

## 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 FY2021 FILP

(Unit: billion yen)

FY2021 FILP	Estimated outstanding amount of FILP lending at the end of FY2020
1.0	6.7

## 3. Estimated policy cost analysis of the project

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

Category	FY2020	FY2021	Fluctuation
1. Government expenditure (subsidies, etc.)	4.0	3.2	-0.8
2. Government revenue (payments to the government, etc.)*1	-	-2.0	-2.0
3. Opportunity cost of capital investments, etc.	0.1	23.1	+23.0
<b>Total (1+2+3=policy cost(A))</b>	<b>4.1</b>	<b>24.4</b>	<b>+20.3</b>
Analysis period (years)	16 years	16 years	-

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

Category	FY2020	FY2021	Fluctuation
(A) Policy cost (previously cited)	4.1	24.4	+20.3
1) Opportunity cost of capital investments, etc. provided before the beginning of the analysis period	1.1	1.3	+0.2
2) Policy cost expected to be newly accrued during the analysis period	3.0	23.1	+20.1
Government expenditure (subsidies, etc.)	4.0	3.2	-0.8
Government revenue (payments to the government, etc.)*1	-	-2.0	-2.0
Opportunity cost of surplus, etc.	-1.0	21.8	+22.8
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.
24.4	25.3	+0.9	-0.1	-	+0.9

(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.
24.4	27.2	+2.8	-	-	+2.8

(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 for 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		FY2020	FY2021	Simple fluctuation
		Simple comparison (before adjustment)	4.1	24.4
Past year comparison (after adjustment)	1) Adjusting initial years (Analysis results after adjusting initial year to that for FY2021 analysis)		2) Adjusting assumed interest rates (Analysis results of re-estimation using assumed interest rate for FY2020)	Real fluctuation (2-1)
		4.2	24.3	+20.1

## 【Real fluctuation factor analysis】

## ○Factors behind policy cost increase

- Increase in cost due to a decrease in medical service earnings accompanying decrease in the number of patients under the COVID-19 impact (+22.8 billion yen)

## ○Factors behind policy cost decrease

- Decrease in cost due to payments to the government (-2.0 billion yen)  
- Decrease in subsidies, etc. accompanying retirement allowances (-0.8 billion yen)

#### 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 of citizens. The scale of projects is estimated to be 1.2 billion yen in FY2020. 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 yen)

FY	Result		Estimated	Planned	Assumptions for calculation						
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Medical services revenues	19,715	20,511	18,380	18,236	18,236	18,236	18,236	18,236	18,236	18,236	18,236
Medical services expenses	17,242	18,049	18,013	18,108	18,108	18,108	18,108	18,108	18,108	18,108	18,108

FY	Assumptions for calculation							
	2029	2030	2031	2032	2033	2034	2035	2036
Medical services revenues	18,236	18,236	18,236	18,236	18,236	18,236	18,236	18,236
Medical services expenses	18,108	18,108	18,108	18,108	18,108	18,108	18,108	18,108

#### 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 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 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:

- Gene therapies for congenital immunodeficiency syndromes (chronic granulomatosis and Wiskott-Aldrich syndromes);
- Genetic diagnosis for rare child diseases utilizing next-generation sequencers;
- Non-stressed pre-implantation genetic diagnosis using maternal blood;
- Establishment of new treatment methods for inborn error of metabolisms;
- Heart surgeries during neonatal period;
- 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:

- 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.;
- 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);
- To conduct data screening for the purpose of building a database of child patients;
- 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.

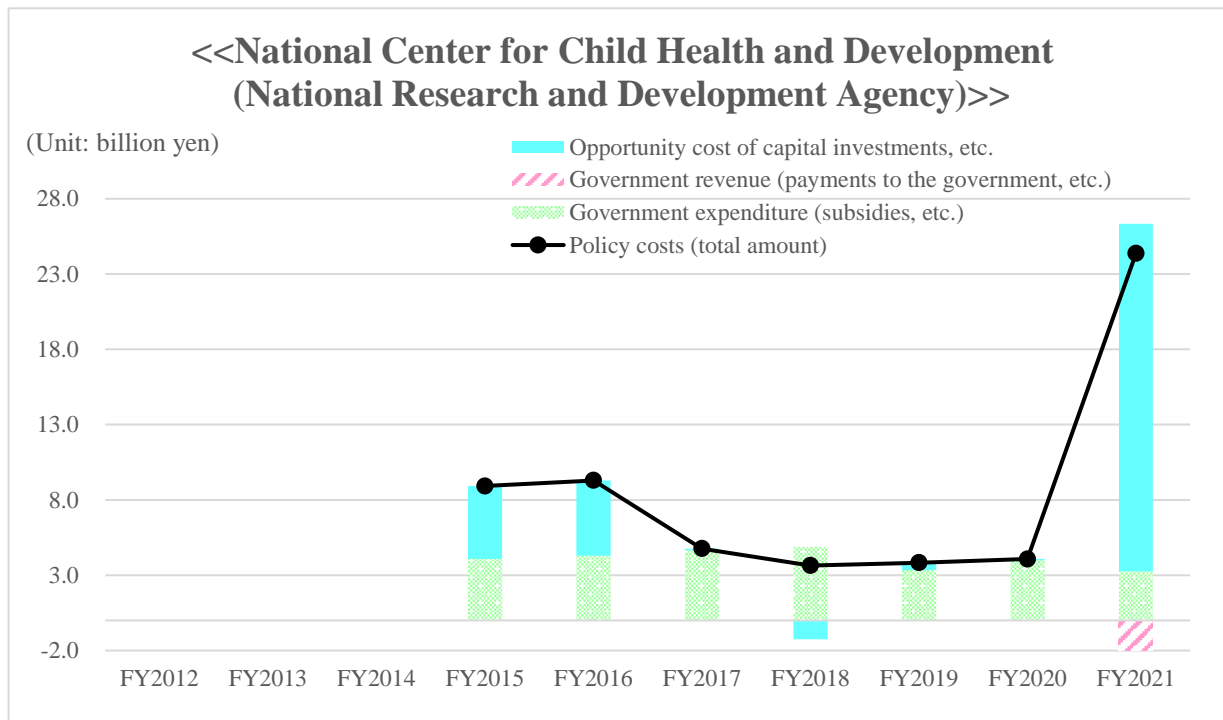
At hospitals, pioneering personnel with leadership and expertise in medical services for child health and development-related diseases are to be fostered and dispatched nationwide to promote the leveling of the medical services for children.

##### 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.

# 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)

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Policy costs (total amount)				8.9	9.3	4.8	3.6	3.8	4.1	24.4
Government expenditure (subsidies, etc.)				4.1	4.3	4.7	4.9	3.3	4.0	3.2
Government revenue (payments to the government, etc.)				-	-	-	-	-	-	-2.0
Opportunity cost of capital investments, etc.				4.9	5.0	0.1	-1.2	0.5	0.1	23.1

### 【Explanation of policy cost trends】

- Subsidies (grants for operation cost, etc.) from the government and opportunity cost of capital investments, etc. from the government regarding medical services become policy costs.
- The policy cost decreased by 4.5 billion yen from FY2016 to FY2017 due primarily to an improvement in medical business revenue as the NCCHD promoted business improvement efforts including lump-sum procurement of medical equipment and supplies, the revision of outsourcing contracts for clerical and janitorial services, and an increase in the number of pediatric intensive care units to raise hospitalized care revenue.
- In the FY2021 analysis, the policy cost rose due to an increase in the opportunity cost of capital investments, despite a fall in operational subsidies.

### 【FILP agency's self-assessment of policy cost analysis results (FY2021)】

- The results of the policy cost analysis in FY2021 showed an increase in the policy cost compared with the estimation results in FY2020. This is attributable to a decrease in medical services revenues due to a decline in the number of patients associated with the COVID-19 pandemic.
- In the sensitivity analysis, the policy cost increased as the opportunity cost of capital investments in the NCCHD rose due to a higher interest rate before the minus interest rate policy. The policy cost increase's financial impact is apparently minor.
- The results of the sensitivity analysis (case of a 1% decrease in medical services revenues) showed an increase of 2.8 billion yen in the policy cost due to a rise in opportunity cost of capital investments, etc. for the Center, but the impact on financial conditions is considered to be minimal.

## (Reference) Financial Statements

## Balance Sheet

(Unit: million yen)

Item	End of FY2019 (Result)	End of FY2020 (Estimated)	End of FY2021 (Planned)	Item	End of FY2019 (Result)	End of FY2020 (Estimated)	End of FY2021 (Planned)
<b>(Assets)</b>				<b>(Liabilities and equity)</b>			
Current assets	10,616	10,895	7,423	Current liabilities	6,493	7,538	8,565
Cash and bank deposits	4,707	5,577	1,594	Debt from grants for operation cost	250	-	-
Securities	300	-	-	Donation received	410	603	396
Accounts due for medical operations	3,958	4,019	4,540	Long-term loans to be repaid within a year	886	1,308	1,393
Accounts receivable	1,486	1,216	1,221	Accounts payable	881	867	867
Inventory assets	161	79	65	Money unpaid	2,681	3,475	4,625
Prepaid expenses	1	1	1	Lease obligation to be paid within a year	224	123	123
Other current assets	2	2	2	Unpaid expenses	1	1	1
Fixed assets	46,614	48,056	50,905	Unpaid consumption tax, etc.	4	4	4
Tangible fixed assets	41,783	43,547	44,050	Advances received	23	23	23
Buildings	15,254	15,776	16,234	Deposits payable	303	303	303
Structures	55	53	47	Reserves	745	745	745
Medical instruments and equipment	1,712	2,926	3,203	Reserve for bonuses	745	745	745
Other instruments and equipment	937	977	759	Other current liabilities	85	85	85
Vehicles	28	19	10	Fixed liabilities	11,544	11,204	13,097
Land	23,796	23,796	23,796	Asset collateral liabilities	1,056	888	772
Other tangible fixed assets	1	1	1	Long-term loans payable	5,084	5,435	8,005
Intangible fixed assets	143	87	2,434	Lease liabilities	507	384	260
Software	142	86	2,433	Allowances	4,841	4,442	4,005
Telephone subscription right	0	0	0	Allowance for retirement pensions	4,816	4,417	3,979
Other intangible fixed assets	0	0	0	Allowances for environment protection measures	25	25	25
Investment and other assets	4,689	4,422	4,422	Asset retirement obligation	55	55	55
Investment securities	100	-	-	(Total liabilities)	18,037	18,741	21,662
Long-term prepaid expenses	2	2	2	Capital	36,383	36,383	36,383
Bankruptcy or rehabilitation claims, etc.	13	13	13	Financing by the Government	36,383	36,383	36,383
Loan loss provisions	-13	-13	-13	Capital surplus	842	1,858	1,927
Return for provision for retirement benefits	4,587	4,420	4,420	Retained earnings	1,968	1,968	-1,644
(Total equity)	39,193	40,210	36,666	(Total liabilities and equity)	57,230	58,951	58,328
Total assets	57,230	58,951	58,328				

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

## Income Statement

(Unit: million yen)

Item	FY2019 (Result)	FY2020 (Estimated)	FY2021 (Planned)
Ordinary expenses	26,847	27,019	28,021
Operating expenses	26,750	26,932	27,939
Research operating expenses	1,140	1,323	1,295
Clinical research operations expenses	2,906	3,377	3,156
Medical care operations expenses	19,553	19,054	20,269
Education and research operations expenses	1,817	1,823	1,820
Information operating expenses	177	210	202
General and administrative expenses	1,157	1,146	1,198
Other ordinary expenses	97	86	82
Ordinary income	27,199	27,009	26,379
Income from grants for operating expenses	2,939	3,021	2,938
Operating income	22,822	21,297	22,163
Clinical research operations income	2,069	2,555	2,419
Medical care operations income	20,616	18,541	19,564
Education and research operations income	29	33	23
Other operating income	108	168	157
Other ordinary income	1,438	2,690	1,278
Ordinary profit	352	-10	-1,642
Temporary losses	4,430	2	2
Fixed asset disposal expense	46	2	2
Other extraordinary losses	4,384	0	0
Temporary profits	4,370	12	-
Profit on fixed asset sale	0	-	-
Other temporary profits	4,370	12	-
Net profit	293	0	-1,644
Gross profit	293	0	-1,644

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