



Providence System Nurse Research and Clinical  
Scholarship Symposium 2024

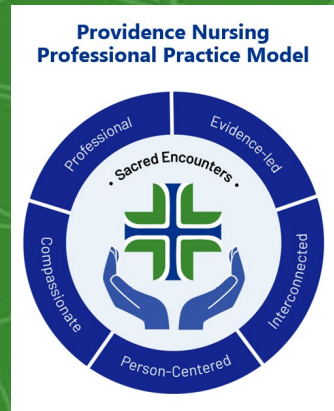
*Clinical Inquiry: The Catalyst to Nursing Excellence*

# Impact of Librarian-Mediated Literature Search Services

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Providence Library Services

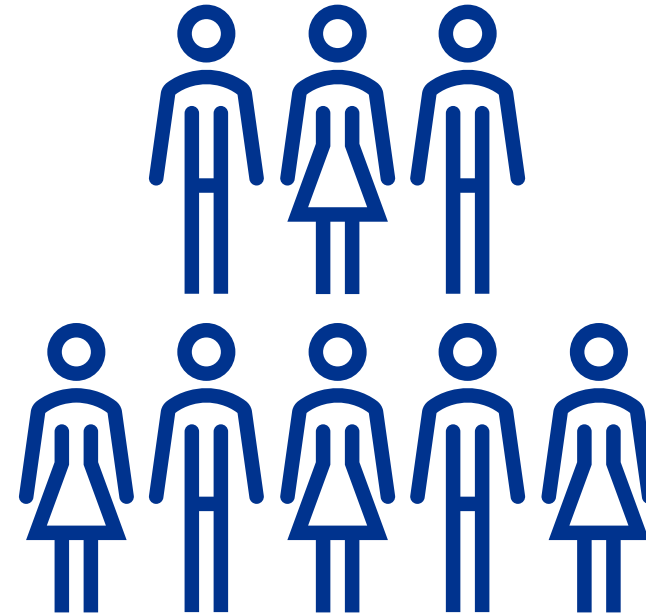
March 1, 2024





# Background

- Providence Library has a small staff and serves a large, geographically dispersed health system
- We regularly collect data around the *number* of literature searches performed, including hours spent, topic and caregiver role
- Previous studies document the effects of professional library services on clinicians' knowledge, time, and decision-making
- Library colleagues in an Australian health system recently published an analysis of their literature search service
- We hoped to replicate their study and evaluate the *impact* of our literature search service





# Background

JOURNAL OF HOSPITAL LIBRARIANSHIP  
2021, VOL. 21, NO. 1, 11–19  
<https://doi.org/10.1080/15323269.2021.1860447>



## Analysis of a Hospital Librarian Mediated Literature Search Service at a Regional Health Service in Australia

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### ABSTRACT

This research evaluated the quality and impact of a health librarian-mediated literature search service at a regional hospital in Victoria, Australia. A survey was e-mailed to all users of the mediated literature search service. The service had a key impact on knowledge development and clinical practice; improved policies and procedures; and increased productivity. Specifically, it indicated that 83.02% of respondents obtained new knowledge, whilst 46.23% confirmed clinical practice. A further 31 responses indicated that choice of tests, medications and advice given to patients was influenced. This research indicated that librarian's searching expertise can indirectly contribute to patient care activities.

### ARTICLE HISTORY

Received 9 September 2020  
Accepted 3 October 2020

### KEYWORDS

Expert literature searching;  
literature search services;  
mediated literature  
searching

- Librarians developed a survey & sent to all users of their search service
- Respondents noted impact on knowledge development and clinical practice; improved policies and procedures; and increased productivity
- 83.02% of respondents obtained new knowledge, 46.23% confirmed clinical practice.
- Research indicated that librarian's searching expertise can indirectly contribute to patient care activities.





# Project Question and Aims

- Question:
  - **In a large, integrated healthcare system, does a professional literature search service impact patient care and save clinicians' time?**
- Aims:
  - **Adapt a published survey instrument on literature search services to our setting**
  - **Estimate time saved when caregivers use the search service, rather than attempting to find the information themselves**
  - **Assess impacts of service on patient care, clinical policies, and decision-making**
  - **Collect anonymous feedback from our users**
  - **Disseminate findings**






# Methods


- IRB determination received September 2022, “project does not meet the definition of human subjects’ research”
- Created private Sharepoint site to house our documents
- Project protocol
  - **Adapt survey instrument, with authors' permission**
  - **Build instrument in REDCap**
  - **Collect email addresses of every Providence caregiver who requested a literature search in 2023**
  - **Use a generic address to send REDCap survey to recipients two weeks after search was completed**





# Survey Email

 Send	From ▾	LiteratureSearchImpacts@providence.org
	To	
	Cc	
	Bcc	
Subject	Please share your feedback on literature search services from the Providence Library	

 No Label ▾

Good morning!

You recently requested a literature search from the Providence System Library Services team. To improve our services and evaluate the impacts of literature searches, we invite you to complete a brief, anonymous survey: <https://redcap.providence.org/redcap/surveys/?s=L47DYWA4ACJR9L9C>. The survey will take less than two minutes and is entirely voluntary.

Because the results and impacts are different for each literature search, you may fill the survey out multiple times.

For questions about this survey, please email the project lead, Heather Martin, Director of System Library Services: [Heather.Martin@providence.org](mailto:Heather.Martin@providence.org). To request library services, including full-text articles or additional literature searches, email [librarian@providence.org](mailto:librarian@providence.org).

Thank you!



**SYSTEM LIBRARY SERVICES**

 [providence.org/library](https://providence.org/library)  [librarian@providence.org](mailto:librarian@providence.org)





# Survey Questions

## Where do you work?

Alaska | California | Montana | New Mexico | Oregon | Texas | Washington | Another state | Outside the US

## What is your primary role? Check all that apply.

Nursing staff | Allied health | Administration | Student | Researcher | Medical staff | Pharmacy | Educator | Resident/Fellow | Other

## Did the results of this literature search have an impact on any of the following? Check all that apply.

Added to knowledge base | Modification of current clinical practice | Confirmation of current clinical practice | Modification of current policy | Confirmation of current policy | Diagnosis | Length of patient stay | Choice of tests | Choice of medications | Advice given to patient | Increased productivity | Other

## Did receiving these search results save you time?

No | Saved less than 1 hour | Saved between 1 and 3 hours | Saved between 4 and 6 hours | Saved more than 7 hours

## How would you rate the quality of the search results?

Very high quality | High quality | Neither high nor low quality | Low quality | Very low quality



## Do you have any comments about this search or other library services?



# Analysis of Data

- **One year of data collection**
- **Compile summary statistics including:**
  - respondents' primary roles**
  - impact on practice**
  - perceived quality of search results**
  - estimate of time saved**
- **Summarize content of free-text feedback**





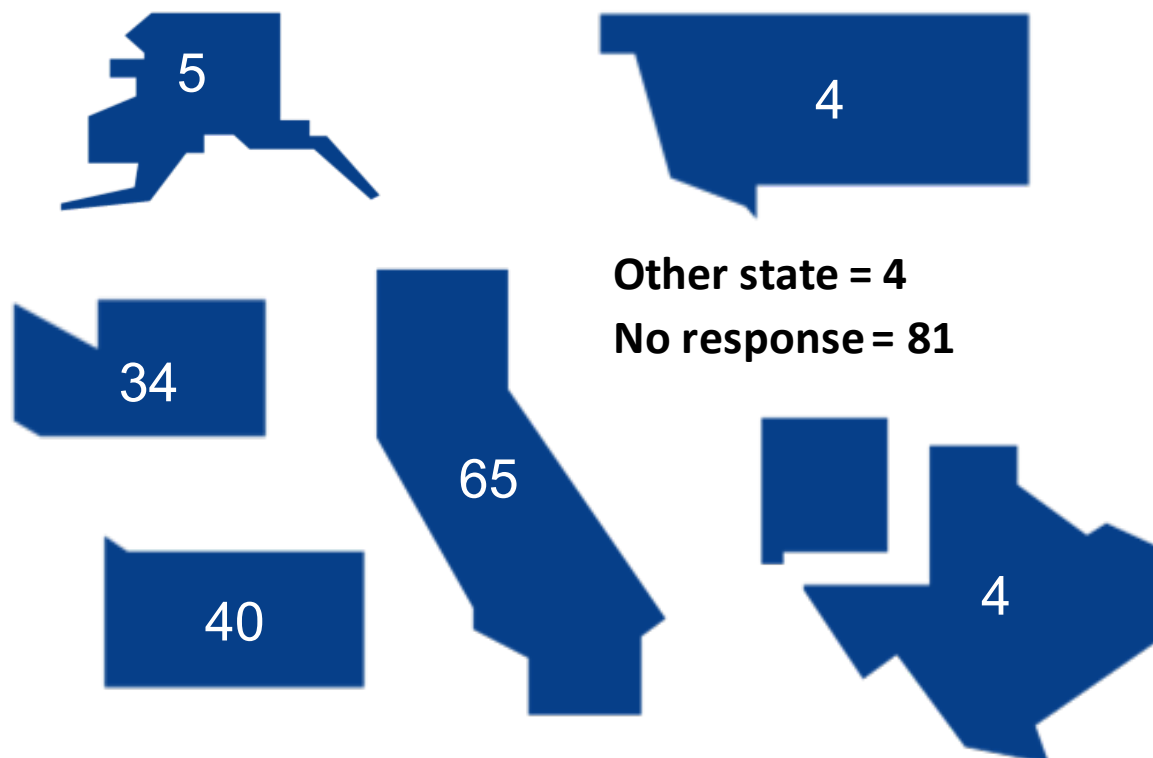


# Demographics

- 1048 emails sent to 924 unique caregivers

*Note: Caregivers who requested multiple searches received multiple survey emails.*

- Response rate: **22.61% (237 responses)**



*Respondents could select more than one role.*

<b>Nursing Staff</b>	<b>65</b>	<b>22.89%</b>
Medical Staff	43	15.14%
<b>Allied Health</b>	<b>27</b>	<b>9.51%</b>
Pharmacy	2	0.70%
<b>Administration</b>	<b>36</b>	<b>12.68%</b>
Educator	35	12.32%
<b>Student</b>	<b>1</b>	<b>0.35%</b>
Resident/Fellow	4	1.41%
<b>Researcher</b>	<b>17</b>	<b>5.99%</b>
Other	54	19.01%

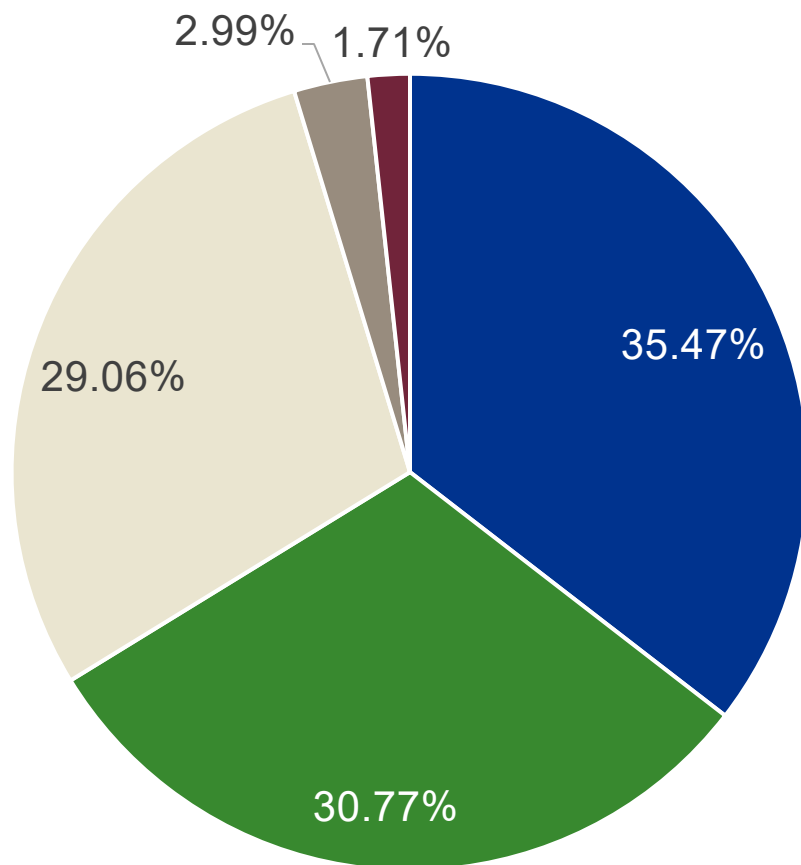


# Clinical Impacts of Literature Searches





# Time Saved by Using Search Service



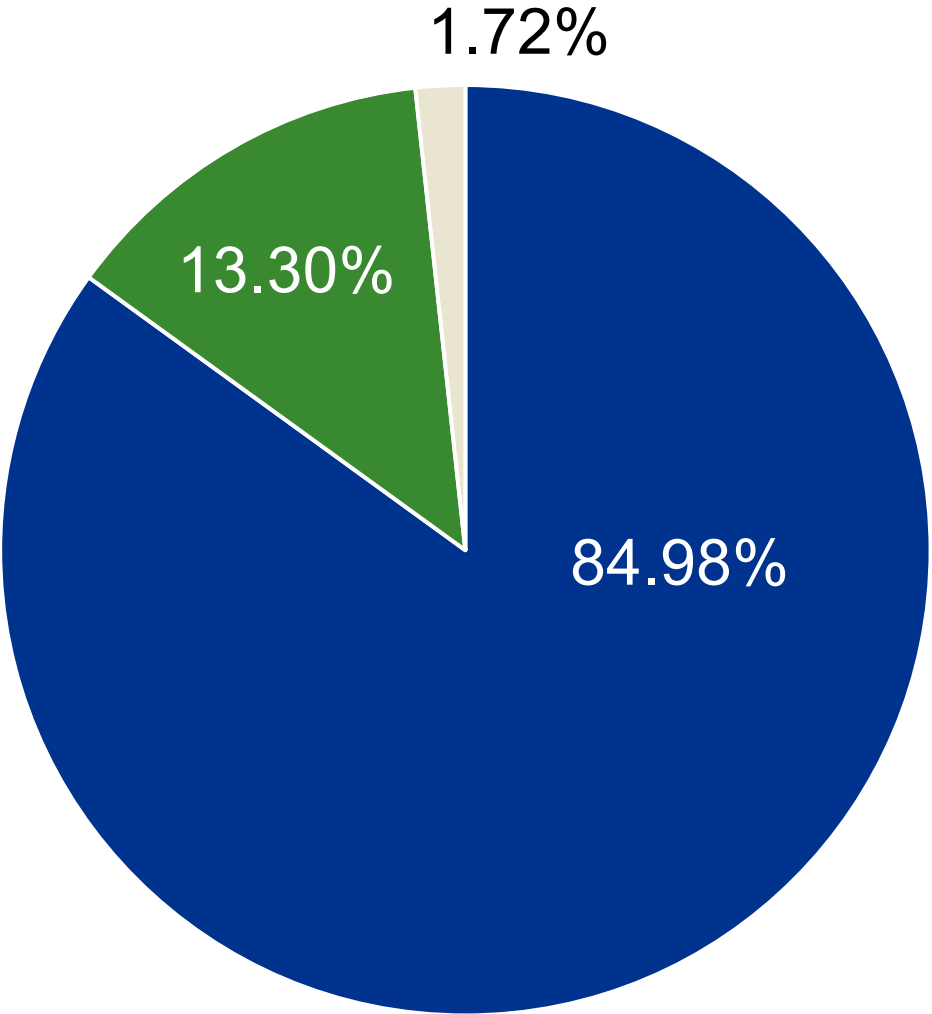
- Saved between 1 and 3 hours
- Saved more than 7 hours
- Saved between 4 and 6 hours
- No time saved
- Saved less than 1 hour





# Perceived Quality of Literature Search Results

Sales



- Very High
- High
- Neither High nor Low





# Summary of Free-Text Comments





# Highlights

**"The Providence Librarian has been a huge help to me in the past few years. This year I finally started doing research and although I am the Principal Investigator for this project, I still feel lost at times with how much information is out there. The Librarian is magic and helps me SO much. I sometimes feel like I am over-using them but I truly am so grateful for this service."**

"[The librarian] was beyond amazing. She produced the perfect literature review in an incredibly short time. I never would have been able to replicate that on my own. What she provided allowed us make a clinical decision that is currently different from our policy. Thank you!"

**"I cannot express how much benefit to clinic productivity, and up to date EBR pt care this program has for our cancer clinics. I do not have the time nor expertise to search the same methods the librarians provide to me. The depth of academic research is top notch and dependable. What a huge mistake to patient care if this resource were to be lost."**

"The medical librarian services are high quality and the quickest and most comprehensive I have worked with in my career so far. The response time is incredible as is receiving the information needed is exactly what I look for."

**"Wonderful resource. The search was helpful for prepping of a rare/complex patient and periprocedural/perioperative management. There was a scarcity of literature detailing some specific requests but the thorough search and summary of peer-reviewed and other sources was very much appreciated."**





# Discussion

- Very positive feedback from users of our search service
- Nearly all respondents rated search results as high or very high quality
- Search service may have compounding effects, as those who request literature services share the results with others
- Limitations:
  - Survey evaluation – likely that only those who wanted to provide positive feedback took the time to answer the survey
  - No way to assess true response rate, library ‘frequent flyers’ easily received survey multiple times





# Clinical Implications

- Project was not research, can't generalize findings, but within Providence the literature search service saves clinicians' time, and the information provided affects both direct patient care and policy

Results will be shared:

- with leadership to advocate for continued support and, ideally, expansion of the Providence library
- at Nurse Research Councils across Providence
- in the greater health science library community to encourage evaluation of service impacts in other settings
- planned Lightning Talk at Medical Library Association 2024 annual conference, Portland OR







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Questions? Thank you

