Using Chart Review and Chart-Stimulated Recall for Resident Assessment

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The Challenge

Formative and summative assessment of residents' clinical reasoning, decision-making, and documentation skills is challenging, as it occurs "inside the learner's head." Educators seek strategies to assess and provide feedback on this critical competency, and medical education researchers require clinically relevant measures of the educational impact of new curricula or other teaching innovations.[1–3] Assessments based on chart review (CR) or chart-stimulated recall (CSR) allow trainees to articulate their process of clinical decision-making and the underlying rationale to be articulated.

What Is Known

CR and CSR assess clinical competence using a clinician's documented patient encounter as the starting point for assessmentt of clinical reasoning and clinical documentation.[4,5] Patient records for CR and CSR are usually selected by faculty providing assessment, but may also be selected by the learner. CR focuses on trainees' medical record documentation. CSR adds an oral examination component—asking the trainee to externalize his or her thought processes—to elicit diagnostic reasoning, decision-making, and related decisions such as use of resources or communicating with patients, families, or other members of the health care team. CR-based feedback on diagnostic performance can motivate residents to improve their clinical reasoning.[6] CSR scoring forms range from checklists with comment boxes to rating scales for a standardized assessment.[5] CSR has been shown to provide valuable and useable feedback for trainees at varying levels, with value extending to marginally performing learners with limited clinical diagnostic and clinical reasoning skills to high-performing, advanced learners.[7,8] CSR can also be used to provide feedback on other competencies, such as communicating with patients and families, clinical documentation, and understanding systems of care. Using CSR for high-stakes assessments has been suggested, but must address issues common in all clinical performance assessments, including number and representativeness of cases selected and rater training/scoring.

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Editor's Note: The online version of this article contains the full chart review and chart-stimulated recall worksheet.

Rip Out Action Items

Program directors should:

1. Identify assessment or feedback gaps that can be supported by CR/CSR: patient care, clinical diagnosis and decision-making, communication, and documentation.
2. Select 1 to 3 patient care contexts for initial CSR use (consider a mix of inpatient plus ambulatory settings).
3. Adopt or adapt the CR/CSR worksheets to become part of your permanent assessment approach, with links to the relevant competencies.

How You Can Start TODAY

1. **Determine if CR/CSR meets your needs.** Discuss with your Clinical Competency Committee how CR and CSR may expand and enrich your assessment toolbox, and provide feedback to trainees relating to their patient care, clinical diagnosis and decision-making, communication, and documentation skills.
2. **Use a CR/CSR worksheet to structure your review.** Select the context (eg, a resident clinic session, patient consult, recently discharged patient, or selected contexts to assess and assist a learner in difficulty). Allocate 10 to 15 minutes for CR review and feedback, and 15 to 20 minutes for a CSR session. Highlight no more than 3 strengths and 3 areas for improvement per session. Use a self-guided worksheet for CR and CSR. See the BOX for a sample worksheet.
3. **Use the CR worksheet section No. 1** to provide feedback on residents' clinical documentation in the electronic health record or a print out or paper chart. Highlight effective documentation practices.

What You Can Do LONG TERM

1. **Teach senior residents how to use CR and CSR** to provide "near-peer" feedback to junior learners, using "7 Principles of Good Feedback," and mentor them in this new role.[9]
2. **Modify the CSR form for specific settings and context**, by deleting nonrelevant sections.
3. **Identify potential possible barriers to CR and CSR posed by your electronic health record** (eg, focus on billing, lack of reasoning process documentation), and how to overcome them.
4. **Create electronic versions** of the CR and CSR feedback forms as part of your assessment system.

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BOX Chart Review (CR)/Chart-Stimulated Recall (CSR) Worksheet[7] (see online supplemental material for a full worksheet)

Section 1: CR & CSR Chart Review—Assess and record key data, based on the documentation in chart/health record.

Competencies key: Medical knowledge (MK); patient care (PC); interpersonal and communication skills (ICS); professionalism (PROF); practice-based learning and improvement (PBLI); systems-based practice (SBP)

- Relevance of information in chart (MK, PC)
- Addresses communication of information to patient/family (ICS)
- Record completeness and clarity (ICS, PBLI)

Section 2: CSR Case Discussion—Probe the resident's thinking about the care of the patient, using the questions as relevant to the chart/case. Enter "N/A" for sections not relevant to a particular patient.

1. Discuss your diagnostic decision-making for this patient. What features of the patient's presentation led you to your top 2 diagnoses? Was there ambiguity or uncertainty? If yes, how did you deal with it? (MK, PC)
2. Did you order any labs or tests? What was your rationale? Were there other tests that you thought of but decided against? Why? (PC, SBP)
3. Did you inquire about the patient's experience of his or her illness and care (feelings, ideas, effect on function and expectations)? What did you learn? (ICS)
4. Describe your management and treatment decisions. What did you decide was appropriate for follow-up? What factors influenced your decision? (See online supplemental material for additional items.)

Section 3A: Provide Verbal Feedback—Provide succinct verbal feedback to the resident. Highlight 3 strengths and 3 areas for improvement that may include comments about (1) the resident's case presentation (CR and CSR); (2) the resident's use of information and clinical reasoning skills (CSR); (3) the use of evidence-based medicine (CSR); (4) communication skills (CR and CSR); (5) the resident's understanding of the system of care (CSR); and (6) evidence of reflective practice (CR and CSR).

Section 3B: Probe for the Resident's Understanding of the Feedback—Record key elements of the feedback.

5. **Seek feedback** from learners, faculty, and the Clinical Competency Committee about the utility of CSR and incorporate this into your assessment approach.
6. **Use CR** for program evaluation or as an outcome measure after curriculum change or other interventions.

Resources

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