National Center for Child Health and Development (National Research and Development Agency)

http://www.ncchd.go.jp/

1. Summary of operations implemented using FILP funds

The National Center for Child Health and Development property provides citizens with better-quality medical services by developing medical facilities, carrying out investigation, research, and exploitation of techniques of medical services for child health and development-related diseases that have a grave impact on the health of citizens, and by integrating medical services closely related to these works and 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
1.2	5.7

3. Estimated policy cost analysis of the project

(1) Policy cost (Unit: billion yen)

Category	FY2018	FY2019	Fluctuation
1. Government expenditure (subsidies, etc.)	4.9	3.3	-1.6
2. Government revenue (payments to the government, etc.)*	-	1	1
Opportunity cost of capital investments, etc.	-1.2	0.5	+1.7
Total (1+2+3=policy cost(A))	3.6	3.8	+0.2
Analysis period (years)	12 years	16 years	+4 years

(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)			+0.2
 Opportunity cost of capital investments, etc. provided before the beginning of the analysis period 	0.5	2.0	+1.5
Policy cost expected to be newly accrued during the analysis period	3.2	1.9	-1.3
Government expenditure (subsidies, etc.)	4.9	3.3	-1.6
Government revenue (payments to the government, etc.)*	1	ı	-
Opportunity cost of surplus, etc.	-1.7	-1.5	+0.3
Opportunity cost of capital investments, etc.	-	-	-

(3) Year-to-Year comparison analysis

(Computing any fluctuation from previous year)

FY2018

FY2019

Simple comparison

2.6

2.0

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COMPUTING ANY FY2019

Simple fluctuation from previous year)

(Unit: billion yen)

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	Simple comparison (before adjustment)	3.6	3.8	+0.2
Policy cost	Past year comparison (after	Adjusting initial years (Analysis results after adjusting initial year to that for FY2019 analysis)	Adjusting assumed interest rates (Analysis results of re-estimation using assumed interest rate for FY2018)	Real fluctuation (2-1)
	adjustment)	3.7	3.7	-0.0

[Real fluctuation factor analysis]

OFactors behind policy cost increase

- Increase in opportunity cost due to analysis period extension (+1.3 billion yen)

OFactors behind policy cost decrease

- Decrease in subsidies, etc. regarding retirement allowances (-1.1 billion ven)
- Others (increase in medical services revenues, etc.) (-0.2 billion yen)

(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	Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*	3. Opportunity cost of capital investments, etc.
3.8	8.9	+5.0	-0.3	-	+5.3

(A) Policy cost (previously cited)	A case in which medical care service revenues are cut by 1%	Fluctuation	Government expenditure (subsidies, etc.)	2. Government revenue (payments to the government, etc.)*	Opportunity cost of capital investments, etc.
3.8	6.7	+2.8	-	-	+2.8

(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

[Outline of estimation]

The estimation covers facility, equipment and medical instrument development by the National Center for Child Health and Development (National Research and Development Agency) to provide medical services for child health and development-related diseases that have a grave impact on the health

The scale of projects is estimated to be \(\frac{\pmathbf{\text{4}}}{1.2}\) billion in FY2019. The length of analysis period is 16 years, during which the redemption of debts related to the projects will be completed.

[Project prospect]

Medical services revenues, which serve as major preconditions that exert a significant influence on changes in the policy cost, are estimated in light of the management efforts being made by the National Center for Child Health and Development (National Research and Development Agency) and other factors.

Revision of medical service fees is an uncertain factor and is not taken into account.

(Unit: million ven)

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	Res	sult	Estimated	Planned	Assumptions for calculation						
FY	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Medical services revenues	19,356	19,284	19,666	19,816	19,816	19,816	19,816	19,816	19,816	19,816	19,816
Medical services expenses	16,389	16,642	16,986	17,352	17,352	17,352	17,352	17,352	17,352	17,352	17,352

	Assumptions for calculation							
FY	2027	2028	2029	2030	2031	2032	2033	2034
Medical services revenues	19,816	19,816	19,816	19,816	19,816	19,816	19,816	19,816
Medical services expenses	17,352	17,352	17,352	17,352	17,352	17,352	17,352	17,352

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

The objective of the Center is to contribute to the progress and improvement of public health through the improvement of advanced technical medical services for intractable diseases, genital diseases or other diseases of parents, babies, and children that especially require treatment to ensure children's sound birth and growth (hereinafter referred to as "child health and development-related diseases") as a national medical policy by carrying out investigation, research, and exploitation of techniques of medical services for child health and development-related diseases, and providing medical services closely related to these works and training of technicians. Grants and subsidies are provided to be appropriated for funds necessary for its operations so that the Center can properly achieve said objective.

(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

(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

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 Center for Child Health and Development (Incorporated Administrative Agency) was reorganized into the National Center for Child Health and Development (National Research and Development Agency) on April 1, 2015.

(Reference) Outcome and social and economic benefits of operations

1. Diagnosis and Cure

The research project aims to promote research and medical services concerning diseases in the reproductive life cycle, starting from fertilization and pregnancy, followed by the fetal period, neonatal period, childhood, puberty to adulthood to foster future generations, and at the same time, to formulate and develop models for all the medical services for child health and development-related diseases, including emergency medical care for children and perinatal care, in consideration of team medical care and comprehensive medical care activities. Specifically, advanced and specialized medical services as follows are to be provided, implemented and established:

- a. Gene therapies for congenital immunodeficiency syndromes (chronic granulomatosis and Wiskott-Aldrich syndromes);
- b. Genetic diagnosis for rare child diseases utilizing next-generation sequencers;
- c. Non-stressed pre-implantation genetic diagnosis using maternal blood;
- d. Establishment of new treatment methods for inborn error of metabolisms;
- e. Heart surgeries during neonatal period;
- f. Further development of organ transplants for children.

2. Research

In order to further strengthen the Center's functions as the base for clinical research on child health and development-related diseases, the research contributing to the development of advanced pioneering care and the establishment of standard medical care will be conducted as follows:

- a. To figure out the mechanism of new diseases through comprehensive genomic analyses of patients with obstetrical abnormalities, growth impairment, reproductive dysfunction, or congenital malformation, etc.;
- b. To figure out the interaction between environmental factors and genes associated with child health and development-related diseases (in particular, to ascertain patterns of genetic mutations in Japanese patients and determinants for the seriousness of diseases, and figure out the correlation between bacterial flora and perinatal diseases);
- c. To conduct data screening for the purpose of building a database of child patients;
- d. To develop a drug for immune deficiency diseases for which hematopoietic stem cell transplants are not available.

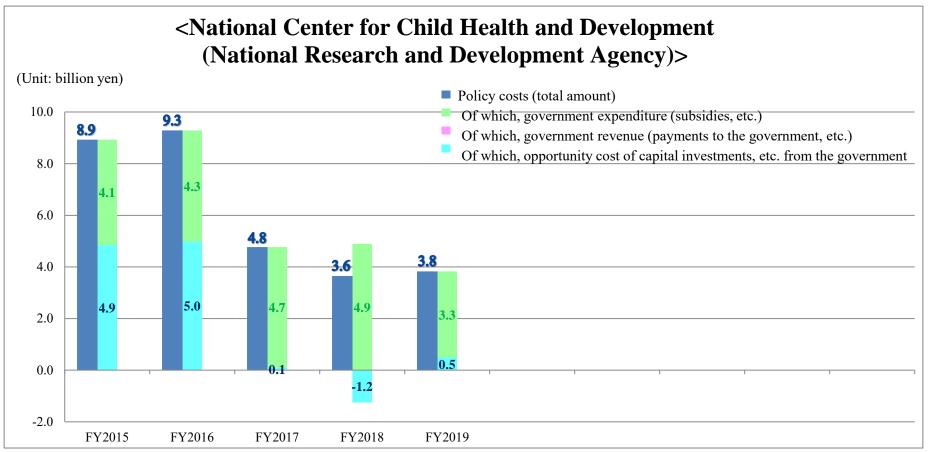
3. Educational training

The educational training project aims to foster specialists in clinical research at research institutions and Clinical Research and Medical Innovation Centers. At hospitals, pioneering personnel with leadership and expertize in medical services for child health and development-related diseases are to be fostered and dispatched nationwide to promote the leveling of the medical services for children.

4. Information transmission

Ideal pediatrics, perinatal care, and maternal care, as well as ideal health services as a whole, will be discussed to present a grand design therefor, with the aim of providing the general public and medical institutions with information, such as research outcomes and latest domestic and international knowledge, promptly and in an easy-to-understand manner.

(Reference) Changes in Policy Costs by Component



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

(Points)

- •Subsidies (grants for operation cost, etc.) from the government and opportunity cost of capital investments, etc. from the government tegarding medical services become policy costs.
- Despite a decrease in management expenses grants, policy costs increase due to a rise in the opportunity cost of capital investments.

(Reference) Financial Statements

Balance Sheet (Unit: million yen)

Item	End of	End of	End of	Item	End of	End of	End of
	FY2017	FY2018	FY2019	2,3,33	FY2017	FY2018	FY2019
(Assets)				(Liabilities and equity)			
Current assets	8,733	9,500	9,637	Current liabilities	5,515	6,092	6,037
Cash and bank deposits	3,971	4,831	4,612	Deposited subsidies	4	-	-
Accounts due for medical operations	3,679	3,921	4,150	Donation received	229	192	175
Accounts receivable	883	549	674	Accounts payable	884	884	884
Inventory assets	198	198	198	Money unpaid	2,137	2,835	3,146
Prepaid expenses	2	2	2	Unpaid expenses	1	1	1
Other current assets	1	0	0	Deposits payable	242	242	242
Fixed assets	42,205	41,800	46,739	Reserves			
Tangible fixed assets	41,538	41,190	41,886	Reserve for bonuses	641	447	444
Buildings	15,167	14,822	15,152	Other current liabilities	1,377	1,492	1,147
Structures	66	60	55	Fixed liabilities	7,760	6,910	11,162
Medical instruments and equipment	1,243	1,361	1,784	Asset collateral liabilities	1,446	1,198	1,026
Other instruments and equipment	1,265	1,113	1,071	Long-term loans payable	4,941	4,800	5,080
Vehicles	1	37	28	Lease liabilities	1,190	677	531
Land	23,796	23,796	23,796	Allowances	127	179	4,470
Other tangible fixed assets	0	1	1	Allowance for retirement pensions	102	154	4,444
Intangible fixed assets	665	607	585	Allowances for environment protection measures	25	25	25
Software	665	607	585	Asset retirement obligation	55	55	55
Telephone subscription right	0	0	0	(Total liabilities)	13,274	13,002	17,200
Other intangible fixed assets	0	0	0	Capital			
Investment and other assets	3	3	4,268	Financing by the Government	36,383	36,383	36,383
Long-term prepaid expenses	3	3	3	Capital surplus	479	301	818
Bankruptcy or rehabilitation claims, etc.	34	34	34	Retained earnings	801	1,614	1,975
Loan loss provisions	-34	-34	-34				
Return for provision for retirement benefits	-	-	4,265				
				(Total equity)	37,664	38,298	39,176
Total assets	50,938	51,300	56,375	Total liabilities and equity	50,938	51,300	56,375

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

Income Statement (Unit: million yen)

FY2017 FY2018 FY2019

Itam	FY2017	FY2018	FY2019
Item	(Result)	(Estimated)	(Planned)
Ordinary expenses	25,072	25,390	25,773
Operating expenses	24,955	25,285	25,677
Research operating expenses	1,253	1,141	1,133
Clinical research operations expenses	2,890	2,822	2,769
Medical care operations expenses	18,110	18,310	18,779
Education and research operations expenses	1,693	1,846	1,897
Information operating expenses	183	181	171
General and administrative expenses	825	986	927
Other ordinary expenses	117	105	96
Ordinary income	26,269	26,218	26,134
Income from grants for operating expenses	3,254	3,368	2,974
Operating income	21,571	21,791	22,128
Clinical research operations income	1,999	1,740	1,765
Medical care operations income	19,435	19,909	20,045
Education and research operations income	25	27	27
Other operating income	111	114	291
Other ordinary income	1,445	1,059	1,033
Ordinary profit	1,197	828	361
Temporary losses	103	16	4,304
Fixed asset disposal expense	37	15	
Other extraordinary losses	66	0	4,304
Temporary profits	9	0	4,304
Profit on fixed asset sale	1	0	
Other temporary profits	8	0	4,304
Net profit	1,102	813	361
Gross profit	1,102	813	361

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