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Health Quality Ontario
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Implementation Subcommittee

Report on the Gap between Evidence and Uptake

August 2013

Table of Contents

Executive Summary 1
Background 2
Implementation Framework 3
Evaluation Framework 4
Implementation Scorecard 5
Challenges 6
Recommendations 6
Appendix A: HQO Implementation Framework 8
Appendix B: Evaluation Framework Logic Model 15
Appendix C: COPD Recommendation Prioritization 16
Appendix D: Implementation Scorecard 22
Appendix E: Side Letter to OHTAC 26

Executive Summary

The Implementation Subcommittee of Ontario Health Technology Assessment Committee (OHTAC) was struck in the Summer of 2012 with three goals: (I) to describe the gap between OHTAC recommendations and their implementation in the Ontario healthcare system; (II) to provide methods for monitoring progress on implementation of OHTAC recommendations; and (III) to develop tools and other supports for increasing implementation of OHTAC recommendations. The Implementation Subcommittee has met through the past year. This report contains a summary of its work. In brief, the Subcommittee was able to address most of its goals.

There has been substantial success in implementation of OHTAC recommendations. Regular reviews of implementation by the Medical Advisory Secretariat, and (now) the Evidence Development and Standards Branch show traction on recommendations that is the envy of many health systems. However, gaps remain in terms of how quickly recommendations are picked up by government and by the health system, the extent to which recommendations are picked up in full, and the consistency with which they are taken up across the health system. There are recommendations that are never picked up by any health system actors. The following report and appendices contain recommendations on how to evaluate implementation and also support the continuation of projects like the Ontario Health Technology Maps Project that document uptake of OHTAC recommendations.

The major challenges to monitoring implementation have to do with following the process of reviewing recommendations inside of government. We have made recommendations on scorecards to monitor implementation and we feel this sort of scorecard would be an effective tool to stimulate progress on implementation. Although policy development and implementation at any level of our health care system is subject to a wide number of pressures and challenges, this sort of measurement may help stimulate process redesign and faster movement of internal processes across institutions in our health system. It will also be important to ensure that Health Quality Ontario (HQO) moves expeditiously to implement recommendations where the responsibility for implementation lies with the agency.

The Subcommittee has also developed tools to support implementation planning, including an implementation framework. This framework provides guidance on possible options to support implementation of OHTAC recommendations. But key to the effective use of this tool is the inclusion of relevant experts on OHTAC expert groups from the start so that implementation becomes an important consideration from the start. Likewise, the use of this framework by HQO staff where there is no expert group would also be important to supporting implementation.

Finally, the Subcommittee identified a number of issues that go beyond its remit that are important to successful implementation of OHTAC recommendations. We have included these in a side letter to the Chair of OHTAC that is also included in the following material.

Background

The Health Quality Ontario (HQO) Evidence Development and Standards (EDS) branch (formerly known as the Medical Advisory Secretariat until 2012) has been conducting evidence-based analyses to evaluate the safety, efficacy, effectiveness, and cost-effectiveness of health interventions since 2003. These evidence-based analyses are then reviewed by the Ontario Health Technology Advisory Committee (OHTAC), a standing advisory subcommittee of the HQO Board, who then make recommendations about the uptake, diffusion, distribution, or removal of health interventions in Ontario. Using OHTAC's recommendations and advice, the HQO Board formulates final recommendations to the health care system and the Minister of Health and Long-Term Care.

Throughout the history of EDS and OHTAC, there have been over 100 sets of recommendations made by OHTAC, and according to an analysis in September 2012, 102 of 111 (92%) sets of recommendations have received some degree of policy traction. While 92% traction appears to suggest that the implementation of OHTAC recommendations has been successful, implementation still faces challenge such as:

- recommendations that are not implemented,
- recommendations that are incompletely implemented,
- recommendations that take too long to be implemented, and
- recommendations/evidence that never make it into a form suitable for implementation.

In most cases, diffusion of an intervention that has been reviewed by OHTAC cannot be directly linked to the recommendation itself, although changes in diffusion in line with recommendations are evidence in the Ontario utilization data. Through the Ontario Health Technology Maps Project, fifteen health interventions were selected by OHTAC for review of usage across different regions (LHINs) and points in time. Although usage patterns cannot be directly correlated with the recommendations themselves, these data do show improvements in the overall level of utilization and reductions in the degree of variation[1,2].

Recognizing that a gap exists between the formation of evidence-based recommendations and their implementation (such as no uptake, incomplete implementation, or the inability to evaluate the implementation of the recommendations), a subcommittee of OHTAC was created to provide advice to OHTAC on how to improve the volume, speed, and fidelity of implementation of evidence-based recommendations into policy and practice in Ontario.

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[1] Health Quality Ontario. Maps Project [Internet]. Ontario. Health Quality Ontario. [cited 2013 June]. Available from: http://www.hqontario.ca/evidence/publications-and-ohtac-recommendations/maps-project.

[2] An example of where it would appear that OHTAC's recommendations were successfully implemented in the province is bariatric surgery. In 2004/05 and 2009/10 OHTAC made a series of recommendations in favour of coverage of bariatric surgery for individuals with diabetes who are morbidly obese by the provincial insurance plan, and that bariatric surgery centres of excellence be established. Monitoring of bariatric surgery through the Maps Project found that between 2003/2004 and 2010/2011, the combined number of bariatric surgery procedures (in Ontario and out-of-country) increased nearly 470%. In addition, in 2010/11 the number of procedures in Ontario exceeded the number performed out-of-country for the first time, and four bariatric centres of excellence were created in Ontario. While the observed trends in access to bariatric surgery align with the recommendations made by OHTAC, they cannot be definitively attributed to the recommendations.

The Implementation Subcommittee was formed in the summer of 2012 and has developed tools to support the implementation of evidence-based recommendations, has identified where barriers and challenges still exist, and has made recommendations on how implementation can continue to be supported in the future. Over seven meetings, and correspondence among its members, the Subcommittee, along with HQO have completed a number of activities including (but not limited to):

- Developed an implementation framework to guide the development of implementation considerations for OHTAC recommendations
- Tested a prioritization tool to rank recommendations for implementation based on feasibility and impact
- Developed a simple reporting tool to track the implementation progress of OHTAC recommendations once submitted to HQO, the Ministry of Health and Long-term Care and other health system institutions
- Developed an evaluation framework that sets up an outline and principles for how to evaluate the degree of implementation as well as the impact of implementing the recommendations
- Worked through the implementation strategies and considerations for the COPD mega-analysis recommendations as a test of the tools described above
- Worked through the implementation strategies and considerations for the Pressure Ulcer Prevention and Management recommendations as a test of the tools described above
- Considered and rejected options for quantifying the gap between extant OHTAC recommendations and implementation of these recommendations
- Drafted a letter to OHTAC containing recommendations on how implementation can continue to be supported beyond the Implementation Subcommittee

By working through the activities listed above, the Subcommittee compiled some key learnings that will be important to consider as implementation continues.

Implementation Framework

The Implementation Framework (see Appendix A) was developed through consultation with experts and serves as the guiding principle for HQO's implementation work by facilitating the discussion that should take place when considering how to implement the OHTAC recommendations, and in the development of the HQO Implementation Strategies. The Implementation Framework is based on the principles of engagement, efficiency, transparency and accountability and sets out the strategy for how to bridge the gap between evidence and action. The framework outlines the process for developing the HQO Implementation Strategies by establishing clear outputs, roles and responsibilities, and ensures that time and resources are only devoted to developing Implementation Strategies where there is a realistic, foreseeable prospect of implementation. The framework also highlights the importance of HQO coming together with subject matter experts, the Ministry, and other health system partners to develop the implementation strategies as well as the role of a multi-disciplinary team of partners and stakeholders to develop and roll-out an implementation plan. In addition to the Implementation Framework, a Value Chain was developed to describe the process for creating the Implementation Strategies in terms of inputs and outputs.

Using the Implementation Framework as a guide, HQO's goal is to support the uptake of OHTAC recommendations through the preparation and dissemination of Implementation Strategies. These Implementation Strategies are aligned with OHTAC's Decision Determinants with a particular focus on the feasibility determinant, and are provided to the ministry and its partners for consideration. The strategies highlight relevant clinical information and present an initial assessment of the expected system impact with optimal adoption of the recommended practice, and offer preliminary considerations around major barriers to and levers for implementation. The strategies will identify the relevant levers needed to facilitate adoption and engage clinicians involved in implementation.

When using the Implementation Framework as a guide for implementation discussions at the Implementation Subcommittee meetings, the Subcommittee noted that individuals with expertise in policy, implementation science, and with business acumen, in addition to relevant subject matter experts, are needed to provide a holistic perspective on implementation. Moving forward, this framework can be used to lead implementation discussions during evidence generation and OHTAC recommendation development processes so that implementation discussions are considered early on.

Following a test application of the Implementation Framework to develop implementation strategies and considerations for OHTAC's recommendations on Chronic Obstructive Pulmonary Disease (COPD), the Subcommittee completed a prioritization exercise on the resulting recommendations. Subcommittee members used an online survey to rank the recommendations according to the dimensions of impact and feasibility. The individual rankings for impact and feasibility were combined to provide an overall rank for prioritization (Appendix C). When multiple OHTAC recommendations are made implementing all the recommendations at once may not be feasible. As such, the overall ranking is intended to provide guidance to the parties responsible for implementation on how to prioritize the recommendations for implementation.

Upon completion of the prioritization exercise, the Subcommittee members found that the results can be powerful and useful. The Subcommittee recommends that going forward, the experts and other individuals providing advice on implementation should also attempt to prioritize the recommendations on the basis of impact and feasibility. The Subcommittee also noted that when evidence on feasibility and impact is available, it should be included in discussions to support effective prioritization.

Evaluation Framework

Since traction of OHTAC recommendations is not currently tracked in a way where we can attribute the diffusion of an intervention directly to the recommendation itself, an evaluation framework for implementation was developed. The evaluation framework sets forth a framework that can be used to assess the extent to which a recommendation has been implemented (using dimensions of speed, uptake, and fidelity), as well as the impact of implementing the recommendations (using relevant clinical and process indicators). This framework should allow us to determine whether or not OHTAC's recommendations were implemented in a timely manner while remaining faithful to the original recommendations, and will also be able to inform us of whether or not the implementation of the recommendations achieved the desired outcomes in the system. The ability to track the implementation status of recommendations as they move through the system can identify where there are gaps between

evidence and practice. Identification of these gaps will help inform on where more effort and support is required to achieve greater uptake and great impact for the health care system (See Appendix B).

Because the challenges around implementation will vary across recommendations, the evaluation framework is a malleable tool that can be adapted to each set of OHTAC recommendations. With respect to assessing the degree of implementation, consideration will need to be given to each of the following dimensions: speed, uptake, and fidelity. Speed and timeliness can be subjective, and as such, a logic model that maps out the implementation steps of a specific set of recommendations from approvals to program/policy roll-out, should be developed. Speed can then be tracked by assessing the time needed to meet each milestone. It can also be compared across recommendations with similar milestones. Following that, uptake can be reflected by the actions the relevant stakeholders have demonstrated toward implementing the recommendations. Fidelity reflects the coherence of eventual practice with the intent of the recommendations. In some cases this can be assessed using approaches like the MAPS project but it may also require new data; this data may be part of the implementation recommendations themselves.

Implementation Scorecard

In order to track the implementation status and uptake of OHTAC's recommendations by HQO, the Ministry and other health system partners who have a role in implementation, an Implementation Scorecard was created (Appendix D). The purpose of this Scorecard is to have a mechanism to track implementation performance along the same dimensions of the evaluation framework: speed, uptake and fidelity, in order to provide real-time high-level feedback on progress and facilitate continuous improvement. Traffic lights were used to provide a visual representation of whether implementation is "on track", "requires attention and monitoring", or "delayed" using green, yellow, and red respectively. The Implementation Scorecard focuses on the process from when a recommendation and the associated Implementation Strategies are received by HQO, the Ministry, and other health system partners to the point where implementation action is observed. It is envisioned that going forward, the Implementation Scorecard could be publically available via the HQO website. It is expected that in the beginning, the scorecard may not show immediate traction (e.g., "green") on all aspects of implementation, however, it should serve to improve transparency within the system and speed of implementation over time.

To further refine and facilitate populating the Scorecard, there is a need to establish appropriate expectations including timelines for implementation. Speed for example presents some challenges, as it can be a very subjective measure. What may seem like a delay in the implementation or decision-making process may in fact be a bottleneck in the system that is outside the control of those responsible for implementation. It is therefore imperative to have an understanding of the contextual factors that will affect implementation, and an understanding of what the appropriate expectations are to work within these factors. To assist in establishing expectations around timing, it is recommended that the implementation strategies – based on consultation with relevant stakeholders – include timelines and milestones for implementation.

Challenges

As the Implementation Subcommittee worked through the development of these tools and discussed Implementation Strategies and considerations for OHTAC recommendations, a number of related challenges became apparent.

The recommendations made by OHTAC, although based on evidence and contextualized for Ontario by local experts, are often not developed with an implementation lens that accounts for the complex nature of the health care system. In order to facilitate the implementation of evidence-based recommendations, a cross-sectoral approach is required that reflects patients' journeys across sectors. In addition, having recommendations that are informed solely by clinical experts may only serve to enhance clinical aspects f health system performance practice, and opportunities to improve different areas of performance by adapting new evidence into health policy may be missed.

Another challenge is the effective tracking and evaluation of implementation, and the ability to gather the necessary information for this tracking. In particular, populating the Implementation Scorecard and designing an evaluation plan based on the proposed Evaluation Framework requires detailed knowledge of the processes and levers used to implement recommendations once they have been passed from HQO, as well as the status of implementation decisions. Due to the complex nature of Ontario's health care system, the processes and decisions will be unique to each set of recommendations, and the information will remain largely unknown to any one health system actor.

For example, in April 2010 and February 2011 OHTAC developed evidence-based recommendations for Endovascular Laser Therapy for Varicose Veins and Endovascular Radiofrequency Ablation for Varicose Veins, respectively. An Implementation Strategy for these recommendations entitled Endovascular Ablation for Varicose Veins (EAVV) was prepared using the Implementation Framework as a guide, and submitted to the ministry in September 2012. To date, six months following submission, no known progress has been made with respect to the implementation of these recommendations. However, consultation with the Ministry has revealed that the associated timelines for assessment of the HQO Board approved recommendations is 4 to 6 weeks. However, these timelines are only estimates subject to change depending on the nature of the recommendations and other variables such as obtaining further information from either HQO or other stakeholders. In addition, it was also noted that implementation strategies that require a significant financial investment require additional time and consideration. All of these timeframes make sense within the democratic processes that shape our health system. However, without establishing first milestones that reflect these time frames, it is impossible to determine whether implementation is progressing as expected.

Recommendations

Along with the challenges noted above, the Subcommittee also has recommendations for how HQO should proceed with their implementation efforts in order to bridge the gap between evidence and uptake. The

basis for these recommendations is grounded in the need for a more integrated approach in the development and implementation of evidence, as well as a plan for ongoing monitoring and evaluation.

A more integrated approach to developing evidence-based recommendations can be achieved by having a broader set of expertise at the table when developing the recommendations. By acknowledging the complexity of the system, and the desire to have these recommendations easily adopted by the system, it is clear that different types of representation are needed at different points of the evidence and recommendation development process. As such, the Subcommittee has made recommendations on three key elements that should occur when developing implementation strategies going forward.

The first recommendation focuses on the membership of experts consulted for implementation considerations. In addition to clinical expertise, the expert panels and committees should be expanded to also include individuals with policy, implementation science, and business acumen to provide a more holistic, strategic, and pragmatic lens to the evidence. The second recommendation is that early and ongoing interaction throughout the development of evidence and implementation considerations should occur. For effective uptake of research by policy audiences there needs to be engagement between those that generate evidence and those expected to apply it. To achieve this type of engagement, policy and decision-makers should be involved early in the evidence process to ensure that the evidence can be applied in the policy environment, which is often plagued with a number of competing interests. Last, the tools (appended to this report) developed by the Subcommittee should be utilized to guide the development of evaluation and implementation considerations for OHTAC recommendations. These and other recommendations can be found in the side letter to the Chair of OHTAC on behalf of the Implementation Subcommittee (Appendix E).

In addition to the expertise considered that may be added to the expert panels and to OHTAC, it may also be useful to reformulate the Implementation Subcommittee with a new mandate now that the largely developmental work of the first mandate has been completed. A new Implementation Subcommittee could have three terms of reference: (i) to review data on the progress of implementation of OHTAC recommendations and to request advice from health system partners on how to increase the speed, uptake, and fidelity of OHTAC recommendations; (ii) to require the new implementation committee to provide general advice re implementation considerations for OHTAC on a quarterly basis (as requested by OHTAC); and (iii) to complete an annual evaluation of the implementation of OHTAC recommendations and to provide advice to OHTAC on the implementation of an evaluation program. This Subcommittee should carry over some of the membership from the first committee, but should add to it experts in evaluation and prominent health system leaders who can help champion and shape implementation efforts in our health system.

With respect to continuous monitoring and evaluation of HQO/OHTAC's implementation efforts, new tools can be leveraged such as the Implementation Scorecard and Evaluation Framework that the Subcommittee developed, in addition to existing tools such as the HQO Maps Project and public reporting. The ability to follow OHTAC's recommendations from formation, to uptake, to impact, will allow us to gain a better understanding of how the mobilization of evidence into practice can improve the health of Ontarians. Also, by considering implementation throughout the process, it will allow HQO to achieve its mandate which extends beyond evidence-based recommendations, to driving their uptake in order to improve quality across the health care system.

Appendix A: HQO Implementation Framework

Translating Evidence into Action:
HQO's Implementation Framework

January 2013

Elements of the Framework

1. Guiding Principles for Framework Development
2. Rationale for Evidence Implementation
3. Establishing Outputs, Roles and Responsibilities
4. Implementation Considerations
5. Appendix

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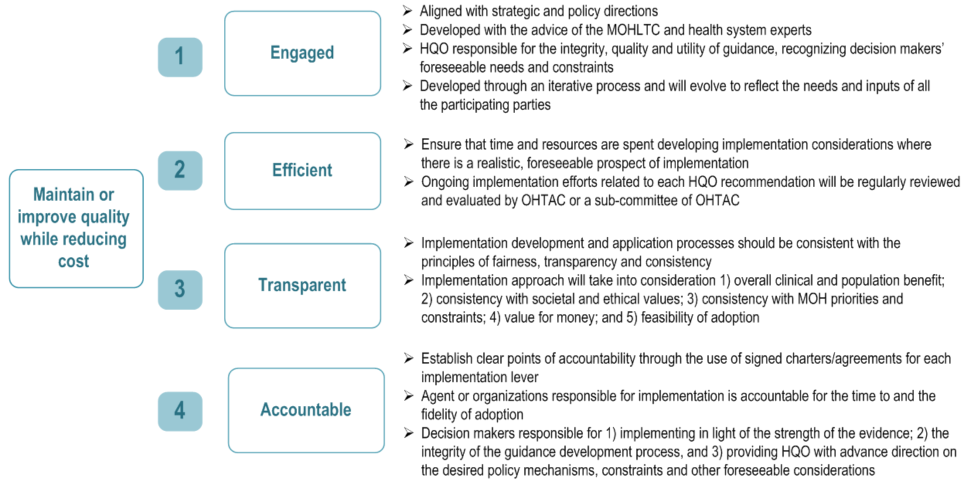
Informed by expert consultation, HQO has synthesized a set of key principles to guide development of an implementation framework



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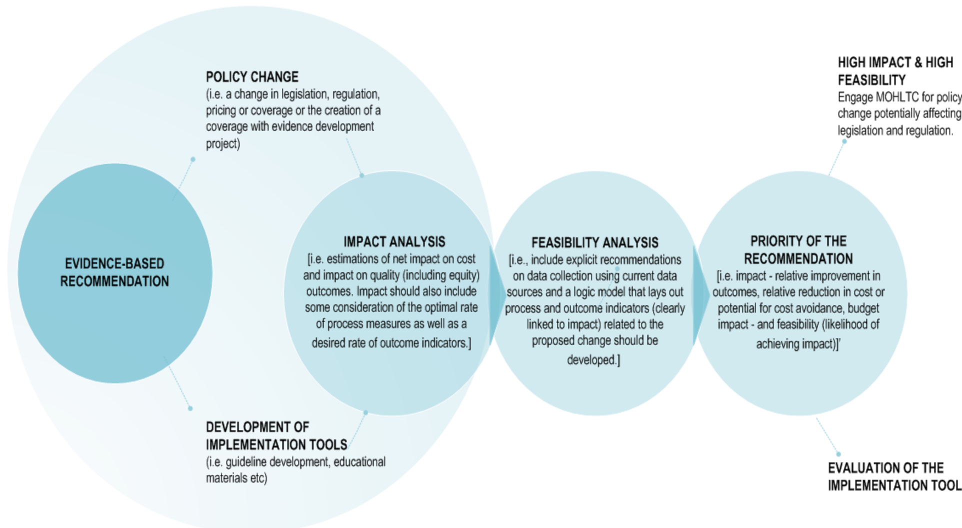
Informed by the Implementation Subcommittee, HQO's Implementation Framework will serve as the bridge between evidence and action



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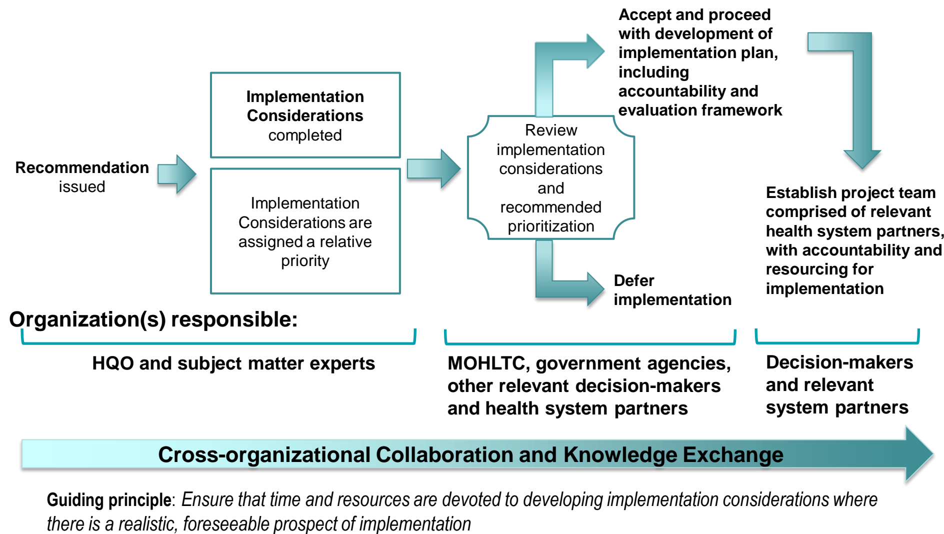
Core to this framework is a new process for evidence implementation that establishes clear outputs, roles and responsibilities



Cross-organizational Collaboration and Knowledge Exchange

Guiding principle: *Ensure that time and resources are devoted to developing implementation considerations where there is a realistic, foreseeable prospect of implementation*

Implementation Considerations for each OHTAC recommendation will highlight relevant information and key considerations related to adoption

Key component	Description of component
Projected optimal adoption	- Projection of system utilization at optimal adoption of the recommendation, using population-based rates and/or provider-based process measures - Draws from data on prevalence and incidence of relevant diseases; current use of technologies for substitution; expert opinion
Impact on population outcomes	- Estimated aggregate impact on provincial outcomes with achievement of full adoption steady state - Presented in QALYs and disease-specific outcomes
System costs and savings considerations	- Estimated aggregate impact on provincial health system costs with optimal steady state adoption including estimated budget impact to provincial government - Presented by total provincial health system cost, sector-specific cost impacts, and cost-effectiveness
Preliminary assessment of barriers to adoption	- Drawn from high level expert discussion on major barriers to adoption - Refer to evidence where it exists on strategies to address barriers
Preliminary assessment of levers for adoption	- Drawn from high level expert and ministry consultation on major levers and opportunities to drive adoption

- *To be completed with each new OHTAC recommendation; complements EBA and existing analysis*
- *Presents an initial assessment of the expected system impact of optimal adoption of the recommended practice, with preliminary considerations around major barriers to and levers for implementation*

HQO's implementation efforts will be aligned with OHTAC's Decision Determinants, with a particular focus on the *feasibility* determinant

- HQO's goal is to support the implementation of all OHTAC recommendations. In order to achieve this, HQO will provide Implementation Consideration packages to the Ministry, and will collaborate with stakeholders (e.g., LHINs) to facilitate uptake.
- Implementation Consideration packages will include:
  - Consolidated background from the EBA, Economic Analysis, and OHTAC Recommendations
    - Overview of the Technology
    - OHTAC Recommendations
    - Population / Patient Health Outcomes
  - Proposed Implementation Strategy
  - Feasibility to Implement
    - Jurisdictional Review
    - Prioritization with respect to feasibility
    - Levers
    - Stakeholders
    - Barriers to Adoption
    - Evaluation
    - Cost / Budget Impact

The Implementation Framework will identify the relevant levers needed to facilitate adoption and engage clinicians involved in implementation

Implementation Matrix

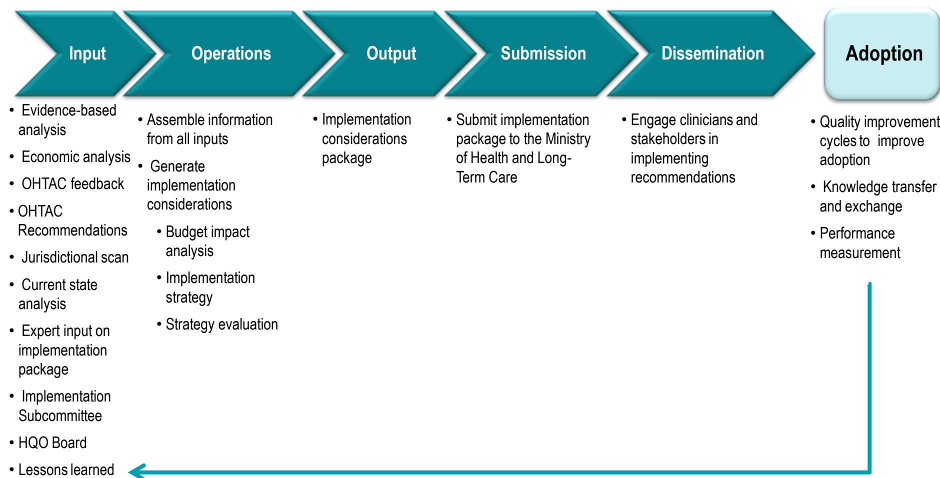
	OHTAC Recommendations				
Implementation Levers[a]	Recommendation #1	Recommendation #2	Recommendation #3	Recommendation #4	Recommendation #5
Policy-Oriented					
• Policy and Regulation					
• Funding					
• Etc...					
Clinical Engagement[b,c]					
• Clinician Leaders					
• Knowledge Transfer					
• Etc...					

[a] A full list of the levers identified to date can be found in the Appendix of this presentation
[b] In collaboration with KTE experts Drs. Sharon Straus, Anna Gagliardi, and Jeremy Grimshaw, a repository of clinical engagement tools and best practices will be refined
[c] Where HQO may not be positioned to engage with clinicians directly, it will provide guidance on the most effective clinical engagement strategies for implementation

Appendix

1. Value Chain – Describes the process for creating the Implementation Considerations in terms of inputs and outputs
2. Implementation Levers Matrix – A list of potential levers needed to facilitate adoption and the stakeholders responsible for those levers

Value Chain



Implementation Levers Matrix

Potential Implementation Levers and Roles	HQO	Ministry	Providers	Others
Field evaluation	Recommend, commission	Monitor	Partner	
One-time incentive funding	Consider ROI	Decide	Meet requirements	
New, dedicated provincial program	High level design and cost/benefit provided if determined to be appropriate	Decide, identify delivery partner if approved	Advise on design	
Program decisions (i.e., decisions on whether to maintain, expand, restrict etc., current provincial programs)	Recommend based on strength of evidence	Decide	Advise on design	
OHIP fee schedule modifications: • Change definition of service billed • Adjust price of service (up or down, relative to other services) • Set patient indications for billing • Set eligible timeframe / frequency for billing • Set eligibility in conjunction with other services • Single physician billing or multiple physician billing for a service • Negate billing for a service if recommended practice is not performed • Remove OHIP physician fee schedule code • Create OHIP physician fee schedule incentive bonus	Recommend, including targets and change management considerations as appropriate	Decide, implement (Issue? Can be confounded by OHIP SOB decisions made separately from EBA)	Consulted	OMA, colleges consulted and support communications
Set targets for uptake, for example: • Percent of eligible primary care patient roster receiving service (e.g., screening) • Completion of X number of recommended services a year	Advise on targets based on potential population benefit, identify main adoption barriers, public reporting	Decide, incorporate targets into accountability instruments	Consulted, implement pathways	Clinical guidelines
Include service in primary health care physician capitation 'basket'	Recommend general approach, facilitate definition of basket, performance criteria and cost	Decide, implement	Consulted	Experts help define basket, collaborate on optimal cost/resource use
Change capitation rate for particular type of patients (e.g., by complexity)	High level design and system cost/benefit developed if determined to be appropriate	Decide, implement	Consulted	Experts, clinicians engaged on characteristics of sub-populations most likely to benefit
Primary care structures • Primary care leads • FHTs, FHOs, etc.	Recommend general approach and identifying leading practices and stakeholders	Decide, allocate funds	Consult, implement	Associations (e.g., AFHTO and CHCA) to lead in implementation

Implementation Levers Matrix – cont'd

Potential Implementation Levers and Roles	HQO	Ministry	Providers	Others
Use existing global funding or rate/volume funding lines (provincial programs, wait times strategy, or new clinical quality groupings funding approach) • Change the definition and scope of service paid for (discrete service to broader 'bundles' of care) • Adjust rate and/or formula for service (evidence-based rates or value-based pricing)—targets, blending, quality overlay • Clinical Quality Groupings only – include as a new clinical group in multiyear rollout plan • Funding linked to execution of indicated key practices • Clinical Quality Groupings only – adjust 'carve-out' approach to pulling funding related to clinical area out of global budget	Recommend general approach per EBA, develop system cost-benefit, monitor impact on population outcomes	Decide, set performance parameters identify accountability mechanisms, assign implementation roles	Consulted, implement necessary system redesign	Define ideal bundle, pathway. LHINs lead local negotiations, facilitate integration, CCACs could use to amend approach to contracting for community services
Use existing case mix-based funding models (HBAM, Post Construction Operating Plan) • Adjust case mix weights • Adjust service volume model for HBAM	Recommend general approach per EBA, develop system cost-benefit, monitor impact on population outcomes	Decide, set provincial case weights, allocate funds	Consulted	
Change LTC funding formula (envelopes) or case weights	Recommend general approach per EBA	Decide, revise funding formula and allocate	Consulted	LHINs facilitate implementation
Change referral, eligibility criteria for LTCH or other community based services	Identify ideal setting for care, develop system cost-benefit, monitor impact on population outcomes	Decide, implement regulation changes	Consulted	Likely need for public consultation CCACs implement
New funding models for example payment approaches spanning multiple sectors, risk/gain sharing strategies	Recommend general approach per EBA, develop system cost-benefit, develop program design in consultation with Ministry and field	Decide, develop and implement enabling policy and funding models	Consulted, may need to identify early adopters	LHINs facilitate integration
Provide/Remove access to device/technology	Recommend	Decide	Consulted	
Legislation and Regulation	Identify likely enablers/barriers in Ontario context per EBA	Decide, implement	Consulted	Public consultation maybe appropriate
Accreditation				Collaboration with CARF, Accreditation Canada on ROPs
Continuing Medical Education	Recommend	Decide if RHPA affected, consulted if colleges are decision makers	Consulted	Collaboration with colleges

Implementation Levers Matrix – cont'd

Potential Implementation Levers and Roles	HQO	Ministry	Providers	Others
Certification, Licensure, Compliance, Audit	Recommend	Decide, implement regulation and policy changes, consider funding training programs	Consulted May be unique implications if provider censure or exit is entailed	HHR, Educational players consulted
Public reporting	Report per mandate, may advocate for data	Consulted, may wish to align accountability agreements	Consulted	Data analytical partners (ICES, CIHI, etc.) engaged
Quality Improvement plans	Recommend coverage, benchmarks and QI supports	Align accountability indicators	Implement, collaborate where multi-provider	LHINs negotiate local targets, facilitate partnerships
Change management supports: • Clinical champions • Province-wide adoption (technology specific) • Regional champions	Recommend, provide evidence to support engagement and recruitment, identify barriers if appropriate	Mandate or promote adoption, address funding barriers as appropriate	Lead and/or implement	Could be role for colleges, provider associations and provincial network Early adopter support if indicated LHINs could lead recruitment
Toolkits for health organizations and providers	Recommend, lead or commission development	Consulted (decision re: HQO budget/resource may be required)	Participate	Expert reference
Public education campaigns	Recommend per EBA, identify leading practices, required content	Decide, lead	Consulted Patient/public engaged	Expert reference
Provider education campaigns	Recommend per EBA, publish best practice on web-site	Decide	Consulted, participate	Provincial associations and networks may lead
Professional standards: • Scope of practice • Privileges • Practice standards	Recommend per EBA, identify best practices	Decide, implement (RHPA) or assign accountability (e.g., H-SAA)	Consulted, implement	Colleges consulted
Standardize on protocols: • Assessment and referral criteria • Risk stratification • Predictive triage • Standing orders	Recommend per EBA, identify best practices, develop system cost-benefit, monitor impact on population outcomes (may be role in QI support)	Decide, implement necessary regulatory changes and/or or assign accountability (e.g., *-SAA)	Implement, may entail redesign care pathways	Expert reference

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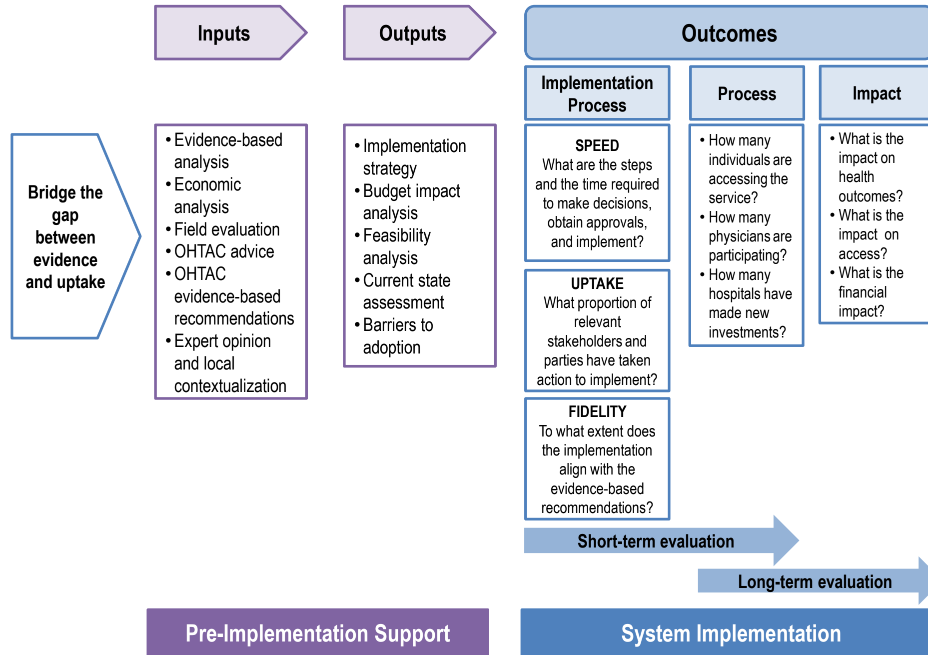
Appendix B: Evaluation Framework Logic Model



Appendix C: COPD Recommendation Prioritization

OHTAC Recommendations for COPD – Prioritization of Implementation Strategies

June 2013

Description of Prioritization Exercise

- The Implementation Subcommittee was asked to prioritize the COPD OHTAC Recommendations for implementation using the Survey Monkey voting and ranking feature.
- The two dimensions used in the prioritization exercise were impact and feasibility.

Impact	Feasibility
• Overall Clinical Benefit • Consistency with Societal and Ethical Values • Value for Money	• Organizational feasibility (i.e., time to implement, number of centres, HHR, etc.) • Implementation status in other jurisdictions • Outcomes and evaluation

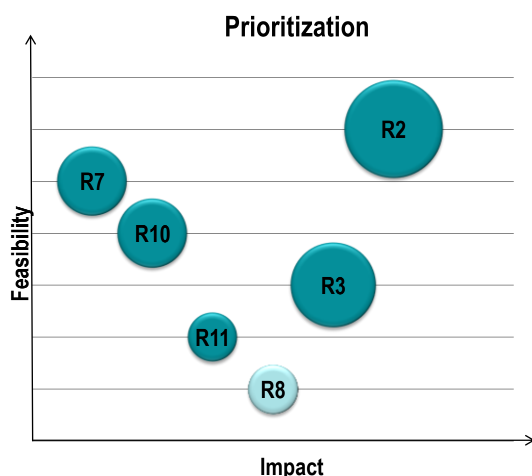
- The rankings for both dimensions were combined to calculate the overall prioritization and depicted graphically using a circle graph.
  - Preferred Recommendations are those with a high impact and high feasibility, representing the upper right quadrant of the circle graph.
  - Large circles represent Recommendations that received the received the greatest number of votes, and thus the highest ranking for implementation

Results of the COPD Prioritization Exercise

- The survey was completed by 10 people
- The overall combined prioritization for implementation is as follows:

Rank	Recommendation
1	Recommendation #2 – Pneumococcal and influenza vaccines access
2	Recommendation #3 – Bundle of smoking cessation strategies
3	Recommendation #7 – Against the use of NPPV for chronic respiratory failure in stable patients
3	Recommendation #10 – For the use of NPPV to wean COPD patients following mechanical ventilation
4	Recommendation #8 – Pulmonary rehabilitation field evaluation
4	Recommendation #11 – Patients' preferences regarding mechanical ventilation

Graphical Representation of the COPD Prioritization Exercise



Rank	Recommendation
1	R2 – Pneumococcal and influenza vaccines access
2	R3 – Bundle of smoking cessation strategies
3	R7 – Against the use of NPPV for chronic respiratory failure in stable patients
3	R10 – For the use of NPPV to wean COPD patients following mechanical ventilation
4	R8 – Pulmonary rehabilitation field evaluation
4	R11 – Patients' preferences regarding mechanical ventilation

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Appendix: Summary of Survey Responses

Prioritization of COPD OHTAC Recommendations

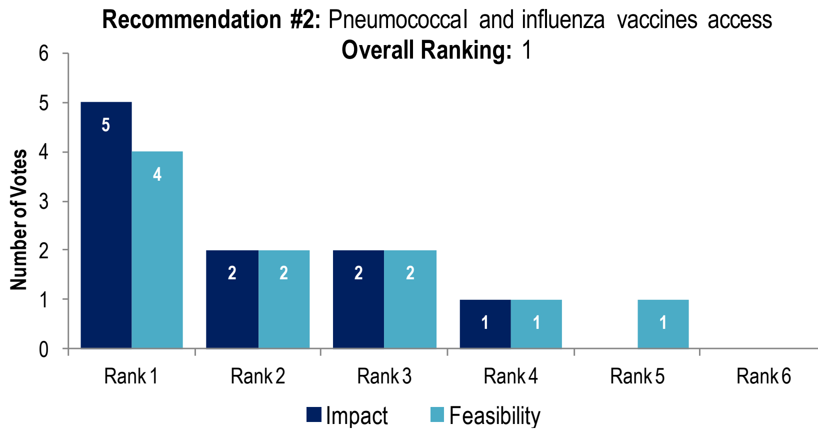
1. Please rank the following recommendations based on overall impact to the health care system, where 1 represents the greatest impact and 6 is the lowest. (Recall: Impact refers to Overall Clinical Benefit, Consistency with Societal and Ethical Values, and

Answer Options	1	2	3	4	5	6	Rating Average	Response Count
Recommendation #2 -	5	2	2	1	0	0	1.90	10
Recommendation #3 -	5	1	2	0	2	0	2.30	10
Recommendation #7 -	0	1	1	2	1	5	4.80	10
Recommendation #8 -	0	3	4	2	1	0	3.10	10
Recommendation #10	0	0	1	3	4	2	4.70	10
Recommendation #11	0	3	0	2	2	3	4.20	10
							answered question	**10**
							skipped question	**0**

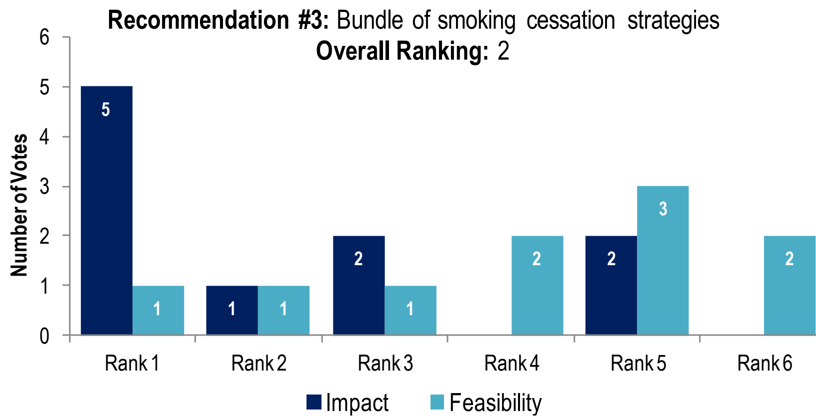
2. Please rank the following recommendations based on overall feasibility of implementation, where 1 represents the most feasible for implementation and 6 is the least feasible. (Recall: Feasibility refers to Organizational Feasibility, Implementation Status in

Answer Options	1	2	3	4	5	6	Rating Average	Response Count
Recommendation #2 -	4	2	2	1	1	0	2.30	10
Recommendation #3 -	1	1	1	2	3	2	4.10	10
Recommendation #7 -	4	1	3	1	1	0	2.40	10
Recommendation #8 -	1	0	2	2	1	4	4.40	10
Recommendation #10	0	4	0	4	0	2	3.60	10
Recommendation #11	0	2	2	0	4	2	4.20	10
							answered question	**10**
							skipped question	**0**

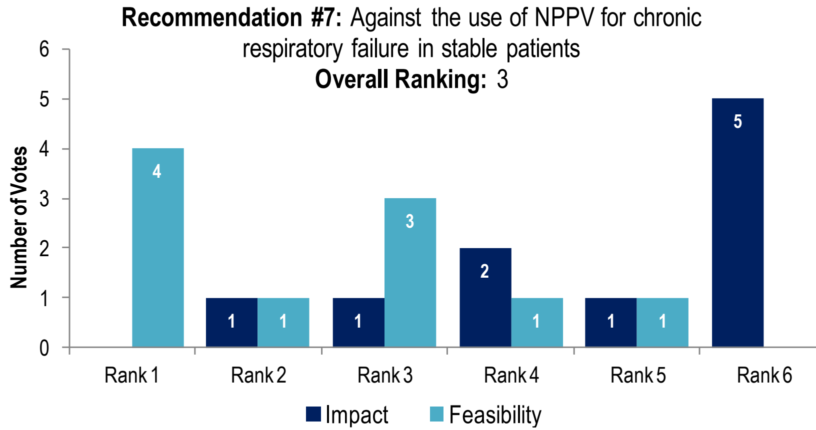
Appendix: Individual Response Breakdown



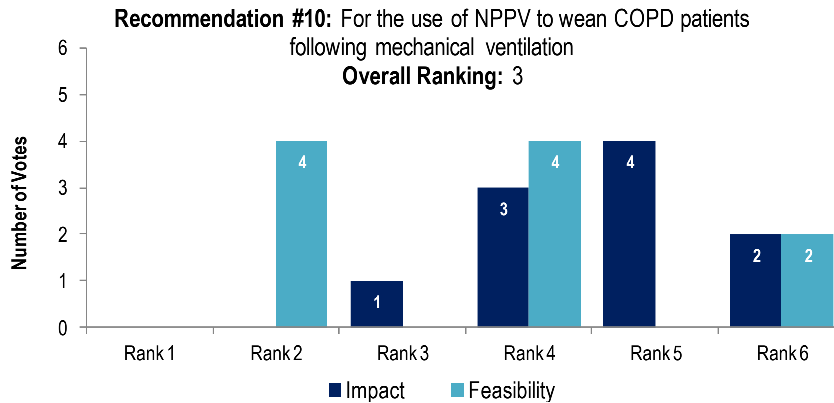
Appendix: Individual Response Breakdown



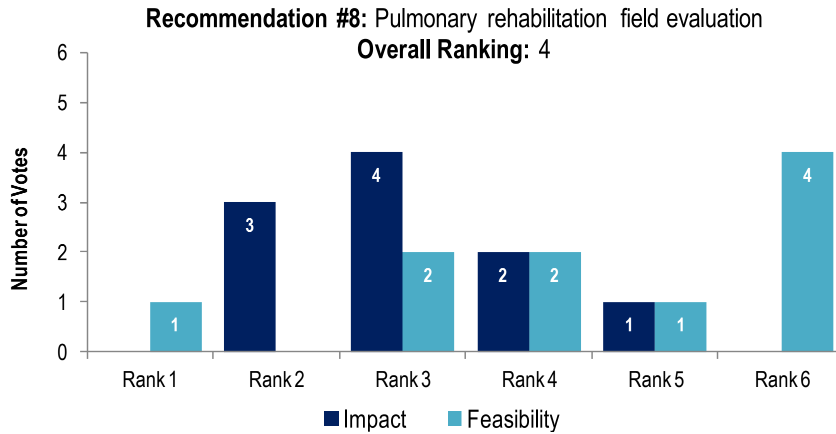
Appendix: Individual Response Breakdown



Appendix: Individual Response Breakdown



Appendix: Individual Response Breakdown



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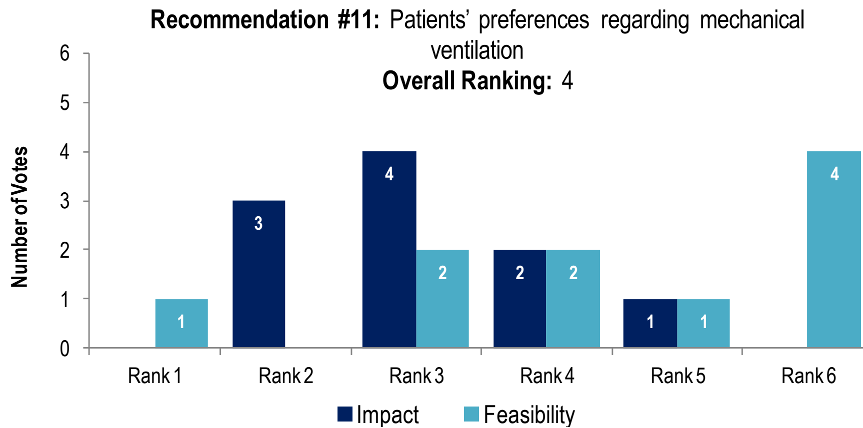
Appendix: Individual Response Breakdown



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Appendix D: Implementation Scorecard

Overall Status of Implementation Initiatives

Implementation Considerations Package	Date of Submission to date of decision by government or regulatory body (Speed)	Date of decision to date of implementation by government or regulatory body (Speed)	Is implementation being tracked?	Does field behaviour reflect the OHTAC recommendation? (Fidelity)
	Date of submission (S): 30-09-2012 *Date of decision (D): dd-mm-yyyy* Green = Within 12 months Yellow = 1 to 2 years Red = > 2 years Blue = Unknown Purple = Not applicable	*Date of decision (D): dd-mm-yyyy* *Date of implementation (I): dd-mm-yyyy* Green = ≤ 6 months Yellow = 6 to 12 months Red = > 12 months Blue = Unknown Purple = Not applicable	*Yes/No* Green = Yes Red = No	*Yes/Partial/No* Green = Yes Yellow = Partial Red = No Blue = Unknown Purple = Not applicable
24-hour ABPM				
Endovascular Ablation of Varicose Veins				
Drug-Refractory Epilepsy				

Summary | 24-hr ABPM | EAVV | Drug-Refractory Epilepsy

Ready

24-hour Ambulatory Blood Pressure Monitoring

Components of Implementation Recommendation	Implemented By:	Date of Submission to date of decision by government or regulatory body (Speed)	Date of decision to date of implementation by government or regulatory	Is implementation being tracked?	Does field behaviour reflect the OHTAC recommendation?
	Implementation facilitator i.e.: by system, MOHLTC, LHIN etc.	*Date of submission (S): 30-09-2012* *Date of decision (D): dd-mm-yyyy* Green = Within 12 months Yellow = 1 to 2 years Red = > 2 years Blue = Unknown	*Date of decision (D): dd-mm-yyyy* *Date of implementation (I): dd-mm-yyyy* Green = ≤ 6 months Yellow = 6 to 12 months Red = > 12 months Blue = Unknown	*Yes/No* Green = Yes Red = No	*Yes/Partial/No* Green = Yes Yellow = Partial Red = No Blue = Unknown Purple = Not applicable
24-hour ABPM becomes an insured service	**MOHLTC**	**Unknown**	**Unknown**	**No**	**Not applicable**
Designate 70 "specialized" facilities	**LHIN**	**Unknown**	**Unknown**	**No**	**Not applicable**
Laboratory requisition form must indicate individual is suspected of having white	**MOHLTC**	**Unknown**	**Unknown**	**No**	**Not applicable**
SUMMARY					

Summary | 24-hr ABPM | EAVV | Drug-Refractory Epilepsy

Ready

Endovascular Ablation of Varicose Veins

Components of Implementation Recommendation	Implemented By:	Date of Submission to date of decision by government or regulatory body (Speed)	Date of decision to date of implementation by government or regulatory body (Speed)	Is implementation being tracked?	Does field behaviour reflect the OHTAC recommendation? (Fidelity)
	Implementation facilitator i.e.: by system, MOHLTC, LHIN etc.	*Date of submission (S): 30-09-2012* *Date of decision (D): dd-mm-yyyy* Green = Within 12 months Yellow = 1 to 2 years Red = > 2 years Blue = Unknown Purple = Not applicable	*Date of decision (D): dd-mm-yyyy* *Date of implementation (I): dd-mm-yyyy* Green = ≤ 6 months Yellow = 6 to 12 months Red = > 12 months Blue = Unknown Purple = Not applicable	*Yes/No* Green = Yes Red = No	*Yes/Partial/No* Green = Yes Yellow = Partial Red = No Blue = Unknown Purple = Not applicable
ELT and RFA become an insured service	**MOHLTC**	**Unknown**	**Unknown**	**No**	**Not applicable**
Retain vein stripping surgery	**MOHLTC**	**Unknown**	**Unknown**	**No**	**Not applicable**
Referral for C4 to C6 only	**OMA**	**Unknown**	**Unknown**	**No**	**Not applicable**
Not used for cosmetic purposes	**MOHLTC**	**Unknown**	**Unknown**	**No**	**Not applicable**
SUMMARY					

Summary | 24-hr ABPM | EAVV | Drug-Refractory Epilepsy

Ready

Care for Drug-Refractory Epilepsy in Ontario

Components of Implementation Recommendation	Implemented By:	Date of Submission to date of decision by government or regulatory body (Speed)	Date of decision to date of implementation by government or regulatory	Is implementation being tracked?	Does field behaviour reflect the OHTAC recommendation?
	Implementation facilitator i.e.: by system, MOHLTC, LHIN etc.	*Date of submission (S): 30-09-2012* *Date of decision (D): dd-mm-yyyy* Green = Within 12 months Yellow = 1 to 2 years Red = > 2 years Blue = Unknown	*Date of decision (D): dd-mm-yyyy* *Date of implementation (I): dd-mm-yyyy* Green = ≤ 6 months Yellow = 6 to 12 months Red = > 12 months Blue = Unknown	*Yes/No* Green = Yes Red = No	*Yes/Partial/No* Green = Yes Yellow = Partial Red = No Blue = Unknown Purple = Not applicable
Implement standards for diagnostic testing to determine surgical candidacy	**Professional Associations**	**Unknown**	**Unknown**	**No**	**Not applicable**
access to diagnostic testing to determine candidacy for epilepsy surgery	**MOHLTC**	**Unknown**	**Unknown**	**No**	**Not applicable**
Increase centres for epilepsy surgery	**LHIN**	**Unknown**	**Unknown**	**No**	**Not applicable**
Increase coordination of care between diagnostic and surgical centres	**LHIN**	**Unknown**	**Unknown**	**No**	**Not applicable**
Increase coordination of follow-up care between surgical centres and regional hospitals / family physicians	**LHIN**	**Unknown**	**Unknown**	**No**	**Not applicable**
SUMMARY					

Summary | 24-hr ABPM | EAVV | Drug-Refractory Epilepsy

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Appendix E: Side Letter to OHTAC

Dr. Charles Wright
Chair, Ontario Health Technology Advisory Committee
10th Floor
130 Bloor Street West
Toronto, Ontario M5S 1N5

24 August 2013

Dear Dr. Wright,

On behalf of Susan Fitzpatrick and the members of the Implementation Sub-Committee, thank you for the opportunity to work on the exciting and challenging problem of how to improve implementation of Ontario Health Technology Advisory Committee Recommendations. Our Sub-Committee had a two-year mandate to look at three terms of reference. We have now completed work on all terms and have attached our final report.

Yours sincerely,

Adalsteinn Brown

Director, Institute for Health Policy, Management, and Evaluation
Dalla Lana Chair and Division Head, Public Health Policy, Dalla Lana School of Public Health
Scientist, Keenan Research Centre, Li Ka Shing Knowledge Institute, St. Michael's Hospital

Health Sciences Building, 155 College Street, Suite 425, Toronto, Ontario M5T 3M6 Canada
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Dear Dr. Wright,

The Implementation Subcommittee of the Ontario Health Technology Assessment Committee (OHTAC) is nearing completion of its first year of a two year term, and this letter serves as an update to the work completed thus far and includes recommendations on steps that can be taken to support the implementation of evidence in the system.

The goal of the Implementation Subcommittee's work is to increase the volume, speed, and fidelity for the implementation of evidence-based recommendations into policy and practice in Ontario. In support of this goal, the Subcommittee's Terms of Reference commits to delivering the following products:

- A report that explains and measures the divide between evidence-based recommendations and their implementation,
- A framework that guides the development and prioritization of high-level implementation strategies for OHTAC's recommendations; and
- An ongoing assessment of improvements in the implementation of OHTAC/HQO evidence-based recommendations.

As you know, in today's environment of rapidly diffusing practices, the uptake of evidence into policy remains a challenge. An examination into the role of evidence in shaping policy in Ontario stated that "[c]omplex forces compete with research for the attention of civil servants and politicians: the interests of stakeholders, the values of the public, the ideologies of governing parties, the constraints of prior policy, and so on".[3] There are however implementation success stories that we can draw from, and continue to build on. An example of Ontario's success in the implementation of evidence in the face of potential political controversy is the avoidance of an expanded PSA screening program that would have likely done more harm than good. This success is a testament to the commitment between HQO and OHTAC to improve care in Ontario and the importance of policy and research working together.

Over the last year we have reviewed a number of OHTAC recommendations with a lens for implementation, and it was noted that there are a number of policy and practice suggestions that would assist in the implementation of these recommendations. The basis of these policy and practice suggestions is grounded in the need for greater integration and an integrated perspective, a need for data and tracking in our system, and contextualization of the OHTAC recommendations.

It is important to recognize that as the mandate of OHTAC evolves to include broader and more system-wide interventions (e.g., Optimizing Chronic Disease Management in the Community) the necessity for greater integration within the system becomes more apparent. It is becoming increasingly difficult to implement recommendations in individual sectors. A system that is more integrated and connected can have a better understanding of what is happening, can be more adept at implementing improvements, and knowledge mobilization can occur at once across a variety of groups. Reforms such as the development of polyclinics to integrate primary and secondary care, which are organized around the patient, can connect the care continuum and have a stronger focus on outcomes rather than process.

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[3] Lomas, J. and Brown, A.D. (2009). Research and Advice Giving: A Functional View of Evidence-Informed Policy Advice in a Canadian Ministry of Health. *The Milbank Quarterly*, 87(4), 903-926

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In line with a greater degree of integration in the system is the notion of adopting a more integrated perspective when developing recommendations. Recommendations that adopt a holistic view of the system and have a stronger connection with the patient will facilitate implementation. For example, end-of-life care is not only a question of appropriateness, but also transcends sectors and will require engagement from a broad set of stakeholders that include patients and the public. By adopting a more integrated perspective, such as the grouping of providers, the system will be more empowered to implement the recommendations.

To facilitate and monitor change it is important to link information and providers through a mechanism that provides accurate and timely information. Continuous evidence and knowledge development alongside an integrated system can be a powerful tool for change. A more integrated system can build a foundation to receive knowledge and can also become a vehicle for its transfer and exchange across various partners and sectors. Mobilizing information and expertise can optimize care and contribute to a high-performing healthcare system, as is achieved through the *Better Outcomes Registry & Network Ontario* (BORN Ontario) which puts evidence alongside practice and performance indicators.

Finally, to achieve greater system impact, we suggest adopting an implementation lens during the development of the OHTAC recommendations in order to ensure they are specific, actionable, and vetted through an expert lens. Since the current health care system does not easily lend itself to change, it is imperative that OHTAC recommendations be framed in a manner that facilitates uptake across our complex system. Being able to incorporate the patient perspective alongside the evidence and expert context, can connect us with the provider population and cultivate advocates within the system to drive continuous quality improvement. It is also important that OHTAC recommendations are specific and directive, as being clear about "who" should be doing "what" is our opportunity to ensure that we are improving care in the province.

As we approach the end of our first year, we are close to delivering on our Terms of Reference. However, before letting the Subcommittee come to an end, it is imperative to identify the best opportunities to continue supporting the implementation of OHTAC's evidence-based recommendations. We know that for effective uptake of research by policy audiences there needs to be engagement between the researchers and these policy audiences.[4]The greatest weakness in the application of evidence to support improvement in programs and policy lay in creating exchanges between the evaluators and policy staff.[5]With this in mind, the Subcommittee recommends that the implementation discussion begin early in the process starting with the research question formulation, expert panels, to when OHTAC makes their recommendations. This would require expert panel and OHTAC membership to expand, and include members with policy, implementation science, and business acumen. Furthermore, following the close out of the Subcommittee, we encourage a reimagining of OHTAC's role to include implementation discussions which can shape the feasibility of uptake of OHTAC's recommendations by the system, where desired. Considering

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[4] Lavis, J.N., Robertson, D. Woodside, J.M., McLeod, C.B., Abelson, J., and the Knowledge Transfer Study Group. (2003). How Can Research Organizations More Effectively Transfer Research Knowledge to Decision Makers? *The Milbank Quarterly*, 81(2), 221-248

[5] Lomas, J. and Brown, A.D. (2009). Research and Advice Giving: A Functional View of Evidence-Informed Policy Advice in a Canadian Ministry of Health. *The Milbank Quarterly*, 87(4), 903-926

implementation throughout the evidence process is imperative to delivering upon HQO's mandate which extends beyond evidence-based recommendations, to driving their uptake in order to improve quality across the health care system.

It has been a great pleasure serving as the Chairs of OHTAC's Implementation Subcommittee. We would also like to acknowledge how grateful we are for the participation of the Subcommittee members and the ongoing dedication and support of the Implementation team at HQO. We look forward to hearing your thoughts on these recommendations and how we can continue to support the implementation of evidence-based recommendations into policy and practice in Ontario.

Best Regards,

____

Adalsteinn (Steini) Brown
Co-Chair, Implementation Subcommittee

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Susan Fitzpatrick
Co-Chair, Implementation Subcommittee

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