

Learning Innovation and Improvement Project (LIIP) Pilot to Test LIIP Concept

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Through the Committee on Innovation in the Learning Environment, the ACGME has begun to explore why some residency programs and sponsoring institutions succeed at innovation and improvement in their learning environment, to meet the dual objectives of high-quality patient care and resident learning and professional development. An added, more formal step in this direction is the Learning Innovation and Improvement Project (LIIP), which will study a group of institutions that appear successful in innovating in their learning environment while performing well in the ACGME's accreditation process. It also will study two comparison groups: institutions that perform well in the accreditation process but do not meet the chosen criterion of "successful at innovation," and institutions that succeed at innovation, but experience problems with the ACGME's accreditation process. The project is authorized by CILE, administered by a small project advisory group. CILE provides oversight.

To date, there has been relatively little research to identify innovation in teaching institutions that seeks to improve resident education and patient care, and the conditions that create a fertile environment for this type of change in the learning environment. As a result, little is known about the role of individuals, organizational culture, structure and strategy in making innovation happen in resident and fellow education. There would be broad benefit in work that adds to understanding of potential common attributes of these settings, and the process by which some programs and institutions achieve innovation and improvement in their learning environment. The goals of LIIP are to:

- ***Gather ground-level observations on processes and common attributes of institutions and programs that succeed in innovation and improvement in their learning environment.***
- ***Disseminate this information for adoption and adaptation with the dual goals of facilitating better linkages between graduate medical education and clinical care and informing the accreditation standards and processes.***

Initial Steps:

1. Identification of Candidate Sites (Fall 2006)
 - a. Identify 10 to 15 candidate sites for LIIP. The process for selecting institutions that appear to succeed at innovation in their learning environment. To identify these institutions information was gathered from published journals and other peer reviewed sources such as posters and abstracts presented at conferences, selecting institutions that have published multiple articles and abstracts on institutional and program level innovation and improvement in the learning environment
 - b. Assess accreditation performance, to screen out candidates with accreditation deficiencies at the program or institutional level (the latter will constitute candidates for the study "institutions that succeed at innovation but do not perform well in the accreditation process).
2. Design of Interview and Site Visit Approach and Questions (Fall/Winter 2006)

- a. Develop an interview approach that: 1) is able to capture and describe program processes that are dynamic and evolving; 2) allows documentation of variations in implementation and ongoing evolution at different sites; and 3) is sensitive to the fact that local level initiatives may seek different outcomes.
 - b. Design a semi-structured interview that offers flexibility through open-ended questions, and the ability to ask follow-up questions tailored to the given response. The framework uses both a deductive approach (validated performance excellence criteria) and an inductive approach that is sensitive to local strengths and emergent properties of institution that have sought to improve and innovate in their learning environment. This enables tapping into the attributes most relevant to the particular respondent or the defining characteristics or environmental conditions for the given exemplary learning site. A copy of the interview questions is shown at **Attachment 1** and an initial matrix for identifying attributes at candidate sites is shown at **Attachment 2**.
3. Select test sites for a pilot of the screening, interview and site visit approach. (January 2007)
Four sites have been selected for an initial pilot. Two of these are university sites (University of Rochester, Dartmouth/Mary Hitchcock Medical Center), one is the large academic group practice with a medical school (Mayo Clinic Rochester), and the fourth is a large independent academic medical center and health system (Henry Ford Hospital/Health System).
 4. Conduct on-site visits at several test sites to assess common attributes that create a favorable environment for innovation and improvement. (February – August 2007)
 5. Individuals to be interviewed during the site visits include: 1) DIO and his/her staff; 2) three to six senior GME leaders selected by the DIO who are involved in innovation and improvement; 3) selected individuals selected who have key roles in program level initiatives selected by the GME leaders; 4) institutional senior leadership to assess their commitment to education and role in innovation in the learning environment; and 5) an exit interview with DIO and selected senior GME leaders to assess their perception of the barriers the current accreditation process presents to institutional and program level innovation and improvement.
 - a. Telephone interviews will be tape recorded and transcribed, with analysis conducted by staff, with input from the LIIP institutions, and developed into structured transcripts.
 6. Use data from the pilot including feedback from the pilot institutions, to refine the questions and site visit process. (September/October 2007)
 - a. Prepare transcripts of the data from the telephone and on-site interviews.
 - b. Conduct follow-up interviews with interviewees and site visit participants to assess the utility of the interviews, concepts covered and those participants thought important to innovation and improvement at their institution that were not addressed during the interview.
 - c. Develop draft feedback reports for review and comment by the pilot participants.
 7. Conduct screening telephone calls with the larger set of institutional candidates to select institutions for second set of site visits, using the refined approach developed via the LIIP pilot study. (Early 2008)

Three types of institutions are of interest to the LIIP Initiative

- a. Group 1: Institutions in good standing with the ACGME that meet definitions of “innovation and improvement (based on number of publications and abstracts about interventions to innovate in and improve their learning environment)
 - b. Group 2: Institutions in good accreditation standing that do not meet the criterion of innovation in the learning environment.
 - a. Group 3: Institutions that innovate in their learning environment but do not perform well in the accreditation process. The study hopes to identify and analyze 4 to 6 institutions that meet this criterion. Because there are concerns about the extent to which institutions in this group would be comfortable and candid with the ACGME in discussing their efforts at innovation and their problems with the accreditation process, this arm of the study will be conducted and coordinated by the Center for Evaluative Clinical Sciences at Dartmouth Medical School. The plans call identifying and analyzing 4 to 6 institutions that meet this criterion. The questions will parallel those for institutions in Groups 1 and 2, with some added open-ended questions about the extent to which these institutions perceive the ACGME’s accreditation standards and processes to be a barrier to innovation in the learning environment. The ACGME receive only the aggregated and the de-identified individual responses from these institutions.
 - b. Group 4: Institutions that do not perform well in the accreditation process, and that do not innovate. (This will involve solely analysis of existing accreditation data and secondary data, to assess if they can offer answers to about the attributes of these institutions.
 - c. Group 5: Residency programs in specialties not accredited by the ACGME. This will involve focus groups with program directors at two institutions with a large number of unaccredited “super-subspecialty” programs.
8. Conduct site visits at a larger group of candidate institutions, and provide summary feedback reports under a pilot approach. Collect information from the participating institutions about the value of this feedback. (Starting Spring 2008)

**Learning Innovation and Improvement Project (LIIP)
Questions to Explore Institutional Attributes**

Part I. We would like to begin by asking you a few questions regarding education:

1. What is your vision of the role of education in your organization? *(Please expand upon that thought)*
2. How do education and clinical care interact and affect one another in your settings?
3. How do you, your office or the programs in your institution foster interest in innovation and improvement in education and patient care? *{Please expand upon that thought.}*
4. Do you share lessons learned among your programs with other institutions? *{Could you please elaborate on those incidences, or occasions?}*

Part II: Next, we would like to ask you a few questions on the topic of change and innovation.

5. What formal or informal mechanism currently stimulates change and improvement in your program? *{Is there another event or mechanism that would stimulate change/improvement in your program(s)? Are you currently making any changes?}*
6. How do you know an innovation is on the “right track?” *{Could you elaborate on what you look for in an innovation?}*
7. Have you had some multi-disciplinary initiatives? *{What are advantages of this approach? How does the multidisciplinary nature of the project add to their complexity?}*
8. What else can you tell us from your experiences about implementing innovations/improvements in graduate medical education? *{What were barriers or advantages in those situations?}*

Part III: We would like to ask a few questions regarding learning practices in your institution.

9. Do you collect and use data on performance (educational and/or clinical)? *{Could you please elaborate on what kind of information or data you collect?}*
10. What role does the data support in organizational learning? *{Does your institution rely on outcome data, if so could you please elaborate that process?}*
11. How are system interdependencies understood within your institution and programs?

Part IV: Last, we would like to explore your perception of areas in which your organization can serve as a role model for others.

12. What are areas/aspects of your institution that could serve as a role model for others?

Learning Innovation and Improvement Project (LIIP)
Draft Matrix for Identifying Attributes During Screening and Site Visit
 (Enter check mark for factors thought to be present in the institution/program)

	Education	Clinical	Other (Describe)
Leadership			
Strategic Planning			
Process Improvements			
Focus on Individuals (Faculty/Staff /Learners)			
Type of Innovation <ol style="list-style-type: none"> 1. Invented something new 2. Improved something that already exists 3. Performs an existing task in a new way 4. Follows the market or thought leader 5. Adopted something successfully tried elsewhere 6. Introduces changes 7. Attracts innovative people 8. Sees something from a different perspective 			
Underlying Causes of Innovation and Improvement <ol style="list-style-type: none"> 1. What is different from one environment to the other? 2. Is it an individual? 3. Is it only money? 4. Is it the facility? 5. Is it the chance mix of students/ residents? 6. Is it support from on high? 			
Effects <ol style="list-style-type: none"> 1. Improves the bottom line (financial) 2. Greater effectiveness in patient care (measured how) 3. Better quality inputs (residents, others) 4. Greater educational effectiveness (measured how) 5. Process improvement (what process) 6. Policy improvement (what policies) 7. Better service to customers/constituents (who) 8. Greater responsiveness to the environment 9. Increased faculty/staff knowledge and skills 10. Increased ability to work in teams 11. Reduced inefficiencies 			
Celebration and Organizational Learning <ol style="list-style-type: none"> 1. Treats successes/failures as opportunities for learning 2. Celebrates and communicates success 3. Celebrates and communicates failure 4. Retains organizational memory of innovation 5. Disseminates innovation among units 6. Disseminates innovation externally (venues, 			

methods)			
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