7-3-1 Hongo, Bunkyo-ku
Tokyo 113-0033
Japan
+81 90-8507-1062
☎ +81 3-5841-5543
✉ hara.konan@gmail.com
harakonan
updated October 8, 2020

Konan Hara

Curriculum Vitae

Personal Information

Citizenship Japan

Language English (fluent), Japanese (native)

Education

2019 **Ph.D. in Medicine**, *Graduate School of Medicine, The University of Tokyo*, Japan.

2013 **M.D. Equivalent**, *Faculty of Medicine, The University of Tokyo*, Japan.
A six-year undergraduate degree that allows one to obtain medical license in Japan.

2013 **B.A.**, *Faculty of Medicine, The University of Tokyo*, Japan.

Research Interests

- Econometrics
- Biostatistics and Epidemiology
- Health Economics
- Labor Economics
- Energy and Environmental Economics

Qualification

2013 **Medical Doctor**, *Japan*.

Appointments and Affiliations

Academic Positions

04/20 – present **Project Researcher**, *Department of Public Health, Graduate School of Medicine, The University of Tokyo*, Tokyo, Japan.

04/19 – present **Part-time Researcher**, *TXP Medical Co., Ltd.*, Tokyo, Japan.
I am working on a project to create a framework that enables efficient usage of electronic health records for clinical research purposes. R is used for the project.

04/19 – present **Part-time Researcher**, *Department of Hematology, Tokyo Metropolitan Cancer and Infectious Diseases Center Komagome Hospital*, Tokyo, Japan.
I am working with clinical medicine specialists to apply statistical models that have rarely used in the domain but are considered to be useful theoretically to clinical data.

04/19 – 03/20 **Project Researcher**, *Graduate School of Economics, The University of Tokyo*, Tokyo, Japan.
I was in charge of management and analysis of highly confidential microdata that covers the entire population in Japan: the Japanese national medical claims data and the Japanese Census data. The data size was up to several terabytes with 40 billion records per table. My main work was to perform a longitudinal linkage of individuals for each data. MySQL, Oracle SQL, R, Python, and Bash were used for the projects.

07/17 – 03/19 **Project Researcher**, *Department of Public Health, Graduate School of Medicine, The University of Tokyo*, Tokyo, Japan.
Using the Japanese national medical claims data, I described the trend in the share of generic drugs for commonly-prescribed medicines from 2009 to 2015, stratified by various demographic groups. Oracle SQL with Oracle Exadata was used for the project.

Appointments at Hospitals

07/16 – present **Nephrologist**, *Chiba Aiyukai Kinen Hospital*, Chiba, Japan.

01/16 – 06/16 **Nephrologist**, *Ageo Central General Hospital Eight Nine Clinic*, Saitama, Japan.

04/15 – 12/15 **Physician**, *Nishimura Heart Clinic*, Saitama, Japan.

04/14 – 03/15 **Intern**, *The University of Tokyo Hospital*, Tokyo, Japan.

04/13 – 03/14 **Intern**, *The Fraternity Memorial Hospital*, Tokyo, Japan.

Research Experience

08/17 – 03/19 **Research Assistant for Hidehiko Ichimura**, *Graduate School of Economics, The University of Tokyo.*
I worked on a project to investigate the preventive effects of early consultation on the onset of fatal diseases through the improvement of lifestyle diseases using large-scale medical claims data and annual health checkup data. Microsoft SQL Server and R were used for the project.

02/17 – 03/17 **Research Assistant for Hajime Sato**, *National Institute of Public Health.*
I was engaged in the survey and summarization of the current state of clinical research regulations in Japan for the establishment of the clinical research law.

07/16 – 03/17 **Research Assistant for Yuichi Tei**, *Graduate School of Engineering, The University of Tokyo.*
As a data manager, I worked on anonymization, data cleaning, and data extraction of company labor management systems and annual health checkup data. R was used for the project.

Honors and Awards

2014 **Award of Excellence**, *Grand Round of Internal Medicine, The University of Tokyo Hospital.*

Grants

2019 **Investigator**, *Elucidation of regulatory mechanisms for latent infection in progenitor cells and molecular mechanisms for virus reactivation along with cell differentiation (PI: Ayumi Taguchi)*, Japan Agency for Medical Research and Development (AMED).

We conducted two projects that explore the application of statistical models that have rarely used in the domain but are considered to be useful theoretically to clinical data: (1) we applied a statistical method for panel data from a semi-Markov process to predict the prognosis of cervical intraepithelial neoplasia according to the genotypes of high-risk human papillomavirus; (2) we applied survival analysis considering competing risks, time-dependent covariates, and interaction terms for exploring the heterogeneous impact of cytomegalovirus reactivation on non-relapse mortality in hematopoietic stem cell transplantation.

Dissertation

Title *Claims-based algorithms for common chronic conditions were investigated using regularly collected data in Japan*

Supervisor Yasuki Kobayashi

Description The literature of claims-based algorithm (CBA) has two features to be refined: the use of a chart review as a source of the gold standard; the procedure of searching for a fine-tuned CBA based on existing knowledge regarding target conditions. The first feature limits the population to which the CBA can be applied and the second makes the CBA construction procedure to be an overly complicated and cumbersome matter. Moreover, the burden of reviewing charts and searching for a fine-tuned CBA lead to a slow establishment of acceptable CBAs because it discourages researchers from CBA studies. The sluggish establishment of usable CBAs can be a big issue as the codes recorded in the claims for transmitting information about patients are supposed to change periodically. The dissertation focused on CBAs for identifying patients with three common chronic medical conditions, hypertension, diabetes, and dyslipidemia, and (1) demonstrated the usefulness of health screening results as the source of gold standard; (2) showed the power of statistical learning methods to develop an efficient CBA construction procedure; (3) proposed a course of action for an efficient CBA research. I believe that the series of techniques evaluated in the study should become essential in future CBA research.

Publications

Economics

[1] Yuki Ito, **Konan Hara**, and Yasuki Kobayashi. The effect of inertia on brand-name versus generic drug choices. *Journal of Economic Behavior & Organization*, 172:364–379, apr 2020.

Public Health and Clinical Research

[1] Tadahiro Goto, **Konan Hara**, Katsuhiko Hashimoto, Shoko Soeno, Toru Shirakawa, Tomohiro Sonoo, and Kensuke Nakamura. Validation of chief

complaints, medical history, medications, and physician diagnoses structured with an integrated emergency department information system in Japan: the Next Stage ER system. *Acute Medicine & Surgery*, 7(1):1–8, jan 2020.

[2] Yoshitaka Kinoshita, Takashi Yagisawa, Toru Sugihara, **Konan Hara**, Saki Takeshima, Taro Kubo, Takahiro Shinzato, Toshihiro Shimizu, Michiko Suzuki, Akito Maeshima, Jun Kamei, Akira Fujisaki, Satoshi Ando, Motofumi Suzuki, Haruki Kume, and Tetsuya Fujimura. Clinical outcomes in donors and recipients of kidney transplantations involving medically complex living donors – a retrospective study. *Transplant International*, jul 2020.

[3] Takuya Shimizuguchi, Noritaka Sekiya, **Konan Hara**, Ayumi Taguchi, Yujiro Nakajima, Yu Miyake, Yukiko Shibata, Kentaro Taguchi, Hiroaki Ogawa, Kei Ito, and Katsuyuki Karasawa. Radiation therapy and the risk of herpes zoster in patients with cancer. *Cancer*, 126(15):3552–3559, aug 2020.

[4] Satoshi Kaito, Yujiro Nakajima, **Konan Hara**, Takashi Toya, Tetsuya Nishida, Naoyuki Uchida, Junichi Mukae, Takahiro Fukuda, Yukiyasu Ozawa, Masatsugu Tanaka, Kazuhiro Ikegame, Yuta Katayama, Takuro Kuriyama, Junya Kanda, Yoshiko Atsuta, Masao Ogata, Ayumi Taguchi, and Kazuteru Ohashi. Heterogeneous impact of cytomegalovirus reactivation on nonrelapse mortality in hematopoietic stem cell transplantation. *Blood Advances*, 4(6):1051–1061, mar 2020.

[5] Satoshi Baba, Ayumi Taguchi, Akira Kawata, **Konan Hara**, Satoko Eguchi, Mayuyo Mori, Katsuyuki Adachi, Seiichiro Mori, Takashi Iwata, Akira Mitsuhashi, Daichi Maeda, Atsushi Komatsu, Takeshi Nagamatsu, Katsutoshi Oda, Iwao Kukimoto, Yutaka Osuga, Tomoyuki Fujii, and Kei Kawana. Differential expression of human papillomavirus 16-, 18-, 52-, and 58-derived transcripts in cervical intraepithelial neoplasia. *Virology Journal*, 17(1):32, dec 2020.

[6] Ayumi Taguchi, Akiko Furusawa, Kei Ito, Yujiro Nakajima, Takuya Shimizuguchi, **Konan Hara**, Maki Takao, Tomoko Kashiyama, Nao Kino, Katsuyuki Karasawa, and Toshiharu Yasugi. Postradiotherapy persistent lymphopenia as a poor prognostic factor in patients with cervical cancer receiving radiotherapy: a single-center, retrospective study. *International Journal of Clinical Oncology*, (0123456789), jan 2020.

[7] Ayumi Taguchi, **Konan Hara**, Jun Tomio, Kei Kawana, Tomoki Tanaka, Satoshi Baba, Akira Kawata, Satoko Eguchi, Tetsushi Tsuruga, Mayuyo Mori, Katsuyuki Adachi, Takeshi Nagamatsu, Katsutoshi Oda, Toshiharu Yasugi, Yutaka Osuga, and Tomoyuki Fujii. Multistate markov model to predict the prognosis of high-risk human papillomavirus-related cervical lesions. *Cancers*, 12(2):270, jan 2020.

[8] Yuki Ito, **Konan Hara**, Byung-kwang Yoo, Jun Tomio, and Yasuki Kobayashi. Can income-based co-payment rates improve disparity? The case of the choice

between brand-name and generic drugs. *BMC Health Services Research*, 19(1):780, dec 2019.

[9] **Konan Hara**, Jun Tomio, Thomas Svensson, Rika Ohkuma, Akiko Kishi Svensson, and Tsutomu Yamazaki. Association measures of claims-based algorithms for common chronic conditions were assessed using regularly collected data in Japan. *Journal of Clinical Epidemiology*, 99:84–95, jul 2018.

[10] Yoshitaka Kinoshita, Akira Ishikawa, **Konan Hara**, Toru Sugihara, Yoshitaka Ishibashi, and Yukio Homma. Plasma cell neoplasm as a risk factor for early thrombosis of arteriovenous fistula. *Hemodialysis International*, pages 3–6, aug 2017.

Conference Presentations

2020 Machine Learning for Healthcare

2019 Annual Meeting of the Japanese Association for Acute Medicine

2017 International Health Economics Association 12th World Congress; Japanese Society of Public Health Annual Meeting

2015 Japanese Society of Public Health Annual Meeting

Computer Skills

Data Science	R (Advanced), Python (Intermediate), Stata (Novice)
RDBMS	MySQL (Advanced), Oracle SQL (Intermediate), SQL Server (Novice)
DWH	Oracle Exadata (Intermediate)
Documentation	LaTeX (Advanced), GFM (Advanced), R markdown (Intermediate)
Others	Zsh (Advanced), Bash (Advanced)

Advanced = Regularly used, Intermediate = Occasionally used, Novice = Rarely used