



The Seven-Level Outcomes Model¹

CE Outcomes Levels	Value and Limitations
<p>Level 1 – Participation Involves registration data</p>	<ul style="list-style-type: none"> Tracks demographic information and participation and paints a picture of who participated in the activity
<p>Level 2 – Satisfaction Involves participant evaluation questions</p>	<ul style="list-style-type: none"> Measures variables related to fair balance, instructional design, and relevance to practice
<p>Level 3a – Learning: Declarative Knowledge (knows) Includes post-tests</p>	<ul style="list-style-type: none"> Participants are tested on knowledge of key concepts which tie back to the activity learning objectives
<p>Level 3a – Learning: Procedural Knowledge (knows how) Includes pre-/post-tests, case-based assessment</p>	<ul style="list-style-type: none"> Provides immediate feedback on learners' ability to apply new knowledge
<p>Level 4 – Learning: Competence (shows how) Includes case based-assessment and commitment to change measures</p>	<ul style="list-style-type: none"> Measures application of learning to practice or care team in educational setting Intent to change has high correlation with actual behavior change
<p>Level 5 – Performance (does) Follow-up assessment of practice change involving 30-60 day surveys, and quality and utilization measures, including dashboards, chart reviews, electronic health records, health plan data</p>	<ul style="list-style-type: none"> Measures whether the performance changes identified by learners at the time of the activity were made Provides rich information about intended as well as unintended consequences of CME Post-activity surveys tend to be subjective. However, in absence of actual observation of performance in practice, this information serves as a surrogate marker that is indicative of actual change. Limits of objective measures include resource intensive, lack of standardization and problem with translating measures to computer language (EHRs), and may be difficult to distinguish learners' data in the context of a large practice group (health plan data)

<p>Level 6 – Patient Health Assesses change in patient health status using actual patient data</p>	<ul style="list-style-type: none">• Tracks net effect of practice change on target populations• May take long time periods to reflect change in health status and difficult to tie changes back to single activity
<p>Level 7 – Community Health Assesses progress toward ultimate goal of improved community/population health</p>	<ul style="list-style-type: none">• Tracks net effect of practice change on target populations• May take long time periods to reflect change in health status and difficult to tie changes back to single activity

1. Based upon: Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *J Contin Educ Health Prof.* 2009;29(1):1-15.