Nationwide trends in home peritoneal dialysis following a medical fee revision in Japan

HPR9

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Conflict of Interest: Takehiro Ishida is an employee of Daiichi Sankyo Company, Limited. Satoshi Yamaguchi is an employee of Accenture. This research was conducted independently of these institutions.

INTRODUCTION

【Home peritoneal dialysis in Japan】

- Kidney replacement therapy (KRT) consists of three major modalities: hemodialysis, peritoneal dialysis, and kidney transplantation.
- In 2022, the kidney transplantation rates were 14 recipients per million population in Japan and 79 recipients per million population in the US.
- The limited availability of kidney transplantation in Japan underscores the importance of diverse dialysis options including home-based dialysis.
- Home-based dialysis includes home peritoneal dialysis (HPD) and home hemodialysis (HHD).
- In 2022, peritoneal dialysis accounted for 3% of dialysis patients in Japan, compared with 12% in the US.

【Policy and Guidelines】

- In FY2022, the fee revision introduced a “Remote Monitoring Add-on” (¥1,150 / 7.93 USD) for HPD (C102), supporting ICT-enabled HPD management by the Ministry of Health, Labour and Welfare (MHLW).
- In FY2023, both the Japanese Society of Nephrology (JSN) guideline and Kidney Disease: Improving Global Outcomes (KDIGO) consensus report encouraged expanded use of home-based dialysis.

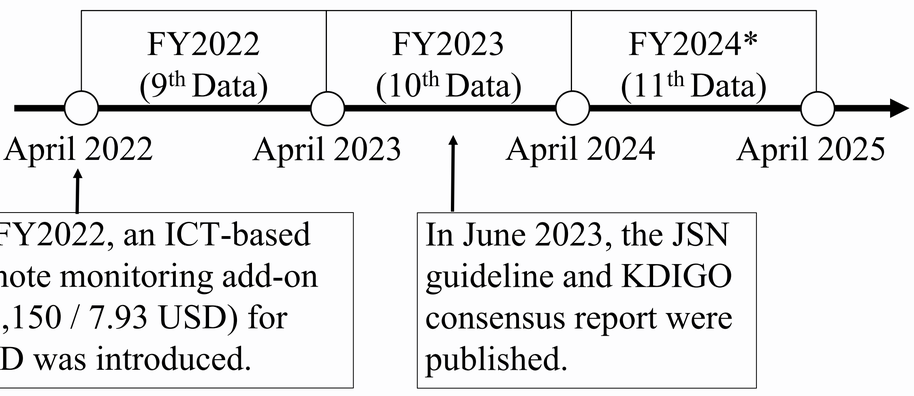
AIM

To examine nationwide trends in HPD claims following recent policy and guideline changes in Japan, including variations by age, sex, and prefecture.

METHODS

【Study Design】 Serial cross-sectional study

【Analysis Period】 FY2022 to FY2024 (April 2022 to March 2025)



*FY2024 data were published by MHLW as of July 2026 after abstract submission.

【Data Source】 NDB Open Data, derived from the same source data as the NDB, was used in this study.

	NDB	NDB Open Data
Data type	Individual-level insurance claims & health-checkup data	Aggregated statistical data (by age, sex, drug, etc.)
Access	Strict expert review & approval required	Publicly available; no restriction
Personal info	Included (anonymized)	Individuals cannot be identified; no hospital-level data

【Outcome】 Claims for the HPD instruction/management fee (¥40,000 / 276 USD) and the HHD instruction/management fee (¥100,000 / 690 USD).

【Analysis Methods】 Analyses included:

- Year-over-year percentage changes
- Age- and sex-stratified trends
- Prefecture-level comparisons across 47 prefectures using a two-sided paired t-test (statistical significance: $p < 0.05$)

RESULTS

Table 1. Nationwide Trends in Home Dialysis Claims per 100,000 population

Claims per 100,000 population	FY2022	FY2023	FY2024	Change FY2022 to 2024
HPD	92.38	95.23	98.48	6.60%
HHD	7.57	7.61	7.48	-1.18%
Total Home Dialysis	99.96	102.84	105.97	6.01%

Key finding: Home dialysis claims increased from FY2022 to FY2024, driven primarily by an increase in HPD claims.

Table 2. HPD Claims per 100,000 population by Age and Sex (FY2022 to FY2024)

HPD Claims per 100,000 population	FY2022	FY2023	FY2024	Change FY2022 to 2023	Change FY2022 to 2024
Male (<65 years)	78.27	80.64	83.79	3.02%	7.04%
Male (≥65 years)	260.48	266.02	272.90	2.13%	4.77%
Female (<65 years)	42.64	44.11	45.20	3.46%	6.01%
Female (≥65 years)	100.41	104.28	108.52	3.85%	8.08%
Total	92.38	95.23	98.48	3.08%	6.60%

Key finding: HPD claims per 100,000 population increased by approximately 5–8% across all age- and sex-specific subgroups between FY2022 and FY2024.

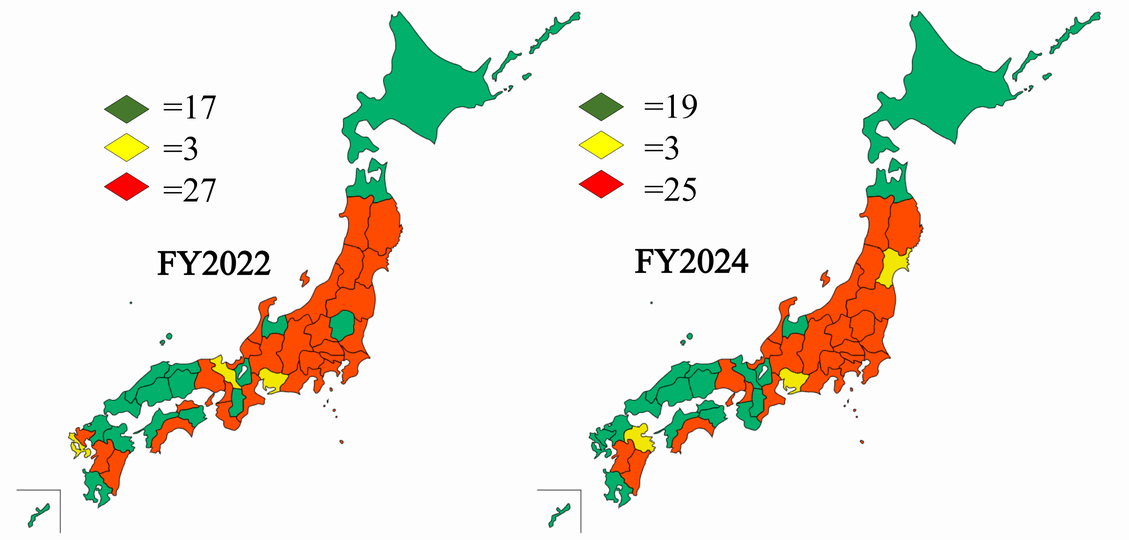
Table 3. Prefecture-Level Analysis of HPD Claims (FY2022 to FY2024)

Prefecture-based Analysis* (n = 47)	FY2022 Mean (95% CI)	FY2024 Mean (95% CI)	Increase Mean (95% CI)	Change Mean (95% CI)
HPD claims per 100,000 population	98.50 (86.4–110.53)	106.86 (92.85–120.88)	8.36 (3.82–12.90) $p < 0.001$	8.64% (4.76–12.52%)

*Each prefecture was equally weighted. Therefore, these estimates differ from the national population-weighted rates presented in Tables 1 and 2.

Key finding: Prefecture-level HPD claims per 100,000 population increased significantly from FY2022 to FY2024.

Figure 1. Prefecture Categories by HPD Claims per 100,000 population
(Prefecture-based analysis; n = 47, per 100,000 population)



Key finding: HPD claims per 100,000 population increased nationwide.

CONCLUSION

HPD claims increased nationwide from FY2022 to FY2024 across demographic and geographic groups, while HHD claims remained stable.

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