Title: Comprehensive curriculum evaluation through partnership and interactive tool development

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Context and setting: In Faculty of Medicine- King AbdulAziz University- KSA, evaluation was confined to a students' end-of-course questionnaire. The process was not standardized. Stakeholders were minimally engaged in the process. Results were quantitative, without interpretation or contextualization, and communicated only to high-level management.

Why the idea was necessary: Evaluation is fundamental to educational quality assurance. At our institution, there was a lack of integrated evaluation data that could enlighten decisions for curriculum development. Faculty were not motivated to utilize evaluation results; and development programs were not focused to address faculty needs.

Setting a comprehensive interactive evaluation plan was needed to inform curriculum planning at the micro (course), meso (year), and macro (whole curriculum/institution) levels; engage stakeholders in each evaluation step through a relationship-centered approach; and institutionalize the value of "learning through evaluation" and targeted faculty development.

What was done: A comprehensive evaluation system was planned incorporating multiple stakeholder perspectives and Kirkpatrick's evaluation model. This included evaluation of (1) curriculum design by educationalists; (2) courses during and after implementation by students and faculty; (3) curriculum for each graduation year (annual retrospective), by graduates, faculty, quality unit (QU), administration and external stakeholders. Phase 2, to be completed in 2013, will include evaluation of institutional capacity for effective and efficient education processes (long-term retrospective), by external experts.

Evaluation processes were standardized, approved by stakeholders and publicized across the institution. Coordination was established with curriculum management committees. Key to the process was building stakeholder relationships, developing tools that were user-friendly and producing quality information. Both qualitative and quantitative approaches were used. Versatile methods (survey and quasi-experimental) and validated tools were adapted for the purpose. Tools were learner –rather than teacher-centered. Assessment was reviewed by: (a) semi-structured interviews with faculty and course portfolios; (b) matching exam blueprints to item analysis and design; (c) designing and training faculty in using a user-friendly blueprint software.

To engage stakeholders in the planning and use of evaluation, closed loop feedback, with feed-forward and follow-up, was practiced among all stakeholders and an electronic curriculum spreadsheet was designed to provide asynchronous interaction. The spreadsheet displayed data analysis results, and provided information regarding alignment of objectives, instruction and assessment strategies. It had active links to course documents, and targeted learning resources.

Impact and lessons learned: Increased awareness, knowledge and skills of evaluation among faculty were indicated by: a) participation of representatives from all departments in targeted workshops; b) improved course design as for alignment between objectives, instruction and assessment strategies; c) 100% response rate for surveys by faculty and students. "Partnering" among all stakeholders pulled them in, as evidenced by regular interaction via the electronic spreadsheet and consultation on quality issues.

Monitoring and control secured through standardization of processes were demonstrated by: a) Ratification, publicization and utilization of a CQI Evaluation/Assessment Reporting Cycle; b) Full documentation of course/program reports.

Coordination with curriculum management committees was evidenced by discussion of evaluation results in all formal departmental and curriculum committees meetings.

Utilization of robust meaningful database to make informed decisions was evidenced at the (1) Macro-level by: a) Issuing of the first annual program report; b) Ratification of short- and long-term curriculum modifications plan; c) Approval to generalize the experience to other Faculties in university board; (2) Meso-level by: a) Significant improvement of satisfaction index (SI) on the program compared between 2010/2011 graduates ($p<0.01$); b) Approval of conducting an end of phase (preclinical and clinical) exam; c) 6th year matriculation rate (97% vs 90%) and graduates' pass rate in national licensing exam (91% vs 77 %) were increased in 2010 than 2009; (3) Micro-level by: a) full documentation of all course files (specifications, reports, improvement action plans); b) improvement shown by increased (SI) on courses in 2010 than 2009 by students, (76% vs 67% in preclinical and 97% vs 75% in clinical courses) and by faculty (79% vs 70%); c) improvement of assessment practice (blueprinting and item analysis) by (75%) of courses exceeded piloting expectations; and improved item design.