This is the first newsletter for 2011 and DYNOPTA investigators have been very busy. This newsletter particularly highlights the number of conferences investigators have attended and papers that have been submitted, published or in progress, and includes summaries of the end-of-year 2010 reports that were sent from several DYNOPTA partner sites.

DYNOPTA Retreat

- The 3rd DYNOPTA Retreat took place on the 6th and 7th of April at the Centre for Mental Health Research, Australian National University. Almost 20 investigators attended and substantial progress on a range of papers was made.

DYNOPTA Up and Coming Conference Presentations

- A number of important conferences will be occurring throughout the year.

- Of particular note, Dr Binod Nepal will present a talk at the International Microsimulation Association Conference 8-10 June and reflects the excellent progression that the micro-simulation development has made in recent months. We certainly look forward to hearing the feedback on how well DYNOPTA and the micro-simulation is received.

- Several DYNOPTA investigators will be participating at the International Association of Gerontology and Geriatrics’ IXth Asia/Oceania Regional Congress at the Melbourne Convention Centre from the 23rd-27th October, 2011, presenting work on DYNOPTA and other projects. The DYNOPTA investigators that we know who will be attending include:
  
  Dr. Lesley Ross (University of Alabama)  
  Prof Kaarin Anstey (Australian National University)  
  Dr. Kerry Sargent-Cox (Australian National University)  
  Mr. Kim Kiely (Australian National University)  
  Dr. Jane Sims (Monash University)  
  Prof Julie Byles (Newcastle university)  
  Prof Mary Lusczc (Flinders University)  

  It has been suggested that some will use this opportunity to organize meetings to further DYNOPTA projects under way and we wish them well with progressing their work.

  Also, several DYNOPTA investigators have been involved with the organization of the conference and we wish them well in the months leading to the conference.

- All investigators are kindly reminded that whilst presentations do not require Scientific Committee approval, they should forward details of presentations to the DYNOPTA Scientific Committee secretary (dynopta@anu.edu.au) for reporting purposes.

DYNOPTA goes to Baltimore

- In early June, Prof Kaarin Anstey delivered a colloquium at the Centre for Ageing and Health, Johns Hopkins University, USA, entitled “The DYNOPTA project : Study description and findings”. The talk was well received by an audience that included a number of eminent researchers, medical practitioners and biostatisticians who were very impressed with DYNOPTA and the burgeoning publication list. Prof Anstey reports that all are keen to review the subsequent publication of more DYNOPTA findings.
Past DYNOPTA Conference Presentations

- Several DYNOPTA investigators have presented individual papers and symposia at a variety of conferences since the last newsletter. A selection of abstracts includes:
  2. Birrel, C. International Conference on Survey Research Methodology held in Taiwan on 25th -26th August 2010. The title of the paper is Combining Longitudinal Surveys: Cross-sectional Weights used for Prevalence Analysis.

DYNOPTA Papers Published in 2010 or In Press

- DYNOPTA Investigators have been very active in preparing papers for publication.
- Several DYNOPTA investigators have recently had papers published or in press and include:
- DYNOPTA investigators have a further 9 papers under review.
DYNOPTA Data Updates

- A small number of corrections to the DYNOPTA Version 3 dataset have been identified and can be viewed here: http://dynopta.anu.edu.au/restricted/Data%20error%20management/index.php

  It’s important that investigators refer to these error pages to ensure they undertake all necessary corrections.

- Please continue to contact us using the DYNOPTA data error report if any errors in the version 3 datasets are found.

Summary of 2010 Site Reports

1. ARU, ANU
   - Under the direction of CI Anstey, ARU investigators have been included with a range of activities including:
     1. The preparation and submission of the NHMRC annual report in the first half of the year. The organisation and hosting of the 3rd DYNOPTA Researchers Retreat.
     2. The organisation and hosting of regular research project forums with investigators from ARU, ASDRI or NATSEM.
     3. Overseeing the release of the third version of the DYNOPTA dataset.
     4. Continuing to address error reports for the DYNOPTA dataset.
     5. Providing secretarial support to the Steering and Scientific Committee secretaries.
     6. Monitoring the dynopta@anu.edu.au email address.
     7. Ensuring research proposal and manuscript submissions are treated in adherence with DYNOPTA protocols.
     8. Updating the DYNOPTA website.
     9. The preparation and publication of DYNOPTA manuscripts.
     10. The presentation of DYNOPTA research findings at seminars and conferences, to scientific, policy and public audiences.

2. ADSRI, ANU
   - Under the direction of CI Booth ADSRI investigators have been involved with an analysis of differentials in mortality by socio-economic characteristics and lifestyle factors, with a focus on educational differentials and the extent to which they are mediated through the lifestyle factors of smoking, alcohol consumption and exercise. This analysis makes use of additional AIHW data on smoking. CI Booth and Dr. Yan Yu have taken part in regular working group meetings with ARU investigators, and have attended the DYNOPTA retreats and CI Booth has been making made substantial contributions to the design of the microsimulation model (led by NATSEM), and to two draft publications describing and justifying the model design, and has also contributed to two papers submitted to journals in 2010: Windsor et al (social engagement) and Anstey et al (Indigenous ageing research).

3. Flinders University
   - Under the direction of CI Luszcz, Anna Lane has submitted a proposal to use DYNOPTA data for part of her PhD. Lane has been developing her proposal, reviewing literature and the DYNOPTA meta-datafile for appropriate studies and variables for inclusion.

4. Monash University
   - Under the direction of CI Browning, Monash investigators have been focusing on one lifestyle behaviour, physical activity. Dr. Jane Sims is leading a draft journal article that is currently being redrafted that is examining older Australian’s physical activity in comparison with the National Health Survey data. The outcomes of this investigation can be used to fully inform policy and practice to promote physical activity as an important
contributor to health and quality of life. For her doctoral studies, Sue Hunt has been studying the literature on theories, models and definitions of successful ageing in addition to working on the physical activity prevalence paper detailed above. She was successfully confirmed at Monash University in June 2010. Sue is currently writing a journal article that provides a comprehensive critique of the quantitative literature surrounding the predictors of successful ageing. She will be commenting on the lack of representative longitudinal data that is analysed, in addition to the lack of information surrounding trajectories of mental health. Following completion of the review, the DYNOPTA data will be employed to identify predictors of successful mental health ageing in older people. She has submitted an abstract on this subject to the International Association of Gerontology and Geriatrics, European Region VII European International Congress in Italy in 2011.

5. NATSEM
- Under the direction of CIs Laurie Brown and Ann Harding, NATSEM investigators have been focused on the construction of a prototype version of “DYNOPTASIM” - a dynamic microsimulation model that simulates dementia, depression, sensory impairment and impairment in mobility in Australia’s baby boomer and aged cohorts - using dementia as the first test case condition. We now have a functioning prototype with the current version projecting the prevalence and incidence of probable dementia for the over 45 years of age population over a 40 year simulation period. This work was undertaken in collaboration with DYNOPTA researchers from the ANU and University of Wollongong, and involved:
  - Preparation of the model’s base file from the pooled DYNOPTA dataset – extraction of Wave 1 data, population weighting to the 1996 Australian population, cloning of unit records, imputation of missing values and adjustment of weights;
  - Derivation of monthly transition probabilities for probable dementia conditional on age, sex and education (age left school) - lifestyle risk factors are currently being included in the modelling;
  - Inclusion of mortality in the demographic ageing of the model population over time (baseline data from the ABS 1996-2007 lifetables with 2007 mortality data being applied for the model out-years until better mortality projections become available from H. Booth’s research team); and
  - Validation of model structure and results.

6. Newcastle University
- Under the direction of CI Byles, Newcastle investigators have been investigating the properties of the dataset to model change over time. Current analyses to that end include modelling a difference score including covariate adjusted latent classes for the sf36 subscale for physical function and modelling the complete trajectories of walking and climbing stairs. The sf36 difference score represents only two time periods as the data were not amenable to a full random effects model. The work on this score has involved exploration of different approaches, including latent class analysis, to representing failing health. The walking and climbing stairs work involves the use of random effects models with categorical outcomes. Different approaches to representing time and maintaining covariance coverage are being considered. Additional to these analyses, is the reporting of work relating to the construction of the ADL and IADL variables for the Dynopta dataset and an exploration of the possibility constructing a composite variable using a latent variable approach.

7. University of Wollongong
- Under the direction of CI David Steel, Wollongong Investigators have continued to work on the derivation of weights for DYNOPTA. Combined weights for wave 1 have been provided for studies on prevalence rates using wave 1 data. Each subset of studies from the nine contributing studies requires calculating a combined weight for overlapping regions, sex and age-groups according to an appropriate reference year. Combined weights for 6 different subsets have been provided for wave 1 combinations as well as
carrying out appropriate analysis for the research papers. Wave 2 study weights have been developed for most studies (all except HILDA) for use in further cross-sectional studies of prevalence analysis. Wave 2 study weights take into account whether missing cases are due to deaths or attrition. Weights have been combined for research questions which combine studies from wave 1 and wave 2. An example of this is combining wave 1 for AusDiab with wave 2 for ALSWHold, BMES and SOPS for the physical activity variables. Also, wave 1 for ALSA, CLS, PATH and SOPS have been combined with wave 2 for BMES for a study of cognitive impairment. Continuing research includes developing weights for subsequent waves according to a model for attrition using wave 1 characteristics as the covariates. This will allow the calculation of combined weights for the research questions which combine different waves from a subset of contributing studies.

Other Information
Please contact us at dynopta@anu.edu.au for any additional information or questions. Also if you have any DYNOPTA related news, we would be happy to include this in future DYNOPTA Newsletters.