**Setting**

- Reference and instruction librarians are integrated into small-group problem-centered learning (PCL) discussion sections.
- Each group is composed of approximately twelve first-year medical students, a clinical faculty tutor, and a library faculty tutor.
- Each librarian has one or two groups of students.
- Groups meet weekly over the entire year.
- Librarians are responsible for:
  - Teaching the informatics curriculum.
  - Assisting students with research for PCL cases.
  - Providing feedback on resources consulted by students.
  - Formally evaluating each student at the end of each semester.

**Problem**

- Growth in incoming class sizes required integrating librarians from technical services (cataloging, serials, acquisitions, etc.).
- Technical services librarians requested support to help them answer students’ research questions and provide instruction.

**Solution**

An in-house training program was developed to support all librarians in developing their research and instructional skills.

**Librarian Review Session**

- PCL librarians meet about one week before the start of a new case.
- Review case’s learning objectives and information resources available to address those objectives.
- Discuss specific informatics objectives relating to this case, and upcoming informatics instructional sessions.
- Address any problems or issues experienced by a particular group or librarian and brainstorm solutions.

**Librarian Resource Guide and LibGuide**

- Reference librarians rotate task of creating or updating a Librarian Resource Guide for each PCL case.
- Guide is structured according to the case’s learning objectives and lists print and online information resources available to research that include textbook chapters, journal articles, practice guidelines, websites, and audiovisual materials.
- Resource Guide was originally a print document, but is now also created as a LibGuide. Librarians may access a guide in print (helpful during PCL sessions) or electronically (helpful for research).
- Resource Guides are shared with clinical tutors, but are not available to students.

**Instructional Handouts with Objectives**

- Each PCL case contains two informatics objectives which correspond to aspects of the case.
- Librarians address these objectives with their PCL groups and answer questions.
- For each objective, a one-page handout is developed outlining the information to be covered (i.e. types of resources suitable for PCL, basic MEDLINE searching, etc.).
- Handouts are also reviewed in the case review session prior to the start of each case.
- Copies are also made for distribution to the students during the case.

**Recommended Information Resources for PCL**

- AccessMedicine
  - Types of information offered:
    - Background: Textbooks
    - Clinical: Drugs, DX Tests (Diagnostic Tests), DDX (Differential Diagnosis), Patient education
  - Collection of full-text clinical and basic science textbooks that includes Harrison’s Online, Tintinalli’s Emergency Medicine, Current Medical Diagnosis and Treatment, Hurst’s The Heart, Goodman & Gilman’s The Pharmacological Basis of Therapeutics, etc.
  - Includes some patient education materials which do not provide adequate depth for PCL or clinical care; use professional-level resources.
  - Access: E-Texts
  - Licensed resource: accessible from on- and off-campus locations.

**Mentoring Systems**

- New clinical faculty tutors are paired with experienced library faculty tutors; new library faculty tutors are paired with experienced clinical faculty tutors.
- Although not formally assigned, new librarian tutors are also strongly encouraged to bring any questions or problems to one of the experienced librarian tutors for input.
- Any and all questions are encouraged!
- Provides a safe environment to explore PCL related issues with someone who can provide answers based on experiences.
- Some new librarian tutors choose a mentor from outside their department, others choose based on established relationships resulting from other projects.
- The primary goal is that the librarian has a support system in order to be fully functional within the PCL course. In this way, the PCL process can be assured through guidance from the experienced tutor.

**Future Plans**

- Each year the internal support program is modified, based on input from the participating librarians who have determined that this model is successful and should be continued in future years.
- New ideas have been incorporated including the informal mentorship and the creation of LibGuides for the resource guides.
- Suggestions for future improvements include thirty minute refresher sessions for the librarians on specific databases, and instructional material regarding copyright and plagiarism.

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