The Alzheimer's Drug Therapy Initiative (ADTI) was announced in October, 2007, consisting of three concurrent programs: drug coverage, education, and research. The PharmaCare program covered cholinesterase inhibitors (ChEIs) with approval of a Special Authority (SA) form submitted by physicians. A dementia education strategy for physicians offered professional development from November 2007 through June 2012. The research program consisted of four studies conducted from the University of Victoria (UVic) and one from the University of British Columbia (UBC).

The four UVic studies are briefly described below. The draft final report with recommendations regarding coverage and comments to inform policy in British Columbia (B.C.) was submitted to the Ministry of Health on May 15, 2015. The finalized report is due August 15, 2015. In September 2015 the Drug Benefits Council will meet to review the ADTI report, together with evidence from multiple other sources. It will recommend to the B.C. government whether ChEIs should be added to the funding schema and in the event they are, policy development regarding coverage, i.e., with or without SA. The decision is expected to be finalized in 6-8 weeks after the Council meeting.

The ADTI program of drug coverage and research constitute 'Coverage with Evidence Development':

# Seniors' Medication Study

The SMS was a prospective longitudinal observational study. It sought to understand outcomes of patients taking ChEIs with an initial indeterminate response and to assess the adequacy of the Standardized Mini-Mental State Examination (SMMSE) on the SA.

### Clinical Epidemiological Study

This observational study drew on data from SA forms and provincial administrative datasets to examine response to ChEIs among those covered under the ADTI.

## Utilization and Cost Study

This study drew on provincial administrative data to examine use of and costs of other health care services prior to and after the ADTI was launched as well as the effect of ChEI use on clinical outcomes and costs of health services.

# Caregiver Appraisal Study

This study included face-to-face interviews, province-wide, with family caregivers to persons prescribed ChEIs, and covered for the medications under PharmaCare. It sought to better understand family caregivers' perceptions of the effects of taking ChEI, on patients and on themselves as caregivers as well as to compare their assessments with clinical assessments.

Researchers continue analyzing data, for academic presentations and publications. Publications to date:

### **Articles Published in Referred Journals**

- Roland, K. P., & Chappell, N. L. (2015). Relationship and stage of dementia differences in caregiver perspectives on the meaning of activity. *Dementia: The International Journal of Social Research and Practice*. Published on-line. <a href="http://dem.sagepub.com/content/early/2015/05/20/1471301215586287.full.pdf?ijkey=Durlc8b6pC5SJzN&keytype=finite">http://dem.sagepub.com/content/early/2015/05/20/1471301215586287.full.pdf?ijkey=Durlc8b6pC5SJzN&keytype=finite</a>
- Roland, K. P., & Chappell, N. L. (2015). Meaningful activity for persons with dementia: Family caregiver perspectives. *American Journal of Alzheimer's Disease & Other Dementias*. Published on-line, pp. 1-10. doi: 10.1177/1533317515576389
- Roland, K., & Chappell, N. L. (2014). A typology of caregiving across neurodegenerative disease presenting with dementia. *Ageing & Society*. Published on-line, pp. 1-23. doi: 10.1017/S0144686X1400066X
- Chappell, N. L., Dujela, C., & Smith, A. P. (2014). Spouse/adult child differences in caregiving burden. *Canadian Journal on Aging*, *33*(Spec. Issue 4), 462-472. doi: 10.1017/S0714980814000336
- Chappell, N. L., Dujela, C., & Smith, A. (2014). Caregiver well-being: Intersections of relationship and gender. *Research on Aging*. Published on-line doi: 10.1177/0164027514549258
- Smith, A., Kobayashi, K., Chappell, N. L., & Hoxsey, D. (2011). The controversial promises of cholinesterase inhibitors for Alzheimer's disease and related dementias: A qualitative study of caregivers' experiences. *Journal of Aging Studies*, 25(4), 397-406. doi: 10.1016/j.jaging.2011.03.002
- Lee, P. E., Hsiung, G-Y. R., Seitz, D., Gill, S. S., & Rochon, P. A. (2011). Cholinesterase inhibitors. *BCMJ*, *53*(8), 404-408.
- Dujela, C. E. (2010). Cholinesterase Inhibitors, Clock Drawings, and caregivers. *BCMJ*, 52(4), 223.
- Maclure, M. (2009). Explaining pragmatic trials to pragmatic policy-makers. *Journal of Clinical Epidemiology*, 62(5), 476-478.
- Maclure, M. (2009). Explaining pragmatic trials to pragmatic policy-makers. *CMAJ*, 180(10), 1001.

## **Under Review**

- Fisher, A., Carney, G., Bassett, K., & Chappell, N. (under review). Cholinesterase inhibitors utilization: The impact of provincial drug policy on discontinuation.
- Fisher, A., Carney, G., Bassett, K., & Chappell, N. (under review). Switching between cholinesterase inhibitors: Effects of a new drug coverage plan and duration of use.
- Smith, A., Dujela, C., & Chappell, N. (under review). Who do you start, who do you stop?: Physicians' experiences with managing long-term cholinesterase inhibitor therapy.
- Chappell, N.L. (under review). Social Determinants of Health; Do they Apply to Caregivers?

#### **Presentations**

- Chappell, N.L., Pryzdatek, M., Dujela, C., & Smith, A. (2016, November). *Caregivers to Those with Dementia; Fears for the Future* 68<sup>th</sup> Annual Scientific Meeting of the Gerontological Society of America, Orlando, Florida.
- Roland, K., & Chappell, N.L. (2015, October). *Unique Contributions to Caregiver Burden across Neurodegenerative Diseases that Present with Dementia*. 44th Annual Scientific and Educational Meeting of the Canadian Association on Gerontology, Calgary, AB.
- Dujela, C. E., & Chappell, N. L. (2015, May). *The role of pets in the lives of those living with dementia in the community*. 9th Annual International Conference on Sociology, Athens, Greece, May.
- Roland, K. & Chappell, N. L. (2014, November). *Meaningful activity for person with dementia:* Caregiver perspectives. Paper presented at Gerontological Society of America, Washington DC.
- Roland, K., & Chappell, N. L. (2014, October). *Meaningful activity differences in spouse compared with adult-children dementia caregivers*. Canadian Association on Gerontology, Niagara Falls, ON.
- Roland, K., & Chappell, N. L. (2014, September). *The role of symptom presentation in dementia caregiver burden and self-esteem*. International Conference of Alzheimer's Disease and Dementia, Valencia, Spain.
- Chappell, N. L. (2014, October). *Intersecting inequalities, implications for caregivers*. 6th International Social & Applied Gerontology Symposium; Aging & Caregiving in the 21st Century, Antalya, Turkey.
- Chappell, N. L. (2014, August). Why caregiver's institutionalize family members; Examining gender and relationship intersections. European Society for Health and Medical Sociology, Helsinki, Finland.
- Chappell, N. L., Dujela, C., & Smith, A. P. (2013, November). *Caregiver quality of life: The differential importance of caregiver burden*. Gerontological Society of America, New Orleans, LA.
- Smith, A. P., Kobayashi, K., & Chappell, N. L. (2013, November). *The rhetoric of claims-making: The case of cholinesterase inhibitors*. Poster. Gerontological Society of America, New Orleans, LA.
- Smith, A. P., Kobayashi, K., & Chappell, N. L. (2013, November). *Persistent cholinesterase inhibitor prescribing in dementia: Physician and specialists' experiences*. Gerontological Society of America, New Orleans, LA.
- Smith, A. P., Kobayashi, K., & Chappell, N. L. (2013, October). *Long-term use of cholinesterase inhibitors in dementia care: Physicians and specialists' experiences*. Canadian Association on Gerontology, Halifax, NS.
- Chappell, N. L., Dujela, C., & Smith, A. P. (2013, June). *Spouse and adult child differences in caregiving burden*. International Symposium on Aging Families, Victoria, BC.
- Kadgien, C., Dujela, C., Chappell, N. L. (2012, October). *Time to test? Thoughts on and images from caregiver- administered clock-drawing tests*. Poster. Canadian Association on Gerontology annual Scientific and Educational meetings, Vancouver, BC.

- Hsiung, G-Y. R., & Dujela, C. (2012, October). In the mind of the beholder: How well do self-assessments of function in early Alzheimer's Disease correlate with standardized test scores in a cohort of cholinesterase inhibitor users over time?. Canadian Association on Gerontology annual Scientific and Educational meetings, Vancouver, BC.
- Smith, A., Kobayashi, K., Chappell, N. L. (2012, October). *Discontinuing cholinesterase inhibitor therapy: Connecting caregivers' experiences to clinical practice*. Canadian Association on Gerontology annual Scientific and Educational meetings, Vancouver, BC.
- Chappell, N. L., & Maclure, M. (2012, August). The gendered nature of caregiver perceptions of the effectiveness of cholinesterase inhibitors (ChEIs) for those with dementia. International Sociological Association Forum of Sociology, Argentina.
- Votova, K., Dujela, C., & Hsiung, G-Y, R. (2012, July). Assessing cognition and function in Alzheimer's disease pharmacotherapy: A comparison of self-assessment by ChEI users and standardized test-scores. Alzheimer's Association International Conference, Vancouver, BC.
- Smith, A., Kobayashi, K., & Chappell, N. L. (2012, July). Examining the discontinuation of cholinesterase inhibitor therapy from the perspectives of Alzheimer's disease caregivers and physicians. Alzheimer's Association International Conference, Vancouver, BC.
- Smith, A., Kobayashi, K., & Chappell, N. L. (2012, March). *The controversial promises of cholinesterase inhibitors for dementia: A qualitative study of caregiver's experiences*. Applied Research Colloquium, Centre on Aging, Victoria, BC.
- Chappell, N. L. (2012, February). A social perspective on dementia: Research advances and promising directions. Keynote address, 1st International Symposium on Alzheimer's Disease and Related Disorders, French National Foundation on Alzheimer's Disease, Paris.
- Smith, A., Kobayashi, K., & Chappell, N. L. (2011, November). The controversial promises of cholinesterase inhibitors for dementia: A qualitative study of caregiver's experiences. The Gerontological Society of America, Boston.
- Chappell, N. L., Outcalt, L., & Maclure, M. (2011, October). Can Pharmaceutical Research be Conducted without the Influence of the Pharmaceutical Industry?. Canadian Association on Gerontology annual meetings jointly with the Pan American Congress, Ottawa.
- Chappell, N. L., Kobayashi, K., & Smith, A. (2011, March). What caregivers think of cholinesterase inhibitors. 26<sup>th</sup> International Conference of Alzheimer's Disease International, Toronto.
- Chappell, N. L., Kobayashi, K., Maclure, M. (2010, December). Caregiver perceptions of medications for dementia; Do they make a difference to caregiver burden and quality of life?. Canadian Association on Gerontology, Montreal.
- Chappell, N. L., Kobayashi, K., Maclure, M. (2010, November). *Caregiver perceptions of the effectiveness of dementia drugs*. Gerontological Society of America, New Orleans.
- Jacova, C., Maclure, M., Hosick, D., Mattson, R., Hsiung, G-Y. R., Lee, P., Rabheru, K., Beattie, B. L, Chappell, N. L. (2010, July). Response to cholinesterase inhibitor medication at first renewal in a Canadian provincial drug coverage initiative: The British Columbia Alzheimer's Drug Therapy Initiative (BC ADTI) experience. ICAD10, Honolulu.
- Hsiung, G-Y. R., Jacova, C., Green, C. J., Hosick, D., Mattson, R., Rabheru, K., Lee, P., Beattie, B. L., Maclure, M., & Chappell, N. L. (2009, July). *Baseline characteristics of patients*

- receiving insurance coverage of cholinesterase inhibitors for Alzheimer disease under a policy of "Coverage with Evidence Development". 19<sup>th</sup> Annual IAGG World Congress, Paris.
- Maclure, M., Green, C. J., Jacova, C., Hsiung, G-Y. R., Dujela, C. E., Gerber, M., Hudson, R., & Chappell, N. L. (2009, August). Poster. *Pragmatic randomized trial of continuing cholinesterase inhibitors among indeterminate responders*. ISPE, Orlando, FL.
- Smith, A., Kobayashi, K., & Chappell, N. L. (2009, May). The hope and controversy of Alzheimer's disease pharmacotherapy: A qualitative study of the experiences of caregivers. Canadian Sociology Association, Ottawa.