Will parallel regulatory and HTA review processes reduce access time for patients in Canada?

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Special thanks to:
Tina Wang, Neil McAuslane, Jesmine Cai
I have no actual or potential conflict of interest in relation to this topic or presentation.
Background

• Timely recommendations by HTA agencies for drug reimbursement ensure patient access to medicines of therapeutic value.
• Patients believe that delays in access to important new medicines result from HTA activities occurring sequentially following regulatory approval.
• Experience from other jurisdictions (e.g. PBAC) indicates that alignment in the timing of the regulatory and HTA review processes could improve timing of overall assessment/recommendation.
• Parallel regulatory and HTA reviews occur for certain medicines in Canada.
Global Comparison of Reg/HTA processes

Scenario I: Regulatory and HTA decision making occur in sequence
- Regulatory review (safety, quality, efficacy)
- HTA review (clinical and/or cost effectiveness, other factors)
- Reimbursement decision

Scenario II: Regulatory and HTA decision making occur in parallel
- Regulatory review (safety, quality, efficacy)
- HTA review (clinical and/or cost effectiveness, other factors)
- Reimbursement decision

Canada, Australia, Thailand

Scenario III: HTA evaluation is integrated as a component of regulatory review
- Regualtory + HTA review (assessment of safety, quality, relative-efficacy and/or cost-effectiveness)
- Reimbursement decision

Scenario IV: HTA evaluation is conducted prior to the regulatory review
- HTA review (cost-effectiveness, budget impact, affordability)
- Regulatory review (safety, quality, efficacy)
- Reimbursement decision

Not formally in place
Research Questions

• How often is the parallel review process* that is available in Canada used?
• What effect does using this route have on the timing of the regulatory review and CADTH recommendation?

* Considerations about the Canadian parallel review process

  • A manufacturer can submit for a CADTH Common Drug Review before a Health Canada Notice of Compliance is issued.
  • For the Health Canada/CADTH parallel review process the submission to CADTH can occur 90 days before the date of anticipated NOC from Health Canada
Methods

- CIRS collected data on 56 New Active Substance (NASs) appraised by CADTH from 2014-2016.

- We analyzed the association of synchronization (sequential or parallel) between the regulatory decision and first HTA recommendation in terms of:
  - the HTA recommendations
  - type of regulatory review paths
  - Timing of decisions/recommendations

- The 56 CADTH recommendations were categorised as:

  Positive, Positive with restrictions or Negative
Trichotomous categorisation of HTA Decisions

Australia

Positive
- List

Positive with restrictions
- List with clinical criteria and/or conditions

Negative
- Do not list
- Do not list/reimburse

Canada

Positive
- List

Positive with restrictions
- Managed Access Scheme
- Optimised
- Indications differ from Market Authorisation

Negative
- Do not list at the submitted price

England

Positive
- Recommended

Positive with restrictions
- Important benefit

Negative
- Not recommended
- Lesser benefit

France

Positive
- Major benefit

Positive with restrictions
- Considerable added benefit

Negative
- No added benefit proven
- Less benefit

Germany

Positive
- Major added benefit

Positive with restrictions
- Non-quantifiable added benefit

Negative
- No recommended
- Less benefit

Poland

Positive
- Recommended

Positive with restrictions
- Accepted with restrictions

Negative
- Not recommended
- No recommended
- No subsidy

Scotland

Positive
- Accepted

Positive with restrictions
- Restricted subsidy

Negative
- General subsidy

Sweden

Positive
- PBS

Positive with restrictions
- CADTH
- NICE
- HAS
- IQWiG

Negative
- No subsidy

Where a green outline indicates that drug reimbursement is possible while a red outline indicates that drug reimbursement is not possible.

CIRS RD Briefing 64: Review of HTA outcomes and timelines in Australia, Canada and Europe 2014-2015. (c) 2017
Outcomes of CADTH Recommendations (n=56)

Number of NASs recommendation

- **2014**: 9
  - Negative: 4
  - Positive: 1
  - Restriction: 4

- **2015**: 16
  - Negative: 8
  - Positive: 2
  - Restriction: 6

- **2016**: 14
  - Negative: 2
  - Positive: 2
  - Restriction: 10

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Higher proportion of priority drugs were assessed through the parallel procedure than those undergoing a standard regulatory review n=56.
Time taken from HC submission to CADTH recommendation (all products n=56) (2014-2016)

Median, Box: 25\textsuperscript{th} and 75\textsuperscript{th} percentiles,
### Time from HC submission to CADTH recommendation according to procedure

<table>
<thead>
<tr>
<th>Process</th>
<th>HC submission to CADTH recommendation</th>
<th>HC submission to HC approval</th>
<th>CADTH submission to CADTH recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sequential</strong></td>
<td>Median: 359 days, Box: 25th and 75th percentiles</td>
<td>Median: 351 days, Box: 25th and 75th percentiles</td>
<td>Median: 252 days, Box: 25th and 75th percentiles</td>
</tr>
<tr>
<td><strong>Parallel</strong></td>
<td>Median: 218 days, Box: 25th and 75th percentiles</td>
<td>Median: 218 days, Box: 25th and 75th percentiles</td>
<td>Median: 218 days, Box: 25th and 75th percentiles</td>
</tr>
</tbody>
</table>

Number of products submitted through:
- Sequential process: 34
- Parallel process: 22
Time from HC submission to CADTH recommendation according to procedure

- Median, Box: 25th and 75th percentiles,

Number of products submitted through:
- Sequential – Standard process: 28
- Sequential – Priority process: 6
- Parallel – Standard process: 15
- Parallel – Priority process: 7
Parallel reduced time from regulatory approval to HTA recommendation

- Regulatory authority review time
- HTA submission to HTA recommendation (national level)

Sequential analysis:
- Total number of cases: 34
- Median time: 359 days
- Time to HTA recommendation: 252 days

Parallel analysis:
- Total number of cases: 22
- Median time: 351 days
- Time to HTA recommendation: 218 days

Median, Box: 25th and 75th percentiles

Time from HC approval to CADTH recommendation (days)
Median roll out time comparison between key jurisdictions 2014-2015

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2014 Regulatory Approval to HTA Recommendation (days)</th>
<th>2014 Regulatory Authority Review Time (days)</th>
<th>2015 Regulatory Approval to HTA Recommendation (days)</th>
<th>2015 Regulatory Authority Review Time (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>403</td>
<td>19</td>
<td>387</td>
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<tr>
<td>Canada</td>
<td>354</td>
<td>324</td>
<td>462</td>
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<td>England</td>
<td>458</td>
<td>315</td>
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<td>Sweden</td>
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<td>241</td>
</tr>
</tbody>
</table>

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What do Reg and HTA agencies see as the future?

Future scenarios by 2025 – Agency responses

Figure 14: Which scenario do you think is likely to reflect the situation by 2025 in your jurisdiction? Agency responses (n=13)

- Parallel process of regulatory and HTA review: 46%
- Regulatory review first, followed by HTA review: 39%
- Other - an integrated system with different possible sequences: 15%

Figure 15: Which is the ideal scenario that you would like to see happen? Agency responses (n=14)

- Regulatory review first, followed by HTA review: 43%
- Parallel process of regulatory and HTA review: 36%
- Other - an integrated system with different possible sequences: 14%
- HTA review first, followed by regulatory review: 7%

Australia, Brazil, Canada, England, EU, Israel, Scotland, Singapore, Sweden, Taiwan

Conclusions

• The large majority of CADTH recommendations for this cohort were positive or positive with restrictions
• Priority drugs were more likely to be assessed through the parallel procedure than those undergoing a standard sequential regulatory review

The parallel process was associated with a shortening of:
• Regulatory review time
• Time to start of CADTH review
• CADTH assessment time
• Overall time from regulatory submission to CADTH recommendation
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Decrease in time from HC approval to CADTH recommendation

- Median, Box: 25th and 75th percentiles,

<table>
<thead>
<tr>
<th>Year</th>
<th>Time (days)</th>
<th>Median</th>
<th>25th Percentile</th>
<th>75th Percentile</th>
</tr>
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<tbody>
<tr>
<td>2014</td>
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<tr>
<td>2016</td>
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