evidence
- We reviewed 7 economic articles (6 unique studies)
  - No Canadian studies, however, they give a perspective on the international evidence
  - Analyzed various perspectives and management strategies
- Results consistent: they all found the POC alternative to be more favorable than the laboratory test
Budget Impact

Additional resources would be required for implementation in either clinic or home settings:

• Implementation in Clinics:
  ▪ Capital costs:
    ➢ $160,000 (ProTime®)
    ➢ $84,000 (CoaguChek®)
  ▪ Consumable costs:
    ➢ $9.5 million/year (ProTime®)
    ➢ $8 million/year (CoaguChek®)

• Implementation of self-testing (~50,000 eligible patients, based on CoaguChek®):
  ▪ $50 million – capital costs
  ▪ $18 million/year – consumable costs