Health practitioners’ perspective on caring for older adults in rural Maine – a Pilot Study

**Student Researchers**
Jessica Harnisch, MPH, Doctor of Osteopathic Medicine Candidate
Ali Stanley, Doctor of Physical Therapy Candidate
Amanda Langley, Master of Public Health Candidate
Jordan Beall, Master of Science Physician Assistant Candidate
### Student Coalition for a Healthy Aging Maine

<table>
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<tr>
<th>Student Researcher</th>
<th>Faculty Mentor</th>
<th>Student Background and Experience</th>
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| Jessica Harnisch, MPH, Doctor of Osteopathic Medicine Candidate | Victoria S. Thieme, DO | • 6 years experience in designing, conducting, and presenting qualitative and quantitative research  
  • Lead Practitioner Interviewer for the Georgia Maternal and Infant Health Research Group  
    o Conducted in-depth interviews, transcribed, and analyzed data for presentation at Georgia March of Dimes Prematurity Awareness Summit  
  • Published and presented undergraduate and graduate thesis |
| Ali Stanley, Doctor of Physical Therapy Candidate | Jim Cavanaugh PT, PhD, NCS | 12-week clinical experience in ambulatory physical therapy clinic located in Waterboro, ME. A majority of this patient population consisted of older/aging adults who would not otherwise receive physical therapy treatment due to the lack of other provider options in the immediate area. Upon completing my DPT curriculum, I wish to practice in rural Maine and continue to provide services to underserved areas in need of quality health care. |
| Amanda Langley, Master of Public Health Candidate | Rebecca Boulos, MPH, Ph.D. | 8 years experience of case management working with the elderly receiving in-home healthcare services. Past experience conducting interviews to assist with Yale Medical research study. After culmination of my MPH degree, I plan to use my research and analysis skills to evaluate and improve programs and policies aimed to improve public health, with a specific interest in elder care. |
| Jordan Beall, Master of Science Physician Assistant Candidate | Sara Hoffman, MPAS, PA-C | • 3 years of community health education experience in rural, Western Maine  
  o Coordinated specific preventative health programs aimed at older adults  
  o Organization of a grant-funded health district collaborative of stakeholders examining health status, access, and barriers to care  
  • HealthCorps service term with a FQHC clinic network working to expand patient access and health education interventions |
BACKGROUND AND SIGNIFICANCE

As of 2012, Maine has become the “oldest” state in the nation, with 22.3% of our population over the age of 60. The U.S. Census Bureau Projections estimates our population above 60 years of age will continue to grow to 31.4% by the year 2030 (U. S. A. o. Aging, 2012). With an increase in the proportion of older adults, Maine will need a concomitant increase in health care providers that are trained to care for the needs of an aging population. As of 2014, Maine has 48 certified Geriatricians, many of which are localized to larger medical centers in Portland, Augusta, and Bangor (Peterson, 2011). In order to cope with the projected increase in Maine’s aging population, an additional 112 Geriatricians will need to be trained (Society, 2015). Maine also has a shortage of nurses due to the large and continually growing older adult population, and it is expected that the number of vacancies in hospitals, nursing facilities, and home health agencies will continue to grow (Lenardson, 2007).

In 2014, the University of New England Maine Geriatric Education Center conducted an Educational Needs Assessment amongst healthcare practitioners that treat older adults in Maine, and they found that only 8% of respondents reported having a certificate in geriatrics. When respondents were asked about their practice of evidence based clinical geriatric care, 39% of respondents had never used the Confusion Assessment Method (CAM) to assess for dementia during a visit with an older adult patient. Additionally, 36% of respondents never provided fall-related resources to their older adult patients. These results suggest that not only are Maine’s healthcare practitioners lacking specific certification in caring for our growing older adult population, but also many practitioners are not utilizing key clinical care guidelines that are specific for our older adult population. (Center, 2014)

It is recognized that Maine’s older adults often live far away from necessary health care and that community health workers are challenged in these rural areas, if they exist there at all. Health providers can no longer financially afford to care for older adults in rural areas, leaving them without necessary services (M. C. o. Aging, 2015). Citizens of rural populations know that traveling distances is something that comes with their “way of life,” but this distance becomes a more significant barrier as it prevents access to routine and specialty healthcare as well as access to emergency care. As these populations age, the factors that necessitate healthcare also make travel to reach needed care more of a burden (Buzza, 2011). When needed care is not accessible, health needs can become more dire or are simply not addressed.

We are conducting this pilot study for the purpose of identifying challenges and determining what solutions Maine’s practitioners have to better the health care for our aging population in rural Maine. The information gleaned from our study will allow us to focus efforts and recommend areas where more research is needed. It is our intention to use this pilot study as a platform to recommend and conduct future Interprofessional Experience projects and research, and build a coalition of University of New England health professional students that are dedicated to exploring the successes and overcoming the challenges and barriers that health professionals face when caring for older adults in rural Maine.

RESEARCH QUESTIONS AND STUDY OBJECTIVES

Research Questions

Research Question 1: What are the challenges that healthcare practitioners face while providing care to their older/aging adult patients in rural Maine?

Research Question 2: What suggestions do healthcare practitioners have for improving health care provision to older/aging adults in rural Maine?

Objectives

Objective 1: To understand the perspectives that healthcare practitioners hold in caring for older adults in rural Maine.

Outcome 1.1: Identify the unique and shared experiences healthcare practitioners in rural Maine hold in regards to care of older adults.
Outcome 1.2: Compare and contrast the experiences healthcare practitioners have by practitioner type (physician, social worker, etc.) and region (Down East vs. Central Maine, etc.).

Objective 2: To determine the challenges, barriers, and opportunities to improve the care that older adults receive in rural Maine.
Outcome 2.1: Determine the daily challenges and barriers that practitioners face.
Outcome 2.2: Offer potential solutions to these challenges through improvement of training, practice or community resources, and policy changes.

METHODS

Design
This is a qualitative study that will be conducted via an in-depth interview guide (see Appendix A). An in-depth interview guide will be developed, and the same in-depth interview guide will be used for all practitioners. Interviews will be conducted in person and on-site. The interviews will be 45-60 minutes in duration. Interviews will be recorded via a digital voice recorder.

Recruitment
Initial contacts will be made based on established relationships within each researcher’s respective field, as well as the connections via faculty mentors and members of the Maine Area Health Education Center (AHEC). Snowball sampling will be utilized from initial contacts.

Methods
Each researcher will conduct up to five interviews, with up to 25 total interviews being conducted between May 15 - July 31, 2016. Practitioners that work within the Federally Designated Primary Care Health Professional Shortage Areas will be interviewed (Appendix B). Each researcher will be designated to a region of Maine and will interview physicians, physician assistants, nurse practitioners, social workers, occupational therapists, and physical therapists that care for community-dwelling older adults in Rural Maine. All interviews will be transcribed verbatim. All identifying information will be removed to maintain the practitioner’s anonymity.

Analysis: Transcribed interviews will be analyzed via NVivo, allowing for thematic analysis of each interview. Two separate analysts will analyze each transcribed interview in order to improve validity. Analysis will be code-based, and themes will be established as each interview is analyzed. Themes will be compiled into coding tables, and comparative analysis will be conducted between practitioner types and geographical regions.

Reporting: Major themes will be determined and compared amongst the interviews. A coding table will be constructed, and a representative quote will be given for each theme.

DISSEMINATION PLAN
At the culmination of our project in August 2016, we will compile a poster presentation that can be presented at each researcher’s respective Research Day (i.e. UNECOM Research Day). In addition, we will be submitting an abstract for the purpose of an oral presentation at the Maine Geriatrics Conference in Bar Harbor in June 2017, or if not accepted, we will submit an abstract for the Maine Summit on Aging in September 2017. These presentations will be aimed at summarizing the themes discovered through our research, as well as offering suggestions to meet these challenges and areas needed for future research.
BUDGET JUSTIFICATION

Equipment

Digital Voice Recorders: All interviewers (4) will require a digital voice recorder, which will be purchased on Amazon for $50. Therefore, $200 of the budget will be spent on digital voice recorders.


Travel Expenses

Travel to practitioner practices is essential for conducting interviews.

Mileage: Student researchers will be using their personal automobiles to travel to interview sites. Student researchers will be compensated $.54/mile driven. Student researchers will be responsible for tracking the mileage for every trip taken in pursuit of conducting interviews.

Hotel accommodations: While hotel accommodations are not expected to be needed, they could be necessary in the event the student researcher is conducting interviews in the same region over the course of many days. In this event, student researchers will be given $100 per night for accommodations, for a max of two nights.

Meals while traveling: While traveling, student researchers will be given an allowance of $20 per day while conducting interviews.

Conference Costs

The results of this pilot study will be presented at the Maine Geriatrics Conference in Bar Harbor in June 2017, or at the Maine Summit on Aging in September 2017. Cost for student registration has not yet been released for these conferences. However, based on the experiences of the research team, conference costs typically cost between $200 - $500 for registration, hotel accommodations, and printing of presentation materials.
## PROPOSED PROJECT BUDGET

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<td>152 miles to Rumford, ME = $82 + 136 Bethel, ME = $73</td>
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# Project Timeline

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<th>Month/Year</th>
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<th>Jessica Harnisch, MPH, DO Candidate</th>
<th>Ali Stanley, DPT Candidate</th>
<th>Amanda Langley, MPH Candidate</th>
<th>Jordan Beall, MSPA Candidate</th>
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<tr>
<td>2/16</td>
<td>Submit IPE mini-grant</td>
<td>Meet with AHEC</td>
<td>Schedule early May interviews</td>
<td>Finalize in-depth interview guide</td>
<td>Transcribe + build mini-report for May interviews</td>
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<td>3/16</td>
<td>Submit IRB app</td>
<td>Schedule late May + early June interviews</td>
<td>Qualitative analysis crash course with Dr. G</td>
<td>Thematic Analysis of all May and June interviews</td>
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<td>4/16</td>
<td>Confirm Faculty Mentors</td>
<td>Meet with faculty mentors to finalize summer plans</td>
<td>Interview Stuart Damon, DO-Vinalhaven Island</td>
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<td>5/16</td>
<td>Schedule July interviews</td>
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<td>Presque Isle interviews</td>
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<td>Interview Stuart Damon, DO-Vinalhaven Island</td>
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**Activity Details:**
- **Submit IPE mini-grant**
- **Meet with AHEC**
- **Schedule early May interviews**
- **Finalize in-depth interview guide**
- **Transcribe + build mini-report for May interviews**
- **Complete thematic analysis**
- **Summarize interview findings into poster presentation and journal article**
- **Quality Counts Conference**
- **Maine Geriatrics Conference**
- **Summit on Aging Conference**
- **Schedule late May + early June interviews**
- **Qualitative analysis crash course with Dr. G**
- **Thematic Analysis of all May and June interviews**
- **Confirm Faculty Mentors**
- **Meet with faculty mentors to finalize summer plans**
- **Schedule July interviews**
- **Interview Stuart Damon, DO-Vinalhaven Island**
- **Presque Isle interviews**
- **Interview Stuart Damon, DO-Vinalhaven Island**
- **Presque Isle interviews**
APPENDICES

APPENDIX A: In-depth Interview Guide

Objectives

To understand the perspectives that health care practitioners hold in caring for older adults in rural Maine. To determine the challenges, barriers, and opportunities to improve the care that older adults receive in rural Maine.

Research Questions

What are the challenges that health care providers experience while providing care to their older/aging adult patients? What are their suggestions for improving health care for older/aging adults in rural Maine?

Target Population: Health Care Providers for Older/Aging Adults

All practitioners must treat community-dwelling older adults.

1. Family Medicine Physicians and Geriatricians
2. Physician Assistants/ Nurse Practitioners
3. Physical Therapists
4. Occupational Therapists
5. Social Workers

INTRODUCTION

Good afternoon. My name is _______ and I am a _______. I am doing a research project with other health professional students at the University of New England and we are interested in learning about the care that practitioners provide, the challenges they face, and the suggestions that they have to better older/aging adult care and outcomes in areas of Maine that are underserved. This interview will take about 45 minutes. I would like to let you know that your participation is voluntary and you can stop me at any time. Please do not hesitate to let me know if you feel uncomfortable answering any of the questions.

I would like your permission to tape record this conversation so that I can come back to it later and have an accurate account of what we talked about. No one else will hear this recording aside my colleagues and me working on this project. If I discuss this interview with anyone else your name will be omitted from the records. If you would like, you can choose an alias for the purpose of confidentiality in the transcript.

Is it ok if I start the recorder now?
Health practitioners’ perspective on caring for older adults in rural Maine – a Pilot Study

WARM UP QUESTIONS/DEMOGRAPHICS

I am first going to ask you a bit about yourself and your practice.

1. Where are you originally from?
2. Where did you receive your training?
3. How do you like living and practicing in [__practitioner’s town___] now?
4. Have you ever been a caregiver for an older adult in your family?

LOCAL OLDER ADULT PATIENT POPULATION

5. Tell me about your older adult patient population in [__practitioner’s town___].
6. What are a few of the more common ailments/diseases that you treat your older adult patients for?
7. Could you describe your older adult patients’ living situations?
   a. What proportion of your patients is living on their own?
   b. What proportion of your patients is living with family?
   c. What proportion of your patients is living in an independent living facility/retirement home?
8. Could you describe any specific or additional training that you’ve attained in order to care for older adult patients?

CHALLENGES, BARRIERS, AND OPPORTUNITIES TO IMPROVE HEALTH CARE FOR OLDER ADULT PATIENTS IN RURAL MAINE

9. Describe the challenges, if any, that you face on a daily basis in providing care to your older adult patients. For example:
   a. Transportation
   b. Medication management
   c. Frequency of visits
   d. Home support
   e. Maine Care/Medicare reimbursement
   f. Communication between family and health care team
10. Do you feel adequately trained to care for your older adult patients?
    a. (If appropriate) What training would you like to receive in order to better care for your older/aging adult patients?
11. Do you feel adequately supported to care for your older adult patients?
    a. (If appropriate) What support would you like to receive in order to care for your older/aging adult patients?
12. Are there aspects of your job that make it easier to provide care to your older adult patients?
13. What successes have you had in your practice or community in caring for your older adults?
14. Do you believe the needs of older adults are being met in rural Maine/your community?
    a. How can health care be improved for older adults?
15. What challenges do you foresee in caring for the aging adult population in Maine? In 5 years? 10 years?
16. Do you think recruiting more practitioners to practice and care for the older adult population in rural areas of Maine is necessary?
   a. [If appropriate] Which practitioners are most needed in your area?
17. As a practitioner, how do you feel about aging?
18. Do you have any other comments that you would like to share regarding the health of older adults in [___practitioner’s town___]?
Health practitioners’ perspective on caring for older adults in rural Maine – a Pilot Study

APPENDIX B: Maine Regional Map of Planned Interview Locations
REFERENCES

February 20, 2016

Letter of Support

Dear Kris and IPE Team,

Please accept this letter in support of Jessica Harnisch who is a first year osteopathic medical student requesting financial support through this mini grant application for her team’s research project.

Jessica approached me early on in her first year describing her interest and ambition to pursue research in the area of rural geriatrics. She sought guidance from me in order to connect with faculty and staff at UNE involved in rural health care in Maine. I was quite taken by her clarity and ambition at a time when most first years are struggling with their anxiety around anatomy and first year courses. Throughout this year, Jess has continued to develop connections and form her health care team as demonstrated by the members listed in her proposal.

Presently it is the team’s plan to understand the perspectives of health care providers who are caring for older adults in rural Maine. The team’s goal is to determine challenges, barriers as well as opportunities to improve our health care system.

As part of this letter of support, I pledge my assistance in the process of navigating the IRB, fulfilling their timeline, reaching their goals and navigating any difficulties.

As you review the student’s skills and experience in this area of research, I am certain you will enthusiastically support their research. If you have any need for further communication, do not hesitate to communicate with me if I can be of help.

Sincerely,

VS Thieme, DO
Co-Director of Geriatrics
Director of Community Medicine
UNE COM
February 4, 2016

Mini-grant Coordinator
Center for Excellence in Interprofessional Education
University of New England

Dear Sir or Madam:

It is my great pleasure to write this faculty advisor letter in support of Ali Stanley and her research team as part of their student-led mini-grant application.

I have known Ms. Stanley since she matriculated into the Doctor of Physical Therapy (DPT) program at UNE in 2014. She impressed me immediately with her strong, goal-oriented, articulate, and team-oriented focus in the program. Indeed, she quickly was elected as president of her DPT class and was appointed as a core student ambassador for the American Physical Therapy Association. She excels as a student in good academic standing. She is professional, compassionate, and a model of integrity. She already has become a valuable asset to our program and to the profession of physical therapy.

Ms. Stanley and her team have developed a worthwhile research project designed to better understand the perspectives that healthcare practitioners in caring for older adults in rural Maine. As part of this process, they seek to determine challenges, barriers, and opportunities to improve the healthcare. The team intends to collect, analyze, and disseminate their data in 2016.

Along with the other faculty advisors, I understand that my role in the project is to supervise and support Ms. Stanley as she and her team conduct the proposed project. I will help ensure that the students stay on track, manage their budget, proceed in a timely fashion with project goals, and prepare to present their project in an open forum. I also will help guide her and her team through the IRB application process.

Sincerely,

James T. Cavanaugh, PT, PhD
Associate Professor
jcavanaugh@une.edu
February 20, 2016

Dear CEIPI Mini-Grant Selection Committee:

I am writing to express my strong support for the Center for Excellence in Interprofessional Education mini-grant application submitted by students from Physical Therapy, Public Health, Social Work, Physician Assistant, and the College of Medicine for their research project, “Health practitioners’ perspective on caring for older adults in rural Maine – A pilot study.”

My support for this application stems from a deep belief that interprofessional service learning should be required of all health science students given the interwoven nature of our professions, and the regular interaction we have with diverse populations. In particular, research conducted by the Institute of Medicine (IOM) demonstrates a growing need for increased focus on geriatric care by health care providers, health professions students, and educational institutions. The research also found the health care workforce is unprepared to meet the needs of this population, resulting from both a lack of interest in the geriatric field and insufficient education in geriatric care. Insufficient knowledge about older adults has been found to be correlated with negative attitudes toward them, which can result in lower quality care and poor health outcomes such as premature loss of independence, increased disability, and higher mortality. Promisingly, it appears educational interventions with health professions students may improve attitudes and increase empathy toward older adults. Therefore the opportunity for these students to work directly with older adults is one step in the right direction toward offering a high quality standard of care for this population.

One of the best parts of being a faculty member is learning with students. It is such an enriching experience for students to design and execute their own research project. I am so thrilled about this opportunity to advise this project. Please accept this very strong letter of support, and let me know if you have any questions or require additional information.

Best regards,

Rebecca J. Boulos, MPH, PhD
Assistant Professor, School of Community and Population Health
February 25, 2016

Mini-grant Coordinator
Center for Excellence in Interprofessional Education
University of New England

Dear Sir or Madam:

Please accept this endorsement as Jordan Beall’s faculty advisor that she and her research team have my full support for their student-led mini-grant application.

I have known Ms. Beall since she matriculated into the Master of Science Physician Assistant program at UNE in May 2015. From the first day of class onward, she has exemplified all the qualities of a promising physician assistant – she is thoughtful, smart, professional, and most importantly, compassionate. Additionally, she demonstrates initiative and leadership skills within her cohort of the PA program. Of note, she was elected by her fellow classmates to be the student representative for the Maine Association of Physician Assistants, the Maine constituent chapter of the American Academy of Physician Assistant.

Ms. Beall and her team have developed a timely and curious research project designed to better understand the challenges that healthcare providers face while providing care to the older adults in rural Maine. By understanding the perspectives of these healthcare providers, Jordan and her research team will be able to propose ways to overcome these barriers, disseminating their data from the research project to others in an upcoming conference.

In support of Ms. Beall and the research team, I will be willing and available to offer supervision and support as they conduct their literature review and conduct and collect data in rural Maine. Along with the other faculty advisors, I will help ensure that the students meet their goals and objectives as outlined in greater detail on the mini-grant application. Please let me know if you have any questions or concerns.

Sincerely,

Sara Hoffman, PA-C
Assistant Professor
Physician Assistant Program
University of New England
shoffman1@une.edu
207-221-4552