



西崎研究グループ の紹介

医学教育研究室、大学院クリニカルトランスレーショナルサイエンス 西崎 祐史

臨床研究・治験センター、大学院クリニカルトランスレーショナルサイエンス 野尻 宗子

大学院クリニカルトランスレーショナルサイエンス 植松 卓也

2024年2月6日

データソース

- ▶ DPCレセプトデータベース (MDV)

大腿骨骨折 30万、大腿骨骨折以外 100万 (ランダムサンプリング)
60歳以上、2016-2020

- ▶ 健保データベース (Desc) : 国保・高齢者・健保データ

2016-2022 600万 60歳以上

レセプトデータ+健診データ (ADLなどの質問票+臨床検査値データ)

- ▶ 人流データ (現在はライセンスは持っていない)

LocationMind社 (東京大学ベンチャー: 東京大学空間情報科学研究センター) 2019-2022

- ▶ Open NDBデータ、e-stat、気象庁データなど

アプローチ方法は、臨床疫学・シミュレーション解析・因果推論・データサイエンスなど多角的アプローチを採用

事例① OpenNDBを用いた関節整形術患者数予測モデルの開発 松岡さん (MPH 1期生)

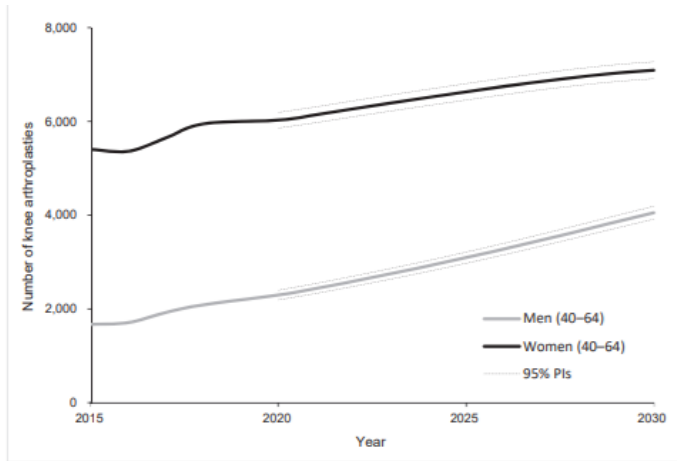
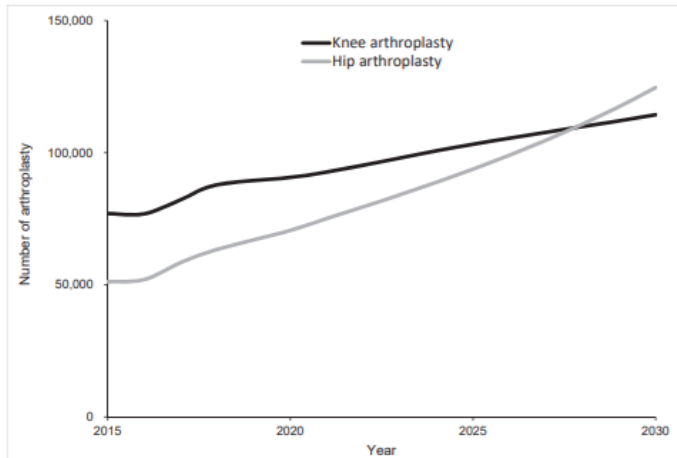


Fig. 1. Actual and projected numbers of knee arthroplasties in patients aged 40 to 64 years by sex from 2015 to 2030 in Japan with 95% projection intervals (PIs).



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Orthopaedic Science

journal homepage: <http://www.elsevier.com/locate/jos>

Original Article

Projected numbers of knee and hip arthroplasties up to the year 2030 in Japan

Hiroaki Matsuoka ^{a, b}, Hisayoshi Nanmo ^c, Shuko Nojiri ^{a, d, *}, Masashi Nagao ^{a, d, e, f}, Yuji Nishizaki ^{a, d}

^a Clinical Translational Science, Juntendo University Graduate School of Medicine, 2-1-1 Hongo, Bunkyo-Ku, Tokyo, 113-8421, Japan
^b Medical Affairs, Pfizer Japan, 3-22-7 Yoyogi, Shibuya-ku, Tokyo, 151-8589, Japan
^c Department of Mathematical Science, Yokohama National University, 79-1 Tokiwadai, Hodogaya-Ku, Yokohama, 240-8501, Japan
^d Medical Technology Innovation Center, Juntendo University, 2-1-1 Hongo, Bunkyo-Ku, Tokyo, 113-8421, Japan
^e Department of Sports Medicine, Juntendo University School of Sports and Health Science, 1-1 Hirakagakuendai, Inzai, Chiba, 270-1695, Japan
^f Department of Orthopaedic Surgery, Juntendo University School of Medicine, 2-1-1 Hongo, Bunkyo-ku, Tokyo, 113-8421, Japan

ARTICLE INFO

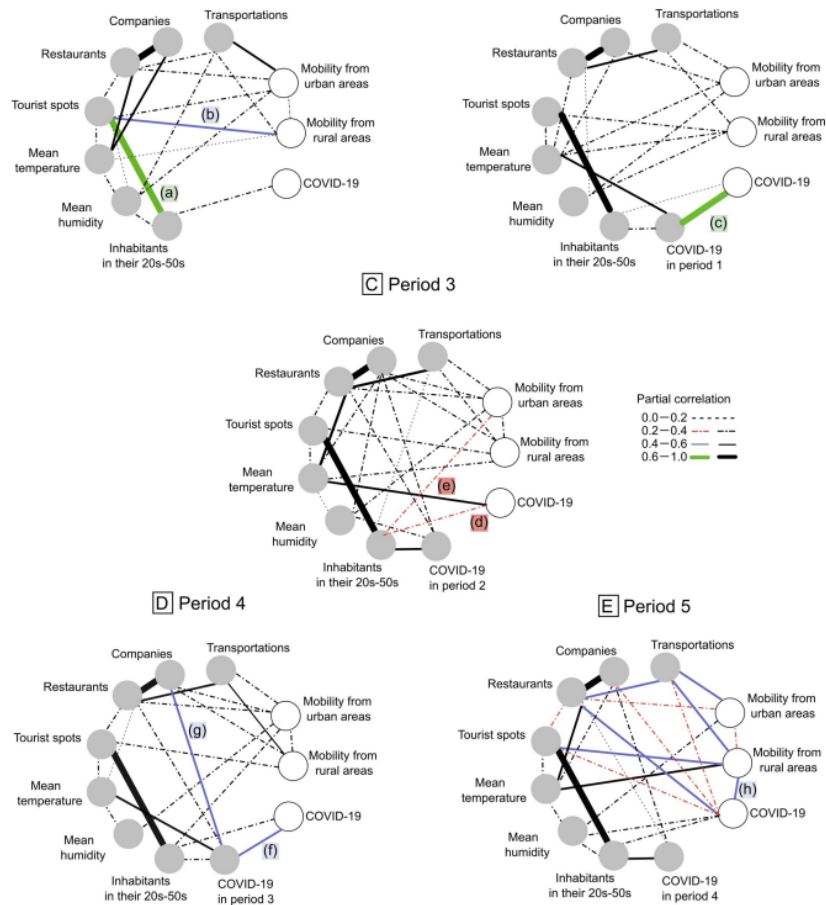
Article history:
Received 29 May 2021
Received in revised form 18 August 2021

ABSTRACT

Background: The aging population is a risk factor for an increase in osteoarthritis, leading to a potential increase in the number of arthroplasties worldwide. This study aimed to calculate the projected numbers of knee and hip arthroplasties in Japan until 2030 using national health insurance claim data.
Methods: Data on the numbers of knee and hip arthroplasties performed in Japan between 2014 and

事例② 人流データを用いたグラフィカルモデリングによるコロナ政策の影響分析 金森さん (MPH2期生)

PLOS ONE



RESEARCH ARTICLE

Changes in social environment due to the state of emergency and Go To campaign during the COVID-19 pandemic in Japan: An ecological study

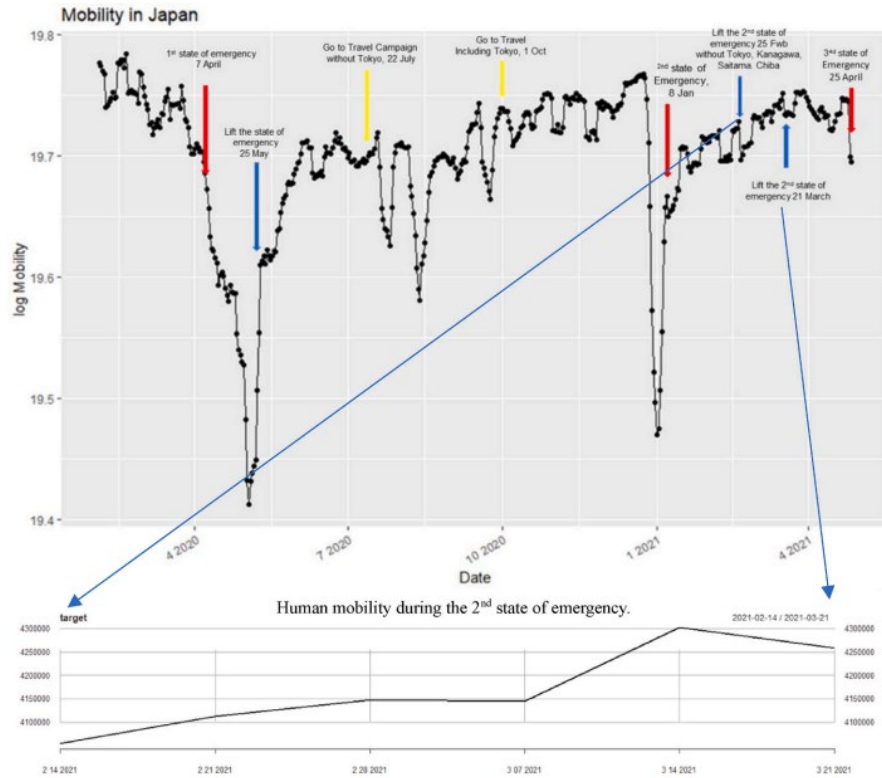
Rie Kanamori¹, Yuta Kawakami², Shuko Nojiri^{1,3*}, Satoshi Miyazawa⁴, Manabu Kuroki⁵, Yuji Nishizaki¹

1 Clinical Translational Science, Juntendo University Graduate School of Medicine, Tokyo, Japan,
2 Department of Mathematics, Physics, Electrical Engineering and Computer Science, Graduate School of

事例③

人流データにおけるDID法を用いたコロナ禍の緊急宣言の評価 中本さん (MPH3期生)

Clinical Epidemiology and Global Health 17 (2022) 101149



LocationMind xPop © LocationMind Inc.

Fig. 2. National human mobility and timing of major policy interventions in Japan.

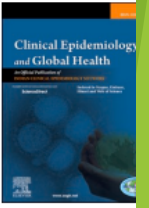


ELSEVIER

Contents lists available at ScienceDirect

Clinical Epidemiology and Global Health

journal homepage: www.elsevier.com/locate/cegh



Original article

The impact of declaring the state of emergency on human mobility during COVID-19 pandemic in Japan

Saisuke Nakamoto^a, Shuko Nojiri^{a,c,*}, Chie Taguchi^d, Yuta Kawakami^{b,d}, Satoshi Miyazawa^e, Manabu Kuroki^d, Yuji Nishizaki^{a,b,c}



Background/objectives: Japan has responded to the spread of COVID-19 through declaration of a state of emergency to regulate human mobility. Although the declaration was enforced by the government for prefectures, there is limited evidence as to whether the public complied with requests for voluntary stay at home. In this study, we evaluated the impact of declaring a state of emergency on human mobility during the COVID-19 pandemic in Japan.

Methods: We utilized daily human mobility data for 47 prefectures in Japan. Data were collected via mobile phone from February 1, 2020 to April 30, 2021. **Difference-in-difference analysis was utilized to estimate the effects of the declaration of a state of emergency on prefectures in the Tokyo Metropolitan Area (Tokyo, Kanagawa, Saitama, and Chiba) in comparison to other prefectures where the state of emergency was first lifted (Osaka, Hyogo, Fukuoka, and Aichi).**

Results: Human mobility was suppressed during the second state of emergency, from January 8 to March 21, 2021. However, the impact was weaker for the second state of emergency compared to the first.

Conclusion: In Japan, government requests for stay at home, such as the declaration of a state of emergency, were temporarily able to control human mobility. However, the second state of emergency was not as effective as the first. If additional need to regulate human mobility arises, self-restraint with stronger enforcement should be considered.

事例④

人流データと感染者数の関連についての数理的 解釈: 新規指標の提案 中本さん (MPH3期生)

scientific reports

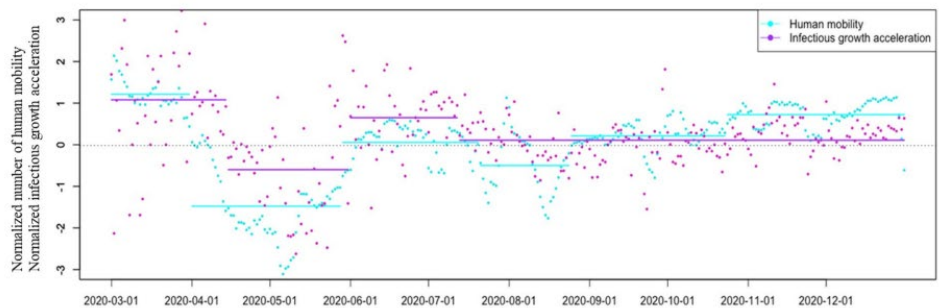
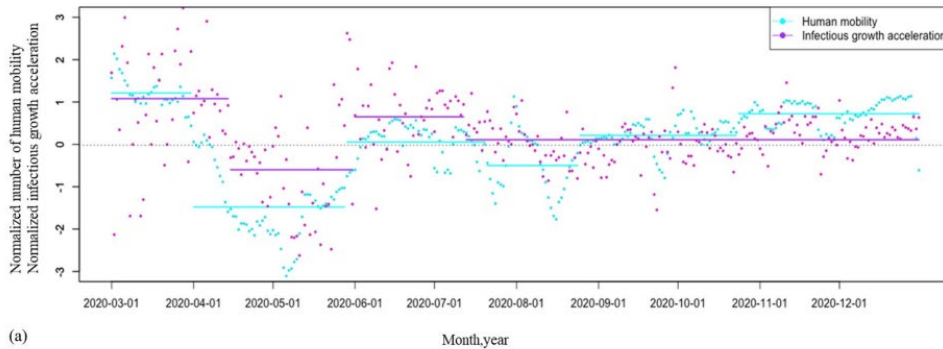
Check for updates

OPEN

Novel indicator for the spread of new coronavirus disease 2019 and its association with human mobility in Japan

Yuta Kawakami^{1,3}, Shuko Nojiri^{1,2,5}, Daisuke Nakamoto⁵, Yoshiki Irie^{1,4}, Satoshi Miyazawa⁶, Manabu Kuroki⁸ & Yuji Nishizaki^{1,2,5,7}

The Japanese government adopted policies to control human mobility in 2020 to prevent the spread of severe acute respiratory syndrome coronavirus 2, which causes coronavirus disease 2019 (COVID-19). The present study examined the impact of human mobility on COVID-19 cases at the prefectural



事例⑤

DPCデータを用い、機械学習により大腿骨骨折 リスクと処方数の関連 植松さん (MPH4期生)

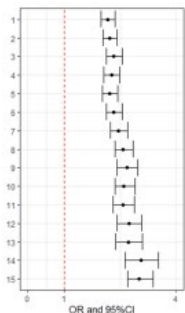
scientific reports

OPEN

Association between number of medications and hip fractures in Japanese elderly using conditional logistic LASSO regression

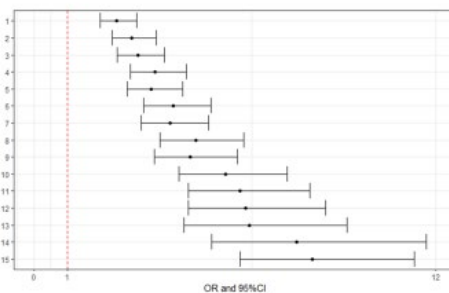
Takuya Uematsu^{1,2}, Yuta Kawakami^{4,9}, Shuko Nojiri^{1,3}✉, Tomoyuki Saito³, Yoshiki Irie^{4,5}, Takatoshi Kasai⁶, Yoshimune Hiratsuka⁷, Muneaki Ishijima⁸, Manabu Kuroki⁹, Hiroyuki Daida⁶ & Yuji Nishizaki^{1,3}

Number	OR	Lower	Upper
1	2.16	1.98	2.35
2	2.21	2.03	2.42
3	2.33	2.13	2.55
4	2.26	2.06	2.48
5	2.21	2.02	2.43
6	2.33	2.13	2.56
7	2.45	2.23	2.69
8	2.58	2.35	2.85
9	2.68	2.42	2.96
10	2.6	2.35	2.89
11	2.57	2.3	2.87
12	2.73	2.42	3.07
13	2.71	2.37	3.1
14	3.05	2.63	3.53
15	3.01	2.69	3.38



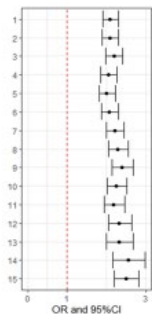
(B)

Number	OR	Lower	Upper
1	2.46	1.98	3.07
2	2.91	2.34	3.65
3	3.1	2.48	3.9
4	3.61	2.88	4.56
5	3.5	2.78	4.43
6	4.15	3.28	5.29
7	4.06	3.19	5.2
8	4.84	3.76	6.26
9	4.67	3.6	6.08
10	5.71	4.33	7.55
11	6.14	4.6	8.24
12	6.31	4.6	8.7
13	6.44	4.48	9.35
14	7.84	5.31	11.72
15	8.32	6.14	11.35



(C)

Number	OR	Lower	Upper
1	2.1	1.91	2.31
2	2.09	1.9	2.31
3	2.19	1.99	2.42
4	2.05	1.86	2.27
5	2.01	1.82	2.23
6	2.08	1.88	2.3
7	2.21	2	2.45
8	2.29	2.06	2.55
9	2.4	2.15	2.68
10	2.26	2.02	2.53
11	2.18	1.94	2.46
12	2.33	2.05	2.65
13	2.32	2.01	2.68
14	2.55	2.17	2.99
15	2.5	2.2	2.83



Check for updates

事例⑥

DPCデータを用いた膝関節症と循環器疾患の関連について疫学研究 植松さん (MPH4期生)

BMJ Journals

 Search [Advanced search](#)

BMJ Open

[Latest content](#) [Archive](#) [For authors](#) [About](#) [Browse by collection](#)

[Email alerts](#)

BMJ Open is an online, open access journal, dedicated to publishing medical research from all disciplines and therapeutic areas.

Impact Factor: 2.9

Citescore: 4.4

The journal publishes all research study types, from protocols through phase I trials to meta-analyses, including small, specialist studies, and negative studies. Publishing procedures are built around fully open peer review and continuous publication, publishing research online as soon as the article is ready.

BMJ Open aims to promote transparency in the publication process by publishing reviewer reports and previous versions of manuscripts as pre-publication histories. Authors are asked to pay article-publishing charges on acceptance; the ability to pay does not influence editorial decisions.



1 Association Between Osteoarthritis and Cardiovascular Disease in Elderly in Japan: An 2 Administrative Claims Database Analysis<

3 <

4 <

5 Takuya Uematsu^{1,2}, Shuko Nojiri^{1,3}, Muneaki Ishijima⁴, Yuji Nishizaki^{1,3,5}<

6 <

7 ¹ Clinical Translational Science, Juntendo University School of Medicine Graduate School of Medicine,
8 Tokyo, Japan<

9 ² Department of Hospital Pharmacy, Juntendo University Hospital, Tokyo, Japan<

Minor revision

事例⑦

Case-crossover研究を活用した中枢性神経薬 と大腿骨発症リスクの研究 深田さん (MPH5期生)

The screenshot shows the homepage of the Internal Medicine journal website. The header includes the logo of the Japanese Society of Internal Medicine, the journal title "Internal Medicine", a search bar, and a "Japanese" language toggle. The main navigation menu contains links for Home, About IM, Instructions to Authors, Submission, Issues, Awards, and Editorial Committee. The main content area features a large "Internal Medicine" title and a description of the journal as a peer-reviewed medical journal published twice each month. A white box highlights a featured article.

Original Article: Association between Central Nervous System Drugs and Femoral Fracture Risk in Over Octogenarian in Japan: A Case-crossover Study[⇐]

Authors: Haruhiko Fukada¹, Shuko Nojiri^{1,2,3} Yuji Nishizaki^{1,2,3}[⇐]

Affiliations:[⇐]

1 Clinical Translational Science, Juntendo University Graduate School of Medicine, Tokyo, Japan[⇐]

Major revision

更新日: 2023/10/08



西崎 祐史

ニシザキ ユウジ (Nishizaki Yuji)

ホーム

研究キーワード

研究分野

論文

書籍等出版物

講演・口頭発表等

委員歴

受賞

所属学協会

共同研究・競争的資金等の研究課題

学術貢献活動

社会貢献活動

メディア報道

経歴

学歴

MISC

担当経験のある科目(授業)

その他

メニュー

マイポータル

研究ブログ

資料公開

共著者の一覧

志水 太郎
01/24 更新篠崎 智大
02/01 更新

基本情報

所属 [順天堂大学](#) 医学部医学教育研究室 先任准教授学位 公衆衛生学修士(2010年3月 東京大学大学院医学系研究科公共健康医学専攻)
医学博士(2014年3月 順天堂大学大学院医学研究科医学専攻課程)

研究者番号 ⓘ 60743888

J-GLOBAL ID [201801009568354910](#)researchmap会
員ID B000330137

2004年日本医科大学卒業、聖路加国際病院で臨床研修を実施、内科チーフレジデントを務める。2010年東京大学公衆衛生学大学院 (SPH) で公衆衛生学修士 (MPH) を取得。その後、順天堂大学循環器内科に入局、2015年厚生労働省、日本医療研究開発機構 (AMED) に出向。2017年順天堂大学革新的医療技術開発研究センターに所属し、臨床研究支援業務に従事、臨床研究中核病院の取得に貢献。現在は、順天堂大学医学部医学教育研究室に所属し、医学教育、研修医教育、研究を中心に活動している。その他、学外の活動として、AMED腎疾患実用化研究事業プログラムオフィサー、日本医療教育プログラム推進機構 (JAMEP) 基本的臨床能力評価試験 (GM-ITE) プロジェクトマネージャーを務める。

<https://researchmap.jp/ynishiza>