

# National Cerebral and Cardiovascular Center (National Research and Development Agency)

<http://www.ncvc.go.jp/>

## 1. Summary of operations implemented using FILP funds

The National Cerebral and Cardiovascular Center unerringly provides citizens with better-quality healthcare by developing medical facilities and machines, by conducting surveys and developing research and technology on medical measures against cardiovascular disease that have a grave impact on the health of citizens, and by integrating the relevant healthcare services with the training of technicians.

## 2. Amount of lending under FY2019 FILP

(Unit: billion yen)

FY2019 FILP	Estimated outstanding amount of FILP lending at the end of FY2018
3.0	42.6

## 3. Estimated policy cost analysis of the project

### (1) Policy cost (Unit: billion yen)

Category	FY2018	FY2019	Fluctuation
1. Government expenditure (subsidies, etc.)	8.8	7.5	-1.3
2. Government revenue (payments to the government, etc.)*	-	-	-
3. Opportunity cost of capital investments, etc.	5.8	6.7	+0.8
<b>Total (1+2+3=policy cost(A))</b>	<b>14.7</b>	<b>14.2</b>	<b>-0.5</b>
Analysis period (years)	26 years	25 years	-1 year

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

Category	FY2018	FY2019	Fluctuation
(A) Policy cost (previously cited)	14.7	14.2	-0.5
1) Opportunity cost of capital investments, etc. provided before the beginning of the analysis period	5.0	4.4	-0.6
2) Policy cost expected to be newly accrued during the analysis period	9.7	9.8	+0.1
Government expenditure (subsidies, etc.)	8.8	7.5	-1.3
Government revenue (payments to the government, etc.)*	-	-	-
Opportunity cost of surplus, etc.	0.9	2.2	+1.4
Opportunity cost of capital investments, etc.	-	-	-

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

(Unit: billion yen)

(A) Policy cost (previously cited)	A case in which a fundraising interest rate is raised by 1 %	Fluctuation	Fluctuation		
			1. Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*	3. Opportunity cost of capital investments, etc.
14.2	19.9	+5.8	-0.8	-	+6.6

(A) Policy cost (previously cited)	A case in which medical care service revenues are cut by 1%	Fluctuation	Fluctuation		
			1. Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*	3. Opportunity cost of capital investments, etc.
14.2	17.3	+3.1	-	-	+3.1

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

(Computing any fluctuation from previous year)

(Unit: billion yen)

Policy cost		FY2018	FY2019	Simple fluctuation
		Simple comparison (before adjustment)	14.7	14.2
Past year comparison (after adjustment)	1) Adjusting initial years (Analysis results after adjusting initial year to that for FY2019 analysis)		2) Adjusting assumed interest rates (Analysis results of re-estimation using assumed interest rate for FY2018)	Real fluctuation (2-1)
		16.3	14.8	-1.5

[Real fluctuation factor analysis]

○Factors behind policy cost increase

- Increase in cost due to increase in medical care service expenses, etc. (+4.2 billion yen)

○Factors behind policy cost decrease

- Decrease in cost due to decrease in interest payments (-5.7 billion yen)

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

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

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

- 1) Subjected to estimation: Medical equipment procurement for the National Cerebral and Cardiovascular Center (National Research and Development Agency)
- 2) Size of operations subjected to estimation: Medical equipment procurement at 3 billion yen
- 3) Analysis period: 25 years to FY2043 when longest loans will be collected
- 4) Medical services revenues are estimated to rise by 10% from the FY2016-2017 average with a revenue increase expected on the enhancement of functions at new hospitals.

FY	Result				Estimated	Planned	Assumptions for calculation
	2014	2015	2016	2017			
Medical services revenues	21,866	22,870	23,775	25,092	25,146	25,998	26,877
Medical services expenses	19,619	20,993	21,186	22,653	21,417	26,240	23,131

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

Reasons for granting of subsidies and mechanism  
(Reasons)

In order to contribute to the progress and improvement of the public health, improving the high and technical medical treatments of cardiovascular diseases and other diseases as a national medical policy by carrying out the investigation, research, and exploitation of techniques of medical treatments of cardiovascular diseases and providing medical treatments related closely to these works, and training of engineers.

(Underlying laws and regulations)

Article 46 of the Act on General Rules for Incorporated Administrative Agencies (Act No.103 of 1999)

(Delivery of Financial Resources)

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)

Article 20, Paragraph 1 and 2 of the Act on National Research and Development Agencies that Conduct Research related to Advanced and Specialized Medical Care (Act No.93 of 2008)

Paragraph 1 of Article 20

(Disposition of Reserve Funds)

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).

Paragraph 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.

Paragraph 3 (omitted)

#### 6. Special remarks

Based on the Act on the Promotion of Administrative Reform to Realize Simple and Efficient Government (Act No. 47 of 2006) and Act on Incorporated Administrative Agency Engaging in Research on Highly-Specialized Medicine (Act No. 93 of 2008), etc., the Special Account of the National Center for Advanced and Specialized Medical Care was abolished as of the end of FY2009, and the National Center for Advanced and Specialized Medical Care was reorganized into an Incorporated Administrative Agency on April 1, 2010.

Under the provisions of Article 130 of the Act on the Arrangement of the Relevant Acts Incidental to Enforcement of the Act for Partial Amendment of the Act on the General Rules for Incorporated Administrative Agencies (Act No. 67 of 2014), the National Cerebral and Cardiovascular Center (Incorporated Administrative Agency) was reorganized into the National Cerebral and Cardiovascular Center (National Research and Development Agency) on April 1, 2015.

The Center plans to move to the vicinity of Kishibe Station on the JR Tokaido Honsen Line in July 2019 as its present 40-year-old building and its site are too outdated to create new innovations that can lead the Japanese and global medical world.

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

##### ○ Diagnostic treatment

In order to ascertain and control cardiovascular diseases, which is the mission of the Center, and to maximize the outcome of research and development, which is the objective of the National Research and Development Agency, the Center develops and provides advanced pioneering medical services for cardiovascular diseases, including the clinical application of its research results, and thereby leads special medical services in Japan in the field of cardiovascular diseases.

Specifically, the Center conducts the following:

- 1) Provision of advanced pioneering medical services
- 2) Development and provision of new treatment system models
- 3) Organ transplants
- 4) Auxiliary artificial heart treatment
- 5) Pre-emptive preventive care for cardiovascular diseases

##### ○ Research

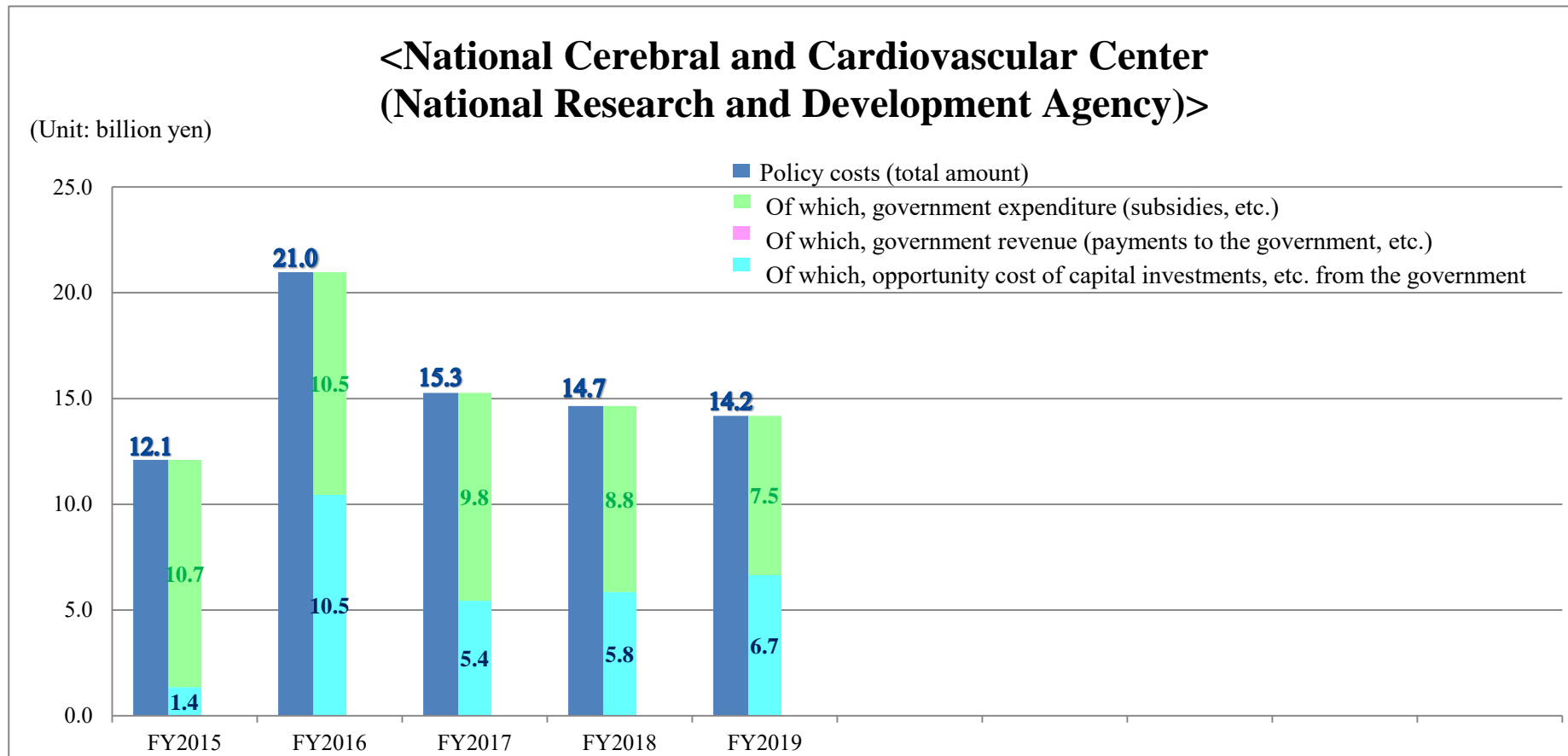
The Center prioritizes the following, in particular, in its research and development:

- 1) Development of innovative medical devices and drugs
- 2) Research and development of new treatment methods in the fields of cardiovascular diseases and adult diseases
- 3) Research and development of innovative treatment methods
- 4) Research and development of prevention of adult diseases

##### ○ Educational training

The Center promotes the development of personnel who can serve as leaders in medical services for cardiovascular diseases by further improving education and training programs for not only doctors but also nurses and other healthcare professionals in light of the movements concerning the specialist doctor system in the academic medical societies and the recent trends in fostering experts.

# (Reference) Changes in Policy Costs by Component



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

## (Points)

- Policy costs include the opportunity cost of Government subsidies regarding medical services (including management expenses grants) and capital investments from the Government.
- In FY2016, the policy cost increased due to increase in depreciation cost, etc.
- In FY2017, the policy cost decreased due to decrease in operating cost grants and medical service cost.
- In FY2018, the policy cost decreased due to increase in medical service income and decrease in depreciation cost.
- Policy costs in FY2019 decrease due to a decline in Government subsidies, etc., the accrual of reserves, etc.

## (Reference) Financial Statements

## Balance Sheet

(Unit: million yen)

Item	End of FY2017 (Result)	End of FY2018 (Estimated)	End of FY2019 (Planned)	Item	End of FY2017 (Result)	End of FY2018 (Estimated)	End of FY2019 (Planned)
<b>(Assets)</b>				<b>(Liabilities and equity)</b>			
Current assets	17,427	22,980	9,405	Current liabilities	6,519	22,043	5,884
Cash and bank deposits	12,145	17,769	3,990	Debt from grants for operation cost	1,495	222	-
Accounts due for medical operations	4,791	4,841	5,032	Subsidy received, etc.	7	-	-
Accounts receivable	266	160	173	Donation received	173	87	2
Inventory assets	139	139	139	Long-term loans to be repaid within a year	139	388	305
Prepaid expenses	68	55	55	Accounts payable	1,103	3,198	1,904
Other current assets	17	17	17	Money unpaid	1,560	16,052	1,477
Fixed assets	35,924	81,632	77,500	Lease obligation to be paid within a year	18	6	443
Tangible fixed assets	35,632	81,225	73,174	Unpaid consumption tax, etc.	26	34	34
Buildings	2,105	3,378	46,665	Advances received	997	997	642
Structures	21	16	8,438	Deposits payable	351	351	351
Medical instruments and equipment	684	2,152	7,309	Unpaid expenses	0	1	2
Other instruments and equipment	1,024	3,115	2,557	Reserves			
Vehicles	0	0	0	Reserve for bonuses	651	705	724
Land	15,123	15,123	8,204	Fixed liabilities	17,768	52,840	54,477
Construction in progress	16,675	57,443	-	Asset collateral liabilities	3,118	9,438	4,074
Intangible fixed assets	250	378	366	Grants for asset collateral operation cost	354	1,763	1,569
Software	250	374	362	Asset collateral subsidies	502	4,453	2,467
Telephone subscription right	0	0	0	Asset collateral contributions	119	78	38
Other intangible fixed assets	0	4	4	Collateral facilities expenses for construction in progress	2,143	3,143	-
Investment and other assets	42	29	3,959	Long-term loans payable	13,518	42,268	44,963
Long-term loan receivable	25	13	13	Lease liabilities	322	315	1,428
Prepaid long-term expenses	17	17	16	Allowances	333	339	3,971
Bankruptcy or rehabilitation claims, etc.	20	20	20	Reserve for retirement pensions	28	34	3,971
Loan loss provisions	-20	-20	-20	Reserves for environment protection measures	305	305	-
Return for provision for retirement benefits	-	-	3,931	Asset retirement obligation	478	479	41
				(Total liabilities)	24,286	74,882	60,361
				Capital			
				Financing by the Government	28,692	28,692	28,692
				Capital surplus	63	△ 34	1,622
				Capital surplus	3,429	3,429	6,572
				Other accumulated administrative costs	-3,366	-3,463	-4,950
				Amount equivalent to accumulated depreciation (-)	-3,231	-3,321	-720
				Amount equivalent to accumulated impairment losses (-)	-91	-91	-
				Amount equivalent to accumulated net gains or losses on sale or disposal (-)	-44	-50	-4,231
				Retained earnings or losses carried forward (-)	310	1,072	-3,769
				Reserves	-	310	1,072
				Unappropriated retained earnings or unappropriated losses for the current year (-)	310	762	-4,842
				(Of this, gross profit or loss (-))	1,477	762	-4,842
				(Total equity)	29,065	29,730	26,544
Total assets	53,351	104,613	86,905	Total liabilities and equity	53,351	104,613	86,905

(Note 1) Components may not add up to the total because of rounding.

## Income Statement

(Unit: million yen)

Item	FY2017 (Result)	FY2018 (Estimated)	FY2019 (Planned)
Ordinary expenses	29,166	31,422	36,589
Operating expenses	29,109	31,350	36,476
Research operating expenses	2,647	2,884	3,330
Clinical research operations expenses	1,995	2,060	2,008
Medical care operations expenses	22,057	23,982	27,565
Education and research operations expenses	1,054	1,054	1,085
Information operating expenses	112	147	155
General and administrative expenses	1,245	1,223	2,333
Other ordinary expenses	57	72	112
Ordinary income	30,644	32,184	33,998
Income from grants for operating expenses	3,556	3,736	3,545
Operating income	26,345	26,242	27,752
Research operating income	1,062	853	853
Clinical research operations income	323	179	199
Medical care operations income	24,937	25,195	26,188
Education and research operations income	23	16	16
Other business income			497
Other ordinary income	743	2,206	2,701
Temporary losses	116	52	6,327
Loss on retirement of fixed assets	1	2	2,432
Other extraordinary losses	115	50	3,895
Temporary profits	115	52	4,076
Other temporary profits	115	52	3,895
Net profit or loss	1,477	762	-4,842

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