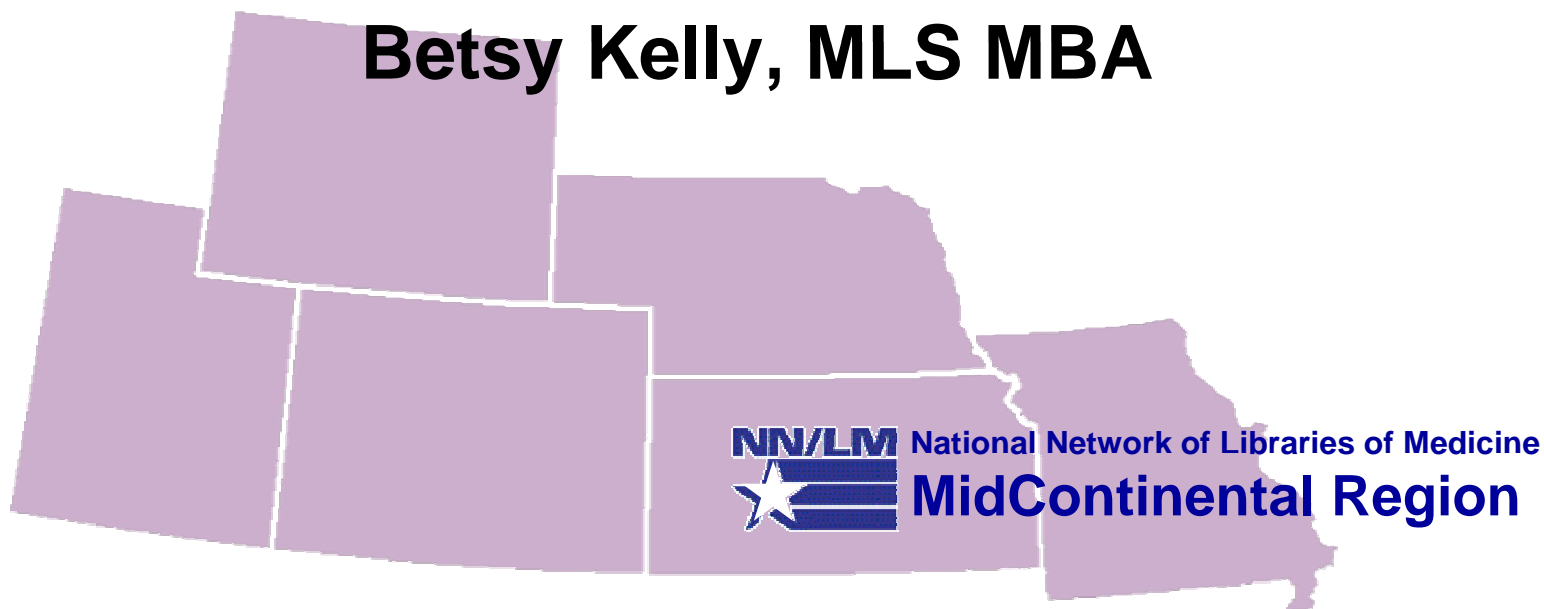


Calculators for Measuring the Impact of Health Science Libraries and Librarians

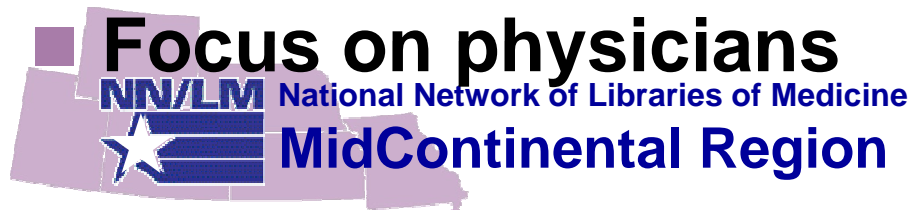
Barbara Jones, MLS

Betsy Kelly, MLS MBA



Historical context

- **Print Index Medicus**
- **Medlars – librarian had to do the search – or send to NLM**
- **Print only collections**
- **Twx, ALA forms, telephone, US mail**
- **Less information available – volume and type**
- **Stand alone hospital vs systems**
- **Focus on physicians**



Current environment

- **Medline, DOCLINE & Loansome Doc**
- **Online indexes and databases**
- **Electronic collections**
- **Explosion of information and sources**
- **Large healthcare systems**
- **Focus on health care providers and consumers**
- **Alternatives to library for information**



Effect

- **Closed libraries**
- **Decreasing budgets, increasing costs**
- **Decreasing space allocation**
- **Librarian's visibility in more complex organizations**
- **Devaluation of librarian's skills**
- **Google, Amazon**
- **Emergence of library advocacy**



Valuing Libraries and Librarians

“In the middle of difficulty lies opportunity.”



Library service is value-added

- **Cost savings**

- Institutional & Personal

- **Time savings**

- Travel, discovery, skills acquisition, opportunity for other uses of time

- **Access**

- Opportunity to use/apply information

- **Impact on clinical, research, safety practice**



The bottom line – you are either ...

- **Generating income or controlling expenses or supporting those who do**

OR

- **Creating recognized value expenses**

OR

- **Creating expenses that must be controlled or eliminated**

Will Welston, PHD, Director, MHA Program, University of Washington

NN/LM National Network of Libraries of Medicine

 **MidContinental Region**

Statistics

Not everything that can be counted counts and not everything that counts can be counted.

Albert Einstein



Calculating the value of your library

■ Retail Value Calculator

Value of Library Resources and Services

Number of Uses	Library Resources or Services	Cost of Resource or Service	Value of Resources or Services
<input type="text"/>	Books used (in house or borrowed)	115	\$ 0.00
<input type="text"/>	Print journals used (in house or borrowed)	35	\$ 0.00
<input type="text"/>	EJournal articles accessed	35	\$ 0.00
<input type="text"/>	Interlibrary Loan Requests	18	\$ 0.00
<input type="text"/>	Reference Questions Answered	45	\$ 0.00
<input type="text"/>	Mediated Searches	75	\$ 0.00
<input type="text"/>	Class hours taught (# students x total class hours)	30	\$ 0.00
<input type="text"/>	AVs used or borrowed	50	\$ 0.00
<input type="text"/>	Self service photocopies	.10	\$ 0.00
<input type="text"/>	Meeting Room Use per Hour	50	\$ 0.00
<input type="text"/>	Hours of Computer Use (i.e. Internet, MS Word, etc.)	12	\$ 0.00
<input type="text"/>	Add another service or resource		\$ 0.00
<input type="text"/>	Add another service or resource		\$ 0.00
<input type="text"/>	Add another service or resource		\$ 0.00
		<input type="button" value="Calculate The Value of Library Services"/>	<input type="button" value="Clear Form"/>
			\$ 0.00



But wait, there's more!



Cost/Benefit Analysis and Return on Investment

- Finance terms that relate costs and benefits
- Express benefits in \$\$
- Articulate costs
- CBA is a ratio
- ROI is an interest rate
- [CBA/ROI Calculator](#)

Costs

- **Purchase price**
- **Staff time**
- **Space, light, heat, computers, benefits...**

Value of Benefits

- **Books used (in house or borrowed)**
- **Print journals used (in house or borrowed)**
- **EJournal articles accessed**
- **Patron time saved**
- **Value of information available for clinical, research, teaching, etc**

Salary Information:	User's Average Annual Salary	\$ <input type="text" value="60000"/>	Library Salary Budget	\$ <input type="text" value="45000"/>	Hours Worked Per Year	<input type="text" value="2080"/>
----------------------------	------------------------------	---------------------------------------	-----------------------	---------------------------------------	-----------------------	-----------------------------------

Benefits		Costs		TOTAL Benefit	TOTAL Cost
Books used (in house or borrowed)				\$ <input type="text" value="0"/>	\$ <input type="text" value="0"/>
Number borrowed or used	<input type="text"/>				
Average retail cost of a book	\$ <input type="text" value="0"/>	Book budget	\$ <input type="text" value="0"/>		
User time saved for each book borrowed (in 10ths of an hr)	<input type="text" value="0"/>	Portion of all staff time devoted to the book collection (order, receive, catalog, process,shelve,etc) in 10ths	<input type="text" value="0"/>		
Print journals used (in house or borrowed)				\$ <input type="text" value="0"/>	\$ <input type="text" value="0"/>
Number articles read by all users	<input type="text"/>				
Per article price from a vendor	\$ <input type="text" value="0"/>	Journal budget (print and electronic)	\$ <input type="text" value="0"/>		
User time saved per article available through library (in 10ths of an hr)	<input type="text" value="0"/>	Portion of all staff time devoted to journal collection (order, license, receive, process, manage, shelve, etc.) in 10ths	<input type="text" value="0"/>		

<input type="button" value="Clear Form"/>	Total Benefits Value: <input type="text" value="0.00"/>	Total Costs: <input type="text" value="0.00"/>
Benefit/Cost Ratio - \$ Benefit for each \$ spent:		ROI %:
<input type="text" value="0.00"/>		<input type="text" value="0.00"/>

Books

■ Benefits

- Number of library books used
- Average retail price for a book
- Amount of time saved for the user

■ Costs

- Book budget
- % of staff time for managing books – select, order, catalog, process, shelve, circulate, etc

Journals

■ Benefits

- Number of articles read (ejournal + shelving stats)
- Average price for pay per view article
- Time saved for user

■ Costs

- Subscription budget
- % of staff time for managing journals – select, order, receive, process, licenses, shelve, circulate, etc.

Salary Information:	User's Average Annual Salary	\$ 100000	Library Salary Budget	\$ 2700000	Hours Worked Per Year	1950
----------------------------	------------------------------	-----------	-----------------------	------------	-----------------------	------

Benefits		Costs		TOTAL Benefit	TOTAL Cost
Books used (in house or borrowed)				\$ 3331855.52	\$ 535000.00
Number borrowed or used	22118				
Average retail cost of a book	\$ 125	Book budget	\$ 157000		
User time saved for each book borrowed (in 10ths of an hr)	.5	Portion of all staff time devoted to the book collection (order, receive, catalog, process,shelve,etc) in 10ths	.14		
Print journals used (in house or borrowed)				\$ 9564000.00	\$ 3070000.00
Number articles read by all users	200000				
Per article price from a vendor	\$ 35	Journal budget (print and electronic)	\$ 2800000		
User time saved per article available through library (in 10ths of an hr)	.25	Portion of all staff time devoted to journal collection (order, license, receive, process, manage, shelve, etc.) in 10ths	.1		

<input type="button" value="Clear Form"/>	Total Benefits Value: 12895855.52	Total Costs: 3605000.00
	Benefit/Cost Ratio - \$ Benefit for each \$ spent: 3.58	ROI %: 257.72

CBA & ROI for Books

Total Costs: 535,000

Total Benefits: 3,331,856

CBA: $3,331,856 / 535,000 = 6.23 : 1$

ROI: $\frac{3,331,856 - 535,000}{535,000} * 100 = 523\%$



CBA & ROI for Journals

Total Costs: 3,070,000

Total Benefits: 9,564,000

CBA: $9,564,000 / 3,070,000 = 3.11:1$

ROI: $\frac{9,564,000 - 3,070,000}{3,070,000} * 100 = 211\%$

CBA & ROI for Books & Journals

Total Costs: 3,605,000

Total Benefits: 12,895,855

CBA: $12,895,855 / 3,544,000 = 3.58:1$

ROI: $\frac{12,895,855 - 3,605,000}{3,605,000} * 100 = 257\%$

Manage Your Environment

- **Calculate your financial value**
 - Use for budget development & negotiation
- **Illustrate your contribution to the bottom line**
 - Annual reports
 - Bookmarks, flyers, posters, publications
 - 30 second elevator talks



“Libraries are not ends in themselves, and they should not be supported because they have intrinsic value.”

Plutchak TS. Means, not ends. J Med Libr Assoc 2004 Jul;92(3):294

So, show your value!



Barbara Jones
**Library Advocacy &
Missouri Liaison**
University of Missouri
Columbia, MO
jonesbarb@health.
missouri.edu

Betsy Kelly
**Assessment &
Evaluation Liaison**
Washington University
St. Louis, MO
betsy.kelly@wustl.edu
1-314-362-2783

<http://nnlm.gov/mcr/evaluation/calculator.html>

<http://nnlm.gov/mcr/evaluation/roi.html>

