

Norimichi Hirahara, Ph.D.



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LANGUAGES

GENERAL INFO

Dr. Norimichi Hirahara is Associate Professor of eHealth (Digital Health & Innovation) Unit at Faculty of Medicine, University of Malaya, where he focuses on working in the domain of clinical registry and patient-driven bigdata.

Before moving to Malaysia, he was Assistant Professor of Department of Health Policy and Management at the School of Medicine, Keio University, in Japan. After receiving his doctoral degree in Human Systems Science (Cognitive Science) at Tokyo Institute of Technology in 2011, he briefly worked as a visiting scholar at Faculty of Medicine, the University of Sheffield in UK, then moved to the Department of Healthcare Quality Assessment at the Graduate School of Medicine, the University of Tokyo as a project researcher. In Japan he worked in such fields as clinical data analysis, healthcare quality improvement, and healthcare policy-making, while being involved with various healthcare ICT projects in collaboration with companies in/out of Japan.

As a cognitive psychologist by training, Dr. Hirahara also studies and teaches in the areas of judgment and decision-making, reasoning, and inferences. He is also known for his public lectures about positive psychology, mindfulness meditation, and Buddhist psychology, where he illustrates evidence-based techniques for happiness to general public.

ACADEMIC BACKGROUND & INTEREST

Cognitive Psychology: judgment and decision-making, medical decision-making, social psychology, organizational behavior.

Healthcare Big-data: clinical registry, big-data analysis, healthcare ICT/patient-generated health data; innovation in healthcare.

Positive Psychology: well-being, mindfulness, contemplative neuroscience.

ACADEMIC SOCIETIES

Society for Medical Decision Making

Japan Society for Healthcare Administration

Society for Clinical Epidemiology (Certified Expert; expert certification committee member)

Japanese Society of Pediatric Surgeons (NCD liaison committee member: Senior Advisor)

Japanese Association for the Study of Buddhism and Psychology (meditation working group: Leader)

WORK EXPERIENCE

Japanese – professional
English – professional

12/2021 - Present
Associate Professor, eHealth Unit at Faculty of Medicine, University
of Malaya, Malaysia

07/2015 - 10/2020
Assistant Professor, Department of Health Policy and Management at
School of Medicine, Keio University, Japan

07/2015 - Present
Visiting Research Fellow, Department of Healthcare Quality
Assessment at Graduate School of Medicine, the University of Tokyo

03/2013 – 06/2015
Project Researcher, Department of Healthcare Quality Assessment at
Graduate School of Medicine, the University of Tokyo, Japan

04/2010 – Present
Part-time Researcher, the Institute of Buddhist Culture, Musashino
University, Japan

05/2009 – 06/2009
Visiting Researcher, Academic Unit of Primary Medical Care at
Faculty of Medicine, the University of Sheffield, UK

08/1998 – Present
Founder & Chairman, RDSystems, Japan

09/1996 – 08/1997
Project Research Assistant, Mellers Decision Making Lab, University
of California, Berkeley, USA

EDUCATION

2007 - 2011
Ph.D in Human Systems Science, Tokyo Institute of Technology,
Japan

2005 - 2007
M.A. in Human Systems Science, Tokyo Institute of Technology,
Japan

1995 - 1997
B.A. in Psychology, University of California, Berkeley, USA

ADDITIONAL SKILLS

Statistical operation: SPSS, R
Programming: Python, Perl, HTML
Server operation: Linux (CentOS), cPanel/WHM

PUBLICATIONS (books in Japanese)

1: Hirahara, N., Wada, C. (2016). "Patient-centered" ways of changing
your hospitals: 15 chapters to boost the quality of care. Tokyo: Igaku-
Shoin. (Translation of Frampton, S., Gilpin, L. and Charmel, P.
(2003). Putting patients first. San Francisco: Jossey-Bass.)

2: Hirahara, N. Can we calculate the utility of life based on its values
and risks? A view from decision science. In Takahashi T, Kume K,

eds. Life as a value: Questioning its essence (Kumamoto University bioethics theses collection). Fukuoka: Kyushu University Press; (2009). p. 100-127.

3: Hasegawa, T, Hirahara, N, Wada, C. (2005). Patients as the best resource to reduce medical errors. Tokyo: Elsevier Japan. (Translation of Spath, P. (2004). Partnering with patients to reduce medical errors. Chicago: Health Forum.)

4: Wada, C, Hirahara, N, Muto, M. (2001). Patients' dreams come true: Best practices of patient-centered hospitals. Nagoya: Nissoken.

PUBLICATIONS (peer-reviewed international journals in English only)

1: Kaise T, Sakihara E, Tamaki K, Miyata H, Hirahara N, Kirichek O, Tawara R, Akiyama S, Katsumata M, Haruya M, Ishii T, Simard EP, Miller BE, Tal-Singer R. Prevalence and Characteristics of Individuals with Preserved Ratio Impaired Spirometry (PRISm) and/or Impaired Lung Function in Japan: The OCEAN Study. *Int J Chron Obstruct Pulmon Dis*. 2021 Sep 23;16:2665-2675. doi: 10.2147/COPD.S322041. PMID: 34588775; PMCID: PMC8476108.

2: Tamaki K, Sakihara E, Miyata H, Hirahara N, Kirichek O, Tawara R, Akiyama S, Katsumata M, Haruya M, Ishii T, Simard EP, Miller BE, Tal-Singer R, Kaise T. Utility of Self-Administered Questionnaires for Identifying Individuals at Risk of COPD in Japan: The OCEAN (Okinawa COPD case finding Assessment) Study. *Int J Chron Obstruct Pulmon Dis*. 2021 Jun 17;16:1771-1782. doi: 10.2147/COPD.S302259. PMID: 34168439; PMCID: PMC8216667.

3: Shimada K, Yamamoto H, Nakatani E, Kumamaru H, Nishimura S, Ichihara N, Hirahara N, Mori K, Kotani M, Miyachi Y, Miyata H. Real-World Evidence of the Incidence of and Risk Factors for Type 1 Diabetes Mellitus and Hypothyroidism as Immune-Related Adverse Events Associated With Programmed Cell Death-1 Inhibitors. *Endocr Pract*. 2021 Jun;27(6):586-593. doi: 10.1016/j.eprac.2020.12.009. Epub 2020 Dec 24. PMID: 34057406.

4: Ide Y, Tachimori H, Hirata Y, Hirahara N, Ota N, Sakamoto K, Ikeda T, Minatoya K. Risk analysis for patients with a functionally univentricular heart after systemic-to-pulmonary shunt placement. *Eur J Cardiothorac Surg*. 2021 Jul 30;60(2):377-383. doi: 10.1093/ejcts/ezab077. PMID: 33712829.

5: Endo I, Hirahara N, Miyata H, Yamamoto H, Matsuyama R, Kumamoto T, Homma Y, Mori M, Seto Y, Wakabayashi G, Kitagawa Y, Miura F, Kokudo N, Kosuge T, Nagino M, Horiguchi A, Hirano S, Yamaue H, Yamamoto M, Miyazaki M. Mortality, morbidity, and failure to rescue in hepatopancreatoduodenectomy: An analysis of patients registered in the National Clinical Database in Japan. *J Hepatobiliary Pancreat Sci*. 2021 Apr;28(4):305-316. doi: 10.1002/jhbp.918. Epub 2021 Mar 20. PMID: 33609319.

6: Hirata Y, Hirahara N, Murakami A, Motomura N, Miyata H, Takamoto S. Status of cardiovascular surgery in Japan: A report based on the Japan Cardiovascular Surgery Database 2017-2018. 1. Congenital heart surgery. *Asian Cardiovasc Thorac Ann*. 2021

May;29(4):289-293. doi: 10.1177/0218492320981501. Epub 2020 Dec 29. PMID: 33375819.

7: Shimizu H, Hirahara N, Motomura N, Miyata H, Takamoto S. Status of cardiovascular surgery in Japan between 2017 and 2018: A report based on the Japan Cardiovascular Surgery Database. 4. Thoracic aortic surgery. *Asian Cardiovasc Thorac Ann*. 2021 May;29(4):278-288. doi: 10.1177/0218492320981456. Epub 2020 Dec 20. PMID: 33342246.

8: Hirahara N, Miyata H, Kato N, Hirata Y, Murakami A, Motomura N. Development of Bayesian Mortality Categories for Congenital Cardiac Surgery in Japan. *Ann Thorac Surg*. 2021 Sep;112(3):839-845. doi: 10.1016/j.athoracsur.2020.07.012. Epub 2020 Sep 17. PMID: 32949608.

9: Terui K, Hirahara N, Tachimori H, Kato N, Fujishiro J, Watanabe E, Tomita H, Okamoto T, Fujiogi M, Okamoto S, Yonekura T, Miyata H, Usui N. Development and validation of risk models for mortality and morbidity in 12 major pediatric surgical procedures: A study from the National Clinical Database-Pediatric of Japan. *J Pediatr Surg*. 2020 Oct;55(10):2064-2070. doi: 10.1016/j.jpedsurg.2020.03.031. Epub 2020 Apr 12. PMID: 32507636.

10: Fujishiro J, Watanabe E, Hirahara N, Terui K, Tomita H, Ishimaru T, Miyata H. Laparoscopic Versus Open Appendectomy for Acute Appendicitis in Children: a Nationwide Retrospective Study on Postoperative Outcomes. *J Gastrointest Surg*. 2021 Apr;25(4):1036-1044. doi: 10.1007/s11605-020-04544-3. Epub 2020 Mar 3. PMID: 32128682.

11: Mizuno S, Ono K, Mikami Y, Naganuma M, Fukuda T, Minami K, Masaoka T, Terada S, Yoshida T, Saigusa K, Hirahara N, Miyata H, Suda W, Hattori M, Kanai T. 5-Aminosalicylic acid intolerance is associated with a risk of adverse clinical outcomes and dysbiosis in patients with ulcerative colitis. *Intest Res*. 2020 Jan;18(1):69-78. doi: 10.5217/ir.2019.00084. Epub 2020 Jan 30. PMID: 32013315; PMCID: PMC7000647.

12: Fujishiro J, Fujiogi M, Hirahara N, Terui K, Okamoto T, Watanabe E, Ishimaru T, Miyata H. Abdominal Drainage at Appendectomy for Complicated Appendicitis in Children: A Propensity-matched Comparative Study. *Ann Surg*. 2021 Dec 1;274(6):e599-e604. doi: 10.1097/SLA.0000000000003804. PMID: 31977513.

13: Nawata K, D'Agostino RS, Habib RH, Kumamaru H, Hirahara N, Miyata H, Motomura N, Takamoto S, Shahian DM, Grover FL. First Database Comparison Between the United States and Japan: Coronary Artery Bypass Grafting. *Ann Thorac Surg*. 2020 Apr;109(4):1159-1164. doi: 10.1016/j.athoracsur.2019.07.095. Epub 2019 Sep 17. PMID: 31539515.

14: Abe T, Nakano K, Hirahara N, Motomura N, Miyata H, Takamoto S. Correction to: Current status of cardiovascular surgery in Japan, 2015 and 2016, a report based on the Japan Cardiovascular Surgery Database. 3-Valvular heart surgery. *Gen Thorac Cardiovasc Surg*. 2019 Sep;67(9):750. doi: 10.1007/s11748-019-01178-4. Erratum for: *Gen Thorac Cardiovasc Surg*. 2019 Sep;67(9):742-749. PMID: 31385164.

15: Hirahara N, Miyata H, Motomura N, Kohsaka S, Nishimura T,

Takamoto S. Procedure- and Hospital-Level Variation of Deep Sternal Wound Infection From All-Japan Registry. *Ann Thorac Surg*. 2020 Feb;109(2):547-554. doi: 10.1016/j.athoracsur.2019.05.076. Epub 2019 Jul 20. PMID: 31336072.

16: Hirata Y, Hirahara N, Murakami A, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan, 2015 and 2016: a report based on the Japan Cardiovascular Surgery Database. 1-congenital heart surgery. *Gen Thorac Cardiovasc Surg*. 2019 Sep;67(9):731-735. doi: 10.1007/s11748-019-01160-0. Epub 2019 Jul 20. PMID: 31327137.

17: Shimizu H, Hirahara N, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan, 2015 and 2016: analysis of data from Japan Cardiovascular Surgery Database. 4-Thoracic aortic surgery. *Gen Thorac Cardiovasc Surg*. 2019 Sep;67(9):751-757. doi: 10.1007/s11748-019-01163-x. Epub 2019 Jul 16. PMID: 31312983.

18: Abe T, Nakano K, Hirahara N, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan, 2015 and 2016, a report based on the Japan Cardiovascular Surgery Database. 3-Valvular heart surgery. *Gen Thorac Cardiovasc Surg*. 2019 Sep;67(9):742-749. doi: 10.1007/s11748-019-01161-z. Epub 2019 Jul 3. Erratum in: *Gen Thorac Cardiovasc Surg*. 2019 Aug 5;; PMID: 31270746.

19: Saito A, Hirahara N, Motomura N, Miyata H, Takamoto S. Current Status of cardiovascular surgery in Japan, 2015 and 2016: a report based on the Japan Cardiovascular Surgery Database. 2-Isolated coronary artery bypass grafting surgery. *Gen Thorac Cardiovasc Surg*. 2019 Sep;67(9):736-741. doi: 10.1007/s11748-019-01162-y. Epub 2019 Jun 29. PMID: 31256329.

20: Sugimoto K, Hirata Y, Hirahara N, Miyata H, Suzuki T, Murakami A, Miyaji K, Takamoto S. Mid-term result of atrioventricular valve replacement in patients with a single ventricle. *Interact Cardiovasc Thorac Surg*. 2018 Dec 1;27(6):895-900. doi: 10.1093/icvts/ivy155. PMID: 29868844.

21: Yoshida T, Miyata H, Konno H, Kumamaru H, Tangoku A, Furukita Y, Hirahara N, Wakabayashi G, Gotoh M, Mori M. Risk assessment of morbidities after right hemicolectomy based on the National Clinical Database in Japan. *Ann Gastroenterol Surg*. 2018 Apr 16;2(3):220-230. doi: 10.1002/ags3.12067. PMID: 29863168; PMCID: PMC5980426.

22: Saito A, Hirahara N, Motomura N, Miyata H, Takamoto S. Correction to: Current status of cardiovascular surgery in Japan, 2013 and 2014: A report based on the Japan Cardiovascular Surgery database 3. Coronary artery bypass surgery. *Gen Thorac Cardiovasc Surg*. 2018 Mar;66(3):182-183. doi: 10.1007/s11748-018-0883-4. Erratum for: *Gen Thorac Cardiovasc Surg*. 2018 Jan;66(1):8-12. PMID: 29344799.

23: Nakano K, Hirahara N, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan, 2013 and 2014: A report based on the Japan Cardiovascular Surgery Database. 4. Valvular heart surgery. *Gen Thorac Cardiovasc Surg*. 2018 Jan;66(1):13-18. doi: 10.1007/s11748-017-0842-5. Epub 2017 Nov 13. PMID: 29134537.

24: Saito A, Hirahara N, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan, 2013 and 2014: A report based on the Japan Cardiovascular Surgery Database 3. Coronary artery bypass surgery. *Gen Thorac Cardiovasc Surg*. 2018 Jan;66(1):8-12. doi: 10.1007/s11748-017-0848-z. Epub 2017 Nov 13. Erratum in: *Gen Thorac Cardiovasc Surg*. 2018 Jan 17;; PMID: 29134536.

25: Hirata Y, Hirahara N, Murakami A, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan 2013 and 2014: A report based on the Japan Cardiovascular Surgery Database. 2: Congenital heart surgery. *Gen Thorac Cardiovasc Surg*. 2018 Jan;66(1):4-7. doi: 10.1007/s11748-017-0841-6. Epub 2017 Nov 13. PMID: 29134535.

26: Hirata Y, Miyata H, Hirahara N, Murakami A, Kado H, Sakamoto K, Sano S, Takamoto S. Long-Term Results of Bilateral Pulmonary Artery Banding Versus Primary Norwood Procedure. *Pediatr Cardiol*. 2018 Jan;39(1):111-119. doi: 10.1007/s00246-017-1735-1. Epub 2017 Sep 21. PMID: 28936753.

27: Hoashi T, Hirahara N, Murakami A, Hirata Y, Ichikawa H, Kobayashi J, Takamoto S. Current Surgical Outcomes of Congenital Heart Surgery for Patients With Down Syndrome in Japan. *Circ J*. 2018 Jan 25;82(2):403-408. doi: 10.1253/circj.CJ-17-0483. Epub 2017 Sep 12. PMID: 28904256.

28: Shimizu H, Hirahara N, Motomura N, Miyata H, Takamoto S. Current status of cardiovascular surgery in Japan, 2013 and 2014: a report based on the Japan Cardiovascular Surgery Database 5. Thoracic aortic surgery. *Gen Thorac Cardiovasc Surg*. 2017 Dec;65(12):671-678. doi: 10.1007/s11748-017-0822-9. Epub 2017 Sep 5. PMID: 28875285.

29: Watanabe T, Miyata H, Konno H, Kawai K, Ishihara S, Sunami E, Hirahara N, Wakabayashi G, Gotoh M, Mori M. Prediction model for complications after low anterior resection based on data from 33,411 Japanese patients included in the National Clinical Database. *Surgery*. 2017 Jun;161(6):1597-1608. doi: 10.1016/j.surg.2016.12.011. Epub 2017 Jan 30. PMID: 28153378.

30: Yokoo H, Miyata H, Konno H, Taketomi A, Kakisaka T, Hirahara N, Wakabayashi G, Gotoh M, Mori M. Models predicting the risks of six life-threatening morbidities and bile leakage in 14,970 hepatectomy patients registered in the National Clinical Database of Japan. *Medicine (Baltimore)*. 2016 Dec;95(49):e5466. doi: 10.1097/MD.0000000000005466. Erratum in: *Medicine (Baltimore)*. 2017 Apr 28;96(17):e6813. PMID: 27930526; PMCID: PMC5265998.

31: Konno H, Kamiya K, Kikuchi H, Miyata H, Hirahara N, Gotoh M, Wakabayashi G, Ohta T, Kokudo N, Mori M, Seto Y. Association between the participation of board-certified surgeons in gastroenterological surgery and operative mortality after eight gastroenterological procedures. *Surg Today*. 2017 May;47(5):611-618. doi: 10.1007/s00595-016-1422-5. Epub 2016 Sep 29. PMID: 27688030.

32: Kunisaki C, Miyata H, Konno H, Saze Z, Hirahara N, Kikuchi H, Wakabayashi G, Gotoh M, Mori M. Modeling preoperative risk factors for potentially lethal morbidities using a nationwide Japanese web-

based database of patients undergoing distal gastrectomy for gastric cancer. *Gastric Cancer*. 2017 May;20(3):496-507. doi: 10.1007/s10120-016-0634-0. Epub 2016 Aug 23. PMID: 27553666.

33: Miura F, Yamamoto M, Gotoh M, Konno H, Fujimoto J, Yanaga K, Kokudo N, Yamaue H, Wakabayashi G, Seto Y, Unno M, Miyata H, Hirahara N, Miyazaki M. Validation of the board certification system for expert surgeons (hepato-biliary-pancreatic field) using the data of the National Clinical Database of Japan: part 2 - Pancreatoduodenectomy. *J Hepatobiliary Pancreat Sci*. 2016 Jun;23(6):353-63. doi: 10.1002/jhbp.348. Epub 2016 May 10. PMID: 26994315.

34: Miura F, Yamamoto M, Gotoh M, Konno H, Fujimoto J, Yanaga K, Kokudo N, Yamaue H, Wakabayashi G, Seto Y, Unno M, Miyata H, Hirahara N, Miyazaki M. Validation of the board certification system for expert surgeons (hepato-biliary-pancreatic field) using the data of the National Clinical Database of Japan: part 1 - Hepatectomy of more than one segment. *J Hepatobiliary Pancreat Sci*. 2016 Jun;23(6):313-23. doi: 10.1002/jhbp.344. Epub 2016 May 10. PMID: 26991462.

35: Anazawa T, Paruch JL, Miyata H, Gotoh M, Ko CY, Cohen ME, Hirahara N, Zhou L, Konno H, Wakabayashi G, Sugihara K, Mori M. Comparison of National Operative Mortality in Gastroenterological Surgery Using Web-based Prospective Data Entry Systems. *Medicine (Baltimore)*. 2015 Dec;94(49):e2194. doi: 10.1097/MD.0000000000002194. PMID: 26656350; PMCID: PMC5008495.

36: Miyata H, Gotoh M, Hashimoto H, Motomura N, Murakami A, Tomotaki A, Hirahara N, Ono M, Ko C, Iwanaka T. Challenges and prospects of a clinical database linked to the board certification system. *Surg Today*. 2014 Nov;44(11):1991-9. doi: 10.1007/s00595-013-0802-3. Epub 2014 May 23. PMID: 24849141.

37: Schwartz, A., Yamagishi, K., Hirahara, N., Onishi, H., Barnes, J. IV, Rosman, A., Butler, S. Risk perception and risk attitudes in Tokyo: A report of the first administration of DOSPERT+M in Japan. *Judgment and Decision Making*. 2013;8(6):691-699.

Publications: 37, Citations: 507, h-index: 13, i10-index: 19 (DB: Google Scholar)