Bendix Carstensen — short biography

Senior Statistician Steno Diabetes Center, Niels Steensens Vej 2, DK-2820 Gentofte mobile: +45 30 75 87 38 email: bxc@steno.dk website: http://BendixCarstensen.com

MSc Mathematical Statistics, University of Copenhagen, 1983 Born: 14 July 1952



Employment

Research

Senior statistician, Steno Diabetes Center, April 1999 -

- Senior statistician, Danish Zoonosis Center, Danish Veterinary Laboratory, Ministry of Food, Agriculture and Fishery, August 1995 March 1999.
- Statistician, Danish Cancer Registry, Institute of Cancer Epidemiology, Danish Cancer Society, June 1984 July 1995
- Research assistant, Statistical Research Unit, Copenhagen, Danish Medical and Social Science Research Councils. February 1983 – May 1984.

Teaching

External lecturer, Department of Biostatistics, University of Copenhagen, 1995 -

Taught several international courses in Epidemiology, Demographic Methods in Epidemiology Statistical computing with R, and various advanced statistical topics.

Research areas

- 1. Application of registers in surveillance of public health. In my current job this has primarily focused on diabetes on the last 10 years, but I have previously been working in cancer epidemiology [1, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15].
- 2. I am the maintainer (and a contributor to) the R-package Epi for statistical and demographic analysis in epidemiology, http://BendixCarstensen.com/Epi/

Biostatistics

- 1. Analysis of follow-up data from register studies and demographic databases:
 - Age-period-cohort models [16, 17].
 - Multistate models and their practical application [2, 8, 9, 11, 18].
- 2. Comparison of clinical measurement methods. This is a topic where I have been involved with the clinical departments and laboratory at Steno Diabetes Center in providing practical analyses and as a consequence also in development of the methodology [19, 20, 21, 22, 23, 24, 25]
- 3. I am the maintainer (and main author of) the R-package MethComp for statistical analysis of method comparison studies, http://BendixCarstensen.com/MethComp/

Selected publications

A complete list of publications is in the full version of my CV: http://BendixCarstensen.com/cv.pdf

- [1] B. Carstensen, M. E. Jørgensen, and S. Friis. The epidemiology of diabetes and cancer. *Curr. Diab. Rep.*, 14(10):535, Oct 2014.
- [2] S. Iacobelli and B. Carstensen. Multiple time scales in multi-state models. *Stat Med*, 32(30):5315–5327, Dec 2013.
- [3] J. A. Johnson, B. Carstensen, D. Witte, S. L. Bowker, L. Lipscombe, A. G. Renehan, and the Diabetes and Cancer Research Consortium. Diabetes and cancer (1): evaluating the temporal relationship between type 2 diabetes and cancer incidence. *Diabetologia*, 55(6):1607–1618, Jun 2012.
- [4] B. Carstensen, D. R. Witte, and S. Friis. Cancer occurrence in Danish diabetic patients: duration and insulin effects. *Diabetologia*, 55(4):948–958, Apr 2012.
- [5] M. B. Hansen, M. L. Jensen, and B. Carstensen. Causes of death among diabetic patients in Denmark. *Diabetologia*, 55(2):294–302, Feb 2012.
- [6] B. Carstensen and Borch-Johnsen K. Register-based studies of diabetes. Scandinavian Journal of Public Health, 39(7 suppl):175–179, 2011.
- [7] B. Carstensen, Christensen J.K., Marcussen M.M., and Borch-Johnsen K. The National Diabetes Register. *Scandinavian Journal of Public Health*, 39(7 suppl):58–61, 2011.
- [8] Bendix Carstensen and Martyn Plummer. Using Lexis objects for multi-state models in R. *Journal of Statistical Software*, 38(6):1–18, 1 2011.
- [9] Martyn Plummer and Bendix Carstensen. Lexis: An R class for epidemiological studies with long-term follow-up. *Journal of Statistical Software*, 38(5):1–12, 1 2011.
- [10] JK Kristensen, TB Drivsholm, B Carstensen, M Steding-Jensen M, and A Green. [Validation of methods to identify known diabetes on the basis of health registers] (in Danish). Ugeskr Laeger, 169(18):1687–1692, 2007.
- [11] B. Carstensen, J.K. Kristensen, P. Ottosen, and K. Borch-Johnsen. The Danish National Diabetes Register: Trends in incidence, prevalence and mortality. *Diabetologia*, 51:2187–2196, 2008.
- [12] Freddie Bray, Bendix Carstensen, Henrik Moller, Marco Zappa, Maja Primic Zakelj, Gill Lawrence, Matti Hakama, and Elisabete Weiderpass. Incidence trends of adenocarcinoma of the cervix in 13 European countries. *Cancer Epidemiol Biomarkers Prev*, 14(9):2191–2199, Sep 2005.
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- [14] Carstensen B and Jensen OM. Atlas of Cancer indicence in Denmark 1970–79. Danish Cancer Society and Environmental Protection Agency, Copenhagen, 1986.
- [15] Jensen OM, Carstensen B, Glattre O, Malker B, Pukkala E, and Tulinius H. Atlas of Cancer Incidence in the Nordic Countries. Nordic Cancer Union, 1988.

- [16] B Carstensen. Age-Period-Cohort models for the Lexis diagram. *Statistics in Medicine*, 26(15):3018–3045, July 2007.
- [17] B Carstensen. Age-Period-Cohort models for the Lexis diagram (author's reply). Statistics in Medicine, 27:1561–1564, 2007.
- [18] Bendix Carstensen. Demography and epidemiology: Practical use of the Lexis diagram in the computer age, or: Who needs the Cox-model anyway? Technical Report 06.2, Department of Biostatistics, University of Copenhagen, http://publichealth.ku.dk/sections/ biostatistics/reports/2006/rr-06-2.pdf, 2006.
- [19] B. Carstensen. Comparing Clinical Measurement Methods: A practical guide. Wiley, 2010.
- [20] B. Carstensen. Comparing methods of measurement: Extending the LoA by regression. *Stat Med*, 29:401–410, Feb 2010.
- [21] B Carstensen, J Simpson, and LC Gurrin. Statistical models for assessing agreement in method comparison studies with replicate measurements. *International Journal of Biostatistics*, 4(1):Article 16, 2008.
- [22] B Carstensen, J Lindström, J Sundvall, K Borch-Johnsen, J Tuomilehto, and the DPS Study Group. Measurement of blood glucose: Comparison between different types of specimens. *Ann Clin Biochem.*, 45(2):140–148, 2008.
- [23] S.S. Rasmussen, C. Glümer, A. Sandbaek, T. Lauritzen, B. Carstensen, and K. Borch-Johnsen. Short-term reproducibility of impaired fasting glycaemia, impaired glucose tolerance and diabetes The ADDITION study, DK. *Diabetes Res Clin Pract*, Dec 2007.
- [24] B Carstensen. Comparing and predicting between several methods of measurement. *Biostatistics*, 5(3):399–413, Jul 2004.
- [25] S Colagiuri, A Sandbæk, B Carstensen, J Christensen, C Glümer, T Lauritzen, and K Borch-Johnsen. Comparability of venous and capillary glucose measurements in blood. *Diabetic Medicine*, 20(11):953–956, Nov 2003.