Preparing Librarians to Meet the Challenges of Today's Health Care Environment

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Training the Information Specialist: A Brief Overview

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- Knowledge Base: The Key
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  - Filtering Teaching Conference
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- Measuring the Mark: Evaluation and Verification of Performance

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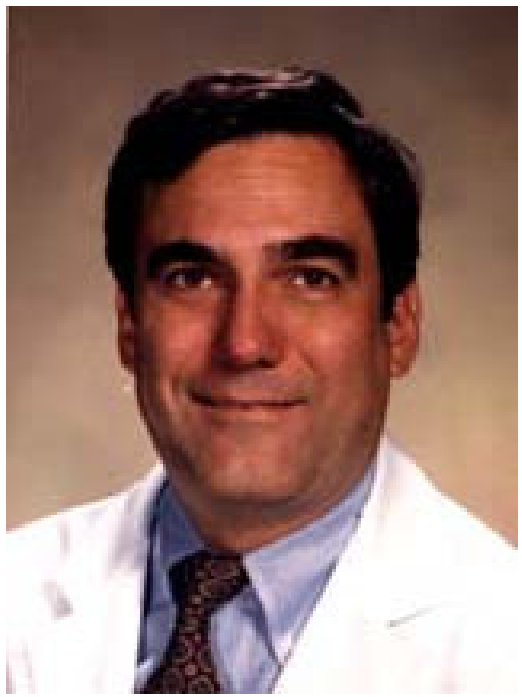


In-Field Experiences: Learning By Doing

- Librarians assume the role of the information specialist, facilitating access to information outside traditional library walls and roles.
- Information specialists are part of multidisciplinary teams.
- Clinical context is key to the information specialist's role, whether in listening for indirectly articulated information needs or simply obtaining the clinical context of the case at hand.
- Information specialists prepare and present fully filtered packets with the best representation of each viewpoint in the literature to their teams.
- Through presence on rounds, librarians gain the important context of relevance, both in the ability to tailor the information provided to the case in question and to provide information within the actual setting.

Training the Successful Informationist

- Information specialists must understand and prepare for the cultural differences between the library and the clinical or research environment. They do this by building and improving their medical knowledge base.

- Librarians must gain clinicians' trust by demonstrating significant clinical understanding in two areas:
  - 1) Understanding clinical language and clinical questions in the applied setting.
  - 2) Understanding the clinical environment (ie, how can information be organized and presented to best serve clinicians' needs?)
  - These principles apply to both clinical and research environments.

- For these reasons, training is crucial for clinical/research librarians.

Clinical Librarians' Training

- EBL Librarians train for clinical librarianship activities by:
  - studying the terminology, practice, and treatments in a specific area
  - using medical texts, online resources, and community education sources (including actual clinical courses at Vanderbilt)
  - learning the tenets of evidence-based medicine and the techniques and theories of clinical trials, including randomization and blinding techniques
  - working with mentors - senior librarians and researchers - who are experts in searching and filtering the biomedical literature
  - with their mentors, analyzing and dissecting complex medical searches to filter and summarize information to appropriately meet the clinical team's request
  - with their mentors, practicing mock interviews and retrievals

Knowledge Base: The Key to Relevance

- Essential to integration with clinical teams is a clear understanding of the subject area, such as neonatology, hematology/oncology, or trauma.

- Each specialist is matched to an area, then immersed in the unit or program culture in addition to extensive reading in his/her subject area, learning about the biomedical field and how to best apply their information-related skills to that area.

- These specialists become, in essence, subject area experts and are required to maintain current awareness in their fields, becoming true information experts within their clinical teams.

Packet Notes: An Example

Question: Is hospitalization appropriate for a febrile asplenic adult who looks relatively "well"?

While there are few tightly controlled studies addressing the optimal management of these patients, there are numerous case reports throughout the literature (which are available upon request) that present a unified picture. According to the experience described by authors and published guidelines, adults presenting with fever in the absence of a spleen or splenic function should be treated aggressively, at least until post-splenectomy sepsis can be conclusively ruled out. Aggressive treatment, by most authors, included hospitalization and empiric antibiotic treatment with diagnostic workup. Traditional indicators of overwhelming infection with encapsulated bacteria may also not always appear classically in these patients, who may expire within hours of symptom onset. Included is a sample of case reports that parallel the age and what is known of the case presentation.

Support Vehicles for CICS Training

- Medical Center and University Resources
  - Mini-Medical School
  - Grand Rounds
  - Journal Clubs
  - Anatomy and physiology class
  - Specialty classes (ie, critical care pharmacology)
  - Medical terminology class
  - MPH classes ("Clinical Trials," etc.)
- Professional Development Time
- In-house modules
- Library Programs

  -Search Talk

  -Journal Club

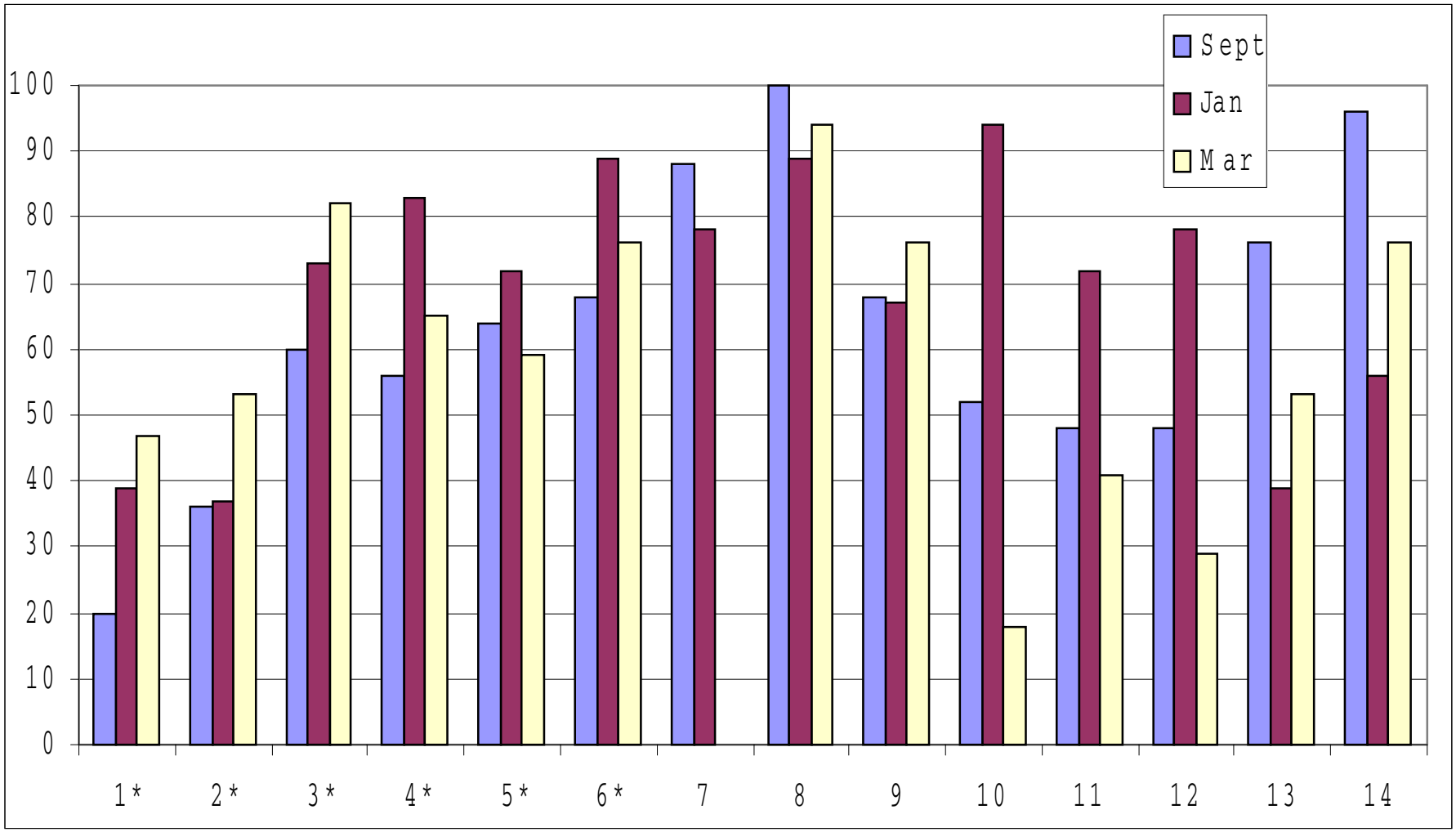
  -Mentoring

  -Filtering Teaching Conference (FTC)

FTC: Filtering Teaching Conference

- A key part of training and professional development is the Filtering Teaching Conference (FTC), where information specialistsdiscuss the filtering and summarizing of the three best articles for a specific clinical question.
  - Consensus: Gold standard filtering and summarizing (articles' key features)
- The conference approach guarantees a basic set of competencies among all librarians: less individual variation, assuring consistent quality of service.

Filtering of Key Items: FTC Participants



Source: Jerome RJ, Gish KW, Koonce TY, Giuse NB. Evaluating the Evidence: Creation of Gold Standard Practices for Searching and Filtering the Biomedical Literature. Annual Meeting, Medical Library Association, May 2001.

Transference: Leveraging on Infrastructure to Meet New Needs

- Librarians can leverage on a strong existing infrastructure to meet new challenges: an environment of lifelong learning is conducive to the transference of skills across subject areas.

- While this is often applied in the clinical arena, the same principles apply to other settings, including research: at Vanderbilt, selected information specialists train in molecular biology to work with researchers at the bench, bringing relevant information to bear in the laboratory setting just as others do in clinical units.

Measuring the Mark: Evaluation and Verification of Performance

- Dual approach to measuring performance

- Evaluation: Skills are tested in a "hothouse" environment such as the FTC on a regular basis, as well as through mentoring with experienced CICS librarians.

- Verification: While evaluation is useful, the final step in assessing performance is verification - the test of acquired knowledge and skills in an applied "real life" environment such as the clinical or research unit.

- Librarianship has traditionally been set apart from medicine and other practical yet professional fields by the limitations of evaluation; when training relies on verification of skills in the appropriate setting, rather than a hothouse environment, true progress in collaboration can begin to develop.

Concluding and Looking Forward

- Training is the foundation of information specialist success in the field setting, whether clinical or research.
- Knowledge of the relevant subject area(s) is crucial to the information specialist's ability to filter information.
- Transference: Leveraging on Infrastructure
- Measuring the Mark: Evaluation and Verification of Performance
- Next steps: We plan to undertake in-depth investigation through a planned study examining the clinical impact of the program in two to three units.