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The determinants of exit from institutions and the price elasticity of institutional care: Evidence from Japanese micro-level data ☆

Haruko Noguchi [a,1], Satoshi Shimizutani [b,*]

[a] National Institute of Population and Social Security Research, Hibiya Kokusai Building 6th Floor, 2-2-3 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-0011, Japan
[b] Institute for International Policy Studies, Toranomon 30 Mori Building 6th Floor, 3-2-2 Toranomon, Minato-ku, Tokyo 105-0001, Japan

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ABSTRACT

Noguchi, Haruko, and Shimizutani, Satoshi—The determinants of exit from institutions and the price elasticity of institutional care: Evidence from Japanese micro-level data

This study examines how the price mechanism affects the length of residents' at institutions and their destination after exit. Using micro-level data from The Survey on Care Service Providers compiled by the Japanese government, we show that the price elasticity of the hazard of exit was 1.7 from welfare care facilities was 1.8 from health care facilities. Moreover, our estimates reveal that a 1 percentage point increase in copayments leads to an increase in the probability of returning home by 0.04% for residents of welfare care facilities and 3.7% for those of health care facilities and a decrease in the probability of being re-hospitalized by 3.3% for residents of health care facilities and 1.9% for those of medical care facilities. Our findings demonstrate that an appropriate price policy may work well to shorten clients' length of stay and to reduce the number of the socially institutionalized. *J. Japanese Int. Economies* **25** (2) (2011) 131–142. National Institute of Population and Social Security Research, Hibiya Kokusai Building 6th Floor, 2-2-3 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-0011, Japan; Institute for Inter-

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* Corresponding author. Fax: +81 (0)3 5404 6650.
E-mail addresses: h.noguchi@ipss.go.jp (H. Noguchi), sshimizutani@iips.org (S. Shimizutani).
[1] Fax: +81 3 3591 4816.

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national Policy Studies, Toranomon 30 Mori Building 6th Floor, 3-2-2 Toranomon, Minato-ku, Tokyo 105-0001, Japan.

1. Introduction

This study examines how the price mechanism affects the length of residents' stay at institutions and their destination after exit in Japan. The purpose of this analysis is motivated to evaluate policy options to reduce the number of socially institutionalized residents in Japan. One of the most serious challenges facing Japan today is the rapid aging of its population and the ballooning costs of the medical and long-term care systems associated with this trend. In the 1990s, medical care expenditure for the aged 70 and over increased from approximately 6 trillion yen to 11 trillion yen, and its share in total medical expenditure grew from 30% to 37% while long-term care costs rose sixfold from about 0.6 trillion yen to 3.6 trillion yen in the same period (Statistics Bureau, Ministry of Internal Affairs and Communications, 2004).

A large share of these costs is accounted for by the growing numbers of "socially hospitalized" patients and "socially institutionalized" residents. Patients at hospitals are defined as "socially hospitalized" if they no longer require acute medical care but remain hospitalized for more than 180 days, because they require some form of care, but have no informal or unpaid caregivers (such as relatives) or sufficient financial resources to afford formal home care. In the same way, residents at long-term care institutions are defined as "socially institutionalized" if their medical condition would allow them to live at home, provided they receive adequate formal or informal home care; but because of the lack of such home care, for family or financial reasons, they often remain in institutions homes until they die. Many European countries facing similar problems of spiraling health care costs have tried to rein these in by introducing policies aimed at transferring patients from medical to long-term care institutions and from institutional to home care.

In order to tackle the issues of social hospitalization and institutionalization, the Ministry of Health, Labour and Welfare (MHLW) introduced the public long-term care insurance scheme in 2000.[2] Under the new program, the "firewall" between medical and long-term care services was abolished and patients can now choose from a variety of institutions providing a wide range of health care services. More importantly, the new scheme introduced the price mechanism to the home care market for the elderly: users must now pay 10% coinsurance for each insured care service. Along with the introduction of the public long-term care insurance scheme, MHLW encourages hospitals to set up wards for long-term care that are separate from wards for acute medical care. The separated wards are intended to support patients while preparing to transfer them from acute medical care to low-level home care. A further element of the reform is that the coinsurance rate for insured care services now rises from 10% to 15% when a patient occupies an acute-care bed for more than 180 days. These reforms are expected to reduce the number of socially hospitalized patients by transferring them to other care institutions.

Yet, this strategy can be only part of the solution of the problem of social institutionalization. Once socially hospitalized patients move from hospital to long-term care institution, many then become socially institutionalized residents. Thus, the next step therefore has to be to find ways to transfer socially institutionalized residents to home care. Using the price mechanism can provide one important instrument in such a strategy, which may depend on three types of institutions; long-term care welfare facilities for the elderly (henceforth, "welfare care facilities"); long-term care health facilities for the elderly (henceforth, "health care facilities"); and long-term care medical facilities for the elderly (henceforth, "medical care facilities"). Welfare care facilities are designed to provide institutional care service for those who require constant care but who do not live with any informal caregivers at home. These

[2] See Mitchell et al. (2006, 2008) for recent development of the Japanese long-term care insurance program. Before the introduction of the long-term care insurance scheme, the decision which services to provide for the elderly rested with local governments. In most cases, long-term care services for the elderly were provided free of charge, but patients could not choose the care facility or what service they would receive.