

## APPENDIX F: better\_health2010 Web-based Polls

Throughout the course of AAMC's *better\_health@here.now* initiative, Public Opinion Polls were posted on the *better\_health* website to seek opinions, ideas and continuing participation of the public in the work of the project.

Polls were announced to stakeholders via various Listservs, including Inforeso (AAMC's Group on Information Resources (GIR)), MedEd list (operated by AAMC's Group on Educational Affairs (GEA)), AAHSL list (Association of Academic Health Science Libraries); MLA HQ online listserv (Medical Library Association); and the *better\_health* list (public able to register at *better\_health@here.now* website). Some polls were also advertised to select groups, for example Slice of Life Conference Registrants, IAIMS consortium members, Medical School educators and others. New polls were posted for the AAMC Annual Meetings in November 1999 and November 2000 and always were announced at meetings *better\_health* staff attended.

When a poll was closed and tabulated, responses were summarized and posted in the Library section of the *better\_health* website. "Snapshots" of three sample poll results follow.

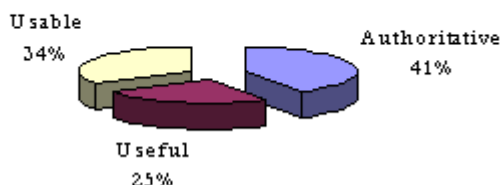
### Virtual Health Library Poll #1

The poll was open May 15-June 15, 1999 Announced to AAHSL and Medical Library Association Lists, and AAMC's INFORESO list. 80 people responded.

Question: describe the features of a persistent, authoritative, useful source of health information on the Internet.

#### Desirable Features of an Internet Health Library

(n = 305)

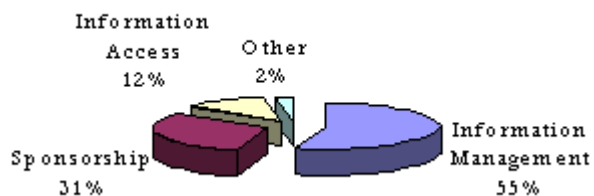


Response: This question produced 305 statements from 80 people.

- *Authoritative 41%:* Frequent updates, with dates (42); credible source, editorial board & peer review (40); written/signed by experts (14); no conflict of interest, no ads, no fees (9)
- *Usable 34%:* Well organized, easy to navigate, well indexed (33); easy to search, print, use (28); good design (16); well maintained, links work (10); feedback link to author, webmaster (8); stable URL (8)
- *Useful 25%:* Relevant, complete, accurate, supported by appropriate evidence (30); written for audience (19); good references and source attributions (17); fast access and loading (9)

Question: What is the biggest barrier to creating a persistent, authoritative, useful health information resource on the Internet?

#### Barriers to an Internet Health Library (n=124)



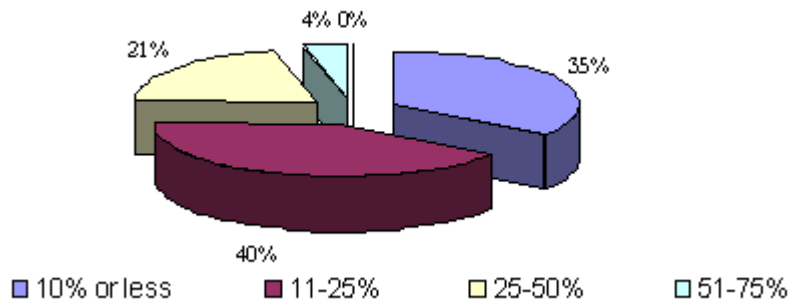
Response: This question produced 124 comments from 80 people.

- *Information Management Issues 55%:* lack of time (18); lack of staff & expertise (14); difficulty of keeping information current (14); lack of quality control/peer review (9); content issues (8); lack of standards (3); lack of good working tools (1).

- *Sponsorship Issues* 31%: lack of money (22); lack of institutional vision/commitment (9); no good sponsor (5); lack of incentives (3).
- *Information Access Issues* 12%: lack of permanence of sites (6); lack of good search tools (5); absence of trained users who can judge quality (4)
- Other 2%: greed (1); liability (1); changing technology (1)

Question: *What percentage of health information on the Internet can be called authoritative?*

**% of Health Information on the Internet that is Authoritative (n=78)**



Response: 78 people responded.

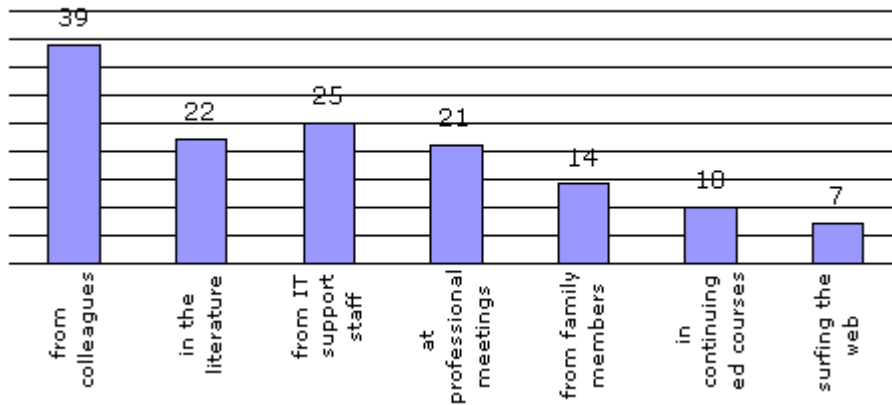
- ¾ of respondents said that no more than 25% of health information on the Internet is authoritative.
- ½ of the instructors and 1/3 of the librarians said 10% or less was authoritative.

## Workplace Information Technology #1

Announced to registrants of AAMC's Senior Women in Medicine Conference, held July 10-12, 1999, Baltimore, MD. The poll was open June 15 – July 14, 1999. 54 people responded to the poll.

Question: *I learn about the latest information technology capabilities...*

### IT Awareness Techniques (n=54 with 138 votes)

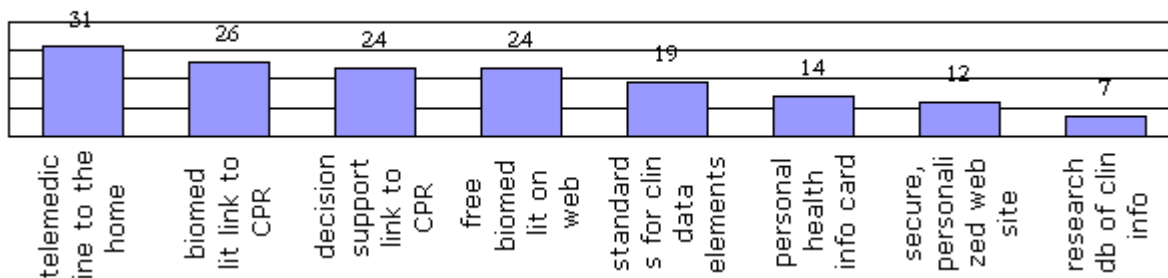


Response:

- colleagues - 29%; IT support staff - 18%; literature - 16%; professional meetings - 15%; family members - 10%; continuing education - 7%; world wide web - 5%.
- *Colleagues*: 85% of instructor, 80% of researchers, and 68% of providers listed colleagues as a primary source of IT information.
- Researchers used *Colleagues* twice as often as any other awareness technique.
- In addition to the responses presented in this table, one respondent mentioned 'librarian' as an IT awareness source.

Question: *Choose the 3 health applications of information technology that have the most potential to improve the health of people and communities.*

### Promising IT Applications (n=54 with 157 votes)

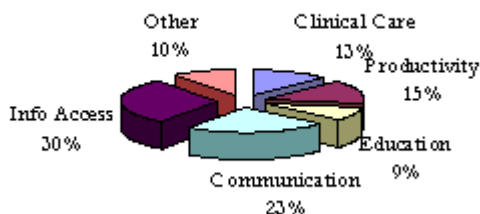


Response:

- *Telemedicine services to the home* - 20%: 70% of researchers, 61% of instructors, 40% of providers and 100% of others chose this response.
- *Biomedical literature linked into the computerized patient record (CPR)* - 17%: 70% of researchers, 50% of providers and instructors, and 33% of others answered with this response.
- *Decision support linked to the CPR* - 15%: 60% of providers, 38% of instructors, 30% of researchers and 17% of others chose this response.
- *Clinical data standards* - 12%: 58% of the votes for this response came from providers.
- One option, *Genome data autolinked to clinical records*, did not receive any votes.

Question: How did your work change this year as a result of information technology and the Internet?

**Work changes resulting from IT (n= 54 with 117 votes)**



Response: The 117 answers covered 41 areas.

*Information Access - 30%: doing more online literature searching;* better, faster, more data; fewer visits to library; download articles; new library services via web; more regulatory updates via web; more professional communication via web; better grant information

*Communication - 23%: more communication with colleagues and staff;* review manuscripts via e-mail; send /receive documents attached to e-mail; receive/send more e-mail; submit abstracts via web; people expect immediate response

*Productivity - 15%: better efficiency;* more time spent managing IT; get benchmark data from peer groups by e-mail; more opportunity for external collaborations; more involved in license negotiations; learning html editing; fewer meetings; more performance improvement projects; reducing paper reprint file

*Clinical Care - 13%: implementing/learning new clinical systems;* better access to clinical info online; more patients come 'armed' with info from the web; more patients use e-mail to communicate; more patient referrals

*Other - 10%: nothing has changed;* less free time/more time online; more hectic pace; more dependent on PC working correctly; local hospital web sites; tremendous changes

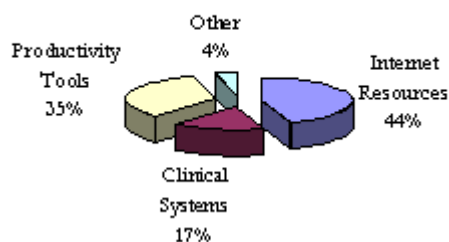
*Education - 9%: more online course evaluation;* more web course development; taking online courses; more online teaching materials available; more access to students

The most frequent responses were:

- more communication with colleagues & staff (13% of total)
- better/faster/more data (9% of total)
- doing more online literature searching (11% of total)
- fewer library visits
- better efficiency

Question: What is the most useful information technology capability available today in your workplace?

**Useful IT in the Workplace (n=54 with 78 votes)**



Response: The 54 people who answered this question mentioned 78 capabilities, which represented 14 different categories.

*Internet Resources - 44%: literature search databases;* web browsers; the internet itself; full text books & journals on the web; other online databases on the web; online grant information

*Productivity Tools - 35%: e-mail;* desktop applications like Excel; access to systems from home.

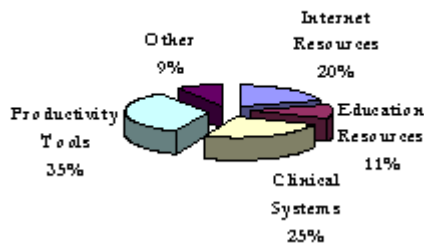
*Clinical Systems - 17%: computerized patient record (CPR);* lab systems/PACs

*Other - 4%: digital camera; fax; Loansome Doc (article delivery service)*

- E-mail was the most frequent response at 30% of the total.
- Online patient information systems, including lab systems and PACS, were the second most frequent response (17%).
- Internet (13%).
- the next most common responses were online literature search (e.g. PubMed) and web browsers.

Question: What is the next thing you wish information technology could do for you in your work?

**IT Wish List (n= 54 with 55 votes)**



Response: 54 people answered this question with 55 votes.

*Productivity Tool - 35%:* **voice input to CPR;** reduce paperwork; more efficient administrative systems; high quality desktop videoconferencing to a group; easy method to scan/store/retrieve; electronic reprint file; automatic CPT coding; automatic letter generation from notes.

*Clinical Systems - 25%:* **national online patient database with authorized access;** drug alerts within CPR; better interlinking of clinical systems; built-in reminders in CPR; convert paper patient records to electronic ones; access to all parts of a patient's record, no matter where they are stored.

*Internet Resources - 20%:* **online books and journals;** faster access; a dependable consumer health information site; peer review of web resources; realtime information for evidence-based medicine; automatic current awareness for biomedical literature.

*Education Resource - 11%:* **better learning support;** scientific meetings broadcast on the internet; scheduler for class lectures; multimedia learning tools, especially for anatomy.

*Other - 9%:* **simplify the complexity;** remote desktop support; remote access to everything at any time; standard complement of resources at any institution; eliminate typing.

Note: bold type indicates most frequent response in each class

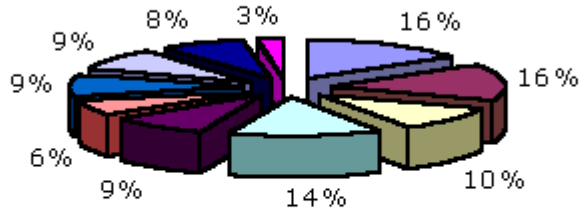
- The most common answer was national online patient database at 14% of the total.
- Voice input to the computerized patient record, reduction of paperwork and online books & journals tied for second place, at 9% each.

### Information Management #2 Poll

The Information Management #2 poll was posted in July 1999 and announced only to the registrants in the AAMC's July 1999 management education seminar on Information Technology in Academic Medical Centers. 26 people responded to the poll. In the graphic below, the 'other' category includes a biomedical researcher and 2 health care providers.

**Question:** Choose the 3 applications of information technology that have the most potential to improve the health of people and communities

**Promising Health IT Applications  
(n= 26 with 77 votes)**



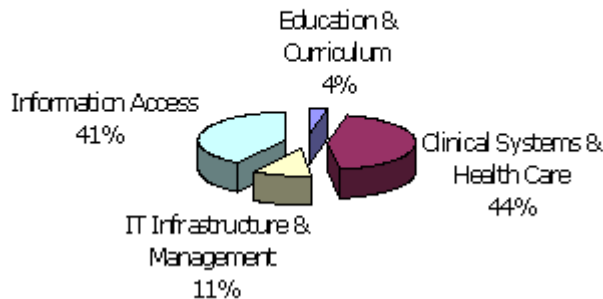
■ decision support link to CPR	■ telemedicine to the home
■ personal health info card	■ biomed lit link to CPR
■ standards for clin data elements	■ genome db link to CPR
■ free biomed lit on the web	■ secure, personalized web site
■ research db of clin info	■ other

**Response:**

- Improvements to computerized patient records (CPR) accounted for 28 (36%) of the 77 votes.
- Telemedicine to the home and decision support links built into the CPR accounted for 24 (31%) of the 77 votes.
- Improved access to biomedical data and literature account for 29 (38%) of the 77 votes.
- The "other" suggestions included free MEDLINE and health education delivered directly to consumers.

**Question:** What is the most promising health application of information technology and the Internet?

**Promising Health Applications of IT (n=26 with 27 votes)**

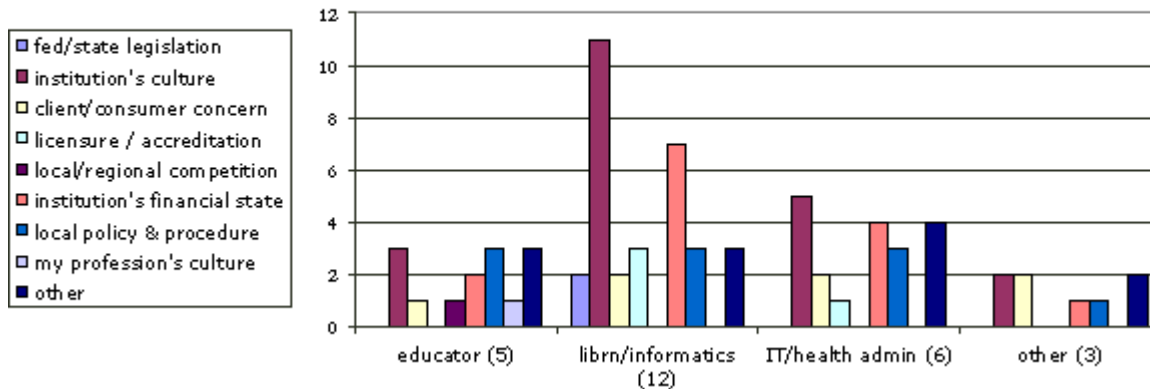


**Response:** This open-ended question resulted in 27 discrete ideas.

- Overall, 'improved access to information' received the most votes (7 of 27).
- Within the 'clinical systems and health care' class, integrated clinical records in the CPR received the most votes; decision support, genetic database and literature links into the CPR are also in this group.
- The 'IT infrastructure and management' category includes high bandwidth, XML and voice recognition.

**Question:** Choose up to 3 factors that most hinder your institution's use of information technology and the Internet in its mission areas.

### Barriers to IT Use by Role (n= 26 with 72 votes)



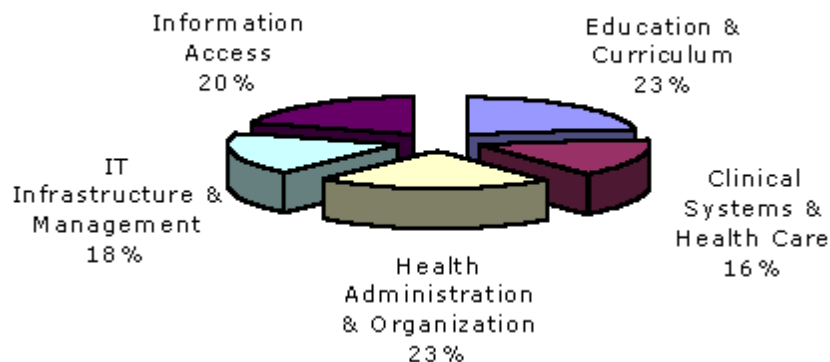
#### Response:

The most frequent responses were:

- institution's culture (21),
- institution's financial state (14),
- local policy and procedure (10), and
- other (22): The 'other' category includes state of technology; large student numbers; inability to hire key personnel; bureaucracy; ignorance; slow adoption of new technologies; and state control.

Question: Name 3 changes in (1) the role function or mission of academic medical centers and (2) the organization and operation of information services at your institution, that will or could occur in the next 10 years as a result of information technology and the Internet.

### Possible Futures (n= 26 with 164 votes)



Response: Respondents suggested 164 possibilities, representing 59 unique concepts. The degree of unanimity varies from category to category.

- **Information Access** 20% (33 votes): Together, more consumer health information (7) and faster dissemination and publication of research information (10) account for about half of the votes.
- **Education & Curriculum** 23% (37 votes): The largest single group of suggestions (14) focused on distance education / asynchronous learning. No other concept received this many votes. The next largest category (4 votes) was 'incorporating more informatics into the curriculum'.
- **Clinical Systems & Health Care** 16% (27 votes): A computerized patient record (CPR) that allows exchange of information nationally received the most votes (9). The next highest scores (3 votes each) went to decision support/digital assistants, telemedicine to the home, and practice guidelines/evidence-based medicine.
- **Health Administration & Organization** 23% (37 votes): Four categories received 5 votes each. They were: decentralization/collaboration/multi-center projects; more consortia and mergers; centralization; increased accountability.
- **IT Infrastructure & Management** 18% (30 votes): Better network infrastructure received 4 votes. The next most frequent response in this class was 'more voice/video conferencing'.

