Twelve tips for making the best use of feedback

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Abstract

Background: Feedback is generally regarded as crucial for learning. We focus on feedback provided through instruments developed to inform self-assessment and support learners to improve performance. These instruments are being used commonly in medical education, but they are ineffective if the feedback is not well received and put into practice.

Methods: The authors formulated twelve tips to make the best use of feedback based on widely cited publications on feedback. To include recent developments and hands-on experiences in the field of medical education, the authors discussed the tips with their research team consisting of experts in the field of medical education and professional performance, to reach agreement on the most practical strategies.

Results: When utilizing feedback for performance improvement, medical students, interns, residents, clinical teachers and practicing physicians could make use of the twelve tips to put feedback into practice. The twelve tips provide strategies to reflect, interact and respond to feedback one receives through (validated) feedback instruments.

Conclusions: Since the goal of those involved in medical education and patient care is to perform at the highest possible level, we offer twelve practical tips for making the best use of feedback in order to support learners of all levels.

Introduction

Background

Professionals working in patient care are required to adapt or improve their performance to be able to provide excellent care. It is globally understood that in order to improve, you should know how you are doing and what can be done better (Davis et al. 2006; Colthart et al. 2008; Krackov & Pohl 2011). An international study concluded that learners of all levels (undergraduates, postgraduates and practicing physicians) perceived feedback as essential to knowing how one was doing and how to improve (Mann et al. 2011). The process of interpreting data about one's own performance and comparing it to an explicit or implicit standard was defined as informed self-assessment (Epstein et al. 2008). The power of selfassessment lies in two domains: (1) the integration of data to assess current performance and promote future learning and (2) the capacity for ongoing self-monitoring during practice (Sargeant et al. 2010). People are known to have difficulty to reliably self-assess their performance (Eva & Regehr 2007; Mann et al. 2011; Sargeant et al. 2011a). For example, physicians' self-assessment of their clinical performance differed from the measures of competence observed by others (Davis et al. 2006). Similar results were found faculty's teaching performance, which faculty for themselves frequently underestimated or overestimated (Lombarts et al. 2009; Boerebach et al. 2012). To generate feedback and inform self-assessment of performance, multiple validated instruments are available (Petrusa et al. 1990; Grand'Maison et al. 1992; Sloan et al. 1995; Beckman et al. 2004; Lombarts et al. 2009, 2010; Arah et al. 2011; van der Leeuw et al. 2011; Boerebach et al. 2012; Durning et al. 2012; Overeem et al. 2012). Even though feedback is widely used, its effect on performance was found to vary (Kluger & DeNisi 1996). In general, there seems to be an emphasis on how to provide effective feedback (Archer 2010; Sargeant et al. 2011b). However, even valid, reliable and effectively given feedback is useless when not well received and put into practice to improve performance. This journal recently published twelve tips to help clinical teachers to give feedback effectively (Ramani & Krackov 2012). What is lacking are twelve tips to make the best use of feedback in order to support performance improvement.

Objectives

We provide twelve tips that will help medical students, interns, residents, clinical teachers and practicing physicians to make the best use of feedback from (validated) feedback instruments to inform self-assessment, to define goals and develop learning plans in order to realize performance at higher levels (Yardley et al. 2012).

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Tip 1

Become quiet and take your time

Feedback can promote learning if it is received mindfully (Bangert-Drowns et al. 1991). Time can help to separate emotions from ratio. Plan and take time to let emotions sink, like sand in muddy water needs time to sink to the bottom before you can see through clear water again. Sometimes a couple of minutes can be enough, but it can also take a night's sleep or a few days. After time has passed, you will better be able to see clearly and establish the value of the feedback. This first 'master-tip' can be helpful throughout the whole process of making the best use of feedback.

Tip 2

Read the feedback attentively

Start by choosing a place that suits you best to read the feedback thoroughly, for example a quiet office or favourite work space at home. When you are reading, it is important to regard all feedback as something that matters. Postpone your judgement until you have carefully read all the information. Try to focus on both the numerical feedback and the narrative comments. Narrative comments have proven to be a rich and useful source of feedback (Overeem et al. 2010; van Es et al. 2012). This 'value-free' reading could be helpful to gain an overview and provide insight in the content and relevance of the received feedback.

Tip 3

Place yourself in the position of the one who provided the feedback

Feedback is always given from a particular context. It is important to know and understand the context, because it can influence your perception of the feedback. If you place yourself in the position of the feedback giver(s), it is easier to think about the context information at play. The context information can help you broaden your own views to test the true relevance of the feedback (Sargeant et al. 2008; Archer 2010).

Tip 4

Separate the content from the relationship

The content of the feedback and the relationship you have with the feedback giver(s) are separate things. Keep these two things apart from each other. Use your knowledge and reason to deliberate the aim and the value of the feedback for your practice or performance (Ericsson 2004; Sargeant et al. 2008). Recognize and acknowledge the time and effort the feedback giver(s) have put into providing the feedback. You could view the feedback as an opportunity to learn enabled by your feedback giver(s). Therefore, it is important to sincerely thank your feedback giver(s) and possibly feed back what it meant to you.

Tip 5

Balance between being self-confident and being humble

A high level of self-confidence facilitates clear analysis of the content. Starting from a self-confident position can be helpful to view the content of the feedback even when it evokes emotional feelings because of negative or unconstructive feedback (Sargeant et al. 2008, 2009). This allows you to accept or reject the content of the feedback based on professional grounds. Hold that confidence to address improvement and develop a personal development plan, as it will increase the chance of being successful in the attempt to become a better doctor or teacher. But keep in mind that confidence can only exist with a humble attitude to yourself and the people in your surroundings.

Tip 6

Love learning

To want to improve your performance is an inherent characteristic of professionals (Medical Professionalism Project 2002). Lifelong learning can run from commencing medical school to working as a physician and educator. The love to learn can facilitate lifelong learning whereas a study on residents reported that those who do not continue to learn become dissatisfied and burn out (Becker et al. 2006). Lifelong learning can be defined as a (1) continuation of medical education with an (2) ongoing process of professional development along with (3) self-assessment that enables physicians to maintain the requisite knowledge, skills and professional standards (Madewell 2004). Even physicians who perform at a high level need feedback to inform their selfassessment and direct learning. Reflection on feedback, defining goals and developing a learning plan can help to put feedback into action (Yardley et al. 2012).

Tip 7

Keep your professional goals in mind

To support professional development, you should keep your professional goals in mind. If you know what you want to develop professionally, you can determine the usefulness of the feedback to get closer to these goals. The process of interpreting feedback about one's own performance and comparing it to an explicit or implicit standard is known as self-assessment (Epstein et al. 2008). Self-assessment is considered to be the key step in the continuing professional development cycle (Eva & Regehr 2008).

Tip 8

Keep the common goal in mind

The feedback giver(s) and you often share a common goal. This could be 'becoming the best possible doctor you can be' (students and their teachers), 'ensure safe and high quality patient care' (residents and clinician teachers) or 'improve teaching' (teachers and their students or residents). With that goal in mind, you may be better able to overcome personal feelings of failure or uncertainty. This is an important step towards making use of the feedback to direct your learning (Sargeant et al. 2011b; Eva et al. 2012).

Tip 9

Take your study, residency training or job seriously

When you are doing something that has value to you, you are more likely to seek feedback and act upon it. For professionals it means that learning is an issue of engaging in and contributing to the practice of their community (Wenger 1998). Equally, for students it means training to become a doctor through their study, for residents growing professionally as doctors and as teachers and for physicians working jobs as doctor *and* teacher. Use your engagement as a starting point to keep a professional attitude towards feedback and the feedback giver(s).

Tip 10

Talk about the feedback with the feedback giver(s)

It is important to talk about feedback to check whether the message that was intended has come across, but it may take courage to discuss the feedback together with the feedback giver(s). If you have the opportunity to talk about the feedback, plan enough time and create the right conditions to exchange thoughts. Ask questions to deepen your understanding of the content and context of the feedback to self-regulate learning (Nicol & Macfarlane-Dick 2006). This requires a non-defensive attitude. Posing questions in an open manner prevents refuting the message the feedback giver(s) might have.

Tip 11

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Start a dialogue with peers

Courage is needed to organize peer evaluation of the content of the feedback. Use a method of dialogue and the help of an expert to organize a safe setting to discuss feedback with others. This increases the chances of learning from peers through sharing and testing the content of feedback to professional values and standards with your peer group. It helps to make the implicit standard explicit (Lockyer et al. 2011). Furthermore, it provides the opportunity to confirm feedback and enables you to discover how peers deal with feedback and learn from each other.

Tip 12

Pick out the pearls

Finally, you are the one who decides whether you can and will do something with the feedback. Moving through the above tips presumably will stimulate reflection which leads to a careful analysis of the content of the feedback (Sargeant et al. 2009). Pick out the pearls you want to respond to. If you accept the feedback, do it wholeheartedly and praise yourself for doing so. Reject the feedback that does not apply to you or is not helpful. Communicate about the unhelpful feedback with the feedback giver(s) acknowledging their efforts. If you choose to reject the feedback, keep looking for feedback in order to keep learning.

Conclusion

Everybody could potentially benefit from receiving feedback. However, feedback was not always found to be successful or beneficial to performance. We aimed to provide a practical solution to bridge the gap between receiving feedback and utilizing it the best possible way. We presented twelve tips that enable medical students, interns, residents, clinician teachers and practicing physicians to utilize feedback to their best interest in order to achieve better performance.

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References

- Arah OA, Hoekstra JB, Bos AP, Lombarts KM. 2011. New tools for systematic evaluation of teaching qualities of medical faculty: Results of an ongoing multi-center survey. PLoS One 6(10):e25983, available from: PM:22022486.
- Archer JC. 2010. State of the science in health professional education: Effective feedback. Med Educ 44(1):101–108, available from: PM:20078761.
- Bangert-Drowns RL, Kulik CLC, Kulik JA, Morgan M. 1991. The instructional effect of feedback in test-like events. Rev Educ Res 61(2):213–238.

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- Becker JL, Milad MP, Klock SC. 2006. Burnout, depression, and career satisfaction: Cross-sectional study of obstetrics and gynecology residents. Am J Obstet Gynecol 195(5):1444–1449, available from: PM:17074551.
- Beckman TJ, Ghosh AK, Cook DA, Erwin PJ, Mandrekar JN. 2004. How reliable are assessments of clinical teaching? A review of the published instruments. J Gen Intern Med 19(9):971–977, available from: PM:15333063.
- Boerebach BC, Arah OA, Busch OR, Lombarts KM. 2012. Reliable and valid tools for measuring surgeons' teaching performance: Residents' vs. self evaluation. J Surg Educ 69(4):511–520, available from: PM:22677591.
- Colthart I, Bagnall G, Evans A, Allbutt H, Haig A, Illing J, McKinstry B. 2008. The effectiveness of self-assessment on the identification of learner needs, learner activity, and impact on clinical practice: BEME Guide no. 10. Med Teach 30(2):124–145, available from: PM:18464136.
- Davis DA, Mazmanian PE, Fordis M, Van Harrison R, Thorpe KE, Perrier L. 2006. Accuracy of physician self-assessment compared with observed measures of competence: A systematic review. JAMA 296(9):1094–1102, available from: PM:16954489.
- Durning SJ, Artino A, Boulet J, La Rochelle J, van der Vleuten C, Arze B, Schuwirth L. 2012. The feasibility, reliability, and validity of a postencounter form for evaluating clinical reasoning. Med Teach 34(1):30–37, available from: PM:22250673.
- Epstein RM, Siegel DJ, Silberman J. 2008. Self-monitoring in clinical practice: A challenge for medical educators. J Contin Educ Health Prof 28(1):5–13, available from: PM:18366128.
- Ericsson KA. 2004. Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains. Acad Med 79(10 Suppl.):S70–S81, available from: PM:15383395.
- Eva KW, Armson H, Holmboe E, Lockyer J, Loney E, Mann K, Sargeant J. 2012. Factors influencing responsiveness to feedback: On the interplay between fear, confidence, and reasoning processes. Adv Health Sci Educ Theory Pract 17(1):15–26, available from: PM:21468778.
- Eva KW, Regehr G. 2007. Knowing when to look it up: A new conception of self-assessment ability. Acad Med 82(10 Suppl.):S81–S84, available from: PM:17895699.
- Eva KW, Regehr G. 2008. "I'll never play professional football" and other fallacies of self-assessment. J Contin Educ Health Prof 28(1):14–19, available from: PM:18366120.
- Grand'Maison P, Lescop J, Rainsberry P, Brailovsky CA. 1992. Large-scale use of an objective, structured clinical examination for licensing family physicians. CMAJ 146(10):1735–1740, available from: PM:1596809.
- Kluger AN, DeNisi A. 1996. The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. Psychol Bull 119(2):254–284.
- Krackov SK, Pohl H. 2011. Building expertise using the deliberate practice curriculum-planning model. Med Teach 33(7):570–575, available from: PM:21696284.
- Lockyer J, Armson H, Chesluk B, Dornan T, Holmboe E, Loney E, Mann K, Sargeant J. 2011. Feedback data sources that inform physician selfassessment. Med Teach 33(2):e113–e120, available from: PM:21275533.
- Lombarts MJ, Arah OA, Busch OR, Heineman MJ. 2010. Using the SETQ system to evaluate and improve teaching qualities of clinical teachers. Ned Tijdschr Geneeskd 154:A1222, available from: PM:20170574.
- Lombarts KM, Bucx MJ, Arah OA. 2009. Development of a system for the evaluation of the teaching qualities of anesthesiology faculty. Anesthesiology 111(4):709–716, available from: PM:19707115.
- Madewell JE. 2004. Lifelong learning and the maintenance of certification. J Am Coll Radiol 1(3):199–203, available from: PM:17411559.

- Mann K, van der Vleuten C, Eva K, Armson H, Chesluk B, Dornan T, Holmboe E, Lockyer J, Loney E, Sargeant J. 2011. Tensions in informed self-assessment: How the desire for feedback and reticence to collect and use it can conflict. Acad Med 86(9):1120–1127, available from: PM:21785309.
- Medical Professionalism Project. 2002. Medical professionalism in the new millennium: A physicians' charter. Lancet 359(9305):520–522.
- Nicol D, Macfarlane-Dick D. 2006. Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. Stud Higher Educ 31:199–218.
- Overeem K, Lombarts MJ, Arah OA, Klazinga NS, Grol RP, Wollersheim HC. 2010. Three methods of multi-source feedback compared: A plea for narrative comments and coworkers' perspectives. Med Teach 32(2):141–147, available from: PM:20163230.
- Overeem K, Wollersheim HC, Arah OA, Cruijsberg JK, Grol RP, Lombarts KM. 2012. Evaluation of physicians' professional performance: An iterative development and validation study of multisource feedback instruments. BMC Health Serv Res 12:80, available from: PM:22448816.
- Petrusa ER, Blackwell TA, Ainsworth MA. 1990. Reliability and validity of an objective structured clinical examination for assessing the clinical performance of residents. Arch Intern Med 150(3):573–577, available from: PM:2310275.
- Ramani S, Krackov SK. 2012. Twelve tips for giving feedback effectively in the clinical environment. Med Teach 34(10):787–91.
- Sargeant J, Armson H, Chesluk B, Dornan T, Eva K, Holmboe E, Lockyer J, Loney E, Mann K, van der Vleuten C. 2010. The processes and dimensions of informed self-assessment: A conceptual model. Acad Med 85(7):1212–1220, available from: PM:20375832.
- Sargeant J, Eva KW, Armson H, Chesluk B, Dornan T, Holmboe E, Lockyer JM, Loney E, Mann KV, van der Vleuten CP. 2011a. Features of assessment learners use to make informed self-assessments of clinical performance. Med Educ 45(6):636–647, available from: PM:21564201.
- Sargeant J, Mann K, van der Vleuten C, Metsemakers J. 2008. "Directed" self-assessment: Practice and feedback within a social context. J Contin Educ Health Prof 28(1):47–54, available from: PM:18366127.
- Sargeant J, McNaughton E, Mercer S, Murphy D, Sullivan P, Bruce DA. 2011b. Providing feedback: Exploring a model (emotion, content, outcomes) for facilitating multisource feedback. Med Teach 33(9):744–749, available from: PM:21854151.
- Sargeant JM, Mann KV, van der Vleuten CP, Metsemakers JF. 2009. Reflection: A link between receiving and using assessment feedback. Adv Health Sci Educ Theory Pract 14(3):399–410, available from: PM:18528777.
- Sloan DA, Donnelly MB, Schwartz RW, Strodel WE. 1995. The Objective Structured Clinical Examination. The new gold standard for evaluating postgraduate clinical performance. Ann Surg 222(6):735–742, available from: PM:8526580.
- van der Leeuw R, Lombarts K, Heineman MJ, Arah O. 2011. Systematic evaluation of the teaching qualities of Obstetrics and Gynecology faculty: Reliability and validity of the SETQ tools. PLoS One 6(5):e19142, available from: PM:21559275.
- van Es JM, Visser MR, Wieringa-de Waard M. 2012. Do GP trainers use feedback in drawing up their Personal Development Plans (PDPs)? Results from a quantitative study. Med Teach 34(11):e718–24.
- Wenger E. 1998. Communities of practice Learning, meaning, and identity. Cambridge: Cambridge University Press.
- Yardley S, Teunissen PW, Dornan T. 2012. Experiential learning: AMEE Guide No. 63. Med Teach 34(2):e102–e115, available from: PM:22289008.

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