

Principal Investigator

Application Number: 950

Name: McNally
First Name: Mary
Salutation: Dr.

Institution: Dalhousie University
Department: Faculties of Dentistry and Medicine

Project Details

Title: Brushing up on Mouth Care: Supporting caregiving and oral health from research to policy to everyday practice.

Category of Research: Health Services

Keywords: family and friend caregivers daily oral care oral health
dependent older adults long-term care policy knowledge translation

Most applicable/predominant NSHRF priority related to the project: Continuing care models

Institution that will administer funds: Dalhousie University

Total Requested: ██████████

Please tell us how you heard about this funding opportunity: NSHRF Website

Principal Investigator CCV/Resume

File Name	Date Attached	Size (KB)
CCV-MaryMcNally-NSHRF_CV.pdf	29/11/2016	55

Plain Language Summary

Provide a clear and concise description of their project, written in language suitable for a non-scientific audience. Describe the objective of your project (the activities for which you are requesting funding), the potential impact of the project on sharing research knowledge in the province and any potential impact on improving the health of Nova Scotians through the research knowledge being shared.

Nova Scotia has been a leader in research on the oral health of its older population. We have learned that Nova Scotians are living longer and maintaining more of their natural teeth as they age. This trend, though welcome, brings new patterns of oral disease and new challenges, especially for older adults who depend on others to assist in their day-to-day care.

Our research team has worked directly with older Nova Scotians, with those who provide care for older adults, and with educators and policy makers to tackle these challenges. We have developed the Brushing Up on Mouth Care program that includes resources (educational videos, oral care tool kits, instructional manuals, and methods for measuring oral health and planning care) that have been introduced to all Long Term Care facilities, Home Support agencies and Continuing Care Assistant training programs in Nova Scotia. The resources are also available on the Brushing Up website.

We are currently partnering with Caregivers Nova Scotia (CNS) to reach new groups of people. CNS is a non-profit organization that informs, supports, and educates its more than 4000 members across Nova Scotia who are unpaid family and friend caregivers. Our research team and CNS are working together to develop and adapt the Brushing Up resources so they can be used by caregivers looking after their loved ones at home.

The Brushing Up program has played a key role in creating educational standards for oral care that became part of the provincial Continuing Care Assistant training program in 2012. Earlier this year these standards also became part of provincial guidelines that require oral health assessments and care-planning for all continuing care residents.

This Knowledge Sharing Support Award will allow us to adapt the Brushing Up resources for family and friend caregivers and to offer support for Long Term Care administrators and personal care providers to meet the new oral health guidelines in the 2016 Nova Scotia Long Term Care Program Requirements. Specifically we will adapt, distribute, and evaluate the existing Brushing Up resources for family and friend caregivers; make the Brushing Up website easier to use; and work with a broad range of new and existing partners to re-launch the website and the new resources.

The impact of this project is expected to be far-reaching. It is possible that every older adult in Nova Scotia who relies on a caregiver or care provider to help with personal daily care could be touched by this work. This is not about professionally delivered oral health services. It is about the necessary day-to-day care that is required to keep our most vulnerable older adults healthy and enjoying an optimal quality of life. On the surface, brushing, flossing and other types of daily mouth care may seem to be mundane tasks. But when providing this care for others, it requires skill, the right resources and the confidence to ensure it is done well.

Application Objectives

List the main learning objectives that you want to achieve over the full duration of your project. Ensure listed objectives cover all the main activities you plan to undertake using the project funds.

Please note: Funded applicants will be expected to report on progress related to the listed objectives.

Objective
Adapt, disseminate and evaluate existing Brushing Up resources for the unique needs of family and friend caregivers. Specifically, 1) enhance resources in the areas of dementia and disability care; 2) roll out resources to family and friend caregivers; 3) evaluate whether resources are meeting caregiver needs; 4) adapt resources based on evaluations.
Modify the Brushing Up website to: 1) maximize usability (availability, accessibility and navigation) of existing open-access content; 2) create specific navigation portals for the i) Caregiver audience; ii) LTC administrator, personal care-provider and educator audiences, and iii) French audience.
Engage in knowledge exchange with new and existing partners to inform and re-launch modified website and resources. Updated resources will be showcased at key knowledge user meetings and circulated to the expanded Brushing Up network of individuals and stakeholder groups for further dissemination through their membership and audiences.

“Some folks have had little or no oral care for a very long time. Have a look in your loved one’s mouth to see his/her state of care. Can you imagine not having your teeth cleaned for months, or never?” L.Sutherland (1)

The sentiments expressed by this retired nurse are the result of frustration over the care of a loved one who is suffering from dementia and living in residential care (2). Her concerns are not new and represent a growing awareness of the importance of oral health and oral hygiene to the overall comfort, health and quality of life of those who depend on others for their care. Nova Scotia has been a leader in supporting research to examine and address serious oral health and personal oral care issues facing its aging population (3-8). Consistent with global trends, we have learned that Nova Scotians are living much longer than their predecessors and are maintaining more of their natural teeth (3-5). These are welcome trends but they also result in new patterns of disease (4,5) and challenges for care (6). The purpose of this *Nova Scotia Health Research Foundation Knowledge Sharing Support Award* is to address knowledge gaps that will support family and friend caregivers and care-providers, administrators and educators in the continuing care sector to respond to the personal oral care crisis suggested by this quote.

This initiative follows from research findings and outputs of Nova Scotia’s Brushing Up on Mouth Care Project (*Brushing Up*) (6,7) described below as well as two exciting and timely developments in Nova Scotia. The first is a knowledge exchange partnership with Caregivers Nova Scotia (CNS) that will enable *Brushing Up* resources to be adapted to the needs of critical front-line family and friend caregivers. Secondly, this initiative supports needs arising from recently launched health policy that has been directly informed by our research and advocacy (1,7). For the first time, the Nova Scotia Department of Health and Wellness *Long Term Care Program Requirements: Nursing Home & Residential Care Facilities* (effective July, 2016) includes explicit standards for oral health and daily mouth care practice in the continuing care sector.

Over the past six months the Principal Investigators (representing CNS and *Brushing Up*) have brought together their respective expertise and networks to advance this knowledge sharing work.

Caregivers Nova Scotia (CNS) is a non-profit organization established in 1998 to inform, support, and educate its membership of over 4000 unpaid family and friend caregivers. CNS programming includes phone support, 21 support groups, developing and delivering educational workshops, and providing a broad range of resources through its library and website. CNS is also an ambassador for caregivers, serving on provincial and national advisory boards and committees to ensure that the voice of the caregiver is echoed in public policy (See Letter of Support).

Brushing Up represents a series of multifaceted research and knowledge exchange initiatives that began as a community-based intervention study in three Long Term Care (LTC) facilities in Nova Scotia. A daily mouth care program was developed, implemented and evaluated (6,7). Key outputs to support a broad range of care providers, administrators and educators in optimizing oral care for dependent older adults include a detailed instruction manual, five comprehensive education videos, oral care tool-kits, assessment and care planning tools that can be readily individualized, as well as guidelines for organizationally mapping oral care. These resources are also available nationally and internationally through an open-access website (<https://www.dal.ca/dept/hpi/community-reports/oral-care-uptake.html>) hosted by the Dalhousie University Healthy Population Institute (formerly the Atlantic Health Promotion Research Centre). In 2012-13, a Canadian Institutes of Health Research Knowledge Translation Supplement Grant supported the development of a nurse educator facilitator guide with detailed teaching modules to further support the uptake of daily mouth care. Hard copies of manuals, facilitator guides and videos were distributed to all LTC facilities (97), Home Support agencies (14) Continuing Care Assistant education programs (23) and to Caregivers Nova Scotia.

This program of research and knowledge exchange has been productive in identifying oral care needs of dependent older adults in Nova Scotia and in finding ways to support caregivers and care providers in meeting those needs. Until now, however, a clear set of policy guidelines to drive uptake of daily mouth care in formal continuing care settings has been absent. The importance of oral care endorsed through formal policy is also timely in complimenting awareness about oral care being generated through the efforts of CNS. Dependent older adults who live at home and who rely on the care of loved ones are the same dependent older adults who may ultimately require entry into formal residential living arrangements. Greater awareness of the complexities of this aspect of personal care by family members will foster realistic expectations in transitions to the continuing care sector. This Knowledge Sharing Support Award marks a critical opportunity to make a timely and pragmatic contribution to the enhancement of existing research findings and resources to meet the needs of both new and existing audiences.

Knowledge Sharing Objectives and Approach: (see detailed workplan)

Objective 1: Adapt, disseminate and evaluate existing Brushing Up resources for the unique needs of family and friend caregivers.

Caregivers Nova Scotia, in collaboration with the *Brushing Up* lead, has already begun this work. Specifically, a *Brushing Up on Mouth Care for Caregivers* education resource has been piloted with an estimated 75 family and friend caregivers. Pilot feedback suggests the need to: 1) enhance resources

(particularly in the areas of dementia and disability care); 2) roll out resources to family and friend caregivers at workshops in each region of the province in 2017; 3) evaluate whether resources are meeting caregiver needs and 4) adapt resources based on evaluations and feedback.

Objective 2: Modify the Brushing Up website to:

- i.* maximize usability (availability, accessibility and navigation) of existing open-access content. CNS expertise will ensure that web-based navigation and evolving content developed for caregivers are adapted, labeled and formatted appropriately for the audience.
- ii.* create specific navigation portals for the 1) Caregiver audience per above; 2) LTC administrator, personal care-provider and educator audiences to meet formal *LTC Program Requirements*; and 3) French audience. (Open-access *Brushing Up* resources already translated to French have not been available due to constraints of the existing web platform).

Objective 3: Engage in knowledge exchange with new and existing partners to inform and re-launch the modified website and resources.

A hallmark of the *Brushing Up* project was its vast network engaging multiple audiences and stakeholders to create awareness about oral care needs and the resources developed through the initial projects (8) (See Appendix II - KT/E Map). Building from both longstanding and new collaborations, the *Brushing Up* Knowledge User contact database will be updated. A meeting will be held with key knowledge users to launch the project and another to re-launch the *Brushing Up* website following the completion of Objectives 1 and 2. Web-links and electronically packaged resources will be showcased and circulated to the expanded and updated network of individuals and stakeholder groups for their further dissemination through mail-outs, newsletters, website links and direct education opportunities through their membership and audiences. Key collaborators (Health Association of Nova Scotia, the Nova Scotia Community College, Community Links, the Nova Scotia Centre on Aging, the NS Continuing Care Assistants' Program, VON, and the Healthy Population Institute) provide endorsement and commitment (See Letters of Support and Appendix III).

As the original funders of the *Brushing up* project, this proposal clearly aligns with the mandate of the Nova Scotia Health Research Foundation to improve the health of Nova Scotians. In addition to the research itself, our longstanding advocacy and knowledge exchange is helping decision-makers understand current evidence and policy needs that both respond to the changing demographic brought on by our aging population and address a relatively new and complex aspect of personal care. This work is not about professionally delivered oral health services. It is about the necessary day-to-day care that is required to keep our most vulnerable older adults healthy and enjoying an optimal quality of life.

Timeline and Work-plan - Objectives will be met over a span of 40 weeks (May 2017 – March 2018)

Objective 1: Adapt, disseminate and evaluate Brushing Up resources for family and friend caregivers.

Weeks 0 – 8: Adapt - Feedback from previously conducted family and friend caregivers pilot oral care workshop sessions will be reviewed with the support coordinators and oral health experts on the project team. Based on this review the existing Brushing Up education resources will be modified to include identified priority areas.

Weeks 8 - 24: Disseminate - Six *Brushing Up on Mouth Care for Care Givers* education workshops will be held across Nova Scotia. These workshops will be 2 hours long and will accommodate approximately 25 participants per workshop.

Weeks 24 - 40: Evaluate - Evaluation questionnaires will be administered at each education workshop (Appendix IV) and a follow-up telephone evaluation of the education program will be conducted by the research coordinator four weeks following the workshops to explore the value and usability of lessons learned applied in the caregiving setting.

Objective 2: Modify the current Brushing Up website.

Weeks 0 – 8: A web-designer, the project team and research staff will plan modifications to the current *Brushing Up* website (including adaptation to a Wordpress platform) to maximize usability of navigation features and resources.

Weeks 8 – 24: Existing website resources will be transitioned to Wordpress. A menu of resources already developed for LTC (documents, assessment tools and education modules critical to meeting the formal LTC Program Requirements) and for French speaking audiences (translated printable open-access documents) will be identified, formatted and integrated into the website.

Weeks 24 – 40: Resources created as part of Objective 1 will be integrated into the website as they become available.

Objective 3: Knowledge exchange activities to inform and re-launch modified website and resources

Weeks 0 – 8: A launch meeting consisting of project team members as well as HPI and CNS staff identified to support the project will be held to confirm details of the project scope, planning, responsibilities and expectations. Key stakeholders (including those who provided letters of support and others described in the Impact statement) will be identified and invited to a knowledge exchange meeting (2 hours) for input on objectives 2 and 3 by week 8.

Weeks 8 – 40: Communication with the team and stakeholders will be achieved through regular email updates and teleconferences as required to seek ongoing input and to advance further networking.

Weeks 30-40: A second knowledge exchange meeting (2 hours) will be held to showcase the updated resources, solicit feedback on website developments and to seek input from stakeholders on broad dissemination.

Impact Statement

The impact of this knowledge sharing initiative for Nova Scotians is expected to be far reaching. It is conceivable that every older adult in the province who relies on a caregiver or care provider to assist with personal daily care could be touched by this work. This proposal comes with the credibility of over a decade of research, knowledge exchange and advocacy within Nova Scotia. A *Brushing Up* knowledge exchange provincial workshop, involving over 70 participants, provided the foundation and impetus for educational standards (incorporated into the provincial Continuing Care Assistants Curriculum in 2012) and the provincial guidelines requiring mandatory periodic oral health assessments and care-planning for all continuing care residents (Nova Scotia Department of Health and Wellness [NS DOHW] *Long Term Care Program Requirements: Nursing Home & Residential Care Facilities*, 2016). While these policy initiatives target clear expectations and responsibilities, this knowledge sharing opportunity **will provide timely support for professional care providers**. In addition, the commitment of Caregivers Nova Scotia to provide education that reflects best practices will bring confidence that **optimal oral care is available to the loved ones of family and friend caregivers**. Feedback gathered through evaluation of education workshops will ensure that caregiver voices contribute to ongoing development of education tools most suited to the private home setting. The fifteen provincial organizations highlighted in the knowledge translation network map (Appendix II) will be re-engaged to provide a conduit to knowledge user sectors in addition to the NS DOHW Continuing Care Branch and Caregivers Nova Scotia. Additionally, the broad network of family and friend caregivers reached through the Nova Scotia affiliates of the ALS Society, Alzheimer Society, Disabled Persons Coalition, Heart and Stroke Foundation, Multiple Sclerosis Society, as well as Muscular Dystrophy (Atlantic Canada Region), Parkinson Society Maritimes, and the VON will be the beneficiaries of communications and referrals for the updated Caregivers Nova Scotia workshop and web-based materials.

The participation of [REDACTED] (a faculty member and junior researcher in the School of Dental Hygiene, Dalhousie Faculty of Dentistry) adds an additional knowledge sharing opportunity. [REDACTED] coordinates outreach programs for senior Dental Hygiene (DH) students to provide oral hygiene education and support to care providers in over fifteen LTC facilities in the Halifax Regional Municipality. There has been a recent increase in demand for the DH student program, particularly in response to care providers' expressions of concern over feeling ill-equipped and apprehensive when providing daily oral care. DH students work directly with care providers and residents, demonstrating "hands on" techniques for assessment, planning and prevention focused daily mouth care utilizing *Brushing Up* resources. Networking through this project will support expansion of the DH outreach programming to additional facilities in Nova Scotia and will help to align compliance with the new LTC Program Requirements with education needs.

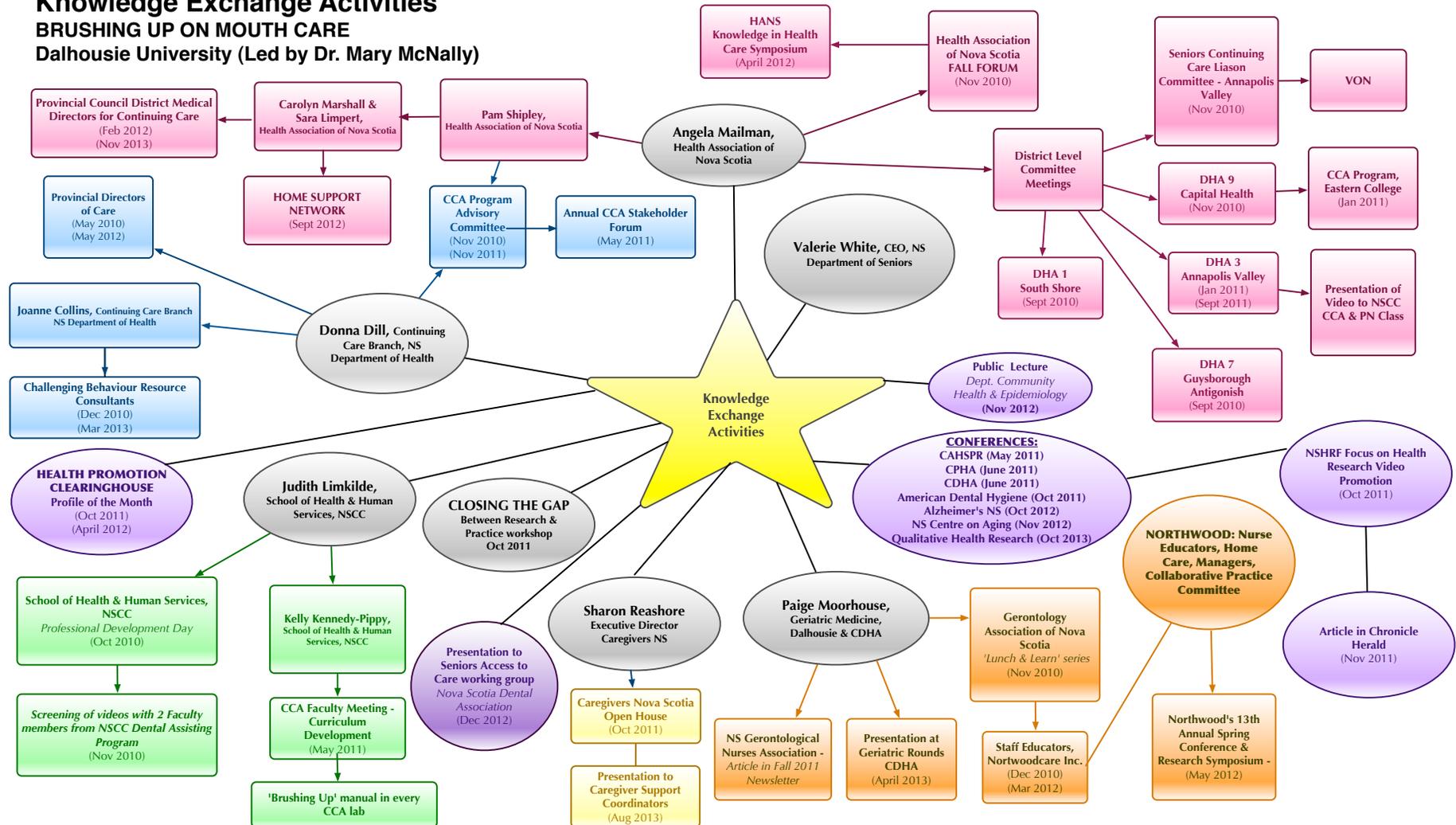
APPENDIX I

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Appendix II Knowledge Sharing Support Award

Knowledge Exchange Activities BRUSHING UP ON MOUTH CARE Dalhousie University (Led by Dr. Mary McNally)



Key audience groups represented in Figure.

- Directors of Care (Digby, May 2012)
- Provincial Council District Medical Directors for Continuing Care (Feb 2012, November 2013)
- Health Association of Nova Scotia (multiple presentations) including Fall Forum (2011) and Knowledge in Health Care Symposium, (April 2012).
- Provincial Continuing Care District Level Committee presentations (Multiple: DHAs 1, 3, 7, & 9)
- Valerie White, CEO, NS Dept of Seniors
- Joanne Collins, Coordinator, Challenging Behaviours Program, NS Dept Health & Wellness
- Challenging Behavior Resource Consultants (December 2010, March 2013)
- Ruby Knowles, Executive Director of Continuing Care, NS Dept of Health & Wellness (April 2012)
- Donna Dill, Director, Monitoring & Evaluation, NS Dept of Health & Wellness (multiple presentations)
- Continuing Care Assistant Program Advisory Committee (2010 & 2011)
- Annual Continuing Care Assistants Stakeholder Forum
- School of Health & Human Services, Nova Scotia Community College (2011)
- Nova Scotia Community College - CCA Faculty Meeting: Curriculum Development Day (May 2011)
- Eastern College – CCA Program
- Nova Scotia Gerontological Nurses Association (Article in Newsletter)
- Gerontology Association of Nova Scotia – Lunch & Learn Series (November 2010)
- Northwood Nurse Educators, Home Care Managers & Collaborative Practice Committee (2010,2012)

More than 40 presentations were conducted over the course of the Brushing Up on Mouth Care project to raise awareness, seek input and build advocacy for optimizing mouth care in the Continuing Care sector

Brushing Up Workshop Evaluation

Location: _____ Facilitator: _____ Date: _____

It is important for us to get feedback on our workshops and how they might be improved to serve you better.

Please mark the circle that describes how you feel about the following statements:

1. The material in this workshop was presented clearly.
 strongly agree agree **Text** disagree strongly disagree

2. The handouts and activities were helpful and supported the material presented.
 strongly agree agree disagree strongly disagree

3. I learned how oral health affects overall health.
 strongly agree agree disagree strongly disagree

4. I learned how I can help myself and my care recipient to maintain good oral health.
 strongly agree agree disagree strongly disagree

5. I will use the information I learned today.
 strongly agree agree disagree strongly disagree

6. One thing I found helpful in this workshop was:

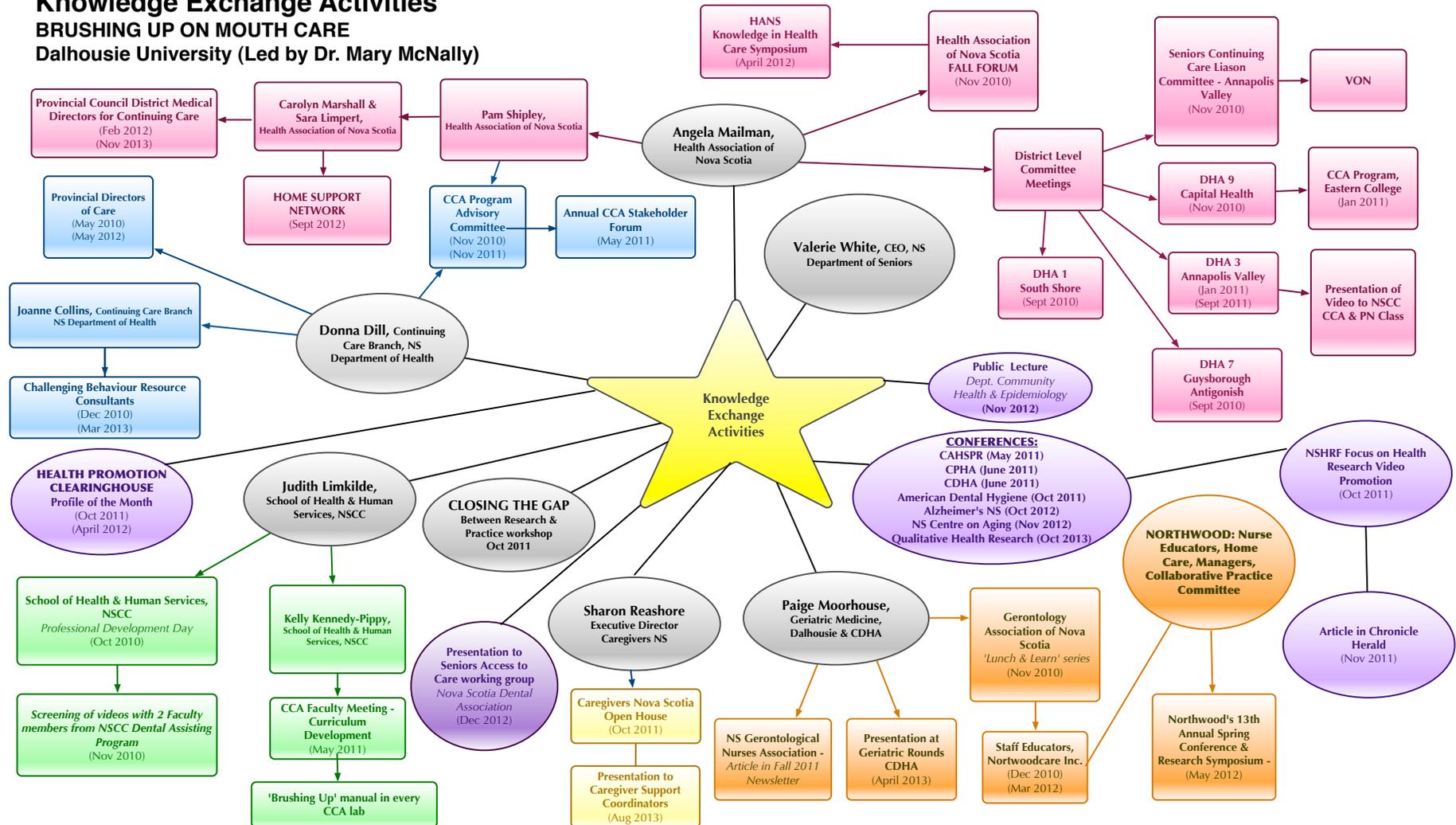
7. One thing I feel could be changed in this workshop is:

8. Any other comments: _____

Thank you for your participation!

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6. One thing I found helpful in this workshop was:

7. One thing I feel could be changed in this workshop is:

8. Any other comments: _____

Thank you for your participation!