APPENDIX

APPENDIX 1: description of western's countries main OOHC systems

Small family doctor based models (registra	tion at a family doctor practice)						
Individual general family practice	The GP takes care of his own patients 24 hours a day, 7 days a week.						
Rota groups (rota)	GPs who are active in the same region take turns being on duty out-of-hours for the patient population of all (up to 15) members of the rota group						
Large family doctor based models (independent of registration at a family doctor practice)							
GP cooperatives	GPs work in a non-profit organization and take turns being on duty out-of-hours for the patient population of all participating GPs. These are large-scale organizations that are supported by nurses, management, chauffeurs, et cetera.						
Primary care centers (PCC)	Centers, which patients can visit without an appointment for minor injuries or illnesses. Such centers operate under supervision of a general practitioner or family physician.						
Deputizing services	Commercial agencies that employ GPs to take over duties of other GPs.						
Minor injury centers or walk-in-centers	Centers, which patients can visit without an appointment for minor injuries or illnesses in order to ask a trained nurse for health information, advice and treatment.						
Hospital based and national models							
Telephone triage and advice services (TTA)	Patients have contact with a medically trained professional via a fixed, non-regional, telephone number. This person advises or refers the patient to the most suitable professional.						
Emergency departments of hospitals (A&E)	Emergency departments of hospitals taking care of patients out-of-hours.						
Primary out-of-hours care integrated in the hospital	Primary out-of-hours care integrated in the hospital (for example, in emergency departments).						

(original image cropped. Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2717955/#B3)

APPENDIX 2: the survey and its explicative

The two following items were sent to all of the 26 cantons' OOHC accountants.

How to fill the grid:

- « GP » stands for general practitioner.
- "OOHC system" stands for out-of-hours care system: how is organized the primary care system out of GP's practices opening hours?
- Regarding the "innovating models" used in the county, here are a few examples of "innovating models" used in Switzerland (according to my literature review)
 - o Instauration of a *unique phone number* for the whole canton.
 - Instauration of a *telephonic triage* (telephonic advise and redirection of patients towards the adequate OOHC service), provided by private societies or hospitals (often at only at night), to alleviate the GP. Furthermore, in some countries, the responsibility of triaging is given to other professionals than doctors, for example nurses.
 - "Notfallpraxis" or "Maison de Garde" model: structures dedicated to primary care out-of-hours, (often) located in the hospitals, and managed alternately by GPs and hospital's doctors in collaboration. We call them "GP-cooperatives". In the specific case of these GP-cooperatives being managed alternatively by GPs (often at the evenings) and hospital's doctors (at night), is called the Baden's model (after Baden's hospital Notfallpraxis).
 - o *Collaboration with the hospital:* the hospital undertakes (most often only at night) telephonic triage and consultations for patients that are able to move, to alleviate the generalist (which stays available as a piquet for eventual home visits). It is called the Lyss' model.
 - o **House calls** are not done by the on-call GP: in some counties, house calls are not anymore the responsibility (at night or during the weekends, or at all time) of the GP, but for example are done by private societies (working in collaboration with GPs and hospitals)

Cantonal demographic information	Is there a telephonic triage and how is it organized?	Can the patient get an out-of- hours consultation, and where? (multiple answers allowed)	Can the patient receive an out-of-hours home visit, and by whom (multiple answers allowed)?	Are general practitioners legally obliged to take part to the on-call service?
■ Number of inhabitants:	□ yes □ no If yes: ■ phone numbers:	□ yes □ no If yes: □ GPs practice: Number of OOHC sectors concerned:	 □ yes □ no ■ GPs Number of OOHC sectors concerned: ■ Private society Number of OOHC sectors concerned: ■ Hospital's doctors Number of OOHC sectors concerned: 	□ yes □ no
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Duration of each "on-call" duty and number of times a GP is on-call per year?	Average number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)?	Comments
□ yes □ no?	Duration:hours?	?	□ yes □ no	

How much / on-call duty : CHF?	Number :/year?		
- <u>Precisions</u> :			
- Particularities of the OC	DHC-system:		
 "Innovating" models us 	ed in the county:		

APPENDIX 3: THE 26 canton's OOHC systems, a comparative table

Abbreviations:

- GP: general practioner

- GPP: general practioner's practice

- UCN : unique cantonal number

- TT : telephonic triage

- TN: telenurses

- GP-C: GP-cooperative (« Maison de Garde » ou « Notfallpraxis »)

- H-GP-C: hospital-integrated GP-C

- BM: Baden's model (GP-C in hospital, managed alternatively by GPs and hospital's doctors in collaboration).

- LM: Lyss Model

- HV: House visits

PS: Private societies

- ED: Emergency Departments (of the hospitals)

yo: years old

- y: year

w-e: week-endBh: bank holiday

- WIC: walk-in centers

	Numbers of GP's obligated to take part to the on- call service	Uniform organi- sation	Telephonic regulation	Out-of-hours consultations for patients who can move	Who do the house calls	Legal obligation and abstention fee	Remu- neration	Length of each "on- call duty and number of duties / year	Mean number of inter- vention / duty	Innovating models
AG: Aargau	608 GPs 11 sectors	No, but UCN	Yes, - UCN - surtaxed Triage: - 8-18h: MNZ (diplomed nurses) - 18-23h: Mobile Aertze	- GPPs (8-18h) - 1 H-GP-C (8h- 23h), managed at night by hospital doctors - ED	- 8-18h: GPs - 18h-8h: PS (Mobile Aertze)	Yes Fee: max 5000 CHF/y	No	L: 24h, app. 12 times / y (info not collected)	5	UCN, TT TN H-GP-C, BM HV by PS
Al: Inner- Rhoden	Unknown	Yes	Yes - UCN - not surtaxed - ARTZEFON (nurses)	GPPs ED h24	GPs	Yes (age limit unknown) Fee: max 8000 CHF/y	Unknown	Unknown	Unknown	UCN, TT TN
AR: Ausser- Rhoden	Unknown	No, but UCN	Yes - UCN - not surtaxed - ARTZEFON (nurses)	GPPs 1 H-GP-C ED	GPs	Yes (age limit and fee unknown)	Unknown	Unknown	Unknown	UCN, TT TN H-GP-C
BE: Bern	Unknown	No, but UCN	Yes - UCN - surtaxed - MEDPHONE	GPPs 4 H-GP-C Walk-in centers ED	GPs PS (Mobile Aertze)	Yes (age limit unknown) Fee: max	Unknown	Unknown	Unknown	UCN, TT TN H-GP-C, BM HV by PS

			(nurses)			15'000 CHF/y				
BL: Basel Land	100 GPs 3 sectors	No, but UCN	Yes - UCN - not surtaxed Triage: MNZ (diplomed nurses)	GPPs (until 6PM) 2 H-GP-C ED	GPs PS (Mobile Aertze)	Yes (until 55 yo) Fee: none	No	L: 14-24h N: up to 12/y for home visits and 12/y for NP duty	0-2	UCN, TT TN H-GP-C HV by PS
BS: Basel- Stadt	100 GPs 2 sectors	Yes	Yes - UCN - not surtaxed - triage: MNZ (diplomed nurses)	GPPs (until 11PM) 1 H-GP-C (week: 17-23h, w-e/bh: 9-23h) ED	GPs h24 PS (Mobile Aertze)	Yes (until 55 yo) Fee: 1000- 6000 CHF/y	Yes (100CHF /duty)	L: 12h N: 5-10/y	Info not collected	UCN, TT TN H-GP-C HV by PS
FR: Fribourg	GPs: unknown 6 sectors	Yes, but no UCN	Yes - no UCN (sector's numbers) - not surtaxed / surtaxed - CTMG (nurses) or doctors - PS (MEDHOME)	GPPs ED	GPs PS (MEDHO ME)	Yes (60 yo) Fee: max 12'000 CHF/y	Unknown	Unknown	Unknown	TT TN HV by PS Lyss model
GE: Genève	Unknown	No	Yes no UCN 3 PS: - SOS Médecin (paramedical professionals) - GeMed (GPs) - Médecins Urgences (GPs)	GPPs Walk-in centers ED	GPs 3 PS (SOS Médecins, GeMed, Médecins Urgences)	Yes (age limit and abstention fee unknown)	Unknown	Unknown	Unknown	TT TT done by paramedical professional HV by PS
GL:	GPs:	Yes	Yes	GPPs	GPs	Yes (age	Unknown	Unknown	Unknown	TT

Glarus	unknown 3 sectors		- No UCN - Artzefon in 1	ED		limit and abstention				TN
			sector (nurses)			fee unknown)				
GR: Grauen- bünden	GPs: unknown 15 sectors	Yes	Yes 144 phone center (nurses) + sectors' numbers	GPPs ED	GPs	Yes (age limit unknown) Fee: max 10'000/y	Unknown	Unknown	Unknown	UCN, TT TN
JU: Jura	Unknown	Yes	No But UCN, redirected to GP/hospital doctor	GPPs ED	GP	Yes (age limit and abstention fee unknown)	Unknown	Unknown	Unknown	UCN
LU: Luzern	330 GPs 10 sectors	No, but UCN	Yes - UCN - surtaxed - MEDPHONE (nurses)	GPs 3 H-GP-C	GPs PS (Mobile Aertze)	Yes (60 yo) Fee: 1500- 5000 CHF/y	No	L: 8-24h N: 20-25/y	Info not collected (around 2-5)	UCN, TT TN H-GP-C HV by PS
NE: Neu- châtel	150 GPs 2/3/4 sectors	Yes	Yes - UCN - not surtaxed CTMG (nurses)	- GPPs (until 6PM) - 3 H-GP-C - ED	- GPs (weekdays) - hospitals doctors: (week nights) - PS (w- e/bh) (Médecins du Jura)	Yes (60/65y) Fee: none	Yes, for the duty in the GP-C: 180CH/h	L: 10H/3h N: depends on sector	Info not collected	UCN, TT TN H-GP-C, BM HV done by PS
NW: Nidwald	23 GPs Sectors: 1	Yes	No - UPC - not surtaxed	GPPs ED	GPs	Yes (age limit unknown)	Yes (1000 CHF/y in 2018)	L: 24h N: varies	Info not collected	UCN Lyss model

			- directly redirected to on- call GP (day) or hospital doctor (night)			Fee: max 15'000 CHF/y				
OW: Obwald	21 GPs 1 sector	Yes	No (GP on-call) But UCN during the week. W-e: H- GP-C (8AM-8PM)	GPPs (until 8PM) 1 H-GP-C ED	GPs	Yes (no age limit) Fee: max 4500CHF/y	No	L: 24h N: 18/y	W-e: 25/w-e Week: 5- 10/d	UCN H-GP-C, BM
SG: Sankt- Gallen	GPs: unknown 16 sectors	No	No14 different numbers, redirected to the sector's on-call GP - Linth and Roschach's hospital are taking the calls at night	GPPs 2 H-GP-C, managed at night by hospital doctors ED	GPs	Yes (age limit and abstention fee unknown)	Unknown	Unknown	Unknown	H-GP-C, BM Lyss model
SH: Schaf- fausen	59 GPs 3 sectors	No, but UCN	No - UCN - not surtaxed - redirected to the GP- cooperative, and at night at the on- call GP	GPPs (until 6PM) 1 H-GP-C, managed at night by hospital's doctors ED	GPs	Yes (no age limit) Fee: full 3000CHF/y	Yes, for the GP-C duties (according to contract) and for the home visiting duty (100CHF	L: 4.5h/11h /13h/24h N: NP + home visits: 17/y Practice day duty: 12/25 per	Practice day duty: 6-8 NP: 11 week home visits service: 0- 2	UCN H-GP-C, BM Lyss model

							weekdays, 200CHF w- e/bh)	year		
SO: Solothurn	Unknown	No, but UCN	Yes, - UCN - not surtaxed - Notfallzentrale (doctors)	- GPPs - 2 H-GP-C, managed at night by hospital's doctors	- GPs (h24) - PS: Mobile Aertze	Yes (no age limit) Fee: 7500CHF/y	Yes: 156CHF /duty	L: 8h N: ≈12/y	Up to 40 patients / 8 hours	UCN H-GP-C, BM HV by PS
SZ: Schwyz	50 Gps 6 sectors	No	No - 1 number per sector - not surtaxed - In 3 sectors, managed by the GP-C	GPPs (until 10pm) 1 H-GP-C, managed at night by hospital doctors ED	GPs (h24)	Yes (age limit?) Fee: 8000CHF/y	No	L: 24h N: 10/y	1-2	H-GP-C, BM
TI: Ticino	Unknown	Yes	Yes - UCN - not surtaxed	GPs (no NP)	GPs PS (Lugan2oC are)	Yes (60 yo) Fee: 2500 CHFy (Bellinzona)	Unknown	L: 11h/24h N: unknown	unknown	UCN HV done by PS
TG: Thurgau	180 GPs 12 sectors during the day, 3 OOH	No	Yes (only for 2 sectors) 3 numbers active since 5pm. Regulation for Ost and West: GP-cooperative (nurses)., not surtaxed	- GPPs (until 5PM) - 2 H-GP-C, managed at night by hospital doctors	GPs (h24)	Yes (as long as working in a GP practice) Fee: max 5000CHF/y	Home visits: no GP-C duties: 200CHF/h	L: NP: 4h / 7- 8h Home visits: 12/17-7h, Sunday 7h-7h N: ≈ 12/y	1-3 home visits	TT TN H-GP-C, BM

			S-B: no, surtaxed number directed to the on-call GP							
UR: Uri	21 GPs 1 (12 weeks of the year, 2)	Yes	No But UCN, redirect to on-call GP (day) or to the hospital (night) Not surtaxed	GPPs (until 10 PM) ED	GPs (h24)	Yes (until 65 yo) Fee: none	No	L: 24h (8h- 8h, phone switched to the hospital 22-6) N: 18/y	2-20	UCN Lyss model
VD: Vaud	GPs: unknown 13 sectors	No, but UCN	Yes, - UCN - not surtaxed - CTMG (nurses)	- GPPs (until 9/10PM) - ED - Walk-in centers	GPs h24 2 PS (SOS MedSarl, Médecins du Léman)	Yes (60y) Fee: max 2500 CHF/y	No (might change)	L: 12-72h N: depends on the sector	?	UCN, TT TN H-GP-C HV done by PS
VS: Valais	unknown	No	Yes - UCN - surtaxed Phone center 144 (doctors)	GPPs 1 H-GP-C, managed by hospital doctors at night	GPs	Yes (age limit and abstentino fee unknown)	unknown	unknown	unknown	UCN, TT H-GP-C, BM
ZG: Zug	unknown	No	Yes - UCN - surtaxed - MEDPHONE (nurses)	GPPs 1 H-GP-C ED Walk-in centers	GPs	Yes (age limit unknown) Fee: 2000- 10'000 CHF / V	unknown	unknown	unknown	UCN, TT TN H-GP-C
ZH: Zurich	180 GPs 5 sectors	No	Yes - UCN - not surtaxed - ARTTZEFON (nurses)	GPs 2 H-GP-C ED Walk-in centers	GPs PS: SOS Aertze, Mobile Aertze,	Yes (until 60 yo) Fee: 5000 CHF/y (2018)	unknown	unknown	unknown	UCN, TT TN H-GP-C HV done by PS

	1 NP: SOS Aertze				

APPENDIX 4: AG - Aargau's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient receive an out-of-hours home visit and by whom (multiple answers allowed)?	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants :	Yes	Yes	Yes	Yes
676238				- age limit: none, as
 number of GPs obligated to take part to the on-call service : 608 Number of out-of-hours 	phone number :unique cantonalnumber 0900 401501	☐ GPs practice: yes, opening times varying Number of OOH sectors concerned: all	• GPs : yes, h24 Number of OOH sectors concerned: 11 Sectors and 4 Sections (all)	long as having a private practice - Abstention fee: maximum 5000 CHF/y
(OOH) service sectors:	surtaxed	☐ GP-cooperative: yes		Cin, y
11 Sectors and 4	Suitaxeu	Gr-cooperative: yes	. Drivete escieturos	
Sections Uniformity: the organisation of the	 organism responsible of the telephonic triage: 8-18h: phone center MNZ 	- <u>Baden's hospital</u> <u>Notfallpraxis:</u> managed by GPs 17-23h, at night by hospital's doctors	 Private society: yes Mobile Aertze Number of OOH sectors concerned: 5 	
sectors is not uniform (but there is a unique cantonal number).	(Medizinische Notrufcentrale) o 18-23h: Mobile	Number of OOH sectors concerned: 2	■ Hospital's doctors: no	
	Aertze	☐ Hospital: yes		
	Professional formation	- <u>Baden's hospital</u>		

	of the telephonists / regulators: Certified nurses NB: other numbers are in function, e.g. direct numbers of the "Notfallpraxen"	Notfallpraxis: managed 8-23h by GPs, and during the night by hospital's doctors Number of OOH sectors concerned: 2 - EDs (in all sectors).		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
No	Length: 24 hours Numbers: about 12 /year The lengths and numbers are different in each Sectors and Sections, and the info is not officially collected.	5	Yes - Notfallpraxis in Baden's hospital, managed by GPs and hospital's doctors in collaboration (Baden's model(

- Particularities of the OOH-system:
 - o **inter-cantonal collaboration**: the telephonic triage is done by the MNZ in Basel
- "Innovating" models used in the county:
 - o unique cantonal number
 - Telephonic triage is done by other professionals than GPs (telenurses)
 - Hospital-integrated GP-cooperative
 - o Baden's model

- https://www.aargauer-aerzte.ch/notfallversorgung/notfalldienst/
- https://www.aargauer-aerzte.ch/files/5114/1708/0753/NFD-Reglement 2014.pdf

https://www.aargauerzeitung.ch/aargau/kanton-aargau/sie-stehen-im-medizinischen-notfall-sofort-bereit-125570256. et https://www.gdk-cds.ch/fileadmin/docs/public/gdk/themen/med_grundversorgung/infoplattform_nfd/ag_medienmitteilung_2012-11-01.pdf_2018, numéro https://www.kantonsspitalbaden.ch/Fachbereiche/Notfallpraxis/

- https://mobile-aerzte.ch/
- https://www.qdk-cds.ch/index.php?id=badener0&L=1#c3801
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform_nfd/hauswirth_2007.pdf
- Gesundheitsgesetz Kanton Aargau: https://gesetzessammlungen.ag.ch/frontend/versions/2502
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/zofingen f.pdf: not up to date!
- <u>https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische_grundversorgung/infoplattform_nfd/hauswirth_2007.pdf</u>: not up-to-date!

APPENDIX 5: AI - Appenzell Inner-Rhoden's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of-hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants :	Yes	Yes	Yes	Yes
16064				
number of GPs obligated to take part to the on-call service : unknown	phone number : unique cantonal number 0900 9050 00	• GPs practice: yes, opening times unknown Number of OOH sectors concerned: supposedly all	■ GPs : yes Number of OOH sectors concerned: supposedly all	Age limit: unknownAbstention fee: max8000 CHF/year
Number of out-of-hours (OOH) service sectors:	• not surtaxed	■ GP-cooperative: no	Private society: no	
unknown	organism responsible of		Hospital's doctors: no	

Uniformity: the organisation of the OOHC is uniform in the canton.	the telephonic triage: ARTZEFON (since 2017, until the end of the pilot- project of the App-R-Ext Notfallpraxis) Professional formation of the telephonists / regulators: nurses	■ Hospital: EDs (in all sectors).		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Unknown	Unknown	No	

- "Innovating" models used in the county:

- o unique cantonal number
- o telephonic triage is done by other professionals than GPs (nurses)

- https://www.appaerzte.ch/default.asp?selm=Notfalldienst
- http://appenzell24.ch/detail/hausaerztliche-notfallpraxis-im-spital-herisau.html

APPENDIX 6: AR - Appenzell Ausser-Rhoden's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 55166 number of GPs obligated to take part to the on-call service: Unknown Number of out-of-hours (OOH) service sectors: Unknown Uniformity: the organisation of the OOHC in the canton is not uniform. 	Yes If yes: ■ phone number: unique cantonal number 0844 55 00 55 ■ not surtaxed ■ organism responsible of the telephonic triage: ARTZEFON ● Professional formation of the telephonists / regulators: nurses	Yes If yes: GPs practice: yes, opening times unknown Number of OOH sectors concerned: supposedly all ™Notfallpraxis": yes Herisau's hospital Notfallpraxis: managed by GPs 17-23h Monday to Sunday. Closed at night. Number of OOH sectors concerned: unknown Hospital: yes - Herisau's hospital Notfallpraxis: after 23h, patients are sent to the ED.	Yes ■ GPs: yes Number of OOH sectors concerned: supposedly all ■ Private society: no ■ Hospital's doctors: no	Yes - Age limit:: unknown - Abstention fee: unknown

		Number of OOH sectors concerned: unknown - EDs (in all sectors).		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Unknown	Unknown	No Herisau's hospital: Notfallpraxis is located in the hospital but not managed alternatively by GPs and hospital doctors (after 11pm, patients sent to the ED).	

"Innovating" models used in the county:

- o Unique cantonal number
- $\circ \quad \text{Telephonic triage} \\$
- o Telephonic triage is done by other professionals than GPs
- o hospital-integrated GP-cooperative

- https://www.appenzell24.ch/detail/hausaerztliche-notfallpraxis-im-spital-herisau.html
- https://www.ar.ch/verwaltung/departement-gesundheit-und-soziales/amt-fuer-gesundheit/abteilung-gesundheitsschutz-gesundheitsfoerderung-und-praevention/kantonsaerztlicher-dienst/aerztefon/
- https://www.appaerzte.ch/default.asp?selm=Notfalldienst
- http://appenzell24.ch/detail/hausaerztliche-notfallpraxis-im-spital-herisau.html

APPENDIX 7: BE – Bern's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 1034650 number of GPs obligated to take part to the on-call service: Unknown Number of out-of-hours (OOH) service sectors: Unknown Uniformity: the organisation of the OOHC in the canton is not uniform. 	 Yes ■ phone number: unique cantonal number 0900 57 67 47 ■ organism responsible of the telephonic triage: <i>MEDPHONE</i> ● Surtaxed ● Professional formation of the telephonists / regulators: Nurses NB: at night, the Aarberg's hospital manages the phone calls to the unique cantonal number (not verified). 	Yes □ GPs practice: yes, opening times unknown Number of OOH sectors concerned: supposedly all □ GP-cooperatives: yes - Thun's hospital Notfallpraxis: GPs on duty 17-22h during the week and 8-22h on the w-e/bh - Burgdorf's hospital Notfallpraxis: opening hours unknown Number of OOH sectors concerned: unknown - Langenthal's hospital Notfallpraxis: GPs on duty 18-21h during the week and 13-19h during the w-e Number of OOH sectors concerned: unknown	Yes ■ GPs: yes, h24 ("Hintergrunddienst", a 24h home visiting service assured by on-call GPs) Number of OOH sectors concerned: supposedly all ■ Private society: yes Mobile Aertze Number of OOH sectors concerned: supposedly all ■ Hospital's doctors: no	Yes - Age limit: unknown - Abstention fee: max. 15'000 CHF/ year

		- Aarberg's hospital Notfallpraxis: opening hours unknown. Number of OOH sectors concerned: unknown. Hospital: yes - Aarberg's hospital: at night, hospital doctors manage the ambulatory emergencies consultations for patients able to move. Number of OOH sectors concerned: unknown. - EDs (in all sectors). Others: walk-in centers (City-Notafall im PostParc 7-22h, Praxiszentrum am Banhof 7-21h, City Emergency AG 7AM- 10PM)		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

Unknown Unknown Yes	
- Notfallpraxen in B Langenthal, Aarber model in Aarberg's - Aarberg: at night, answers the phone unique cantonal nu model)	rg (Baden's hospital e calls to the

- Precisions:
- Particularities of the OOH-system:
 - o MEDPHONE is financed 25% by the surtaxed number and 75% by the affiliated doctors
- "Innovating" models used in the county:
 - Unique cantonal number
 - Telephonic triage
 - o Telephonic triage is done by other professionals than GPs (nurses)
 - Hospital-integrated GP-cooperative
 - o Baden's model
 - Lyss Model: collaboration with the hospital: in some sectors, phone calls to the unique cantonal number are managed by the hospital at night to move (the GP is available as a piquet for eventual home visits).
 - o In some sectors, home visits are done by private societies.
 - o **LEZANO project**: development of a decisional computer-based assistance for the nurses that do the telephonic triage at MEDPHONE (in collaboration with MEDI24).
 - o **FUTURO project**: development of the primary care system, to make it more adequate for 2 target groups: 1) chronic illnesses and 2) the "online" generation.

- https://www.gef.be.ch/gef/fr/index/direktion/organisation/kaza/publikationen.assetref/dam/documents/GEF/KAZA/fr/Publications/Raport_m%C3%A9 decine de premier recours canton de Berne 2011.pdf
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

- http://www.bern.ch/fr/theme/sante-age-et-affaires-sociales/numeros-d2019urgence
- http://www.bern.ch/themen/sicherheit/notfalle https://www.localmed.ch/standorte/bern-postparc/city-notfall/
- https://www.hirslanden.ch/de/klinik-permanence/centers/notfallstation-klinikpermanence.html, https://www.hirslanden.ch/de/klinik-permanence/centers/notfallstation-klinikpermanence.html, https://www.hirslanden.ch/de/klinik-permanence/centers/notfallstation-klinikpermanence.html, https://www.hirslanden.ch/de/salem-representation-klinikpermanence.html, <a href="https:/
- https://www.berner-aerzte.ch/fileadmin/user_upload/3_Fuer_Aerzte/Notfalldienst/Allgemeine_Bemerkungen_NFD_2_.pdf
- https://www.qdk-cds.ch/index.php?id=860&L=1
- <u>https://medi24.ch/fr/home, https://www.presseportal.ch/fr/pm/100012145/100594084</u> https://www.presseportal.ch/fr/pm/100012145/100589628
- : https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt massnahmen def 20081023-f.pdf
- https://www.fmh.ch/files/pdf13/versorgungsmodelle_f.pdf
- http://notfallthun.ch/index.php?option=com_content&view=article&id=13&Itemid=12
- http://www.sro.ch/desktopdefault.aspx/tabid-175//199 read-359/
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/mm burgdorf 20090408.pdf
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/mm seeland 200901.pdf
- https://www.gdk-cds.ch/index.php?id=861&L=1#c3797
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

APPENDIX 8: BL- Basel Land's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants : 287729	Yes	Yes	Yes	Yes
number of GPs obligated to take part to the on-call service :	phone number: the unique cantonal number 0612611515	If yes: GPs practice, opened until 6pm	GPs : yes Number of OOH sectors concerned: all	- Until 55 yo - Abstention fee:

≈100			Number of OOH sectors			none for GPs
Number of out-of-hours (OOH) service sectors :	•	no surtaxed	concerned: all	•	Private society: yes Mobile Aertze	
Uniformity: not all the sectors are organised in an uniform way, but there is a unique cantonal number.	•	organism responsible of the telephonic triage: MNZ (Medizinischen Notrufzentrale) Professional formation of the telephonists / regulators: Nurses with a special formation	□ "Notfallpraxis": yes Liestal's hospital Notfallpraxis: handled by GPS 18-22h30 during the week and 9-22h during the w-e Number of OOH sectors concerned: 1 Bruderholz's hospital Notfallpraxis: 18-22 during week, 9-19 on w-e Number of OOH sectors concerned:1 □ Hospital: at night, patients are directed to the ED (Notfallstation) (the Notfallpraxis is not managed by hospital doctors). Number of OOH sectors concerned: all	•	Number of OOH sectors concerned: all Hospital's doctors: no	
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	an	ngth of each "on-call" duty d number of times a GP is i-call per year	Mean number of interventions per an on-call period?	ho	ollaboration with the spital (Baden's model or ss's model or similar)	Comments
No	an	ngth: 14-24 hours (6pm – 8 n during the week; 8 AM – AM during the w-e)	0-2		o iestal and Bruderholz otfallpraxen, are located in	

	the hospital but handled only	
Number: up to 12 times	by GPs	
/year		
+duty at the Notfallpraxis		
(same frequency)		

- Particularities of the OOH-system:
 - o Intercantonal collaboration: the MNZ does the telephonic regulation for Basel-Land and Basel-Stadt (+ Aargau and Zug)
- "Innovating" models used in the county:
 - o Unique cantonal number
 - o Telephonic triage is done by a private society, which alleviates the GP
 - o Telephonic triage is done by other professionals than GPs
 - Hospital-integrated GP-cooperative
 - o Part of the house calls done by a private society, which alleviates the GP

Sources (websites consulted in July 2018):

- https://www.baselland.ch/politik-und-behorden/gemeinden/arztlicher-notfalldienst
- https://www.aerzte-bl.ch/notfall/
- http://bl.clex.ch/frontend/versions/2123
- https://bullmed.ch/fr/resource/jf/journal/file/view/article/saez/fr/bms.2012.16623/2012-05-1139.pdf/

APPENDIX 9: BS - Basel-Stadt's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants :	Yes	Yes	Yes	Yes
194541				
■ number of GPs	phone number :	If yes :	 GPs : yes, h24 (via MNZ) 	- Until 55 yo

obligated to take part to the on-call service: 100 Number of out-of-hours (OOH) service sectors: 2 The organisation of all sectors is uniform.	unique cantonal number 0612611515 Is the number surtaxed? yes □ no organism responsible of the telephonic triage: MNZ_(Medizinischen Notrufzentrale) Professional formation of the telephonists / regulators: Nurses with a special formation	□ GPs practice: yes, until 23h Number of OOH sectors concerned: 2 □ "Notfallpraxis": yes Basel-Stadt universitary hospital's Notfallpraxis: handled by GPs 17-23h during the week, 9-23h at w-e/bH. Closed at night. Number of OOH sectors concerned: 2 □ Hospital: yes ED after 11PM (Notfallpraxis closed at night). Number of OOH sectors concerned: 2 □ Others: Medix (walk-in centre 7-22h)	Number of OOH sectors concerned: all Private society: yes Mobile Aertze: at night, only a few patients (1-3) Number of OOH sectors concerned: all Hospital's doctors: no	- Abstention fee: 1000-6000 CHF/year
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
□ yes □ no How much / on-call duty:	Length: 12 hours Numbers : 5-10/year	Information not collected	No Basel-Stadt's Notfallpraxis is located in the hospital, but not managed alternatively by GPs and hospital doctors in	

100 CHF				collaboration.	
- Particularit	ties of the OC	DH-system:			
o Int	o Intercantonal collaboration: the MNZ does the telephonic regulation for Basel-Land and Basel-Stadt				
- "Innovating	g" models us	ed in the county:			
o Un	 Unique cantonal number 				
o Te	 Telephonic triage is done by a private society, which alleviates the GP 				
o Te	 Telephonic triage is done by other professionals than GPs 				
о Но	Hospital-integrated GP-cooperative				

Sources (websites consulted in July 2018):

- <u>http://www.mnzbasel.ch/de.html</u>
- http://www.medges.ch/401.html
- <u>https://bazonline.ch/basel/stadt/Am-Bahnhof-noch-rasch-zum-Arzt/story/17685881?track</u>

o Part of the house calls done by a private society, which alleviates the GP

- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

APPENDIX 10: FR - Fribourg's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants : 317525 number of GPs obligated to take part to the on-call service : unknown 	Yes, only for 1 sector (Broye) phone numbers: 0848 133 133 not surtaxed	Yes □ GPs practice: yes Number of OOH sectors concerned: supposedly all	Yes ■ GPs: yes, h24? Number of OOH sectors concerned: supposedly all	Yes ■ Age limit: 60 yo ■ Abstention fee: max 12'000CHF/y

Number of out-of-hours 6* The organisation of the OOHC is not uniform in the canton (telephonic triage for example): *Broye, Glâne, Gruyère, Lac, Sarine, Singine	 organism responsible of the telephonic triage: CTMG Professional formation of the telephonists / regulators: nurses 	☐ GP-cooperative: no☐ Hospital: EDs (in all sectors).	 Private society: MEDHOME Number of OOH sectors concerned: all Hospital's doctors: no 	
	Other sectors: Glâne, Gruyère, La Sarine: 026 304 21 36 (non-surtaxed) Lac: 0900 670 600 (surtaxed) Singine: 026 418 35 35 (non-surtaxed). At night, managed by Tafers' hospital.			
	NB: the private society MEDHOME also has a function of telephonic regulation (done by other health care professionals such as nurses, ambulance staff,)			
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

Unknown	Unknown	Unknown	Yes	
			Lyss model in Tafers' hospital	
			(1 sector)	

- Remarks:

- o intercantonal collaboration with the canton Lausanne for the telephonic triage (done by the CTMG) in 1 sector (Broye)
- o A free app (find the name) is currently in phase test, aiming to redirect patients towards the right service to use out-of-hours.
- o Progins Accompagnements: service in Bulle that offers help to mobilize patients without vehicules (e.g. elderly people in nursing home)
- "Innovating" models used in the county:
 - Lyss model (in 1 sector)
 - o Home visits can be done by a private society

Sources: (websites consulted in July 2018):

- http://www.med-home.ch/fr/a-propos/presse.html
- <u>https://www.smcf.ch/garde</u>
- https://www.gdk-cds.ch/index.php?id=863&L=1#c3805

APPENDIX 11: GE - Genève's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
■ Number of inhabitants :	Yes	Yes	Yes	Yes

		T		
498897	There is no unique cantonal			
number of GPs	number , but 3 private	☐ <i>GPs practice: yes,</i> opened		 Age limit: unknown
obligated to take part	societies that all have a	until what time?	■ GPs:yes	
to the on-call service :	function of telephonic	Number of OOH sectors	Number of OOH sectors	 Abstention fee:
Unknown	regulation.	concerned: supposedly all	concerned: supposedly all	unknown
Number of out-of-hours				
(OOH) service sectors:	If yes :	□ GP-cooperative: no	Private society: yes	
Unknown	phone numbers :	·	- SOS Médecins	
	∘ SOS Médecins :	☐ Hospital: EDs (in all	- GeMed	
The organisation of the	0227484950	sectors)	- Médecins Urgences	
OOHC is not uniform .	o GeMed : 022 754	,	Number of OOH sectors	
	54 54	□ Others: Walk-in centers ,	concerned: supposedly all	
	Medecins	opened until 10/11PM*	, , , , , , , , , , , , , , , , , , ,	
	Urgences : 0900	,	Hospital's doctors: no	
	21 21 21			
	Is the number surtaxed?			
	• Yes : GeMed			
	No: Médecins			
	Urgences and			
	SOS Médecins			
	303 Wicaccins			
	organism responsible of			
	the telephonic triage: cf			
	above			
	above			
	 Professional formation of 			
	the telephonists /			
	regulators:			
	o SOS Médecins:			
	paramedical or			
	non-medical			
	iioii-iiieuicai			

	professionals o GeMed et Médecins Urgences: GPs			
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Unknown	Unknown	No	

- Comments:

- * Clinique de Carouge, Hôpital de la Tour, Cité Générations regrouping 3 medical centers (Clinique et Permanence d'Onex, Groupe Médical d'Onex, Centre Médical de Cressy), Clinique des Grangettes, Lancy Urgences, Clinique de la Colline, Groupe médical de Versoix, Permanence Médico-chirurgicale Rond-Point Plainpalais
- "Innovating" models used in the county:
 - $\circ \quad \text{telephonic triage} \\$
 - o telephonic triage is done by other professionals than GPs (paramedical professionals)
 - o home visits done by private societies

- https://www.amge.ch/site/wp-content/uploads/Que-faire-en-cas-durgence.pdf
- http://www.sos-medecins.ch/wordpress/nos-services/la-direction-medicale/
- http://www.geneve-medecins.ch/dox/060427letemps.pdf
- http://www.geneve-medecins.ch/dox/2005_entreprendre.pdf

- https://gmo.ch/
- <u>http://www.cite-generations.ch/index.php</u>
- http://www.geneve-medecins.ch/.
 - o <u>http://www.geneve-medecins.ch/satisfaction/synthese_enqprat_v3.htm_http://www.geneve-medecins.ch/satisfaction/rapport_enqprat_v8.pdf</u>
 - o http://www.geneve-medecins.ch/dox/110512 journal FMH.pdf
 - o http://www.geneve-medecins.ch/dox/100301 Planete sante Mars 2010 img.pdf)

APPENDIX 12: GL - Glarus' OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants :	Yes, only for the southern	Yes	Yes	Yes
40391	sector (not verified).			
number of GPs		☐ GPs practice: yes, opening	■ GPs: yes	- Age limit: unknown
obligated to take part	If yes :	times unknown	Number of OOH sectors	
to the on-call service : unknown	phone numbers : one number for each	Number of OOH sectors concerned: supposedly all	concerned: supposedly all	 Abstention fee: unknown
Number of out-of-hours	sector, no unique		Private society: no	
(OOH) service sectors:	cantonal number	☐ GP-cooperative: no		
3*			Hospital's doctors: no	
	 not surtaxed 	☐ Hospital: EDs (in all		
The organisation of the		sectors)		
OOHC is uniform.	organism responsible of			
	the telephonic triage:			
*(South, North, Middle)	ARTZEFON (only			

	 southern sector)? Professional formation of the telephonists / regulators: Nurses with a formation 			
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Unknown	Unknown	No	

- Particularities of the OOH-system:
 - o intercantonal collaboration: Glarus in working with Artzefon Zürich for the telephonic triage (pilot project)
- "Innovating" models used in the county:
 - o telephonic triage
 - o telephonic triage is done by other professionals than GPs (telenurses)

- http://gesetze.gl.ch/frontend/versions/779
- http://www.gl.ch/xml_1/internet/de/application/d1256/d31/d379/d434/f438.cfm
- https://www.suedostschweiz.ch/zeitung/0844-55-66-55-f%C3%BChrt-im-notfall-glarus-s%C3%BCd-zum-arzt
- https://www.gdk-cds.ch/index.php?id=852&L=1

APPENDIX 13: GR – Grauenbünden's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 197916 number of GPs obligated to take part to the on-call service: unknown Number of out-of-hours	Professional formation of the telephonists / regulators: number of the unique cantonal number - Besides, there's a different number for each of the 15 sectors. ■ Not surtaxed ■ Organism responsible of the telephonic triage: 144 phone centre	Yes GPs practice: yes Number of OOH sectors concerned: supposedly all GP-cooperative: no Hospital: EDs (in all sectors)	 GPs: yes, h24? Number of OOH sectors concerned: all? Private society: no Hospital's doctors: no 	Yes - Age limit unknown - Abstention tax: maximum 10'000/year
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

Unknown	Unknown	Unknown	No	
			<u> </u>	

- "Innovating" models used in the county:

- o Unique cantonal number (beside the direct sectors's numbers)
- o telephonic triage is done by other professionals than GPs (telenurses)

Sources (all websites consulted in July 2018):

- http://www.chur.ch/de/verkehrundsicherheit/wichtigenummern/
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bericht nfd-f schlussbericht publiziert26.10.06 .pdf
- http://www.buendneraerzteverein.ch/
- https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=10&cad=rja&uact=8&ved=2ahUKEwjU2O_BsdHcAhVSVhoKHV1XB8UQFjAJeq
 QIAxAC&url=https%3A%2F%2Fwww.gr-lex.gr.ch%2Ffrontend%2Fversions%2F2793%2Fdownload_pdf_file&usg=AOvVaw1pZyHYsYtr86MRovxH0UC3
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt_nf_nr_def_20081023-f.pdf

APPENDIX 14: JU - Jura's OOHC system

Cantonal demographic	Telephonic regulation?	Can the patient get an out-of-	Can the patient get a OOH	Are the general practioners
information		hours consultation?	house calls, and by whom	legally obligated to take part
		(multiple answers allowed)	(multiple answers allowed)	to the on-call service?

 Number of inhabitants: 73440 number of GPs obligated to take part to the on-call service: unknown Number of out-of-hours (OOH) service sectors: unknown The organisation of the OOHC is uniform in the canton. 	No There's no proper telephonic regulation yet, but there is a unique cantonal phone number. If yes: phone numbers: unique cantonal number 0800 300 033 not surtaxed not surtaxed cantonal responsible of the telephonic triage: The phone center CASU-144 (externalized in canton Fribourg since 2017) receives call and redirect it towards; non-call GP at daytime ED's doctor in Porrentruy's hospital at night.	Yes □ GPs practice: yes, opened until 8 PM. Number of OOH sectors concerned: supposedly all □ GP-cooperative: no □ Hospital: EDs (in all sectors)	Yes ■ GPs: yes, h24? Number of OOH sectors concerned: supposedly all ■ Private society: no ■ Hospital's doctors: no	Yes - Age limit: unknown - Abstention fee: unknown
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

Unknown	Unknown	Unknown	No	

Comments

- o the phone center CASU-144 receives calls and sends pre-hospital means
- o the Jura's OOHC system will be reorganised: broadening of OOHC times (8AM-10PM), development of a telemedicine consultation for new GPs
- "Innovating" models used in the county:
 - o unique cantonal number

Sources (all websites consulted in July 2018):

- <u>https://www.lematin.ch/suisse/suisse-romande/Urgences-de-Saignelegier-fermees-de-nuit-en-ete/story/20081717</u>
- https://www.jura.ch/CHA/SIC/Urgences.html
- <u>Concept-cantonal-de-medecine-durgence-et-de-sauvetage%20(1).pdf</u>
- <u>www.h-ju.ch/Htdocs/Files/v/6046.pdf/.../StrategieV280214presse.pdf?download=1</u> -
- https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=2ahUKEwjM2-

z8o97cAhUJUIAKHTo_BpEQFjADegQIBxAC&url=https%3A%2F%2Fwww.jura.ch%2FHtdocs%2FFiles%2Fv%2F29239.pdf%2FDepartements%2FCHA%2F SIC%2FCommuniques%2F2018%2FConcept-cantonal-de-medecine-durgence-et-de-

sauvetage.pdf%3Fdownload%3D1&usg=AOvVaw0B3AxGtw_gtKuzo9MEUwSy

- <u>https://www.revmed.ch/RMS/2007/RMS-138/2835</u>
- <u>https://www.jura.ch/DES/SSA/Service-de-la-sante-publique-SSA.html</u>):
- <u>https://www.jura.ch/CHA/SIC/Centre-medias/Communiques-2005-2014/2010/Nouvelle-formation-dans-le-Jura-pour-les-medecins-generalistes-</u>
 1.html
- <u>https://www.jura.ch/CHA/SIC/Centre-medias/Communiques-2017/La-Centrale-d-appels-sanitaires-urgents-CASU-144-FR-JU-est-pleinement-operationnelle-depuis-hier-matin-lundi-26-juin-9h-en-avanc.html</u>.

APPENDIX 15: LU – Luzern's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 408905 number of GPs obligated to take part to the on-call service: 330 Number of out-of-hours (OOH) service sectors: 10 The organisation of the OOHC is not uniform in the canton. 	Professional formation of the telephonists / regulators: nurses	If yes: □ GPs practice: yes Number of OOH sectors concerned: all □ GP-cooperative: yes - notfallpraxis der Hausärzte in Sursee: 18-23h during the week, 8-23h on Saturday, 9-21h on Sunday handled by GPs. Closed at night. Number of OOH sectors concerned: 1 - Wolhusen Notfallpraxis: 18-23h during the week, 12-23h on Saturday 8-21h on Sunday handled by GPs. Closed at	■ GPs: yes, 24h Number of OOH sectors concerned: all ■ Private society: yes - Mobile Ärzte Number of OOH sectors concerned: 2 ■ Hospital's doctors:no	Yes - Age limit: 60 yo - Abstention fee: 1500-5000 / year

Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	night Number of OOH sectors concerned: 1 - 24notfallpraxis, Luzern Kantonsspital: 8-23 So-Fr 8-01h on Saturday handled by GPs. Number of OH sectors concerned: 1 Hospital: EDs (in all sectors) Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
No	Depending on the sector Length: 8-24 hours Number: 20-25 /year	Not statistically recorded, around 2-5	No The GP-cooperatives are located within hospitals, but only managed by GPs, not also by hospital doctors.	

- Remarks:

- The unique cantonal number is surtaxed, to contribute to the financement of the telephonic triaging system. For technical Reasons there is a different number for users of prepaid mobile services.
- "Innovating" models used in the county:
 - o Unique cantonal number
 - o Telephonic triage is done by a private society
 - O Telephonic triage is done by other professionals than GPs

- Hospital-integrated GP-cooperatives
- o Part of the house calls are done by a private society, which alleviates the GP.

- https://www.aerzte-zs.ch/open section/patienten infos/ https://www.medphone.ch/services
- <u>https://www.hirslanden.ch/de/klinik-st--anna/centers/24-h-notfall-inkl-herznotfall/kompetenzen.html</u> https://gruezi.lu.ch/notfaelle_beratungsstellen/notfallnummern
- https://www.luzernerzeitung.ch/zentralschweiz/luzern/aerzte-neue-notfallnummer-wird-kostenpflichtig-ld.14344
- http://srl.lu.ch/frontend/versions/3222?locale=de
- http://www.notfallsursee.ch/
- https://www.luks.ch/standorte/standort-wolhusen/hausaerztliche-notfallpraxis
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform_nfd/nfdreglement_lu_ab2009.pdf
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

APPENDIX 16: NE - Neuchâtel's out-of-hours system

Cantonal demographic information	Telephonic regulation ?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants :	Yes	Yes	Yes	Yes
177160				
	phone number :	☐ GPs practice: yes, 8-18h	□ GPs: yes, 8-18h	- age limit: 65 years old
■ number of GPs	unique cantonal	(4 sectors)	Number of OOH sectors	for duties in the GP-
obligated to take part	number : 0848 134 134	Number of OOH sectors	concerned: all	cooperatives. Weekdays
to the on-call service:		concerned: all		duties: regional

any 150	- natauntauad			annuaciation, in 2 simples
env. 150	 not surtaxed 	6D	8.5.4	appreciation: in 3 circles,
		☐ GP-cooperative : yes	□ Private society: yes	it's 65yo; in Neuchâtel,
Number of out-of-hours	- Organism responsible of		<u>Médecins du Jura, w-e and</u>	60 yo.
(OOH) sectors:	the telephonic triage :	- weekdays : 3 Maisons de	<u>bh h24 (</u> friday 18h –	_
- weekdays: 4 during	the CTMG (in Lausanne)	<i>Garde,</i> 19-22h (Neuchâtel	Sunday 22h)	- Abstention fee: none!
the day, 2 at night (2		and Chaud-de-Fond)	Number of OOH sectors	
"Maisons de la garde")	 Professional formation of 	- w-e/bh : 10-20h (with 2 free	concerned: all	
- w-e/bank holidays: 3	the telephonists /	hours at HNE-Pourtalès and		
(3 MG)	regulators: nurses	CDF and 14h-18h at VDT	Hospital's doctors: yes, at	
		(Couvet)	night (22h-8h) during the	
Uniformity: all the sectors			week and on Sunday	
are organized on the		Number of OOH sectors	night.	
same model.		concerned: all (2 circles)	Number of OOH sectors	
		Cercle1:	concerned: all	
		Neuchâtel/Boudry/VDT	(departs from 3 sites: NE,	
		Cercle2 : La Chaux-de-	CDT, Couvet via SMUR)	
		Fonds/Le Locle/VDR)		
		. 6.1.4.6, 26 260.6, 121.1,		
		□ Hospital: yes		
		Hospital's doctors between		
		22h-8h during the weeks and		
		22h-8h w-e/bh		
		Number of OOH		
		sectors concerned: all		
Remuneration for the	Durás do shagua garde st		Collaboration avec l'hârital	Commontaires
	Durée de chaque garde, et	Nombre moyen	Collaboration avec l'hôpital	Commentaires
OOHC activity (in addition	nombre de gardes / médecin	d'interventions par garde ?	(selon le modèle de Baden ou	
to the payment for the	/ année		similaire)	
services provided by the				
doctor)				
No for weekdays (8-18h	Duration:	Information not collected.	Yes	
in the GP's office)	 10h for weekdays in 		- collaboration	

	the office	- The calls are redirected to	
Yes for duties in the MG:	- 3h (19-22h) for week	the hospital at night	
180 CHF/h (except	evenings in the MG	- Hospital's doctors also do	
breaks)	- 10h (10-20h), with 2	the home visits at night (18-	
breaks)	hours break on the		
	w-e/bh	8h) during the week. - Baden's model	
	w-e/bn	- Baden's model	
	Number:		
	Weekdays at the office :		
	depending on the circle		
	1 every 9 days (VDT)		
	1 every 30 days (Boudry)		
	1 every 60 days		
	(Neuchâtel/VDR)		
	1 every 45 days (La Chaux-de-		
	Fonds/Locle		
	Evenings at the MGs :		
	Cercle 1 (99 doctors) for		
	Neuchâtel : 2,5 duties /y		
	Cercle 2(54 doctors) for		
	Chaux-de-Fonds: 4,6 duties/y		
	chaax ac ronas : 1,0 daties, y		
	For the duties during the w-		
	e/bh in the MGs:		
	Cercle 1 (99 doctors) for		
	Neuchâtel et VDR env. 2,3		
	duties / y		
	Cercle 2 (54 doctors) for		
	Chaux-de-Fonds env. 2,1 / y		
- Particularities and remains	arks:		

- o Intercantonal collaboration with Lausanne for the telephonic triage (CTMG)
- o the explication of the system's organization has an excellent visibility and clarity on the internet.
- Results of the satisfaction reprt of 2016 has shown positive results, notably a diminution of 50% of P1 emergencies (absolute priorities)
 admission, which alleviate the A&E.
- o A survey about the system's organization has been 2008 and could inspire other counties (Revmed).
- Innovating models used:
 - o unique cantonal number
 - o Telephonic triage, done by other health's professionals than doctors (nurses)
 - o Baden's Model
 - Home visits:
 - at night, home visits are done by hospital's doctors (no nighttime on-call duty for the GPs), meaning a "reduction of 50-55% of the time dedicated to on-call duty, which is attractive for young doctors!"*
 - w-e and bh: all the home visits are done by a private society, which alleviate the GPs.

- https://www.revmed.ch/RMS/2009/RMS-194/Hopitaux-neuchatelois-une-revolution-de-Bas-en-Haut mais rien sur garde
- https://www.ne.ch/autorites/DFS/SCSP/sph/Pages/accueil.aspx):
- https://www.ne.ch/medias/Pages/141107-144.aspx
- https://www.ne.ch/medias/Documents/15/04/15.011.pdf
- https://www.ne.ch/autorites/GC/objets/Documents/Rapports/2016/16025_com.pdf:
- http://www.snm.ch/images/documents/snm_news/81_snmnews.pdf
- https://www.revmed.ch/RMS/2008/RMS-179/Attentes-et-besoins-des-medecins-de-premier-recours-face-a-l-urgence-une-enquete-neuchateloise
- https://www.ne.ch/autorites/GC/objets/Documents/Rapports/2016/16025_com.pdf

APPENDIX 17: NW - Nidwalden's out-of-hours system

Cantonal demographic Telephonic regulation?	Can the patient get an out-of-	Can the patient get a OOH	Are the general practioners
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^{*}http://www.snm.ch/images/documents/snm_news/81_snmnews.pdf

information		hours consultation? (multiple answers allowed)	house calls, and by whom (multiple answers allowed)	legally obligated to take part to the on-call service?
 Number of inhabitants: 43065 number of GPs obligated to take part to the on-call service: 23 Number of out-of-hours (OOH) service sectors: 1 Uniformity: all the sectors are organized on the same model. 	 phone numbers: unique cantonal number 041 610 81 61 not surtaxed During the day, this number is directly deviated to the GP on duty. At night (22h-7h), the number is managed by the Stans' cantonal hospital. 	Yes GPs practice: yes Number of OOH sectors concerned: supposedly all GP-cooperative: no Hospital: ED (in all sectors)	Yes GPs: yes Number of OOH sectors concerned: supposedly all Private society: no Hospital's doctors: no	Yes - age limit: unknown - Abstention fee: max 15'000CHF/year
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Yes 1000 CHF/year - Precisions:	Duration: 24 hours (7am-7am) Number: depends on the number of GPs currently taking part and the work percentages of these GPs.	Info not collected.	Yes Lyss' model in Stans cantonal hospital: at night, phone calls and consultations for patients that are able to move are managed by hospital's doctors (the GP on duty is available for eventual home visits).	

- o **intercantonal collaboration**: redirection of the phone calls to the GP on duty is done at Sarnen's hospital (in Oberwald). It is a direct commutation, without intervention of an operator. The deviation is programmed every morning at 8 am for the next 24 hours.
- "Innovating" models used in the county:
 - o unique cantonal number
 - o Lyss' model

- http://www.nw.ch/dl.php/de/57b4657478142/Gesundheitsgesetz-NG 711.1.pdf
- https://www.luzernerzeitung.ch/zentralschweiz/nidwalden/notfalltelefon-klingelt-nachts-im-kantonsspital-ld.46162
- https://www.gdk-cds.ch/index.php?id=858
- https://www.qdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

APPENDIX 18: OW - Obwalden's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a home visit out-of-hours and who is doing it (multiple answers allowed)?	Are the general practioners legally obligated to take part to the on-call service?
• Number of inhabitants :	No	Yes	Yes	Yes
 37748 number of GPs obligated to take part to the on-call service: 21 Number of out-of-hours (OOH) service sectors: 	But there is a unique cantonal number. • phone numbers: • during the week: unique cantonal number 041 660 33 77 • during the w-e: number of cantonal	☐ GPs practice: yes, opened until 8pm Number of OOH sectors concerned: 1 ☐ "Notfallpraxis": yes Obwald's cantonal hospital's Notfallpraxis: w-e/bh 9-20h	 GPs: yes Number of OOH sectors concerned: 1 Private society: no Hospital's doctors: no 	 Age limit : none Abstention fee: max 4500 CHF/year

Uniformity: the	hospital's	Number of OOH sectors		
organization of the OOHC	Notfallpraxis 041 666	concerned: 1		
is uniform in the canton.	41 26 (8h-20h)			
	•	☐ Hospital: yes		
		- Obwald's cantonal hospital's		
	Is the number surtaxed?	Notfallpraxis: at night,		
	□ yes □x no	managed by hospital doctors		
		(for consultations for patients		
	 (organism responsible of 	that are able to move)		
	the telephonic triage:	Number of OOH sectors		
	GPs / Notfallpraxis)	concerned: 1		
		- ED (in all sectors)		
	(Professional formation			
	of the telephonists /			
	regulators: doctors)			
Remuneration for the	Length of each "on-call" duty	Mean number of	Collaboration with the	Comments
OOHC activity (in	and number of times a GP is	interventions per an on-call	hospital (Baden's model or	
addition to the payment	on-call per year	period?	Lyss's model or similar)	
for the services provided				
by the doctor)				
No	Duration :: 24 hours	W-e: 25	Yes	
	Number : 18/y	Weekdays: 5-10	Notfallpraxis in cantonal	
			hospital, managed alternately	
			by GPs and hospital doctors in	
			collaboration (Baden's model)	
		umbartatha CD an dutu is mada		

^{• &}lt;u>Precisions</u>: the commutation of the unique cantonal number to the GP on duty is made (without interposition of an operator) by the cantonal police's central.

 [&]quot;Innovating" models used in the county:

[•] unique cantonal number

- hospital-integrated GP-cooperative
- Baden's model

- https://www.ksow.ch/de/notfall/index.php, https://www.gdk-cds.ch/index.php?id=858
- https://www.gdk cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/mm obwalden 200910.pdf et
 https://www.gdk cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/mm obwalden 200910.pdf
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische_grundversorgung/bt_nf_nr__def__20081023-f.pdf

APPENDIX 19: SG - Sankt-Gallen's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
■ Number of	No	Yes	Yes	Yes
inhabitants:507659	phone numbers :			
number of GPs obligated to take part	14 different numbers, directly redirected to the	☐ GPs practice: yes , opening times unknown	GPs: yes Number of OOH sectors	- Age limit: unknown
to the on-call service : unknown	GP on duty	Number of OOH sectors concerned: supposedly all	concerned: supposedly all	- Abstention fee: unknown
Number of out-of-hours	• Is the number surtaxed?		Private society: no	
(OOH) service sectors:	yes, almost all	□ "Notfallpraxis": yes		
16	□ no		Hospital's doctors: no	
		- <u>Sankt-Gallen kantonsspital's</u>		

	1	1	•	
The organisation of the	- At night, Linth's hospital is	Notfallpraxis ZNA1: managed		
OOHC is not uniform in	functioning as call centre (not			
the canton.	verified).	week and 10-23h during the		
		week-end. At night, managed		
	- In the Roschach's sector,	by hospital doctors.		
	the sector's number is	Number of OOH sectors		
	managed by the night doctor	concerned: unknown		
	of the local hospital (not			
	verified).	- <u>Linth's hospital Notfallpraxis</u> :		
		Evenings and week-ends,		
		managed by GPs, at night		
		by hospital's doctors.		
		Number of OOH sectors		
		concerned: unknown		
		□ Hospital: yes		
		In Sankt-Gallen's		
		kantonsspital's Notfallpraxis		
		and Linth's hospital		
		Notfallpraxis, consultations		
		for patients able to move are		
		managed by hospital doctors		
		at night.		
		Number of OOH sectors		
		concerned: unknown		
		At night, Roschach's hospital		
		manages phone calls,		
		consultations for patients		
		that are able to move.		
		Number of OOH sectors		
		concerned: unknown		
	E.			

		EDs (in all sectors)		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Unknown	Unknown	Yes	
			- Baden's model:	
			Notfallpraxen in S-G	
			Kantonsspital and in Linth's	
			spital	
			- Lyss's model in these two	
			Notfallpraxen: hospital's	
			doctors manage phone calls	
			and consultations at the	
			Notfallpraxen (the GP on duty	
			stays available for eventual	
			home visits) Roschach's sector: phone	
			calls are managed by the night	
			doctor at the local hospital.	

- "Innovating" models used in the county:

- o hospital-integrated GP-cooperatives
- o Baden's model in Linth and SG Kantonsspital
- Lyss's model: at night, hospital's doctors managed phone calls to the sector's number and consultations for patients that are able to move. The
 GP on duty is available for eventual home visits (Linth, SG Kantonsspital, Roschach)

Sources (all websites consulted in July 2018):

- <u>https://www.hirslanden.ch/de/klinik-stephanshorn/centers/notfallaufnahme-klinikstephanshorn.html</u>

- https://www.aerzte-sg.ch/default.asp?selm=Notfalldienstnummern
- https://saez.ch/de/resource/jf/journal/file/view/article/saez/de/saez.2010.15684/2010-50-814.pdf/ et https://www.tagblatt.ch/ostschweiz/stgallen-gossau-rorschach/neuer-aerztlicher-notfalldienst-in-stgallen-ld.180437, https://www.dde/resource/jf/journal/file/view/article/saez/de/saez.2010.15684/2010-50-814.pdf/">https://www.gdk-cds.ch/index.php?id=854&L=1#c3769
- https://www.gdk-cds.ch/index.php?id=850&L=1
- https://primary-hospital-care.ch/pdf d/2009/2009-12/2009-12-187.PDF: https://www.qdk-cds.ch/index.php?id=859&L=1#c3789
- <u>https://saez.ch/pdf_f/2010/2010-50/2010-50-814.PDF</u>
- https://www.tagblatt.ch/ostschweiz/stgallen-gossau-rorschach/hausaerzte-mit-notfallpraxis-im-spital-linth-ld.736754 et https://www.medinside.ch/de/post/spital-linth-mit-neuer-notfallpraxis https://toggi.zehnder.ch/eweb/media/toggi/2013/09/11/pdf/11 09 2013 toggi 18 309fee4e54.pdf
- <u>https://www.tagblatt.ch/ostschweiz/stgallen-gossau-rorschach/neuer-aerztlicher-notfalldienst-in-stgallen-ld.180437</u>
- https://saez.ch/de/resource/jf/journal/file/view/article/saez/de/saez.2010.15684/2010-50-814.pdf/
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

APPENDIX 20: SH - Schaffausen's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 81859 number of GPs obligated to take part to the on-call service: 59 Number of out-of-hours (OOH) service sectors: 	No The number is redirected to the Notfallpraxis during its opening hours. Out of these hours, it's redirected to a phone centre in Zürich, who directs the call to the on-call	Yes GPs practice: yes, 7-18h ("regionaler Tagesdienst") Number of OOH sectors concerned: all GP-cooperatives: yes	Yes GPs: yes, h24 ("Hintergrundbesuchdiens t") Number of OOH sectors concerned: all	Yes - Age limit: none - Abstention fee: max. 3000 CHF/y

- 1 sector for the "Notfallpraxis" duties - 3 sectors for the regional day duty ("regionaler Tagesdienst") The sectors are not all organised on the same model (but there is a unique cantonal number)	■ phone number(s): unique phone number 052 634 34 00 ■ Not surtaxed ■ (organism responsible of the telephonic triage: Notfallpraxis (GPs / hospital doctor) / night doctor in the hospital / on-call GP ■ Professional formation of the telephonists / regulators: Doctor, phone center's employees)	Schaffhausen's cantonal hospital's Notfallpraxis: weekdays: 18.00 – 22.00 h w-e/bh: 9.00 – 22.00 h Number of OOH sectors concerned: 1 Hospital: yes - Schaffhausen's cantonal hospital's Notfallpraxis: 22h- 7h managed by hospital doctors (GP on duty is available for eventual home visits) Number of OOH sectors concerned: 1 - EDs (in all sectors)	 Private society: no Hospital's doctors: no 	
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Yes (not for all duties) - no for the weekday duty at the office - yes for the duties at the GP-C, according to the employment contract.	Duration: - Duty days at the office: 11h - Notfallpraxis: - weekdays: 4.5 hours - w-e/bh: 2 shifts every 7 hours (3 between Christmas	- "Regionaler Tagesdienst": 6-8 - GP-C: weekdays: 11 - home visits service: 0-2	Yes - Baden's model in the cantonal hospital, managed alternately by GPs and hospital doctors in collaboration.	

- home visits service: yes,	and New Year Eve)	- Lyss' model in the cantonal	
100 CHF/day weekdays,	- Home visits service:	hospital: at night, hospital's	
200 CHF/day during the	weekdays 13 hours, w-e/bh	doctors manage phone calls	
w-e/bh.	24h	and consultations for patients	
		able to move (the GP on duty	
	Number :	is available for eventual home	
	- Notfallpraxis + home visit	visits)	
	service or only Notfallpraxis:		
	17 duties / y at a 100%		
	working GP office.		
	- Weekdays at the office		
	(Tagesdienst):		
	Schaffhausen: 12/y		
	Klettgau: 25/y		
	Stein am Rhein: 25/y		
- "Innovating" models us	sed in the county:		
 Unique canton 	al number		

Lyss' model

- https://www.gdk-cds.ch/index.php?id=858

o Notfallpraxis' model (Baden's model)

- http://rechtsbuch.sh.ch/fileadmin/Redaktoren/Dokumente/gesetzestexte/Band_8/810.100.pdf
- https://www.spitaeler-sh.ch/notfall/
- http://www.aerzte-schaffhausen.ch/xml 1/internet/de/application/d64/d50/f16.cfm
- https://www.gdk-

cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/mm schaffhausen 20081128.pdf

APPENDIX 21: SO – Solothurn's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of-hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
■ Number of inhabitants: 272954 ■ number of GPs obligated to take part to the on-call service: unknown ■ Number of out-of-hours (OOH) service sectors: unknown Uniformity: the organisation of the OOHC differs according to the sectors.	Professional formation of the telephonists / regulators: Doctors	If yes: GPs practice: yes, Number of OOH sectors concerned: all GP-cooperative: yes, similar idea, ambulatory emergencies' area (ambulante Notfallstationen): - Olten's spital: NOFOL, managed 17-23h by GPs. At night, by hospital doctors Number of OOH sectors concerned: unknown - Bürgerspital: managed 17-23h by GPs.	Yes GPs: yes, h24 Number of OOH sectors concerned: all Private society: yes Mobile Aertze Number of OOH sectors concerned: all Hospital's doctors: no	Yes - age limit: none - Abstention tax: 7500 CHF/y for a 100% work rate

Remuneration for the OOHC activity (in addition to the	Length of each "on-call" duty and number of times a GP is on-call per	□ Hospital: yes - the ambulante Notfallstationen of Olten's hospital and the Bürgerspital are managed by hospital doctors 8-17h and 23h-8h. 17-23h GPs, 23-8h hospital doctors - EDs (in all sectors) Mean number of interventions per an on- call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
payment for the services provided by the doctor)	year			
yes 156 CHF/ duty	Duration: 8 hours Number : ca 12x /year	40 patients / 8h	Yes Baden's model in the ambulatory emergencies' area - ambulante Notfallstation in Olten's hospital and Bürgerspital	

- "Innovating" models used in the canton:

- o unique cantonal number
- o integrated GP-cooperative (ambulatory emergencies' area)
- o Baden's model
- House calls can be done by a private society (Mobile Aertze)

Sources (all websites consulted in July 2018):

- <u>https://bgs.so.ch/frontend/versions/4094</u>
- https://www.so.ch/staatskanzlei/medien/medienarchiv-2000-2014/2002/dezember/0848-112-112-neue-notfallarzt-nummer-im-kanton-solothurn/

- https://www.so-h.ch/kantonsspital-olten/institute/notfallstation/ambulante-notfallstation-nofol.html
- <u>https://www.gdk-</u> <u>cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/infoplattform nfd/mm solothurn 20080922.pdf</u>
- http://www.drfluri.ch/styled-22/styled-8/index.html
- <u>https://www.solothurnerzeitung.ch/solothurn/kanton-solothurn/berner-aerzte-beschweren-sich-wie-laeuft-notfalldienst-im-kanton-solothurn-130766848</u>

APPENDIX 22: SZ - Schwyz's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of-hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 158313 number of GPs obligated to take part to the on-call service: 50 Number of out-of-hours (OOH) service sectors: 6 (Einsiedeln, Goldau, Höfe, Küssnacht, March, Schwyz) Uniformity: the organisation of the OOHC is not uniform in the canton. There are 6 OOH 	 phone numbers: a different number for each sector not surtaxed Sector's numbers of Schwyz and Arth-Goldau are managed by Schwyz's Hospital Notfallpraxis During the night, sector's numbers are answered by the hospitals in 3 sectors (Schwyz, 	Yes □ GPs practice: yes, until 10pm Number of OOH sectors concerned: all □ "Notfallpraxis": yes, Schwyz's hospital Notfallpraxis, managed by GPs during the week 18- 22h, week-ends 8-22h. During the night, handled by doctor's hospital. Number of OOH sectors concerned: 2	 Yes ■ GPs: yes, h24 <i>Number of OOH sectors concerned: all</i> ■ Private society: no ■ Hospital's doctors: no 	Yes - age limit: unknown - Abstention tax: 8000 CHF/year

sectors, with a different number for each one, and different amenities depending on the sector.	Einsiedlen, Lachen) (not verified)	□ Hospital: yes - Schwyz's hospital Notfallpraxis is managed by hospital doctors at night. Number of OOH sectors concerned: 2 - EDs (in all sectors)		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
No	Duration: 24h Number : 10 /year?	1-2	Yes - During the night, hospitals answer the phone calls of 3 sectors (Lyss Model) - Baden's model in the GP-cooperative	

^{- &}quot;Innovating" models used in the county:

- O Hospital-integrated GP-cooperative
- o Baden's model
- \circ Lyss model: hospitals answer the calls to the sector's phone number instead of the GPs in 3 sectors

- https://www.aerzte-zs.ch/kantonsgesellschaften/schwyz/dienstleistungen/
- https://www.sz.ch/privatpersonen/gesundheit-soziales/not-katastrophenfall/notfalldienste-arzt-zahnarzt.html/72-512-444-1705-1701
- https://www.spital-schwyz.ch/leistungsangebot/interdisziplinaere-notfallstation/notfall-was-tun.html
- https://www.suedostschweiz.ch/wirtschaft/hausaerztliche-notfallpraxis-im-spital-schwyz
- <u>https://www.medinside.ch/de/post/schwyz-notfalldienst-oder-es-wird-teuer</u>

APPENDIX 23:TI - Ticino's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 353133 number of GPs obligated to take part to the on-call service: unknown 	Phone numbers: unique cantonal number 091 800 18 28	Yes □ GPs practice: yes Number of OOH sectors concerned: supposedly all	Yes ■ GPs : yes Number of OOH sectors concerned: supposedly all	Yes - Age limit: 60 yo in Bellinzona Abstention fee: 2500 CHF/y in Bellinzona
 Number of out-of-hours (OOH) service sectors : unknown Uniformity: the organisation of the OOHC 	 not surtaxed organism responsible of the telephonic triage: unknown 	□ GP-cooperatives: no□ Hospital: EDs (in all sectors)	 Private society: yes, in some sectors, eg LuganoCare. Number of OOH sectors concerned: 1 	CITI/Y III BEIIIII2011a
is uniform in the canton.	 Professional formation of the telephonists / regulators: unknown 		■ Hospital's doctors: no	

Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Duration: 11h (8PM-7AM weekday) or 24h (7AM-7AM w-e/bh), in Bellinzona. Number: unknown	Unknown	No	
- "Innovating" models us	sed in the county:			

- o unique cantonal number
- o house calls can be done by private societies

- http://luganocare.com/medico-ed-infermiera-a-domicilio/
- http://www.omct.ch/omct/regolamenti/Regolamentopicchetti/content/03/content/0/document/Regolamento%20picchetti%20B&%23039;zona.pdf.pdf
- http://www.omct.ch/omct/home
- https://www.inrete.ch/ti/Urgenze/urgenze.htm
- https://www3.ti.ch/CAN/RLeggi/public/raccolta-leggi/legge/numero/6.1.1.1
- http://hospiceticino.ch/servizi/picchetto-24-ore/

APPENDIX 24: TG - Thurgau's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out- of-hours consultation? (multiple answers allowed)	Who is doing the house calls (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 275935 number of GPs obligated to take part to the on-call service: 180 Number of out-of-hours (OOH) service sectors: During the day: 12 west: 7 east 3 others: 2 (Bischofszell – Kradolf – Sulgen – Erlen and Rickenbach/Wilen/Busswil /Wil SG/Schwarzenbach SG) Out of opening practice times: 3 (Ost, West; Sulgen – Bischofszell) Uniformity: the organisation of the OOHC is not uniform in the canton. Sectors Ost and West are organised the same, but Sulgen-Bischofszell has a different system. 	Yes, only for 2 sectors (Ost and West, Sulgen-Bischofszell: direct to the on-call GP) 3 phone numbers, active from 5pm on. organism responsible of the telephonic triage: Frauenfeld's hospital Notfallpraxis until 22h (nurses), then Notfallstation not surtaxed for Thurgau Ost and West, surtaxed for S-B Professional formation of the telephonists / regulators: TG Ost and West: nurses Sulgen-Bischofszell: direct to the on-call GP	Yes GPs practice: yes, opened 7-17h Number of OOH sectors concerned: all "Notfallpraxis": yes - Frauenfeld's hospital Notfallpraxis: managed by GP until 22h. Managed by hospital' doctors at night Number of OOH sectors concerned: 7 - Münsterligen's hospital Notfallpraxis: until 22h Number of OOH sectors concerned: 3 (Arbon, Romanshorn, Amrswil- Obersee) Hospital: yes - Münsterligen's and Frauenfeld Notfallpraxis: managed 22-8h by a hospital doctor Number of OOH sectors concerned: 3	Yes ■ GPs: yes, h24 7-17h 12 sectors 17h-7h 3 sectors Notfallpraxis answer the calls until 22h, then Notfallstation, and they ask GPs to do the home visits Number of OOH sectors concerned: all ■ Private society: no ■ Hospital's doctors: no	Yes - Limit age: none, as long as a GP is working in a practice - Abstention tax: max 5000 CHF/year

		- EDs (in all sectors)		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
- Home visits: no - duties at the Notfallpraxis: 200CHF/h	Duration: - Notfallpraxis 4h, except Thursday and w-e: 7-8h Home visits: 17-7h Mon- Fri Thursday and Saturday 12-7h, Sunday 7h-7h Number: app 12/year (according to a system of points, for example a weekday is 1 point, a w-e day is 2.5 point).	 Sunday or bh: 3 home visits Saturday: 2-3 home visits Weekdays: 1 home visit/night 	□ yes □ no - Baden's model in Münsterligen's GP- cooperative	

^{- &}lt;u>Remarks:</u> from 2007 to 2008, a pilot project was put into place: MEDI24 (a private telemedicine society) was managing the phone calls (in Frauenfeld and Arbon-Romanshorn's sectors) at night. The project was suspended in 2008 due to lack of funding.

- "Innovating" models used in the county:
 - Unique phone number for part of the county (the west area)
 - o hospital-integrated GP-cooperative
 - o Baden's model

- http://www.aerzte-tg.ch/de/notfalldienst/regionale-notfallkreise.html/90
- <u>https://www.tagblatt.ch/ostschweiz/arbon-kreuzlingen-weinfelden/im-notfall-nach-muensterlingen-ld.749122</u>
- http://www.rechtsbuch.tg.ch/frontend/versions/1188

- https://www.gdk-cds.ch/index.php?id=850&L=1
- $\underline{https://www.tagblatt.ch/ostschweiz/arbon-kreuzlingen-weinfelden/der-notfalldienst-gehoert-dazu-ld.843435}\\$

APPENDIX 25: UR – Uri's out-of-hours system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
Number of inhabitants :36375number of GPs	No There's no telephonic triage	Yes If yes:	Yes	Yes
obligated to take part to the on-call service : 21 Number of out-of-hours (OOH) service sectors :	system in Uri, but one unique cantonal number that is directly redirected (without contact) by a phone centre (in Uri's cantonal spital) to	☐ GPs practice: yes, until 10PM Number of OOH sectors concerned: all	 GPs : yes Number of OOH sectors concerned: all Private society: no 	- Age limit: 65 yo - Abstention fee: none
1; 12 weeks of the year 2 (Andermatt)	the GP on duty . Every morning, the number of the GP on-call is programmed for	□ GP-cooperative: no□ Hospital: EDs (in all	■ Hospital's doctors: no	
Uniformity: the organisation of the OOHC	the next 24 hours.	sectors)		
is uniform in the canton.	 phone numbers : unique cantonal number: 0418700303 not surtaxed 			
Remuneration for the OOHC activity (in addition to the payment for the	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

services provided by the doctor)				
No	Duration: 8-8 Uhr, the phone is switched to the hospital from 22-6. Numbers: +/- 18 /year?	Varying, between 2-20	Yes Lyss'model: between 22- 8: the hospital is answering the phone, if a house visite is necessary the GP is called and goes to see the patient	

Precisions :

- According to the VZAG's website, the unique cantonal number only covers the "unteres und mittlers Reusstal", not the "oberes Reusstal", but that's not correct: the cantonal number covers the whole canton if the gp in andermatt is around patients of the oberes Reusstal go there. If the gp of Andermatt is not around the patients need to come to the unteres Reusstal. If the gp of Andermatt is not around: there are no house visits in oberes Reusstal, the patient is brought to the hospital by ambulance.
- "Innovating" models used in the county:
 - o unique cantonal number
 - Lyss model (no consultations)

Sources (all websites consulted in July 2018):

- <u>https://www.urnerwochenblatt.ch/artikel/urner-oberland-neuregelung-des-hausaerztlichen-notfalldienstes</u>
- https://www.aerzte-zs.ch/
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt nf nr def 20081023-f.pdf

APPENDIX 26: VD - Vaud's out-of-hours system

(reviewed by a person included in the team responsible for the OOHC)

Cantonal	Telephonic regulation?	Garde par des consultations	Can the patient get a OOH house calls,	Obligation for the GPs to take part	
demographic		hors des heures ouvrables ?	and by whom (multiple answers	to the OOHC	

information		(plusieurs réponses possibles)	allowed)	
■ Number of inhabitants: 795368 ■ number of GPs obligated to take part to the on-call service: unknown ■ Number of out-of-hours (OOH) service sectors: 13 The organisation of the OOHC is not uniform in the canton.	 ■ phone number: unique cantonal number 0848 133 133 ■ not surtaxed ■ organism responsible of the telephonic triage: <u>CTMG (Centrale</u> Téléphonique des Médecins) ● Professional formation of the telephonists / regulators: Nurses 	GPs practice: yes, until 21/22h (depends on the sector and the weekday. No uniformization). Number of OOH sectors concerned: all GP-cooperative: yes - Maison de Garde de l'Est Vaudois, opened until 21/22h (depends on the weekday) Number of OOH sectors concerned: 1 Hospital: yes - EDs (all sectors) . The ED has an ambulatory emergencies' area. Walk-in centers : Permanence du Flon (until 9PM)	Yes, except for 1 sector that doesn't have a home visit service. GPs: yes, h24 Number of OOH sectors concerned: 12 Private society: yes SOS MED SARL and Médecins du Léman Numbers of OOH sectors concerned:	- age limit: 60 yo - Abstention fee: max 2500 CHF/y
Remuneration for the OOHC activity (in addition to the payment for the	Length of each "on- call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

services provided by the doctor)			
□ no, but could change in the future*.	Duration: 24h, but depending on the sector between 12- 72h (or more). Numbers : unknown	No	

- "Innovating" models used in the county:
 - o unique cantonal number
 - o telephonic triage done by other health's professionals than GPs (nurses)
 - o GP-cooperative (not integrated to the hospital)
 - o part of the home visits are done by private societies.

- <u>https://www.24heures.ch/vaud-regions/maillard-revolutionne-garde-medicale/story/19669207</u>
- <u>https://www.24heures.ch/vaud-regions/maillard-revolutionne-garde-medicale/story/19669207</u>
- <u>https://www.urgences-sante.ch/qui-sommes-nous</u>
- http://www.sosmed.ch/
- <u>http://www.medecinsduleman.ch/garde/</u>
- www.svmed.ch/wp-content/uploads/.../Mai-La-garde-de-demain-Tous-à-lhopital.pdf

APPENDIX 27: VS - Valais' OOHC system

(not reviewed by the	Telephonic regulation?	Can the patient get an out-of-	Can the patient get a OOH	Are the general
society responsible for		hours consultation?	house calls, and by whom	practioners legally

the OOHC)Cantonal demographic information		(multiple answers allowed)	(multiple answers allowed)	obligated to take part to the on-call service?
 Number of inhabitants: 342850 number of GPs obligated to take part to the on-call service: unknown Number of out-of-hours (OOH) service sectors: unknown Uniformity: the organisation of the OOHC system is not uniform. 	 phone numbers: unique cantonal number 0900144033 surtaxed organism responsible of the telephonic triage: On-call GPs in the phone centre 144 (emergencies calls) in Sierre Professional formation of the telephonists / regulators: Regulator doctors. Night time (7PM-7AM) and w- e: an on-call GP answers the call (and another GP is on-call for the eventual home visits). The rest of the time, phone centre's employees handle the calls. 	If yes: GPs practice: yes Number of OOH sectors concerned: supposedly all GP-cooperative: yes, the HANOW (Garde Médicale des médecins de famille) in the Haut-Valais hospital center (Viège). Managed by GPs 5.30-10 PM during the week, 9AM-10PM w- e/bh. Number of OOH sectors concerned: unknown Hospital: yes - The GP-cooperative HANOW is managed by hospital's doctors after 10PM EDs (in all sectors)	Yes GPs: yes Number of OOH sectors concerned: supposedly all Private society: no Hospital's doctors: no	Yes
Remuneration for the OOHC activity (in addition to the payment for the	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

services provided by the doctor)				
unknown	Unknown	Unknown	Yes Baden's model in the GP- cooperative HANOW	

- <u>Remarks:</u>

- o Some GPs can chose to deviate their phone numbers to the unique cantonal number. Currently, about 28 GPs are using this possibility.
- o In some peripheral areas of the canton, there is no on-call GP but "SMUP doctors" ("Service mobile de proximité", literally "mobile proximity service"). Nine times over ten, the phone centre is able to reach a SMUP doctor. When it is not possible and according to the emergency level of the patient, the phone centre tries to reach a SMUP doctor of a GP from a neighbouring peripheral area.
- "Innovating" models used in the county:
 - o unique cantonal number
 - o Baden's model
 - SMUP doctors

Sources (all websites consulted in July 2018):

- <u>http://www.smvs.ch/uploads/default/id-728-2016-02-08-Flyer-HANOW-FR-DE-Korrektur.pdf</u>
- http://www.smvs.ch/uploads/default/id-729-INFORMATIONS-POUR-PATIENTS-URGENCES-SIERRE.pdf
- https://www.tdq.ch/suisse/maison-garde-ouvre-portes-valais/story/24351718
- https://www.lenouvelliste.ch/articles/valais/valais-central/la-premiere-maison-de-garde-medicale-du-valais-297831
- <u>http://www.reseau-entraide-vs.ch/fr/institutions-ressources/ressources/garde-des-medecins-0-482</u>
- https://www.gdk-cds.ch/index.php?id=856&L=1%20AND%201%3D1%C2%97#c3778
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische_grundversorgung/bt_nf_nr__def__20081023-f.pdf

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Who is doing the house calls (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 126143 number of GPs obligated to take part to the on-call service: unknown Number of out-of-hours (OOH) service sectors: unknown Uniformity: the organisation of the OOHC is not uniformed. 	 phone numbers: unique cantonal number: 0900 008 008 surtaxed organism responsible of the telephonic triage: <u>MEDPHONE</u> Professional formation of the telephonists / regulators: nurses 	yes □ GPs practice: yes, opening times unknown. Number of OOH sectors concerned: supposedly all □ GP-cooperatives: yes Zug's cantonal hospital Notfallpraxis: handled by GPs 6PM-11PM during the week except on Thursday (3PM-11PM), 9AM-10PM on Saturday, 9AM-9PM on Sunday / bh. Number of OOH sectors concerned: unknown □ Hospital: EDs (in all sectors) □ Others: Hirschlanden Andreasklinik 24h Notfallaufnahme (walk-in center)	 GPs: yes Number of OOH sectors concerned: supposedly all Private society: no Hospital's doctors: no 	Yes - Age limit: unknown - Abstention tax: 2000- 10'000 CHF / year

		Number of OOH sectors concerned: unknown		
Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments
Unknown	Unknown	Unknown	No	

- "Innovating" models used in the county:
 - o Unique cantonal number
 - o Telephonic triaging done by other professionals than GPs (nurses)
 - o hospital-integrated GP-cooperative

- https://www.zg.ch/behoerden/gesundheitsdirektion/direktionssekretariat/notfall
- http://www.notfallpraxiszug.ch/
- <u>https://www.hirslanden.ch/de/andreasklinik-cham-zug/centers/24h-notfallaufnahme.html</u>
- http://www.aerztezentrum-sins.ch/kontakt-termine/notfalldienst
- https://www.aerzte-zs.ch/nc/open_section/vzag_news/details/article/praesentationen_12_zentralschweizer_aerzte_forum_2018/

APPENDIX 29: ZH - Zurich's OOHC system

Cantonal demographic information	Telephonic regulation?	Can the patient get an out-of- hours consultation? (multiple answers allowed)	Can the patient get a OOH house calls, and by whom (multiple answers allowed)	Are the general practioners legally obligated to take part to the on-call service?
 Number of inhabitants: 1516908 number of GPs obligated to take part to the on-call service: 180 Number of out-of-hours (OOH) service sectors: 5 Uniformity: the organisation of the OOHC is not uniform in the canton. 	 phone numbers: unique cantonal number 0800 33 66 55 not surtaxed organism responsible of the telephonic triage: Artzefon: "kantonale Notfallnummer" SOS Arzte Professional formation of the telephonists / regulators: nurses NB: SOS Artze (a private society) has a function of telephonic regulation 	Yes □ GPs practice: yes, opening times unknown. Number of OOH sectors concerned: supposedly all □ GP-cooperatives: yes - Stadtspital Waid Notfallpraxis: 9/10AM - 10.30PM - Stadtspital Bülach Notfallpraxis Number of OOH sectors concerned: unknown □ Hospital: yes - patients can go to the EDs in all sectors (Project in hospital Affoltern (group of GPs on duty there 8AM-8PM): suspended in 2017.) □ Others: walk-in centers - NotfallZürich 3AG (10h-14h) - Medbase Hauptbanhof	■ GPs: yes Number of OOH sectors concerned: all ■ Private society: yes - SOS Artze - Mobile Artze Number of OOH sectors concerned: all ■ Hospital's doctors: no	□ yes □ no - age limit: 60 yo - Abstention tax: fixed every year by the AGZ (5000CHF in 2018)
Remuneration for the OOHC activity (in addition to the payment for the services	Length of each "on-call" duty and number of times a GP is on-call per year	Mean number of interventions per an on-call period?	Collaboration with the hospital (Baden's model or Lyss's model or similar)	Comments

provided by the doctor)				
Unknown	Unknown	Unknown	No	

- Precisions :

- Particularities of the OOH-system:
 - o the planification and commutation of the cantonal number to the GP on-call is assisted by docbox.
 - Zurich city and its associated communes finance about 75% of the Artzefon system. Furthermore, every GP taking part to the on-call duty participates to the cover of the costs by giving Artzefon 270 CHF / year.
- "Innovating" models used in the county:
 - o there exists a unique cantonal number (in addition to other numbers in function)
 - o hospital-integrated GP-cooperative
 - o there exists an informatic platform "Notfall walk-in Netwerk Zurich" that shows patients where they can seek help when their personnel GP is unavaible.
 - o House calls are made by private societies in some sectors.
 - o the "Futuro Project" is being developed in Zürich (project of an online GP's practice)

Sources (all websites consulted in July 2018):

- http://www.hplus.ch/fileadmin/user upload/Medien/Medienkonferenzen/JMK-2010/Franz%C3%B6sisch/08 Medienkonferenz Hplus Notfallzentru m Waid 20 Mai 2010 V31-f-3h V5.pdf
- https://www.medbase.ch/fr/a-propos-de-medbase/actualites/detail/news/medbase-reprend-la-permanence-a-la-gare-centrale-de-zurich/.
- <u>http://www.nz3.ch/angebot.html</u>
- https://econtent.hogrefe.com/doi/abs/10.1024/1661-8157/a002064, https://www.nzz.ch/zuerich/aktuell/hausaerztemangel-ein-notfalldienst-fuer-den-ganzen-kanton-ld.1306985
- https://www.qdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische grundversorgung/bt massnahmen def 20081023-f.pdf
- http://aerzte-zh.ch/informationen/notfalldienst.html

- http://aerzte-zh.ch/pdf/Informationen/notfall/Reglement_NFD_DV%2025%20Sept%202017_Version%20DV%2029%20Jan%202018.pdf
- https://primary-hospital-care.ch/fr/resource/jf/journal/file/view/article/phc/fr/pc-f.2013.00253/pc-f-00253.pdf/
- https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2753.2010.01418.x
- <u>http://www.weinland-aerzte.ch/</u> numéro d'urgence
- https://www.gdk-cds.ch/index.php?id=853&L=1%20AND%201%3D1%C2%97#c3765
- http://www.notfallwalkin.ch/
- https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische_grundversorgung/infoplattform_nfd/tschudi_2007.pdf
- <a href="https://www.gdk-cds.ch/index.php?id=855&L=1%20AND%201%3D1%C3%83%C2%83%C3%82%C2%83%C3%83%C2%82%C3%82%C3%82%C3%82%C2%83%C3%83%C2%83%C3%83%C2%83%C3%83%C2%83%C3%83%C2%83%C3%83%C2%83%C3%83%C2%83%C3%82%
- https://www.ncbi.nlm.nih.gov/pubmed/21554685
 https://www.gdk-cds.ch/fileadmin/pdf/themen/gesundheitsversorgung/medizinische_grundversorgung/bt_nf_nr__def__20081023-f.pdf

APPENDIX 30: 9 EUROPEAN COUNTRIES OOHC SYSTEMS, A COMPARATIVE TABLE

Abbreviations:

- NI: number of inhabitants
- MD: medical density (ambulatory)
- S: sectors
- ED: Emergency Department
- GP: general practioner

	Demographics	Telephonic regulation	OOH consultations (patients able to move)	OOH house calls	GP's obligation to take part to the OOHC	Remuneration	Length and number	Collaboration with the ED
Germany	NI: 82,293,457 MD: 4 S:14	Yes: formed employees under doctor supervision	GPs' practices (rota) GP- cooperatives ED	GPs Private societies	Yes	No? (only the costs for home visits are reimbursed)	12/18/24h	Yes, some GP-coop are in hospitals and work together
Austria	NI:8 754 413 MD: 5.15 S: 9	Yes: doctors	GP's practices ED	GPs Private societies?	?	Yes	varying	?
France	NI: 67'795'000 MD: ? S: 1616	Yes: doctors / private societies	Gp's practices GP- cooperatives ED	GPs Private societies	No	yes	12/24h	Yes 1/3 of the GP- cooperative cooperate with the ED
Italy	60'589'445 MD: 4 S: ?	No	GP's practices Guardia Medica practices ED	"Physicians for continuity" Private societies?	No	yes	12/24h	No
UK	NI: 65'648'100 MD: 3 S:?	Yes: trained advisors	GPs' practices Primary care centers Minor injuries centers Walk-in centers	GP Nurse consultants Emergency care praticioners Deputizing	No	Yes	13h/24h	Yes

			ED	services				
The Netherland s	NI:17'108'799 MD: 3 S: ?	Yes: telenurses	GP- cooperatives ED	GPs Private societies?	Yes	Yes	6-8h Mean: 4h/week	Yes (70% of the GP- coop collaborate with the ED)
Denmark	NI:5'887'565 MD: 3.65 S:5	Yes: telenurses	GP- cooperatives ED	GPs Deputizing services	No?	Yes	8h	no
Sweden	NI: 10' 171'524 MD: 4 S:?	Yes: telenurses	GP- cooperatives ED	GPs Deputizing services?	Yes	Yes	?	?
Norway	NI: 5'295 619 MD: 4.42 S: 262	Yes: telenurses	GP's practices GP- cooperatives: casualty clinics Emergency clinics ED	GPs Deputizing services?	Yes	?	?	No

APPENDIX 31: GERMANY OOHC SYSTEM

Demographic information	Telephonic regulation?	How is organised the system of out-of-	How is organised the home visits
		hours consultations for patients able	system?
		to move?	

 Number of inhabitants: 82,293,457 Medical density: 4 GP obligated to take part to the OOH care: 110'000 (2012) Number of out-of-hours (OOH) service sectors: 14 Uniformity: there is a unique cantonal number, but the organisation of the OOH care differs depending on the sector. 	Present in some sectors, absent in other ones (number directly transmitted to the oncall GP). Phone number: unique number 116117 Not surtaxed organism responsible of the telephonic triage: telephone centre Professional formation of the telephonists / regulators: "formed employees" under doctor's supervision	 GPs' practices organised in rotas (30-50 GPs joined together and alternating in doing OOHC shifts) OOHC care centers (GP- cooperatives): "Bereitschaftsdienstpraxen » (equivalent to Notfallpraxen)	 GPs Private societies (for example "arztbesucheberlin")
Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)
Yes	Only the costs linked to home visits are reimbursed.	Length: 12h on mon, tue, thur; 18h on wed, fri and the eve of a holiday, 24h on w-e/bh. Number: unknown	Some of the GP-cooperatives are located in hospitals.

- Comments:

- the costs occasioned by the out-of-hours system's infrastructure (for example call-centers, facilities, ...) are not assumed by the city or the health insurances, but are deducted from the doctor's income.
- There is a online service which helps the patient (according to his location) to visualise which structure (GP's practice, GP-cooperative,

hospitals) he can go to.

- "Innovating" models used in the county:
 - o unique number
 - o telephonic triage, done by other health professionals than doctors
 - o "in-town system": GP-cooperatives (Bereitschaftsdienstpraxen), sometimes located in the hospitals.
 - o Part of the house calls can be done by private societies.

Sources (all websites consulted in September 2018):

- https://www.116117.de/html/de/
- https://www.merkur.de/welt/117-funktioniert-neue-notfall-nummer-2273946.html
- https://www.116117.de/html/de/regionen.php
- https://arztbesucheberlin.de/
- https://www.tandfonline.com/doi/full/10.3109/13814788.2014.887069
- https://www.cairn.info/revue-francaise-des-affaires-sociales-2006-2-page-91.html#no2
- References (see Table of contents in the main document): (1), (23)-(26).

APPENDIX 32: AUSTRIA OOHC SYSTEM

Demographic	Telephonic regulation?	How is organised the system	How is organised the home visits system?
information		of out-of-hours consultations	
		for patients able to move?	

 Number of inhabitants: 8 754 413 Medical density: 5.15 Number of out-of-hours (OOH) service sectors: 9 Uniformity: the system is uniform. 	 Ves organism responsible of the telephonic triage: phone center « Artzefunkdienst »: 141 Redirected to the local on-call GP Professional formation of the telephonists / regulators: Telephone regulator doctor "Telefonarzt" not surtaxed NB: in Niederosterreich, 141 and 144 are both managed by the 144 phone center. 	 GP's practices Hospital: ED when GP's practices and GP-cooperatives are closed 	 GPs: "Funkarzt" (GP doing house calls, driven by a paramedical driver) or "Selbstfahrender Arzt" (GP doing house calls with his own vehicle) Private societies: possibly
Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)
Unknown	 Yes on-call GP "Funkarzt": fee-for-hour for a 6 / 12 hours on-call GP "Selbstfahrender Arzt": fee for covering the costs due to the vehicle + unique fee per house call on-call GP "Telefonarzt": fee-for-hour for 6/12h 	Duration: - varying times for the Funkarzt - 8-20h for the Selbstfahrender Arzt Numbers :unknown	No

Innovating models used in the country:

- unique national number

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Sources (all websites consulted in September 2018):

- https://web.archive.org/web/20100104191701/http://www.aekwien.at/index.php/aerztlichetaetigkeit/weitere-taetigkeiten/aerztefunkdienst
- http://www.aeksbg.at/notdienste
- https://www.roteskreuz.at/news/datum/2013/01/04/ich-brauche-einen-arzt-144-oder-141/
- <u>http://www.aerztekammer.at/hausarzte</u>
- https://de.wikipedia.org/wiki/%C3%84rztlicher Notdienst#%C3%96sterreich
- https://www.144.at/homepage/news 524.html 116 117
- https://web.archive.org/web/20100104191701/http://www.aekwien.at/index.php/aerztlichetaetigkeit/weitere-taetigkeiten/aerztefunkdienst
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2717955/

APPENDIX 33: FRANCE OOHC SYSTEM

Demographic information	Telephonic regulation?	How is organised the system of out-of-hours consultations	How is organised the home
		for patients able to move?	visits system?

 Number of inhabitants: 67'795'000 Medical density: 3 Number of out-of-hours (OOH) service sectors: 1616 (resectorisation reduced it by 50% since 2003) Uniformity: no (different numbers, different amenities depending on the sectors) 	active in 3 pilot areas: Corse, Normandie, Pays de Loire)	fixed effector, in: GP's practices: organised in a system of rota OOHC medical centres: « Maisons médicales de Garde » (MMG), usually opened at night during the week and during the w-e/bh. Walk-in centers hospital: A&E (only option when GP's practice and MMG are closed)	GPs: mobile effector Private societies: "SOS médecins"
Are the general practioners	_	Length of each "on-call" duty and number of times a GP is	Collaboration with the

legally obligated to take part to the on-call service?	activity (in addition to the payment for the services provided by the doctor)	on-call per year	hospital (Baden's model or Lyss's model or similar)
Not anymore (since 2002),	Yes	Length: 8pm – 8 am during the week, 10pm – 8 am on the	Yes
but if there's a lack of	20 euros per consultation, 30	following working day on w-e/bh.	For some of the MMG (1/3 in
effective, the Prefect can	euros per home visits, per		2003).
requisition GPs.	hour indemnity for regulators.	Number: unknown	

- in 2016, 66 departments use the phone number 15 as unique phone number, and 34 departments use a 4/10 numbers phone number.

Innovating models used in the country:

- implementation of a unique national number (pilot project)
- GP-cooperatives: "Maisons Médicales de Garde »
- Part of the house calls can be done by other professionals than GPs

Sources (all websites consulted in September 2018):

- <u>https://www.gouvernement.fr/risques/connaitre-les-numeros-d-urgence</u>
- <u>http://www.ordmed31.org/exercice-medical/pdsa/article/exemption-de-garde</u> .
- https://www.cairn.info/revue-francaise-des-affaires-sociales-2006-2-page-91.html#no2
- https://www.lemonde.fr/sante/article/2017/04/06/un-numero-pour-les-medecins-de-garde-comme-alternative-au-15 5107028 1651302.html
- https://www.conseil-national.medecin.fr/sites/default/files/cnominfographiepds2014.pdf
- https://www.paris.fr/services-et-infos-pratiques/sante/se-faire-soigner/medecins-et-pharmacies-de-garde-urgences-medicales-49
- http://www.maisonmedicaledegarde-paris.fr/
- https://www.sosmedecins.fr/
- <u>https://fr.wikipedia.org/wiki/R%C3%A9gulation_m%C3%A9dicale_en_France</u>
- https://www.revmed.ch/RMS/2005/RMS-39/1911
- https://www.revmed.ch/RMS/2001/RMS-2372/548
- https://www.conseil-national.medecin.fr/node/2130

- https://www.ladepeche.fr/article/2012/01/19/1263861-la-maison-medicale-de-garde-serait-pilote-en-france.html
- References (see Table of contents in the main document): (1), (27)-(35).

APPENDIX 34: ITALY OOHC SYSTEM

Demographic information	Telephonic regulation?	How is organised the system of out-of-hours consultations for patients able to move?	How is organised the home visits system?
 Number of inhabitants: 60'589'445 Medical density: Number of out-of-hours (OOH) service sectors: unknown Uniformity: the organisation is uniform. 	No Each Guardia Medica office has its own number and there is no unique call centre. Is the number surtaxed? Unknown	 OOH: 8pm – 8am during the week, 24h w-e/bh Guardia Medica: "special" GPs Italy works with a OOHC system unique in Europe, the Guardia Medica" 20'000 GPs known as physicians for continuity (Medici di Continuità Assistenziale), active at night and afternoons of the w-e/bh. Traditionnal GPs can also take part the OOHC. GPs'practices: regular GPs can also be involved in OOHC hospital: A&E 	 Doctors from the guarda medica Private societies?
Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)

No	Hourly flat rate under regional scheme (annual income 30'000-50'000	Length: 12h (8pm – 8 am week night) / 8 pm – 8 am on the following working day on w-e/bh.	No
	euros, which is relatively low compared to the income of the GP	Number: unknown	

Remarks:

- Guardia Medica GPs don't have a great reconnaissance. They have a GP's (eventually a specialist) diploma, but no further formation. They often work as Guardia Medica 5 to 8 years, before opening a practice.

Innovating models used in the country:

- Guardia Medica: professionalizing the function of on-call GP

Sources (all websites consulted in September 2018):

- <u>https://it.ambafrance.org/En-cas-d-urgence</u>
- https://academic.oup.com/eurpub/article/25/4/563/2399141
- http://www.grusol.it/informazioni/21-07-14.PDF

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2717955/: 'Other' referred to the Guardia Medica, a unique out-of-hours care model in Italy.

- http://www.pratomigranti.it/en/vivere/salute/dove/servizio-continuita/pagina131.html
- https://www.sciencedirect.com/science/article/pii/S0168851015000044?via%3Dihub

APPENDIX 35: UK'S OOHC SYSTEM

Demographic	Telephonic regulation?	How is organised the system of out-of-hours	How is organised the home visits
information		consultations for patients able to move?	system?

 Number of inhabitants: 65'648'100 Medical density:3 Number of out-of-hours (OOH) service sectors: Unknown Uniformity: yes (with variation within local amenities and medical density). 	Yes ■ Number: NHS111 ■ Not surtaxed ■ organism responsible of the telephonic triage: NHS Direct ■ Professional formation of the telephonists / regulators: Fully trained advisors, using a clinical assessment tool ("NHS Pathways"), connecting the patient to a nurse, a GP, NB: in some regions, an OOHC GP is designated and its number given.	OOHC: after 6.30pm, w-e, bh NHS111, redirecting patients to large-scale organisation (GP-cooperatives): urgent care centres Primary care centres (PCC) Minor injury units walk-in centres GP's practices: 10% of GPs chose to keep their OOHC duty. hospital: ED PCC: centers, supervised by GPs, that can be attended without appointment for minor health problems. Minor injury centers / walk-in centers: centers that can be attended without appointment for minor health problems. Patient is managed by trained nurses.	 NHS: on-call GP, nurse consultant (nursing care at home, useful for example the chronically ill patients), Emergency care practionner (paramedics) GPs independent from NHS Deputizing services
Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)
No GPS can choose to keep their	Yes, hourly rate, varies in the UK. Eg: - full time OOH service GP (NHS): 118'000- 147'000	Length: 6.30PM-8AM every week-day, 24h during w-e/bh	□ yes □ no

duties or give the responsibility to the NHS (90% of the	-	euros (compared to 100'000 for other GPs) (2006) Scotland: 72-115 euros/h	Numbers : unknown	
GPs don't				
keep their on-				
call duty).				

- the call-centre function of the NHS111 is very developed and inclusive: there's a NHS111 online help (targeting the current "on-line generation"), an option for the deafs and the mutes (presence of a "typetalk assistant" who assist the telephonic consultation and translates), and a confidential interpret service that can be asked at the beginning of the phone call.

Innovating models used in the country:

- Integrated care
- GP-cooperatives
- Part of the house calls can be done by deputizing services

Sources (all websites consulted in September 2018):

- <u>https://www.cairn.info/revue-francaise-des-affaires-sociales-2006-6-page-89.htm</u>
- http://www.careukhealthcare.com/our-services/out-of-hours-services
- https://www.nhs.uk/using-the-nhs/nhs-services/urgent-and-emergency-care/nhs-out-of-hours-services/
- https://www.nao.org.uk/wp-content/uploads/2014/09/Out-of-hours-GP-services-in-England1.pdf
- References (see table of Contents in the main document): (1), (36) (57).

APPENDIX 36: THE NETHERLAND'S OOHC SYSTEM

Demographic information	Telephonic regulation?	How is organised the system of out-of-hours consultations for patients able to move?	How is organised the home visits system?
 Number of inhabitants: 17'108'799 Medical density:3 Number of out-of-hours (OOH) service sectors: unknown Uniformity: yes: national, uniform system based on GP-cooperatives (50 to 250 PCPs provide care for 100 000 to 500 000 people) 	responsible of the telephonic triage:	 (possibly GP's practices in rural areas) GP-cooperatives hospital: ED 	Private societies: possibly

Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on- call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)		
Yes	Yes, hourly fee (65 euros/h)	Length: 6-8h, mean of 4 hours / week. 5pm – 8am, h24 w-e/bh. Numbers : ?	□ yes □ no Increasingly, GP-cooperative are located within hospitals and collaborate with the ED.		
Remarks: Innovating models used in the country: - unique national number - telephonic triage done by nurses					

Sources (all websites consulted in September 2018):

GP-cooperatives

- <u>https://www.xpat.nl/expat-netherlands/health-care/going-to-the-doctor/</u>
- https://repository.ubn.ru.nl//bitstream/handle/2066/52886/52886.pdf
- https://www.nhs.uk/using-the-nhs/healthcare-abroad/healthcare-when-travelling-abroad/healthcare-in-the-netherlands/
- References (see Table of Contents in the main document): (1), (2), (59)-(74)

APPENDIX 38: DENMARK'S OOHC SYSTEM

Ī	Demographic information	Telephonic regulation?	How is organised the system of out-of-	How is organised the home visits
			hours consultations for patients able to move?	system?

 Number of inhabitants: 5'887'565 Medical density: 3.65 Number of out-of-hours (OOH) service sectors: 5 Uniformity: no, county-based system with each one having a coordination center. 	 yes	 GP's practices GP-cooperatives hospital: ED 	GPs Deputizing services
Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)
Unknown	Yes, fee-for-service, varying for the type of contact	OOH period: 4pm – 8am week, w-e/bh Length: typically 8 hours Number: one night duty every 35 nights and one evening duty every 15 evenings; and in most places it's possible to be completely free of duty.	No GP-cooperatives are often located within hospitals, but work independently.

- In Denmark, only licensed GP are allowed to do the telephonic triage.
- In Denmark, GPs get paid more if they manage the patients with a telephone consultation rather than with a face-to-face contact,
- In Denmark, it is increasingly necessary to have a referral from primary care settings to get access to the ED (giving to primary care actors a big gate-keeping role)

Innovating models used in the country:

- Unique cantonal number
- Telephonic triage (done by GPs)
- **GP-cooperatives**

Sources (all websites consulted in September 2018):

- http://www.laegevagten.dk/kontakt-laegevagten/region-syddanmark
- https://www.tandfonline.com/doi/full/10.1080/02813432.2016.1248622
- http://www.jabfm.org/content/25/Suppl 1/S34.full
- https://europepmc.org/abstract/med/24814746
- <u>https://www.healthaffairs.org/doi/full/10.1377/hlthaff.25.6.1733</u>
- References (see Table of Contents in the main document): (1), (2), (75)-(83)

APPENDIX 38: SWEDEN'S OOHC SYSTEM

Demographic	Telephonic regulation?	How is organised the system of out-of-hours	How is organised the home
information		consultations for patients able to move?	visits system?

 Number of inhabitants: 10'171'524 Medical density: 4 Number of out-of-hours (OOH) service sectors: Unknown Uniformity: the system is uniform. 	 organism responsible of the telephonic triage: national medical helpline, the "Healthcare Guide 1177 by Phone" (HGP), h24 not surtaxed Professional formation of the telephonists / regulators: Nurses with a decision support tool (symptoms-based checklist) 	GP's practices GP-cooperatives:	 GPs Deputizing services?
Are the general practioners legally obligated to take part to the on-call service?	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or similar)
Yes	Yes, fee-for-hour "additional hours" after 5pm	Length: unknown Numbers : 1-2/ month for duties in the PUCC	No

- Home visits are not frequently done in Sweden. Patients must usually wait for the PCC to open, go to an hospital A&E department or to a doctor in the private sector.

Innovating models used in the country:

- unique national number
- GP-cooperatives

Sources (all websites consulted in September 2018):

- https://www.cairn.info/revue-francaise-des-affaires-sociales-2006-6-page-89.htm
- References (see Table of contents in the main document): (1), (2), (84) (91).

APPENDIX 39: NORWAY'S OOHC SYSTEM

Demographic information	Telephonic regulation?	How is organised the system of out-of-hours consultations for patients able to move?	How is organised the home visits system?
 Number of inhabitants: 5'295 619 Medical density: 4.42 Number of outof-hours (OOH) service sectors: 262 districts (2006) Uniformity: Yes and no, uniform system of "casualty clinics", but great variation amongst them. 	 yes	 GP's practices: in many rural districts (article 2012) GP-cooperatives: municipal casualty clinics, staffed by GPs, which volume and resources vary greatly amongst one another. Emergency clinics: direct access hospital: ED 	• GPs
Are the general practioners legally obligated to take	Remuneration for the OOHC activity (in addition to the payment for the services provided by the doctor)	Length of each "on-call" duty and number of times a GP is on-call per year	Collaboration with the hospital (Baden's model or Lyss's model or

part to the on-call service?			similar)
Yes	Unknown	Length: unknown Number: unknown	No Casualty clinics work independently from hospitals.

- The technical diagnosis tools vary greatly amongst casualty clinics. Most of them can do basic blood tests and electrocardiogram, but only a small part of them can offer radiologic imaging (92).

Innovating models used in the country:

- unique national number (existing in parallel to direct casualty clinics numbers)
- telephonic triage done by nurses or medical assistants
- GP-cooperatives

Sources (all websites consulted in September 2018):

- https://www.tandfonline.com/doi/full/10.3109/02813432.2012.684208
- References in the main document: (1), (92)-(96)