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MCC360

INTRODUCTION TO MCC 360: A MULTI-SOURCE FEEDBACK INITIATIVE

National Guidelines

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TERMINOLOGY

	DESCRIPTION
FACILITATOR / COACH	A facilitator enables or guides individuals or a group in exploration of information or the undertaking of an activity. A coach in education plays a similar facilitative role in guiding an individual to identify performance improvement goals and in co-developing an action plan to meet these goals. We use the term "facilitator/coach" to emphasize both the facilitative and outcomes-focused aspects of the role in MCC 360.
FORMATIVE ASSESSMENT	Providing assessment data for learning (i.e., for the individual to use for his/her own learning and improvement)
INSTRUMENTS	MCC 360 surveys
ITEMS	Individual questions used in the MCC 360 instruments
NON-PHYSICIAN CO-WORKERS	Nurses, pharmacists, dieticians and other health professionals identified by the physician to complete the surveys
PHYSICIAN COLLEAGUES	Physician peers, referring and consultant physicians
REVIEWERS	Individuals who complete surveys about the physician being assessed; they include physician colleagues, non-physician co-workers and patients
SUMMATIVE ASSESSMENT	Providing assessment data for evaluation purposes (i.e., for the individual's institution or organization to make high-stakes decisions about her/his performance)

ABBREVIATIONS

ACRONYM	DESCRIPTION
AFMC	Association of Faculties of Medicine of Canada
CanMEDS	CanMEDS is a framework that identifies and describes the abilities physicians are required to possess to effectively meet the health-care needs of the people they serve. It has been adopted by the Royal College of Physicians and Surgeons of Canada (RCPSC) as CanMEDS, and by the College of Family Physicians of Canada (CFPC) as CanMEDS$_{FM}$.
CBD	Competence by design
CFPC	College of Family Physicians of Canada
CPD	Continuing professional development
CPSA	College of Physicians and Surgeons of Alberta
FMRAC	Federation of Medical Regulatory Authorities of Canada
G-STUDIES	Generalizability studies
MCC	Medical Council of Canada
MCC 360	Name given to the MCC's 360 or multi-source feedback instruments and program
MSF	Multi-source feedback
PAR	Physician Achievement Review, the CPSA's former MSF program that has been phased out for the MCC 360
PPI	Physician Practice Improvement (PPI) is the process developed by FMRAC for physicians to self-assess and improve their practice, using a systems-based quality improvement approach ppiresults.com/about.php
RCPSC	Royal College of Physicians and Surgeons of Canada

1. WHO IS THIS GUIDE INTENDED FOR?

This guide is primarily intended as a comprehensive guide for organizations that have adopted the Medical Council of Canada (MCC) 360 tool to provide multi-source feedback to physicians as well as those organizations considering using MCC 360 in the future. It may also be of interest to physicians who are participating in an MCC 360 assessment as well as physician colleagues, non-physician co-workers (e.g., nurses, pharmacists) and patients of physicians who may serve as reviewers. There are additional, shorter communication resources available that may be more suitable depending on the context.

2. WHAT IS THE MCC 360 AND WHY IS IT IMPORTANT?

The MCC 360 is the multi-source feedback (MSF) assessment tool designed by the MCC to assess physician workplace performance and provide performance data to physicians. It assesses the communicator, collaborator and professional CanMEDS roles. These roles have been found suitable for assessment by MSF and are critical to patient safety. It is now known that poor communication with patients, physician colleagues and non-physician co-workers and unprofessional behaviour negatively influence patient care and outcomes. For example, inadequate handover communication can result in errors that impact patient safety. Similarly, unclear or inappropriate communication in any way compromises patient care (e.g., unclear discharge plans, communication with the health-care team, explanation and planning with patients). Likewise, unprofessional behaviour that prevents open and respectful communication by all involved in a patient's care can compromise safe care. Conversely, good communication and collaborative skills handled in a professional way will enhance patient safety.

3. WHAT IS MULTI-SOURCE FEEDBACK?

MSF is a process originally developed in industry (Bracken et al., 2016; Bracken & Church, 2013). Recognizing the importance of providing physicians with feedback about their professional behaviours, regulatory authorities, professional organizations and health systems began adopting MSF for physicians. MSF collects data from those working with an individual and provides feedback on the individual's actual performance in practice (Lockyer & Sargeant, 2012). It consists of a four-stage process:

- The data about a physician's observable workplace behaviours are collected through surveys from those interacting with the individual and include a self-assessment survey

- The data about the physician are separately aggregated by source (e.g., physician colleagues, patients, non-physician co-workers) for anonymity and confidentiality

- The aggregated data, along with self-assessment data, are provided to the individual in a report for reflection upon strengths and opportunities for improvement in one's practice and planning for change

- The physician meets with a trusted individual to review the data, have a feedback conversation and develop an action plan (Lockyer, 2017)

4. THE FOUR STAGES

There are four stages that highlight the important components of the MCC 360.

4.1. COLLECTION OF ASSESSMENT DATA USING SURVEYS

In addition to a self-assessment survey for the physician to complete, there are three different surveys customized for reviewer groups:

- Physician colleagues (e.g., peer colleagues, referring physicians, consultant physicians)
- Non-physician co-workers (e.g., nurses, pharmacists, dieticians)
- Patients

Each survey is composed of approximately 30 items based on observable behaviours related to the _CanMEDS roles_ of collaborator, communicator and professional (see: _royalcollege.ca/rcsite/ canmeds/canmeds-framework-e_). The surveys are customized to address the relationship that the reviewer group has with physicians. For example, for the communicator role, the patient survey asks, "_This doctor answered my questions in a way that I could understand._" Both the non-physician co-worker and physician colleague surveys ask, "_This physician provides me with valuable advice when approached about difficult clinical decisions._" The self-assessment is based on selected items found in all three reviewer surveys and asks the physician to address the same items based on how they believe they are doing. An example of an item on the self-assessment is "_I provide advice when I am approached about difficult clinical decisions._"

The items on the survey are accompanied by a five-point assessment scale (strongly disagree to strongly agree, including a 'neutral' point where the person neither agrees nor disagrees). There is also an 'unable to assess' option for cases in which the person does not have the required information. Additionally, all surveys provide an opportunity for free-text comments. Respondents are asked to describe one thing the physician does particularly well and one thing they think could be done better.

Reviewers could vary across programs. Generally, they are recruited by the physician, but may be recruited by others (e.g., department head). Names and emails of eight to 12 physician colleagues and eight to 12 non-physician co-workers will be provided; these individuals will be invited to complete the surveys. Identified reviewers must know the physician and their clinical work well enough to provide constructive, thoughtful feedback. The physician or her/his office staff will invite 25 to 35 patients to complete surveys. While concerns have been raised about having the physician select their assessors, the physician is generally in the best position to identify people who know her/him and their practice. Further, given the formative purpose of a 360 data collection (i.e., to give physicians information that can guide them in improving their practice), the data will be more useful if they identify reviewers who will offer a variety of perspectives and can accurately assess their performance. The literature makes it clear that using this procedure can generate MSF data that differentiates physicians.

4.2. AGGREGATION OF DATA

Once a physician's data is received, it will be aggregated by source so the physician receives reports for patients, non-physician co-workers and physician colleagues separately along with

the self-assessment data. Aggregation ensures the anonymity of responses and enables the physician to receive a single report that provides for the perspective from each reviewer group as well as comparator data where the items on surveys are identical. The reviewers' free-text comments will be provided verbatim. Reviewers will be encouraged to provide specific, useful comments in these areas, but will also be informed that free-text comments will not be edited in any way.

4.3. PROVISION OF A REPORT

Physicians will receive a report that contains:

- Graphical data for the three roles and items delineating how well the physician did on each survey
- Frequencies and average ratings for each item on the surveys
- Self-assessment comparator graphs for physician colleagues, non-physician co-workers and patients by scale
- Comparator data for self-ratings and the average physician colleague, non-physician co-worker and patient ratings
- Free-text comments listed by question and source
- Guidance on how to interpret, reflect on and use the report, and for reflecting on strengths and areas in which the physician would like to do better

4.4. FACILITATED FEEDBACK CONVERSATION, COACHING AND DEVELOPMENT OF AN ACTION PLAN

Physicians will meet with a facilitator/coach or other trusted individual to have a feedback conversation about their MSF report, what it means to them and to plan for its use. Different approaches to offering the feedback conversation and coaching are available. In some settings, each physician will have an in person or phone meeting to discuss the report and its findings. In others, the physician will select a trusted colleague to review the report with them. The purpose of the feedback conversation is to review the report, explore the physician's reactions to the assessment data, identify opportunities for improvement and co-develop an action plan. The action plan will describe the key intended changes the physician plans to make over the next six to 12 months, including information about resources needed to support the changes, enablers and barriers, and what success will look like.

5. WHY IS MCC 360 A UNIQUE AND IMPORTANT ASSESSMENT TOOL TO COMPLEMENT THE USE OF OTHER APPROACHES?

The MCC 360 captures unique performance data about the communicator, collaborator and professional CanMEDS roles. Performance in these roles is best assessed by those who work with physicians regularly, observe them in practice and interact with them on a regular basis (i.e., physician colleagues, non-physician co-workers, patients). The contribution of patients in assessing physician practice is generally underutilized and makes MSF data particularly unique. Patients are in a rare position to provide feedback about the care received. The MCC 360 tool

offers patients the opportunity to provide feedback in a safe and confidential manner. Patients can accurately assess how well their physician communicates and collaborates. They can also comment on professional interaction. There are very few assessments used in medical practice where patients are a key contributor. MSF offers a feasible way to collect and provide these data to physicians.

A physician's performance as a communicator, collaborator and professional is now known to impact patient safety. Poor communication with patients, physician colleagues and non-physician co-workers, and unprofessional behaviour can negatively influence patient care and outcomes. For example, poorly written referral letters may result in delays while referral appointments are being prioritized or unnecessary duplicate investigations are being pursued. Similarly, lack of availability or coordination of team discussions around patients with nurses, dieticians, pharmacists, etc. can negatively impact patient access to the right treatment at the right time. Inadequate explanations to patients may affect compliance with medications and treatment plans, repeat visits and follow-ups with other physicians and health-care professionals.

MCC 360 is "one of the tools in the performance assessment toolbox." Combining MSF data about communicator, collaborator and professional roles with data assessing the medical expert role provides a more elaborate assessment of a physician's performance. Common sources of performance data for medical expert include medical record audits, prescribing patterns, patient and practice process and outcome metrics, and assessment of office/clinic procedures and standards. The combination of these data can give physicians a holistic view of their performance.

MCC 360, similar to MSF in general, is best suited as a formative assessment tool (i.e., to provide assessment data to physicians for their learning and improvement). It is not suitable to be used in isolation for summative assessment purposes (i.e., to provide data to organizations for high-stakes decisions about a physician's performance). Optimally, it would be included with other performance data to guide the physician's continuous quality improvement.

6. HOW DO WE IMPLEMENT MCC 360 AT AN ORGANIZATIONAL LEVEL?

Introducing MCC 360 requires organizational commitment and resources. Developing a comprehensive implementation plan with a feasible timeline and a strong and continuous plan for communication is essential for success (Lockyer et al., 2012; Lockyer, 2017). There will be decision-making in implementing the program, maintaining it and evaluating/monitoring it.

6.1. ASSESS THE ORGANIZATION'S READINESS FOR MCC 360

While funding for the delivery, reporting and feedback discussions are an obvious consideration, attention should also be paid to champions within the organization who will foster and support the program.

6.2. EXAMINE ORGANIZATIONAL AND PROGRAM SUPPORT AND BUY-IN

Leadership must commit to creating, sustaining and promoting the program. Assessors must be engaged in providing feedback that is thoughtful. Recipients must commit to carefully reviewing the data and engage in discussions about their data to create an action plan. There has to be sufficient technology and human resources allocated to the program. There needs to be a plan in place for the appointing and training of physician facilitators/coaches to work with the physicians along with funding for this.

6.3. IDENTIFY THE MCC 360 TEAM

This is the group that will lead the introduction of the MCC 360 and sustain it over time, including answering questions at meetings and other events. It should include members of the leadership team as well as physicians who will be assessed.

6.4. DETERMINE HOW THE RESULTS WILL BE USED AND WHO WILL HAVE ACCESS TO THE RESULTS

MCC 360 is designed as a formative/quality improvement initiative. If it is going to be used in other ways (e.g., to inform summative decisions), it should be clear to physicians and assessors how the data will be used. In some organizations, an independent facilitator will handle the discussion with the physician and have access to the results. In other instances, the division or department head will conduct the discussions. While relatively few physicians will be identified for egregious behavior, there must be a plan in place to anticipate this and to take required action.

6.5. IDENTIFY PARTICIPANTS AND REVIEWERS

While important to ensure that all physicians participate in the program, the resources (financial and human) will need to be considered to determine what numbers are feasible. Feasibility must also recognize that having too many reviews going on simultaneously in the same environment may impact engagement if the same people are being asked to review multiple physicians.

6.6. DETERMINE HOW FREQUENTLY MSF WILL BE CONDUCTED

Deciding how often the tool will be used requires both a quality improvement decision (i.e., how frequently one needs to give physicians feedback on how they are doing relative to standards at a point in time) and consideration of when to provide additional feedback to help the individual determine if they have shown improvement. If there is too short a time, there may not have been sufficient time to improve and for others to see the changes. The repetition of the MSF is also a resource decision.

6.7. DETERMINE THE PROCESS FOR PROVIDING FACILITATED FEEDBACK, COACHING AND DEVELOPMENT OF THE ACTION PLAN

Acceptance and use of the data is enhanced by a feedback conversation with a trained facilitator /coach who helps recipients interpret their data, determine ways to improve and develop an action plan that can be reviewed subsequently for progress; resources need to be identified for this. As a minimum, it is possible to provide the physician with a standardized discussion protocol and have the physician discuss the report with a trusted colleague. It is better to train a

group of people as facilitators/coaches to have discussions with physicians by phone or in person about the data in their MSF report. In some organizations, a department or division head may be responsible for having the discussion. Criteria for success of the facilitated feedback conversation include:

- Ensuring processes and practices protect confidentiality for the recipient
- Conducting the conversation in a respectful manner in a safe and non-threatening environment
- Recognizing this is a formative assessment that will achieve optimal benefit only if the physician is encouraged to identify performance improvement strategies they will/can implement rather than the physician being given solutions

6.8. RECRUIT AND PREPARE FACILITATORS/COACHES

The facilitator/coach plays a critical role in discussions. Their role is to conduct a reflective feedback discussion with physicians about the data in their MCC 360 report that guides the physician in interpreting it and identifying opportunities for improvement, to coach them in setting goals for change, and to collaborate in developing an action plan to address these. Specific activities include:

- Developing a trusting relationship
- Exploring their reactions to the report and the data
- Encouraging reflection and self-critique/informed self-assessment
- Ensuring they understand what the data means for them and their practice
- Fostering the identification of strengths, opportunities for improvement and the selection of one or more priority opportunities to work on
- With the physician, co-developing an action plan to address the specific opportunity/ies
- Identifying/offering resources to assist the physician in their plan
- Through this process, supporting the physician's informed self-assessment and self-directed learning approaches to enable effective, lifelong learning

6.9. CONDUCT A PILOT PROGRAM

Organizations that have not had a MSF program in the past should conduct a small pilot of 10 to 20 physicians. The pilot should examine physician and recipient acceptance of the initiative and the surveys, the scores on the surveys, the feasibility of running the MSF program and the effectiveness of the feedback process. Ideally, these pilot physicians would be the individuals who are expected to become coaches/facilitators for other physicians. This would enable these key individuals to have first-hand insight into the process and describe their personal experiences and use of their MSF data. For organizations with previous MSF program experience, the focus would be on the functioning of the MCC 360 program.

6.10. EVALUATE AND MODIFY THE PROGRAM

Programs and organizations are continually changing. It is important for participating organizations to engage with the MCC to adapt and modify the program and its components as changes are required.

7. HOW CAN WE OPTIMIZE THE QUALITY IMPROVEMENT IMPACT OF MSF THROUGH A FACILITATED FEEDBACK CONVERSATION, COACHING AND CO-DEVELOPMENT OF AN ACTION PLAN?

Research in both industry and medical education shows that simply receiving a report on one's performance, even when gaps are readily apparent, is often insufficient to promote learning or a change in practice (Bracken & Rose, 2011; Ferguson et al., 2014; Sargeant et al., 2007; Sargeant et al., 2005). Many factors influence accepting performance data and using it to change behaviour. Among these factors, we find the belief in one's ability to change, perceptions of credibility of the data, self-perceptions of one's performance, emotional reactions to the data, practice context, peer support, system constraints, etc. As a result, making a practice change in response to performance data is frequently complex and often requires three specific interventions:

- Facilitated feedback conversation about the MSF report and data
- Coaching for change
- Co-developing an action plan

Research has further identified characteristics of the feedback conversation that enhance its effectiveness and contribute to success in coaching and developing a plan for learning and performance change.

- Having a supportive and respectful relationship and environment
- Using open-ended questions to stimulate the physician's reflection and guide self-assessment and self-critique
- Exploring the physician's perspectives and reactions to the report and data
- Ensuring the physician's understanding of what the data means
- Identification from the data of strengths and opportunities for improvement

A facilitated, reflective feedback model that integrates these characteristics and considers the various factors that influence the acceptance and use of performance data for change is the R2C2 feedback model (Sargeant et al., 2015). It includes four phases:

1. **R**elationship building
2. Exploring **r**eactions to the feedback
3. Exploring understanding of feedback **c**ontent
4. **C**oaching for performance change (Appendix A)

Each phase is informed by theory and research to guide the feedback conversation and provides open questions to promote self-reflection, self-critique and self-direction. The model is intended to be used iteratively by the facilitator/coach to explore the various sections of the report and data that are most meaningful to the physician and the facilitator/coach, and then to coach and co-develop an action plan for each section.

For MSF reports like the MCC 360, discussions should focus on the data in the report for each of the three CanMEDS roles (communicator, collaborator, professional) and across physician colleague, non-physician co-worker and patient reports. For example, there may be common threads related to communication that appear on the physician colleague, non-physician co-

worker and patient reports that need to be explored with the physician to develop an action plan. To make it truly formative, the discussions should focus on the physician's relative strengths and areas they could improve within each role. The overall goal is that the process of generating an action plan is normalized as part of a learning culture within the profession rather than seen as punitive. For physicians who are excelling, the discussion could focus upon an aspirational change or improvement they may wish to make.

Most importantly, the physician's self-assessment report creates an opportunity for reflective discussion, especially if the self-assessment scores differ from their reviewers' scores (Sargeant et al., 2009). A difference creates an opportunity for further exploration, in a non-threatening manner, using open, reflective questions such as, *"Why do you think these differences in scores might exist?"* and *"What do you think is going on here?"*. The goal is to be curious and gain understanding of physicians' self-perceptions of their performance and their thinking behind their own scores and the scores of others. Through this process, an important task of the facilitator/coach is also to enable the physician to gain understanding of their own scores, why those of others may differ and to use that understanding to guide the physician in focusing upon the opportunity for change that the data presents and creation of an action plan to address it.

Consistently rating oneself higher than one's physician colleagues' scores can indicate a lack of insight, which can be reason for concern, because the physician may not accept the reviewers' feedback and not see a need to change when it is actually indicated. In the rare cases where this occurs, a follow-up phone call with the physician may be required to ensure they have developed some appreciation of their reviewers' data.

Coaching in the educational context is considered as "a one-to-one conversation focused on the enhancement of learning and development through increasing self-awareness and a sense of personal responsibility, where the coach facilitates the self-directed learning of the coachee through questioning, active listening, and appropriate challenge in a supportive and encouraging climate" (Van Niewerburgh, 2012, p. 19). Coaching is a strategy for focusing on the physician's own goal(s) for change and collaboratively creating an action plan for further development based on the performance data (Sargeant & Holmboe, 2017) and discussion of it. The coaching phase requires physicians to set goals for their identified change(s), consider barriers and enablers to the change and ways to address these, and identify metrics to determine success. A structured action plan is effective to guide the learning and change discussion and the co-development and recording of the plan. Co-development of the plan is important for the physician to feel that they own it by making the major contribution, and for the facilitator/coach to contribute their experience and knowledge. The task of the coach is not to provide the answers, but to facilitate the prioritization of focus and discovery of strategies that will enable the physician to reach the goals to which he/she commits. A sample action plan is included in Appendix B.

The facilitator/coach may also connect the physician with learning resources and system supports in the communicator, collaborator and professional roles to enable them to be successful in their goals for improvement. In collaboration with the professional and regulatory colleges and continuing professional development (CPD) units of the Association of Faculties of Medicine of Canada (AFMC), the MCC will provide a list of such resources.

8. WHERE DOES THE MCC 360 FIT WITHIN NATIONAL, PROFESSIONAL AND REGULATORY PROTOCOLS?

The MCC 360 is intended for use as a formative assessment to provide performance data to physicians for their learning and improvement about their communicator, collaborator and professional roles. The MCC 360 is one assessment tool in the "performance assessment toolbox". Physicians may receive data from other sources, such as medical record audits and population metrics, about their medical expert role. Taken together, the MCC 360 and assessments of medical expertise can provide physicians with a more extensive and authentic overview of their performance, a rich data source for identifying their practice strengths and areas in which they could be doing better, and for developing plans for improvement.

The practice of using data with feedback to guide learning and practice improvement is an integral CPD component with the College of Family Physicians of Canada (CFPC) and the Royal College of Physicians and Surgeons of Canada (RCPSC). The RCPSC grants a higher rating for CPD activities that are based upon objective performance data, using external sources of data, and lead to an outcome that may include future learning or practice action plan. The CFPC offers a higher credit value for assessment activities that incorporate quality criteria elements of learning reinforcement, reflection and outcome measurement, and lead to a formal action plan.

Using MSF data and feedback to make practice changes within multiple intrinsic CanMEDS roles will support the RCPSC transitions to competency-based CPD as part of competence by design (CBD).

From a regulatory perspective, the Federation of Medical Regulatory Authorities of Canada (FMRAC) has formally recognized the role that performance and practice assessment play in ongoing practice improvement and, in 2015, initiated the Physician Performance Improvement (PPI) framework. PPI is a five-step, cyclical process based on principles of quality improvement:

1. Understand your practice
2. Assess your practice
3. Create your learning plan
4. Implement your learning plan
5. Evaluate outcomes

The MCC 360 process fits readily into the PPI cycle for physicians, providing them with assessment data to use in creating and implementing a learning plan and evaluating outcomes.

Finally, we must remember that, while assessment data like the MCC 360 can help to identify an opportunity for improvement in a physician's practice, making the change is often more difficult. It can be especially challenging if the change is beyond the reach of the individual physician and requires a broader clinic or system change.

9. WHAT IS THE EVIDENCE BASE ON WHICH THE MCC 360 WAS DEVELOPED?

The MCC 360 was developed out of the College of Physicians and Surgeons of Alberta's (CPSA) Physician Achievement Review (PAR) program. The instruments were developed and subsequently used in Alberta, Nova Scotia, Manitoba, Ontario and British Columbia. While PAR was either in a test or operational phase (1977 – 2016), four postdoctoral theses, one masters thesis and over 40 research studies were published in peer-review journals from work undertaken in Alberta, Nova Scotia and the Netherlands. Several book chapters have been written and numerous workshops, symposia and research papers presented at national and international meetings including

- Psychometric (validity/reliability), feasibility and acceptability studies of the instruments in nine specialty areas and two provinces (Hall et al., 1999; Sargeant et al., 2003; Lockyer & Violato, 2004; Lockyer et al., 2009; Lockyer et al., 2006a; Lockyer et al., 2006b; Violato et al., 2003, Violato et al., 2006, Violato et al., 2006)
- Comparison studies with other MSF instruments (Overeem et al., 2010)
- Examinations of the use of the feedback by physicians to make changes (Fidler et al., 1999; Lockyer, 2003; Sargeant et al., 2003)
- Explorations of the barriers and enablers to using the data to make changes in practice (Fidler et al., 1999; Sargeant et al., 2005; Sargeant et al., 2007; Sargeant et al., 2009)
- Examinations of the utility of having a facilitated reflective feedback discussion to discuss the data and the report, the physician's reflections upon them, the strengths and opportunities identified by them and plans to use the data for improvement (Sargeant et al. 2009; Sargeant et al., 2015)
- Assessments of longitudinal changes in data for physicians who participated in PAR on more than one occasion (Lockyer et al., 2009; Violato et al., 2008)
- Comparisons of physician performance by Canadian school of graduation (Lockyer et al., 2009; Lockyer et al., 2012)
- An examination of the association between PAR ratings and academic appointments and teaching (Lockyer, 2016)

The work has also led to systematic reviews of MSF, work on exploring the role that self-assessment plays when one is interpreting performance feedback and the development of a model for facilitating feedback discussions (the R2C2 model) about one's performance data.

10. WHAT WERE THE LESSONS LEARNED FROM MSF RESEARCH THAT INFORMED MCC 360?

There were many lessons learned from work with the PAR instruments. Additionally, work done in the UK, US and elsewhere for undergraduates, residents and practising physicians contributed to the research and theory base for the MCC 360 instrument design and implementation.

10.1. ENSURING ITEMS FOCUS ON OBSERVABLE BEHAVIORS

Recipients of MSF data have queried how their respondents could answer questions if they were not in a position to observe them. All MCC 360 items have been assessed for observability through the work of the instrument development committee which reviewed each item and considered observability as well as through focus group testing.

10.2. FOCUSING ON THE CanMEDS ROLES OF COLLABORATOR, PROFESSIONAL AND COMMUNICATOR ON THE INSTRUMENT

While all seven CanMEDS roles are important, those of communicator, collaborator and professional are core to everyday medical practice and influence patient outcomes and safety. Many objective tools to assess the medical expert role exist and are being used, including chart reviews, prescribing profiles, opiate and benzodiazepine prescribing practices and standards of practice assessments. Further, it can be difficult to create items to assess health advocate, leader and scholar as these aspects of physician performance are less frequently observed and physicians find it difficult to identify sufficient numbers of respondents who can assess these behaviours. As such, a decision was made by the MCC to focus on communicator, collaborator and professional roles.

10.3. USING THE LIKERT SCALE (STRONGLY DISAGREE TO STRONGLY AGREE) WITH A NEUTRAL MIDPOINT AND AN 'UNABLE TO ASSESS' OPTION

This Likert scale was selected as it was successfully used in previous versions of PAR. It is a common approach found to be viable because having more than five points may lead to confusion over meaning and distinctness of options. Further, the goal in MSF is not to rank physicians but to provide feedback about what they are doing well and where there is room for improvement. A neutral midpoint is used as it avoids non-response bias and is the most familiar and preferred term (Roy & Streefkerk, 2016).

10.4. CONSIDERING THE NUMBERS OF RESPONDENTS REQUIRED FOR EACH SURVEY WITH ATTENTION TO FEASIBILITY AND RELIABILITY

Several studies have examined the reliability/dependability of the data provided to physicians. Generalizability studies (G-studies) have shown it is difficult to get reliability at the levels normally considered acceptable for high-stakes decision-making. Studies also show that patient heterogeneity likely accounts for needing many more patients than required for physician colleagues or non-physician co-workers who may have a more common perspective about the items. However, across studies, it appears that 8-12 physician colleagues and non-physician co-workers are required and 25-40 patients can provide a reasonable level of dependability (Lockyer, 2017). The MCC will do psychometric testing to determine appropriate numbers.

10.5. INCLUDING THE OPTION OF FREE-TEXT COMMENTS

The MCC 360 encourages physician colleagues and non-physician co-workers and patients to add comments focused on specific areas of practice the physician does well in, as well as areas the physician can target for improvement. It is known that the way the questions are posed for comments will affect the nature and type of comments. Studies have shown that physicians can anticipate that approximately 25% of reviewers will provide free-text comments. The comments

will generally be positive and more comments are likely to be provided by non-physician co-workers than physician colleagues. Comments may span all of the CanMEDS roles and will have variable degrees of specificity, actionability and polarity. The current wording reflects work that examined two models of questioning and identified questions with the greatest numbers of responses. The MCC 360 comments will be reviewed for utility and modifications made to wording as required (Richards et al., 2009; Whitehouse et al., 2005; Overeem et al., 2010).

10.6. DIRECTING PHYSICIAN SELECTION OF RESPONDENTS

Having physicians select their own respondents is the most controversial aspect of MSF. Initial studies suggested the data was similar whether the physician selected respondents or the respondents were selected by others. There is more recent work that suggests physicians who are not performing well receive higher ratings from physician colleagues they select than those who are selected for them. Other work suggests there is a bias created by how well the physician knows the respondents. Whilst it may be feasible in some settings for a third party to identify reviewers, it can be impractical depending on the physician's setting and context. It is recommended that participating physicians be encouraged to review the instruments and the behaviours being assessed to identify physician colleagues and non-physician co-workers who can best observe the behaviours and provide ratings in an objective manner.

10.7. REPORTING FEEDBACK

Feedback reports need to be clear. A challenge noted in several studies relates to clarity of data and its utility for physicians in using the data to guide changes. Further, when physicians receive ratings from physician colleagues and non-physician co-workers that are lower than anticipated, they may be disappointed and their emotional reaction to the data can get in the way of using the data to inform change. The MCC 360 report has been field tested and will continue to be assessed for comprehension and utility. The report needs to provide guidance for interpretation and include questions that guide physicians in reflecting critically upon their data, self-perceptions of how they are performing, performance strengths/gaps and opportunities/plans for improvement.

10.8. UNDERSTANDING THE ROLE THAT SELF-ASSESSMENT PLAYS IN ACCEPTING AND USING MSF PERFORMANCE DATA

Research in medical education over the past 10-15 years (Eva & Regehr 2005, 2008; Davis et al., 2006) has confirmed for physicians what earlier cognitive psychologists had identified for the general population (Kruger & Dunning, 1999), that self-assessment undertaken as an individual appraisal, uninformed by external data, is generally flawed. In research on the PAR program, it was found that physicians responded to their MSF scores by first comparing them with how they perceived their own performance. If their scores were lower than their perceptions of how they thought they were doing, they often reacted emotionally and tended to discount the data. Further, their willingness to accept their MSF data was directly correlated with their scores; i.e., those with higher scores were more willing to accept them while those with lower scores were less inclined (Sargeant et al., 2003, Sargeant et al., 2005). As MSF is intended to provide feedback for practice improvement, these findings were disconcerting and led to a body of research exploring how physicians, residents and students self-assessed how they were doing. Respondents identified that one's self-assessment needed to be informed by data from various

external sources such as colleagues, supervisors, patients, practice audits and one's internal reactions; interpretation of these data and the decision to accept and use them is a complicated and sensitive process (Sargeant et al., 2010, Lockyer et al., 2011, Mann et al., 2011, Eva et al., 2012). Results of this research led to the notion of informed self-assessment, built on earlier work demonstrating the need for self-assessment, to be externally informed or guided (Eva & Regehr, 2005, 2008).

Results also led to the question of, *"If external data are needed to inform one's self-assessment, and yet individuals are reluctant to take on that external data, especially if the data disconfirm their own perceptions, how might we facilitate acceptance and use of those data for performance improvement?"* This question led to a subsequent body of research addressing feedback and is described in the section below.

10.9. HAVING A FACILITATED FEEDBACK AND COACHING DISCUSSION

Both physicians and researchers have identified the need for physicians to have facilitated, reflective feedback discussions about their data. It appears that individuals have difficulty understanding and interpreting data, and assimilating it across reports to identify areas for improvement. Guided reflection encourages the physician to consider and appraise their performance: to examine their own perceptions of how they are doing, their understanding of their scores and their implications, and what any differences in their self-ratings and those of others might mean. Facilitated reflection also encourages physicians to identify strengths and gaps in their performance and to consider goals and a plan for improvement. In short, promoting reflection can support the physicians in becoming self-directed in response to their report and improving their performance.

Industry research has identified the important role that a 'coach' (Bracken & Church, 2013; Bracken & Ross, 2011; Bracken et al., 2016) or facilitator (Goodstone & Diamante, 1998) plays in promoting reflection and effecting performance change following MSF. It is being suggested in medicine that a trusted colleague or person in a position of responsibility through the program may help the physician understand the data, their reactions to it, its implications and help with the co-creation of a change or action plan based on the data.

Medical education research to enhance physicians' acceptance and use of their MSF and other performance data led to the development of a facilitated, reflective feedback model that considers the various emotional, self-efficacy and motivational factors that influence whether or not physicians will take on external data (Sargeant et al., 2015). The R2C2 is a facilitated feedback model and includes four phases:

1. **R**elationship building
2. Exploring **r**eactions to feedback
3. Exploring understanding of feedback **c**ontent
4. **C**oaching for performance change

The model was founded upon three theoretical perspectives (humanism, informed self-assessment and the science of behaviour change). Each phase is informed by theory and research to guide the feedback conversation and provide specific, open questions to promote self-reflection and self-direction. The coaching phase also includes a separate structured action plan to guide future learning and subsequent reflection.

With the MCC 360, varied approaches may be taken to the discussion but it should focus on the data in each report as well as triangulate data across reports. For example, there may be common threads related to communication that appear on the physician colleague, non-physician co-worker and patient reports; these threads need to be explored with the physician to develop a plan. Again, to make these discussions formative, they should prompt the physician to focus on his/her relative strengths and things they need to work on such that the process of generating an action plan is normalized as part of a learning culture within the profession, rather than punitive

10.10. CREATING AN ACTION PLAN

Learning contracts and commitments have been used effectively within education and medical education, particularly continuing medical education (Mazmanian et al. 1997; Mazmanian & Mazmanian, 1999; Wakefield et al., 2003; Wakefield, 2004). Physicians will make commitments to change and to follow through, particularly when they generate the strategy through which change will take place and when there is an appropriate opportunity to implement the plan within a reasonable period of time. Using the MCC 360, physicians can identify and act upon a range of opportunities for change across the spectrum of CanMEDS roles that relate to how they communicate with patients and others with whom they work, set up their office practices and make information available to patients. Knowledge translation research has identified many barriers to making changes in one's practice, such as beliefs about ability to change, practice context, colleagues and support. Developing an action that incorporates these factors will prove helpful.

10.11. MSF IS A FORMATIVE/QUALITY IMPROVEMENT VS. SUMMATIVE ASSESSMENT TOOL

MSF appears most effective as a formative or quality improvement tool (Wright et al., 2012). The G-study assessments are consistent in their findings that reliability isn't sufficient enough for high-stakes decision-making. This results partly from it being common that performance assessment scores are skewed to the positive end of the spectrum, thereby creating a narrow range. Further, MSF focuses on a small component of a physician's practice. Each of these factors has lead educators and researchers to recommend that MSF be used as part of a composite picture of a physician's work that is insufficient to make summative decisions, but may trigger/be combined with other assessments to determine the full scope of a physician's performance.

11. WHAT ARE THE LIMITATIONS OF THE MCC 360?

All assessment tools have limitations and parameters that inform best practices.

11.1. FORMATIVE ASSESSMENT

While MSF has been used in summative ways, psychometric analyses (particularly reliability analyses) suggest that MSF within medical contexts is best used in a formative way and in conjunction with other assessments (Wright, 2012).

11.2. NUMBER OF RESPONDENTS

MSF requires a sufficient number of respondents to provide reliable/dependable assessments as data are aggregated and anonymity must be preserved (Lockyer, 2013; 2017).

11.3. REQUIRED RESOURCES

A stable human resources infrastructure is required to manage the processes of program implementation, program communication and to ensure mechanisms are in place for reporting and feedback. People are limited in their ability to interpret data and use the data to develop robust action plans unaided. Coaching and other support systems are recommended to optimize the use of the data. Physicians will have variable ability to draw on and use data effectively.

There is a need to ensure educational resources are available to support improvement in the collaborator, communicator and professional roles.

11.4. STIMULI ARE DAILY, REAL EVENTS THAT ARE RANDOM AND DIFFERENT FOR EVERY OBSERVER

A lack of standardization may create challenges in data interpretation. Similarly, historical information about a physician may have an impact on assessments. This limitation is, in fact, one of the reasons that aggregation of observations, such as that enabled by MSF, is so valuable.

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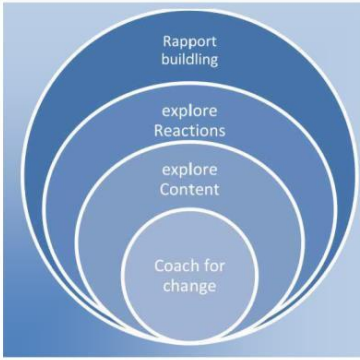
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A.

R2C2: Evidence-Informed Facilitated Feedback for Physicians

R2C2 - A model for sharing physician performance feedback, coaching and planning for change (revised Jan '18)

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Learning Change Plan (Action Plan)

1. Describe specific, observable change/s you intend to make from this feedback session.

2. What is your goal for each?

3. What **specific actions** do you need to take?

4. When will you begin? When do you think you will see results?

5. What resources will you need? Who can help you? What learning will you need?

6. What might get in the way of making the changes?

7. How will you overcome that?

8. How will you know you when you have achieved your goal?

Stage 1. Build rapport and relationship

Goal: to engage the person, build relationship and trust, establish credibility of the assessment.

- Explain the purpose of assessment report and interview; i.e.; to provide:
  - A sense of how they're performing;
  - A chance to describe their practice and work environment;
  - Data that can present opportunity for improvement.

- Outline the agenda to:
  - Review performance data and gaps;
  - Discuss their reactions to the data and what it means to them;
  - Develop an action plan from the data.

Stage 1 Phrases and Strategies

- *"Tell me about your experience in completing this assessment"*
- *"I'd like to hear about your practice (setting, patients, challenges, what you enjoy)"*
- *"Would you like to hear more about the assessment process?"*
- *"What struck you about this report?"*

Confirm what you're hearing; empathize, show respect; build trust; validate.

Relation-building is central and needs attention throughout the interview.

B.

Stage 2. Explore reactions to and perceptions of the data/report

Goal: for physician to feel understood and that their views are heard and respected.

Stage 2 Phrases and Strategies

- *"What were your initial reactions? Anything particularly striking?"*
- *"Did anything in the report surprise you? Tell me more about that..."*
- *"How do these data compare with how you think you were doing? Any surprises?"*
- *"Based on your reactions, is there a particular part that you would like to focus on?"*

Negative reactions/surprises tend to be more frequently elicited by:

- ○ Subjective data such as multisource feedback, than by objective data such as chart audit
- ○ Comparative data, when scores are lower than the group mean
- ○ Data identifying one is not doing as well as they thought
- ○ Be prepared for expression of negative reactions in these cases. Support expression of negative reactions using general facilitative approaches and explore reasons for these reactions.

Stage 3. Explore physician understanding of the content of the data/report

Goal: for the physician to be clear about what the data mean for their practice and the opportunities suggested by the data for change.

Stage 3 Phrases and Strategies

Ask general questions initially, but be systematic as the session goes on, to ensure that items that might impact on patient safety or are priorities for achievement, are covered.

- *"Was there anything in the report that didn't make sense to you?"*
- *"Anything you're unclear about?"*
- *"Let's go through section by section."*
- *"Any items in section X that you'd like to explore further or comment on?"*
- *Anything that causes you to think of impact on patient safety?*
- *"Anything that struck you as something to focus on?"*
- *"Do you recognize a pattern?"*

Knowledge of the speciality and areas where opportunities frequently arise for improvement can be helpful.

Stage 4. Coach for performance change

Goal: for the physician to identify priority area/s for change and develop an achievable action plan/s.

Stage 4 Phrases and Strategies

Physicians need to understand, reflect upon and assimilate the content of the report before being able to plan for change.

Consider coaching to:
- guide the development of priority goals and activities to achieve them
- ensure a concrete plan is developed
- support self-directed learning

- *"And 6 months down the line – what would you like to see changed?"*
- *"If there was just one thing that you would target for immediate action, what would it be?"*
- *"What might be your goal?"*
- *"What action might you have to take?"*
- *"Who/what might help you with this change?"*
- *What might get in the way?*
- *"How do you see this as linking to a QI initiative? To team work?"*
- *"Do you think you can achieve this change?"*

Individual Physician action plan*

Physician Name: _____ **Date:** _____

From your MCC 360 report and any discussions you have had about it, identify aspects of your work that you consider as opportunities for change.

	CHANGE AND GOAL
Describe a specific, observable change that you intend to make as a result of the feedback. What is your goal?	
How will you and your patients benefit from this change?	
What specific actions do you need to take? What resources will you need? What learning will you need to undertake? Who will you involve in the work?	
When will you begin? When do you hope to see results?	
What will get in the way of accomplishing the change? How will you overcome these? What factors will help you?	
How will you measure success? What will tell you that you have achieved your goal?	

*Adapted from Wakefield J, Herbert CP, MacLure M, Dormuth C, Wright JM, Legare J, Brett-MacLean P, Premi J. Commitment to change statements can predict actual change in practice. J Cont Educ Health Prof 2003; 23:81-93.

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