Report

Policy Research Center
Research Project Accomplishment Report

Date: 2020/2/26

Project Leader: Title Associate Professor   Name   Stacey H. Chen

Research Project Title: Effects of Elite Hospital Residency Training on Junior Doctors' Quality Growth

Duration (yyyy/mm/dd): 2019/11/12 ～ 2021/2/28   2-year

Co-Investigator:	Title	Name	Affiliation	(Remarks)
Co-Investigator 1	Dr	Kiyoshi Kurokawa	GRIPS Professor Emeritus	
Co-Investigator 2	Mr.	Juhei Matsumoto	Director, Data Analysis Division, Japan Institute for Advancement of Medical Education Program or JAMEP	
Co-Investigator 3				
Co-Investigator 4				
Co-Investigator 5				

Project aims and goals:

We propose to utilize the change in each junior doctor's examination score from the first year to the second year of the resident program to evaluate the causal impact of elite hospital training on junior doctors' quality growth. This project will be the first that links nationwide examination results of Japanese junior doctors to their training programs. For this project, we will also evaluate examination designs and question quality. Such evaluation of national medical examinations will also be the first time in Japan. Our results outcomes will potentially make important contributions to the academic literature and provide useful policy implications. We intend to first work closely with policymakers and official data management officers in evaluating and improving the designs of national examinations. Using the evaluation results and the data sources, we can go further to examine the effectiveness of hospital training programs in improving junior doctors' performance. Our findings will potentially help policymaking and contribute to academic literature.

Accomplishment(s) of Project (400 words):

Since 2019 November, we have reviewed the previous l literature, constructed econometric models, collected the required datasets, and merged the collected data across years by hospital and physician identification codes. We compiled the data in the following five steps:

1) Collect and organize the yearly data of hospital characteristics from 2011 to 2018, published on the MHLW website. These datasets have been compiled by hospital name or identification code. We include hospital characteristics including MDC構成比, 他院よりの紹介の有無, 再入院の状況, variables in 施設概要表.

2) We have collected and organized the characteristics data of all the medical schools in Japan from 2011 to 2018, including (a) The average of physician certification test scores by the medical school among graduating students in the given year and (b) ranking based on international journals.

3) We also collected and organized the annual questionnaire data from JAMEP between 2012 and 2018, including each physician's the test scores during the first- and second-year residency training and the variables in the self-reported survey questionnaire regarding each respondent physician's characteristics (sex, age, 希望専門科, 1日の平均勉強時間, 1週間の平均カンファレンス参加時間（院内）, 1週間の平均カンファレンス参加時間（院外）, 平均した一か月のER当直回数, 平均した一か月の病棟当直回数, 平均した常時の入院患者受け持ち人数, 内科ローテート月数, 利用している医学オンラインリソース。

4) Link each physician's test scores in JAMEP during the first- and second-year residency training for the cohorts from 2012 to 2018.

5) Compile data from (1) to (4) by physician ID and training hospital ID/name.

To compare Japanese systems to those in other countries, we have consulted Dr. Tzu-Hsin Lin of the National Taiwan Hospital about Taiwan's institutional details and requested to get data for further analysis.

Accomplishments:
 Please fill in [the list of Accomplishment]

Other things to report:

This project hired no RA although we contracted a graduate student at Utokyo, Department of Economics, to help with the data work described above ("Accomplishment of the Project)."

(Please include all items within one page.)

List of Accomplishment
(including forthcoming)
(If the description exceeds five in each item, please add a line as necessary.)

Article
Academic papers (including those published in general journals)
*For collaboratively authored papers, please underline your name.
*Please report "Peer-reviewed academic conference papers" as well.

	Author	Title	Publisher	Vol/No /Chapt er/Sect ion	Date of Publications	Pages (from)	Pages (to)	Referee Report (yes=1)	Internatio nal coauthors hip (yes=1)	DOI	Open Access (yes=1)
		0 in total		The number of referred article	0				0		0
1							-				
2							-				
3							-				
4							-				
5							-				

Book
*For collaboratively edited or authored books, please underline your name.
*If you are an author of a chapter in a book, please report in "Article" category.

	Author	Title	Publisher	Date of Publications	Total pages
		0 in total			
1					
2					
3					
4					
5					

Verbal report / Conference presentation
*Here please report "Non-peer-reviewed academic conference papers".
*When you or co-invetsigetor had a lecture/presentation as invitees, please specify "(invited lecture)" after Event Title.

	Presenter	Title	Event Title	Venue	Date
		1 in total			
1	Stacey Chen	"IRT analysis: Prelimenary Evaluation Results of the JAMEP Tests in 2017 and 2018"	Research meeting with Dr. Kiyoshi Kurokawa and Mr. Juhei Matsumoto	GRIPS	1/23/2020
2					
3					
4					
5					