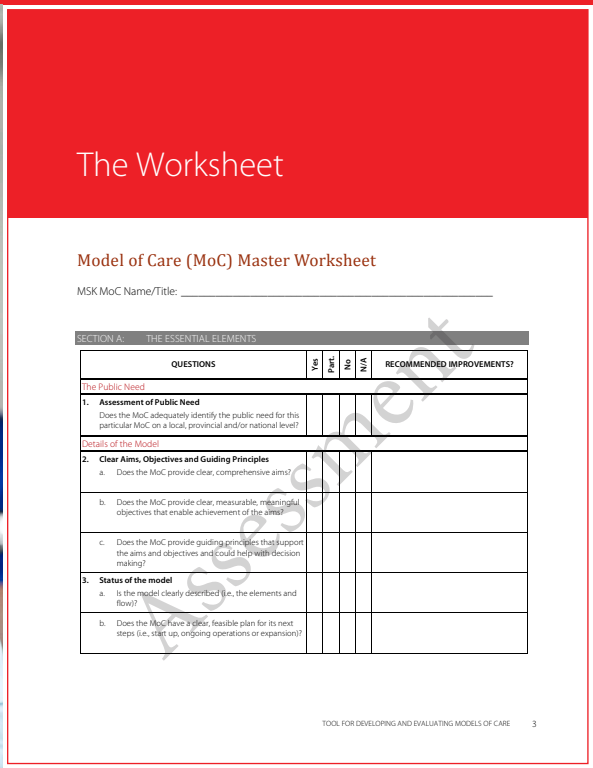
Tool for Developing and Evaluating Models of Care

created by the Musculoskeletal Stakeholder Community

The Worksheet



Model of Care (MoC) Master Worksheet

MSK MoC Name/Title: _____

SECTION A: THE ESSENTIAL ELEMENTS

QUESTIONS	Yes	Part	No	N/A	RECOMMENDED IMPROVEMENTS?
The Public Need					
1. **Assessment of Public Need** Does the MoC adequately identify the public need for this particular MoC on a local, provincial and/or national level?					
Details of the Model					
2. **Clear Aims, Objectives and Guiding Principles** a. Does the MoC provide clear, comprehensive aims?					
b. Does the MoC provide clear, measurable, meaningful objectives that enable achievement of the aims?					
c. Does the MoC provide guiding principles that support the aims and objectives and could help with decision making?					
3. **Status of the model** a. Is the model clearly described (i.e., the elements and flow)?					
b. Does the MoC have a clear, feasible plan for its next steps (i.e., start up, ongoing operations or expansion)?					

Assessment

TOOL FOR DEVELOPING AND EVALUATING MODELS OF CARE 3

supported by the Arthritis Alliance of Canada

Fall, 2012

Arthritis Alliance of Canada
Alliance de l'arthrite du Canada

Tool for Developing and Evaluating Models of Care:
Created by the Musculoskeletal Stakeholder Community

supported by the Arthritis Alliance of Canada
www.arthritisalliance.ca.

A special thank you to Drs. Aileen Davis, Cy Frank, Bernie Novokowsky and Michel Zummer, and Johnathan Riley and Rhona McGlasson for their hard work and dedication to this project.

In loving memory of Dr. Bernie Novokowsky.
May his wisdom, dedication, and desire to help others always be an inspiration.

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List of Abbreviations

AAC	Arthritis Alliance of Canada
BHAG	Big Hairy Audacious Goal
CIHR	Canadian Institutes of Health Research
HQCA	Health Quality Council of Alberta
MoC	Models of Care
MSK	Musculoskeletal
RCT	Randomized Control Trial

Table of Contents

Introduction

This Master Worksheet was developed by experts who have experience with models of care (MoC). It was tested and improved by a national audience of subject matter experts from the organizations that have been engaged to date.

Objectives

The Master Worksheet is intended to help model developers assess the completeness of MoCs, suggest improvements and view their readiness for expansion. It can be used for the planning, development or formative evaluation of proposed MoCs, locally, provincially/territorially or nationally. It can also be used for identifying their appropriateness for dissemination.

This Worksheet can be used by anyone interested in developing or evaluating a proposed MoC. It includes a three-level assessment of the match between the model and the essential elements of an MoC, as well as space for suggested improvements of the elements in question.

Strategic Elements

The Worksheet has been developed to first address the following elements that experts originally identified as "must be included" for a MoC to be successful and appropriate for expansion. Some additional "nice to have" elements were added in subsequent discussions. All elements were refined and their language clarified when pilot tested in April 2012.

SECTION A: The Essential Elements

The essential elements for a MoC to be successful and appropriate for expansion are:

The Public Need

(1) Assessment of Public Need

Details of the Model

(2) Aim, Objectives and Guiding Principles
(3) Status of the Model
(4) Appropriate Strategies
(5) Standards of Care
(6) Clear Accountabilities, Roles and Responsibilities
(7) Supporting Materials

(8) Built-in Education Plan
(9) Local Partnerships
(10) Scalability and Adaptability
(11) Is it Evidence-Based?

Evaluation of the Model

(12) Built-in Self-Evaluation and Iterative Improvement

Model Outcomes

(13) Performance and Outcome Measurement

Other Factors

(14) Resource Priorities
(15) Expansion Opportunities

When assessing or evaluating an existing or new MoC, the proposal may undergo further refinement by working through three additional sections.

SECTION B: Quality – Access – Cost Trade-offs

SECTION C: Internal Consistency with Other Trade-offs

SECTION D: Overall Evaluation

The refinement process is offered as a step toward achieving the strategic framework's aim for improving musculoskeletal (MSK) MoCs. As such, it is seen as a guide for designing, assessing and upgrading *any* model of care.

Above all, it is hoped that the information presented in this tool will be of assistance to federal/provincial/territorial governments, local authorities and care teams working to establish a high-quality, efficient health care delivery system that will be sustainable in the future.

The Worksheet

Model of Care (MoC) Master Worksheet

MSK MoC Name/Title: _____

SECTION A: THE ESSENTIAL ELEMENTS

QUESTIONS	Yes	Part.	No	N/A	RECOMMENDED IMPROVEMENTS?
The Public Need					
1. Assessment of Public Need Does the MoC adequately identify the public need for this particular MoC on a local, provincial and/or national level?	☐	☐	☐	☐	
Details of the Model					
2. Clear Aims, Objectives and Guiding Principles a. Does the MoC provide clear, comprehensive aims?	☐	☐	☐	☐	
b. Does the MoC provide clear, measurable, meaningful objectives that enable achievement of the aims?	☐	☐	☐	☐	
c. Does the MoC provide guiding principles that support the aims and objectives and could help with decision making?	☐	☐	☐	☐	
3. Status of the model a. Is the model clearly described (i.e., the elements and flow)?	☐	☐	☐	☐	
b. Does the MoC have a clear, feasible plan for its next steps (i.e., start up, ongoing operations or expansion)?	☐	☐	☐	☐	

4.	**Appropriate Strategies** a. Are the proposed strategies and processes consistent with the MoC's aims, objectives and guiding principles?	☐	☐	☐	☐
	b. Does the MoC appropriately engage all relevant and required stakeholders?	☐	☐	☐	☐
	c. Does the MOC have the potential to influence strategies of policy makers and providers (i.e., influence both up and down)?	☐	☐	☐	☐
5.	**Establish Standards of Care** Does the MoC use or try to establish clinical standards of care, including prevention, triage, assessment, treatment and patient education?	☐	☐	☐	☐
6.	**Clear Accountabilities, Roles, & Responsibilities** Does the MoC clearly articulate the work that needs to be performed, who should perform it, and the performance standards and competencies that should be achieved?	☐	☐	☐	☐
7.	**Supporting Materials** a. Does the MoC have the necessary supporting materials (e.g., work flow diagrams, care maps, education materials)?	☐	☐	☐	☐
	b. Does the MoC demonstrate or have a planned update cycle for supporting materials?	☐	☐	☐	☐
8.	**Built-in Education Plan** a. Does the MoC drive continuous improvement through knowledge translation (KT) and the education of the health care professionals and staff?	☐	☐	☐	☐
	b. Does the MoC drive improved patient/client education and self-management?	☐	☐	☐	☐
9.	**Local Partnerships** Does the MoC include relevant partnerships (e.g., primary care, pharmacy, fitness centres)?	☐	☐	☐	☐
10.	**Scalability and Adaptability** Does the MoC provide for expansion or contraction based on changes in need, resources or scale?	☐	☐	☐	☐
11.	**Evidence based** a. Has a formal health technology assessment been conducted on any/all relevant model elements?	☐	☐	☐	☐
	b. Are references provided to support the model or its elements?	☐	☐	☐	☐

Evaluation of the Model					
12. Built in Self-Evaluation and Iterative Improvement a. Does the MoC provide a comprehensive evaluation plan to assess its ability to meet the aim and objectives?	☐	☐	☐	☐	
b. Does the MoC provide a relevant, meaningful, and efficient system of measurement in relation to the aim and objectives?	☐	☐	☐	☐	
c. Does the MoC provide a relevant, meaningful, and efficient system of measurement for all six quality dimensions where available?	☐	☐	☐	☐	
d. Does the MoC provide a relevant, meaningful, and efficient system of measurement for the overall impact in MSK care?	☐	☐	☐	☐	
e. If the MoC is established, has it been formally and objectively evaluated? By a third party?	☐	☐	☐	☐	
Model outcomes					
13. Performance and Outcome Measurement of Existing MoCs a. Is there evidence of superior clinical effectiveness directly attributable to this MOC? What level of clinical evidence is presented? If not clear, what research/measurement is needed?	☐	☐	☐	☐	
b. Does the MoC use existing MSK standards, as described in #5 above?	☐	☐	☐	☐	
c. Does the MoC meet the public need, as described in #1 above?	☐	☐	☐	☐	
d. Has the MoC been effective in other ways (i.e., evidence of its influence on policy, practice, public behaviours or other)? If not clear, do you recommend an evaluation before generalizing?	☐	☐	☐	☐	
Other factors					
14. Established Resource Priorities Does the MoC make explicit choices as to what is most important in relation to the competing issues, trade-offs, and application of scarce resources?	☐	☐	☐	☐	
15. Expansion Opportunities a. Does the model contain elements that can be adopted by other regions? Describe.	☐	☐	☐	☐	
b. Does the MoC allow for use in other patient populations and adaption to changing context?	☐	☐	☐	☐	
c. Does the MoC have partnerships established for adoption in other regions or other specialties?	☐	☐	☐	☐	

SECTION B: QUALITY–ACCESS–COST TRADE-OFFS

NOTE: For orientation and/or clarification of the use of the three terms/criteria—quality, access and cost—see the National MSK MoC Strategic Framework's *Common Languaging* (Appendix I). Refer also to Appendix IV. All three elements are considered equally important for a sustainable MoC.

1. Does the MoC explicitly prioritize the attention given to each of the above three criteria? (e.g., which of access, quality or cost is 1st, 2nd and 3rd and what is the rationale for the priority selected?)

   Yes ☐ No ☐

   Improvements:

2. Does the MoC explicitly identify any "phasing" (time horizon, trigger condition, etc.) whereby these three criteria receive priority attention? (e.g., does it suggest considering costs later?)

   Yes ☐ No ☐

   Improvements:

SECTION C: INTERNAL CONSISTENCY OF OTHER TRADE-OFFS

3. Does the MoC explicitly describe the consideration given and/or decision rationale behind the following four trade-offs, and are they consistent with each other? (Refer to Appendix V):

a) Short-term expediency vs. Long-term sustainability

   Yes ☐ No ☐

   Suggestions:

b) Centralized vs. Decentralized (e.g., control, decision making)

   Yes ☐ No ☐

   Suggestions:

c) Standardized delivery (greater efficiency) vs. Customized delivery (greater effectiveness)

   Yes ☐ No ☐

   Suggestions:

d) Provider- or System-centered delivery design vs. Client-centered delivery design

   Yes ☐ No ☐

   Suggestions:

SECTION D: OVERALL

4. Based on Sections A to C, what is your overall evaluation of this MoC? Would you recommend it in its current form as a nationally endorsed model?

   Check: I ☐ would ☐ would not recommend broad implementation of this model in its current form in my province/territory or nationally.

   Specific suggestions for model improvement and dissemination:

APPENDICES

APPENDIX I - Common Languaging

(The "Strategic Framework Wikipedia")
An underlying fundamental of effective collaboration is efficient coordination. Efficient coordination is dependent upon clarity, which includes the understanding of common terminology.
For the purposes of this initiative, "What do we mean by . . . "

Aim:

- The ultimate purpose or intention, or the ultimate desired outcome to be achieved; the "overarching objective" of all the objectives; what resources are dedicated to achieving.
- *Common synonyms* (aka): vision; mission; purpose; target; intent; raison d'être; ambition; direction; resolve; BHAG (Big Hairy Audacious Goal); "final cause" (Aristotle); the will.
- *Usage example*: The aim of war is to destroy the opposing forces in a way that is economical and efficient, such that national policy is continued.

Clinical Effectiveness

- The measure of the extent to which a particular intervention works. For this initiative, the question is, "Does the arrangement and provision of clinical services directly result in improved patient outcomes?"

Framework:

- The basic structure underlying a system of thought; a set of coherent principles widely enough accepted to serve as a guide within a particular discipline, while both allowing for and demanding that local judgment be required in the local application and use of the framework.
- *Common synonyms* (aka): structure, order, scheme, system, configuration, composition, makeup, archetypal patterning.
- *Usage examples*: A particular conceptual framework in research attempts to connect all the aspects of inquiry (e.g., problem definition, purpose, literature review, methodology, data collection and analysis).

Guiding Principles:

- The fundamental propositions that serve as the foundation for a system of behaviour and/or a chain of reasoning. They are guides to decision making; they have special applications across a wide set of circumstances. Unlike rules that must be followed, the following of principles is encouraged, using judgment and recognizing that failure to follow them is at one's peril.
- *Common synonyms* (aka): tenet, precept, creed, credo, axiom, doctrine, dictum, ethical value, cultural value, rule of thumb.
- *Usage examples*: A principle of war is to "surprise your enemy"; a principle of investing in stocks is to "buy low, sell high."

Model:

- A system, characteristic or person that one is encouraged to follow or imitate; an excellent example of a specified quality or set of qualities.
- *Common synonyms* (aka): exemplar, template, paragon, epitome, blueprint, ideal.
- *Usage example*: Most parents would do better to provide a *model* for their child—a person or characteristic that is to be followed or imitated because of its excellence in conduct or character—rather than trying to be an *example*, which refers to a precedent for imitation, either good or bad.

Objectives:

- Statements of the results that one is trying to achieve: the enabling subsets of the Aim. They determine the measurement that is needed. They are the basis for evaluation and adjustment actions.
- *Common synonyms* (aka): goals, targeted accomplishments, ambition, ends, desired outcomes, intended consequences.
- *Usage example*: The objective is to secure the army's left flank by capturing Hill 151.

Priorities:

- The declaration of rank of importance among a list of actions, aims or goals: the right to take precedence; a choice in terms of timing, sequence or resource allocation, such as money.
- *Common synonyms* (aka): primacy, first place, preference, pre-eminence, predominant, prime concern, most important considerations.
- *Usage examples*: Capturing the hill has priority over minimizing casualties; allocation of resources will be based on chosen priorities.

Process:

- A series of value-added actions or steps taken from a defined start point to achieve a particular end point. In design of organizational activity, *processes* are usually linked and nested by some *structure(s)* as part of *system(s)*.
- *Common synonyms* (aka): procedure, method, means, practice, approach, methodology, undertaking, an operation.
- *Usage examples*: The current process for assessing the validity of any proposed model of care is unclear.

Quality:

- Distinctive attribute(s) or characteristic(s) that reflect the degree of excellence; a standard or description as measured against things of a similar kind.
- *Common synonyms* (aka): standard, grade, class, calibre, merit, worth, value, rank.
- *Usage example*: The manufacturer produces only a limited number of quality products.

Scalable:

- The ability to be changed in size, scope or range of capabilities. Scalability can be measured in various dimensions: functional (enhancing the system with minimal resources or additional effort); geographical (expansion to new geographical domains); and/or load (capacity to accommodate heavier or lighter loads with resource pool).
- *Common synonyms* (aka): size, scope, range, ability to adapt to changing conditions.
- *Usage example*: The scalable process easily handled the growth in demand.

Six Quality Dimensions:

- An example of the conceptualization and definition of quality in health care for use as an assessment tool and a guide for improvement.
- *Common synonyms* (aka): various quality descriptors—see Appendix 2 for examples.
- *Usage example*: Serious and widespread problems exist in health care because of the underuse, overuse or misuse of the dimensions of health care quality.

Strategic:

- A level relating to the identification of overall aims and interests in the longer term and the means of achieving them; the bridge in thinking and planning between the "policy" level and the "tactical".
- *Common synonyms* (aka): stratagem, scheme, large-scale manoeuvre.
- *Usage example*: There remains debate as to whether strategic planning is the responsibility of top management or specialized strategic planners, or part of everyone's role.

Validity:

- The extent to which a variable or intervention measures what it is supposed to measure, or accomplishes what it is aimed to accomplish. The *internal validity* of a study refers to the integrity of the experimental design. The *external validity* of a study refers to the appropriateness by which its results can be applied to non-study patients or populations.
- *Common synonyms* (aka): reliability, legitimacy, authority, soundness, rightness, efficacy.
- *Usage examples*: Either the evidence supports the conclusion, or it does not, hence giving it validity or not.

APPENDIX II - How Well Does the Model of Care Address the Essential Elements?

Over two meetings, the MSK National Models of Care Group identified and then refined the following list of Essential Strategic Framework Elements. These elements were considered as the "first test" for assessing the completeness and viability of any MSK Model of Care (MoC).

(1) Assessment of Public Need
(2) Aim, Objectives and Guiding Principles
(3) Status of the Model
(4) Appropriate Strategies
(5) Established Standards of Care
(6) Clear Accountabilities, Roles and Responsibilities
(7) Supporting Materials
(8) Built-in Education Plan
(9) Local Partnerships
(10) Scalability and Adaptability
(11) Evidence based
(12) Built-in Self-Evaluation and Iterative Improvement

Sample Screening Questions:

What is the MoC evaluation plan for assessing it as a guiding framework?

How well is the MoC designed to be dynamic, with scheduled evaluations and adjustments for improvements?

(13) Performance and Outcome Measurement
(14) Resource Priorities
(15) Expansion Opportunities

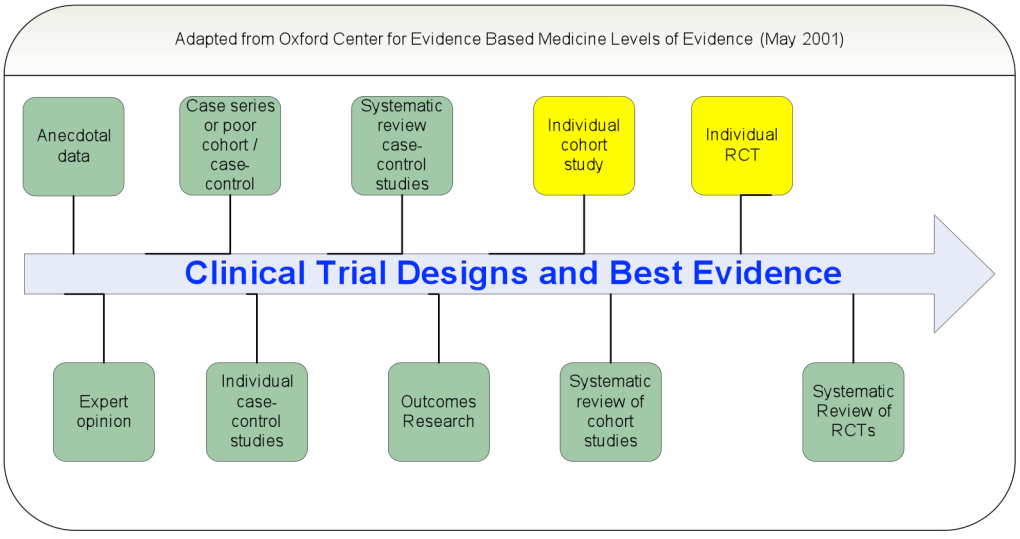
APPENDIX III - How Well Does the Model of Care Use Higher/Highest Levels of Evidence?

The proposed levels of evidence to be used as a filter for a model of care (MoC) are those of University of Oxford Centre for Evidence Based Medicine. This filter for the proposed MoC (for the Model overall and/or the MoC's "elements"—the latter, if the MoC itself) has not yet been formally tested.

Table 1. The Levels of Evidence

Level	Therapy/Prevention/Etiology/Harm
1	Systematic reviews (with homogeneity) of randomized controlled trials 1a: Systematic review of randomized trials displaying worrisome heterogeneity; 1b: Individual randomized controlled trials (with a narrow interval); and 1c: All or none randomized controlled trials.
2	Systematic reviews (with homogeneity) of cohort studies 2a: Systematic reviews of cohort studies displaying worrisome heterogeneity; 2b: Individual cohort study or low quality randomized controlled trials (<80% follow-up); and 2c: "Outcomes" research; ecological studies.
3	Systematic review (with homogeneity) of case-control studies. 3a: Systematic review of case-control studies with worrisome heterogeneity; and 3b: Individual case-control study.
4	Case-series (and poor quality cohort and case-control studies).
5	Expert opinion without explicit critical appraisal, or based only on physiology, bench research or "first principles."

Figure 1. The Levels of Clinical Evidence (Note: Clinical evidence is only one type of evidence.)

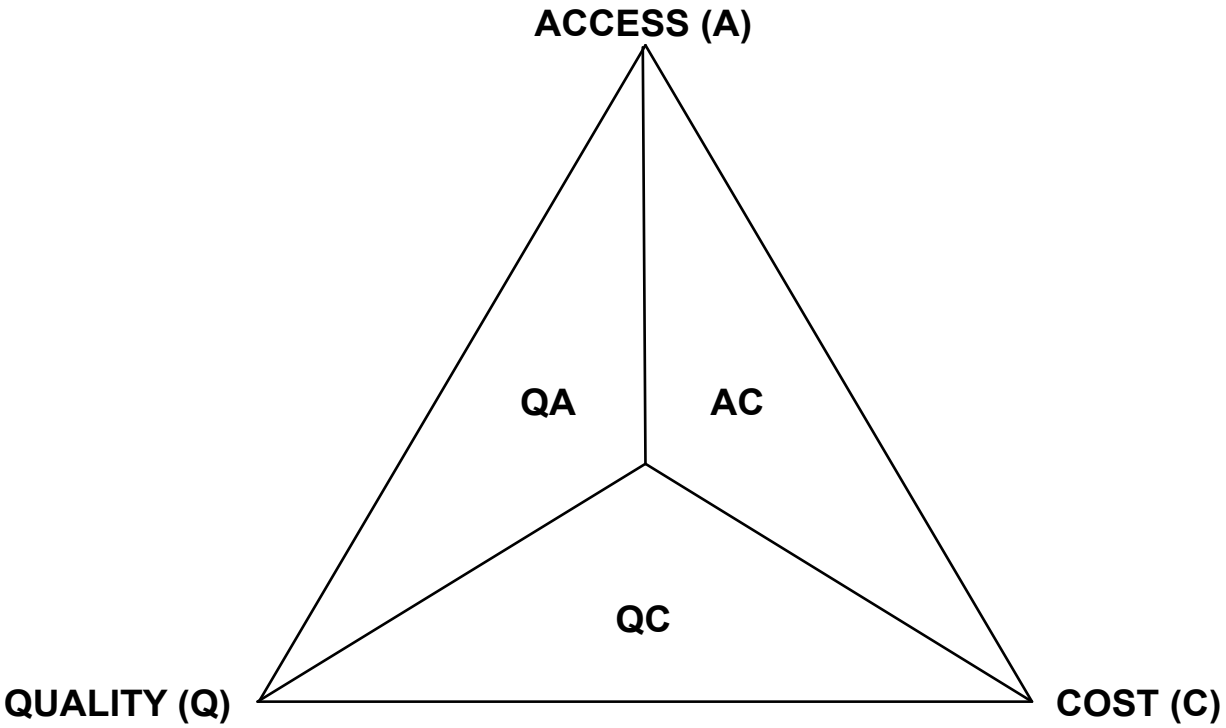


Assess according to the strength of freedom from various biases that beset all medical knowledge.

APPENDIX IV - To What Degree Does the Model of Care Consider Quality – Access – Cost?

The "Quality – Access – Cost" trio is a fundamental relationship that must be properly addressed. It assumes that the gains in any one of the three will be at some expense to the other two, but likely mre in terms of one than the other. For example, increasing either Access or Quality will increase Costs, which will make the MoC potentially unsustainable.

Figure 2. The Quality – Access – Cost Trio



Thus, there is a need to assess which of the "Cost – Quality – Access" trio the model of care primarily satisfies (QA, AC or QC), and what, if any, mitigating action is suggested for the trio element least addressed. It is acknowledged that "health care quality" is a separate topic unto itself. This filter is a simplified version of more comprehensive definitions and criteria.

APPENDIX V - How Well Does the Model of Care Orchestrate and Manage Key Trade-offs?

There are multiple dichotomies, where the selection of primacy of one of the two poles is achieved usually at the expense of the other. Another term commonly used for trade-offs is "dilemmas". If and/or when explicit choice is not made as to which "pole" gets priority and for what context or time, then sadly BOTH poles suffer (i.e., neither is achieved or done well). Common organizational or service delivery dilemmas include four trade-offs:

(1) Short term expediency vs Long term sustainability

(2) Centralized, e.g., control, decision making vs. Decentralized, e.g., control, decision making

(3) Standardized delivery (greater efficiency) vs. Customized delivery (greater effectiveness)

(4) Producer- or System-centered delivery design vs. Client-centered delivery design

Figure 3. A Sample of a "Trade-off" (Deciding where on the continuum the MoC chooses to be.)

The focus of this filter is not to assess whether the right choice was made ideologically, but rather to:

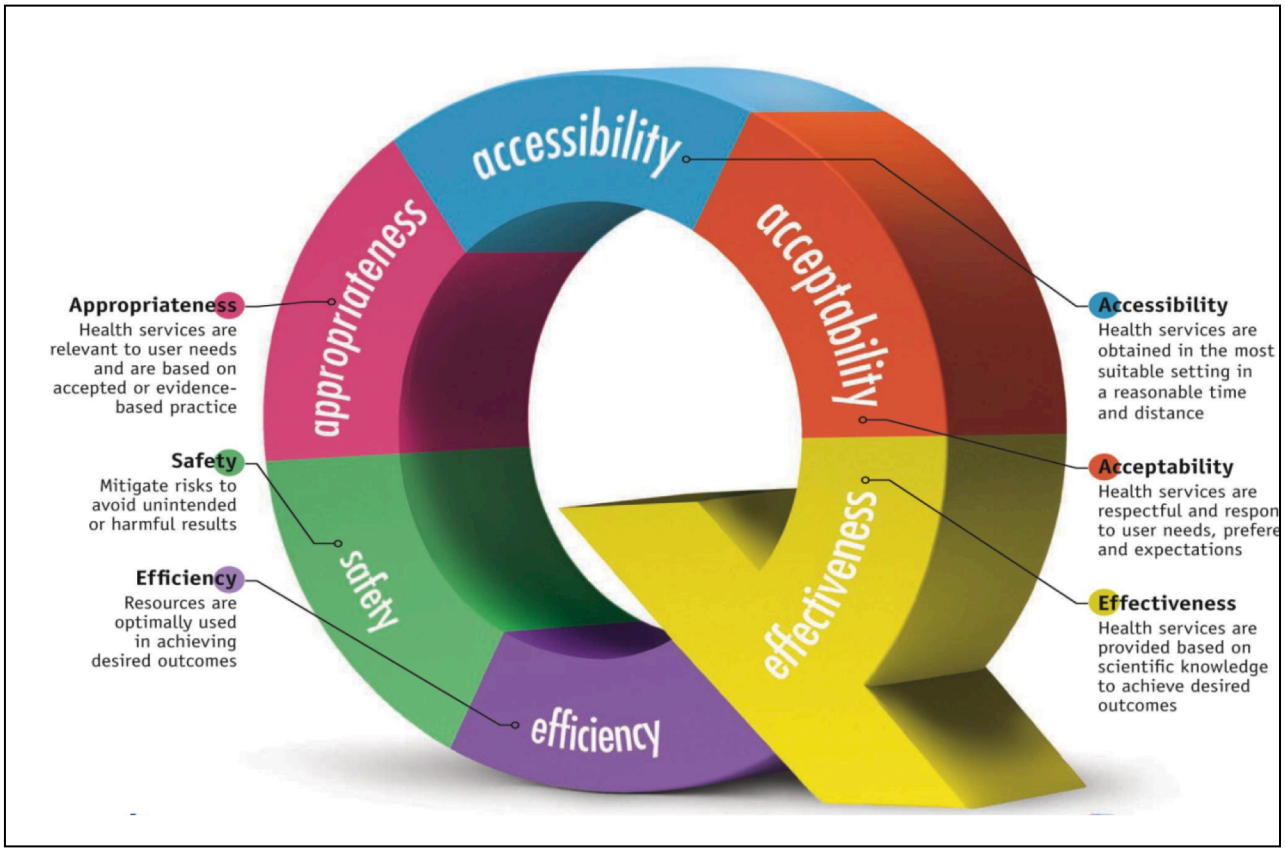
(1) Assess the degree of explicit consideration that was given to the trade-offs; and

(2) Assess how consistent and congruent the choice made along the continuum is with the other strategic framework elements and filters.

For example, if the MoC's aim and focus are on high levels of cost efficiency, then the selection of trade-offs should reflect centralized, standardized, system-centered choices, rather than espousing decentralized, customized, patient-centered choices that are non-congruent with efficiency.

APPENDIX VI - Health Quality Council of Alberta: Six Quality Dimensions

Figure 4. Health Quality Council of Alberta (HQCA) Quality Matrix with Definitions
(Note: This is only one of several possible options for defining clinical quality.)



The Arthritis Alliance of Canada, formerly the Alliance for the Canadian Arthritis Program (ACAP), was formed in 2002. Its goal is to improve the lives of Canadians with arthritis.

With more than 35 member organizations, the Alliance brings together arthritis health care professionals, researchers, funding agencies, governments, voluntary sector agencies, industry and, most importantly, representatives from arthritis consumer organizations from across Canada. While each member organization continues its own work, the Alliance provides a central focus for national arthritis-related initiatives.

http://www.arthritisalliance.ca