

付帯資料

フォローアップの状況

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|-----------------------|----------------|
| 1. 生存・追跡調査回答 | 2. 生存・追跡調査拒否 |
| 3. 病気・機能障害などを理由とした不参加 | 4. 死亡 |
| 5. 家族介護などを理由とした不参加 | 6. 追跡不能（転居・異動） |
| 7. その他 | |

都市別の追跡状況

	2	3	4	5	6	Total
1	595 78.81	696 71.46	447 87.13	687 90.75	586 70.10	3,011 78.51
2	106 14.04	167 17.15	21 4.09	28 3.70	159 19.02	481 12.54
3	12 1.59	31 3.18	6 1.17	6 0.79	18 2.15	73 1.90
4	8 1.06	11 1.13	9 1.75	10 1.32	4 0.48	42 1.10
5	5 0.66	0 0.00	1 0.19	2 0.26	6 0.72	14 0.37
6	22 2.91	62 6.37	23 4.48	24 3.17	59 7.06	190 4.95
7	7 0.93	7 0.72	6 1.17	0 0.00	4 0.48	24 0.63
Total	755 100.00	974 100.00	513 100.00	757 100.00	836 100.00	3,835 100.00

Pearson chi2(24) = 216.2469 Pr = 0.000

年齢別の追跡状況

	1	50-59, 2	60-64 3	65-69 4	70- Total
1	990 76.92	594 78.16	639 80.58	788 79.36	3,011 78.55
2	187 14.53	110 14.47	83 10.47	100 10.07	480 12.52
3	11 0.85	9 1.18	18 2.27	35 3.52	73 1.90
4	6 0.47	8 1.05	11 1.39	17 1.71	42 1.10
5	5 0.39	3 0.39	2 0.25	4 0.40	14 0.37
6	78 6.06	30 3.95	38 4.79	44 4.43	190 4.96
7	10 0.78	6 0.79	2 0.25	5 0.50	23 0.60
Total	1,287 100.00	760 100.00	793 100.00	993 100.00	3,833 100.00

Pearson chi2(18) = 55.8815 Pr = 0.000

性別による追跡状況

	0=m 1=f		
1	1,533 79.43	1,478 77.63	3,011 78.53
2	239 12.38	242 12.71	481 12.55
3	29 1.50	44 2.31	73 1.90
4	25 1.30	17 0.89	42 1.10
5	7	7	14
6	84 4.35	106 5.57	190 4.96
7	13 0.67	10 0.53	23 0.60
Total	1,930 100.00	1,904 100.00	3,834 100.00

Pearson chi2(6) = 8.3921 Pr = 0.211

学歴別による追跡状況

	<high, 1	high 2	>high 3	Total
1	1,062 80.21	1,244 77.27	691 78.08	2,997 78.48
2	128 9.67	226 14.04	127 14.35	481 12.59
3	32 2.42	33 2.05	8 0.90	73 1.91
4	18 1.36	16 0.99	7 0.79	41 1.07
5	6 0.45	4 0.25	4 0.45	14 0.37
6	70 5.29	78 4.84	42 4.75	190 4.98
7	8 0.60	9 0.56	6 0.68	23 0.60
Total	1,324 100.00	1,610 100.00	885 100.00	3,819 100.00

Pearson chi2(12) = 24.6518 Pr = 0.017

等価所得 4 区分による追跡状況

Quartiles of equivalent household income					
	Q1	Q2	Q3	Q4	Total
1	677	635	665	630	2,607
	78.27	83.01	81.30	76.09	79.58
2	101	79	95	120	395
	11.68	10.33	11.61	14.49	12.06
3	23	11	16	11	61
	2.66	1.44	1.96	1.33	1.86
4	9	5	9	8	31
	1.04	0.65	1.10	0.97	0.95
5	6	1	2	4	13
	0.69	0.13	0.24	0.48	0.40
6	45	29	27	47	148
	5.20	3.79	3.30	5.68	4.52
7	4	5	4	8	21
	0.46	0.65	0.49	0.97	0.64
Total	865	765	818	828	3,276
	100.00	100.00	100.00	100.00	100.00

Pearson chi2(18) = 28.0213 Pr = 0.062

婚姻状況による追跡状況

Marital Status					
	1 married	2 never	3 widowed	4 divorced	Total
1	2,465	104	297	139	3,005
	79.01	81.25	76.55	72.40	78.50
2	402	13	48	18	481
	12.88	10.16	12.37	9.38	12.57
3	59	1	8	5	73
	1.89	0.78	2.06	2.60	1.91
4	35	1	5	1	42
	1.12	0.78	1.29	0.52	1.10
5	12	1	0	1	14
	0.38	0.78	0.00	0.52	0.37
6	130	8	27	25	190
	4.17	6.25	6.96	13.02	4.96
7	17	0	3	3	23
	0.54	0.00	0.77	1.56	0.60
Total	3,120	128	388	192	3,828
	100.00	100.00	100.00	100.00	100.00

Pearson chi2(18) = 44.8762 Pr = 0.000

IADLの障害有無による追跡状況

	IADL limitation		Total
	NO	YES	
1	1,808 81.04	1,140 75.95	2,948 78.99
2	259 11.61	199 13.26	458 12.27
3	33 1.48	39 2.60	72 1.93
4	19 0.85	21 1.40	40 1.07
5	4 0.18	9 0.60	13 0.35
6	95 4.26	84 5.60	179 4.80
7	13 0.58	9 0.60	22 0.59
Total	2,231 100.00	1,501 100.00	3,732 100.00

Pearson chi2(6) = 21.1695 Pr = 0.002

移動機能の障害有無による追跡状況

	Mobility limitation		Total
	NO	YES	
1	2,493 79.24	514 75.15	3,007 78.51
2	397 12.62	84 12.28	481 12.56
3	50 1.59	23 3.36	73 1.91
4	22 0.70	20 2.92	42 1.10
5	12 0.38	2 0.29	14 0.37
6	152 4.83	38 5.56	190 4.96
7	20 0.64	3 0.44	23 0.60
Total	3,146 100.00	684 100.00	3,830 100.00

Pearson chi2(6) = 36.9578 Pr = 0.000

疾病罹患状況の変遷：地点別

心臓病 (0 なし 1 新規発生 2 既往)		city					
heart_shock revised	2	3	4	5	6	Total	
0	517 87.93	602 88.14	365 82.02	581 86.72	502 87.76	2,567 86.78	
1	10 1.70	17 2.49	11 2.47	14 2.09	14 2.45	66 2.23	
2	61 10.37	64 9.37	69 15.51	75 11.19	56 9.79	325 10.99	
Total	588 100.00	683 100.00	445 100.00	670 100.00	572 100.00	2,958 100.00	

Pearson chi2(8) = 13.5670 Pr = 0.094

悪性新生物 (0なし 1 新規発生 2 既往)		city					
cancer_shock revised	2	3	4	5	6	Total	
0	564 95.92	646 94.58	413 92.81	652 97.31	528 93.95	2,803 95.08	
1	3 0.51	11 1.61	8 1.80	8 1.19	9 1.60	39 1.32	
2	21 3.57	26 3.81	24 5.39	10 1.49	25 4.45	106 3.60	
Total	588 100.00	683 100.00	445 100.00	670 100.00	562 100.00	2,948 100.00	

Pearson chi2(8) = 18.7276 Pr = 0.016

脳卒中 (0なし 1 新規発生 2 既往)		city					
stroke_shock revised	2	3	4	5	6	Total	
0	558 94.90	657 96.19	413 92.81	646 96.42	536 95.37	2,810 95.32	
1	7 1.19	3 0.44	8 1.80	8 1.19	8 1.42	34 1.15	
2	23 3.91	23 3.37	24 5.39	16 2.39	18 3.20	104 3.53	
Total	588 100.00	683 100.00	445 100.00	670 100.00	562 100.00	2,948 100.00	

Pearson chi2(8) = 12.7594 Pr = 0.120

糖尿病 (0なし 1新規発生 2既往)		city					Total
diabetes_s	hock_r	2	3	4	5	6	
0		490	595	385	610	472	2,552
		85.22	87.24	86.71	91.18	84.89	87.22
1		19	18	13	14	14	78
		3.30	2.64	2.93	2.09	2.52	2.67
2		66	69	46	45	70	296
		11.48	10.12	10.36	6.73	12.59	10.12
Total		575	682	444	669	556	2,926
		100.00	100.00	100.00	100.00	100.00	100.00

Pearson chi2(8) = 15.7347 Pr = 0.046

疾患罹患状況の変遷；年齢別

悪性新生物（0なし 1新規発生）

heart_shoc k revised	1	50-59, 2	60-64 3	65-69 4	70- Total
0	889 98.78	507 97.13	530 97.07	619 96.42	2,545 97.51
1	11 1.22	15 2.87	16 2.93	23 3.58	65 2.49
Total	900 100.00	522 100.00	546 100.00	642 100.00	2,610 100.00

Pearson chi2(3) = 9.8648 Pr = 0.020

悪性新生物（0なし 1新規発生）

cancer_sho ck revised	1	50-59, 2	60-64 3	65-69 4	70- Total
0	940 99.37	540 98.54	586 98.32	715 98.08	2,781 98.65
1	6 0.63	8 1.46	10 1.68	14 1.92	38 1.35
Total	946 100.00	548 100.00	596 100.00	729 100.00	2,819 100.00

Pearson chi2(3) = 5.9596 Pr = 0.114

脳卒中（0なし 1新規発生）

stroke_sho ck revised	1	50-59, 2	60-64 3	65-69 4	70- Total
0	949 99.58	553 99.28	580 98.64	706 97.65	2,788 98.83
1	4 0.42	4 0.72	8 1.36	17 2.35	33 1.17
Total	953 100.00	557 100.00	588 100.00	723 100.00	2,821 100.00

Pearson chi2(3) = 14.5356 Pr = 0.002

糖尿病（0なし 1新規発生）

diabetes_s hock_r	1	50-59, 2	60-64 3	65-69 4	70- Total
0	871 97.21	505 96.56	527 96.88	649 97.30	2,552 97.03
1	25 2.79	18 3.44	17 3.13	18 2.70	78 2.97
Total	896 100.00	523 100.00	544 100.00	667 100.00	2,630 100.00

Pearson chi2(3) = 0.7209 Pr = 0.868

疾患罹患状況の変遷；性別

心臓病

heart_shoc k revised	0=m	1=f	Total
0	1,282 97.42	1,263 97.60	2,545 97.51
1	34 2.58	31 2.40	65 2.49
Total	1,316 100.00	1,294 100.00	2,610 100.00

Pearson chi2(1) = 0.0949 Pr = 0.758

悪性新生物

cancer_sho ck revised	0=m	1=f	Total
0	1,411 98.19	1,370 99.13	2,781 98.65
1	26 1.81	12 0.87	38 1.35
Total	1,437 100.00	1,382 100.00	2,819 100.00

Pearson chi2(1) = 4.6911 Pr = 0.030

脳卒中

stroke_sho ck revised	0=m	1=f	Total
0	1,400 98.52	1,388 99.14	2,788 98.83
1	21 1.48	12 0.86	33 1.17
Total	1,421 100.00	1,400 100.00	2,821 100.00

Pearson chi2(1) = 2.3500 Pr = 0.125

糖尿病

diabetes_s hock_r	0=m	1=f	Total
0	1,240 96.35	1,312 97.69	2,552 97.03
1	47 3.65	31 2.31	78 2.97
Total	1,287 100.00	1,343 100.00	2,630 100.00

Pearson chi2(1) = 4.1229 Pr = 0.042

疾患罹患状況の変遷：喫煙の有無

心臓病

heart_shoc k revised	d_currentsmoke		Total
	0	1	
0	1,885 97.47	570 97.60	2,455 97.50
1	49 2.53	14 2.40	63 2.50
Total	1,934 100.00	584 100.00	2,518 100.00

Pearson chi2(1) = 0.0342 Pr = 0.853

悪性新生物

cancer_sho ck revised	d_currentsmoke		Total
	0	1	
0	2,084 99.00	597 97.39	2,681 98.64
1	21 1.00	16 2.61	37 1.36
Total	2,105 100.00	613 100.00	2,718 100.00

Pearson chi2(1) = 9.1930 Pr = 0.002

脳卒中

stroke_sho ck revised	d_currentsmoke		Total
	0	1	
0	2,092 98.96	603 98.53	2,695 98.86
1	22 1.04	9 1.47	31 1.14
Total	2,114 100.00	612 100.00	2,726 100.00

Pearson chi2(1) = 0.7802 Pr = 0.377

糖尿病

diabetes_s hock_r	d_currentsmoke		Total
	0	1	
0	1,922 97.02	547 97.68	2,469 97.17
1	59 2.98	13 2.32	72 2.83
Total	1,981 100.00	560 100.00	2,541 100.00

Pearson chi2(1) = 0.6842 Pr = 0.408

疾患罹患状況の変遷: BMI別 (0: <25 1: <30 2: >=30)

heart_shoc k revised	0<25	1<30	2>=30	Total
0	1,894 97.38	558 97.72	55 100.00	2,507 97.51
1	51 2.62	13 2.28	0 0.00	64 2.49
Total	1,945 100.00	571 100.00	55 100.00	2,571 100.00

Pearson chi2(2) = 1.6517 Pr = 0.438

cancer_sho ck revised	0<25	1<30	2>=30	Total
0	2,061 98.52	620 98.88	60 100.00	2,741 98.63
1	31 1.48	7 1.12	0 0.00	38 1.37
Total	2,092 100.00	627 100.00	60 100.00	2,779 100.00

Pearson chi2(2) = 1.3278 Pr = 0.515

stroke_sho ck revised	0<25	1<30	2>=30	Total
0	2,071 99.00	623 98.73	59 95.16	2,753 98.85
1	21 1.00	8 1.27	3 4.84	32 1.15
Total	2,092 100.00	631 100.00	62 100.00	2,785 100.00

Pearson chi2(2) = 7.8980 Pr = 0.019

diabetes_s hock_r	0<25	1<30	2>=30	Total
0	1,916 97.71	548 94.97	49 92.45	2,513 96.99
1	45 2.29	29 5.03	4 7.55	78 3.01
Total	1,961 100.00	577 100.00	53 100.00	2,591 100.00

Pearson chi2(2) = 15.2043 Pr = 0.000

疾病・機能障害の incidence(新規発生)の予測モデル

多変量解析に用いた変数一覧

_Iage_2		年齢ダミー (60-64)	
_Iage_3		年齢ダミー (65-69)	
_Iage_4		年齢ダミー (70-)	年齢は 50-^59 が reference category
_Isex_1		性ダミー (1 ; 女性)	
_Ic_educ_2		教育ダミー (高校)	
_Ic_educ_3		教育ダミー (大学以上)	教育は高卒未満が reference category
_Ic_equiv_-2		等価所得ダミー (4分位の2番目Q2)	
_Ic_equiv_-3		Q3	
_Ic_equiv_-4		Q4	所得はQ1が reference category
_Imarital_2		婚姻ダミー (未婚)	
_Imarital_3		婚姻ダミー (離別)	
_Imarital_4		婚姻ダミー (離婚)	婚姻は既婚が reference category
_Id_obesit-1		肥満ダミー (BMI > 25)	
_Isoccap_1		社会関係資本ダミー (1)	
_Isoccap_2		社会関係資本ダミー (2)	
_Isoccap_3		社会関係資本ダミー (3)	0が reference
_Id_dep_1		depression (CESD>16)	0が reference
_Id_curren-1		ベースラインでの現在喫煙	
_Icity_3		都市ダミー	
_Icity_4			
_Icity_5			
_Icity_6			都市ダミーは都市2が reference

心臓病の新規発生の予測モデル

. *heart incidence (65/2617=0.025)

Logistic regression

Log likelihood = -224.60351

Number of obs = 2116
 LR chi2(19) = 31.55
 Prob > chi2 = 0.0351
 Pseudo R2 = 0.0656

heart_new	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	3.147849	1.517147	2.38	0.017	1.223957	8.095835
_Iage_3	2.822842	1.43801	2.04	0.042	1.040084	7.661345
_Iage_4	5.296299	2.52958	3.49	0.000	2.076958	13.5057
_Isex_1	.9818394	.3092828	-0.06	0.954	.5295525	1.820421
_Ic_educ_2	1.298351	.4531982	0.75	0.454	.6550499	2.573415
_Ic_educ_3	.9101905	.420088	-0.20	0.838	.3683578	2.249027
_Ic_equiv_-2	.5066593	.2161272	-1.59	0.111	.2195919	1.169003
_Ic_equiv_-3	.8353543	.3139032	-0.48	0.632	.3999562	1.744733
_Ic_equiv_-4	.7166822	.3077557	-0.78	0.438	.3088915	1.662828
_Ihypert_1	1.108656	.3424354	0.33	0.738	.6051774	2.031006
_Ihigh_cho-1	1.50288	.5872758	1.04	0.297	.6987198	3.232554
_Idiabetes_1	1.584956	.6513791	1.12	0.262	.7082617	3.546833
_Id_dep_1	2.001982	.6567506	2.12	0.034	1.052503	3.808001
_Id_curren-1	1.295356	.4715548	0.71	0.477	.634632	2.643968
_Id_obesit-1	.8852171	.3085521	-0.35	0.726	.447048	1.752853
_Icity_3	1.459491	.6293429	0.88	0.381	.6268409	3.398174
_Icity_4	.8336813	.4564032	-0.33	0.740	.2851054	2.437782
_Icity_5	.6859455	.3758359	-0.69	0.491	.2343734	2.007571
_Icity_6	1.31629	.5890255	0.61	0.539	.5475811	3.164135

脳卒中の新規発生の予測モデル
 . *stroke incidence (33/2828=0.012)

Logistic regression

Number of obs = 2312
 LR chi2(19) = 35.68
 Prob > chi2 = 0.0116
 Pseudo R2 = 0.1336

Log likelihood = -115.66276

stroke_new	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	.6276435	.5568828	-0.52	0.600	.1102748	3.572316
_Iage_3	1.284485	.9200685	0.35	0.727	.3155139	5.22925
_Iage_4	2.430302	1.562118	1.38	0.167	.6895027	8.566129
_Isex_1	.6327267	.2944084	-0.98	0.325	.2541857	1.575002
_Ic_educ_2	.3489127	.18393	-2.00	0.046	.1241665	.9804587
_Ic_educ_3	.250853	.2049606	-1.69	0.091	.0505756	1.244221
_Ic_equiv_-2	1.204679	.6462933	0.35	0.729	.420934	3.447696
_Ic_equiv_-3	1.084716	.6112839	0.14	0.885	.359441	3.273441
_Ic_equiv_-4	.5457671	.4572291	-0.72	0.470	.1056558	2.81917
_Ihypert_1	2.060464	.8841842	1.68	0.092	.8885833	4.777842
_Ihigh_cho-1	1.000555	.654931	0.00	0.999	.2773781	3.609192
_Idiabetes_1	1.188184	.6929131	0.30	0.767	.3788684	3.726308
_Id_dep_1	2.759789	1.256067	2.23	0.026	1.131012	6.734176
_Id_curren-1	1.867742	.9158775	1.27	0.203	.7143588	4.883344
_Id_obesit-1	1.281704	.5863144	0.54	0.587	.5228853	3.141732
_Icity_3	.4209045	.3721697	-0.98	0.328	.0743942	2.381377
_Icity_4	1.437211	.9904474	0.53	0.599	.3723223	5.547817
_Icity_5	.6456926	.4563211	-0.62	0.536	.16161	2.579784
_Icity_6	1.126749	.7586291	0.18	0.859	.3011076	4.216313

悪性新生物 新規発生の予測モデル
 . * cancer incidence (38/2826=0.013)

Logistic regression

Number of obs = 2288
 LR chi2(19) = 33.90
 Prob > chi2 = 0.0189
 Pseudo R2 = 0.1155

Log likelihood = -129.75749

cancer_new	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	1.388492	.9086563	0.50	0.616	.3850352	5.0071
_Iage_3	2.2296	1.385844	1.29	0.197	.6594	7.538848
_Iage_4	2.315663	1.382805	1.41	0.160	.7184192	7.464022
_Isex_1	.6847782	.299677	-0.87	0.387	.2904302	1.614575
_Ic_educ_2	2.267504	1.1182	1.66	0.097	.8625521	5.960886
_Ic_educ_3	1.356627	.9155442	0.45	0.651	.3614195	5.092244
_Ic_equiv_-2	1.575738	.8300394	0.86	0.388	.5611813	4.424507
_Ic_equiv_-3	1.109475	.6263003	0.18	0.854	.3669554	3.354456
_Ic_equiv_-4	.3491793	.2944352	-1.25	0.212	.0668802	1.823052
_Ihypert_1	2.48023	1.009289	2.23	0.026	1.117145	5.506485
_Ihigh_cho-1	.2650567	.2741391	-1.28	0.199	.0349116	2.012368
_Idiabetes_1	.8715653	.5535221	-0.22	0.829	.2510213	3.026142
_Id_dep_1	1.688233	.8088285	1.09	0.274	.6601213	4.317587
_Id_curren-1	1.712322	.7755506	1.19	0.235	.7047843	4.160202
_Id_obesit-1	.6001352	.3093329	-0.99	0.322	.2185279	1.648129
_Icity_3	9.402502	10.00805	2.11	0.035	1.167407	75.72944
_Icity_4	7.440069	8.263911	1.81	0.071	.8435706	65.61943
_Icity_5	4.085654	4.701214	1.22	0.221	.4283659	38.96802
_Icity_6	9.532013	10.20522	2.11	0.035	1.16914	77.71461

糖尿病新規発生の予測モデル

. *diabetes incidence (78/2720=0.029)

Logistic regression

Number of obs = 2143
 LR chi2(16) = 18.96
 Prob > chi2 = 0.2707
 Pseudo R2 = 0.0351

Log likelihood = -260.65324

diabetes_new	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	1.13633	.4227438	0.34	0.731	.5480693	2.355988
_Iage_3	1.154721	.4449858	0.37	0.709	.5425708	2.457525
_Iage_4	.7504346	.3111911	-0.69	0.489	.3329168	1.69157
_Isex_1	.5856186	.1677695	-1.87	0.062	.3340109	1.026761
_Ic_educ_2	.7200839	.2346193	-1.01	0.314	.3802268	1.363714
_Ic_educ_3	.5830791	.2408555	-1.31	0.192	.259488	1.3102
_Ic_equiv_~2	1.21511	.4440913	0.53	0.594	.5936404	2.487183
_Ic_equiv_~3	.7912038	.3177529	-0.58	0.560	.3601139	1.738348
_Ic_equiv_~4	1.007371	.3937125	0.02	0.985	.4682881	2.167035
_Id_dep_1	.6008175	.2626389	-1.17	0.244	.2550656	1.41525
_Id_curren~1	.6641745	.23831	-1.14	0.254	.32875	1.341834
_Id_obesit~1	1.87268	.519217	2.26	0.024	1.087578	3.224532
_Icity_3	.6476984	.2526181	-1.11	0.265	.3015668	1.391112
_Icity_4	.7677689	.3211968	-0.63	0.528	.3381658	1.743137
_Icity_5	.4512861	.2002683	-1.79	0.073	.189109	1.07694
_Icity_6	.6620365	.2795195	-0.98	0.329	.2893975	1.514499

健診受診の有無を考慮したモデル

Logistic regression

Log likelihood = -165.98216

Number of obs = 1413
 Pseudo R2 = 0.0310

diabetes_new	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	1.31998	.5653505	0.65	0.517	.5701591	3.055899
_Iage_3	.7294929	.3894855	-0.59	0.555	.2561851	2.077248
_Iage_4	.8365797	.4306966	-0.35	0.729	.3049881	2.294731
_Isex_1	.6804928	.2466302	-1.06	0.288	.3344441	1.384597
_Ic_educ_2	.7234373	.3028741	-0.77	0.439	.3184469	1.643481
_Ic_educ_3	.5493835	.2872414	-1.15	0.252	.1971654	1.530807
_Ic_equiv_~2	1.506899	.7504477	0.82	0.410	.5677782	3.999349
_Ic_equiv_~3	1.239455	.6305969	0.42	0.673	.4572624	3.359666
_Ic_equiv_~4	.9901823	.5294433	-0.02	0.985	.3472033	2.823882
_Id_dep_1	.8927017	.4396416	-0.23	0.818	.3400188	2.343742
_Id_curren~1	.6555015	.2987669	-0.93	0.354	.2682934	1.601539
_Id_obesit~1	1.739133	.6233909	1.54	0.123	.8614305	3.511117
_Icity_3	.6679301	.30872	-0.87	0.383	.2699617	1.65257
_Icity_4	.858046	.4549162	-0.29	0.773	.3035451	2.425482
_Icity_5	.4079855	.2241169	-1.63	0.103	.1390138	1.197379
_Icity_6	.5154505	.2849958	-1.20	0.231	.1744024	1.523427

移動機能 障害の新規発生の予測モデル
 . *mobility limitation incidence

Logistic regression

Number of obs = 2048
 LR chi2(24) = 112.72
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.0978

Log likelihood = -519.8195

del_mobillim	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	2.14527	.6438488	2.54	0.011	1.191284	3.863213
_Iage_3	3.219626	.9550015	3.94	0.000	1.800209	5.758213
_Iage_4	4.96073	1.462769	5.43	0.000	2.783249	8.841768
_Isex_1	.9414356	.2367062	-0.24	0.810	.575138	1.541023
_Ic_educ_2	.9115611	.188975	-0.45	0.655	.6071889	1.368509
_Ic_educ_3	.7992526	.214115	-0.84	0.403	.4727726	1.351188
_Ic_equiv_~2	.7581169	.1757706	-1.19	0.232	.4812644	1.194232
_Ic_equiv_~3	.8694755	.1990509	-0.61	0.541	.555124	1.361836
_Ic_equiv_~4	.7931604	.2096149	-0.88	0.381	.4725058	1.33142
_Imarital_2	1.562909	.775979	0.90	0.368	.590629	4.135732
_Imarital_3	1.06343	.2969495	0.22	0.826	.6152071	1.838215
_Imarital_4	.4596306	.2812198	-1.27	0.204	.1385514	1.524779
_Iwork_2	2.685392	1.136074	2.33	0.020	1.171928	6.153389
_Iwork_3	1.432446	.3741261	1.38	0.169	.8585423	2.389984
_Iwork_4	1.884268	.5098765	2.34	0.019	1.108691	3.202395
_Iwork_5	.8175179	.5228047	-0.32	0.753	.2334274	2.863141
_Id_obese_1	1.179924	.2408531	0.81	0.418	.7908634	1.760379
_Id_obese_2	.3992244	.4166727	-0.88	0.379	.0516195	3.087598
_Id_dep_1	1.773938	.3943625	2.58	0.010	1.147384	2.742637
_Id_curren-1	1.017113	.2371658	0.07	0.942	.6440059	1.606381
_Icity_3	.975818	.2697573	-0.09	0.929	.567624	1.677555
_Icity_4	1.039549	.3102679	0.13	0.897	.5791509	1.865941
_Icity_5	1.660122	.4579348	1.84	0.066	.9668096	2.850617
_Icity_6	.9588654	.2805059	-0.14	0.886	.5404402	1.701248

IADL障害の新規発生の予測モデル

. *IADLlim incidence

Logistic regression

Number of obs = 1460
 LR chi2(24) = 39.66
 Prob > chi2 = 0.0233
 Pseudo R2 = 0.0275

Log likelihood = -700.95

del_IADLlim	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
_Iage_2	1.128425	.2210125	0.62	0.537	.7687002	1.656488
_Iage_3	1.026721	.2191144	0.12	0.902	.6757657	1.559944
_Iage_4	1.293154	.2880143	1.15	0.248	.8357354	2.00093
_Isex_1	.6237292	.1137914	-2.59	0.010	.4362196	.8918399
_Ic_educ_2	.8772988	.1584914	-0.72	0.469	.6157024	1.250041
_Ic_educ_3	.8666564	.1830673	-0.68	0.498	.5728544	1.311142
_Ic_equiv_2	.9536421	.1908158	-0.24	0.812	.6442688	1.411574
_Ic_equiv_3	.9822149	.1988331	-0.09	0.929	.6605336	1.460556
_Ic_equiv_4	.9656838	.2023928	-0.17	0.868	.6403773	1.456243
_Imarital_2	.7229357	.3353432	-0.70	0.484	.2912451	1.794489
_Imarital_3	.8580672	.2281861	-0.58	0.565	.5095197	1.445046
_Imarital_4	1.030035	.3755091	0.08	0.935	.5041252	2.104581
_Iwork_2	.6900281	.3420424	-0.75	0.454	.261175	1.823064
_Iwork_3	1.456684	.3290194	1.67	0.096	.9356332	2.267907
_Iwork_4	1.243546	.2692958	1.01	0.314	.8134481	1.90105
_Iwork_5	2.151794	.8656386	1.90	0.057	.9780776	4.733997
_Id_obese_1	.9282238	.1563549	-0.44	0.658	.6672243	1.291319
_Id_obese_2	.8272855	.4605042	-0.34	0.733	.277868	2.463045
_Id_dep_1	1.639788	.3130999	2.59	0.010	1.127873	2.384051
_Id_curren-1	1.314307	.223835	1.60	0.109	.9413079	1.83511
_Icity_3	1.104501	.2294064	0.48	0.632	.7351409	1.659442
_Icity_4	.9840573	.2401872	-0.07	0.948	.6099025	1.587743
_Icity_5	1.183779	.2678973	0.75	0.456	.7596925	1.844605
_Icity_6	1.191573	.269047	0.78	0.438	.7654674	1.854875

握力の予測モデル

*ベースラインの grip

Source	SS	df	MS	Number of obs = 1947
Model	95127.6491	22	4323.98405	F(22, 1924) = 160.09
Residual	51965.8766	1924	27.0092914	Prob > F = 0.0000
				R-squared = 0.6467
				Adj R-squared = 0.6427
Total	147093.526	1946	75.5876288	Root MSE = 5.197

grip	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
_Iage_2	-1.990781	.3396067	-5.86	0.000	-2.656817 -1.324746
_Iage_3	-3.480546	.3527314	-9.87	0.000	-4.172322 -2.78877
_Iage_4	-5.452739	.3491528	-15.62	0.000	-6.137497 -4.767981
_Isex_1	-12.65234	.2547343	-49.67	0.000	-13.15193 -12.15276
_Ic_educ_2	.7707296	.3028652	2.54	0.011	.1767512 1.364708
_Ic_educ_3	.7527804	.36021	2.09	0.037	.0463374 1.459223
_Ic_equiv_-2	.6984313	.3432831	2.03	0.042	.0251853 1.371677
_Ic_equiv_-3	.8703	.3428794	2.54	0.011	.1978458 1.542754
_Ic_equiv_-4	.9732568	.3614273	2.69	0.007	.2644264 1.682087
_Imarital_2	-.5553132	.7520377	-0.74	0.460	-2.030208 .9195814
_Imarital_3	-.0959204	.4913724	-0.20	0.845	-1.059599 .8677581
_Imarital_4	-1.736575	.6974119	-2.49	0.013	-3.104338 -.3688123
_Id_obesit-1	1.301506	.2767814	4.70	0.000	.7586829 1.844329
_Isoccap_1	.6121746	.3517804	1.74	0.082	-.0777363 1.302086
_Isoccap_2	.4893365	.3301754	1.48	0.138	-.1582026 1.136876
_Isoccap_3	.4842422	.3742551	1.29	0.196	-.2497461 1.218231
_Id_dep_1	-1.201377	.3346698	-3.59	0.000	-1.85773 -0.5450232
_Id_curren-1	-.0216746	.30694	-0.07	0.944	-.6236446 .5802955
_Icity_3	-1.001634	.3659459	-2.74	0.006	-1.719327 -.2839423
_Icity_4	-.5009335	.416735	-1.20	0.229	-1.318233 .3163663
_Icity_5	-.0929237	.3886856	-0.24	0.811	-.855213 .6693655
_Icity_6	-2.551919	.3821348	-6.68	0.000	-3.301361 -1.802477
_cons	37.56346	.5725423	65.61	0.000	36.44059 38.68633

追跡調査時点の grip

Source	SS	df	MS	Number of obs = 1947
Model	82807.721	22	3763.98732	F(22, 1924) = 140.74
Residual	51455.5582	1924	26.7440531	Prob > F = 0.0000
				R-squared = 0.6168
				Adj R-squared = 0.6124
Total	134263.279	1946	68.9944908	Root MSE = 5.1715

grip_2	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
_Iage_2	-2.016235	.3379351	-5.97	0.000	-2.678993 -1.353478
_Iage_3	-3.775566	.3509952	-10.76	0.000	-4.463937 -3.087195
_Iage_4	-5.448308	.3474342	-15.68	0.000	-6.129695 -4.76692
_Isex_1	-11.92834	.2534804	-47.06	0.000	-12.42546 -11.43121
_Ic_educ_2	.7828557	.3013744	2.60	0.009	.191801 1.37391
_Ic_educ_3	.6269377	.3584369	1.75	0.080	-.076028 1.329903
_Ic_equiv_-2	.2737356	.3415934	0.80	0.423	-.3961965 .9436678
_Ic_equiv_-3	.5722652	.3411916	1.68	0.094	-.0968791 1.241409
_Ic_equiv_-4	.5519027	.3596483	1.53	0.125	-.1534387 1.257244
_Imarital_2	-.8931408	.748336	-1.19	0.233	-2.360776 .574494
_Imarital_3	.1889194	.4889538	0.39	0.699	-.7700157 1.147854
_Imarital_4	-1.249235	.6939791	-1.80	0.072	-2.610265 .1117951
_Id_obesit-1	1.100199	.2754191	3.99	0.000	.5600474 1.64035
_Isoccap_1	.4354511	.3500488	1.24	0.214	-.2510639 1.121966

_Isoccap_2	.1147917	.3285502	0.35	0.727	-.5295602	.7591435
_Isoccap_3	.4269525	.372413	1.15	0.252	-.3034229	1.157328
_Id_dep_1	-1.249504	.3330224	-3.75	0.000	-1.902627	-.5963812
_Id_curren-1	-.0783481	.3054292	-0.26	0.798	-.6773551	.5206588
_Icity_3	-.2920715	.3641446	-0.80	0.423	-1.006231	.422088
_Icity_4	.9750966	.4146837	2.35	0.019	.1618198	1.788373
_Icity_5	.6067798	.3867724	1.57	0.117	-.1517573	1.365317
_Icity_6	-1.019465	.3802539	-2.68	0.007	-1.765218	-.2737124
_cons	35.9707	.5697242	63.14	0.000	34.85336	37.08804

ベースラインの grip を予測因子に加えた、追跡時点の grip の予測モデル

```
. xi:reg grip_2 grip i.age i.sex i.c_educ i.c_equiv_income i.marital i.d_obesity i.
> soccap i.d_dep i.d_currentsmoke i.city if grip_2=.
```

Source	SS	df	MS	Number of obs =	1947
Model	105482.475	23	4586.19455	F(23, 1923) =	306.43
Residual	28780.8046	1923	14.9666171	Prob > F =	0.0000
				R-squared =	0.7856
				Adj R-squared =	0.7831
Total	134263.279	1946	68.9944908	Root MSE =	3.8687

grip_2	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
grip	.6605598	.0169708	38.92	0.000	.6272767 .693843
_Iage_2	-.7012051	.2550502	-2.75	0.006	-1.201409 -.2010011
_Iage_3	-1.476457	.2691345	-5.49	0.000	-2.004283 -.9486313
_Iage_4	-1.846447	.2758907	-6.69	0.000	-2.387524 -1.305371
_Isex_1	-3.570711	.2864648	-12.46	0.000	-4.132525 -3.008896
_Ic_educ_2	.2737427	.2258313	1.21	0.226	-.1691573 .7166428
_Ic_educ_3	.1296812	.2684438	0.48	0.629	-.3967903 .6561527
_Ic_equiv_2	-.18762	.255814	-0.73	0.463	-.6893221 .314082
_Ic_equiv_3	-.00262	.2556657	-0.01	0.992	-.5040312 .4987912
_Ic_equiv_4	-.0909917	.2695523	-0.34	0.736	-.6196372 .4376539
_Imarital_2	-.5263233	.5598947	-0.94	0.347	-1.624388 .5717413
_Imarital_3	.2522805	.3657803	0.69	0.490	-.4650872 .9696482
_Imarital_4	-.1021234	.5199879	-0.20	0.844	-1.121923 .917676
_Id_obesit-1	.240476	.2072161	1.16	0.246	-.1659159 .6468679
_Isoccap_1	.0310731	.2620706	0.12	0.906	-.4828994 .5450456
_Isoccap_2	-.2084444	.2459221	-0.85	0.397	-.6907465 .2738577
_Isoccap_3	.1070816	.278716	0.38	0.701	-.4395357 .6536989
_Id_dep_1	-.4559229	.2499604	-1.82	0.068	-.9461448 .0342991
_Id_curren-1	-.0640308	.2284858	-0.28	0.779	-.5121368 .3840753
_Icity_3	.369568	.2729392	1.35	0.176	-.16572 .904856
_Icity_4	1.305993	.3103332	4.21	0.000	.6973682 1.914618
_Icity_5	.6681615	.2893411	2.31	0.021	.1007062 1.235617
_Icity_6	.6662297	.2877383	2.32	0.021	.1019178 1.230542
_cons	11.15779	.7668311	14.55	0.000	9.653882 12.6617

厚生労働科学研究費補助金

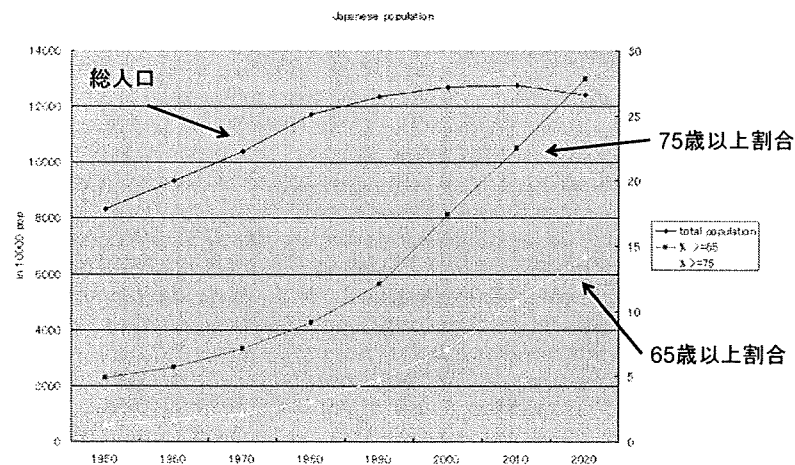
長寿科学総合研究事業／認知症対策総合研究事業

社会経済的格差と高齢者の健康、生活習慣、医療介護
資源利用に関する検討 (H19-長寿-一般-017)

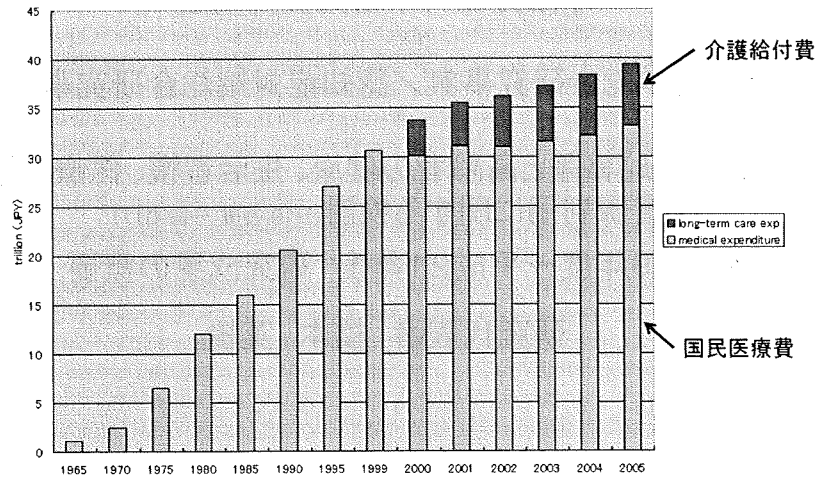
平成19年度～平成21年度 研究成果の概要

研究代表者 橋本 英樹

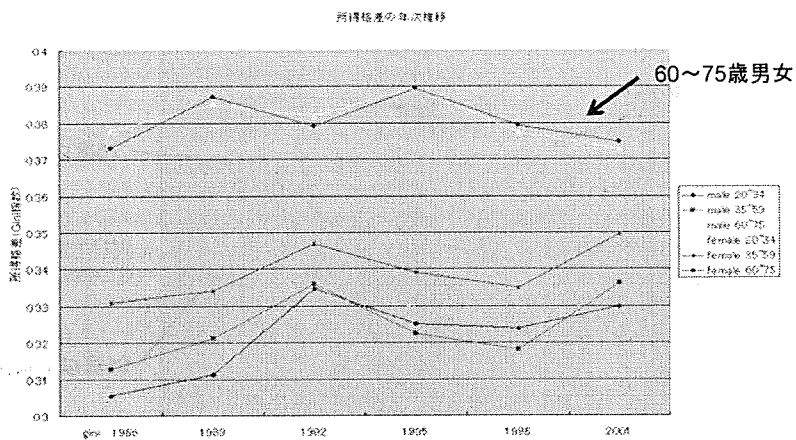
背景1; 高齢化の進展



背景2; 医療費と介護費の動向



背景3; 高齢者における所得格差



国民生活基礎調査より橋本が推計

A. 研究目的

- 所得格差が大きく、また医療・介護の資源消費量が大きい高齢者層に着目し、その人口学的・疫学的・行動心理的特性に加えて、世帯や地域社会の社会経済的資源量についても包括的に測定することで、高齢者の健康・生活習慣・社会経済的資源と医療・介護需要の関係を実証的に検討する
- 高齢者世帯に関する包括的・大規模な個票データを整備し、多様なニーズを持つ高齢者に対応した、持続性の高い医療介護サービスのあり方を探るための基礎的政策資料を提示する

B. 研究方法

- 高齢者の就労・引退、貯蓄行動などに関する社会経済調査(「暮らしと健康」調査(一橋大学・経済産業研究所)＝米国立長寿研究所Health and Retirement Surveyとの国際共同研究)を母体フレームとして、追加的な調査を実施
 - 上記先行調査では平成19年10月現在全国5地点で、住民台帳より無作為抽出された50-74歳男女約4000人(回答率61%)につき完了、所得、資産、消費、年金、家族構成などの情報を入手
 - 本研究事業と併せて追加的に生活習慣(喫煙・飲酒・運動)、自覚的健康状態、精神的健康(K6)、機能測定(握力、IADL、認知)、食事調査(佐々木式BDHQ)を実施