

# Chart Audit

## What:

The review and assessment of medical records, generally using pre-established criteria and standards.

## Possible Uses:

- Identify morbidity patterns and adverse events.
- Compare evidence regarding management approaches to current practice.
- Assess high risk, high-patient volume, or high-cost conditions.
- Examine complex conditions with common complications or co-morbidities.

## Advantages:

- Potentially large number of recorded observations.
- Relatively easy to perform, less expensive and time consuming than some other methods.
- Standardized approach and use of criteria can lead to reliable findings.
- Not disruptive to practice.
- Electronic medical records provide additional opportunities.

## Disadvantages:

- Many records focus on outcome rather than process/consultation so notes may not accurately or thoroughly reflect patient care.
- Data collected may not be appropriate for what is being assessed.
- Lack of standardization in chart formats.
- Incomplete records, illegibility.

## General steps in chart audit:

1. Select a subject.
2. Establish criteria with standards (involve peers and experts).
3. Identify sampling procedure.
4. Train chart reviewers for consistent, accurate application of criteria and standards.
5. Collect data.
6. Analyze data.
7. Compare findings to criteria and standards.
8. Repeat chart audit following an intervention to identify changes in practice.

## Examples of chart audit studies:

1. Goulet F, Jacques A, Gagnon R, Racette P, and Sieber W. Assessment of family physicians' performance using patient charts: Interrater reliability and concordance with chart-stimulated recall interview. *Evaluation and the Health Professions*, 2007; 30:376-392.
2. Humberstone V, Wheeler A, Lambert T. An audit of outpatient antipsychotic usage in the three health sectors of Auckland, New Zealand. *Aust N Z J Psychiatry*, 2004;38:240-5.
3. Toma A, Hopman WH, Gorwill RH. Hysterectomy at a Canadian tertiary care facility: results of a one year retrospective review. *BMC Womens Health*, 2004;4:10.

## Resources:

- University of Toronto CME chart audit bibliography [www.cme.utoronto.ca/research/bibchartaudit.asp](http://www.cme.utoronto.ca/research/bibchartaudit.asp)
- The College of Physicians and Surgeons of Ontario, A guide to current medical record-keeping practices: a focus on record-keeping in the office-based setting, 2002 [www.cpso.on.ca/Policies/medicalrec.htm](http://www.cpso.on.ca/Policies/medicalrec.htm)

## References:

1. Grant J. Learning needs assessment: assessing the need. *BMJ*, 2002;324:156-9.
2. Hays RB, Davies HA, Beard JD, et al. Selecting performance assessment methods for experienced physicians. *Med Educ*, 2002;36:910-917.
3. Jennett P and Affleck L. Chart audit and chart stimulated recall as methods of needs assessment in continuing professional health education. *JCEHP*, 1998;18:163-171.
4. Tugwell P, Dok C. Medical record review. In: Neufeld VR, Norman GR, eds. *Assessing clinical competence*. New York: Springer, 1985:142-182.

