# An Effective Model for a Comprehensive Performance Measurement of Clinical and Research Laboratory Centers

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**Abstract**

**Bachground and objectives:** Improvement of the effectiveness of services is one of the most important strategies in many clinical and research laboratory centers. The increased client satisfaction (researchers or patients), resource development innovation, efficacy, continuity of services and income are also the important strategies of these centers. For achieving these strategies, we combined the qualitative and the quantitative approaches to evaluate the effective model based on frameworks of the Balance Scorecard (BSC) and the Laboratory Quality Management Systems (LQMS).

**Material and Methods:** This paper describes the basic steps required for designing and developing of a model for performance measurement in laboratory centers. For model validation, the relationship between the criteria, the strategies and the strategic objectives was evaluated using both the AHP method and the evaluation by the experts.

**Results:** Implementation of the above mentioned model, conducted in one of the largest Laboratory centers, has resulted in a remarkable enhancement in the efficiency (22%), profit (33%), level of quality of service (27%) and in the clients' satisfaction (4%).

**Conclusion:** This research model is a valuable tool for effective evaluation and continuous improvement of the clinical and research laboratory centers. Applying this model leads to increased resource productivity as well as the clients and community satisfaction from the laboratories services.

**Key words:** Labratories , Total quality managment, Balance Scorecard (BSC), Laboratory Quality Management Systems (LQMS)