Supplementary Table 2. The new coding variable classification process on European Service Mapping Schedule-Revised (ESMS-R) mapping tree.

N= 89 Main type of care (MTC)	1= Local, without gatekeeping	2= Local with gatekeeping	3= Centralized, without gatekeeping	4= Centaralized, with gatekeeping	Individual classification (n/6) round 1. Agreement with proposal	Consensus (round 1.)	Consensus and final decisions after individual classification (round 2.), 4 MTC (on red) re-classification and Category 4 re-coding to 3 (Centralized)
Information (I) (N=9)							
I1.1	6				6/6	1	1
I1.2		6			6/6	2	2
I1.3	6				6/6	1	1
I1.4		6			6/6	2	2
I1.5	6				6/6	1	1
I2.1	6				6/6	1	1
I2.1.1	6				6/6	1	1
I2.1.2	6				6/6	1	1
I2.2	6				6/6	1	1
Accessibility to care (A) (N=5)							
A1	6				6/6	1	1
A2		6			6/6	2	2
A3		5			5/5	2	2
A4	6				6/6	1	1
A5	6				6/6	1	1
Sef-Help and voluntary care (S) (N=10)							
S1.1	6				6/6	1	1
S1.2	6				6/6	1	1
S1.3	6				6/6	1	1
S1.4	6				6/6	1	1
S1.5				6	6/6	4	3
S2.1	6				6/6	1	1
S2.2		6			6/6	2	2
S2.3	6				6/6	1	1
S2.4	5				5/5	1	1
S2.5				6	6/6	4	3
Outpatient care (O) (N= 24)							
O1.1	2	3		1		2	2
O1.2	2	2	2			1	1
O2.1		6				2	2
O2.2	1	4		1		2	2
O3.1	1	1	4			3	3 (3/6)
O3.2	1	1	1	2		3	3 (3/6)
O4.1		6				3	2 (6/6)
O4.2	1	1	4			3	2 (6/6)
O5.1.1		5		1		2	2
O5.1.2	1	4		1		2	2
O5.1.3		2		3		2	2
O5.2.1		5		1		2	2
O5.2.2	1	4		1		2	2
O5.2.3		2		4		2	2
O6.1		6				2	2
O6.2	1	4		1		2	2
O7.1	1	4		1		2	2
O7.2	1	3		2		2	2
O8.1	1	4		2		2	2
O8.2		2	1	2		2	2
O9.1	3	4		1		2	2
O9.2	2	3		2		2	2
O10.1	4	1		2		1	1
O10.2	1	2	2	1		1	1
Day care (D) (22)							
D0.1		2	1	3		4	3
D0.2			3	3		4	3
D1.1		2	2	4		4	3
D1.2		2		4		4	3
D2.1		2	1	2		2	2
D2.2		2	1	3		4	3
D6.1		4	1	1		2	2
D6.2		3	2	1		4	3
D3.1		3	1	2		4	3
D3.2	1	3	1	1		4	3
D7.1		3	2	2		4	3
D7.2		2	2	1		4	3
D4.1		5		1		2	2
D4.2		1	2	3		4	3
D4.3	1	3	1	1		2	2
D4.4	3	2	1			1	1
D8.1		4		2		2	2
D8.2		1	1	4		4	3
D8.3	4		1	1		2	2
D8.4	4		1	1		1	1
D5		5	1			1	1
D9		4	1	1		1	1
Residential services R (N=19) MTC types on additional figure 1.					6/6	4	3 (N=19)

All residental services were classified to the category 4, after round 2, to the category 3., MTC codes on additional figure 1.m residential services

Statistical test not done related to the individual classifications guiding role and small numbers of classifications. There were 14 MTC:s under half (<3/6) agreement.

Table 1. Specialists participating in to the Delphi-panel

Work position (At the time)	*Academic crentials*
Director of nursing (TA-N)	MNSc, PhD-student (chair of panel)
Research Professor (KW)	Associate professor, PhD, Specialist in Psychiatry
Psychiatrist (MS)	Specialist in Psychiatry
Medicine director (GJ)	Associate professor, PhD, Specialist in Psychiatry
Chief Medical Officer (SS)	Associate professor, PhD, Specialist in Psychiatry
Development chief (PN)	Master of psychologists, PhD-student
Project chief (RK)	PhD
Psychiatric nurse, Project coordinator (MV)	MNSc
Psychiatric nurse, Project coordinator (VM)	RN
Administrative head nurse, Project coordinator (OO)	PhD
Psychiatric nurse, Project coordinator (SG)	RN

Supplementary Table 3. Recoded Different main type of cares by main main branches and found frequency of units (BSICs) after first consensus classification round (Quadrange classification)

Main type of care (MTC N = 89)	**1 = local without gatekeeping**	**2 = local with gatekeeping**	**3 = centralized without gatekeeping**	**4 = centralized with gatekeeping**	**Total main type of care**
Information for care	**7**	**2**			9
Accessibility to care	**3**	**2**			5
Self-Help and voluntary care	**7**	**1**		**2**	10
Outpatient care	**3**	**17**	**4**		24
Day care	**4**	**6**		**12**	22
Residental care				**19**	19
Total (MTC N = 89)	**24**	**28**	**4**	**33**	89
Percent of recoded MTC	**27.0**	**31.5**	**4.5**	**37.1**	100
Frequency (BSIC N = 987)	**360**	**189**	**34**	**396**	979
Percent of found BSICs	**37 %**	**19 %**	**3 %**	**40 %**	100

BSIC = Basic Stable Input of Care; i.e. the organizational units that provide the services. Missing 8 BSIC.
Different MTC (main type of care) in ESMS-R (European Service Mapping Schedule-Revised) branches (N = 9)

Supplementary Table 4. The classification of found service units (BSIC) on local versus centralized categories per 1000 adults (18+)

Catchment Area	Population (18 +)	Local without gatekeeping BSICs	Local without gatekeeping BSICs per 1000	Local with gatekeeping BSICs	Local with gatekeeping BSICs per 1000	Centralized BSICs	Centalized BSICs per 1000	Total number of BSICs	Total number of BSICs per 1000
Länsi-Uusimaa (1)	35 296	10.00	0.28	3.00	0.08	8.00	0.23	21.00	0.59
Lohja (2)	70 379	15.00	0.21	9.00	0.13	16.00	0.23	40.00	0.57
Hyvinkää (3)	139 734	37.00	0.26	11.00	0.08	41.00	0.29	89.00	0.64
Porvoo (4)	74 611	19.00	0.25	3.00	0.04	21.00	0.28	43.00	0.58
Helsinki (5)	501 928	49.00	0.10	57.00	0.11	90.00	0.18	196.00	0.39
Jorvi (6)	230 005	25.00	0.11	16.00	0.07	31.00	0.13	72.00	0.31
Peijas (7)	187 332	30.00	0.16	19.00	0.10	36.00	0.19	85.00	0.45
Carea (8)	143 210	28.00	0.20	37.00	0.26	50.00	0.35	115.00	0.80
Eksote (9)	107 612	28.00	0.26	14.00	0.13	26.00	0.24	68.00	0.63
Turku (10)	151 616	42.00	0.28	16.00	0.11	34.00	0.22	92.00	0.61
Salon seutu (11)	128 039	54.00	0.42	19.00	0.15	29.00	0.23	102.00	0.80
Vakka-Suomi (12)	81 391	21.00	0.26	9.00	0.11	18.00	0.22	48.00	0.59
Turunmaa (13)	18 199	9.00	0.49	0.00	0.00	4.00	0.22	13.00	0.71
Total	1 869 352	367.00	0.20	213.00	0.11	404.00	0.22	984.00	0.00
Mean	143 796	28.23	0.25	16.38	0.10	31.08	0.23	75.92	0.59

Supplementary Table 5. Sosioeconomic indicators from catchment areas

Catchment area	Population (+18 year)	Mental health index (not age adjusted)*	Education index**	Un-employment %
Länsi-Uusimaa (1)	35 296	92.3	3.0	7.2
Lohja (2)	70 379	94.0	3.2	7.1
Hyvinkää (3)	139 734	92.9	3.5	6.0
Porvoo (4)	74 611	89.0	3.3	7.1
Helsinki (5)	501 928	90.0	4.1	7.5
Jorvi (6)	230 005	77.2	4.6	5.5
Peijas (7)	187 332	89.6	3.4	8.0
Carea (8)	143 210	106.2	3.0	12.2
Eksote (9)	107 612	102.7	3.0	11.8
Turku (10)	151 616	109.7	3.7	12.9
Salo (11)	128 039	101.0	3.2	8.8
Vakka-Suomi (12)	81 391	102.9	3.2	7.1
Turunmaa (13)	18 199	101.3	3.2	6.0
Mean	143 796 (median 128 000)	96.1	3.4	8.2
SD	122 760	8.9	0.5	2.5

Data Statistics Finland [R] THL (National Institute for Health and Welfare), SOTKAnet Statistics and Indicator Bank.

Areas 1-9 data from 2011 and Areas 10-13 from 2012.

* Mental health index (MHI) is calculated for each area using three years data on the suicides and suicides attemps, of persons eligble for special reimbursement for antipsychotic medication, and of persons on disability pension (18-64 years) due to mental disorders (https://www.sotkanet.fi)

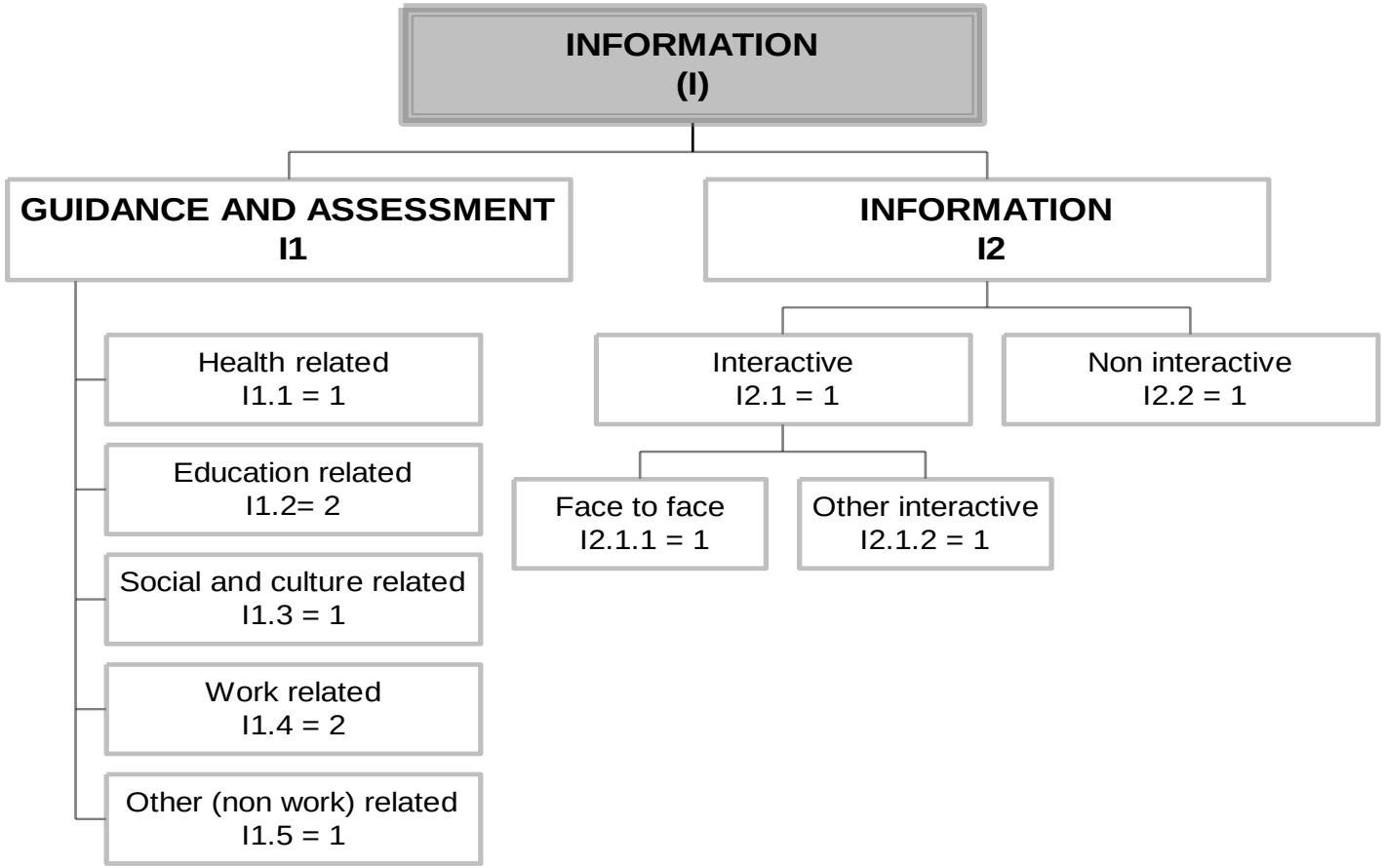
** Education years after primary school e.g. high school, professional school and university

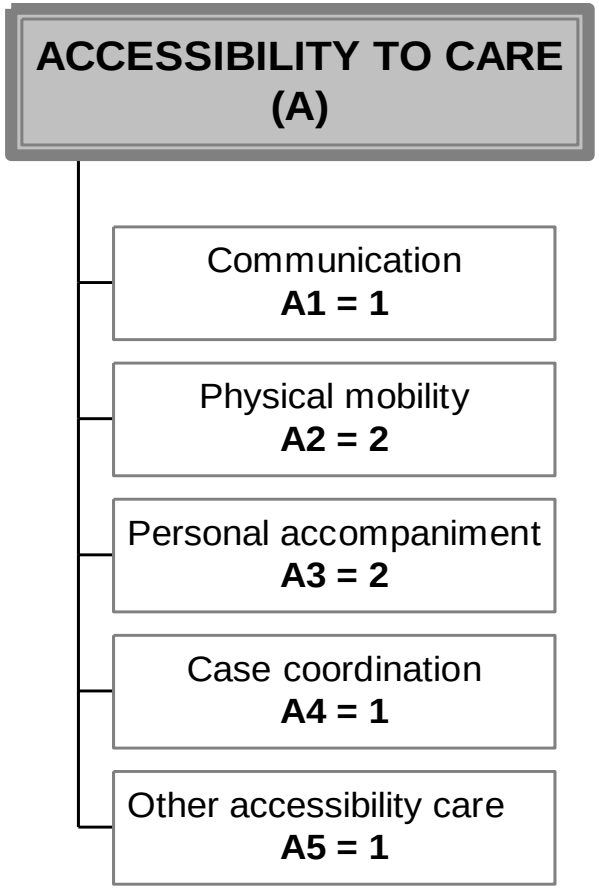
Supplementary Table 6. Linear regression modeling with total personnel per 1000 adults as the dependent variable

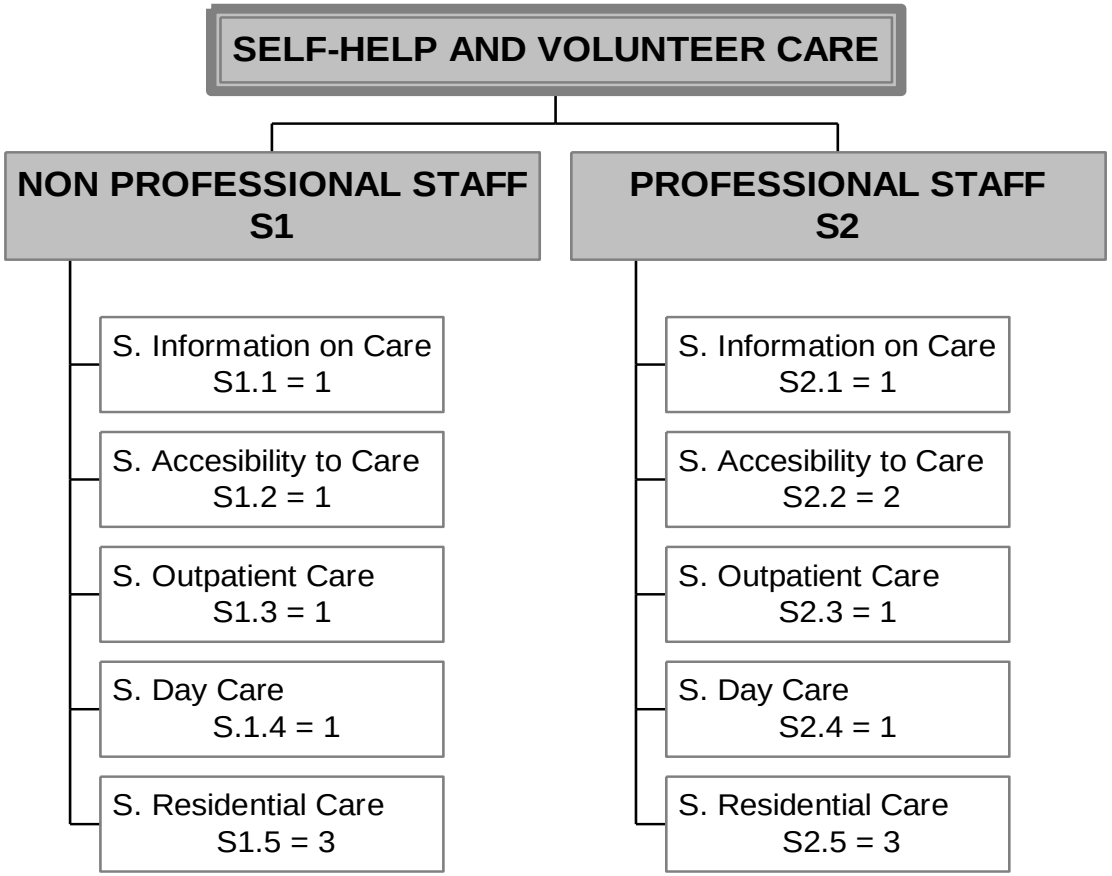
Independent variables	Model 1	Model 2	Model 3	Model 4
% of total personnel in centralized services	0.9 (2.9)	1.1 (2.4)	1.6 (3.1)	2.3 (2.4)
Catchment area size		1.3 E-06 (.000)		1.9 E-06 (.000)
Mental Health Index			0.18 (0.007)*	0.02 (0.007)*

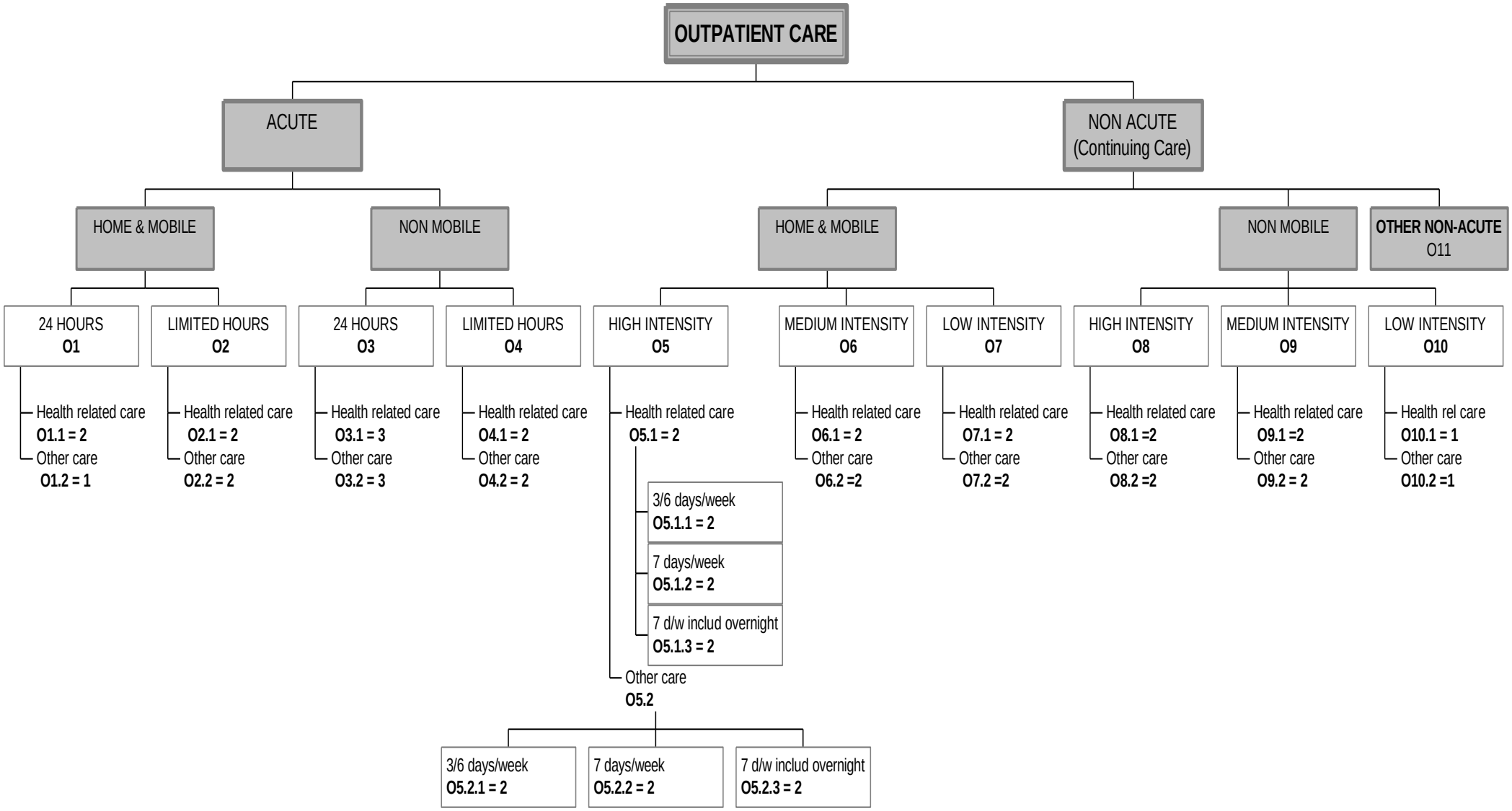
* $p < 0.05$, ** $p < 0.01$

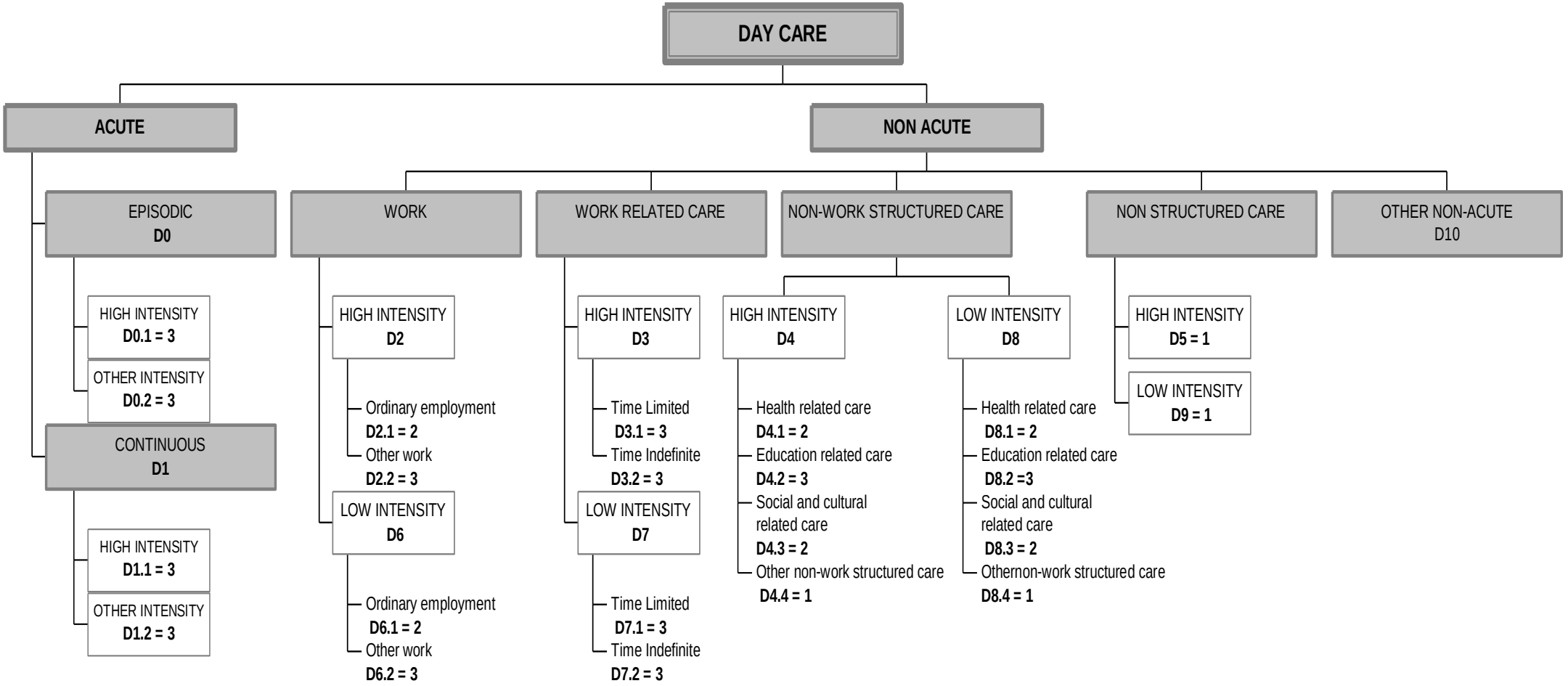
Supplementary figure 1. ESMS- R (DESDE) mapping tree (Salvador-Carulla et al. 2013, Salvador-Carulla et al. 2015) **including new coding variable.** Code 1 = local without gatekeeping MTC service, 2 = local with gatekeeping MTC service, 3 = centralized gatekeeping MTC service by referral or distance gatekeeping.

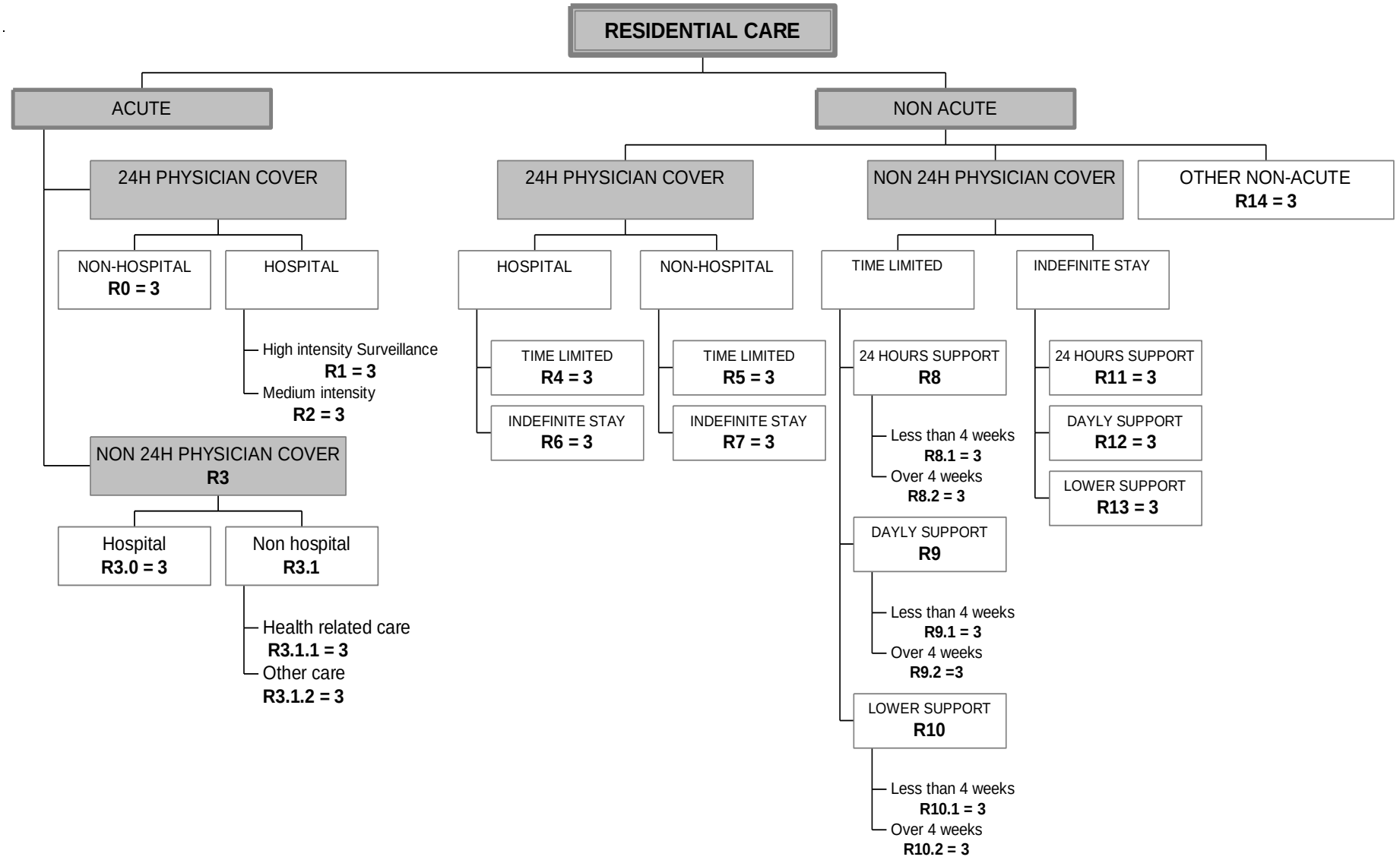



ACCESSIBILITY TO CARE (A)
Communication
A1 = 1
Physical mobility
A2 = 2
Personal accompaniment
A3 = 2
Case coordination
A4 = 1
Other accessibility care
A5 = 1


SELF-HELP AND VOLUNTEER CARE
NON PROFESSIONAL STAFF
S1
PROFESSIONAL STAFF
S2
S. Information on Care
S1.1 = 1
S. Accesibility to Care
S1.2 = 1
S. Outpatient Care
S1.3 = 1
S. Day Care
S.1.4 = 1
S. Residential Care
S1.5 = 3
S. Information on Care
S2.1 = 1
S. Accesibility to Care
S2.2 = 2
S. Outpatient Care
S2.3 = 1
S. Day Care
S2.4 = 1
S. Residential Care
S2.5 = 3


OUTPATIENT CARE
ACUTE
NON ACUTE (Continuing Care)
HOME & MOBILE
NON MOBILE
HOME & MOBILE
NON MOBILE
OTHER NON-ACUTE O11
24 HOURS O1
LIMITED HOURS O2
24 HOURS O3
LIMITED HOURS O4
HIGH INTENSITY O5
MEDIUM INTENSITY O6
LOW INTENSITY O7
HIGH INTENSITY O8
MEDIUM INTENSITY O9
LOW INTENSITY O10
Health related care O1.1 = 2
Other care O1.2 = 1
Health related care O2.1 = 2
Other care O2.2 = 2
Health related care O3.1 = 3
Other care O3.2 = 3
Health related care O4.1 = 2
Other care O4.2 = 2
Health related care O5.1 = 2
3/6 days/week O5.1.1 = 2
7 days/week O5.1.2 = 2
7 d/w includ overnight O5.1.3 = 2
Other care O5.2
3/6 days/week O5.2.1 = 2
7 days/week O5.2.2 = 2
7 d/w includ overnight O5.2.3 = 2
Health related care O6.1 = 2
Other care O6.2 =2
Health related care O7.1 = 2
Other care O7.2 =2
Health related care O8.1 =2
Other care O8.2 =2
Health related care O9.1 =2
Other care O9.2 = 2
Health rel care O10.1 = 1
Other care O10.2 =1


DAY CARE
ACUTE
NON ACUTE
EPISODIC
D0
HIGH INTENSITY
D0.1 = 3
OTHER INTENSITY
D0.2 = 3
CONTINUOUS
D1
HIGH INTENSITY
D1.1 = 3
OTHER INTENSITY
D1.2 = 3
WORK
HIGH INTENSITY
D2
Ordinary employment
D2.1 = 2
Other work
D2.2 = 3
LOW INTENSITY
D6
Ordinary employment
D6.1 = 2
Other work
D6.2 = 3
WORK RELATED CARE
HIGH INTENSITY
D3
Time Limited
D3.1 = 3
Time Indefinite
D3.2 = 3
LOW INTENSITY
D7
Time Limited
D7.1 = 3
Time Indefinite
D7.2 = 3
NON-WORK STRUCTURED CARE
HIGH INTENSITY
D4
Health related care
D4.1 = 2
Education related care
D4.2 = 3
Social and cultural related care
D4.3 = 2
Other non-work structured care
D4.4 = 1
LOW INTENSITY
D8
Health related care
D8.1 = 2
Education related care
D8.2 =3
Social and cultural related care
D8.3 = 2
Othernon-work structured care
D8.4 = 1
NON STRUCTURED CARE
HIGH INTENSITY
D5 = 1
LOW INTENSITY
D9 = 1
OTHER NON-ACUTE
D10


RESIDENTIAL CARE
ACUTE
NON ACUTE
24H PHYSICIAN COVER
NON-HOSPITAL
R0 = 3
HOSPITAL
High intensity Surveillance
R1 = 3
Medium intensity
R2 = 3
NON 24H PHYSICIAN COVER
R3
Hospital
R3.0 = 3
Non hospital
R3.1
Health related care
R3.1.1 = 3
Other care
R3.1.2 = 3
24H PHYSICIAN COVER
HOSPITAL
TIME LIMITED
R4 = 3
INDEFINITE STAY
R6 = 3
NON-HOSPITAL
TIME LIMITED
R5 = 3
INDEFINITE STAY
R7 = 3
NON 24H PHYSICIAN COVER
TIME LIMITED
24 HOURS SUPPORT
R8
Less than 4 weeks
R8.1 = 3
Over 4 weeks
R8.2 = 3
DAYLY SUPPORT
R9
Less than 4 weeks
R9.1 = 3
Over 4 weeks
R9.2 =3
LOWER SUPPORT
R10
Less than 4 weeks
R10.1 = 3
Over 4 weeks
R10.2 = 3
INDEFINITE STAY
24 HOURS SUPPORT
R11 = 3
DAYLY SUPPORT
R12 = 3
LOWER SUPPORT
R13 = 3
OTHER NON-ACUTE
R14 = 3