AUCD

LEND Program Quality Improvement (LPQI) Network: Tutorial for Faculty

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1. Introduction

Goal: The goal of the LEND Program Quality Improvement (LPQI) Network is to help individual programs improve the quality of LEND training in core competencies (e.g. family-centered care, interprofessional teaming) by: (1) using standardized measurement tools, (2) developing a voluntary inter-institutional database, (3) providing feedback to programs to use for quality improvement, and (4) identifying programs that demonstrate changes consistent with "best practices."

Need: Most LEND programs currently use a variety of internal data to judge the effectiveness of specific training efforts. Measurement of trainee progress in core LEND competencies such as interprofessional teaming or leadership skills varies among the LEND programs, however, and there is no simple way to judge short-term program effectiveness except through documentation of trainee improvement within a LEND program. Although each program can demonstrate gains in trainee outcomes, it may be that some training methods are more effective than others. The current NIRS system appropriately tracks broad long-term outcomes for LEND trainees, but does not provide data to judge the effectiveness of specific training practices. The proposed LPQI Network would allow participating LEND programs to judge the effectiveness of components of their curriculum by comparison to national averages.

History: The LPQI Network began in 2013 when some LEND directors began to wonder how we could harness the power of the AUCD network to improve the quality of our training programs. At LEND director meetings in 2014, a majority of LEND programs participated in discussions of what tools to use and how to implement a national database, as well as the rule for transparency and data-sharing. In 2015 and 2016, four LEND programs implemented pilot studies using an established trainee self-report measure (CCM) and a newly developed faculty observation measure (I-FOR). The first pilot suggested that both instruments were generally acceptable to trainees and faculty. The second pilot was a year-long formal research study of the two measures, focusing on feasibility and the metrics of each instrument. An analysis of 80 trainee/faculty data points is currently underway.

All stages of the project were shared for input from the LPQI Advisory Group, which consists of more than 20 LEND leaders. In addition, LPQI pilot leaders shared updates at every LEND directors meeting and with MCHB leaders starting in 2014. The online Application was designed by AUCD staff with input and testing by LEND training directors and administrators. The entire system is linked to NIRS and is being piloted in a user-friendly format starting in 2016-17, with the goal of network-wide participation by all interested LEND programs in 2017-18.

Key Elements

    A. Participating LEND programs will use two common tools, one trainee self-report (CCM) and the second a faculty observation tool (I-FOR) to enter baseline and follow-up data on long-term trainees into a database maintained by AUCD and linked to NIRS (the "LPQI Application"). The first pilot year (2016-17) will focus on the core MCH competencies of interprofessional teaming and family-centered / culturally competent care. Leadership, advocacy, and other competencies can be added in the future.

    B. The "LPQI Application" will automatically analyze the data from participating LEND programs to determine change in baseline for each competency area (mean change and effect size) for both trainee self-report (CCM) and faculty observation (I-FOR). Each LEND program will have access to reports on their own program's performance. These reports will also include information so that LEND programs to compare their outcomes with aggregate national data. LEND programs will not have access to outcomes of other individual programs.

C. Participating LEND programs will use each year's LPQI data reports to determine areas for improvement, devise and implement a quality improvement plan, and measure outcomes in subsequent years.

D. AUCD will provide annual reports on national outcomes, analyzing aggregate data by trainee discipline, intermittent vs. continuous training, etc. AUCD will not identify scores or "rank" of individual LEND programs.

E. Starting with data at the end of Year 2 (2017-18), AUCD will begin identifying the approximately 10-20% of LEND programs that have demonstrated relatively large change in each MCHB competency area during the last year. This list would be available to LEND programs looking for models to help with their QI efforts. AUCD would not rank programs, and would not publicize lists of programs.

F. Participating LEND programs can voluntarily share their individual program outcomes with MCHB as part of their annual progress report. This will allow programs to put outcomes in context (e.g. high baseline scores of LEND trainees led to low change – "ceiling effect") and describe how they are addressing outcome data (e.g. QI plan).

G. The LPQI Network is a technical assistance tool offered by AUCD to LEND programs. It is not endorsed by or required by MCHB.

2. Dictionary

T1 data period: Designated time (set by individual programs using the LPQI Application) in the beginning of the training year during which trainees report baseline knowledge and skills related to specific competency areas

T2 data period: Designated time (set by individual programs using the LPQI Application) several months into the training year during which faculty rate current knowledge and skills of trainees related to specific competency areas

T3 data period: Designated time (set by individual programs using the LPQI Application) in the end of the training year during which trainees report current knowledge and skills and faculty rate current knowledge and skills of trainees related to the same competency areas as T1 and T2, respectively

CCM: "Core Competency Measure"; trainee self-report measure developed by the Children's Hospital of Philadelphia LEND program, completed for interdisciplinary care (6 items) and family-centered / culturally competent care (8 items) as part of LPQI at T1 and T3

I-FOR: "Interdisciplinary and Family-Centered Care Observation Rubric"; faculty observation tool specific to the LPQI initiative that was originally adapted from competencies in the Pediatric Milestones Project and refined based on a review of MCH Leadership Competencies, completed for interdisciplinary care and family-centered /culturally competent care as part of the LPQI at T2 and T3

Fiscal Year
The definition of "Fiscal Year" for the LPQI Application will match the definition of "Fiscal Year" in NIRS; it begins July 1 and ends on June 30. Collected data from previous Fiscal Years will be available for review but will be locked for modifications to users with all security levels, with the exception of AUCD Administrators.

3. **Key Administrative Contacts**

For general Application or LPQI questions, please contact:
Natalie Martinez
Data Support Manager
nmartinez@aucd.org or (301)588-8252 ext. 221

If you have technical problems or need to report Application errors, please contact:
Oksana Klimova
Director, Web Services
oklimova@aucd.org or (240)821-9378

4. **How-To: Using LPQI Application**

As a Faculty member who works closely with one or more Trainees as part of their LEND experience, you will receive an invitation to participate in the LPQI Application. This invitation will contain a link to a login page, where you'll input the same information as you do for the NIRS database. If don't remember your NIRS login information, use the "Forgot your password" feature.

4.1 **Login Page**

Screenshot	
	NIRS default login page https://www.aucd.org/nirs/db/index.cfm Will have option for LPQI login here If user will clink link "here" for option "LPQI" , the user will be directed to the LPQI login page https://www.aucd.org/nirs/db/index4.cfm Pull down list of "Center Name" will only include centers that are participants of LPQI.

Functional Description	On the NIRS default login page (https://www.aucd.org/nirs/db/), you will see a new option: **LPQI, login <u>here</u>**
	Click "here" to be prompted to the LPQI login page. Select your program from the "Center Name" drop-down list. This list will only include programs that decided to participate in LPQI.

4.2 My Dashboard

Screenshot	
Functional Description	After successfully logging in to the LPQI Application, you will be directed to your personal dashboard.
	You will be able to see two important items: (1) the schedule of data collection times (there are two for Faculty) for the current Fiscal Year, and (2) a visual report on the status of your Trainee observation (I-FOR) submissions.

4.3 My Activities

Screenshot	

Functional Description	The "My Activities" page will display a list of Trainees that were assigned to you by your program's administrator. For each Trainee, you will be able to see the following information: name, e-mail address, and submission status. Submission status can be: (1) A "complete evaluation" link in if you have not yet completed the I-FOR for that particular Trainee during the active data collection period (either T2 or T3, depending on the time of year). (2) A red "X" if you did not complete the I-FOR for that particular Trainee during a data collection period that is now closed. (3) An "edit evaluation" link if you've already completed the I-FOR for that particular Trainee during an active data collection period. (4) A "view evaluation" link if you successfully completed the I-FOR for that particular Trainee during a data period that is now closed. **Quick E-mail Tool:** By selecting check boxes (Select to Email), you will add trainee(s) email addresses into field "Trainee Recipient(s)". You can send custom email by manually typing in Subject line and Content text.

4.3.1 **Trainee Observation**

Functional Requirements	The I-FOR includes: - Page with questions about your assigned Trainee's skills related to Interprofessional Teaming - Page with questions about your assigned Trainee's skills related to Family-Centered Care - Page with questions about your assigned Trainee's skills related to Policy/Leadership - Thank you page Note that all questions require an answer. You cannot move to the next page without selecting an answer for each question. The screenshots above do not show all questions and answers.