## **Multimedia Appendix 12.** Explanatory factors of some dimensions of European general practitioners' eHealth usage and eHealth usage outcomes in 2012-2013.

	n/variable	Standardized coefficient	P value	Error	P value
ICT 110	age (ICTUS)		1	0.028	<.001
	Internet usage during consultations	0.245	. 001		<.001
1. 2.		0.245 0.064	<.001 <.001	0.443	<.001
	Computer usage in general practice	0.064			_
3.	Computer usage to display patients' health-related information	0.287	<.001	0.441	<.001
4.	Problems of compatibility in electronically exchanging	0.481	<.001	1.215	<.001
4.	patient data	0.401	<.001	1.213	<.001
5.	Medical organizations in contact with general	0.640	<.001	2.840	<.001
0.	practitioner	0.010	1.001	2.010	1.001
Goodn	ness-of-fit indices: NFI <sup>b</sup> : 0.996; RFI <sup>c</sup> : 0.984; IFI <sup>d</sup> : 0.997; TLI <sup>e</sup> : 0	).990; CFI <sup>f</sup> : 0.997; R	MSEA <sup>g</sup> : 0.012		
	rs to eHealth usage (BARRIERS)	, , , , , , , , , , , , , , , , , , ,		0.513	<.001
6.	Lack of financial incentives	0.607	<.001	0.881	<.001
7.	Lack of financial resources	0.632	<.001	0.821	<.001
8.	Lack of access to technology	0.631	<.001	0.797	<.001
9.	Lack of technical support	0.649	<.001	0.748	<.001
10.	Lack of interoperability and standards	0.597	<.001	1.084	<.001
11.	Lack of sufficient resilience –ICT <sup>h</sup> systems can fail	0.653	<.001	0.788	<.001
12.	Lack of sufficient security and risk control	0.643	<.001	0.833	<.001
13.	Lack of framework on confidentiality and privacy issues	0.655	<.001	0.874	<.001
14.	Lack of time – additional workload	0.681	<.001	0.687	<.001
15.	Lack of sufficient ICT skills among general practitioners	0.663	<.001	0.628	<.001
16.	Lack of sufficient training for healthcare professionals	0.673	<.001	0.605	<.001
17.	Lack of clear motivation for using ICT	0.623	<.001	0.798	<.001
18.	Increased patient expectations	0.528	<.001	1.042	<.001
19.	Lack of framework on using e-mail for communication	0.574	<.001	1.089	<.001
	between doctors and patients				
20.	Lack of remuneration for additional work answering	0.548	<.001	1.069	<.001
	patients e-mails				
21.	Difficult to use	0.629	<.001	0.703	<.001
	ness-of-fit indices: NFI: 0.984; RFI: 0.975; IFI: 0.985; TLI: 0.97	77; CFI: 0.985; RMS	EA: 0.040		
. eHealt	h usage outcomes in internal practices (OUTINTPRA)				
				0.456	<.001
т	Useful for my practice				
72.		0.717	<.001	0.430	<.001
73.	Increases the number of patients I can see on average during working hours	0.624	<.001	0.936	<.001 <.001
73. 74.	Increases the number of patients I can see on average during working hours Enhances effectiveness of job	0.624 0.735	<.001	0.936 0.548	<.001 <.001 <.001
73. 74. 75.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care	0.624 0.735 0.686	<.001 <.001 <.001	0.936 0.548 0.679	<.001 <.001 <.001 <.001
73. 74. 75. 76.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use	0.624 0.735 0.686 0.801	<.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419	<.001 <.001 <.001 <.001 <.001
73. 74. 75. 76. 77.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want	0.624 0.735 0.686 0.801 0.769	<.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511	<.001 <.001 <.001 <.001 <.001 <.001
73. 74. 75. 76. 77. 78.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with	0.624 0.735 0.686 0.801 0.769 0.744	<.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73. 74. 75. 76. 77.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems	0.624 0.735 0.686 0.801 0.769	<.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725	<.001 <.001 <.001 <.001 <.001 <.001
73. 74. 75. 76. 77. 78.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use	0.624 0.735 0.686 0.801 0.769 0.744	<.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73. 74. 75. 76. 77. 78. 79.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems  People who influence my behavior think I should use ICT systems  People who influence my clinical behavior think I should	0.624 0.735 0.686 0.801 0.769 0.744 0.477	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73.  74.  75.  76.  77.  78.  79.  80.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems  People who influence my behavior think I should use ICT systems  People who influence my clinical behavior think I should use ICT systems	0.624 0.735 0.686 0.801 0.769 0.744 0.477 0.442	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725 1.754	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73.  74.  75.  76.  77.  78.  79.  80.  81.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems  People who influence my behavior think I should use ICT systems  People who influence my clinical behavior think I should use ICT systems  I have the necessary resources to use ICT systems	0.624 0.735 0.686 0.801 0.769 0.744 0.477 0.442 0.435	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725 1.754 1.762 0.819	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73.  74.  75.  76.  77.  78.  79.  80.  81.  82.  83.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems  People who influence my behavior think I should use ICT systems  People who influence my clinical behavior think I should use ICT systems  I have the necessary resources to use ICT systems  I have the knowledge to use ICT systems	0.624 0.735 0.686 0.801 0.769 0.744 0.477 0.442 0.435 0.628 0.627	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725 1.754 1.762 0.819 0.681	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73.  74.  75.  76.  77.  78.  79.  80.  81.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems  People who influence my behavior think I should use ICT systems  People who influence my clinical behavior think I should use ICT systems  I have the necessary resources to use ICT systems  I have the knowledge to use ICT systems  I have technical assistance available	0.624 0.735 0.686 0.801 0.769 0.744 0.477 0.442 0.435	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725 1.754 1.762 0.819 0.681 0.887	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001
73.  74.  75.  76.  77.  78.  79.  80.  81.  82.  83.  84.  85.	Increases the number of patients I can see on average during working hours  Enhances effectiveness of job  Increases quality of care  Easy to use  Easy to get it to do what I want  Flexible to use / interact with  Colleagues who are important to me think I should use ICT systems  People who influence my behavior think I should use ICT systems  People who influence my clinical behavior think I should use ICT systems  I have the necessary resources to use ICT systems  I have the knowledge to use ICT systems	0.624  0.735  0.686  0.801  0.769  0.744  0.477  0.442  0.435  0.628  0.627  0.558  0.616	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001	0.936 0.548 0.679 0.419 0.511 0.583 1.725 1.754 1.762 0.819 0.681	<.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001 <.001

86.	Reduce medical errors	0.740	<.001	0.604	<.001
87.	Improvement in the quality of diagnosis decisions	0.783	<.001	0.495	<.001
88.	Improvement in the quality of treatment	0.784	<.001	0.495	<.001
89.	Enhance self-evaluation	0.696	<.001	0.769	<.001
90.	More data for clinical research and public health	0.665	<.001	0.669	<.001
91.	Facilitate patients' education and adherence to	0.723	<.001	0.652	<.001
	prescriptions				
92.	Improvement in patient satisfaction	0.707	<.001	0.759	<.001
93.	Increased patient access to healthcare (e.g., booking	0.647	<.001	0.823	<.001
	online appointments, viewing data)				
94.	Avoid unnecessary tests and duplications	0.710	<.001	0.577	<.001
95.	Increase average number of patients receiving help	0.697	<.001	0.749	<.001
	during one day				
96.	Reduce pharmaceutical expenditure	0.649	<.001	0.945	<.001
97.	Shorter waiting lists	0.677	<.001	0.823	<.001
98.	Allow more efficient consultations	0.767	<.001	0.541	<.001
99.	Improvement in coordination between the different	0.720	<.001	0.592	<.001
	levels of the healthcare system				
100.	Expedite workflow due to the availability of patients'	0.741	<.001	0.555	<.001
	clinical data				
101.	Improvement in the efficiency of the whole healthcare	0.797	<.001	0.448	<.001
	system				
Goodn	ess-of-fit indices: NFI: 0.989; RFI: 0.983; IFI: 0.990; TLI: 0.9	984; CFI: 0.990; RN	MSEA: 0.038		

<sup>&</sup>lt;sup>a</sup>Regression analysis: structural equation modeling (SEM); direct effects.

<sup>&</sup>lt;sup>b</sup>NFI: normed fit index

<sup>°</sup>RFI: relative fit index.

<sup>&</sup>lt;sup>d</sup>IFI: incremental fit index.

<sup>&</sup>lt;sup>e</sup>TLI: Tucker-Lewis index

<sup>&</sup>lt;sup>f</sup>CFI: comparative fit index.
<sup>g</sup>RMSEA: root mean square error of approximation
<sup>h</sup>ICT: information and communication technology