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Best Practices in Evaluation and Assessment (BPEA)

Learner Handover and Appropriate Disclosure of Learner Needs

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1. Executive Summary

Medical learners progress at different speeds. At some point it may be identified that a learner is significantly behind what is expected for their level of training. As with patient handover, which simply implies providing information about patients to the next team member(s), providing learner handover is a process to provide information on what a learner needs to fill gaps in their knowledge or skills. This review considers literature that explores the issues around providing learner handover from one level to the next.

Appropriate disclosure of learner needs is defined as *sharing information* about learner needs from one educator and/or educational setting to the next. This sharing will occur as needed during educational experiences.

Learner Handover is the *process* to be used at the end of an educational experience (e.g. shift, rotation, year) by which one educator and/or educational setting (e.g. instructor/supervisor/rotation lead/facility) provides information to the next (e.g. instructor/supervisor/rotation lead/facility) about the learner's strengths, limits and about priority areas that need further work, additional supervision or other adjustments to the education.

The rationale for sharing information about a resident's needs is strong. The purpose of resident assessment is to identify how residents are performing, to identify struggling residents, and to help the residents to be successful. Residents who have problems in one rotation are more likely to have problems in other rotations. Research has demonstrated that when members of committee meet to discuss medical students, many faculty decisions are altered based on the discussion; themes of marginal performance are observed. This process allows full discussion of the student performance by a group and therefore takes responsibility off any single individual for failing a student. Information is frequently shared through "back channels," and an official process would eliminate this potentially biasing network. The benefits of sharing assessment information exceed the risk if the intent is to offer the program best suited to the individual learner's needs.

The major concerns regarding sharing of information are confidentiality and privacy of resident information, the possibility of bias for or against the resident, and the possibility of appeals.

The interests of society are best served by addressing any issues as early as possible. If information is shared, residents can be assigned to the most appropriate supervisors to enhance their learning experience rather than rediscovering the same problem over and over

again. Sharing of information also makes it possible to share ideas on the best way(s) to handle learner needs. Communication across rotations will aid in identification of learners who have multiple borderline assessments, yet are being passed along. Once the pattern is identified, it is more likely to be acted on.

In summary, disclosure of learner needs promotes "assessment *for* learning" as opposed to "assessment *of* learning," results in improved defensibility, and helps identify concerns.

2. Background

Individuals, including both undergraduate and postgraduate medical learners, progress at different speeds. Some pick up material and skills quickly; others more slowly. At some point it may be identified that a learner is significantly behind what is expected for their level of training. This is a point at which decisions must be made regarding promotion or additional assistance and instruction or additional clinical experiences. Whether providing information about learner needs, from one supervisor to the next, would assist in providing the most appropriate educational experiences and supports is the question to be addressed.

In the past, most publications used the terms "forward feeding" or "feedforward" to refer to providing learner-specific information from one rotation or instructional unit to the faculty or directors of the next rotation or instructional unit. There is some concern that this terminology presents a negative view of the disclosure of information about learners' abilities – as if their educational needs are "confidential" or a "secret."

As with patient handover, which simply implies providing information about patients to the next team member(s), providing "learner handover" takes the constructive, educational view of providing educationally necessary information. The information necessary may relate to the learner's goals, performance strengths, limits to abilities, needed supervision, patient safety, or the implications of learner's abilities. Learner handover is a description of a *process* to provide information as to what a learner needs, to ensure that the learner is provided with the appropriate opportunities for learning and, in particular, for filling gaps in their knowledge or skills. Learner handover *includes* the appropriate disclosure of learner needs.

Learner Handover is defined as the process by which one educational setting (e.g. instructor/supervisor/rotation lead/facility) provides information to the next educational setting (e.g. instructor/supervisor/rotation lead/facility) about both the learner's strengths as well as areas that need further work.

Appropriate disclosure of learner needs is defined as sharing information about learner needs from one educational setting to the next educational setting.

This review considers literature that explores the issues around providing learner handover from one undergraduate level to the next, from one postgraduate year (PGY) level to the next, from one school to another, or from undergraduate to graduate medical education.

3. Methodology

An unpublished literature review conducted in 2012 at the University of Toronto explored disclosure of learner needs, using the terms “forward feeding” and “failure to fail.”1 That paper provided a starting place for the current discussion of learner handover. The next step in exploring literature on learner handover was consideration of The Learner Education Handover Pilot Project.2 This Pilot Project was planned by the former Future of Medical Education in Canada (FMEC) Learner Education Handover Committee. This Committee developed a handover tool to be used following the Canadian Residency Matching Service (CARMS), between undergraduate medical education (UME) and postgraduate medical education (PGME), and is currently planning a pilot test on the use of this tool. The reference list from an early draft of the study plan was reviewed to identify any recent publications; one relevant article was identified but it was not recent.

A literature search using Medline was conducted using key words from the previously found articles (e.g. forward feeding, failure to fail, feedforward, disclosure, struggling learners, failing students, remediation, clinical competence). In addition, the most relevant articles previously identified were looked up in Medline and the options to search for “similar articles” and “citing” articles were checked. Finally, the authors of the most relevant articles were searched for within Medline to find out whether they had any more recent publications on the topic. While there have been many articles published on remediation, including a systematic review,3 the articles on remediation do not generally touch on disclosure of learner needs.

All relevant articles were read and summarized, with a specific focus on learner handover. There are very few published articles specifically on the topic of learner handover and no further articles specifically on this topic appear to have been published since the original search in 2012. All the articles identified deal with undergraduate medical students; no articles dealing with disclosure of learner needs in postgraduate training were identified.

4. Results and Discussion

The topic of disclosure of learner needs has been in the literature for over 30 years. Over this time the discussion does not appear to have changed much; disclosure happens, often surreptitiously, and it would be a good idea to have a policy to provide guidance for such disclosure.

In 1979 the American Association of Medical Colleges (AAMC) began a clinical evaluation program.[1] This was in response to concern among faculty regarding their roles as evaluators of medical students. Research since then has continued to document serious deficiencies in clinical skills among both medical students and residents.[2,3]

A survey of Clerkship Directors (CDs) 20 years ago identified serious challenges to assessment, including having no warning system for “problem” medical students, breakdown in information transfer across clerkships, inadequate guidelines about medical students remediating

clerkships, no follow-up on effectiveness of remediation, and lack of integrated information about medical students over time.[4]

Faculty have been surveyed at various times regarding the information available to them about medical student needs. At the start of the AAMC clinical evaluation program (1979), a pilot study was conducted at 10 medical schools. Three-quarters of the respondents expressed concern about the lack of information regarding problems that medical students had coming in to the rotation.[5] Ten years later, in 1989, a subsequent report was published recommending routine sharing of information about medical students' problems.[6]

A recent publication described interviews with key administrators at U.S. and Canadian medical schools related to professionalism remediation.[7] Over half of these schools (52% n=49) did not share information, while others indicated they would not disclose information to a residency program unless the behaviour was egregious or unresolved; the authors did not define what was considered egregious. Eight themes were identified in these interviews:

1. Disclosing only when certain criteria are met
2. Using disclosing mechanisms to support medical student learning
3. Disclosure occurs informally during faculty meetings
4. Concerns about creating biases, either positive or negative
5. Concerns with respect to disclosure to residency programs
6. General struggles with disclosure policies
7. Deciding not to disclose information
8. Legal issues regarding disclosure policies.

In problem-solving sessions at the Generalists in Medical Education meetings, small groups discuss problem(s) presented and make recommendations for change.[6] Surveyed participants were presented with the problem: "Should evaluation information on students be forwarded to faculty in subsequent units? If so, under what circumstances and by whom?" There was unanimous agreement among the 45 medical educators, representing over 30 medical schools, that some amount of information should be shared.

In 2010 the Clerkship Directors (CDs) of Internal Medicine National Survey addressed this topic.[4] Half of the CDs (49%) indicated that their meetings discussed struggling students, and 22% spent time planning for at-risk pre-clerkship students. Other CDs (36%) indicated they were explicitly prevented from discussing student performance. Reasons for this included developing bias against the student, violation of privacy/confidentiality, and a possible bias in assessment. Virtually all the CDs (94%) agreed there were benefits to students resulting from discussions. These included longitudinal tracking of concerns, designing remediation, and tailoring teacher assignments.

Despite CDs reporting policies prohibiting the sharing of information, and some schools having no policies and no formal processes, information is still shared.[4,7]

In another study it was reported that 39% of respondents indicated there was direct communication from the dean's office, and in other cases (27%) there was informal

communication among faculty.[1] So despite either not having a policy, or having a policy that prohibited sharing, 66% of the schools still shared information. Having a clear policy should eliminate the underground network of sharing and likely protect the rights of the students.[1]

Medical education has as a major goal creating practitioners who will meet the health needs of society.[8,9] To achieve this, medical education should produce graduates who are skilled in core competencies. The clinical learning environment is fragmented by specialization, demand for productivity, and competition with research and clinical practice for resources.[10] As noted by Hirsh, the fundamental model of clinical education has changed little since Osler. While the current model has strengths, it creates a lack of connection or continuity across the learning experiences. Educational continuity reflects progressive professional and personal development, yet the block system design (i.e. one or more months on a specific rotation, changing to one or more months on the next rotation, with few if any longitudinal experiences) does not provide the continuity required to ensure this growth. To avoid taking action to improve the situation is against the best interest of society and the professions duty to itself.[4,6-8,10]

In addition, faculty are usually transient in the clinical units (i.e. “on service”), so they may not have much time to observe and provide feedback to learners. The end result is a perpetual cycle of “starting over” with assessment, instead of using available information for the trainee’s development and for creation of suitable learning plans.

In developing assessment systems, the issue of disclosure has been raised, both internally and from UME to PGME.[11] Programs need longitudinal assessment systems to counter the effects of the fractured learning environment. “Faculty must become less fearful of providing meaningful performance data.” Without “forward feeding,” trainees end up in a cycle of superficial, nonspecific assessment and feedback.[12]

When concerns are identified early, there is enough time remaining to address the concerns. In some cases, individual faculty may only observe medical students for one or two weeks, and may understate concerns. Isolated assessments that begin every six to eight weeks may fail to identify inadequate or marginal performance.[8] In some cases medical students have demonstrated marginal performance in multiple clerkships, yet are not identified as needing assistance. These marginal passes may actually be inadequate performance, because faculty tend to give the benefit of the doubt.[8]

4.1. Rational for Sharing

It is estimated that a policy on sharing of information affects very few learners. One estimate is that it affects at under 2% of medical students.[1] More recently, CDs have indicated that 0 to 15% of third-year medical students struggle each year during the core IM clerkship, and up to 11% of fourth-year medical students struggle.[13]

The rationale for sharing information is strong. The purpose of assessment is to identify how learners are performing, to identify struggling learners, and to help the learners to be successful.[1] Learners who have problems in one course or rotation are more likely to have

problems in other courses or rotations, and often the problems can be remediated.[14] In addition, the principles of adult learning include the sharing of information with the learner.[1]

Programmatic assessment that looks across a whole year may contribute to better decisions than those made from isolated assessments alone. There is evidence that reliability arises more from the aggregation of assessments, rather than a very detailed specification of criteria on a particular assessment form.[9] Learners may present as "sub threshold," where multiple preceptors rate the learner as "borderline," but not totally under the threshold on any one assessment. This pattern will not be recognized if each assessment is conducted in a silo, yet the larger pattern should be sufficient to trigger remedial action.

It is notable that when members of a clerkship committee met to discuss medical students who had marginal performance on their third-year IM clerkship, 25% of individual faculty decisions were altered, changing the grade and/or resulting in remediation for some students.[15] This process allowed full discussion of the student performance by a group and therefore removed responsibility from any single individual for failing a student.

Having a policy on sharing information makes good educational sense, as it is consistent with current learning theories. It would provide teachers with background knowledge so they could properly plan for the learner.[6] Having a policy with an official process eliminates the random bias that occurs when the information is transmitted through underground networks or "grapevines."[6]

A policy provides a formal mechanism for addressing the perceived legal concerns.[6] Wilkinson and colleagues made suggestions for improving the assessment systems.[9] Their suggestions included sharing assessment information with faculty who will be supervising the learner in future placements.

In summary, the benefits of sharing assessment information exceeds the risk if the intent is to offer the program best suited to the individual learner's needs.[1] In order to implement a policy there needs to be a supportive educational environment, guidance and mentorship for faculty; learners need to be identified early; and there is a need to view medical education as a continuum and not focus solely on a single clerkship.[13]

4.2. Concerns about sharing

There are concerns related to the sharing of information among faculty. One fear is that future CDs could be biased, either for or against the learner.[4,13,16] There is the potential to bias faculty in future assessments, either negatively (already seeing the learner as weak so continuing to rate them as weak, or alternatively being harder on the learner and holding them to a higher standard) or positively (rating the learner higher, since they are repeating a placement, regardless of observed ability).[1,4,12] At the same time, it is possible that this labelling could create unfair advantage, as the learner would receive extra tutoring or coaching, and this extra attention might be helpful to all learners.[16] The argument that sharing information may create biases towards the learner may be more likely to occur if there are no formalised assessments of competence.[9]

There may be concerns about learner confidentiality or privacy.[4,13,16,17] There may be a lack of trust that the clerkship director will use the information appropriately.[13] There may be a concern that bias may present a barrier to developing effective remediation plans.[4,17] And there may be a concern that the learner might feel stigmatized by being identified as weak.[4]

There may be concerns regarding appeals or litigation.[4,13,16] As yet there is little evidence that identifying learners results in remedial programs that provide benefit.[16] In some institutions such discussions take place at promotions committee, so a policy to disclose in other ways is not necessary.[4,15]

The major concerns regarding sharing of information are confidentiality and privacy of learner information, the possibility of bias for or against the learner, and the possibility of appeals.

4.3. Benefits of Sharing

The interests of society are best served in addressing the issues as early as possible.[4,8] As one Clerkship Director stated, "We have a responsibility to produce graduates who are competent and professional. By [holding discussions] we are more likely to accomplish these goals by intervening early rather than by passing the buck."[4]

If information is shared, learners can be assigned to the most appropriate supervisors to enhance their learning experience, rather than rediscovering the same problem over and over again[1,4,13]. Sharing information provides an opportunity to intervene early, allowing early identification of problems to avoid future failure, and provides the opportunity to design appropriate remedial activities to ensure that deficiencies are addressed.[4,9]

Sharing of information also allows for the sharing of ideas on how to best handle learner needs,[4] thus optimizing the likelihood that any remedial action will be most appropriate and have the best effect.

In a system where promotion discussions occur at a central progress committee, failure does not depend on one person's decision.[9,15] This removes many of the concerns faculty have that lead to their "failure to fail."

The approach of collecting and considering assessments across time leads to a decision-making procedure that is similar to a qualitative approach. In qualitative research, data continues to accumulate until saturation is reached and a decision becomes trustworthy and defensible. Similarly, this approach allows collection of assessment data across time to identify patterns that are not evident from a single assessment. Communication across clerkships will aid in identification of learners who have multiple borderline assessments, yet are being passed along. Patterns may become evident that are not obvious to a single observer. Once the pattern is identified, it is more likely to be acted on.

CDs may be more likely to raise concerns when they believe that they will get advice and helpful suggestions from colleagues. The sharing also allows faculty who will be receiving the learners to make appropriate plans for the most suitable learning experiences. And similar to some methods of standard setting for examinations, the discussion among faculty helps in creating

norms for standards, so there is more consistency across assessments as to what is considered acceptable performance.

In summary, "joining the dots" between assessment results in "assessment *for* learning" as opposed to "assessment *of* learning," results in improved defensibility and helps identify previously hard to define concerns, particularly around professionalism.[9,18]

While outside the scope of this particular document, the issue of "failure to fail" is intertwined with disclosure of learner needs. Publications in this area point out that medical students are often surprised when they fail[19] and tend to believe their actions are appropriate unless told otherwise.[20] Faculty members pass medical students who should have failed.[9] There are many reasons for the failure to fail.[21-24] Having a policy on disclosure of learner needs may assist faculty in identifying weaknesses without having to fail a candidate outright.

4.4. Policies, procedures, guidelines

Framing documents vary at different schools, and the approaches to developing, documenting, and revising structures and processes also varies. For the sake of simplicity, here we use the words policy and policies to include the wide range of possible documents, structures, and processes to guide and direct learner handover.

Just over half of schools who responded to a survey in 1998 indicated they had policies addressing the sharing of assessment information, and of those with policies 53% permitted sharing of information.[1] Sharing was allowed for issues of academic performance (35%), professional conduct (35%), physical health (25%), and other circumstances (e.g. learning disabilities) (5%). The respondents indicated that information was shared with clerkship coordinators (44%), course directors (35%), faculty mentors (11%), clinical faculty supervisors (8%), and resident supervisors (3%). In the programs with policies, 7% required that the medical student be informed when information was shared, 71% did not require the medical students to be informed, and 14% indicated that medical students were never to be informed.

Eight years later, in 2006, a survey of CDs for Internal Medicine investigated what schools were doing with respect to disclosure of learner needs.[13] In this survey only 14% of institutions had a written policy for sharing information. Two-thirds (67%) of the respondents felt they should share the information with other CDs, and just over half (51%) said they did share information. Two-thirds of respondents present struggling students to a promotion committee.

4.5. What is absent from the articles reviewed

The literature on learner handover is limited, and all of the literature identified relates to undergraduate medical students, not postgraduate residents. It is likely that the approach taken for undergraduate learner handover is not appropriate for postgraduate education.

There does not appear to be an exploration of the needs of faculty for accurate information, which would enable them to provide learner-focused field-based education. One aspect of this is the lack of assessment documentation that clearly outlines the learner's current level. [16,19,21,23]. Another seems to be the concern about confidentiality.[4,6,16] While it is justified to ensure that

only appropriate information is provided to the relevant faculty — just as with patient handover there is a need for confidentiality while still providing the information and data that is needed for appropriate ongoing care — in the case of medical education this information is needed to provide the most appropriate ongoing learning experiences.

The discussion of learner handover rarely mentions the aspect of patient safety implications of non-disclosure of learner gaps and needs, which could put patients at risk, though some recognize that the lack of communication regarding learner needs could result in safety issues.[20,23,25]

4.6. Potential tool for appropriate disclosure of learner needs

With patient handover there are various tools that can be used to structure the process. These include the Handover in Everyday Practice tool,[26] the ISBAR tool,[27] and IPSASS.[28] Warm and colleagues[3] point out that there is research demonstrating that patient handover has decreased medical errors and improved patient care.[29,30] They therefore propose a tool for use during learner handover, with the goal being that such handovers will achieve the goal of "transparent, reliable, and safe ways to communicate this information."[3]

What Warm et al. propose is called the CLASS model. It includes the following components:

1) A description of the learner's **C**ompetency attainment
2) A summary of the **L**earner's performance
3) An **A**ction list
4) A statement of **S**ituational Awareness
5) **S**ynthesis by the receiving program

5. Summary and implications

Most of the literature that was identified deals with undergraduate medical students; no literature was identified regarding postgraduate trainees.

What is clear is that disclosure *does* happen, even when it is "prohibited." There are two aspects to this situation. First, creating policies that outline how and when this disclosure of learner needs is to be carried out would provide some structure around the process, promoting a transparent educational system that is working towards the best interests of the learners. Second, a culture change to make this process more explicit and acceptable is needed to make the "implicit" current practice "explicit." Again, this promotes a transparent educational system.

Key lessons about learner handover and appropriate disclosure of postgraduate learner needs from this review include:

1. CBME is about learner-focused education. This means not making time-based assumptions about learner's needs, abilities, and limits.
2. CBME will benefit from a much more open and transparent approach by all parties in postgraduate medical education (i.e. learners, faculty, supervisors, Site Directors,

Program Directors, postgraduate deans, and medical education researchers) when it comes to learner handover and appropriate disclosure of postgraduate learner needs.
3. CBME will benefit from a culture of improved learner handover and/or disclosure of learner needs.
4. There is a need to develop resources, structures, and processes (e.g. policies, guidelines) relating to disclosure of learner needs that reflects the values of fairness, transparency, educational focus, and patient and system needs.
5. Working with resources that are being developed nationally will be important. For example, the Future of Medical Education in Canada (FMEC) Learner Education Handover Committee has developed a handover tool to be used post-CARMS between UME and PGME and is currently planning a pilot test on the use of this tool.

As noted in 4 above, in order to ensure consistency and an appropriate use of information, creating a policy on when and how to share information, with the intention of assisting learners to meet their educational needs, is recommended by a number of authors. Considerations from the literature about what can be included in policies, procedures, or guidelines about learner handover is found in Appendix 2.

6. References

1. Gold WL, McArdle P, Federman DD. Should medical school faculty see assessments of students made by previous teachers? *Academic Medicine.* 2002;77(11):1096-1100.
2. Holmboe ES. Faculty and the Observation of Trainees' Clinical Skills: Problems and Opportunities. *Academic Medicine.* 2004;79(1):16-22.
3. Warm EJ, Englander R, Pereira A, Barach P. Improving Learner Handovers in Medical Education. *Academic Medicine.* 2017;Publish Ahead of Print.
4. Hemmer PA, Durning SJ, Papp K. What are the discussion topics and usefulness of clerkship directors' meetings within medical schools? A report from the CDIM 2007 National Survey. *Academic Medicine.* 2010;85(12):1855-1861.
5. Tonesk X. AAMC Program to Promote Improved Evaluation of Students During Clinical Education. *Journal of Medical Education.* 1986;61(9):83-88.
6. Cohen GS, Blumberg P. Investigating whether teachers should be given assessments of students made by previous teachers. *Academic Medicine.* 1991;66(5):288-289.
7. Ziring D, Danoff D, Grosseman S, et al. How Do Medical Schools Identify and Remediate Professionalism Lapses in Medical Students? A Study of U.S. and Canadian Medical Schools. *Academic Medicine.* 2015;90(7):913-920.
8. Cleary L. "Forward Feeding" About Students' Progress: The case for longitudinal, progressive, and shared assessment of medical students. *Academic Medicine.* 2008;83(9):800.
9. Wilkinson TJ, Tweed MJ, Egan TG, et al. Joining the dots: conditional pass and programmatic assessment enhances recognition of problems with professionalism and factors hampering student progress. *BMC Medical Education* 2011;11(29).
10. Hirsh DA, Ogur B, Thibault GE, Cox M. "Continuity" as an organizing principle for clinical education reform. *NEJM.* 2007;356(8):858-866.
11. Sousa AC, Wagner DP, Henry RC, Mavis BE. Better data for teachers, better data for learners, better patient care: college-wide assessment at Michigan State University's College of Human Medicine. *Medical Education Online.* 2010;16(5926).
12. Holmboe E, Ginsburg S, Bernabeo E. The rotational approach to medical education: time to confront our assumptions? *Medical Education.* 2011;45:69-80.
13. Frellsen SL, Baker EA, Papp KK, Durning SJ. Medical School Policies Regarding Struggling Medical Students During the Internal Medicine Clerkships: Results of a National Survey. *Academic Medicine.* 2008;83:876-881.
14. Blumberg P, Gohen G, Sullivan P, Ryan NC. The progress of students who encounter repeated difficulties in a problem-based medical school. *Teaching and Learning in Medicine.* 1994;7(23-28).
15. Gaglione MM, Moores LK, Pangaro L, Hemmer PA. Does Group Discussion of Student Clerkship Performance at an Education Committee Affect an Individual Committee Member's Decisions? *Academic Medicine.* 2005;80(10 (supplement)):S55-S58.
16. Cox SM. "Forward Feeding" About Students' Progress: Information on struggling medical students should not be shared among clerkship directors or with students' current teachers. *Academic Medicine.* 2008;83(9):801.
17. Durning SJ, Cleary TJ, Sandars J, Hemmer PA, Kokotailo P, Artino AR. Viewing "Strugglers" Through a Different Lens: How a self-regulated learning perspective can help medical educators with assessment and remediation. *Academic Medicine.* 2011;86(4):488-495.
18. Stiggins R. Assessment Crisis: The absence of Assessment FOR Learning. *The Phi Delta Kappan.* 2002;83(10):758-765.

19. Cleland JA, Arnold R, Chesser A. Failing finals is often a surprise for the student but not the teacher: identifying difficulties and supporting students with academic difficulties. *Medical Teacher.* 2005;27(6):504-508.
20. Challis M, Flett A, Batstone G. An accident waiting to happen? A case for medical education. *Medical Teacher.* 1999;21(6):582-585.
21. Cleland JA, Knight LV, Rees CE, Tracey S, Bond CM. Is it me or is it them? Factors that influence the passing of underperforming students. *Medical Education.* 2008;42:800-809.
22. Cohen GS, Henry NL, Dodd PE. A self-study of clinical evaluation in the McMaster clerkship. *Medical Teacher.* 1990;12(3/4):265-272.
23. Dudek NL, Marks MB, Regehr G. Failure to Fail: the perspectives of clinical supervisors. *Academic Medicine.* 2005;80(10 (Supplement)):S84-S87.
24. Rees C, Knight LV, Cleland JA. Medical educators' metaphoric talk about their assessment relationships with students: 'you don't want to sort of be the one who sticks the knife in them'. *Assessment & Evaluation in Higher Education.* 2009;34(4):August.
25. Sanfey H, Williams R, Dunnington G. Recognizing residents with a deficiency in operative performance as a step closer to effective remediation. *Journal of the American College of Surgeons.* 2013;216(1):114-122.
26. Glover Takahashi S, Abbott C, Oswald A, Frank JR, eds. *CanMEDS Teaching and Assessment Tools Guide.* Ottawa, ON: Royal College of Physicians and Surgeons of Canada; 2015.
27. Government of South Australia. ISBAR - Identify, Situation, Background, Assessment and Recommendation. updated Jan 2017; Description of the ISBAR Handover process. Available at: http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/clinical+handover/isbar+-+identify+situation+background+assessment+and+recommendation. Accessed January 15, 2017.
28. American College of Obstetricians and Gynecologists. IPASS. 2012; Number 517:http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Patient-Safety-and-Quality-Improvement/Communication-Strategies-for-Patient-Handoffs. Accessed January 15, 2017.
29. Hesselink G, Schoonhover L, Barach P, et al. Improving patient handovers from hospital to primary care: A systematic review. *Annals of Internal Medicine.* 2012;157:417-428.
30. Starmer A, Spector N, Srivastava R, et al. I-PASS Study Group. Changes in medical errors after implementation of a handoff program. *NEJM.* 2014;371(19):1803-1812.
31. Pangaro L. "Forward Feeding" About Students' Progress: More information will enable better policy. *Academic Medicine.* 2008;83(9):802.

7. Appendix 1: Annotated Bibliography

Gold WL, McArdle P, Federman DD. Should medical school faculty see assessments of students made by previous teachers? *Academic Medicine.* 2002;77(11):1096-1100.

> This study reported on a survey of 144 medical schools in the United States, Canada, and Puerto Rico. The specific question here was whether there were policies that addressed learner handover. At the time, over half of those schools (56%) reported having policies that addressed learner handover. Of those that had policies, over half (53%) allowed sharing of information. Therefore, at the time of this study, 29% of the 129 medical schools that responded to the survey had a policy that permitted the sharing of assessment information.

Frellsen SL, Baker EA, Papp KK, Durning SJ. Medical School Policies Regarding Struggling Medical Students During the Internal Medicine Clerkships: Results of a National Survey. *Academic Medicine.* 2008;83:876-881.

> This study was designed to characterize policies of medical schools regarding struggling medical students: those at risk of receiving a grade of less than pass because of problems with knowledge, clinical skills, professionalism, or a combination of these items. It used the annual Clerkship Directors in Internal Medicine (CDIM) survey for 2006 to include a section about how clerkship directors handle struggling third- and fourth-year medical students. The key point to the study is that sharing occurs (51% of respondents indicated sharing), whether sanctioned or not. Very few schools reported written policies related to sharing (14%).

Cleary L. "Forward Feeding" About Students' Progress: The case for longitudinal, progressive, and shared assessment of medical students. *Academic Medicine.* 2008;83(9):800.

> This is a commentary on Frellsen 2008 (above). Cleland points out that sharing information allows faculty to develop better assessments, direct teaching to a student's specific needs, and produce better doctors. The article outlines reasons for sharing information and precautions to be taken when sharing information.

Cox SM. "Forward Feeding" About Students' Progress: Information on struggling medical students should not be shared among clerkship directors or with students' current teachers. *Academic Medicine.* 2008;83(9):801.

> This article is contrary to most in that it presents reasons for ***not*** sharing information among faculty, in particular the concern about confidentiality and bias.

Pangaro L. "Forward Feeding" About Students' Progress: More information will enable better policy. *Academic Medicine.* 2008;83(9):802.

> This article presents a series of questions to address when considering what information to provide in learner handover.

8. Appendix 2: Considerations for policy, procedures, and guidelines on disclosure of learner needs

In developing a policy it is important to ensure that learners are evaluated fairly, without arbitrary or capricious scrutiny. There would be great value to a longitudinal perspective both for identifying gaps and for providing appropriate learning experiences. It is not in the best interest of providing high quality education to blindfold faculty or supervisors; it is important for them to have the information they need in order to provide the best learning experiences for each resident.

Some key implications for CBME:

1. Adopt a clear definition that discriminates between learner handover and disclosure of learner needs.
2. Identify people and educational resources that will allow for the description of educational needs
3. implement a clear protocol for learner handover.
4. Both learners and faculty will need development and support to implement learner handover and provide appropriate disclosure of learner needs. They will need to understand that the goal of this process is to support learning and ensure competence.

Questions that might assist in exploring and deciding on options for a specific policy related to learner handover have been described.[6,31] Slightly adapted for the postgraduate setting, these are the types of questions that a group might consider as they draft a policy:

1. What types of problems encountered by the trainee are to be shared (e.g. academic, clinical, technical or procedural, attitudes, other personal qualities, interpersonal, health, physical, or emotional)? Are there particular types of behaviours that are more likely to be "true positives" that merit documenting and tracking (e.g. unreliability such as poor follow-up in patient care, or diminished capacity for self-improvement such as failure to accept constructive criticism)? Which problems resolve on their own and which need further feedback and deliberate practice? Is there a different response to problems in the junior and senior residency years?

2. What are the barriers to honest assessment of trainees? What is the support for the notion that a framework for educational goals can be used consistently across teachers and across rotations? Can Site Directors be trained to avoid "diagnostic biases" based on receiving disclosed information?

3. What is to be the involvement of learners to the entire process? They could be involved in the development of the policy, and as for the individual learner in difficulty, should they be made aware of the sharing and should they be encouraged to initiate the process themselves?

4. Who should be providing data? Can barriers to assessment be addressed in order to allow honest assessment of trainees? Can a more comprehensive approach to

assessment be implemented? Can the learning outcomes and competencies be described at progressive developmental levels? Can assessment strategies be developed to provide clear evaluation and then feedback to trainees?

5. Who is informed of the issues? E.g. Should information be distributed to the learner's mentor (if any), and to the Program Director for dissemination to the next Site Director? It may be that the specific supervisors are not told about the issues, but the Site Directors are informed and are able to choose supervisors who are best suited to the needs of the trainee and to oversee and keep track of the learner's progress. Can Site Directors and other faculty involved be trained to avoid "diagnostic biases"? How can these biases be recognized or mitigated by the assessment system? Can individual teachers be trained or coached to avoid biases?

6. Ensure that data is collected to evaluate the policy and to determine if it has been successful in remediating struggling learners.

7. Considerations for prerequisites to a policy being implemented:
    a. What level of confidentiality among the involved faculty is required and what assurance to the learner is to be made regarding this confidentiality?
    b. What level of commitment of faculty is required to make the process work (e.g. prompt completion of all evaluations)?
    c. Can this be implemented at the specialty program level vs. a school-wide implementation?
    d. At what level is the policy to be sanctioned (e.g. program level, school level)?