National Center for Geriatrics and Gerontology (National Research and Development Agency)

http://www.ncgg.go.jp/

. Sun	nmary of operati	ons implement	ed using H	TLP funds	5									
imp and	lements surveys, r	esearch and tech on of medical ca	nology dev	velopment fo	or medica	al c	are	regardir	ng agin	g-rela	ated diseases that	exert	Ils medical equipmen t great impacts on citi in order to provide b	zens' health
. Am	ount of lending	under FY2021	FILP										::	
	FY2	021 FILP		Estim	ated out	sta	nd	ing amo	ount of	FIL	P lending at the		nit: billion yen) of FY2020	
		3.1						0		7.4	0			
. Esti	mated policy co	st analysis of th	ne project											
(1)	Policy cost	-		(Unit: I	billion ye	n)					urison analysis tion from previous ye	ar)		(Unit: billion yen)
	Catego	ry	FY2020	FY2021	Fluctuati	on			8.,		FY2020	,	FY2021	Simple fluctuation
	overnment expen- osidies, etc.)	diture	1.2	1.6	+0	.4			Simple cor (before adj			1.1	1.4	+0.3
	overnment revenu ments to the gove		-	-		-		Policy cost	Past y		 Adjusting initial (Analysis results after a initial year to that for F 	djusting	 Adjusting assumed interest rates (Analysis results of re-estimation) 	Real
	pportunity cost of estments, etc.	capital	-0.1	-0.2	-0	.0		Poli	compa (aft adjustr	er	analysis)		using assumed interest rate for FY2020)	(2-1)
	Total (1+2+3=pol	licy cost(A))	1.1	1.4	+0.	.3		Real	Ŭ		actor analysis	1.1	0.9	-0.2
Ana	Analysis period (years) 32 ye			31 years	-1 yea	ar	OFactors behind policy cost increase - None							
(2) B	reakdown of policy c	-	<u> </u>		Unit: billion y	_					policy cost decrea		expenses (-0.2 billion	ven)
	Catego	-	FY2020	FY2021	Fluctuati			- Deere	ase uu	0 10 1	an in medical sei	vices	expenses (-0.2 billion	r yen)
(A)	Policy cost (previe 1) Opportunity cost of ca	-	1.1	1.4	+0	.3								
	provided before the begin period	nning of the analysis	1.4	1.9	+0	.5								
	2) Policy cost expe accrued during the	analysis period	-0.3	-0.5	-0	.2								
	Governme (subsidies,	nt expenditure etc.)	1.2	1.6	+0	.4								
	Government r to the government	revenue (payments ment, etc.)*1	-	- '		-								
	Opportunity etc.	cost of surplus,	-1.5	-2.1	-0	.6								
	Opportunity investments	cost of capital , etc.	-	-		-								
(4)	Sensitivity analy	ysis (cases whe	re assump	tions chan	ige)		ļ					ת)	Unit: billion yen)	
()	A) Policy cost	Case before t									Covoranno - +			
	(previously cited) negative interes policy* ²							ernment expenditure subsidies, etc.)			Government revenue nents to the government, etc.)*1		Deportunity cost of tal investments, etc.	
	1.4		2.6		+1.2				-0.1		-		+1.3	
	A) Policy cost	Case of a 19 decrease in me		Fluctuation	ı [ı	Gor	vern	ment evpe	nditure	2. 0	Government revenue	3 (Dpportunity cost of	
(pr	reviously cited)	services reven	ues			1. Government expenditure (subsidies, etc.)			(paym	etc.)*1		tal investments, etc.		
	1.4		1.6		+0.2				-		-	<u> </u>	+0.2	

(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.

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

Outline of estimation

· Operations subject to the analysis construct buildings and install medical equipment there for the NCGG to provide medical care regarding aging-related diseases that exert great impacts on citizens' health.

• Subject to the analysis are FY2019-2021 operations worth 5.1 billion yen. The analysis period is 33 years during which borrowings regarding those operations will be repaid.

[Approach on future operations]

Regarding medical services expenses, the Center promoted rejuvenation of staff, mainly doctors, while projecting an increase in materials cost, etc. due to a rise in medical services revenues in FY2021 and later and personnel replenishment following a significant decline in the number of staff members due to the retirement of nurses in FY2020. As a result, medical services expenses were booked in a way that reflected the streamlining of personnel cost

										(Unit: mi	llion yen)
			Result			Estimated	Planned	Assumptions for calculation			tion
FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	•••	2051
Medical services revenue	5,616	5,723	6,012	6,502	6,782	6,430	7,147	7,147	7,147		7,147
Medical services expenses	5,304	5,291	5,894	5,958	5,970	5,797	6,137	6,132	6,126		6,097

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

(Reasons)

In order to contribute to the progress and improvement of public health through the improvement of advanced technical 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)

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)

(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).

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 plans to receive 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.

1) 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.

2) Promoting the standardization of geriatrics and gerontology based on the outcomes of cooperative clinical research between the research institute and the hospital, by providing medical services based on the most recent scientific grounds and seeking more effective and safer application of existing medical technologies whose effectiveness has already been proven, such as minimally invasive operations safer for elderly people and optimal drug therapies for them.

3) Offering medical services and comprehensive assistance related to dementia and providing model medical care services at home.

4) Implementing comprehensive medical examination of frailty, sarcopenia, and locomotive syndrome as the world's first epoch-making outpatient service

5) Implementing the five-sense examination at the Center for Sensory Organ

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) ving measure nd made great contributions to the promotion of medical care by taking the follo

1) Making progress in research on blood biomarkers concerning amyloid-beta (Aβ), and advancing the research in order to develop binding stratification markers regarding dementia 2) Identifying new gene locus related to Alzheimer's disease

3) Examining aging-related changes in the brain and the factors that prevent aging through a project to analyze brain images of local resident cohorts

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.

1) Fostering and training dementia support doctors (in FY2020, a web-based session was held in place of an on-site session, and 213 persons participated in it. The cumulative number of participants since the first training session in FY2005 is 11,468.)

2) Training sessions for initial dementia patient support team members (five sessions were held in FY2020 for 840 persons, with the cumulative number of training session participants since their initiation in FY2015 reaching 10,886)

3) Comprehensive nursing training for geriatrics and home care (one training session was held in FY2020 for 156 persons, with the cumulative number of training session participants since their initiation in FY2014 reaching 1,331)

4) Training sessions for cognicise (cognition and exercise) instructors (one session was held in FY2020 for 25 persons, with the cumulative number of training session participants since their initiation in FY2015 reaching 343)

5) Training for cognicise practitioners (two training sessions were held in FY2020 for 51 persons, with the cumulative number of training session participants since the first session in FY2015 reaching 791).

6) Training for urination (a training session planned in FY2020 was cancelled due to the COVID-19 pandemic. The cumulative number of training session participants since the first session in FY2018 is 51).

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: bil	lion yen)
	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Policy costs (total amount)	\langle	\langle		3.6	7.1	5.0		5.3	1.1	1.4
Government expenditure (subsidies, etc.)	\langle	\langle	\backslash	4.0	3.3	4.2		2.4	1.2	1.6
Government revenue (payments to the government, etc.)				-	-	-		-	-	-
Opportunity cost of capital investments, etc.	\langle	\langle	\langle	-0.4	3.8	0.8	\langle	3.0	-0.1	-0.2

[Explanation of policy cost trends]

• The policy cost includes the opportunity cost of Government subsidies (including operational subsidies) and capital investments from the Government for developing hospital buildings and other facilities and installing medical equipment regarding medical services.

• In FY2021, retained earnings in FY2021 decreased from FY2020 due to an increase in personnel and other costs (fixed costs) caused by the effects of working style reform. Despite a decrease in opportunity cost of capital investments, etc., the policy cost rose due to an increase in operational subsidies.

[FILP agency's self-assessment of policy cost analysis results (FY2021)]

•While government expenditure (subsidies, etc.) increased, opportunity cost of capital investments, etc. decreased. As a result, the total amount of policy cost did not increase significantly.

• The results of the sensitivity analysis (case before the negative interest rate policy) showed an increase of 1.2 billion yen in the policy cost due to a rise in opportunity cost of capital investments, etc. caused by changes in surplus. However, as most of the increase is attributable to "opportunity cost of capital investments, etc.," the Center's assessment is that the impact on the actual financial conditions is minimal.

The results of the sensitivity analysis (the case of a 1% decrease in medical services revenues) and the analysis of the basic case showed an increase of 200 million yen in the policy cost due to a rise in opportunity cost of capital investments, etc. However, the Center's assessment is that the impact on the actual financial conditions is minimal.

alance Sheet							nit: million ye
Item	End of FY2019 (Result)	End of FY2020 (Estimated)	End of FY2021 (Planned)	Item	End of FY2019 (Result)	End of FY2020 (Estimated)	End of FY202 (Planned)
(Assets)				(Liabilities and equity)			
urrent assets	4,296		,	Current liabilities	2,930	2,965	3,08
Cash and bank deposits	2,873	2,905		Debt from grants for operation cost	195	-	
Accounts due for medical operations	978	1,098	1,151	Donation received	130	141	15
Accounts receivable	368	116	116	Long-term loans to be repaid within a year	66	186	23
Inventory assets	51	51	51	Accounts payable	244	273	2
Other current assets	26	22	22	Money unpaid	1,470	1,539	1,5
xed assets	17,707	17,745	-	Unpaid consumption tax, etc.	-	9	
Tangible fixed assets	16,100	16,133		Advances received	123	123	1
Buildings	9,152	9,077	14,204	Deposit received	380	380	3
Structures	218	213	192	Temporary receipts	-	-	
Medical instruments and equipment	967	924	1,428	Accrued expenses	0	0	
Other instruments and equipment	657	428	226	Reserves	321	314	3
Vehicles	2	1	1	Reserve for bonuses	321	314	3
Land	3,294	3,294	3,294	Fixed liabilities	11,242	11,355	13,0
Construction in progress	1,808	2,194	-	Asset collateral liabilities	1,067	1,265	2
Other tangible fixed assets	3	3	3	Grants for asset collateral operation cost	368	299	
ntangible fixed assets	30	25	16	Asset collateral subsidies	201	120	
Software	26	22	13		30	18	
Telephone subscription right	20	0		Collateral facilities expenses for construction in	409	558	
	0	0	0	progress		270	
Other intangible fixed assets	4	3	3	Collateral subsidies for construction in progress	59		10.0
nvestment and other assets	1,577	1,586	1,583	Long-term loans payable	7,211	7,224	10,0
Long-term loan receivable	2	2	2	Unpaid long-term expenses	1,179	1,080	
Reserves for repayment exemption	-2	-2	-2	Reserves	1,786	1,786	
Long-term prepaid expenses	-	9	6	Provision for retirement benefits	1,679	1,679	1,
Bankruptcy or rehabilitation claims, etc.	10	10	11	Reserves for environment protection measures	107	107	
Loan loss provisions	-10	-10	-11	(Total liabilities)	14,172	14,320	16,
Return for provision for retirement benefits	1,577	1,577	1,577	Capital	10,334	10,334	10,1
				Financing by the Government	10,334	10,334	10,3
				Capital surplus	-2,309	-2,006	-
				Capital surplus	3,011	3,559	5,0
				Other administrative costs accumulated	-5,320	-5,565	-5,8
				Amount equivalent to accumulated depreciation cost	-5,077	-5,321	-5,0
				(-) Amount equivalent to accumulated net gains or losses			
				on sale or disposal (-)	-243	-243	-2
				Retained earnings or deficit carried forward Reserve carried forward during former medium-term target period	-194 166	-712	-9
				Unappropriated loss for the period (-)	-360	-712	-9
				(of this, gross loss (-))	-360	-518	
				(Total equity)	7,831	7,616	
Total assets	22,003	21,936	25,390		22,003	21,936	

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

	(Ui	nit: million yen)	
FY2019	FY2020	FY2021	
(Result)	(Estimated)	(Planned)	
11,987	13,191	13,497	
11,932	13,131	13,437	
1,030	1,314	1,233	
3,451	4,563	4,471	
6,457	6,414	6,761	
327	240	281	
69	39	43	
600	561	648	
54	60	59	
11,604	12,674	13,255	
2,546	2,992	2,809	
8,564	8,970	9,688	
36	27	27	
1,602	2,316	2,316	
6,768	6,550	7,200	
153	73	137	
5	3	8	
494	711	759	
-382	-517	-242	
1,607	1		
2	1		
3	-		
1,603	-		
1,629	0	(
1,629	0	(
-360	-518	-242	
-360	-518	-242	
	(Result) 11,987 11,932 1,030 3,451 6,457 327 69 600 54 11,604 2,546 8,564 36 1,602 6,768 153 5 494 -382 1,607 2 3 1,603 1,629 1,629 -360	$\begin{array}{c c c} FY2019 & FY2020 \\ \hline (Result) & (Estimated) \\ \hline 11,987 & 13,191 \\ \hline 11,932 & 13,131 \\ 1,030 & 1,314 \\ 3,451 & 4,563 \\ 6,457 & 6,414 \\ 327 & 240 \\ 69 & 39 \\ 600 & 561 \\ 54 & 60 \\ \hline 11,604 & 12,674 \\ 2,546 & 2,992 \\ 8,564 & 8,970 \\ 36 & 27 \\ 1,602 & 2,316 \\ 6,768 & 6,550 \\ 153 & 73 \\ 5 & 3 \\ 494 & 711 \\ -382 & -517 \\ 1,607 & 1 \\ 2 & 1 \\ 3 & - \\ 1,603 & - \\ 1,629 & 0 \\ 1,629 & 0 \\ -360 & -518 \\ \end{array}$	

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