

Opportunities for Hospital Librarians in the Era of Genomic Medicine



Helping Clinicians Implement New Approaches to Patient Care



Kathryn J. Elliott, MS • MLIS Candidate • San Jose State University

Introduction

Genomic medicine is a rapidly growing new field. It is a comprehensive approach to using individuals' genetic information to guide healthcare and drug therapy strategies.

Translation of research into clinical practice faces many challenges, including development and dissemination of evidence-based guidelines and policies [1]. Physician attitudes, time constraints, and lack of genomic literacy create barriers to incorporating new genomic medicine approaches to patient care [2].

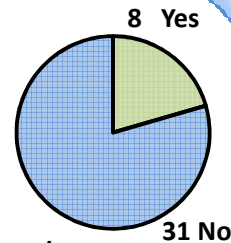
The result is an information gap that is likely to grow dramatically as genomic applications transform medical practice. This study examines ways in which hospital librarians are addressing current and anticipated genomic medicine information needs.

Methods

- **Survey design:** 2 closed- and 3 open-ended questions (<http://tinyurl.com/genomicsurvey>) on GoogleDocs (<http://docs.google.com>)
- **Survey invitation:** directed to hospital librarians, posted on 3 electronic discussion groups (MEDLIB-L, MLA Hospital Libraries Section, MLA Public Services Section)
- **Responses:** 39
- **Timeframe:** November 2-7, 2011

Results (1)

Have you received requests from clinicians for genomic medicine information?



Types of information requested

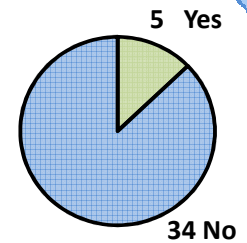
- Diagnosis/treatment of disorders related to an individual's genome
- Drug sensitivity markers (pharmacogenomics)
- Information on genetics of specific diseases: cancer, cystic fibrosis
- Information for patients and families: genetic conditions, support groups
- Literature searches for genetic counselors
- General questions on trend toward genomic medicine

Examples of tools/resources used

- PubMed, PubMed Clinical Queries
- MD Consult, Access Medicine, UpToDate
- Ovid, Cochrane
- Scirus, Google Scholar
- MedlinePlus
- NIH/NCBI genetic databases (e.g., OMIM)
- Genetics Home Reference
- Rare disease databases: NORD, Orphanet
- ASCO Guidelines, NCCN Guidelines
- AHRQ Technology Assessments
- Books/internet resources on specific genetic syndromes/diseases/defects

Results (2)

Are you developing any genomic medicine resources or services for clinicians?



Resources/Services

- LibGuide
- Genomics page on library website
- Database of genetic resources
- Links to relevant databases on website
- Literature searches and article requests

Discussion

Interactions between hospital librarians and clinicians in the new field of genomic medicine appear to be at an early stage. However, some clinicians are requesting support, and librarians are using a variety of tools and resources to respond. Opportunities exist for proactive librarians to help clinicians learn about and implement cutting-edge, evidence-based practices in genomic medicine.

References

1. Ginsburg GS, Willard HF. Genomic and personalized medicine: foundations and applications. *Translational Research* 2009;15(4):277-287.
2. Guttmacher AE, Porteous ME, McInerney JD. Educating health-care professionals about genetics and genomics. *Nature Reviews Genetics* 2007;8(2):151-157.

Acknowledgment

The author wishes to thank Charles Greenberg, MLS, MEd (Cushing/Whitney Medical Library, Yale University) for posting the survey to the MLA discussion groups.