

## Supplementary material

Questionnaire used in both 2006 and 2019 surveys:

- 1. Excluding medicines and dental care, have you ever fully paid out-of-pocket for your medical care that you could have obtained free of charge or at a lower cost within the SSN?**
  - Yes, 1-5 times
  - Yes, >5 times
  - No
  - I don't remember
  
- 2. And was any of these medical care within the last two years?**
  - Yes
  - No
  - I don't remember
  
- 3. Last time you fully paid out-of-pocket for private medical care, which of the following did you pay for?**
  - Diagnostic test
  - Medical examination by a specialist
  - Surgical intervention
  - Something else
  - I don't remember
  
- 4. Last time you fully paid out-of-pocket for private medical care, what was the main reason you decided to pay?**
  - To have the medical care as quickly as possible
  - To be able to choose a particular doctor or hospital
  - I was not aware that the SSN could provide the same service for free or at a lower cost
  - Other reason
  - I don't remember
  
- 5. What do you think about the waiting list problem of the Italian SSN?**
  - It is very important
  - It is acceptable
  - It almost does not exist
  - I don't know

## Supplementary results

**Table S1.** Multiple logistic regression model to assess factors associated with **private access during lifetime**. Odds Ratios and 95%CI of full and final regression models.

	Full model		Final model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Cohort</b>		<0.001		<0.001
2006	1.00		1.00	
2019	2.64 (1.89 – 3.66)		2.66 (1.98 – 3.58)	
<b>Gender</b>		0.004		0.003
Men	1.00		1.00	
Women	1.54 (1.15 – 2.06)		1.54 (1.15 – 2.05)	
<b>Age in classes</b>		0.703		
≤24 years	1.00			
25-34 years	1.17 (0.69 – 1.97)			
35-44 years	0.91 (0.51 – 1.63)			
45-54 years	1.18 (0.64 – 2.15)			
≥55 years	0.93 (0.53 – 1.61)			
<b>Educational level</b>		0.483		
University degree or higher	1.00			
High school	0.98 (0.67 – 1.44)			
Middle school or lower	0.80 (0.51 – 1.26)			
<b>Employed</b>		0.031		0.002
No	1.00		1.00	
Yes	1.43 (1.03 – 1.97)		1.58 (1.19 – 2.11)	
<b>Household income</b>		0.663		
Low	1.00			
Medium	1.17 (0.78 – 1.76)			
High	1.12 (0.69 – 1.82)			
<i>Refuse to respond</i>	0.94 (0.61 – 1.45)			
<b>Marital status</b>		0.002		<0.001
Single/ Widower/Separated/Divorced	1.00		1.00	
Married/in a domestic relationship	1.77 (1.25 – 2.52)		1.84 (1.39 – 2.45)	
<b>Number of family members</b>	0.96 (0.82 – 1.11)	0.569		
<b>Presence of children (≤14 years)</b>		0.361		
No	1.00			
Yes	1.19 (0.82 – 1.74)			
<b>Perceived health status</b>		0.001		0.001
Very good	1.00		1.00	
Good	1.57 (1.09 – 2.26)		1.56 (1.09 – 2.24)	
Discrete	2.41 (1.54 – 3.76)		2.31 (1.51 – 3.55)	
Not good	2.98 (1.31 – 6.78)		2.91 (1.30 – 6.49)	
Bad	1.16 (0.38 – 3.53)		1.08 (0.37 – 3.18)	
<b>Private health insurance</b>		<0.001		<0.001
No	1.00		1.00	
Yes	2.51 (1.62 – 3.87)		2.54 (1.65 – 3.90)	
<b>Area of residence</b>		0.019		0.024
North-West	1.00		1.00	

North-East	1.96 (1.26 – 3.05)	1.90 (1.23 – 2.95)
Center	1.33 (0.90 – 2.00)	1.31 (0.88 – 1.94)
South	1.34 (0.91 – 1.98)	1.32 (0.90 – 1.92)
Islands	1.93 (1.13 – 3.28)	1.89 (1.12 – 3.18)

**Table S2.** Multiple logistic regression model to assess factors associated with **private access for diagnostic tests**. Odds Ratios and 95%CI of full and final regression models.

	Full model		Final model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Cohort</b>		<0.001		<0.001
2006	1.00		1.00	
2019	1.72 (1.37 – 2.17)		1.79 (1.47 – 2.20)	
<b>Gender</b>		0.396		
Men	1.00			
Women	0.91 (0.74 – 1.12)			
<b>Age in classes</b>		0.067		0.039
≤24 years	1.00		1.00	
25-34 years	1.10 (0.71 – 1.70)		1.13 (0.76 – 1.70)	
35-44 years	1.56 (1.00 – 2.44)		1.58 (1.08 – 2.33)	
45-54 years	1.11 (0.71 – 1.74)		1.12 (0.76 – 1.65)	
≥55 years	1.39 (0.90 – 2.15)		1.43 (0.98 – 2.09)	
<b>Educational level</b>		0.281		
University degree or higher	1.00			
High school	1.07 (0.83 – 1.38)			
Middle school or lower	0.87 (0.63 – 1.20)			
<b>Employed</b>		0.318		
No	1.00			
Yes	0.89 (0.71 – 1.12)			
<b>Household income</b>		0.545		
Low	1.00			
Medium	1.10 (0.83 – 1.47)			
High	0.90 (0.64 – 1.28)			
<i>Refuse to respond</i>	1.07 (0.77 – 1.47)			
<b>Marital status</b>		0.245		
Single/ Widower/Separated/Divorced	1.00			
Married/in a domestic relationship	1.16 (0.90 – 1.50)			
<b>Number of family members</b>	1.11 (0.99 – 1.24)	0.066	1.15 (1.04 – 1.26)	0.004
<b>Presence of children (≤14 years)</b>		0.983		
No	1.00			
Yes	1.00 (0.77 – 1.30)			
<b>Perceived health status</b>		0.532		
Very good	1.00			
Good	0.94 (0.68 – 1.28)			
Discrete	0.90 (0.63 – 1.27)			

Not good	1.26 (0.77 – 2.07)	
Bad	0.66 (0.25 – 1.78)	
<b>Private health insurance</b>		0.703
No	1.00	
Yes	1.05 (0.82 – 1.34)	
<b>Area of residence</b>		0.119
North-West	1.00	
North-East	1.37 (1.02 – 1.86)	
Center	1.26 (0.93 – 1.70)	
South	1.40 (1.05 – 1.88)	
Islands	1.45 (1.01 – 2.08)	

**Table S3.** Multiple logistic regression model to assess factors associated with **private access for medical examination by a specialist**. Odds Ratios and 95%CI of full and final regression models.

	Full model		Final model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Cohort</b>		0.297		0.150
2006	1.00		1.00	
2019	0.89 (0.72 - 1.11)		0.87 (0.72 - 1.05)	
<b>Gender</b>		0.001		0.002
Men	1.00		1.00	
Women	1.38 (1.13 - 1.68)		1.36 (1.12 - 1.64)	
<b>Age in classes</b>		0.113		
≤24 years	1.00			
25-34 years	1.18 (0.79 - 1.77)			
35-44 years	0.90 (0.59 - 1.37)			
45-54 years	1.17 (0.77 - 1.77)			
≥55 years	0.87 (0.58 - 1.30)			
<b>Educational level</b>		0.115		
University degree or higher	1.00			
High school	0.86 (0.68 - 1.09)			
Middle school or lower	1.09 (0.80 - 1.61)			
<b>Employed</b>		0.021		<0.001
No	1.00		1.00	
Yes	1.29 (1.04 - 1.61)		1.43 (1.17 - 1.73)	
<b>Household income</b>		0.117		
Low	1.00			
Medium	1.05 (0.80 - 1.38)			
High	1.35 (0.97 - 1.86)			
Refuse to respond	0.95 (0.70 - 1.29)			
<b>Marital status</b>		0.657		
Single/ Widower/Separated/Divorced	1.00			
Married/in a domestic relationship	1.06 (0.83 - 1.34)			
<b>Number of family members</b>	0.94 (0.85 - 1.04)	0.214		

<b>Presence of children (≤14 years)</b>		0.604		
No	1.00			
Yes	1.07 (0.83 - 1.37)			
<b>Perceived health status</b>		0.008		0.007
Very good	1.00		1.00	
Good	1.40 (1.04 - 1.89)		1.43 (1.07 - 1.91)	
Discrete	1.82 (1.31 - 2.53)		1.79 (1.31 - 2.45)	
Not good	1.37 (0.84 - 2.23)		1.32 (0.83 - 2.12)	
Bad	1.63 (0.68 - 3.87)		1.50 (0.64 - 3.52)	
<b>Private health insurance</b>		0.428		
No	1.00			
Yes	1.10 (0.87 - 1.38)			
<b>Area of residence</b>		0.576		
North-West	1.00			
North-East	0.91 (0.69 - 1.20)			
Center	0.80 (0.60 - 1.05)			
South	0.86 (0.66 - 1.13)			
Islands	0.84 (0.59 - 1.18)			

**Table S4.** Multiple logistic regression model to assess factors associated with **private access to have the medical service as quickly as possible**. Odds Ratios and 95%CI of full and final regression models.

	Full model		Final model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Cohort</b>		<0.001		<0.001
2006	1.00		1.00	
2019	1.62 (1.31 - 2.02)		1.75 (1.45 - 2.11)	
<b>Gender</b>		0.852		
Men	1.00			
Women	1.02 (0.84 - 1.24)			
<b>Age in classes</b>		0.229		0.006
≤24 years	1.00		1.00	
25-34 years	1.25 (0.84 - 1.87)		1.42 (0.98 - 2.06)	
35-44 years	1.46 (0.96 - 2.21)		1.75 (1.22 - 2.51)	
45-54 years	1.54 (1.01 - 2.33)		1.89 (1.32 - 2.70)	
≥55 years	1.22 (0.82 - 1.81)		1.47 (1.04 - 2.09)	
<b>Educational level</b>		0.821		
University degree or higher	1.00			
High school	0.96 (0.76 - 1.23)			
Middle school or lower	1.04 (0.77 - 1.41)			
<b>Employed</b>		0.353		
No	1.00			
Yes	1.11 (0.89 - 1.38)			
<b>Household income</b>		0.915		
Low	1.00			
Medium	1.09 (0.83 - 1.43)			

High	1.02 (0.74 - 1.42)			
<i>Refuse to respond</i>	1.01 (0.75 - 1.37)			
<b>Marital status</b>		0.169		
Single/ Widower/Separated/Divorced	1.00			
Married/in a domestic relationship	1.18 (0.93 - 1.50)			
<b>Number of family members</b>	1.10 (1.00 - 1.23)	0.060	1.11 (1.02 - 1.22)	0.020
<b>Presence of children (≤14 years)</b>		0.588		
No	1.00			
Yes	0.93 (0.73 - 1.20)			
<b>Perceived health status</b>		0.246		
Very good	1.00			
Good	1.33 (1.00 - 1.78)			
Discrete	1.33 (0.96 - 1.84)			
Not good	1.54 (0.95 - 2.51)			
Bad	0.89 (0.38 - 2.12)			
<b>Private health insurance</b>		0.329		
No	1.00			
Yes	1.12 (0.89 - 1.42)			
<b>Area of residence</b>		0.008		0.006
North-West	1.00		1.00	
North-East	1.12 (0.84 - 1.48)		1.11 (0.84 - 1.48)	
Center	1.09 (0.82 - 1.44)		1.06 (0.80 - 1.40)	
South	0.70 (0.53 - 0.92)		0.69 (0.53 - 0.90)	
Islands	1.08 (0.76 - 1.52)		1.04 (0.74 - 1.46)	

**Table S5.** Multiple logistic regression model to assess factors associated with **private access to be able to choose the physician or the hospital**. Odds Ratios and 95%CI of full and final regression models.

	Full model		Final model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Cohort</b>		0.003		0.011
2006	1.00		1.00	
2019	0.65 (0.49 - 0.86)		0.73 (0.58 - 0.93)	
<b>Gender</b>		0.045		0.022
Men	1.00		1.00	
Women	1.30 (1.01 - 1.67)		1.32 (1.04 - 1.68)	
<b>Age in classes</b>		0.515		
≤24 years	1.00			
25-34 years	1.15 (0.68 - 1.96)			
35-44 years	0.91 (0.52 - 1.59)			
45-54 years	1.24 (0.72 - 2.15)			
≥55 years	1.20 (0.71 - 2.04)			
<b>Educational level</b>		0.059		
University degree or higher	1.00			

High school	0.89 (0.66 - 1.21)			
Middle school or lower	0.64 (0.43 - 0.95)			
<b>Employed</b>		0.693		
No	1.00			
Yes	0.95 (0.72 - 1.25)			
<b>Household income</b>		0.653		
Low	1.00			
Medium	1.08 (0.75 - 1.54)			
High	1.02 (0.67 - 1.57)			
Refuse to respond	1.24 (0.84 - 1.84)			
<b>Marital status</b>		0.306		
Single/ Widower/Separated/Divorced	1.00			
Married/in a domestic relationship	1.17 (0.86 - 1.59)			
<b>Number of family members</b>	0.90 (0.79 - 1.03)	0.145	0.90 (0.81 - 1.00)	0.048
<b>Presence of children (≤14 years)</b>		0.665		
No	1.00			
Yes	0.93 (0.67 - 1.28)			
<b>Perceived health status</b>		0.505		
Very good	1.00			
Good	1.08 (0.73 - 1.59)			
Discrete	1.21 (0.80 - 1.85)			
Not good	0.74 (0.37 - 1.46)			
Bad	0.90 (0.29 - 2.86)			
<b>Private health insurance</b>		0.268		
No	1.00			
Yes	1.18 (0.88 - 1.59)			
<b>Area of residence</b>		0.015		0.009
North-West	1.00		1.00	
North-East	1.21 (0.85 - 1.74)		1.18 (0.82 - 1.68)	
Center	0.81 (0.55 - 1.19)		0.79 (0.54 - 1.16)	
South	1.52 (1.08 - 2.15)		1.47 (1.06 - 2.04)	
Islands	1.14 (0.73 - 1.78)		1.11 (0.72 - 1.72)	

**Table S6.** Multiple logistic regression model to assess factors associated with **perception of waiting lists as an important problem**. Odds Ratios and 95%CI of full and final regression models.

	Full model		Final model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Cohort</b>		0.053		0.037
2006	1.00		1.00	
2019	1.35 (1.00 - 1.82)		1.33 (1.02 - 1.75)	
<b>Gender</b>		<0.001		<0.001
Men	1.00		1.00	
Women	1.65 (1.25 - 2.18)		1.61 (1.24 - 2.10)	

<b>Age in classes</b>		0.064		0.018
≤24 years	1.00		1.00	
25-34 years	1.74 (1.02 - 2.97)		1.69 (1.04 - 2.76)	
35-44 years	1.88 (1.08 - 3.27)		1.86 (1.13 - 3.06)	
45-54 years	2.36 (1.33 - 4.17)		2.43 (1.46 - 4.04)	
≥55 years	2.00 (1.17 - 3.40)		1.99 (1.24 - 3.18)	
<b>Educational level</b>		0.193		
University degree or higher	1.00			
High school	1.37 (0.98 - 1.92)			
Middle school or lower	1.25 (0.83 - 1.89)			
<b>Employed</b>		0.340		
No	1.00			
Yes	1.16 (0.85 - 1.59)			
<b>Household income</b>		0.951		
Low	1.00			
Medium	1.11 (0.75 - 1.64)			
High	1.12 (0.70 - 1.77)			
<i>Refuse to respond</i>	1.05 (0.68 - 1.62)			
<b>Marital status</b>		0.726		
Single/ Widower/Separated/Divorced	1.00			
Married/in a domestic relationship	0.94 (0.67 - 1.32)			
<b>Number of family members</b>	1.21 (1.04 - 1.40)	0.014	1.23 (1.07 - 1.42)	0.004
<b>Presence of children (≤14 years)</b>		0.075		0.045
No	1.00		1.00	
Yes	0.73 (0.51 - 1.03)		0.71 (0.51 - 0.99)	
<b>Perceived health status</b>		0.486		
Very good	1.00			
Good	1.06 (0.72 - 1.55)			
Discrete	1.05 (0.68 - 1.63)			
Not good	2.00 (0.88 - 4.53)			
Bad	1.07 (0.30 - 3.87)			
<b>Private health insurance</b>		0.664		
No	1.00			
Yes	0.93 (0.68 - 1.28)			
<b>Area of residence</b>		0.314		
North-West	1.00			
North-East	0.96 (0.66 - 1.40)			
Center	1.39 (0.93 - 2.08)			
South	1.30 (0.88 - 1.92)			
Islands	1.20 (0.74 - 1.95)			

**Table S7.** Logistic regressions models. Sensitivity analysis excluding the answers “Did not remember”.

	Simple model		Multiple model	
	OR (95% CI)	p-value	Adj OR (95% CI)	p-value
Private access	4.64 (3.34 – 6.45)	<0.001	3.87 (2.74 – 5.46)	<0.001
Private access for diagnostic tests	1.77 (1.45-2.16)	<0.001	1.80 (1.46 - 2.22)	<0.001
Private access for medical examination by a specialist	0.96 (0.80 - 1.16)	0.692	0.89 (0.72 - 1.09)	0.263
Private access to have the medical service as quickly as possible	1.90 (1.57 - 2.29)	<0.001	1.85 (1.52 – 2.25)	<0.001
Private access to be able to choose the physician or the hospital	0.77 (0.61 - 0.98)	0.033	0.70 (0.54 - 0.90)	0.005

Note: Adj OR = adjusted for confounding factors.