



RURAL PHYSICIAN SEARCH PARTICIPANT EVALUATION

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Brenda Gaida BA, M.Ed.

RPAP Research Assistant (South)

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EXECUTIVE SUMMARY

The Rural Physician Swift Efficient Application of Research in Community Health (SEARCH) Participant Evaluation was conducted in response to the Rural Physician Action Plan's (RPAP) continuing goal to educate, recruit and retain rural physicians for the province of Alberta. As part of RPAP's retention goal a modest but formal strategic research plan was developed to tie RPAP's research needs with ongoing RPAP research initiatives. One on going research related need relevant to the RPAP mandate is "to support practicing rural physicians who wish to use research findings, or conduct research relevant to rural medicine". SEARCH is one support that provides an opportunity for rural physicians to develop organizational capacity for practice-driven research and evidence-based decision-making. It is hoped that this support provides the rural physician with opportunities to expand his/her career path and retain him/her in rural Alberta.

The evaluation was designed to serve two objectives.

1. Inform RPAP's coordinating committee about how SEARCH helps to integrate research into rural practice.
2. To identify RPAP's role in research assistance for the rural physician SEARCH participant/graduate.

Evaluation Methodology

The evaluation, conducted by the RPAP's Research Assistant (South) consisted of a twelve item qualitative questionnaire. Since 1999, RPAP has supported the participation of five Alberta rural physicians in the SEARCH program. All five rural physician participants were personally interviewed; three were graduates of the SEARCH program and 2 were in their 2nd SEARCH year.

RESULTS

- 1) The following list of themes suggests that SEARCH does play a major role in aiding participating physicians to integrate research into their rural practice:

Appreciation for research: the participants reported a better “feel” for research and a more realistic understanding of the research process.

“Qualitative research helps me to understand why people behave the way they do and this reflects on how I practice and understand that kind of behaviour.”

(SEARCH participant)

Research skills: an increase in skills to actually conduct research. Participants reported increased abilities to write for journals, review and analyze literature, use software (SPSS), and conduct qualitative research.

Evidence Based Decision Making: a better understanding of applying the best available evidence to the evaluation of options and to decision making in clinical, management and policy settings.

“By choosing and using evidence we are able to defend our rural practice when we get told by specialists that surgeries or diabetic care isn’t well done in a rural practice.”
(SEARCH participant)

Informatics: increase in skills to access knowledge, information technology skills and tools to support the delivery of healthcare and promote health.

“I can work the computer better so that helps the employees.”
(SEARCH participant)

Network: an increased connectivity with other individuals and groups of individuals (health professionals, health administrators and policy makers).

“It is intriguing to work with other healthcare professionals other than doctors, it was good to liaise with them and to develop a working relationship with them”
(SEARCH participant)

Navigate Organization: an increase in understanding the contexts of academic, provider (e.g., Regional Health Authorities) and policy (Alberta Health) organizations and the operational/policies of organizations by accurately considering key contextual variables of the organization in their research.

“The way I interact with the Regional Health Authority, I understand the organization and its culture better.”
(SEARCH participant)

Career/Influence: an increase in career-related outcomes, promotions, changes in satisfaction with work, job enrichment, enhanced credibility with others and being invited to participate on related committees.

"I am on a government primary healthcare transition funding application committee and I am the only doctor on the committee."(SEARCH participant)

Personal Development: an increase personal well-being.

"There is a positive change in myself."
(SEARCH participant)

Clinical Practice: Changes in way physicians practice medicine.

"I have influenced not only my colleagues but also my patients in terms of the way we do things differently in the clinic."
(SEARCH participant)

Patient Education: Use research skills for patient education.

"Patients bring in a bunch of stuff from the Internet and the good thing is I can turn this around and give them good sites to go to and show them what we look for."
(SEARCH participant)

Rural Commitment: An increase in determination and commitment to rural practice.

"I am more determined now to stay in rural Alberta."
(SEARCH participant)

Continued Rural Research Projects: An increase in rural research.

"I did in addition to the On Call burden project from SEARCH we then went on and did the Alberta Physician Stress and Burn Out Study, it was a component of the annual national survey."
(SEARCH participant)

2) There was also a strong response for RPAP to continue to contribute financially and to make research assistance available to the participants. The main themes for support both during and after participating in the SEARCH program were very similar. The largest theme reported was continued financial support from RPAP, other smaller themes reflected on taking dedicated time off to do projects, setting up a rural research virtual site or hub and making RPAP's research assistants available to the participants.

*"The financial support helped a lot when we were away from our practices."
(SEARCH participant)*

*"Support for projects monetarily and RPAP RA assistance."
(SEARCH participant)*

*"Key role for RPAP is to set up a rural research site in a rural area."
(SEARCH participant)*

RECOMMENDATIONS

This evaluation has shown that participating in SEARCH has helped rural physicians to integrate research into their rural practice, provided them with opportunities to develop their careers, and has helped to retain them in rural Alberta. The evaluation results also shows strong support from SEARCH participants for RPAP to continue to contribute financially and provide research assistance to the participants.

The following recommendations are not intended to be exhaustive. They are, however, designed to address the findings from this evaluation.

Recommendation 1

The Rural Physician Action Plan should continue to send and encourage rural physicians to participate in the Swift Efficient Application of Research in Community Health Program.

- a) There is sufficient response from the participants that the SEARCH experience was an educational and appreciated opportunity, which is a positive indication that SEARCH (one of the many initiatives RPAP is involved with) addresses and supports the goal of retaining rural physicians in rural Alberta.

Recommendation 2

The Rural Physician Action Plan should continue to contribute financially to rural physician SEARCH participants during the SEARCH program.

- a) There was an overwhelming response that acknowledged RPAP's financial contribution and the continued support during the program.

Recommendation 3

The Rural Physician Action Plan should continue to contribute financially to rural physician SEARCH participants SEARCH project (for a specified amount of time) after the participants complete the SEARCH program.

- a) Participant responses showed a concern for RPAP to continue financial support so they could finish their SEARCH projects after the program ended.

Recommendation 4

The Rural Physician Action Plan provide research assistance (for a set amount of time) for the rural physician SEARCH participant.

- a) There was a unified response that there was a strong need for research assistance (RPAP research assistants be available to them).

Recommendation 5

The Rural Physician Action Plan to investigate other areas for research assistance for rural physicians. (I.e. Literature review on Rural Research Virtual Websites and/or Rural Remote Research Centers)

- a) Interesting “Other comments” and suggestions about assisting rural physicians in research were provided. (Rural Research Centers in Whales, Australia and Virtual Research Websites)

Acknowledgement

I am grateful for the cooperation, enthusiastic support and time the SEARCH physician participants contributed. They were helpful and forthcoming with information necessary to conduct a thorough evaluation.

Also this work would not have been possible without the valuable input from The Alberta Heritage Foundation For Medical Research. Sincere thanks to Sarah Hayward, Richard Thornley, Craig Gromnisky and all SEARCH personnel that invited and welcomed me to experience the “SEARCH experience.”

Brenda Gaida

Final Thoughts

“SEARCH has been a really valuable thing, the most striking value is understanding organizational behaviour, understanding interactions within our own clinic, government, health organizations.”
(SEARCH participant)

I appreciate the fact that I have been given the opportunity to do it and I realize there has been a lot of money and investment put into a rather senile old doc which I am very grateful for.”
(SEARCH participant)

DATA ANALYSIS

The following is a qualitative analysis of all questions presented to the participants. Common themes were found throughout the participants' responses. A Theme Definition list is presented to aid in the understanding of the themes.

Theme Definitions

Appreciation for research: the participants reported a better “feel” for research and a more realistic understanding of the research process.

Research skills: an increase in skills to actually conduct research. Participants reported increased abilities to write for journals, review and analyze literature, use software (SPSS), and conduct qualitative research.

Evidence Based Decision Making: a better understanding of applying the best available evidence to the evaluation of options and to decision making in clinical, management and policy settings.

Informatics: increase in skills to access knowledge, information technology skills and tools to support the delivery of healthcare and promote health.

Network: an increased connectivity with other individuals and groups of individuals (health professionals, health administrators and policy makers).

Navigate Organization: an increase in understanding the contexts of academic, provider (e.g., Regional Health Authorities) and policy (Alberta Health)

organizations and the operational/policies of organizations by accurately considering key contextual variables of the organization in their research.

Career/Influence: an increase in career-related outcomes, promotions, changes in satisfaction with work, job enrichment, enhanced credibility with others and being invited to participate on related committees.

Personal Development: an increase in personal well-being.

Clinical Practice: Changes in way physicians practice medicine.

Patient Education: Use research skills for patient education.

Rural Commitment: An increase in determination and commitment to rural practice.

Continued Rural Research Projects: An increase in rural research.

Question #1

1. What were your goals in participating in SEARCH? Have these goals changed at all as a result of participating in SEARCH?

The physicians overall goal for participating in SEARCH was their desire to learn basic research skills that would enhance their ability to do research in rural practice and also to have the ability to

“look at difficult questions that deal within the practice and clinical community”
(SEARCH participant).

After participating in SEARCH the outcome of these goals were either fulfilled or surpassed their original goal intent. Themes suggest there was an increase in appreciation for research, informatics, networking, research skills and improvement in evidence based decision – making.

Themes	Responses
Research Skills	<ul style="list-style-type: none"> Wanted to get to get some basic research goals
Research Skills	<ul style="list-style-type: none"> Medical school did not have actual research.
Rural Interest	<ul style="list-style-type: none"> My original participation in research was in palliative care and then I got keen on rural.
Research Skills	<ul style="list-style-type: none"> Research and evaluation background
Research Skills	<ul style="list-style-type: none"> Apply to projects I was already doing.
Research Skills	<ul style="list-style-type: none"> To be able to look at difficult questions that deal within the practice and clinical community
Comment	<ul style="list-style-type: none"> Alberta offers a lot of technology to remote centers.
Research Skills	<ul style="list-style-type: none"> I have always wanted to quantitate and evaluate some things that I do in rural practice.
Research Skills	<ul style="list-style-type: none"> I recognize SEARCH could enhance my ability to do some research in rural practice.
Informatics	<ul style="list-style-type: none"> My computer skills have improved.
No change	<ul style="list-style-type: none"> My goals have not really changed; I have always been interested in research.
Network	<ul style="list-style-type: none"> It is intriguing to work with other

Themes	Responses
	healthcare professionals other than doctors, it was good to liaise with them and have develop working relationships with them.
Clinical Practice	<ul style="list-style-type: none"> • Research has allowed us to think about other ways for diagnosis and quality of care.
Research Appreciation	<ul style="list-style-type: none"> • One realizes how painfully arduous research is and how complicated it may be i.e. ethics approval. • I have developed critical thinking, which helps in the data that is fed to doctors' everyday. • Research methodology, search skills, network with other health professionals

Have these goals changed at all as a result of participating in SEARCH?

Fifty percent of the participants reported no goal change.

Themes	Responses
Goal change	<ul style="list-style-type: none"> • Goal changed from basic research education to a much broader education than I thought I would.
No Goal change	<ul style="list-style-type: none"> • I have met my goal and it has not changed.
Goal change	<ul style="list-style-type: none"> • Goals in my project changed/ scaled down
No Goal change/ enhanced ability	<ul style="list-style-type: none"> • Goals not changed/ SEARCH enhanced my ability to do research in rural practice

Question #2

2. Do you use the course now?

Out of the five physicians surveyed all five said they use the course now.

Question #3

3. As a result of participating in SEARCH what changes if any have you observed? (attitude, biases, confidence).

In your research abilities?

(increase capacity for research & evidence based decision making)

Other changes that the participants observed since participating in SEARCH have been an increase in research appreciation attitude, research skills and improvement in evidence based decision-making and informatics.

Attitude

Themes	Responses
Research Appreciation	<ul style="list-style-type: none">I have a better appreciation of how much research takes up time.
Research Appreciation	<ul style="list-style-type: none">I have a better appreciation of the commitment it takes and how much goes into research.
Research Appreciation	<ul style="list-style-type: none">Research is arduous/complicated and there is a lot of trouble involved in doing research.

Skills

Themes	Responses
Research Skills	<ul style="list-style-type: none">Skills changed, write journals, learned SPSS
Research Skills	<ul style="list-style-type: none">Easier to ask the 'question'. Know who to ask for help. Good IT support
Research Skills	<ul style="list-style-type: none">Can review literature, do peer reviews.
Research Skills	<ul style="list-style-type: none">My experience also makes a difference and I bring that to a research project.
Research Skills	<ul style="list-style-type: none">I have an increased capacity in qualitative research and improved evidence based decision-making.
Evidence Based Decision Making	<ul style="list-style-type: none">More confidence with analyzing literature,

Network	empathy towards employees of other health regions and their lack of job security or support
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Technical

Themes	Responses
Informatics	<ul style="list-style-type: none"> I use the desktop.
Informatics	<ul style="list-style-type: none"> Tools are extremely helpful
Informatics	<ul style="list-style-type: none"> High speed internet helps

The Impact from this change

The impact from these changes reported themes in areas of the participants personal life, career/Influence, evidence based decision-making and appreciation of research.

Themes	Responses
Personal life	<ul style="list-style-type: none"> Research has taken time away from personal time.
Personal Development	<ul style="list-style-type: none"> It is interesting and intellectually stimulating doing research.
Career/Influence	<ul style="list-style-type: none"> It has opened doors for me.
Career/Influence	<ul style="list-style-type: none"> Activities have changed, I am doing things I never did before.
Evidence Based Decision Making	<ul style="list-style-type: none"> I look at clinical questions differently
Evidence Based Decision Making	<ul style="list-style-type: none"> Qualitative helps me to understand why people behave the way they do and this reflects on how I practice and understand that kind of behaviour.
Evidence Based Decision Making	<ul style="list-style-type: none"> I have a healthier respect for qualitative research.
Evidence Based Decision Making	<ul style="list-style-type: none"> I analyze quantitative more critically.
Research Appreciation	<ul style="list-style-type: none"> I appreciate the amount of work people do in research.
Evidence Based Decision Making	<ul style="list-style-type: none"> I am more critical about the data that is fed to us now.
Research Skills	<ul style="list-style-type: none"> Narrower questions and fewer projects.

In your application/utilization of research skills?
(problem solving, way you look at a website, government)

Application

Themes in the application of research skills reflected in areas of evidence based decision-making and career/influence.

Themes	Responses
Evidence Based Decision Making	<ul style="list-style-type: none"> I now know how to evaluate what is out there.
Career/Influence	<ul style="list-style-type: none"> I am on a government primary healthcare transition funding application committee and I am the only doctor on the committee.

Utilization

Themes in the utilization of research skills supported an increase in areas of evidence based decision-making, patient education, SEARCH resources, career/influence, and navigate organization.

Themes	Responses
Evidence Based Decision Making	<ul style="list-style-type: none"> I use the resources SEARCH gave us to evaluate medical information on the Internet.
Patient Education	<ul style="list-style-type: none"> I use this for patient education and clinical practice.
SEARCH Resources	<ul style="list-style-type: none"> I don't evaluate new sites only use SEARCH reputable ones.
Career/Influence	<ul style="list-style-type: none"> My clinical perspective offers credibility to some government funded projects.
Evidence Based Decision Making	<ul style="list-style-type: none"> I use evidence base thinking; observe new procedures and drugs more critically.
Navigate Organization	<ul style="list-style-type: none"> Research skills have not played a role working with government but understanding organizational change and structure has been most valuable.
Evidence Based Decision Making	<ul style="list-style-type: none"> I look at websites critically and help

	patients to find reputable websites
Evidence Based Decision Making	<ul style="list-style-type: none"> I realize facts told one day are fiction the next.
Appreciation of Research	<ul style="list-style-type: none"> Government not informed about time required to complete good research.

The impact from this change

The themes of the impacts were reflected in areas of an increase in information retrieval, career/influence, navigate organization, and time.

Themes	Responses
Informatics	<ul style="list-style-type: none"> I am quicker in finding appropriate resources than my colleagues.
Informatics	<ul style="list-style-type: none"> I have looked at resources before them so I know where to find the information.
Informatics	<ul style="list-style-type: none"> I have become a resource to my colleagues.
Career/Influence	<ul style="list-style-type: none"> My career has changed direction
Career/Influence	<ul style="list-style-type: none"> I have influenced the direction of some primary healthcare transition funding.
Career/Influence	<ul style="list-style-type: none"> I have influenced some of the medical organizations direction around primary care renewal.
Navigate Organization	<ul style="list-style-type: none"> The way I interact with Regional Health Authority, I understand the organization and its culture better.
Navigate Organization	<ul style="list-style-type: none"> I also understand the importance in developing our own organizational culture in our clinic.
None	<ul style="list-style-type: none"> No impact.
Time	<ul style="list-style-type: none"> Applying for gov't grants a waste of time at this level. Usually look for alternate funding.

In your Professional practice?

(colleagues, employees, and patients attitudes)

Positive changes reflected themes in navigate organization, personal development, credibility, clinical practice, office practice, and evidence based decision making.

Some negative changes were reflected in one area, which were patients.

Positive Changes	
Themes	Responses
Navigate Organization	<ul style="list-style-type: none"> I have a clearer understanding about what healthcare administrators and CEO's do.

Personal Development	<ul style="list-style-type: none"> • There is a positive change in myself.
None	<ul style="list-style-type: none"> • No change within my own staff.
Navigate Organization	<ul style="list-style-type: none"> • I understand health care system on a global level now other than my own little world.
Personal Development	<ul style="list-style-type: none"> • Patients have asked about my research and what I am doing, they do show an interest in what I am doing.
Clinical Practice	<ul style="list-style-type: none"> • I have influenced not only my colleagues but also my patients in terms of the way we do things differently in the clinic.
Office Practice	<ul style="list-style-type: none"> • Employees were impacted by the implementation of an information system.
Clinical Practice	<ul style="list-style-type: none"> • We approach patients on healthy lifestyle education in a different way.
Office Practice	<ul style="list-style-type: none"> • We work in a more cost efficient manner.
Navigate Organization	<ul style="list-style-type: none"> • I am much more cognizant of the team approach.
Navigate Organization	<ul style="list-style-type: none"> • We keep people better informed and understand why dynamics occur.
Evidence Based Decision Making	<ul style="list-style-type: none"> • With colleagues I have tried to slow down decision making process/no decision is made without evidence.
Evidence Based Decision Making	<ul style="list-style-type: none"> • I use data/evidence when dealing with patients and colleagues and allow them to make up their own mind.
Navigate Organization	<ul style="list-style-type: none"> • I realize it isn't the amount of funding a government supplies it is where the funding is used that is the more important issue.
Evidence Based Decision Making	<ul style="list-style-type: none"> • Answered some of my own questions.

Negative Changes	
Themes	Responses
Patient Comments	<ul style="list-style-type: none"> • Patients commented how much I was away during the 2 years in SEARCH.
Patient Comments	<ul style="list-style-type: none"> • Patients did not like it when I am not here.

The impact from this change

The themes of the impacts were reflected in areas of patient/colleague education, research skills, navigate organization, and personal development.

Themes	Responses
Patient Education	<ul style="list-style-type: none"> • Patients are given information and websites for their clinical questions.
Patient/Colleague Education	<ul style="list-style-type: none"> • Colleagues, employees and patients are impacted by the implementation of a whole new way of practicing medicine.
Research Skills	<ul style="list-style-type: none"> • We understand the process is much more

Themes	Responses
	important.
Navigate Organization	<ul style="list-style-type: none"> I am making a much more concerted effort to change things like a team approach.
Research Skills	<ul style="list-style-type: none"> It has enhanced ones abilities, skills and information.
Personal Development	<ul style="list-style-type: none"> More confident when talking with patients and professionals.

**In your frame of thought?
(medical model)**

Participants changed in their thinking how different organizations are navigated including their own. One participant however felt his medical frame of thought had not changed but he also did mention that his thinking is more evidence based.

Themes	Responses
General Comment	<ul style="list-style-type: none"> This is a tough question.
Navigate Organization	<ul style="list-style-type: none"> I understand and appreciate the administration aspects of medicine more now and appreciate how admin has to make tough decisions without no medical background.
No Change	<ul style="list-style-type: none"> Team work has always been here so that hasn't changed.
Navigate Organization	<ul style="list-style-type: none"> Goals for doctors and administrators are different. Both have a different frame of reference. I understand their decisions better.
Navigate Organization	<ul style="list-style-type: none"> A major change in thought process around working within a team.
Navigate Organization	<ul style="list-style-type: none"> The concept of autonomy and decision-making is not just yours.
Navigate Organization/Clinical Practice	<ul style="list-style-type: none"> We are taking a more proactive surveillance/make sure people are staying on track with chronic disease. A proactive approach to healthcare has impressed me.
Navigate Organization	<ul style="list-style-type: none"> I see a broad spectrum of health ranging from effective social change and how it affects health through chronic disease management, prevention and more conventional medical areas.
No Change	<ul style="list-style-type: none"> My frame of medical thought has not changed.
Evidence Based Decision Making	<ul style="list-style-type: none"> More evidence based.

The impact from this change

The impacts from this change in thought were reflected in an increase in research appreciation, clinical practice and evidence based decision-making.

Themes	Responses
Research Appreciation	<ul style="list-style-type: none"> Better appreciation on how to write up a proposal, who to approach for equipment acquisition or participation in a primary care initiative.
Clinical Practice	<ul style="list-style-type: none"> Patients receive better care. We now have meaningful community participation, community has the opportunity to be cohesive, to be able to make changes quickly that urban centers would not have a chance of.
No Impact	<ul style="list-style-type: none"> None.
Evidence Based Decision Making	<ul style="list-style-type: none"> Realize how little good evidence there is.

In your professional network? (increase in people/information resources)

Participants reported an increase in networking with people and resources.

Themes	Responses
Network	<ul style="list-style-type: none"> On more committees, it has broadened my scope of the people I work with.
Network	<ul style="list-style-type: none"> I know a lot more people/SEARCH faculty/ACORN/I have a much stronger link with the university.
Network	<ul style="list-style-type: none"> We now have connections in every region, nurses, managers, Alberta Health and Wellness connections.
Network	<ul style="list-style-type: none"> Network of people have increased. Now know middle management from regions.
Network	<ul style="list-style-type: none"> Need to have high speed Internet; more people are coming to us to do quick literature searches.
Network	<ul style="list-style-type: none"> Increase area of relationships with people within our region.
No change	<ul style="list-style-type: none"> Little

The impact from this change

Participants reported the impact from this increase in professional network were in areas of a development of larger networks, an increase in career/influence and are now able to navigate through organizations better. Some however reported no impact from this change.

Themes	Responses
Network	<ul style="list-style-type: none"> By knowing more people, you have more people to help you with a certain problem and so one can be more specific in who you ask for help.
Career/Influence	<ul style="list-style-type: none"> Career change, I am invited to participate in research projects that I wasn't before.
Navigate Organization	<ul style="list-style-type: none"> There is a fundamental change in increase of respect for all disciplines of health.
Navigate Organization	<ul style="list-style-type: none"> Everyone has a better understanding of other points of view, like management, economics and frontline workers.
Network	<ul style="list-style-type: none"> Network of people are interested in research and share information, non threatening, no turf wars.
No Change	<ul style="list-style-type: none"> None.
No Change	<ul style="list-style-type: none"> Little.

Other

(any other areas/people/organizations/ Health Region)

Participants reported on other areas of change in career/influence, regional expectations, networking, and research skills.

Themes	Responses
Career/Influence	<ul style="list-style-type: none"> The UofC faculty is very interested now in my skills and what I have learned.
Career/Influence	<ul style="list-style-type: none"> My involvement in teaching at the UofC has been positive.

Themes	Responses
Career/Influence	<ul style="list-style-type: none"> Now do a number of quality assurance projects, chair a mortality review committee and have done keynote speaking with different stakeholders.
Career/Influence	<ul style="list-style-type: none"> Some things from the Taber project has been incorporated into the AMA Alberta Health Agreement.
Regional Expectations	<ul style="list-style-type: none"> Health region is a little leery on the broad social issues we are addressing, they do not think what we are doing is valid, they would prefer we work on chronic disease management or increase screening in clinic.
Network	<ul style="list-style-type: none"> Improved relations with other organizations such as the Picany Nations, improved dialogue with chief in council and improved intercultural activities.
Research Skills	<ul style="list-style-type: none"> I concentrate now on processes.
Network	<ul style="list-style-type: none"> Knowing people from our regional headquarters is really going to help us.
Network	<ul style="list-style-type: none"> Knowing someone's face, is harder to say no to them and they are more likely to accommodate our needs.
Network	<ul style="list-style-type: none"> Good positive attitudes coming from the region.

The impact from this change

The impact from these other changes were in areas of an increase in career/influence and networking.

Themes	Responses
Career/Influence	<ul style="list-style-type: none"> The AMA Alberta Health Agreement has incorporated some of our work.
Career/Influence	<ul style="list-style-type: none"> Major health players such as CMA, the Royal College have started primary care renewal projects that have a research foundation; this has had a huge impact and has really spread out.
Network	<ul style="list-style-type: none"> Better processes of communication, this has had a huge impact.
Career/Influence	<ul style="list-style-type: none"> More things are happening in the community i.e. increase in rural surgery; more surgeons are coming out of Lethbridge to give more assistance in team care.

Question #4

4. Have any of these changes impacted your thoughts about practicing medicine in rural Alberta? If so which one and why?

(Rural Alberta is a place where you can also do research)

The main theme that was reflected about practicing medicine in rural Alberta was in an increase of the participants' commitment to continue to practice rural medicine. This continued rural practice commitment has impacted one participant's career/influence (winning awards and being recognized as a community based physician). Another theme that was evident was in order to continue rural research the participants need research support.

Themes	Responses
Rural Commitment	<ul style="list-style-type: none"> Always been committed to rural medicine.
Rural Commitment	<ul style="list-style-type: none"> SEARCH is a selling feature for residents, it says we aren't second-rate physicians working in the boonies but we are right out in the forefront doing research and being academic.
Rural Commitment	<ul style="list-style-type: none"> I am more determined now to stay in rural Alberta.
Rural Commitment	<ul style="list-style-type: none"> Universities are starting to realize that we can do academic medicine in rural Alberta.
Career/Influence	<ul style="list-style-type: none"> Winning awards, two UofC Faculty of Medicine Awards one in clinical research and one in Biomedical research. I have been recognized as a community based physician that has won this award – AMAZING!
Research Support	<ul style="list-style-type: none"> I never thought you couldn't do research as a rural physician but there are time limitations and there has to be some type of support for it.
Appreciation for Research	<ul style="list-style-type: none"> My biggest change is that I have become much more interested in population health, it has taken me away from the clinic and that is something I didn't anticipate happening.
Research Support	<ul style="list-style-type: none"> Primary initiative care is forcing us to put in some evaluation criteria to do some research and needs assessment, it is a lot of work and people need to be supported in this. I don't think this is a bad thing but it is surprising.

Themes	Responses
Research Support	<ul style="list-style-type: none"> • Can't say at this time, still in SEARCH, there are still huge obstacles i.e. no funding for physicians, sometimes we get funding for staff to help us, but none for us at this time.
Rural Commitment	<ul style="list-style-type: none"> • Still enjoy rural. Internet contacts help.

Question #5

SEARCH speaks to research as choosing, using and creating evidence.

Choosing evidence refers to an increase in information skills, health information systems, health knowledge sources, information searching and retrieval, critical appraisal and research synthesis.

Using evidence refers to an increase in partnerships and collaboration, organizational change and change management, managing the interface between research and practice, health policy issues and evaluation, navigating context, decision-making skills, research writing and presentation skills, and research transfer strategies.

Creating evidence refers to applying research paradigms, policy and process, research designs, methods and techniques, evaluation and assessment methods, health data sources, analysis and management, research ethics including conducting ethical research and understanding the research ethics process.

Which one of these processes has had the greatest impact on your: Medical practice (choosing, using or creating evidence? Why?)

(With each area also include if you have faced any barriers, anything that is preventing you from applying these processes.)

In the participants medical practice choosing evidence was the main theme, which focused mostly on information retrieval for patients and colleagues.

However creating and using evidence were also applied.

Themes	Responses
Choosing	<ul style="list-style-type: none"> • Choosing is the biggest factor.
Choosing	<ul style="list-style-type: none"> • Medical practice I choose evidence much more.
Choosing	<ul style="list-style-type: none"> • Finding resources is probably the most

Themes	Responses
	important thing that has helped me in my day-to-day practice.
Using	<ul style="list-style-type: none"> I am more guideline oriented – so using the evidence that builds guidelines.
Choosing	<ul style="list-style-type: none"> Choosing: I have computers in all my rooms so I can find something on the net immediately for my patients.
Choosing	<ul style="list-style-type: none"> Patients come in a lot with Internet stuff, I first check what site they got this off of and if it isn't a good spot I will direct them to a more reputable site.
Choosing/Using	<ul style="list-style-type: none"> In our actual medical practice we are definitely choosing and using evidence more.
Choosing	<ul style="list-style-type: none"> Choosing clinical guidelines to prompt us to use the best available evidence for management is a fundamental change that is occurring.
Creating	<ul style="list-style-type: none"> Creating Evidence: we have done our baseline stats of what we are doing now and we are going to compare those, this is going to be a creating evidence piece. I am not sure we would have done this is we wouldn't have had funding for this project.
Creating	<ul style="list-style-type: none"> Creating evidence in my medical practice.

Barriers/Impact

The barriers of choosing evidence were in their clinics information technology ability and the time it takes to retrieve the information.

However some participants experienced no barriers.

Themes	Responses
Information Technology	<ul style="list-style-type: none"> No high speed Internet is a problem (takes forever to download).
Information Technology	<ul style="list-style-type: none"> We have high speed now but I still think it is still a barrier in other places.
Time	<ul style="list-style-type: none"> Need to be able to do searches on Internet faster, if you are spending 5 minutes looking that is too long. Still have work here.
Time	<ul style="list-style-type: none"> Trying to get everybody to review the stuff (information found on the Internet).
No Barrier	<ul style="list-style-type: none"> Everyone has supported us when we are gone and when we come back, when we want to change things they have been extremely supportive.
No Barrier	<ul style="list-style-type: none"> No barriers in using evidence in rural practice.

Patients (choosing, using or creating evidence? Why?)

With the participants' patients the main theme was choosing evidence. (Retrieving information for patients, and getting evidence based information on new treatments or drugs for patients).

Themes	Responses
Choosing	<ul style="list-style-type: none"> Choosing again with patients, it is just finding information for them is the biggest thing they are benefited from.
Choosing	<ul style="list-style-type: none"> Any new treatment or drug I am very choosy about the evidence and tend to be very particular now. I look at the evidence more closely.
None	<ul style="list-style-type: none"> In creating evidence we have not done a piece of that.
Choosing	<ul style="list-style-type: none"> They benefit from using the evidence that is being presented to the physician that is treating them.

Barriers/Impact

The barriers of choosing evidence for patients is that it involves a time commitment and spending more time with patients on where reliable internet sites can be found.

Themes	Responses
Time/Research Support	<ul style="list-style-type: none"> Lack of time and resources for people.
Time	<ul style="list-style-type: none"> Takes more time finding the evidence, this is a barrier.
Patient Education	<ul style="list-style-type: none"> The barrier is that patients bring in a bunch of stuff from the Internet and the good thing is I can turn this around and give them good sites to go to and show them what we look for.
Patient Education	<ul style="list-style-type: none"> Patient's beliefs may be different.

Colleagues (choosing, using or creating evidence? Why?)

With the participants colleagues they use choosing and using evidence. Colleagues come to the participants for information on best treatment options but also have some reservation about guidelines.

Themes	Responses
Choosing	<ul style="list-style-type: none"> Colleagues come to me about finding information; this will promote a discussion on which is the best treatment option.
Using	<ul style="list-style-type: none"> A lot of colleagues don't like guidelines; some feel guidelines are too constraining and that experience is more important.
Choosing	<ul style="list-style-type: none"> Stating evidence in a consult is the way to go, you can't bluff anyone anymore.
Using	<ul style="list-style-type: none"> In teaching Using evidence is the way to go. We will be creating evidence.
Choosing	<ul style="list-style-type: none"> Choosing makes people more cognizant of looking at what the evidence is and slows down our decision-making.

Barriers/Impact

The barriers of choosing and using evidence with the participants' colleagues involve an increase in commitment of time and they also found a resistance to change with the colleagues.

Themes	Responses
Time	<ul style="list-style-type: none"> It was a burden on my colleagues for me being away.
Resistance to Change	<ul style="list-style-type: none"> There is still a resistance to change, still not valuing the evidence out there.
Resistance to Change	<ul style="list-style-type: none"> Colleagues are more defensive about it, but they are doing it.
None	<ul style="list-style-type: none"> No barriers.

Employees (choosing, using or creating evidence? Why?)

With the participants employees the main theme was a combination of choosing and using evidence. (Employees are entering files on computers, nurses are given more decision-making responsibilities and the clinics as a whole are choosing better clinical practice guidelines).

Themes	Responses
Choosing	<ul style="list-style-type: none"> I can work the computer better so that helps the employees.
Choosing	<ul style="list-style-type: none"> Computerization was an issue but no one is running around filing paper anymore. We have taken that time and put it into patient contact.
Using	<ul style="list-style-type: none"> Nurses feel they have more of a role and more professional satisfaction in that role because they have been given more decision making responsibilities, but sometimes they don't like that either.
Choosing	<ul style="list-style-type: none"> We have changed some of our clinical practice guidelines, hired an office manager, have excellent input from employees on how to implement some of our guidelines.
Choosing	<ul style="list-style-type: none"> From SEARCH aspect we have chosen good compressed guidelines that everyone is involved in.
Using	<ul style="list-style-type: none"> Brought in educators to teach staff why we do certain things a certain way.
Using	<ul style="list-style-type: none"> Rapid changes taking place within the practice of medicine in Pincher Creek, employee and myself have taken a course together that we are now adapting this and using this on our patients.

Barriers/Impact

Within the area of choosing and using evidence some employees have stated that it is at times more responsibility than they are comfortable with and this increases their stress level. However other participants stated that there were no barriers regarding choosing, using and creating evidence with their employees.

Themes	Responses
Comfort level	<ul style="list-style-type: none"> • Employees feel it is more than they are comfortable with.
Stress	<ul style="list-style-type: none"> • Staff are stressed and they are left holding the bag.
None	<ul style="list-style-type: none"> • No barriers.

Other

Other areas that the participants are choosing, using and creating evidence are in areas of student/resident education, continued research projects, community projects and maintaining credibility with specialists.

Themes	Responses
Student/Resident Educational Impact	<ul style="list-style-type: none"> • Students and residents have benefited from my skills. • I have been able to give them some thoughts on the whole experience and where they might go to talk to people about furthering research.
Research Skills	<ul style="list-style-type: none"> • I have been writing more journal articles.
Continued Rural Research Projects	<ul style="list-style-type: none"> • Involved in more research projects.
Evidence Based Decision Making	<ul style="list-style-type: none"> • The community projects and guidelines we have looked at how do we choose and use the evidence and how we can evaluate them.
Evidence Based Decision Making	<ul style="list-style-type: none"> • By choosing and using evidence we are able to defend our rural practice when specialists tell us that surgeries or diabetic care isn't will done in a rural practice.
Evidence Based Decision Making	<ul style="list-style-type: none"> • We hopefully will start producing evidence that can support our arguments for maintaining skills at a local level.

Barriers/Impact

The only barrier in these other areas is lack of research support to fulfill choosing, using and creating evidence.

Research Support	<ul style="list-style-type: none">• Unpaid time and effort in producing this evidence.
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Question #6

6. What kinds of research projects have you been involved in since SEARCH?

<p style="text-align: center;">Participant 1</p> <ul style="list-style-type: none">• Influenza Immunizations and Family Physicians (Group Project).• What features of medical students will predict them choosing a rural career/Career Choice in Medical Students/with Bruce Wright• Project with the faculty of nursing at the U of C, it is about preceptorships in rural education.• Evaluation projects with the Southern Alberta Child and Youth Health Network.• Involved with the AFPRN, Rural Research Workshop.
<p style="text-align: center;">Participant 2</p> <ul style="list-style-type: none">• Needs assessment for Aboriginal women's health.• We held a focus group with mental health providers within our community to develop a job description of our mental health coordination position in our clinic, it was interesting to find out their needs and to change our description to fill the need of the community. It was again that idea of process of being flexible, we think we know what to do, but they said no you know what we really need and we said ok, it was an interesting process.
<p style="text-align: center;">Participant 3</p> <ul style="list-style-type: none">• I did 2 formal projects in SEARCH, the Taber project which really went on and is still going on and that was a major one . The other one was in palliative care research project which evolved around the difference between rural culture and attitude around both patient and physician .we are still actually working at that we are close to writing that.• I got involved in writing a curriculum the rural residents care because of the dispersal factor we did it on line and that was interesting and innovative new things center of learning so that curriculum is in its third year and actually been presented in Spain at WONCA and that has been really quite good.• I did in addition to the on Call burden project from SEARCH we then went on and did the Alberta physician stress and burn out study, it was a component of the annual survey national.• The health technology assessment group we approached them and asked if they would assess the use of advanced directives in long term care facilities. So we did specifically our region and assessed the use of advanced directives.• Study on Narrative, Physician stories. We are thinking about using Nudist. And we think if we do a qualitative content analysis from a lot of stories from rural and urban Specialist and GP's we will find common themes.
<p style="text-align: center;">Participant 4</p> <ul style="list-style-type: none">• We have the group project that is moving along, other projects in the works possibly a diabetics study, we are extending the study we are doing on colonoscopy well beyond SEARCH and continuing that.
<p style="text-align: center;">Participant 5</p> <ul style="list-style-type: none">• The incidence of infections in a meat packing plant before and after the introduction of prophylaxis antibiotics. Data analysis• The efficacy of corticosteroid injections for trigger finger in meatcutters. Manuscript preparation.• The effects of on-call on family health. Manuscript preparation.• Gorsche R, Wiley P, Renger R, Sasyniuk T, Burke N. A Comparison of Outcomes between Symptomatic cases of CTS and Matched Asymptomatic• Controls. Occupational Medicine 2002;52(8):491-496. Peer reviewed.• Gorsche R. Tilley P. A Cluster of Patients with West Nile Virus Disease Associated with Neutropenia and Rash. CMAJ 2004 (submitted).

Question #7

7. What have been your roles in those projects?

- Principle Investigator
- Co-Investigator
- Data Collection
- Steering Committee Member

Question #8

8. What resulted from these projects?

(dissemination activities, awards recognition, data collecting, increase in content specific knowledge).

- Poster Presentations
- International Presentations
- Document/ Article Writing
- Key Speaker Invitations
- Publications
- U of C Faculty of Medicine Awards

Question #9

9. What should RPAP's role be in supporting physician SEARCH participants during the SEARCH program?

The main theme that the participants reported was that RPAP's role should continue with financial research support.

Themes	Responses
Financial	<ul style="list-style-type: none"> • Their financial support helped a lot when we were away from our practices.
Research Support	<ul style="list-style-type: none"> • I think a sponsoring committee such as RPAP to oversee your involvement in very important, because AHFMR won't give money to an individual.
Research Support	<ul style="list-style-type: none"> • Need dedicated time to work on specifically that, if not then you are working your nights and Saturday mornings.
Research Support	<ul style="list-style-type: none"> • It would be helpful to have continuing support of ½ day support to continue to get the assignments and in between work done.
Research Support	<ul style="list-style-type: none"> • Hard to work at the clinic or hospital on the computer but it is the only place with high speed Internet.
Time	<ul style="list-style-type: none"> • Being totally dedicated to that time commitment, but I don't know if your clinic can tolerate that.
Financial	<ul style="list-style-type: none"> • More money, for SEARCH participants and the fact that what has happened I gather in the early stages there was more money and its being halved and inappropriate so, it is very costly for an individual physicians that it is very fortunate that I agree it has shared some of those costs, it hasn't been quite as hard on me and Cathy Scrimshaw that it would have been if we hadn't got such a progressive group.
Financial	<ul style="list-style-type: none"> • Support for projects monetarily and RA assistance.

Question #10

10. What should RPAP's role be in supporting physician SEARCH participants after the SEARCH program?

The main theme that the participants reported was that RPAP's role after SEARCH should be continued financial support to complete SEARCH project and to provide some type of research support for the physicians.

Themes	Responses
Financial	<ul style="list-style-type: none"> Understanding they will give you 250 dollars stipend up to 1 day/week to work on your project after the SEARCH modules are finished.
Research Support	<ul style="list-style-type: none"> I have not been able to take that much time off, that time off is difficult but I don't think RPAP can do anything about that.
Financial	<ul style="list-style-type: none"> Financial support is very helpful.
Time	<ul style="list-style-type: none"> Taking one day off a week (isn't practical) doesn't work out but what I have been trying is to take a whole week off every 2-3 months and that has worked fairly well.
Research Support	<ul style="list-style-type: none"> I was hoping to get better training in statistics as in SPSS statistical databases.
Research Support	<ul style="list-style-type: none"> Need help with data analysis; some type of help here would be divine.
No Urban/Rural Separation	<ul style="list-style-type: none"> Don't separate urban and rural so much, when you do you get some urban push back when you do that too much.
Research Support	<ul style="list-style-type: none"> Key role for RPAP is to set up a rural research site in a rural area.
Research Support	<ul style="list-style-type: none"> Australia has a rural remote research centre that does a huge amount of rural research.
Research Support	<ul style="list-style-type: none"> English also have research centres in small towns in Whales.
Research Support	<ul style="list-style-type: none"> It should be a virtual site or research hub, it would connect those rural physicians and rural communities that are interested in research.
Research Support	<ul style="list-style-type: none"> People like RPAP's RA's being available to help in research.
Research Support	<ul style="list-style-type: none"> A lot of us don't know you are there, I don't know how you can make us read our stuff.
Research Support	<ul style="list-style-type: none"> Support for projects monetarily and RA assistance

Question #11

11. What immediate support would help physicians get started in research activity? (Other than more hours in a day)

The main theme reported was to provide research assistance (RPAP research assistants be available to them).

Themes	Responses
Team/Network	<ul style="list-style-type: none"> Working in a group is a very motivating thing.
Network	<ul style="list-style-type: none"> Getting interested people together is the most important thing you can do.
Network	<ul style="list-style-type: none"> Networking with interested people is very important.
Research Support	<ul style="list-style-type: none"> Research Assistants: for us to be able to say "Hey can you help us with this or that is far more important that we recognize the people who are willing to help.
Time	<ul style="list-style-type: none"> Exactly that is the bottom of it More Time!
Network/Research Support	<ul style="list-style-type: none"> Hopefully ones who do research filter out to others and that there may be more joint projects.
Rural Research Support	<ul style="list-style-type: none"> Rural research needs to be in the forefront in order to preserve what healthcare we have.
Comment	<ul style="list-style-type: none"> Primary care reform is what doctors in rural Alberta are already doing.
Rural Research Support	<ul style="list-style-type: none"> Rural reality needs to go out and be in the faces of specialists like surgery, there is no evidence that shows that there are problems in doing rural surgery, the bottom line is that 20% of the people have already driven 2 hours to come to the community hospital.
Research Support	<ul style="list-style-type: none"> Sometimes overhead costs trivialize research and makes it look like a hobby.
Financial	<ul style="list-style-type: none"> Money.
Research Support	<ul style="list-style-type: none"> Suggested questions that need answering

Question #12

11. Is there anything you would like to add?

Themes ranged from appreciation of the SEARCH experience, formalization of the SEARCH course into a Masters Degree and understanding organizational behaviour better.

Themes	Responses
Wonderful Experience/Increase in Education	<ul style="list-style-type: none"> SEARCH was a wonderful experience and I learned lots and I now know how much I have to learn now.
Formalize into Masters Degree	<ul style="list-style-type: none"> I would like to have my SEARCH education formalized into a Masters Degree.
Valuable Experience	<ul style="list-style-type: none"> Search has been a really valuable thing, the most striking value is understanding organizational behaviour, understanding interactions within our own clinic, government, health organizations.
Understand Organizational Behaviour	<ul style="list-style-type: none"> I am not as naive in how the process works and I now believe you can make a difference in policy if you have the evidence.
Appreciation	<ul style="list-style-type: none"> I appreciate the fact that I have been giving the opportunity to do it and I realize there has been a lot of money and investment has been put into a rather senile old doc which I have been very grateful.

APPENDIX A.

Date: _____

Rural Physician SEARCH Participant Survey

The purpose of this survey is to better understand the impact of SEARCH on rural physician participants as well as their needs to ongoing engagement in research and evidence-based practice. The Rural Physician Action Plan (RPAP) is conducting this project in collaboration with the Alberta Heritage Foundation of Medical Research (AHFMR/SEARCH). Both RPAP and AHFMR will use this data for program planning and evaluation. Comments will not be linked to individuals in any public report.

1. What were your goals in participating in SEARCH? Have these goals changed at all as a result of participating in SEARCH?

2. Do you use the course now? Yes No
3. As a result of participating in SEARCH what changes if any have you observed?
(attitude, biases, confidence)
 - In your research abilities?
(increase capacity for research & evidence based decision making)

The impact from this change:

- In your application/utilization of research skills?
(problem solving, way you look at a website, government)

The impact from this change:

- In your Professional practice?
(colleagues, employees, and patients attitudes)

The impact from this change:

- In your frame of thought?
(medical model)

The impact from this change:

- In your professional network?
(increase in people/information resources)

- Other
(any other areas/people/organizations/ Health Region)

The impact from this change:

4. Have any of these changes impacted your thoughts about practicing medicine in rural Alberta? If so which one and why?
(Rural Alberta is a place where you can also do research)

5. SEARCH speaks to research as choosing, using and creating evidence. Which one of these processes has had the greatest impact on you:
(With each area also include if you have faced any barriers, anything that is preventing you from applying these processes.)

- Medical practice (choosing, using or creating evidence? Why?)

- Patients (choosing, using or creating evidence? Why?)

- Colleagues (choosing, using or creating evidence? Why?)

- Employees (choosing, using or creating evidence? Why?)

- Other (choosing, using or creating evidence? Why?)

6. What kinds of research/evaluation projects have you been involved in since SEARCH?

7. What have been your roles in those projects?

8. What resulted from these projects?
(dissemination activities, awards recognition, data collecting, increase in content specific knowledge).

9. What should RPAP's role be in supporting physician SEARCH participants **during** the SEARCH program?

10. What should RPAP's role be in supporting physician SEARCH participants **after** the SEARCH program?

11. What immediate support would help physicians get started in research activity? (Other than more hours in a day)

12. Is there anything you would like to add?
