

## 1. Summary of operations implemented using FILP funds

The NCGG develops hospital facilities or medical machines to provide medical services related to physical and mental changes accompanying aging and diseases caused by such changes for which special medical services are required to ensure that the elderly achieve a life-long independence (hereinafter referred to as "age-related diseases").

(Reference) Operations other than those subject to FILP include surveys, research and technology development related to the abovementioned medical services and training of technicians related closely to these operations.

## 2. Amount of lending under FY2022 FILP

(Unit: billion yen)

FY2022 FILP	Estimated outstanding amount of FILP lending at the end of FY2021
0.2	10.3

## 3. Estimated policy cost analysis of the project

## (1) Policy cost

(Unit: billion yen)

Category	FY2021	FY2022	Fluctuation
1. Government expenditure (subsidies, etc.)	1.6	3.4	+1.8
2. Government revenue (payments to the government, etc.)*1	-	-	-
3. Opportunity cost of capital investments, etc.	-0.2	2.2	+2.3
<b>Total (1+2+3=policy cost(A))</b>	<b>1.4</b>	<b>5.6</b>	<b>+4.2</b>
Analysis period (years)	31 years	30 years	-1 year

## (2) Breakdown of policy cost by the time of the provision of funds (Unit: billion yen)

Category	FY2021	FY2022	Fluctuation
(A) Policy cost (previously cited)	1.4	5.6	+4.2
1) Opportunity cost of capital investments, etc. provided before the beginning of the analysis period	1.9	1.9	+0.0
2) Policy cost expected to be newly accrued during the analysis period	-0.5	3.7	+4.2
Government expenditure (subsidies, etc.)	1.6	3.4	+1.8
Government revenue (payments to the government, etc.)*1	-	-	-
Opportunity cost of surplus, etc.	-2.1	0.2	+2.3
Opportunity cost of capital investments, etc.	-	-	-

## (4) Sensitivity analysis (cases where assumptions change)

(Unit: billion yen)

(A) Policy cost (previously cited)	Case before the negative interest rate policy*2	Fluctuation			
			1. Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*1	3. Opportunity cost of capital investments, etc.
5.6	6.4	+0.8	-0.2	-	+1.0

(A) Policy cost (previously cited)	Case of a 1% decrease in medical services revenues	Fluctuation			
			1. Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*1	3. Opportunity cost of capital investments, etc.
5.6	5.9	+0.3	+0.0	-	+0.3

(Note) Components in each column may not add up to the total because of rounding.

\*1 Government revenue (payments to the government, etc.) is booked as a negative amount. Example: -10 b. yen in payments to government, etc.

\*2 Assumed interest rates (discount factor and future interest rate) are based on the market yield on Japanese government bonds on January 28, 2016, before the introduction of the negative interest rate policy.

## (3) Year-to-Year comparison analysis

(Computing any fluctuation from previous year)

(Unit: billion yen)

Policy cost		FY2021	FY2022	Simple fluctuation
		Simple comparison (before adjustment)	1.4	5.6
Past year comparison (after adjustment)	1) Adjusting initial years (Analysis results after adjusting initial year to that for FY2022 analysis)		2) Adjusting assumed interest rates (Analysis results of re-estimation using assumed interest rate for FY2021)	Real fluctuation (2-1)
	3.0	5.5	+2.6	

[Real fluctuation factor analysis]

○Factors behind policy cost increase

- Increase in cost due to the revision of premises for grants for operation cost (+2.0 billion yen)

- Increase in opportunity cost due to a cut in the discount factor (+0.6 billion yen)

○Factors behind policy cost decrease

- None

#### 4. Outline of estimation and project prospect employed in the analysis

##### [Outline of estimation]

- The operation subject to the analysis is the development of hospital facilities or medical machines required for the NCGG to provide medical services for age-related diseases.
- The analysis period covers 30 years for the redemption of 200 million yen in fiscal loans committed in FY2022 and existing fiscal loans for the operation.

##### [Approach on future operations]

- Medical services expenses are estimated with consideration given to an increase in materials cost, etc. and the regular replacement of large medical machines and electronic health records that will accompany an increase in medical services revenues through the opening of new hospital buildings in and after FY2022.
- The revision of medical services fees is not taken into account because some factors have yet to be fixed.

(Unit: million yen)

FY	Result					Estimated 2021	Planned 2022	Assumptions for calculation			
	2016	2017	2018	2019	2020			2023	2024	...	2051
Medical services revenue	5,723	6,012	6,502	6,782	6,323	7,047	7,703	7,703	7,703	...	7,703
Medical services expenses	5,291	5,894	5,958	5,970	5,896	6,397	6,546	6,546	6,546	...	6,546

#### 5. Reasons for granting of subsidies, mechanism and underlying laws

##### (Reasons for granting of subsidies)

In order to contribute to the progress and improvement of public health through the improvement of medical services for age-related diseases as a national medical policy by carrying out investigation, research, and exploitation of techniques of medical services for age-related diseases, and providing medical services closely related to these works and giving training to technicians.

##### (Underlying laws and regulations)

Act on General Rules for Incorporated Administrative Agencies (Act No.103 of 1999)

Article 46 The national government may give incorporated administrative agencies grants equivalent to all or any part of the funds necessary for their operations.

##### (Underlying laws and regulations for the payments to the national treasury)

Act on National Research and Development Agencies that Conduct Research related to Advanced and Specialized Medical Care (Act No.93 of 2008)

Article 20 (1) National Centers for Advanced and Specialized Medical Care may, if there is a reserve fund as prescribed by Article 44, Paragraph 1 of the Act after the deposition as prescribed by Article 44, Paragraph 1 or 2 of the Act in the last fiscal year of the project in the period of the medium to long-term target (hereinafter referred to as "medium to long-term target period") as prescribed by Article 35-4, Paragraph 2, Item 1 of the Act, use the amount approved by Minister of Health, Labour and Welfare as revenue for operations which National Centers for Advanced and Specialized Medical Care conduct, as prescribed by from Article 13 to 19 in the next medium to long-term target period as specified in the medium to long-term plan approved as prescribed by Article 35-5, Paragraph 1 of the Act concerning next medium to long-term target period (if any change is approved as prescribed by the same Paragraph, use the plan after the change).

(2) National Centers for Advanced and Specialized Medical Care may deduct from the amount equal to the reserve specified in Paragraph 1 the amount approved under the said Paragraph. After the deduction, the remaining amount, if any, shall be paid to the national treasury

(3) (Omitted)

#### 6. Special remarks

- Under provisions of the Act on Incorporated Administrative Agency engaging in Research on Highly Specialized Medicine (Act No. 93 of 2008), the National Center for Geriatrics and Gerontology covered by the now-defunct special account for national advanced medical centers became an incorporated administrative agency with the same name. Later, under provisions of Article 130 of the Act on the Arrangement of Relevant Acts Incidental to Enforcement of the Act Partially Amending the Act on General Rules for Incorporated Administrative Agencies (Act No. 67 of 2014), the National Center for Geriatrics and Gerontology became a national research and development agency with the same name.
- In addition to subsidies from the national Government for hospital building construction, the NCGG received 1.0 billion yen in local government subsidies from FY2019 to FY2021.

#### (Reference) Outcome and social and economic benefits of operations

##### 1. Diagnostic treatment

The Center provides advanced pioneering medical technologies concerning diseases unique to elderly people and tries to standardize geriatrics and gerontology to enhance effectiveness and safety for elderly people.

- Promoting the development and diffusion of models available for other medical institutions regarding new medical services for elderly people, including the improvement of quality of life and the implementation of minimally invasive therapies, based on the achievements of cooperative clinical research between the research institute and the hospital.
- Compiling its research outcomes and knowledge of domestic and overseas research institutes and medical institutions, etc., and providing advanced pioneering medical services to prevent, diagnose, and treat diseases unique to elderly people and to restore their deteriorated functions.
- Implementing support linked closely to everyday life, including the penetration of understanding about dementia and other age-related diseases, and the mitigation of burdens. Classes are held for patients and their families adapted to disease and health conditions.
- Developing sarcopenia diagnosis methods using artificial intelligence and remote medical care and instruction systems using information and communication technologies.
- Using integrated medical care databases to share data with other research organizations, develop frailty registries common to multiple facilities, promote research on frailty and improve elderly disease treatment results and elderly people's quality of life.
- Developing and diffusing model medical care for the end-of-life stage, including advance care planning linked with home care and end-of-life care.

##### 2. Research

The Center promotes studies for figuring out the onset mechanism of dementia and preventing deterioration of elderly people's self-reliance levels, and has also been carrying out longterm research and surveys on age changes covering broad fields of medical science, psychology, exercise physiology, nutrition science, etc.

- The Center has tackled essential investigation, prevention, diagnosis and therapy approach development for diseases that it covers, particularly dementia (Alzheimer's disease) and made great contributions to the promotion of medical care by taking the following measures:  
Examining aging-related changes in the brain and the factors that prevent aging through a project to analyze brain images of local resident cohorts
- Improving clinical data pooling functions to develop databases and other systems for implementing joint therapeutic trials and clinical research with enterprises promptly and effectively
- Using robot engineering and information and communication technologies to prevent and delay the progression of dementia
- Cooperating with specialized outpatient clinics, specialized care units and biobanks to conduct comprehensive surveys, analyses and frailty diagnosis and develop disease prevention and treatment methods
- Enhancing databases to promote genomic medicine. Using genomic data to promote individualized medicine for Japanese

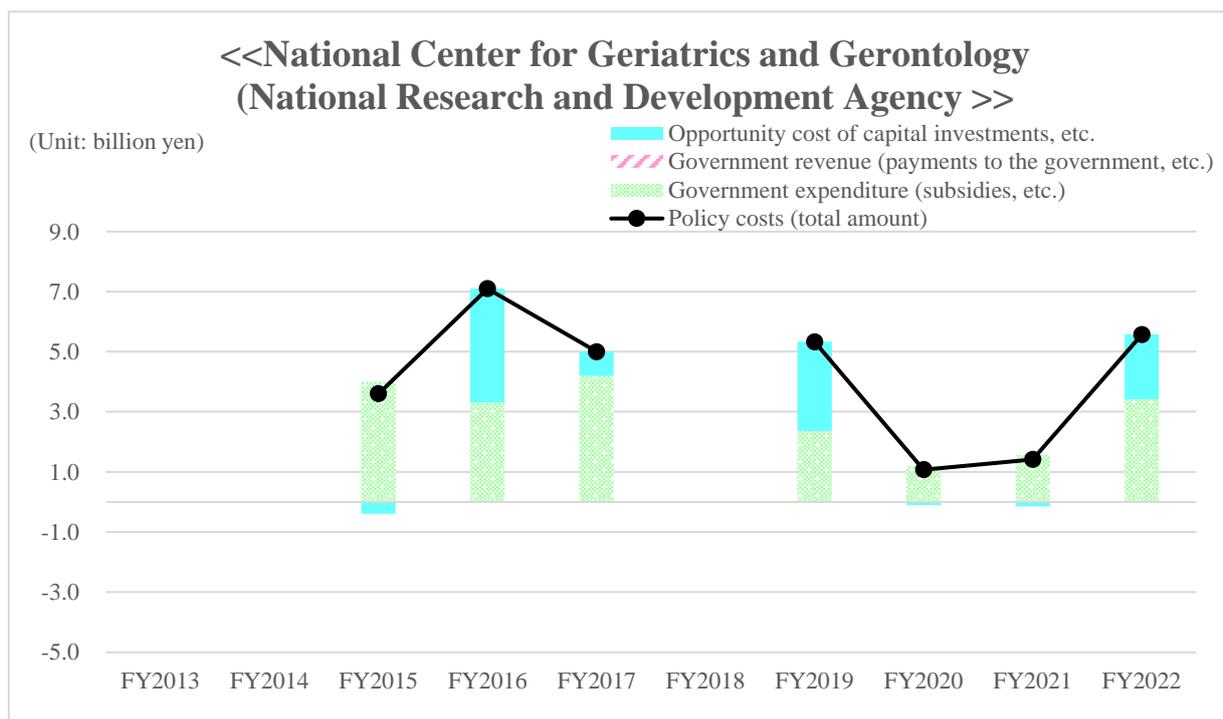
##### 3. Educational training

To become a base for developing useful human resources for Japan and other countries, the Center nurtures human resources who would lead the promotion of medical care and research regarding aging-related diseases.

- Fostering and training dementia support doctors (in FY2021, a web-based session was held in place of an on-site session, and 1,161 persons participated in it. The cumulative number of participants since the first training session in FY2005 is 12,629.)
- Training sessions for initial dementia patient support team members (five sessions were held in FY2021 for 1,099 persons, with the cumulative number of training session participants since their initiation in FY2015 reaching 11,985.)
- Comprehensive nursing training for geriatrics and home care (one training session was held in FY2021 for 174 persons, with the cumulative number of training session participants since their initiation in FY2014 reaching 1,505.)
- Training sessions for cognicise (cognition and exercise) instructors (one session was held in FY2021 for 32 persons, with the cumulative number of training session participants since their initiation in FY2015 reaching 375.)
- Training for cognicise practitioners (two training sessions were held in FY2021 for 25 persons; 58 persons in a web-based session, with the cumulative number of training session participants since the first session in FY2015 reaching 874.)

# Overview of policy cost analysis results

## [Changes in policy costs]



Note: Policy costs for each fiscal year differ in assumptions including interest rates applied to estimates.

(Unit: billion yen)

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Policy costs (total amount)			3.6	7.1	5.0		5.3	1.1	1.4	5.6
Government expenditure (subsidies, etc.)			4.0	3.3	4.2		2.4	1.2	1.6	3.4
Government revenue (payments to the government, etc.)			-	-	-		-	-	-	-
Opportunity cost of capital investments, etc.			-0.4	3.8	0.8		3.0	-0.1	-0.2	2.2

### 【Explanation of policy cost trends】

- As the development of hospital facilities or medical machines for medical services is subjected to FILP, the policy cost covers subsidies (grants for operation cost, etc.) from the government for the medical service segment and the opportunity cost of capital investments, etc. from the government.
- The policy cost in FY2022 increased due to rises in grants for operation cost (retirement allowances for the medical service segment) and in the opportunity cost of capital investments, etc. from the government.

### 【FILP agency's self-assessment of policy cost analysis results (FY2022)】

- The policy cost in the FY2022 analysis increased from the FY2021 analysis. This is mainly because government expenditure (including subsidies) increased as retirement allowances for service periods before and after the NCGG's conversion into the incorporated administrative agency status in FY2010 were recognized as cost to meet the realities of budget measures for grants for operation cost and secure the accuracy of the estimation in the FY2022 analysis, after retirement allowances for service periods only before the conversion were recognized as cost earlier. Therefore, the policy cost increase is assessed as having no problem with financial soundness.
  - The results of the sensitivity analysis (case before the negative interest rate policy) showed an increase of 0.8 billion yen in the policy cost due to a rise in the opportunity cost of capital investments, etc. caused by changes in surplus. As no other major changes were seen, however, the NCGG's assessment is that the increase has no problem with financial soundness.
- The sensitivity analysis (case of a 1% decrease in medical services revenues) showed an increase of 0.3 billion yen in the policy cost from the basic case due to a rise in the opportunity cost of capital investments, etc. However, the NCGG's assessment is that the increase's impact on actual financial conditions is minimal.

## (Reference) Financial Statements

## Balance Sheet

(Unit: million yen)

Item	End of FY2020 (Result)	End of FY2021 (Estimated)	End of FY2022 (Planned)	Item	End of FY2020 (Result)	End of FY2021 (Estimated)	End of FY2022 (Planned)
<b>(Assets)</b>				<b>(Liabilities and net assets)</b>			
Current assets	4,607	4,616	5,072	Current liabilities	3,056	2,751	2,932
Cash and bank deposits	2,863	3,165	3,487	Donation received	164	266	279
Accounts due for medical operations	1,084	1,119	1,259	Current portion of long-term borrowings	171	284	441
Accounts receivable	569	244	244	Accounts payable	266	235	311
Inventory assets	58	58	58	Money unpaid	1,700	1,210	1,111
Other current assets	33	30	24	Current portion of lease obligation	-	-	26
Fixed assets	17,364	21,299	20,345	Unpaid consumption tax, etc.	1	1	1
Tangible fixed assets	15,729	19,683	18,739	Advances received	148	148	148
Buildings	8,656	14,229	13,452	Deposit received	277	277	277
Structures	215	229	206	Accrued expenses	0	0	0
Medical instruments and equipment	809	1,527	1,326	Provisions			
Other instruments and equipment	554	400	459	Provision for bonuses	329	329	337
Vehicles	1	1	1	Fixed liabilities	11,495	14,434	14,058
Land	3,294	3,294	3,294	Contra-accounts for assets	1,401	1,469	1,265
Construction in progress	2,198	-	-	Contra-accounts for assets funded by operational grants	396	368	249
Other tangible fixed assets	3	4	4	Contra-accounts for assets funded by subsidies	138	1,077	1,003
Intangible fixed assets	29	20	12	Contra-accounts for assets funded by contributions	36	24	13
Software	25	17	10	Contra-construction in progress funded by subsidies for facilities	560	-	-
Telephone subscription right	0	0	0	Contra-construction in progress funded by subsidies	270	-	-
Other intangible fixed assets	3	3	3	Long-term borrowings	7,085	10,054	9,798
Investment and other assets	1,605	1,596	1,593	Unpaid long-term expenses	1,080	981	882
Long-term loan receivable	7	7	7	Lease liabilities	-	-	184
Allowance for repayment exemption	-6	-6	-6	Provisions	1,930	1,930	1,930
Long-term prepaid expenses	15	6	3	Provision for retirement benefits	1,695	1,695	1,695
Bankruptcy or rehabilitation claims, etc.	9	10	11	Provision for environment protection measures	107	107	107
Allowance for loan losses	-9	-10	-11	Provision for loss on litigation	128	128	128
Contra-accounts for provision for retirement benefits	1,589	1,589	1,589	(Total liabilities)	14,551	17,185	16,991
				Capital			
				Government investment	10,334	10,334	10,334
				Capital surplus	-2,440	-1,140	-1,442
				Capital surplus	3,123	4,676	4,676
				Other administrative costs accumulated	-5,563	-5,816	-6,118
				Amount equivalent to accumulated depreciation cost (-)	-5,303	-5,507	-5,810
				Amount equivalent to accumulated net gains or losses on sale or disposal (-)	-260	-309	-309
				Deficit carried forward	-474	-464	-465
				Unappropriated loss for the period (-)	-474	-464	-465
				(of this, gross loss (-))	-281	10	-1
				(Total net assets)	7,420	8,730	8,426
Total assets	21,971	25,915	25,417	Total liabilities and net assets	21,971	25,915	25,417

Notes 1. The balance sheet includes amounts for projects other than those subject to the policy cost analysis.

2. Components may not add up to the total because of rounding.

## Income Statement

(Unit: million yen)

Item	FY2020 (Result)	FY2021 (Estimated)	FY2022 (Planned)
Ordinary expenses	12,420	12,642	13,114
Operating expenses	12,359	12,590	13,007
Research operating expenses	1,112	1,136	1,141
Clinical research operations expenses	3,945	3,599	3,572
Medical care operations expenses	6,486	6,924	7,488
Education and research operations expenses	248	258	260
Information operating expenses	25	29	29
General and administrative expenses	543	644	516
Other ordinary expenses	61	52	107
Ordinary income	12,267	12,654	13,128
Income from grants for operating expenses	2,893	2,742	2,806
Operating income	8,675	8,889	9,650
Research operating income	39	21	21
Clinical research operations income	2,134	1,650	1,650
Medical care operations income	6,441	7,082	7,843
Education and research operations income	61	123	123
Other operating income	1	12	12
Other ordinary income	699	1,023	672
Ordinary profit (loss)	-153	12	14
Temporary losses	134	2	15
Loss on retirement of fixed assets	1	2	-
Cost of eliminating fixed assets	5	-	-
Other temporary losses	-	-	15
Temporary profits	7	-	-
Other temporary profits	7	-	-
Net profit or loss	-281	10	-1
Gross profit or loss	-281	10	-1

Notes 1. The income statement includes amounts for projects other than those subject to the policy cost analysis.

2. Components may not add up to the total because of rounding.