

## Division of Clinical Epidemiology

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### General Summary

The Division of Clinical Epidemiology was founded in 2009 as one part of the Research Center for Medical Science to promote the activity of clinical research, clinical epidemiology and education concerning them. Our aim is to support clinicians to solve their own problems in daily practice by epidemiological/clinical research skills.

The research agenda covered by our division are, moreover, medical communication, evaluation of medical care, behavioral medicine, outcome research, qualitative research as well as disease-oriented epidemiological research. Especially, we aim at making evidence in the field of primary-care due to the lack of evidence although primary-care is a front-line of practice.

As a contribution to the pregraduate education, our division has classes of “Evidence-based Clinical Practice (EBCP)” to make medical students skillful doctors able to employ evidence-based approach.

Our post-graduate education concentrates on the methodology of clinical/epidemiological research and biostatistics. “The educational program for primary-care on clinical research methodology”, which was started in 2007 by financial support of the Ministry of Health, Labour and Welfare, was renewed as “Jikei Clinical Research Program for Primary-care” in 2009. The aim of this program is to have a primary-care physician be a clinician-researcher.

### Research Activities

#### *Chronic care model*

Chronic care model was developed during 1990's in US to improve chronic illness care by refining care-provider system especially in a primary-care setting. The aim of this research is to clarify the usefulness of the chronic care model in Japan.

The plan consisted of 3 steps. The first was to make the official Japanese version of the assessment form “Assessment of Chronic Illness Care (ACIC)” by following WHO procedure, e.g., translation, back translation, and pilot study. The second step was to compare the quality of diabetes care between specialists in diabetes and primary-care physicians as non-specialists. The last step was to evaluate the validity of ACIC to examine the correlation between ACIC scores and the measurement of urinary albumin excretion.

#### *Patient Enablement Instrument*

The concept of “patient enablement” involves patients' perceptions of ability to understand and cope with illness. Patient Enablement Instrument (PEI) is a questionnaire developed in UK to evaluate patient enablement. The aim of this study was to develop PEI Japanese version and examine its validity and reliability. Two principal compo-

nents, coping and independence have been identified in Japanese patient enablement by PEI Japanese version with high validity and reliability.

#### *The cohort study in home medical care*

The cohort study in home medical care was planned to evaluate the incidence of death at home. This cohort will be comprised with patients receiving home medical care by regular visits of general practitioner. Financial support for this research was provided by the Ministry of Health, Labour and Welfare.

#### **Publications**

**Yokoyama H, Matsushima M, Kawai K, Hirao K, Oishi M, Sugimoto H, Takeda H, Minami M, Kobayashi M, Sone H; Japan Diabetes Clinical Data Management Study Group.** Low incidence of cardiovascular events in Japanese patients with type2 diabetes in primary care settings: a prospective cohort study. *Diabet Med.* 2011; **28**: 1221-8.

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**Hayashi N, Matsushima M, Yamamoto T,**

**Sasaki H, Takahashi H, Egawa S.** The impact of hypertriglyceridemia on prostate cancer development in patients aged  $\geq 60$  years. *BJU Int.* 2012; **109**: 515-9.

**Date T, Yamane T, Yamashita S, Matsuo S, Matsushima M, Inada K, Taniguchi I, Yoshimura M.** Paradoxical clearance of natriuretic peptide between pulmonary and systemic circulation: a pulmonary mechanism of maintaining natriuretic peptide plasma concentration in obese individuals. *J Clin Endocrinol Metab.* 2012; **97**: E14-21.

**Hosoya T, Matsushima M, Nukariya K, Utsunomiya K.** The relationship between the severity of depressive symptoms and diabetes-related emotional distress in patients with type 2 diabetes. *Intern Med.* 2012; **51**: 263-9.