

The Dental Care Needs and the Government's Intervention Service in People With Special Needs in Taiwan

Mei-Chi Lai, Ruei-Yi Chang, Li-Ying(Grace) Hung

Division of Health Technology Assessment, Center for Drug Evaluation(CDE), Taiwan

OBJECTIVES: The people with disabilities usually gets less dental care then the general population, and it get worse with increasing age. The study investigated the dental care and the government's intervention service in people with specific disabilities (PSDS).

METHODS: This cross-section study was conducted to analyze the insurance reimbursement of dental services in 2016-2019 National health insurance research database and disability database. It stratified it at different disability type and severity, the hospital levels to examine the utilization of oral care of PSDS and evaluated the effectiveness of related policies.

RESULTS: The utilization of dental care of PSDS for treatment of dental disease and get preventive care was 33.5% to 34.6% in 2016-2019. The rate of PSDS seeking dental care across other counties and cities was about 40 to 50% in 2016-2019. The utilization of dental auxiliary medical treatment by PSDS is low from 2016 to 2019. The utilization of general anesthesia is only about 0.2% to 0.3% per year. The utilization of the protection sexual limb restraint is only about 1.1% to 1.3% every year, and the utilization of sedation and anesthesia is less than 0.1%. The utilization of dental care with PSDS was the lowest in vegetative patients that was about 12% to 14% in 2016-2019.

CONCLUSIONS: The results of this study, it is the same as the Italian experience. Dentists may be less willing to provide dental care services to people with cognitive impairment and poor coordination ability. The government should provide more training program and incentives so that dentists are willing and not afraid to provide dental care services for the elderly and those with more severe disabilities of PSDS.

Table 1. Number and percent of the patients with a dental visit by PSDS in 2016-2019

year	Number of PSDS with a dental visit	Percent of PSDS with a dental visit
2016	184,575	33.5%
2017	191,760	34.3%
2018	195,916	34.3%
2019	200,142	34.6%

Figure 1. percentages of dental visit among PSDS and the general population in 2019

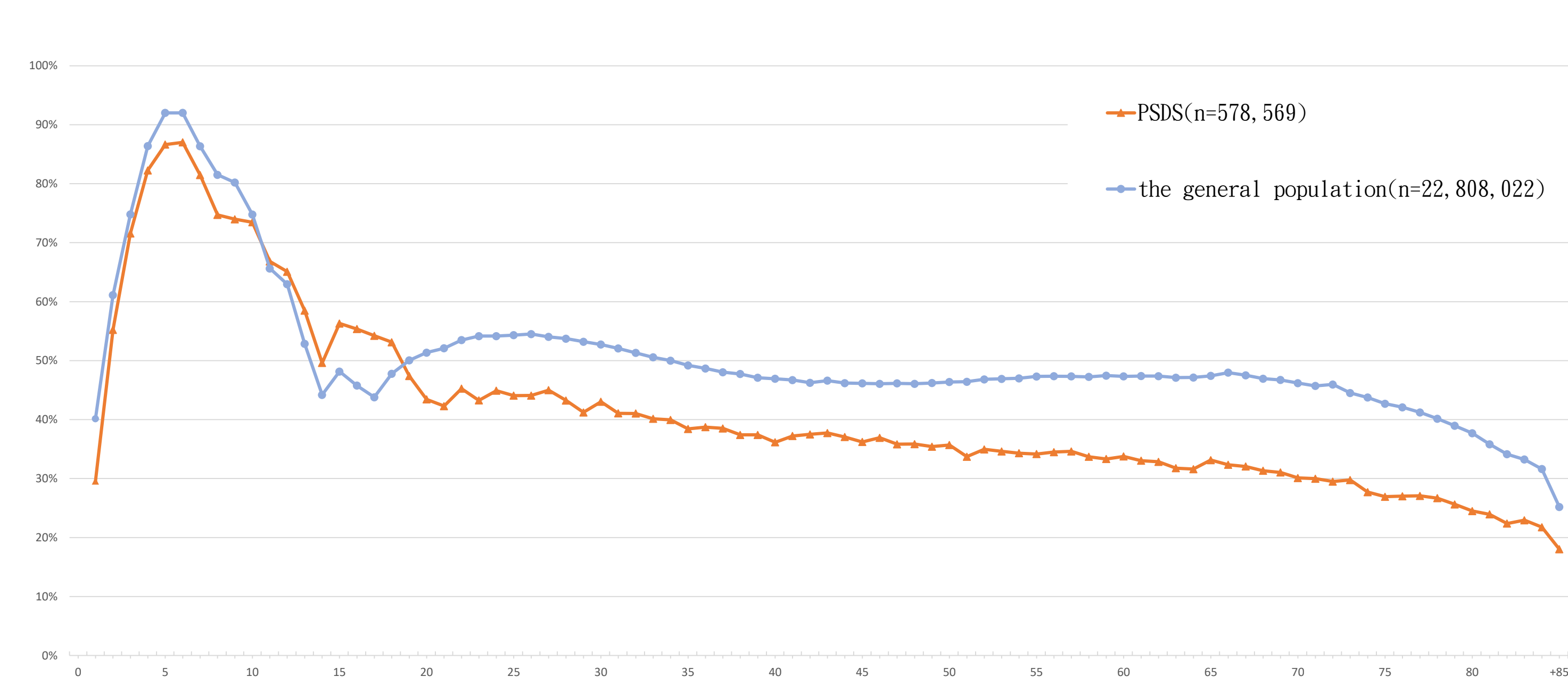


Figure 2. the percentage of dental utilization on PDSD in 2016-2019

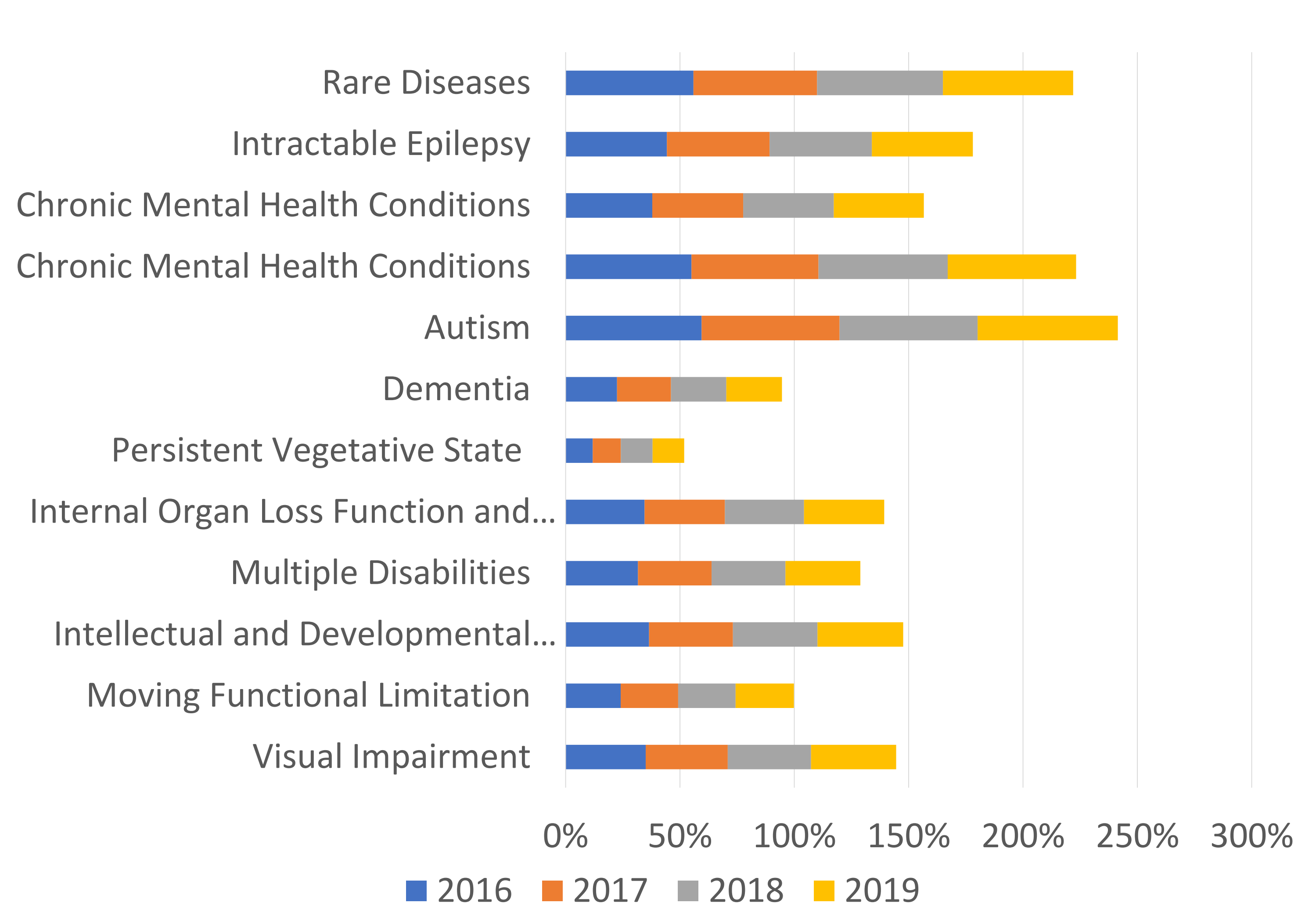


Table 3. the number of PSDS on dental service in in 2016-2019

Dental service	Number of PSDS (%)			
	2016	2017	2018	2019
Services within the institution	22,801 (59%)	25,513 (61%)	27,589 (62%)	29,648 (63%)
Medical tour services	15,614 (40%)	16,031 (38%)	15,957 (36%)	16,071 (34%)
Dental Home Visit and Oral Healthcare	134 (0.3%)	360 (1%)	603 (1%)	812 (2%)
supplementary dental service for PSDS	126 (0.3%)	127 (0.3%)	179 (0.4%)	172 (0.4%)
Community medical station services	0(0%)	0(0%)	14(0.03%)	19(0.04%)
total	38,675	42,031	44,342	46,722

Table 4. The number and utilization rate of supplementary dental treatment for disabled patient

year	number of general anesthesia ¹	rate of general anesthesia ¹	number of protective stabilization ²	rate of protective stabilization ²	number of sedation ³	rate of sedation ³
2016	831	0.21%	3,500	1.11%	294	0.05%
2017	867	0.21%	3,637	1.15%	313	0.06%
2018	869	0.21%	3,894	1.22%	280	0.05%
2019	1,022	0.25%	4,173	1.31%	226	0.04%

Table 2. the percentage of out-of-county dental utilization in 2016-2019

category	Degree of disability	the percentage of out-of-county dental utilization			
		2016 (n=551,787)	2017 (n=559,668)	2018 (n=571,452)	2019 (n=578,569)
Visual Impairment	≥3	43.9%	43.7%	50.4%	49.7%
Moving Functional Limitation	limited cerebral palsy & ≥3	39.8%	40.0%	45.4%	45.9%
Intellectual and Developmental Disability		37.9%	37.1%	43.2%	43.2%
Multiple Disabilities		42.8%	42.9%	47.2%	47.4%
Internal Organ Loss Function and Related Disabilities	≥3	41.7%	41.6%	48.3%	48.1%
Persistent Vegetative State		47.5%	47.3%	52.1%	54.3%
Dementia		46.9%	46.3%	52.0%	52.1%
Autism		49.5%	48.3%	52.5%	51.9%
Chronic Mental Health Conditions		51.7%	51.7%	55.6%	56.0%
Chronic Mental Health Conditions	≥2	43.9%	43.8%	48.2%	48.1%
Intractable Epilepsy		39.2%	38.3%	42.6%	43.4%
Rare Diseases		46.2%	48.3%	54.6%	54.0%
Total		42.3%	42.1%	47.5%	47.5%