

# Report on Preclinical Research of Somavedic Medic Uran Case Efficacy



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Mšené-lázně 2019

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director Approved in September 2019, the results will be entered into  
the RIV VaVaI information register of R&D results.

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## **Anotace**

Somavedic Technologies s.r.o. vyvinul a vyrábí přístroj Somavedic Medic Uran (SMU). SMU je konstrukčně řešen jako pevně uspořádaný soubor minerálních krystalů, které jsou buzeny elektromagnetickým polem. Vzniká nízkoenergetické záření, které má nebo může mít pozitivní vliv na lidský organizmus, případně na prostředí, ve kterém se tento organizmus pohybuje. Předklinický výzkum má za cíl předběžné ověření bezpečného užití přístroje SMU, vyloučení případné škodlivosti. Dalším cílem je stanovení hypotézy vhodné délky časové expozice přístroje SMU a konečně zásadní zjištění tvrdých i měkkých dat o účincích. Jinými slovy postupně identifikovat, popsat a analyzovat vlastnosti účinku SMU pro následné klinické hodnocení a další perspektivní inovace přístroje do úrovně zdravotnického prostředku ve smyslu platné legislativy. Předklinický výzkum kazuistických případů účinku přístroje vhodně předcházející projektu standardního klinického hodnocení vychází z dat, která se získají během nejméně 30denního působení na podporu celkového pocitu zdraví, resp. zmírnění symptomů nemoci. Tato data zahrnují aktuální stav krevního tlaku (TK), pulzu a poruchy srdečního rytmu, plus vstupní a výstupní sebehodnocení každého případu. Účinek SMU na jednotlivé případy je hodnocen příznivě.

## **Annotation**

Somavedic Technologies s.r.o. has developed and manufactured Somavedic Medic Uran (SMU). The SMU is designed as a fixed set of mineral crystals, which are excited by an electromagnetic field. Low-energy radiation is produced which has or may have a positive effect on the human organism, or on the environment in which the organism moves. Preclinical research is aimed at preliminary verification of safe use of the SMU, eliminating potential harmfulness. Another aim is to determine the hypothesis of the appropriate duration of time exposure of the SMU and finally to determine the hard and soft effect data. In other words, gradually identify, describe and analyze the properties of the effect of the SMU for subsequent clinical assessment and other prospective innovations of the device to the level of the medical device in accordance with the applicable legislation. Preclinical research of case reports of device efficacy prior to a standard clinical trial project are based on data obtained over a period of at least 30 days to support overall feeling of health or well-being, respectively relieving the symptoms of the disease. These data include current blood pressure (BP) status, heart rate, and cardiac rhythm disorders, plus input and output self-assessment of each case. The effect of SMU on individual cases is evaluated positively.

# **Preclinical research of SMU case efficacy**

## **Introduction, research subject**

Somavedic Technologies s.r.o. has developed and manufactured Somavedic Medic Uran (SMU). The SMU is designed as a fixed set of mineral crystals, which are excited by an electromagnetic field. Low-energy radiation is produced which has or may have a positive effect on the human organism, or on the environment in which the organism moves. The SMU was tested in multiple laboratories (the Czech Republic, Austria, Germany, and Slovenia). The most important research results for the project of proving the SMU effects on the human organism are those processed by BION, Institute for Bioelectromagnetics and New Biology, Ltd, research organization code No.: 0431, Stegne 21, SI 1000 Ljubljana, Slovenia, EU, [www.bion.si/en](http://www.bion.si/en). The institute specializes in measuring ultralight radiation effects. The physical system measurements include interactions between the measuring device and the system. The main issue here is that it is not possible to reduce the interactions studied based on the quantum mechanics principles. It will be necessary to tackle this issue in future. For the time being, it must be enough for us to have hard objective data on the SMU effects in addition to the traditional subjective information. This means that although we can find out a particular progressive change in time, the cause can only be described speculatively and hypothetically (e.g. BP, HT, blood oxygen levels...). This approach partly corresponds to complementary and alternative medicine (CAM). In general, the term “alternative therapy” is used for any medical treatment that is not considered standard in the Western medical practice. Technically speaking, the “alternative” treatments used instead of traditional medicine have not been preclinically described when it comes to the causes of their effects, toxicity, effect dynamics and other factors. When the alternative treatments used alongside the standard medical ones, we call it “complementary” medicine. Lately, standard clinical trials have been more and more common in the US to prove the efficacy of certain alternative approaches. Thanks to this, the so-far “alternative” approaches become either marginal or common in the scale of proof-based medical principles. In the US, there is the National Center for Complementary and Integrative Health (NCCIH), a central government agency specializing in research of various systems and practices employed by the medical and health institutions that are not generally considered to be part of conventional medicine. In 2018, the agency’s budget amounted to more than 200 million USD. The NCCIH used to be called the National Center for Complementary and Alternative

Medicine. Although some people distinguish between the terms based on certain criteria, the terms are very similar in their effects. The field includes a variety of therapists, from those using only herbs to educated mainstream doctors of medicine who offer scientific explanations to their approaches. When these therapies are proved with clinical research, they become complementary medicines. They offer help when traditional medicine fails, and altogether offer a qualitatively better help to human beings based on the claim that they take into consideration the whole being (at least both body and mind as in holism) and find the connections. The Balneology Research Institute (Výzkumný ústav balneologický, v. v. i.) (BRI) has been preparing a subsequent methodology for clinical analysis of the SMU effects on human beings. It looks into the effects on mental and physical well-being, using both non-invasive procedures and hard data (such as BP, HT, and blood oxygen levels). The BRI's innovative approach operates with preclinical research of the SMU effects preceding the clinical research itself. The aim is to obtain the basic data so that a methodology for a clinical analysis on the level of a medical device can be formulated. The basic data include especially: safe SMU handling, excluding possible harmful effects, stipulating a hypothesis for the total time for which a subject should be exposed to SMU, and obtaining soft and hard key data on the positive effects, incl. identification of diseases the effects on which are best observable if possible. Based on these information, the follow-up methodology for clinical analysis of the SMU effects can be formulated. The main goal is to get SMU registered as a medical device.

Act No. 268/2014 Coll. on Medical Devices and on Amendments to Act No. 634/2004 Coll., on Administrative Fees, as amended, as of October 22, 2014. Part one MEDICAL DEVICES, Title I Introductory Provisions, Section 1 Subject matter: This Act incorporates relevant regulations of the European Union (hereinafter referred to as the "Union") and defines the handling of medical devices and their accessories. The following section 2 Basic provisions and definition of terms, art. 1 says: (1) A medical device shall mean any instrument, apparatus, appliance, software, including software intended by the manufacturer for specific use for diagnostic or therapeutic purposes and necessary for the correct use of the medical device, material or other article, intended by the manufacturer to be used for human beings for the purposes of: a) diagnosis, **prevention**, monitoring, **treatment or alleviation of disease** (highlighted by the authors of the study).

## **1. Methodology for preclinical research of SMU case efficacy**

The authors introduce the term **preclinical research** of medical devices for the

phase of the clinical analysis during which it will be determined what changes occur on the level of physical measurements of the set variables and whether it is possible to prove that there are positive effects, i.e. whether the clinical analysis, much more demanding in terms of time, capacity and expenses, would be suitable.

As stated above, the basic data include especially: safe SMU handling, excluding possible harmful effects, stipulating a hypothesis for the total time for which a subject should be exposed to SMU, and obtaining soft and hard key data on the effects, incl. identification of diseases the effects on which are best observable if possible. The aim is to gradually identify, describe and analyse the properties of the effect of the SMU for subsequent clinical assessment and other prospective innovations of the device to the level of the medical device in accordance with the applicable legislation. The whole project is supported and covered by the producer. The preclinical research of case reports of device efficacy prior to a standard clinical trial project is based on data obtained over a period of at least 30 days to support overall feeling of health or well-being, respectively relieving the symptoms of the disease, supporting effects on current blood pressure (BP) status, heart rate (HR), and cardiac rhythm disorders (heart arrhythmias), plus input and output self-assessment of each case.

The procedure and data described below were followed when monitoring the SMU efficacy:

1.1 12 cases were chosen for the preclinical research, 5 out which were patients with a cardiology disease in collaboration with an external doctor guaranteeing the right treatment. The effects were followed on the above-mentioned persons diagnosed with: i. hypertension, class I and II according to NYHA, no comorbidity evaluation; ii. hypotonia (blood pressure below systolic norm rate, between 95 a 110 mm Hg in adults). Measurements are made at the participants'. All participants-cases have got 1 SMU device and one wrist tonometer for measuring BP and HR for 30-60 days. In one case, three participants living in one building got 1 SMU in total, located in a way so that it would be 12 m from their bed at the maximum. In one case, a married couple got 2 tonometers and 1 SMU in total. The SMU is located in the household in a way so that the participant is exposed to the radiation for the whole time, including when sleeping. Throughout the measurements (30 days at least), the device was on and active. During the day, when the participants were at work and simply not at home, they were not exposed to the SMU. Each participant was supposed to be met every 10 days to consult, hand

over parts of the Protocol and download tonometer data. This was observed in a majority of cases.

1.2 All participants-cases measured their BP and HR as described below and saved the data in the tonometer using the tonometer instructions. BP and HR were measured as follows:

- in the morning, basal data right after waking up
- in the evening, the last activity of the day

1.3 All participants (cases) were also asked to perform a self-evaluation of their calmness/stress using the following scale (table):

- Input self-evaluation of calmness/stress \*) using the following scale:

Description of the feeling		Possible cause
Feeling calm and at peace	1	Woke up after a pleasant dream, awaiting success, feeling delighted, a nice partner etc.
Feeling calm	2	(Almost) no need to feel worried
Feeling slightly worried	3	Unpleasant dream, awaiting a challenge, presenting in front of people, a slightly displeased partner, slightly worried about an illness etc.
Feeling slightly tense	4	Unpleasant dream, unpleasant talk you were prepared well for, slightly (justifiably) worried about an illness etc.
Feeling worried and tense	5	Hidden danger, symptoms of an illness, mistrusting a partner/a colleague, awaiting reproaches etc.
Feeling stressed	6	Argument with a partner/a colleague/somebody else, ill family member, danger of physical violence
Feeling in danger	7	Bankruptcy, insolvency, serious surgery, physical violence etc.

*\*Inspired by Scitovski, T.: The Joyless Economy, Oxford university Press 1976*

- Recorded unspecified symptoms were attached as a separate attachment.
- The output self-evaluation was performed based on the self-evaluation scale of calmness/stress, the structure remained the same.

## **2. Hidden list of participants and encoded list of cases**

The list of participants and their personal data are archived in accordance with the GDPR rules, will be archived for 6 months after the research is finished and all the cases are evaluated, and then will be destroyed under the protocol. Until then, the following persons are entitled to handle the data, solely for the purpose of the research and of personally meeting the participants: Ing. František Och, director and head of the research team, MUDr. Lubomír Mankovecký, CSc, MUDr. Pavel Zubina, Bc. Lucie Braumová, and Bc. Dita Plíhalová.

## **3. Preclinical research and technical security**

10 Somaved Medic Uran devices with serial numbers S/N 2019033741–201903750 were lend for the purpose of the preclinical efficacy research by SOMAVEDIC Technologies s.r.o. The preclinical analysis was based on the data measured by wrist tonometer VEROVAL<sup>®</sup>, model BPM25. Producer: HARTMANN-RICO, the Federal Republic of Germany. Measurement method: oscillometric method. Measurement scope: systolic BP 50–280 mmHg, diastolic BP 30– 200 mmHg, HR 40–199 pulses/min., approved as a medical device, computer interface: Software Veroval<sup>®</sup>medi.connect allows to read the measured data from the tonometer memory using a USB cable and to display them on the computer.



#### **4. Input and output status of individual cases**

The term “status” refers especially to the participants’ medical condition. According to TheFreeDictionary: Health status is “a generic term referring to the health (good or poor) of a person, group or population in a particular area, especially when compared to other areas or with national data.”

##### **The encoded list of cases includes:**

The Input and Output statuses of individual cases (see Appendix no. 4) have been processed for the purpose of the research and individual cases’ data processing.

##### **Case number:**

- Age
- Sex
- Simplified input diagnosis
- Date of the first measurement
- Date of the last measurement
- Simplified output diagnosis

#### **5. Blood pressure and heartbeat rates overview**

The rates are presented for each of the twelve cases (1-12)

- Appendix no. 3 Table: Date, time, time of the day, systolic BP, diastolic BP, HR, MAP - mean arterial pressure, heart arrhythmia,
- Appendix no. 4 Input and output status of individual cases
- Appendix no. 5 BP and HR progress graphs for individual cases

#### **6. Efficacy evaluation on the preclinical case level**

Efficacy evaluation on the preclinical case level was performed for all the twelve cases, i.e. **all cases were evaluated individually and possibly using a different approach**; no statistic evaluation was performed, the only things observed are any potential changes and their nature (positive, negative).

**Trend 1:** Input rates BP: evening systolic 142, diastolic 64, HR 74,  
Critical difference systolic - diastolic 78!

Input self-evaluation 5

After the project: Improved subjective physical state and condition, inclined towards 4.

**BP and HR graphs evaluation:**

**Trend rates:** Systolic: slight decrease (trend 140 to 130), diastolic: increase (trend: (71 to 80), HR: very slight decrease (68 to 66)  
Heart arrhythmias: 7x during the measured period, only 1 arrhythmia in the second half of the period Recommendation: monitor personally.

**Total efficacy evaluation of case 1: Positive influence, improving trend, further 3-month-long observation recommended.**

**Trend 2 - not evaluated, measured only for 5 days**

**Trend 3:** Considerably less OCD (obsessive–compulsive disorder) attacks, less headaches and migraines, better quality of sleep, feels more composed. **The subject appreciates highly positive effects on psychological well-being! One of the most distinctive effects.**

**Note:** The subject gathered daily BP and HR data along with current state of their disorders and diseases for **more than 60 days**. Upon our agreement, the subject will monitor their BP with the wrist tonometer VEROVAL plus with a pulse oximeter from now on.

**Trend 4 - not evaluated, measured only for 5 days**

**Trend 5:** After the measured period – Even more positive physical state and condition, inclined towards 3.

**BP and HR graphs evaluation:**

Systolic: **positive decrease** (trend 140 to 130), diastolic: increase (trend 71 to 80), HR very slight decrease (trend 68 to 66)

Heart arrhythmias: 4x during the measured period, out of which 1x both morning and evening arrhythmias in one day towards the end of the measured period. Recommendation: monitor personally.

**Trend 6:**

**BP and HR graphs evaluation:** Systolic: slight decrease (trend 140 to 130), diastolic: increase (trend: 71 to 80), HR very slight decrease (68 to 66) **The most distinctive positive effect was on the mental well-being (see subjective self-evaluation); the husband was positively affected as well, even though he was not a subject.**

**Trend 7:**

**BP and HR graphs evaluation:**

Systolic: strong decrease (trend 130 to 119), diastolic: very slight decrease (trend: 78 to 77), HR slight increase (70 to 75), overall improving trend.

**Warning:** 8 heart arrhythmias in total throughout the measured period; 5 in the first half, 3 in the second half of the period.

**Improving trend of heart arrhythmias.** Despite that, a medical consultation was recommended.

**Trend 8:**

**BP and HR graphs evaluation:** Systolic: strong decrease (trend 136 to 120), diastolic: decrease (trend: 83 to 75), HR very slight decrease (76 to 73). 5 heart arrhythmias during the measured period. Recommendation: monitor personally.

**Trend 9:**

**BP and HR graphs evaluation:** Systolic: stagnated at higher trend level (135), diastolic: slight decrease (trend: 84 to 89), HR very slight increase (70 to 75) Almost no SMU effect. Reason: high psychological stress - 2 jobs and wedding preparations.

Heart arrhythmias: 5x, evenly distributed throughout the measured period, cardiological monitoring recommended (higher BP and heart arrhythmias) Indicated obesity with high BMI, weight-loss recommended

**Trend 10:**

**BP and HR graphs evaluation:** Systolic: decrease (trend: 140 to 120), diastolic: decrease (trend: 76 to 89), HR increase (69 to 64)

**Positive effects on systolic BP, psychological well-being and quality of sleep. Critical amount of heart arrhythmias, identified 30x in total.**

**Recommendation: 24-hour Holter EKG monitoring.** The evaluation can help with monitoring the hearth rhythm and arrhythmias.

**Trend 11: BP and HR graphs evaluation:**

Systolic: increase (trend: 138 to 144), diastolic: decrease (trend: 98 to 94), HR decrease (68 to 60)

**Positive: Decreasing trend of HR throughout the measured period.**

**Very strong decrease of heart arrhythmias - 7x, only 1x in the measured period!**

**Trend 12:**

**BP and HR graphs evaluation:** Systolic: increase (trend 83 to 97), diastolic: increase (trend: 53 to 65), HR decrease (78 to 69). The systolic and diastolic trends show **trend towards increasing the low BP** which suggests positive effects. The HR decrease is a positive trend as well.

Subjective self-evaluation. **Positive effect on psychological well-being.** Less tired - better quality and depth of sleep, in accordance with the trend of the low BP increase.

## 7. Summary and recommendations

The preclinical research met the expectations based on the observations of the SMU effects made by the SMU producer and distributor as well as the users throughout several years. The casuistic approach evaluates all the cases separately, no statistic evaluation was made. The aim was to gather data necessary for the decision whether it would be appropriate to invest in a subsequent clinical analysis, especially data on which the methodology for this subsequent clinical analysis would be based.

### Key preclinical findings:

- **No case of harmful effects** on a measured subject was identified.
- The time frame of the SMU effects on the measured subjects differed a lot. Most of the participants (8) were subject to the device mainly at night, when sleeping or being at home. The remaining four participants were subject to the device almost continuously, i.e. throughout the day as well. Further research would ideally work with the hypothesis that **the SMU should not influence a subject for less than 8 hours a day.**
- SMU has **positive effects on the cardiovascular system.** High BP becomes lower (in 7 cases), very slight difference or stagnation only in 1 case, low BP increased in 2 cases. The HR effect was positive but it would require a longer measured period for proper evaluation (at least 60 days).
- SMU has **positive effects on the nervous system.** An exceptionally positive effect on psychological well-being was detected in four cases; in one case (case 3) a psychiatric disorder was positively affected. Note: Including the subject in case 2 who stopped measuring due to work-related reasons but asked for the SMU anyway because of the subjective improvement, mainly of the psychological well-being.
- In 5 cases, warnings and recommendations were formulated as a secondary benefit; these will be discussed with the subjects individually, the subjects will be recommended to see a specialist. One subject has already been warned (30 heart arrhythmias during the 30 measured days, which means in 50% of cases when measuring twice a day).

- An almost general positive effect of the SMU on both physical and psychological well-being was detected. After the first 10 days during which sleep improves and the subjects may even be more tired, both **the length and the quality of sleep positively improve.**

### **Final recommendations**

#### **We recommend the clinical analysis of the SMU efficacy to be performed:**

- New conditions must be accounted for under the Regulation on medical devices (hereinafter referred to as “Regulation”), repealing the current Council Directives on medical devices (93/42/EEC) and on active implantable medical devices (90/385/EHS). The Regulation was introduced in May 2017; at the same time, a 3-year-long period of transition from the Directive on medical devices commenced. The Regulation will come into effect gradually throughout the transitive period; the first provisions in effect will be those on designation of notified bodies and on manufacturers’ requests for new certificates under the Regulation. The transition period will end on May 26, 2020 which will be the “day of applicability” of the Regulation. As of this day, the Regulation will be effective in its whole scope.
  - a) Preparing the query and the application for the State Institute for Drug Control for acknowledging the SMU as a medical device - a treatment-supporting device of the 1st category. Therefore, it would be ideal to have: i. Simplified technical description of the SMU and its functions; ii. Adjusted brief report on the preclinical research; iii. Proposal of the clinical analysis methodology, incl. the name of the health service provider who will perform the analysis (BRI is preparing an application to be designated a medical institution offering prevention); iv. Preliminary contract with an institution with an ethics committee (should BRI be designated, it will have an ethics committee of its own).
  - b) If it is agreed that the SMU could be certified as a medical device, it will be necessary to prepare a Clinical evaluation project for the State Institute for Drug Control (“a clinical trial plan”, a document containing substantiation, goals and aims, proposal, methodology, monitoring results, statistical aspects, organization, and clinical test results);
- the State Institute for Drug Control will then approve the project or recommend adjustments required for the medical device class

## 8. Literature and other sources

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## **Appendix no. 1 Sample informed consent form for case studies, SMU and Veroyal operation training**

Text of the informed consent form for case study participants

Due to the limitations posed by Appendix no. 2, the Informed consent forms are hidden and accessible only by the BRI director.

1. I, signed below, give my consent with participating in the case study. I am over 18 years old.
2. I have been informed in detail about the aim of the study, its process, and about what is required from me. The expected benefits, potential health risks arising from my participation in the study, and steps that would be taken in case of undesirable effect have been explained to me by a doctor performing the study. I acknowledge that the case study is a research activity.
3. I have informed the doctor performing the study about any medication I have taken during the last 28 days as well as any medication I am currently on. Should another doctor prescribe any medication to me, I will inform him/her about my participation in the case study and will not take the medication without the consent of the doctor performing the study.
4. I will cooperate with my doctor throughout my treatment and inform him/her without any delay should any unusual or unexpected symptom occur.
5. I will not be a blood donor throughout the study and 4 weeks after the study will be finished.
6. I understand that I am entitled to suspend or revoke my participation in the study at any time without affecting the course of any potential treatments. My participation in the study is voluntary.
7. When included in the study, my personal data will be treated as confidential under valid laws of the Czech Republic. The results of the case study will not become part of my medical records unless agreed otherwise with the doctor performing the study. Should this happen, my personal data will be treated as confidential. During the study, my personal data can be provided to subjects not mentioned above only without identifiers – as anonymous data assigned with a numerical code. When anonymized (stripped off identifiers) or when my consent is given, my personal data can also be provided to other subject for research and scientific purposes.
8. I am not entitled to remuneration for my participation in the study.
9. I understand that my name will never been mentioned in relation to the study. I will not object against presentations of the results of the study.
10. I have received a signed copy of the informed consent.

Patient's signature:

Date:

Signature of the doctor performing the study:

Date:

## **Appendix no. 2 Loan agreement**

As a preclinical research, this Case Study is a precondition for the follow-up Clinical analysis of the SMU efficacy. For the purpose of that, the selected participants will be lent ten SMUs in total by Somavedic Technologies s.r.o. as well as ten wrist tonometers by the BRI.

The signed copies of the Loan Agreement are archived as confidential and accessible only by the BRI director.



## Appendix no. 3 Blood pressure and heartbeat rates for cases 1-12

Case number:	1
Sex:	Male
Age (years):	79
Height (cm):	173
Weight (kg):	105

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
09/08/2019	23:27	evening	142	64	74	90		No	No	Yes
10/08/2019	08:47	morning	129	72	66	91		Yes	No	Yes
10/08/2019	21:14	evening	142	72	74	95		No	No	Yes
11/08/2019	09:57	morning	105	74	76	84		No	No	Yes
11/08/2019	22:04	evening	150	72	72	98		Yes	No	Yes
12/08/2019	07:09	morning	103	70	64	81		No	No	Yes
12/08/2019	22:33	evening	120	65	77	83		No	No	Yes
13/08/2019	07:37	morning	117	72	69	87		No	No	Yes
13/08/2019	21:01	evening	138	78	69	98		No	No	Yes
14/08/2019	07:26	morning	139	75	64	96		Yes	No	Yes
14/08/2019	22:53	evening	141	69	69	93		No	No	Yes
15/08/2019	10:42	morning	133	81	66	98		No	No	Yes
15/08/2019	22:14	evening	129	84	80	99		No	No	Yes
16/08/2019	09:46	morning	171	81	58	111		No	No	Yes
16/08/2019	22:05	evening	120	67	69	85		No	No	Yes
17/08/2019	08:24	morning	129	85	60	100		Yes	No	Yes
17/08/2019	23:21	evening	142	80	69	101		No	No	Yes
18/08/2019	08:50	morning	148	78	61	101		No	No	Yes
18/08/2019	22:00	evening							Not measured	No
19/08/2019	07:00	morning							Not measured	No
19/08/2019	23:22	evening	183	88	69	120		No	No	Yes
20/08/2019	07:58	morning	142	75	61	97		No	No	Yes
20/08/2019	23:49	evening	110	75	74	87		Yes	No	Yes
21/08/2019	05:28	morning	125	73	69	90		No	No	Yes
21/08/2019	23:06	evening	162	73	64	103		No	No	Yes
22/08/2019	08:20	morning	129	83	63	98		No	No	Yes
22/08/2019	23:46	evening	153	84	68	107		No	No	Yes
23/08/2019	10:11	morning	153	75	63	101		No	No	Yes
24/08/2019	00:32		121	65	72	84		No	No	Yes
24/08/2019	09:21	morning	146	78	61	101		No	No	Yes
24/08/2019	21:27	evening	139	78	71	98		No	No	Yes
25/08/2019	08:26	morning	129	74	64	92		No	No	Yes
25/08/2019	19:52	evening	136	76	74	96		No	No	Yes
26/08/2019	07:00	morning							Not measured	No

26/08/2019	21:11	evening	153	74	71	100		No	No	Yes
27/08/2019	08:46	morning	129	84	63	99		No	No	Yes
27/08/2019	23:55	evening	153	76	66	102		No	No	Yes
28/08/2019	09:34	morning	160	99	63	119		No	No	Yes
28/08/2019	23:23	evening	163	82	64	109		No	No	Yes
29/08/2019	07:32	morning	165	76	61	106		No	No	Yes
29/08/2019	21:33	evening	119	74	74	89		No	No	Yes
30/08/2019	09:10	morning	117	64	74	82		No	No	Yes
31/08/2019	00:20		142	79	79	100		No	No	Yes
31/08/2019	09:27	morning	109	63	72	78		No	No	Yes
31/08/2019	21:44	evening	117	68	74	84		Yes	No	Yes
01/09/2019	09:50	morning	137	72	64	94		No	No	Yes
01/09/2019	21:33	evening	144	65	58	91		No	No	Yes
02/09/2019	08:09	morning	148	76	66	100		No	No	Yes
02/09/2019	20:48	evening	129	82	61	98		No	No	Yes
03/09/2019	09:40	morning	103	71	80	82		No	No	Yes
03/09/2019	21:21	evening	132	72	64	92		No	No	Yes
04/09/2019	10:22	morning	127	71	71	90		No	No	Yes
04/09/2019	20:59	evening	132	74	66	93		No	No	Yes
05/09/2019	10:19	morning	136	71	66	93		No	No	Yes
05/09/2019	21:37	evening	143	76	61	98		No	No	Yes
06/09/2019	09:37	morning	149	70	72	96		No	No	Yes
06/09/2019	23:39	evening	109	58	66	75		No	No	Yes
07/09/2019	10:40	morning	94	60	77	71		No	No	Yes
07/09/2019	21:53	evening	131	70	68	90		No	No	Yes
08/09/2019	09:06	morning	176	90	68	119		No	No	Yes
08/09/2019	20:15	evening	133	73	68	93		No	No	Yes
09/09/2019	08:40	morning	150	80	80	103		No	No	Yes
09/09/2019	20:02	evening	140	75	64	97		No	No	Yes
10/09/2019	10:28	morning	102	69	82	80		No	No	Yes
10/09/2019	20:27	evening	149	68	64	95		No	No	Yes
11/09/2019	10:35	morning	132	81	77	98		No	No	Yes
11/09/2019	19:41	evening	129	84	61	99		Yes	No	Yes
12/09/2019	10:44	morning	141	67	71	92		No	No	Yes
12/09/2019	20:03	evening	137	74	68	95		No	No	Yes
13/09/2019	10:07	morning	122	69	72	87		No	No	Yes
13/09/2019	20:14	evening	156	69	63	98		No	No	Yes
14/09/2019	09:18	morning	130	70	77	90		No	No	Yes
15/09/2019	00:33	evening	122	60	74	81		No	No	Yes
15/09/2019	09:17	morning	147	71	74	96		Yes	No	Yes
15/09/2019	22:00	evening							Not measured	No
16/09/2019	06:23	morning	174	80	69	111		No	No	Yes
16/09/2019	21:57	evening	116	69	66	85		No	No	Yes

<b>Case number:</b>	2
<b>Sex:</b>	Male
<b>Age (years):</b>	63
<b>Height (cm):</b>	172
<b>Weight (kg):</b>	110

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
31/07/2019	19:30	evening	139	93	80	108		No	Yes	Yes
01/08/2019	06:00	morning	157	107	91	124		No	Yes	Yes
01/08/2019	21:00	evening	142	94	90	110		No	Yes	Yes
02/08/2019	06:00	morning	181	82	81	115		No	Yes	Yes
02/08/2019	21:00	evening	142	98	78	113		No	Yes	Yes
03/08/2019	06:00	morning	141	95	69	110		No	Yes	Yes
03/08/2019	21:00	evening	153	99	76	117		No	Yes	Yes
04/08/2019	07:00	morning	147	109	73	122		No	Yes	Yes

<b>Case number:</b>	3
<b>Sex:</b>	Male
<b>Age (years):</b>	26
<b>Height (cm):</b>	168
<b>Weight (kg):</b>	84

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
11/07/2019	07:00	morning	118	81	74	93		Not measured	Yes	Yes
11/07/2019	22:00	evening	121	80	72	94		Not measured	Yes	Yes
12/07/2019	07:00	morning	119	79	68	92		Not measured	Yes	Yes
12/07/2019	22:00	evening	121	81	72	94		Not measured	Yes	Yes
13/07/2019	07:00	morning	120	82	71	95		Not measured	Yes	Yes
13/07/2019	22:00	evening	119	82	66	94		Not measured	Yes	Yes
14/07/2019	07:00	morning	119	80	64	93		Not measured	Yes	Yes
14/07/2019	22:00	evening	120	80	69	93		Not measured	Yes	Yes
15/07/2019	07:00	morning	121	80	68	94		Not measured	Yes	Yes
15/07/2019	22:00	evening	119	79	65	92		Not measured	Yes	Yes
16/07/2019	07:00	morning	120	81	69	94		Not measured	Yes	Yes
16/07/2019	22:00	evening	118	80	71	93		Not measured	Yes	Yes
17/07/2019	07:00	morning	119	80	67	93		Not measured	Yes	Yes
17/07/2019	22:00	evening	121	80	71	94		Not measured	Yes	Yes
18/07/2019	07:00	morning	120	82	70	95		Not measured	Yes	Yes
18/07/2019	22:00	evening	119	80	64	93		Not measured	Yes	Yes

19/07/2019	07:00	morning	118	79	68	92		Not measured	Yes	Yes
19/07/2019	22:00	evening	121	80	72	94		Not measured	Yes	Yes
20/07/2019	07:00	morning	120	82	67	95		Not measured	Yes	Yes
20/07/2019	22:00	evening	119	80	69	93		Not measured	Yes	Yes
21/07/2019	07:00	morning	121	81	68	94		Not measured	Yes	Yes
21/07/2019	22:00	evening	121	80	74	94		Not measured	Yes	Yes
22/07/2019	07:00	morning	120	82	66	95		Not measured	Yes	Yes
22/07/2019	22:00	evening	118	80	69	93		Not measured	Yes	Yes
23/07/2019	07:00	morning	119	80	67	93		Not measured	Yes	Yes
23/07/2019	22:00	evening	119	81	70	94		Not measured	Yes	Yes
24/07/2019	07:00	morning	121	79	63	93		Not measured	Yes	Yes
24/07/2019	22:00	evening	120	80	67	93		Not measured	Yes	Yes
25/07/2019	07:00	morning	121	81	62	94		Not measured	Yes	Yes
25/07/2019	22:00	evening	121	80	70	94		Not measured	Yes	Yes
26/07/2019	07:00	morning	120	82	66	95		Not measured	Yes	Yes
26/07/2019	22:00	evening	121	80	69	94		Not measured	Yes	Yes
27/07/2019	07:00	morning	120	80	68	93		Not measured	Yes	Yes
27/07/2019	22:00	evening	119	81	65	94		Not measured	Yes	Yes
28/07/2019	07:00	morning	121	80	67	94		Not measured	Yes	Yes
28/07/2019	22:00	evening	119	81	69	94		Not measured	Yes	Yes
29/07/2019	07:00	morning	120	79	68	93		Not measured	Yes	Yes
29/07/2019	22:00	evening	121	81	66	94		Not measured	Yes	Yes
30/07/2019	07:00	morning	120	81	63	94		Not measured	Yes	Yes
30/07/2019	22:00	evening	121	81	66	94		Not measured	Yes	Yes
31/07/2019	07:00	morning	120	80	66	93		Not measured	Yes	Yes
31/07/2019	22:00	evening	119	81	69	94		Not measured	Yes	Yes
01/08/2019	07:00	morning	121	80	68	94		Not measured	Yes	Yes
01/08/2019	22:00	evening	120	82	68	95		Not measured	Yes	Yes
02/08/2019	07:00	morning	119	81	69	94		Not measured	Yes	Yes
02/08/2019	22:00	evening	120	80	67	93		Not measured	Yes	Yes
03/08/2019	07:00	morning	117	78	69	91		Not measured	Yes	Yes
03/08/2019	22:00	evening	119	79	78	92		Not measured	Yes	Yes
04/08/2019	07:00	morning	120	81	66	94		Not measured	Yes	Yes
04/08/2019	22:00	evening	119	80	68	93		Not measured	Yes	Yes
05/08/2019	07:00	morning	121	80	66	94		Not measured	Yes	Yes
05/08/2019	22:00	evening	119	80	64	93		Not measured	Yes	Yes
06/08/2019	07:00	morning	121	81	69	94		Not measured	Yes	Yes
06/08/2019	22:00	evening	120	80	67	93		Not measured	Yes	Yes
07/08/2019	07:00	morning	120	81	68	94		Not measured	Yes	Yes
07/08/2019	22:00	evening	121	80	69	94		Not measured	Yes	Yes
08/08/2019	07:00	morning	121	82	66	95		Not measured	Yes	Yes
08/08/2019	22:00	evening	120	80	65	93		Not measured	Yes	Yes
09/08/2019	07:00	morning	121	82	68	95		Not measured	Yes	Yes
09/08/2019	22:00	evening	120	81	71	94		Not measured	Yes	Yes
10/08/2019	07:00	morning	119	80	64	93		Not measured	Yes	Yes

10/08/2019	22:00	evening	120	79	66	93		Not measured	Yes	Yes
11/08/2019	07:00	morning	120	82	67	95		Not measured	Yes	Yes
11/08/2019	22:00	evening	121	81	67	94		Not measured	Yes	Yes
12/08/2019	07:00	morning	121	80	66	94		Not measured	Yes	Yes
12/08/2019	22:00	evening	120	82	68	95		Not measured	Yes	Yes
13/08/2019	07:00	morning	121	80	66	94		Not measured	Yes	Yes
13/08/2019	22:00	evening	122	81	69	95		Not measured	Yes	Yes
14/08/2019	07:00	morning	120	82	64	95		Not measured	Yes	Yes
14/08/2019	22:00	evening	121	81	71	94		Not measured	Yes	Yes
15/08/2019	07:00	morning	120	81	64	94		Not measured	Yes	Yes
15/08/2019	22:00	evening	120	82	69	95		Not measured	Yes	Yes
16/08/2019	07:00	morning	117	79	69	92		Not measured	Yes	Yes
16/08/2019	22:00	evening	119	78	77	92		Not measured	Yes	Yes
17/08/2019	07:00	morning	120	80	64	93		Not measured	Yes	Yes
17/08/2019	22:00	evening	121	82	67	95		Not measured	Yes	Yes
18/08/2019	07:00	morning	121	81	68	94		Not measured	Yes	Yes
18/08/2019	22:00	evening	120	82	65	95		Not measured	Yes	Yes
19/08/2019	07:00	morning	118	78	68	91		Not measured	Yes	Yes
19/08/2019	22:00	evening	119	80	76	93		Not measured	Yes	Yes
20/08/2019	07:00	morning	121	81	69	94		Not measured	Yes	Yes
20/08/2019	22:00	evening	122	80	66	94		Not measured	Yes	Yes
21/08/2019	07:00	morning	122	80	68	94		Not measured	Yes	Yes
21/08/2019	22:00	evening	121	81	70	94		Not measured	Yes	Yes
22/08/2019	07:00	morning	118	79	72	92		Not measured	Yes	Yes
22/08/2019	22:00	evening	119	82	78	94		Not measured	Yes	Yes
23/08/2019	07:00	morning	120	81	64	94		Not measured	Yes	Yes
23/08/2019	22:00	evening	121	82	65	95		Not measured	Yes	Yes
24/08/2019	07:00	morning	121	82	66	95		Not measured	Yes	Yes
24/08/2019	22:00	evening	120	80	68	93		Not measured	Yes	Yes
25/08/2019	07:00	morning	120	82	62	95		Not measured	Yes	Yes
25/08/2019	22:00	evening	121	81	68	94		Not measured	Yes	Yes
26/08/2019	07:00	morning	122	80	66	94		Not measured	Yes	Yes
26/08/2019	22:00	evening	119	81	67	94		Not measured	Yes	Yes
27/08/2019	07:00	morning	121	82	67	95		Not measured	Yes	Yes
27/08/2019	22:00	evening	120	80	69	93		Not measured	Yes	Yes
28/08/2019	07:00	morning	121	81	63	94		Not measured	Yes	Yes
28/08/2019	22:00	evening	120	80	68	93		Not measured	Yes	Yes
29/08/2019	07:00	morning	120	82	68	95		Not measured	Yes	Yes
29/08/2019	22:00	evening	120	81	66	94		Not measured	Yes	Yes
30/08/2019	07:00	morning	121	81	69	94		Not measured	Yes	Yes
30/08/2019	22:00	evening	119	80	68	93		Not measured	Yes	Yes
31/08/2019	07:00	morning	117	80	69	92		Not measured	Yes	Yes
31/08/2019	22:00	evening	119	79	79	92		Not measured	Yes	Yes
01/09/2019	07:00	morning	121	77	73	92		Not measured	Yes	Yes
01/09/2019	22:00	evening	119	81	79	94		Not measured	Yes	Yes

02/09/2019	07:00	morning	119	79	71	92		Not measured	Yes	Yes
02/09/2019	22:00	evening	118	80	79	93		Not measured	Yes	Yes
03/09/2019	07:00	morning	117	79	69	92		Not measured	Yes	Yes
03/09/2019	22:00	evening	119	80	81	93		Not measured	Yes	Yes
04/09/2019	07:00	morning	117	79	74	92		Not measured	Yes	Yes
04/09/2019	22:00	evening	119	81	77	94		Not measured	Yes	Yes
05/09/2019	07:00	morning	121	82	69	95		Not measured	Yes	Yes
05/09/2019	22:00	evening	120	81	72	94		Not measured	Yes	Yes
06/09/2019	07:00	morning	120	80	70	93		Not measured	Yes	Yes
06/09/2019	22:00	evening	121	82	74	95		Not measured	Yes	Yes
07/09/2019	07:00	morning	117	80	72	92		Not measured	Yes	Yes
07/09/2019	22:00	evening	119	79	77	92		Not measured	Yes	Yes
08/09/2019	07:00	morning	120	82	70	95		Not measured	Yes	Yes
08/09/2019	22:00	evening	121	80	71	94		Not measured	Yes	Yes
09/09/2019	07:00	morning	122	81	64	95		Not measured	Yes	Yes
09/09/2019	22:00	evening	120	80	66	93		Not measured	Yes	Yes
10/09/2019	07:00	morning	121	81	64	94		Not measured	Yes	Yes
10/09/2019	22:00	evening	120	82	68	95		Not measured	Yes	Yes
11/09/2019	07:00	morning	120	82	63	95		Not measured	Yes	Yes
11/09/2019	22:00	evening	119	80	65	93		Not measured	Yes	Yes
12/09/2019	07:00	morning	121	81	67	94		Not measured	Yes	Yes
12/09/2019	22:00	evening	120	79	65	93		Not measured	Yes	Yes
13/09/2019	07:00	morning	117	82	72	94		Not measured	Yes	Yes
13/09/2019	22:00	evening	119	79	79	92		Not measured	Yes	Yes
14/09/2019	07:00	morning	122	78	78	93		Not measured	Yes	Yes
14/09/2019	22:00	evening	119	79	81	92		Not measured	Yes	Yes
15/09/2019	07:00	morning	117	80	77	92		Not measured	Yes	Yes
15/09/2019	22:00	evening	119	79	79	92		Not measured	Yes	Yes
16/09/2019	07:00	morning	120	82	69	95		Not measured	Yes	Yes
16/09/2019	22:00	evening	121	79	71	93		Not measured	Yes	Yes
17/09/2019	07:00	morning	120	82	66	95		Not measured	Yes	Yes
17/09/2019	22:00	evening	119	80	67	93		Not measured	Yes	Yes
18/09/2019	07:00	morning	121	81	66	94		Not measured	Yes	Yes
18/09/2019	22:00	evening	120	82	68	95		Not measured	Yes	Yes

<b>Case number:</b>	4
<b>Sex:</b>	Male
<b>Age (years):</b>	83
<b>Height (cm):</b>	170
<b>Weight (kg):</b>	115

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
31/07/2019	19:30	evening	168	91	95	117		Not measured	Yes	Yes
01/08/2019	06:00	morning	173	99	80	124		Not measured	Yes	Yes
01/08/2019	21:00	evening	167	100	87	122		Not measured	Yes	Yes
02/08/2019	06:00	morning	178	99	89	125		Not measured	Yes	Yes
02/08/2019	21:00	evening	146	81	85	103		Not measured	Yes	Yes
03/08/2019	06:00	morning	174	106	99	129		Not measured	Yes	Yes
03/08/2019	21:00	evening	159	92	86	114		Not measured	Yes	Yes
04/08/2019	07:30	morning	194	119	81	144		Not measured	Yes	Yes

<b>Case number:</b>	5
<b>Sex:</b>	Male
<b>Age (years):</b>	76
<b>Height (cm):</b>	182
<b>Weight (kg):</b>	96

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
03/08/2019	21:59	evening	141	88	61	106		No	No	Yes
04/08/2019	05:11	morning	129	83	61	98		No	No	Yes
04/08/2019	20:57	evening	93	58	74	70		No	No	Yes
05/08/2019	05:26	morning	133	75	64	94		No	No	Yes
05/08/2019	23:37	evening	124	71	74	89		No	No	Yes
06/08/2019	05:15	morning	122	71	64	88		No	No	Yes
06/08/2019	22:01	evening	118	68	74	85		No	No	Yes
07/08/2019	05:02	morning	119	64	63	82		No	No	Yes
07/08/2019	20:17	evening	137	61	74	86		No	No	Yes
08/08/2019	05:22	morning	144	89	63	107		No	No	Yes
08/08/2019	21:17	evening	142	70	72	94		No	No	Yes
09/08/2019	06:07	morning	119	64	61	82		No	No	Yes
09/08/2019	22:34	evening	133	85	71	101		No	No	Yes
10/08/2019	06:10	morning	115	65	61	82		No	No	Yes
10/08/2019	23:15	evening	109	59	74	76		No	No	Yes

11/08/2019	04:26	morning	124	63	61	83		No	No	Yes
11/08/2019	21:22	evening	98	55	74	69		No	No	Yes
12/08/2019	06:30	morning	131	83	61	99		No	No	Yes
12/08/2019	21:37	evening	108	76	77	87		No	No	Yes
13/08/2019	04:57	morning	149	93	66	112		No	No	Yes
13/08/2019	20:31	evening	110	62	66	78		No	No	Yes
14/08/2019	04:46	morning	142	79	60	100		No	No	Yes
14/08/2019	21:51	evening	137	77	66	97		No	No	Yes
15/08/2019	05:40	morning	144	93	66	110		No	No	Yes
15/08/2019	20:17	evening	135	68	72	90		No	No	Yes
16/08/2019	06:13	morning	146	85	63	105		No	No	Yes
16/08/2019	22:46	evening	121	67	74	85		No	No	Yes
17/08/2019	05:53	morning	139	75	61	96		No	No	Yes
17/08/2019	22:30	evening	116	72	70	87		No	No	Yes
18/08/2019	06:07	morning	133	82	66	99		No	No	Yes
18/08/2019	22:28	evening	120	74	71	89		No	No	Yes
19/08/2019	05:05	morning	152	53	58	86		No	No	Yes
19/08/2019	21:25	evening	107	65	77	79		No	No	Yes
20/08/2019	05:17	morning	127	73	66	91		No	No	Yes
20/08/2019	11:27	evening	119	66	60	84		No	No	Yes
21/08/2019	06:26	morning	136	66	61	89		No	No	Yes
21/08/2019	21:51	evening	117	66	76	83		No	No	Yes
22/08/2019	04:55	morning	129	83	60	98		No	No	Yes
22/08/2019	22:30	evening	125	78	77	94		No	No	Yes
23/08/2019	04:13	morning	148	84	61	105		No	No	Yes
23/08/2019	18:44	evening	135	76	74	96		No	No	Yes
24/08/2019	04:24	morning	142	81	61	101		No	No	Yes
24/08/2019	22:16	evening	138	97	85	111		Yes	No	Yes
25/08/2019	05:25	morning	144	57	72	86		No	No	Yes
25/08/2019	20:52	evening	130	73	76	92		No	No	Yes
26/08/2019	06:35	morning	140	73	64	95		No	No	Yes
26/08/2019	22:00	evening							Not measured	No
27/08/2019	04:56	morning	147	88	63	108		No	No	Yes
28/08/2019	01:01	evening	129	82	61	98		No	No	Yes
28/08/2019	06:32	morning	149	82	64	104		No	No	Yes
28/08/2019	06:34	morning	121	78	72	92		No	No	Yes
28/08/2019	20:33	evening	135	95	82	108		No	No	Yes
29/08/2019	04:41	morning	115	66	63	82		No	No	Yes
30/08/2019	00:33	evening	126	81	66	96		No	No	Yes
30/08/2019	05:38	morning	129	84	63	99		No	No	Yes
30/08/2019	21:59	evening	128	82	82	97		No	No	Yes
31/08/2019	05:33	morning	140	85	63	103		No	No	Yes
31/08/2019	22:30	evening	132	80	72	97		No	No	Yes
01/09/2019	04:24	morning	129	83	61	98		Yes	No	Yes
01/09/2019	22:28	evening	134	89	69	104		No	No	Yes



02/09/2019	06:28	morning	103	68	58	80		No	No	Yes
02/09/2019	21:57	evening	116	71	72	86		No	No	Yes
03/09/2019	05:11	morning	129	83	61	98		No	No	Yes
03/09/2019	21:12	evening	120	67	66	85		No	No	Yes
04/09/2019	05:13	morning	129	83	60	98		No	No	Yes
04/09/2019	23:57	evening	124	75	64	91		No	No	Yes
05/09/2019	04:34	morning	115	83	61	94		No	No	Yes
05/09/2019	22:47	evening	121	75	66	90		No	No	Yes
06/09/2019	04:39	morning	123	80	66	94		Yes	No	Yes
06/09/2019	22:11	evening	102	68	71	79		Yes	No	Yes
07/09/2019	06:52	morning	132	81	64	98		No	No	Yes
07/09/2019	22:11	evening	114	62	69	79		No	No	Yes

<b>Case number:</b>	6
<b>Sex:</b>	Female
<b>Age (years):</b>	46
<b>Height (cm):</b>	172
<b>Weight (kg):</b>	63

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
04/08/2019	23:22	evening	59	40	66	46		No	No	Yes
05/08/2019	09:02	morning	71	60	72	64		No	No	Yes
05/08/2019	23:08	evening	86	59	69	68		No	No	Yes
06/08/2019	09:03	morning	92	57	63	69		No	No	Yes
06/08/2019	23:51	evening	92	54	61	67		Yes	No	Yes
08/08/2019	09:13	morning	83	51	61	62		No	No	Yes
08/08/2019	22:00	evening	79	58	68	65		No	No	Yes
09/08/2019	10:01	morning	89	59	66	69		No	No	Yes
09/08/2019	21:37	evening	83	58	69	66		Yes	No	Yes
10/08/2019	09:59	morning	91	56	60	68		No	No	Yes
10/08/2019	22:44	evening	82	56	72	65		No	No	Yes
11/08/2019	10:51	morning	86	58	74	67		No	No	Yes
11/08/2019	23:57	evening	76	55	56	62		No	No	Yes
12/08/2019	11:28	morning	83	62	76	69		No	No	Yes
12/08/2019	21:56	evening	68	52	64	57		Yes	No	Yes
13/08/2019	09:17	morning	96	63	72	74		No	No	Yes
13/08/2019	22:04	evening	90	59	66	69		No	No	Yes
14/08/2019	09:33	morning	100	58	61	72		No	No	Yes
14/08/2019	20:33	evening	81	55	66	64		Yes	No	Yes
15/08/2019	08:48	morning	93	64	64	74		No	No	Yes

15/08/2019	22:07	evening	72	50	69	57		Yes	No	Yes
16/08/2019	08:48	morning	91	57	66	68		No	No	Yes
16/08/2019	23:10	evening	91	45	77	60		No	No	Yes
17/08/2019	11:45	morning	103	60	74	74		No	No	Yes
17/08/2019	21:13	evening	90	62	76	71		No	No	Yes
18/08/2019	11:57	morning	110	63	85	79		No	No	Yes
18/08/2019	22:36	evening	95	62	78	73		No	No	Yes
19/08/2019	08:26	morning	86	61	77	69		No	No	Yes
19/08/2019	21:55	evening	80	56	75	64		No	No	Yes
20/08/2019	08:15	morning	89	55	79	66		No	No	Yes
20/08/2019	23:08	evening	90	63	69	72		No	No	Yes
21/08/2019	11:44	morning	103	69	82	80		No	No	Yes
21/08/2019	11:27	evening	91	55	80	67		Yes	No	Yes
22/08/2019	08:16	morning	87	63	74	71		No	No	Yes
22/08/2019	22:10	evening	78	44	72	55		Yes	No	Yes
23/08/2019	07:53	morning	89	62	69	71		Yes	No	Yes
23/08/2019	23:36	evening	83	46	68	58		No	No	Yes
24/08/2019	08:33	morning	98	54	61	69		Yes	No	Yes
24/08/2019	23:42	evening	102	69	84	80		No	No	Yes
25/08/2019	11:33	morning	106	72	77	83		No	No	Yes
25/08/2019	22:46	evening	100	67	74	78		No	No	Yes
26/08/2019	08:37	morning	83	63	88	70		No	No	Yes
26/08/2019	23:33	evening	89	56	80	67		No	No	Yes
27/08/2019	08:18	morning	81	67	82	72		No	No	Yes
27/08/2019	11:35	evening	98	55	80	69		No	No	Yes
28/08/2019	08:22	morning	96	57	72	70		No	No	Yes
28/08/2019	23:50	evening	86	63	74	71		No	No	Yes
29/08/2019	08:43	morning	87	56	77	66		Yes	No	Yes
29/08/2019	21:40	evening	72	57	80	62		No	No	Yes
30/08/2019	08:23	morning	104	70	80	81		No	No	Yes
30/08/2019	20:19	evening	76	56	80	63		No	No	Yes
31/08/2019	11:30	morning	99	46	84	64		Yes	No	Yes
31/08/2019	20:51	evening	86	49	69	61		No	No	Yes
01/09/2019	11:34	morning	90	65	92	73		No	No	Yes
01/09/2019	21:50	evening	99	67	71	78		No	No	Yes
02/09/2019	08:48	morning	89	62	72	71		No	No	Yes
02/09/2019	23:04	evening	104	61	66	75		No	No	Yes
03/09/2019	09:54	morning	90	64	66	73		No	No	Yes
03/09/2019	23:04	evening	113	56	66	75		No	No	Yes
04/09/2019	10:33	morning	111	68	72	82		No	No	Yes
04/09/2019	23:36	evening	83	46	68	58		No	No	Yes

<b>Case number:</b>	7
<b>Sex:</b>	Female
<b>Age (years):</b>	72
<b>Height (cm):</b>	168
<b>Weight (kg):</b>	69

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
05/08/2019	06:57	morning	130	83	79	99		No	No	Yes
05/08/2019	21:14	evening	124	72	72	89		No	No	Yes
06/08/2019	07:00	morning							Not measured	No
06/08/2019	21:00	evening							Not measured	No
07/08/2019	06:40	morning	129	55	61	80		No	No	Yes
07/08/2019	23:09	evening	193	122	76	146		No	No	Yes
08/08/2019	08:08	morning	124	84	71	97		No	No	Yes
08/08/2019	20:56	evening	119	69	69	86		No	No	Yes
09/08/2019	07:40	morning	128	83	61	98		No	No	Yes
09/08/2019	21:19	evening	104	71	82	82		No	No	Yes
10/08/2019	08:11	morning	128	72	69	91		No	No	Yes
10/08/2019	21:57	evening	136	62	66	87		No	No	Yes
11/08/2019	08:19	morning	129	82	61	98		No	No	Yes
11/08/2019	22:03	evening	99	57	80	71		No	No	Yes
12/08/2019	07:29	morning	122	65	61	84		No	No	Yes
12/08/2019	21:48	evening	140	73	66	95		No	No	Yes
13/08/2019	07:37	morning	107	69	64	82		No	No	Yes
13/08/2019	19:15	evening	129	71	76	90		No	No	Yes
14/08/2019	07:50	morning	125	74	64	91		No	No	Yes
14/08/2019	19:36	evening	124	75	74	91		No	No	Yes
15/08/2019	07:11	morning	139	89	60	106		No	No	Yes
15/08/2019	21:24	evening	128	84	82	99		No	No	Yes
16/08/2019	08:06	morning	119	88	71	98		No	No	Yes
16/08/2019	21:49	evening	135	72	72	93		No	No	Yes
17/08/2019	08:19	morning	129	85	61	100		Yes	No	Yes
17/08/2019	21:34	evening	129	83	79	98		No	No	Yes
18/08/2019	08:41	morning	110	78	69	89		No	No	Yes
18/08/2019	22:26	evening	107	72	84	84		Yes	No	Yes
19/08/2019	07:57	morning	124	71	69	89		No	No	Yes
19/08/2019	19:46	evening	129	83	79	98		No	No	Yes
20/08/2019	08:31	morning	98	85	82	89		Yes	No	Yes
20/08/2019	21:01	evening	139	82	72	101		No	No	Yes
21/08/2019	07:56	morning	112	79	68	90		No	No	Yes
21/08/2019	20:55	evening	130	82	80	98		No	No	Yes
22/08/2019	07:17	morning	116	79	66	91		No	No	Yes

22/08/2019	21:14	evening	119	94	85	102	Yes	No	Yes
23/08/2019	07:21	morning	135	68	64	90	Yes	No	Yes
23/08/2019	19:28	evening	128	82	82	97	No	No	Yes
24/08/2019	07:42	morning	116	76	69	89	No	No	Yes
24/08/2019	20:20	evening	120	73	76	89	Yes	No	Yes
25/08/2019	07:38	morning	108	74	64	85	No	No	Yes
25/08/2019	19:03	evening	128	82	80	97	No	No	Yes
26/08/2019	07:38	morning	112	72	69	85	Yes	No	Yes
26/08/2019	20:48	evening	118	81	84	93	No	No	Yes
27/08/2019	07:51	morning	111	75	66	87	No	No	Yes
27/08/2019	20:58	evening	111	70	85	84	No	No	Yes
28/08/2019	07:44	morning	132	66	60	88	No	No	Yes
28/08/2019	19:17	evening	122	70	68	87	No	No	Yes
29/08/2019	08:19	morning	112	63	80	79	No	No	Yes
29/08/2019	21:28	evening	121	73	76	89	No	No	Yes
30/08/2019	07:28	morning	116	64	64	81	No	No	Yes
30/08/2019	21:03	evening	103	68	79	80	Yes	No	Yes
31/08/2019	07:29	morning	109	75	76	86	No	No	Yes
31/08/2019	21:37	evening	125	84	85	98	No	No	Yes
01/09/2019	07:48	morning	117	78	64	91	No	No	Yes
01/09/2019	20:57	evening	128	82	79	97	No	No	Yes
02/09/2019	07:48	morning	120	75	66	90	No	No	Yes
02/09/2019	20:51	evening	129	82	82	98	No	No	Yes
03/09/2019	07:43	morning	129	85	58	100	No	No	Yes

<b>Case number:</b>	8
<b>Sex:</b>	Male
<b>Age (years):</b>	75
<b>Height (cm):</b>	178
<b>Weight (kg):</b>	75

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
06/08/2019	22:17	evening	121	74	69	90		No	No	Yes
07/08/2019	07:38	morning	176	83	72	114		No	No	Yes
07/08/2019	23:12	evening	119	68	72	85		No	No	Yes
08/08/2019	08:16	morning	156	107	74	123		No	No	Yes
08/08/2019	22:24	evening	101	65	88	77		No	No	Yes
09/08/2019	07:58	morning	141	91	69	108		No	No	Yes
09/08/2019	21:24	evening	129	84	80	99		No	No	Yes
10/08/2019	08:11	morning	136	79	79	98		No	No	Yes
10/08/2019	21:57	evening	132	57	80	82		No	No	Yes

11/08/2019	08:19	morning	111	72	71	85		No	No	Yes
11/08/2019	22:03	evening	111	82	77	92		Yes	No	Yes
12/08/2019	08:03	morning	135	93	74	107		No	No	Yes
12/08/2019	21:50	evening	127	78	77	94		No	No	Yes
13/08/2019	07:39	morning	129	92	76	104		No	No	Yes
13/08/2019	19:12	evening	120	85	72	97		No	No	Yes
14/08/2019	07:48	morning	128	95	80	106		No	No	Yes
14/08/2019	21:08	evening	136	90	71	105		No	No	Yes
15/08/2019	07:09	morning	152	84	64	107		No	No	Yes
15/08/2019	21:24	evening	113	62	72	79		No	No	Yes
16/08/2019	07:56	morning	150	75	77	100		No	No	Yes
16/08/2019	21:47	evening	109	81	77	90		No	No	Yes
17/08/2019	08:15	morning	145	90	72	108		No	No	Yes
17/08/2019	21:15	evening	141	84	74	103		No	No	Yes
18/08/2019	08:24	morning	130	75	74	93		No	No	Yes
18/08/2019	22:16	evening	140	72	80	95		No	No	Yes
19/08/2019	07:57	morning	153	98	72	116		Yes	No	Yes
19/08/2019	20:49	evening	116	74	74	88		No	No	Yes
20/08/2019	08:37	morning	132	92	79	105		No	No	Yes
20/08/2019	21:13	evening	137	86	69	103		No	No	Yes
21/08/2019	07:51	morning	127	83	69	98		No	No	Yes
21/08/2019	20:55	evening	105	70	79	82		No	No	Yes
22/08/2019	07:21	morning	128	83	80	98		No	No	Yes
22/08/2019	21:15	evening	111	76	77	88		No	No	Yes
23/08/2019	07:32	morning	142	88	69	106		No	No	Yes
23/08/2019	19:30	evening	124	76	66	92		No	No	Yes
24/08/2019	07:36	morning	130	84	64	99		No	No	Yes
24/08/2019	20:22	evening	114	75	76	88		No	No	Yes
25/08/2019	07:39	morning	123	85	69	98		No	No	Yes
25/08/2019	20:53	evening	117	62	72	80		No	No	Yes
26/08/2019	07:38	morning	123	82	71	96		No	No	Yes
26/08/2019	20:46	evening	120	78	74	92		No	No	Yes
27/08/2019	07:48	morning	129	79	69	96		No	No	Yes
27/08/2019	20:56	evening	132	82	74	99		No	No	Yes
28/08/2019	07:39	morning	130	99	74	109		No	No	Yes
28/08/2019	21:02	evening	105	54	72	71		No	No	Yes
29/08/2019	07:23	morning	128	83	61	98		No	No	Yes
29/08/2019	21:28	evening	125	67	77	86		No	No	Yes
30/08/2019	07:34	morning	112	74	72	87		Yes	No	Yes
30/08/2019	21:04	evening	114	76	68	89		No	No	Yes
31/08/2019	07:34	morning	127	57	69	80		Yes	No	Yes
31/08/2019	21:48	evening	115	64	76	81		No	No	Yes
01/09/2019	07:59	morning	129	84	61	99		Yes	No	Yes
01/09/2019	20:58	evening	109	71	69	84		No	No	Yes
02/09/2019	07:50	morning	131	67	71	88		No	No	Yes

02/09/2019	20:27	evening	125	75	77	92		No	No	Yes
03/09/2019	07:50	morning	129	64	79	86		No	No	Yes
03/09/2019	20:28	evening	106	48	66	67		No	No	Yes
04/09/2019	08:06	morning	144	72	69	96		No	No	Yes
04/09/2019	20:54	evening	98	67	82	77		No	No	Yes
05/09/2019	07:32	morning	129	84	82	99		No	No	Yes
05/09/2019	20:37	evening	123	85	71	98		No	No	Yes
06/09/2019	07:41	morning	129	82	82	98		No	No	Yes
06/09/2019	21:02	evening	125	73	74	90		No	No	Yes
07/09/2019	07:40	morning	132	78	64	96		No	No	Yes

<b>Case number:</b>	9
<b>Sex:</b>	Female
<b>Age (years):</b>	27
<b>Height (cm):</b>	165
<b>Weight (kg):</b>	88

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
09/08/2019	07:37	morning	146	98	106	114		No	No	Yes
09/08/2019	22:09	evening	136	74	92	95		No	No	Yes
10/08/2019	06:33	morning	135	101	93	112		No	No	Yes
11/08/2019	00:42	evening	131	79	96	96		No	No	Yes
11/08/2019	06:25	morning	146	108	93	121		No	No	Yes
11/08/2019	23:45	evening	127	85	90	99		No	No	Yes
12/08/2019	06:18	morning	127	78	74	94		No	No	Yes
12/08/2019	23:41	evening	127	79	87	95		No	No	Yes
13/08/2019	06:20	morning	147	69	56	95		Yes	No	Yes
13/08/2019	22:25	evening	128	73	92	91		No	No	Yes
14/08/2019	06:21	morning	139	91	80	107		No	No	Yes
15/08/2019	00:13	evening	132	86	85	101		No	No	Yes
14/08/2019	06:01	morning	135	78	77	97		No	No	Yes
15/08/2019	00:07	evening	132	97	82	109		No	No	Yes
15/08/2019	06:25	morning	136	106	85	116		No	No	Yes
15/08/2019	23:33	evening	132	101	79	111		No	No	Yes
16/08/2019	06:29	morning	149	103	82	118		No	No	Yes
17/08/2019	00:17	evening	139	102	88	114		No	No	Yes
17/08/2019	07:00	morning							Not measured	No
17/08/2019	22:00	evening							Not measured	No
18/08/2019	06:30	morning	128	72	69	91		No	No	Yes
18/08/2019	11:22	morning	113	48	76	70		No	No	Yes
19/08/2019	00:25	evening	126	76	88	93		No	No	Yes

19/08/2019	06:29	morning	151	105	88	120		No	No	Yes
19/08/2019	23:56	evening	121	72	85	88		No	No	Yes
20/08/2019	05:50	morning	129	84	80	99		No	No	Yes
20/08/2019	23:09	evening	132	84	93	100		No	No	Yes
21/08/2019	06:25	morning	129	98	98	108		No	No	Yes
22/08/2019	00:30	evening	126	85	74	99		No	No	Yes
22/08/2019	06:16	morning	131	96	85	108		No	No	Yes
22/08/2019	23:49	evening	138	78	80	98		No	No	Yes
23/08/2019	05:46	morning	132	98	85	109		No	No	Yes
23/08/2019	22:00	evening							Not measured	No
24/08/2019	10:07	morning	142	97	98	112		No	No	Yes
24/08/2019	23:46	evening	145	83	93	104		No	No	Yes
25/08/2019	09:22	morning	115	68	74	84		No	No	Yes
25/08/2019	23:33	evening	129	84	82	99		No	No	Yes
26/08/2019	06:19	morning	136	83	90	101		No	No	Yes
27/08/2019	00:29	evening	131	83	80	99		No	No	Yes
27/08/2019	05:44	morning	123	83	72	96		No	No	Yes
27/08/2019	23:47	evening	110	96	80	101		Yes	No	Yes
28/08/2019	05:50	morning	130	96	82	107		No	No	Yes
28/08/2019	23:56	evening	138	80	79	99		No	No	Yes
29/08/2019	06:29	morning	135	77	90	96		No	No	Yes
29/08/2019	23:47	evening	136	86	87	103		No	No	Yes
30/08/2019	06:16	morning	131	84	80	100		No	No	Yes
31/08/2019	01:45	evening	138	55	93	83		Yes	No	Yes
31/08/2019	09:43	morning	129	83	82	98		No	No	Yes
01/09/2019	00:43	evening	132	92	88	105		No	No	Yes
01/09/2019	06:45	morning	129	82	82	98		No	No	Yes
01/09/2019	23:12	evening	145	83	80	104		No	No	Yes
02/09/2019	06:17	morning	135	95	82	108		No	No	Yes
02/09/2019	23:42	evening	130	93	79	105		No	No	Yes
03/09/2019	06:17	morning	126	80	87	95		No	No	Yes
03/09/2019	23:52	evening	134	92	84	106		No	No	Yes
04/09/2019	06:47	morning	130	93	84	105		Yes	No	Yes
05/09/2019	00:02	evening	135	85	96	102		No	No	Yes
05/09/2019	06:24	morning	136	95	93	109		No	No	Yes
05/09/2019	23:12	evening	116	64	95	81		No	No	Yes
06/09/2019	06:41	morning	138	110	93	119		No	No	Yes
07/09/2019	00:38	evening	140	84	74	103		No	No	Yes
07/09/2019	06:23	morning	138	103	95	115		No	No	Yes
08/09/2019	00:18	evening	145	93	85	110		No	No	Yes
08/09/2019	06:23	morning	116	78	72	91		No	No	Yes
09/09/2019	00:25	evening	147	99	96	115		No	No	Yes
09/09/2019	06:18	morning	135	100	98	112		No	No	Yes

<b>Case number:</b>	10
<b>Sex:</b>	Male
<b>Age (years):</b>	26
<b>Height (cm):</b>	175
<b>Weight (kg):</b>	90

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
09/08/2019	07:39	morning	141	83	92	102		No	No	Yes
09/08/2019	22:46	evening	114	56	64	75		Yes	No	Yes
10/08/2019	06:49	morning	124	96	68	105		Yes	No	Yes
10/08/2019	22:00	evening							Not measured	No
11/08/2019	10:55	morning	116	55	56	75		Yes	No	Yes
11/08/2019	23:43	evening	131	73	64	92		Yes	No	Yes
12/08/2019	06:27	morning	124	98	77	107		Yes	No	Yes
12/08/2019	23:43	evening	113	55	66	74		No	No	Yes
13/08/2019	06:33	morning	125	110	76	115		Yes	No	Yes
14/08/2019	00:18	evening	116	75	64	89		No	No	Yes
14/08/2019	06:14	morning	111	78	72	89		No	No	Yes
15/08/2019	00:31	evening	103	54	68	70		No	No	Yes
15/08/2019	06:31	morning	113	76	71	88		Yes	No	Yes
16/08/2019	00:15	evening	115	66	55	82		No	No	Yes
16/08/2019	05:57	morning	128	98	79	108		No	No	Yes
17/08/2019	02:01	evening	126	70	68	89		No	No	Yes
18/08/2019	11:18	morning	145	92	72	110		No	No	Yes
19/08/2019	00:26	evening	114	81	60	92		No	No	Yes
19/08/2019	06:36	morning	130	83	58	99		No	No	Yes
20/08/2019	01:55	evening	118	64	56	82		No	No	Yes
21/08/2019	05:46	morning	108	53	61	71		No	No	Yes
22/08/2019	00:33	evening	100	60	63	73		No	No	Yes
22/08/2019	06:21	morning	116	62	63	80		No	No	Yes
23/08/2019	00:34	evening	103	62	64	76		No	No	Yes
23/08/2019	06:49	morning	117	91	72	100		No	No	Yes
24/08/2019	13:59	evening	147	89	74	108		Yes	No	Yes
25/08/2019	00:27	evening	97	73	72	81		No	No	Yes
25/08/2019	09:24	morning	129	82	66	98		No	No	Yes
26/08/2019	00:42	evening	121	67	71	85		Yes	No	Yes
26/08/2019	06:27	morning	99	55	60	70		Yes	No	Yes
27/08/2019	00:29	evening	103	69	60	80		Yes	No	Yes
27/08/2019	05:52	morning	113	62	56	79		Yes	No	Yes
27/08/2019	23:46	evening	90	57	72	68		Yes	No	Yes
28/08/2019	05:56	morning	108	65	68	79		No	No	Yes
29/08/2019	00:26	evening	104	70	61	81		No	No	Yes
29/08/2019	06:32	morning	103	68	58	80		Yes	No	Yes



29/08/2019	23:53	evening	110	57	72	75		No	No	Yes
30/08/2019	05:49	morning	118	65	66	83		Yes	No	Yes
30/08/2019	22:00	evening							Not measured	No
31/08/2019	10:10	morning	115	76	68	89		No	No	Yes
01/09/2019	00:52	evening	108	67	77	81		No	No	Yes
01/09/2019	07:03	morning	118	81	64	93		No	No	Yes
01/09/2019	22:00	evening							Not measured	No
02/09/2019	06:18	morning	114	71	56	85		Yes	No	Yes
02/09/2019	23:42	evening	109	46	48	67		Yes	No	Yes
03/09/2019	05:51	morning	124	53	60	77		Yes	No	Yes
04/09/2019	00:30	evening	103	69	80	80		Yes	No	Yes
04/09/2019	05:58	morning	105	71	76	82		Yes	No	Yes
05/09/2019	00:33	evening	105	69	58	81		No	No	Yes
05/09/2019	06:25	morning	130	66	60	87		Yes	No	Yes
05/09/2019	23:56	evening	127	87	66	100		No	No	Yes
06/09/2019	06:11	morning	136	97	82	110		No	No	Yes
07/09/2019	00:54	evening	119	78	64	92		No	No	Yes
07/09/2019	07:30	morning	104	69	63	81		Yes	No	Yes
08/09/2019	00:18	evening	109	49	66	69		No	No	Yes
08/09/2019	10:28	morning	129	85	58	100		Yes	No	Yes
09/09/2019	00:45	evening	111	66	69	81		No	No	Yes
09/09/2019	06:22	morning	116	78	64	91		No	No	Yes

<b>Case number:</b>	11
<b>Sex:</b>	Female
<b>Age (years):</b>	68
<b>Height (cm):</b>	162
<b>Weight (kg):</b>	90

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
08/08/2019	07:13	morning	128	100	88	109		No	No	Yes
08/08/2019	20:51	evening	124	81	72	95		No	No	Yes
09/08/2019	06:37	morning	145	105	82	118		No	No	Yes
10/08/2019	06:24	morning	145	87	63	106		No	No	Yes
11/08/2019	06:11	morning	152	100	61	117		Yes	No	Yes
12/08/2019	06:43	morning	134	81	56	99		No	No	Yes
13/08/2019	07:11	morning	129	106	61	114		Yes	No	Yes
14/08/2019	06:56	morning	133	80	64	98		No	No	Yes
15/08/2019	06:44	morning	135	108	71	117		Yes	No	Yes
16/08/2019	07:03	morning	159	100	58	120		No	No	Yes

17/08/2019	06:59	morning	158	100	56	119		No	No	Yes
18/08/2019	06:55	morning	149	99	58	116		No	No	Yes
19/08/2019	06:42	morning	140	100	61	113		No	No	Yes
20/08/2019	07:24	morning	109	87	66	94		Yes	No	Yes
21/08/2019	06:47	morning	129	84	58	99		No	No	Yes
22/08/2019	06:47	morning	152	95	61	114		No	No	Yes
23/08/2019	09:33	morning	150	104	77	119		No	No	Yes
24/08/2019	06:25	morning	118	105	74	109		Yes	No	Yes
25/08/2019	06:24	morning	161	101	61	121		No	No	Yes
26/08/2019	06:06	morning	145	110	64	122		Yes	No	Yes
27/08/2019	06:12	morning	120	78	74	92		No	No	Yes
28/08/2019	06:09	morning	139	99	63	112		No	No	Yes
29/08/2019	06:08	morning	136	95	64	109		No	No	Yes
30/08/2019	06:06	morning	134	79	68	97		No	No	Yes
31/08/2019	06:19	morning	145	95	58	112		No	No	Yes
01/09/2019	06:39	morning	139	79	56	99		No	No	Yes
02/09/2019	06:28	morning	155	80	64	105		No	No	Yes
03/09/2019	07:05	morning	146	80	60	102		No	No	Yes
04/09/2019	07:05	morning	159	99	58	119		No	No	Yes
05/09/2019	07:23	morning	147	93	66	111		No	No	Yes
06/09/2019	07:08	morning	149	86	58	107		No	No	Yes
07/09/2019	06:59	morning	148	93	60	111		No	No	Yes
08/09/2019	08:42	morning	139	97	61	111		No	No	Yes
09/09/2019	07:20	morning	150	107	66	121		Yes	No	Yes
10/09/2019	07:03	morning	130	91	58	104		No	No	Yes
11/09/2019	07:17	morning	150	104	58	119		No	No	Yes

<b>Case number:</b>	12
<b>Sex:</b>	Female
<b>Age (years):</b>	48
<b>Height (cm):</b>	175
<b>Weight (kg):</b>	62

Date	Time	Time of the day	Systolic	Diastolic	Heart rate	MAP	WHO	Heart arrhythmia	Manually	Include into the analysis
15/08/2019	08:14	morning	94	58	77	70		No	No	Yes
15/08/2019	21:26	evening	90	68	80	75		No	No	Yes
16/08/2019	06:19	morning	82	59	77	67		No	No	Yes
16/08/2019	21:03	evening	88	60	79	69		No	No	Yes
17/08/2019	07:31	morning	90	62	73	71		No	No	Yes
17/08/2019	22:01	evening	89	59	68	69		Yes	No	Yes
18/08/2019	07:51	morning	96	55	74	69		No	No	Yes

19/08/2019	00:14	evening	65	35	77	45		No	No	Yes
19/08/2019	06:27	morning	87	50	66	62		No	No	Yes
19/08/2019	21:14	evening	90	58	75	69		No	No	Yes
20/08/2019	06:50	morning	85	53	70	64		Yes	No	Yes
20/08/2019	22:53	evening	76	42	79	53		No	No	Yes
21/08/2019	06:21	morning	74	40	80	51		No	No	Yes
21/08/2019	21:44	evening	88	39	77	55		No	No	Yes
22/08/2019	06:42	morning	87	58	72	68		No	No	Yes
22/08/2019	22:38	evening	86	55	66	65		No	No	Yes
23/08/2019	07:09	morning	86	62	80	70		No	No	Yes
23/08/2019	20:59	evening	90	56	80	67		No	No	Yes
24/08/2019	07:58	morning	91	59	66	70		No	No	Yes
24/08/2019	23:56	evening	98	66	75	78		No	No	Yes
25/08/2019	09:41	morning	81	58	77	66		No	No	Yes
25/08/2019	21:46	evening	91	53	76	66		No	No	Yes
26/08/2019	06:08	morning	89	51	67	64		No	No	Yes
26/08/2019	21:08	evening	73	47	92	56		No	No	Yes
27/08/2019	08:10	morning	78	55	80	63		No	No	Yes
27/08/2019	21:09	evening	97	64	68	75		No	No	Yes
28/08/2019	06:41	morning	92	57	74	69		No	No	Yes
28/08/2019	22:00	evening							Not	No
29/08/2019	07:30	morning	76	59	77	65		No	No	Yes
29/08/2019	22:01	evening	88	62	66	71		No	No	Yes
30/08/2019	06:35	morning	91	65	73	74		No	No	Yes
30/08/2019	21:58	evening	93	62	69	72		No	No	Yes
31/08/2019	08:33	morning	85	50	76	62		No	No	Yes
31/08/2019	22:00	evening							Not	No
01/09/2019	09:13	morning	90	56	82	67		No	No	Yes
01/09/2019	22:11	evening	98	63	80	75		No	No	Yes
02/09/2019	06:12	morning	100	68	69	79		No	No	Yes
02/09/2019	21:59	evening	87	55	71	66		No	No	Yes
03/09/2019	06:40	morning	74	54	74	61		No	No	Yes
03/09/2019	22:24	evening	95	61	70	72		No	No	Yes
04/09/2019	07:27	morning	88	58	76	68		No	No	Yes
04/09/2019	20:50	evening	98	69	69	79		No	No	Yes
05/09/2019	06:29	morning	84	55	71	65		No	No	Yes
05/09/2019	21:45	evening	92	59	75	70		No	No	Yes
06/09/2019	07:01	morning	89	60	74	70		No	No	Yes
07/09/2019	00:05	evening	101	64	69	76		No	No	Yes
07/09/2019	08:10	morning	102	69	58	80		Yes	No	Yes
07/09/2019	23:51	evening	99	68	71	78		No	No	Yes
08/09/2019	07:20	morning	84	60	64	68		No	No	Yes
08/09/2019	22:50	evening	97	65	70	76		No	No	Yes
09/09/2019	07:36	morning	99	67	69	78		No	No	Yes
09/09/2019	21:40	evening	100	69	65	79		No	No	Yes

10/09/2019	08:51	morning	92	63	74	73		No	No	Yes
10/09/2019	22:34	evening	103	70	69	81		No	No	Yes
11/09/2019	07:30	morning	81	59	72	66		No	No	Yes
11/09/2019	22:10	evening	93	61	69	72		No	No	Yes
12/09/2019	07:39	morning	101	68	84	79		No	No	Yes
12/09/2019	22:40	evening	91	62	66	72		No	No	Yes
13/09/2019	07:55	morning	95	65	72	75		No	No	Yes
13/09/2019	20:29	evening	105	69	72	74		No	No	Yes

Explanatory notes:

<b>MAP</b>	mean arterial pressure
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<b>WHO legend</b>	
Stage 3	
Stage 2	
Stage 1	
High-normal	
Normal	
Ideal	

## Appendix no. 4 Input and output status of individual cases 1–12

Case number 1	Input	Output
Age	79	79
Sex	Male	No changes
Height	173	No changes
Weight	105	No changes
Education	University degree	No changes
Family status	A widower after his wife of 54 years suddenly died in the end of 2018, which has negatively influenced his psychological well-being and everyday life even though his 2 daughters support him.	No changes
Client's characteristic	Almost 30 years in health sector management - ICT medical and social systems, specializes in analysis and design of regional health services, data analyses and statistics in medical IT, scientific IT and projects.	Stabilized throughout the measured period - a business/relax stay at a cabin.
<b>Brief case history</b>	Stabilized after having been urgently hospitalized due to severe sepsis in February 2019, a series of complex clinical, biochemical and immunological examinations performed, final medical report: diabetes mellitus/stage 2 obesity (DX E11), stage 1 hypertension (DX I10), hepatic steatosis (DX K76.0) and portal vein thrombosis (DX I81) - cured LMWH with no thrombotization, Chron.	BP monitored at various timeslots. Partial pathological changes of BP rates resulted in both positive medication correction and everyday activities.

	(DX K81.1.) and cholelithiasis with multiple concrements (DX K80.1) - indicated after surgery, prostatic hyperplasia (DX N40), predisposed to allergies (DX Z 88.1).	
<b>Medication</b>	Prestarium 5 mg/1x in the morning and Agen 5mg tbl /1x in the evening (BP), Omeprazol 20mg/ 1x in the morning, Allergy med. 1x at noon	no changes
<b>Input self-evaluation based</b>	Self-evaluation - "Feeling worried and tense, deg. 5"	4 slightly stressed due to mild activities
<b>- cause</b>		Esp. mild work and money-related worries
	<b>Subjective self-evaluation during/in the end of the measured period</b>	In conclusion: subject calmer, a huge psychological stressor (wife's death) resolved, subject has come to terms with it

**Trend 1:**

**Input rates BP: evening systolic 142, diastolic 64, HR 74, Critical difference systolic - diastolic**

**78! Input self-evaluation 5**

**After the project: Improved subjective physical state and condition, inclined towards 4. BP and HR graphs evaluation - trend rates**

Systolic (trend 140 to 130), diastolic: increase (trend 71 to 80), HR very slight decrease (trend 68 to 66) Heart arrhythmias: 7x during the measured period, only 1 arrhythmia in the second half of the period Recommendation: monitor personally.

**Total efficacy evaluation of case 1:** Positive influence, improving trend, further 3-month-long observation recommended.

<b>Case number 2</b>	<b>Input</b>	Discontinued due to work reasons, continues in measuring since 01/10/2019, asked for further SMU loan
Age	63	63
Sex	Male	
Height	172	
Weight	110	
Education	University degree, an entrepreneur highly stressed due to the work overload and job prestige, a	
Family status	Family status - a widower, a lot has changed for him since his wife's death in 2018.	
Client's characteristic	Lives alone, a prominent social figure, very popular in the international business area, has long-term personal VIP contacts both in the Czech Republic and abroad...	
Brief case history	Multiple health issues diagnosed during regular doctor's appointments, numerous hospital states and continuous health issues management. Objective state: obesity (DX E11) reduced with a diet a change of lifestyle, varices in left leg (DX I83.9) - permanently wears a compression sock, immunodeficiency with a GI diagnosis: "Metabolic syndrom" and DXs K579 (Diverticulosis of intestine, part unspecified) and K629 (Disease of anus and rectum) - polyp excision (benign oncological diseases)	

Medication	<p>The main potential indication for the SMU - sleep apnea (DX G47.3), sleeps with CPAP (Continuous Positive Airway Pressure), permanent stress situations without medication and stage 1 hypertension (DX I10) medicated (Valsacor, Concor), tinnitus (DX H93.1)- (medicated: Betaserc).</p> <p>A non-smoker and a very occasional drinker (high-quality cognac, wine); often drives a car.</p>	
Input self-evaluation based on the table	5	5
- characteristic		Partial evaluation of the first 5 days is in the tables and graphs, no total evaluation performed
- cause		



<b>Case number 3</b>	<b>Input</b>	<b>Output</b>
Age	26	26
Sex	Male	no changes
Height	168	no changes
Weight	84	no changes
Education and profession	University degree in tourism. Speaks several languages: English, German, Arabic. A business assistant in touch with diplomats, translating, authorized on-line publications.	no changes
Family status	Psychological stress due to his mother's death last year, they had a strong bond and he was her permanent personal assistant and medical companion.	In the week between 31/08 and 08/09, the family situation got worse (his alcoholic brother returned from his treatment prematurely, which caused many problems) - all factors got a lot worse: OCD, headaches, migraine attacks.
Client's characteristic	What is positive about this young SOMA project respondent's approach is his precise monitoring, sustainability of the results, and the client's interest in medical consultations with Dr. Zubina about the symptomatic occurrences related to his health state and further extension of the treatments proposed by his current doctors.	no changes
Brief case history	Main health issues resulting from the subject's stressful work, anxious and depressions: OCD (obsessive-compulsive disorder) diagnosed long	no changes

	medicated (DX F42), the subject was able to obtain his university degree. Also often suffers from migraines (DX G43.0 both when stressed and when calm. Sweet treats help with the migraines.	
Medication	N/A	no changes
Input self-evaluation based on the chart		Graph 3 shows stagnation explainable by medication, recommended for further examination in the scope of the follow-up project
- characteristic	3 - 5	3
- cause	Unknown cause, evaluated subjectively	Unknown cause, evaluated subjectively
	<b>Subjective self-evaluation during/in the end of the measured period</b> For BP and HR rates at the beginning and at the end - see Table 3 and Graph 3.	Very positive trend - less often migraine and OCD attacks after a relatively short time with the SMU (2 months, non-standard in the study), along with the physiological rates of monitored BP.

**Note** The subject gathered daily BP and HR data along with current state of their disorders and diseases for more than 60 days. Upon our agreement, the subject will monitor their BP with the wrist tonometer VEROVAL plus with a pulse oximeter from now on.

**Trend:** Graph 3 stagnation, presumably due to permanent medication. Considerably less OCD attacks, less headaches and migraines, better quality of sleep, feels more composed. The subject appreciates highly positive effects on psychological well-being! **One of the most distinctive effects.**

<b>Case number 4</b>	<b>Input</b>	<b>Output</b>
Age	84	84
Sex	male	no changes
Height	170	no changes
Weight	115 kg	no changes
Education and profession	N/A	no changes
Family status	lives alone, family of the Arab type and culture	no changes
Client's characteristic  Brief case history	<p>An entrepreneur from a prestigious Arab family, a long-term partner in a Czech limited-liability company, has repeatedly stayed in the Czech Republic, this time also for a planned spa treatment, originally in Teplice nad Bečvou, now in DARKOV, a.s. (due to medical complications after the procedures).</p> <p>Many health issues, esp. stage 2 diabetes mellitus, obesity, stage 2 hypertension and cardiac insufficiency - medicated, but does not take his medication regularly, which caused his emergency crisis at the spa and had to be shortly hospitalized in the Ostrava Hospital (clinical monitoring and treatment).</p> <p>The subject had similar cardiac and metabolic issues in Prague, hospitalized in the 3rd Internal Clinic of the General Faculty Hospital in Prague, prof. MUDr. Štěpán Svačina, DrSc., MBA. - clinically examined and stabilized so that he could fly to Arabia. Age-related symptoms - senile debility, DX R54.</p>	<p>Discontinued prematurely for business and health reasons, return to Arabia,</p> <p>Table 5 and Graph 5 show the first 5 days.</p> <p>Not evaluated due to technical reasons.</p>

<b>Case number 5</b>	<b>Input</b>	<b>Output</b>
Age	77	No changes
Sex	male	No changes
Height	182	No changes
Weight	96	No changes
Education	University degree in engineering	No changes
Family status	Married. 33 years of problemless marriage, common household.	No changes
Client's characteristic	Satisfied at work, till 1989 only highly qualified work on IT projects and R&D, since 1989 economic and R&D projects, esp. for the industry and health sectors.	No changes
Brief case history	Brief case history: 6 y. o. hepatitis; 14 y. o. meningitis (tick-borne encephalitis); no other serious diseases till 77 y. o.; prostate problems since 2018.	No changes
Main diagnosis	Occasional high BP and irregular HR, prostate problems (urine retention, preparing for an invasive surgery)	BP normalized, less occurrence of irregular HR, see Table 5 and Graph 5
Medication	No	No changes
Input self-evaluation based on the table	Feeling slightly tense 4 - slightly but justifiably worried about an illness	Output self-evaluation based on the table Feeling slightly worried
- characteristic	Feels good	Feels good
- cause	tranquil and relaxed life	tranquil and relaxed life
	<b>Input measurements</b> Morning BP 141/88, HR 61, oximeter 92%. Mean BP and HR rates before the project:	<b>Output measurements</b> Morning BP, HR and

	morning 145/90, HR 62 evening 115/89, HR 76	129/83, HR 60, 93 %
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**Trend: After the measured period – Even more positive physical state and condition, inclined towards 3.**

BP and HR graphs evaluation

Systolic: **positive decrease** (trend 140 to 130), diastolic: increase (trend 71 to 80), HR very slight decrease (trend 68 to 66) Heart arrhythmias: 4x during the measured period, out of which 1x both morning and evening arrhythmias in one day towards the end of the measured period. Recommendation: monitor personally.

<b>Case number 6</b>	<b>Input</b>	<b>Output</b>
<b>Age</b>	46	46
<b>Sex</b>	Female	No changes
<b>Height</b>	172	No changes
<b>Weight</b>	63	No changes
<b>Education and profession</b>	Bachelor degree in economics and management, works in administration	No changes
<b>Family status</b>	Married, a 13-y-o child, unstable relationship with husband, almost pre-divorce - many arguments, husband's threats	Home situation improved, the often hot-tempered and quarrelsome husband much calmer ca. in the 2nd half of the measured period.
<b>Client's characteristic</b>	Non-smoker, occasional alcohol drinker, interested in alternative medicine and treatments, willing when it comes to the study and the measurements	No changes
<b>Brief case history</b>	Thyroiditis since 16 y.o. - medicated, allergic and asthmatic - medicated, arterial hypotension - no medication (frequent vertigo and balance loss), anaemic, frequent inflammations - asthmatic and of the urinary tract, permanently feeling tired (even after sleeping a whole night) and exhausted, in the last two years has had 6 rather severe urinary tract infections, 2 asthmatic bronchitises, and several virus infections. Unstable health. Very difficult childbirth with huge blood loss 13 years ago - frequent health problems since then.	29/08 - ankle effusion – fell down the stairs – treated on 30/08 – bed rest till the end of the measured period – positive trend: HR decrease – BP increase

<b>Medication</b>	Euthyrox 75 mq/day, Xados 25 mg/day, Symbicortt Turbuhaler 1x a	No changes
<b>Input self-evaluation based on the table</b>	6	5
<b>- characteristic</b>	feeling stressed - permanently, arguments with the partner, awaiting reproaches and arguments danger of physical violence	tension, worries
<b>- cause</b>	marriage crisis, afraid of husband's rage (psychological abuse, threats of physical violence), feels trapped and sees no way of solving the situation; afraid of further illnesses - very limiting	Permanently tense (family situation) and afraid that husband's rage attacks will come back and the situation will get worse again; afraid of her health state getting worse
	<b>Subjective self-evaluation during/in the end of the measured period</b>	Improved, deeper and longer sleep, does not feel tired after waking up, has more energy, feels less stressed and more at ease. Since ca. the 2nd half of the measured period - only one vertigo and balance loss!

**Trend:**

BP and HR graphs evaluation: Systolic (trend 140 to 130), diastolic: increase (trend 71 to 80), HR very slight decrease (trend 68 to 66)

**The most distinctive positive effect was on the mental well-being (see subjective self-evaluation); the husband was positively affected as well, even though he was not a subject.**

Case number 7	Input	Output
Age	73	73
Sex	Female	No changes
Height	168	No changes
Weight	69 kg	No changes
Education	University degree, retired	No changes
Family status	married	No changes
Client's characteristic	non-smoker, occasional alcohol drinker, works in the garden all year	No changes
Brief case history	Hypothyroid since 2006 - medicated, normal EKG, feels well	No changes
Medication	Euthyrox	No changes
Self-evaluation based on the table	2	2
- characteristic	Feels good	Feels good
- cause	tranquil and relaxed life	tranquil and relaxed life

**Trend:**

Systolic: strong decrease (trend 130 to 119), diastolic: very slight decrease (trend: 78 to 77), HR slight increase (70 to 75), overall improving trend.

**Warning:** 8 heart arrhythmias in total throughout the measured period; 5 in the first half, 3 in the second half of the period. Improving trend. Despite that, a medical consultation was recommended.



<b>Case number 8</b>	<b>input</b>	<b>output</b>
Age	75	75
Sex	Male	Male
Height	178 cm	No changes
Weight	75 kg	No changes
Education	University degree, retired	No changes
Family status	married	No changes
Client's characteristic	non-smoker, occasional alcohol drinker, former athlete – 800 metres, still exercises an hour every day with no problems, works in the garden all year long, takes active care of grandchildren	No changes
Brief case history	both hips replaced 15 years ago	No changes
Medication	no medication	No changes
Input self-evaluation based on the table	2	2
- characteristic	Feels good	Significant improvement - BP trend
- cause	almost no impulses for concern	

**Trend:**

Systolic (trend 136 to 120), diastolic: increase (trend 83 to 75), HR very slight decrease (trend 76 to 74). 5 heart arrhythmias during the measured period. Recommendation: monitor personally.

<b>Case number 9</b>	<b>Input</b>	<b>Output</b>
<b>Age</b>	28	28
<b>Sex</b>	Female	Female
<b>Height</b>	165 cm	No changes
<b>Weight</b>	88 kg	No changes
<b>Education</b>	Bachelor degree in physiotherapy	No changes
<b>Family status</b>	Unmarried, shares household with a partner	No changes
<b>Client's characteristic</b>	Satisfied at work, great colleagues, has two jobs (both in physiotherapy), time-demanding	No changes
<b>Brief case history</b>	No severe health problems throughout her life, occasionally higher BP and irregular HR, no medical treatments, does not smoke, drinks alcohol only occasionally (wine). Circuit training 2x a week, recreational sports. Is getting married in a month - more stressed than usual, livelier dreams.	No changes
<b>Medication</b>	contraceptives, allergy drugs (Zenaro)	Sore throat and fever in the first week of the measured period (Augmentin 3x a day for 7 days). No fever since the third day of the measured period which was the third day on Augmentin as well. No other changes in medication.
<b>Input self-evaluation based on the table</b>	feeling slightly tense 4	feeling slightly worried 3 (slightly anxious)
<b>- characteristic</b>	higher HR, stress, restless sleep	slightly worried
<b>- cause</b>	oncoming wedding, organizing the wedding and the honeymoon	organizing the oncoming wedding, 2 jobs with difficult commuting, time stress

	<b>Subjective self-evaluation during/in the end of the measured period</b>	Less stressed, improved sleep - subjectively deeper, falls asleep more quickly.
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**Trend:**

Systolic: stagnated at higher trend level (135), diastolic: slight decrease (trend: 84 to 89), HR very slight increase (70 to 75).

Almost no SMU effect. Reason: high psychological stress - 2 jobs and wedding preparations. Heart arrhythmias: 5x, evenly distributed throughout the measured period, cardiological monitoring recommended (higher BP and heart arrhythmias) Indicated obesity with high BMI, weight-loss recommended!

<b>Case number 10</b>	<b>Input</b>	<b>Output</b>
<b>Age</b>	26	26
<b>Sex</b>	Male	No changes
<b>Height</b>	175 cm	No changes
<b>Weight</b>	90 kg	No changes
<b>Education</b>	Bachelor degree - optician, optometrist	No changes
<b>Family status</b>	Shares household with a girlfriend.	Lives in a house with a girlfriend, wedding in 2 weeks
<b>Client's characteristic</b>	Satisfied at work, sometimes stressed when working with people	No changes
<b>Brief case history</b>	Thrombocytopenia; mononucleosis when 16 y. o. No medication, non-smoker, occasional alcohol drinker (wine, beer). Plays football 3 times a week.	No changes
<b>Medication</b>	no medication	no changes
<b>Input self-evaluation based on</b>	4 - Feeling slightly tense	4 - Feeling slightly tense
<b>- characteristic</b>	stress, occasionally tired	slightly worried
<b>- cause</b>	oncoming wedding, organizing the wedding and the honeymoon, work responsibilities	wedding organization, work conflicts - does work for an ill colleague as well right now, more stressful work
	<b>Subjective self-evaluation during/in the end of the measured period</b>	improved sleep (subjectively deeper, falls asleep more quickly)

**Trend:** Systolic: decrease (trend: 140 to 120), , diastolic: decrease (trend: 76 to 89), HR increase (69 to 64)  
**Positive effects** on systolic BP, psychological well-being and quality of sleep. **Critical** amount of heart arrhythmias, **identified 30x in total**. Recommendation: 24-hour Holter EKG monitoring. The evaluation can help with monitoring the hearth rhythm, arrhythmias, and potential ischemic heart disease.

**Critical** amount of heart arrhythmias, **identified 30x in total**. Recommendation: 24-hour Holter EKG monitoring. The evaluation can help with monitoring the hearth rhythm, arrhythmias, and potential ischemic heart disease.

<b>Case number 11</b>	<b>Input</b>	<b>Output</b>
<b>Age</b>	68	68
<b>Sex</b>	Female	No changes
<b>Height</b>	162 cm	No changes
<b>Weight</b>	90 kg	No changes
<b>Education</b>	Vocational school, now retired.	No changes
<b>Family status</b>	lives alone with a dog, her grandson and his girlfriend live next door	No changes
<b>Client's characteristic</b>	Used to work in a butcher shop - physically demanding, now retired and working on her fields	No changes
<b>Brief case history</b>	Varicose veins, higher and fluctuating BP	No changes
<b>Medication</b>	Detralex, Caltrate, Torvacard	No changes
<b>Input self-evaluation based on the table</b>	4 - Feeling slightly tense	3 - Feeling slightly worried Note: only morning data measured, but still evaluated
<b>- characteristic</b>	backache, sometimes tired	slightly worried
<b>- cause</b>	harvesting potatoes, demanding work in the field and the garden	wedding organization, working on the field, time stress
	<b>Subjective self-evaluation during/in the end of the measured period</b>	less tired, improved sleep (longer for ca. 1-2 hours)

**Trend:** Systolic: increase (trend: 138 to 144), diastolic: decrease (trend: 98 to 94), HR decrease (68 to 60)

**Positive:** Decreasing trend of HR throughout the measured period.

Very strong decrease of heart arrhythmias. 7x in the first half of the measured period, only 1x in the second half!

<b>Case number 12</b>	<b>Input</b>	<b>Output</b>
<b>Age</b>	48	48
<b>Sex</b>	Female	No changes
<b>Height</b>	175	No changes
<b>Weight</b>	62	No changes
<b>Education and profession</b>	High-school diploma, works in the hospitality industry	No changes
<b>Family status</b>	Divorced, two children in her care (14 and 6 y. o., third child already adult); the exhusband does not pay child alimony (execution levied by seizure, no job); her current partner is married but partially supports her	No changes
<b>Client's characteristic</b>	Non-smoker, occasional alcohol drinker, interested in alternative medicine and treatments, willing when it comes to the study and the measurements	No changes
<b>Brief case history</b>	hypotension - no medication, frequent backache - no medication, frequently tired due to both physical and mental strain	No changes
<b>Medication</b>	no medication	No changes
<b>Input self-evaluation based on the table</b>	5	4
<b>- characteristic</b>	mistrust in a child, increased responsibility, afraid of the future	slightly worried and stressed - otherwise no changes

<b>- cause</b>	worried for a child, suspects him of drug and alcohol abuse (a 14yo. boy, diagnosed with depression and suicidal tendencies, medicated, drug abuse whenever he can - marijuana, alcohol); afraid of the future, financial worries	significantly improved situation of the child (14 y. o. - no drug and alcohol abuse, no depressions, still medicated), otherwise no changes, significantly less stressed
	<b>Subjective self-evaluation during/in the end of the measured period</b>	Less tired - better quality and depth of sleep, in accordance with the trend of the low BP increase.
	Note: Somavedic located in her bedroom under the bed, children behind a 0.5m thick wall	

**Trend:**

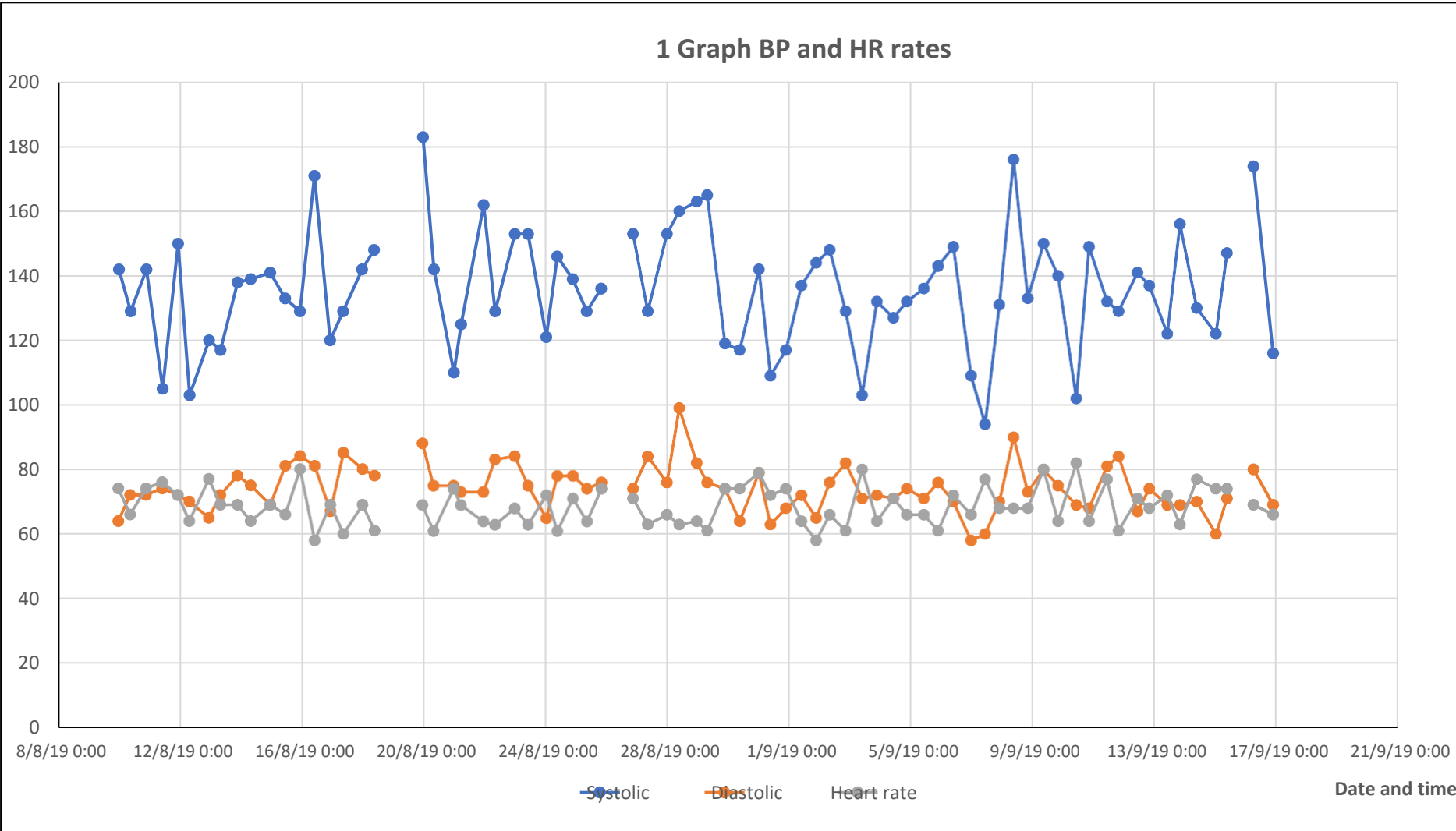
**BP and HR graphs evaluation:**

**Trend:** Systolic: increase (trend 83 to 97), diastolic: increase (trend: 53 to 65), HR decrease (78 to 69). The systolic and diastolic trends show **trend towards increasing the low BP** which suggests positive effects. The HR decrease is a positive trend as well.

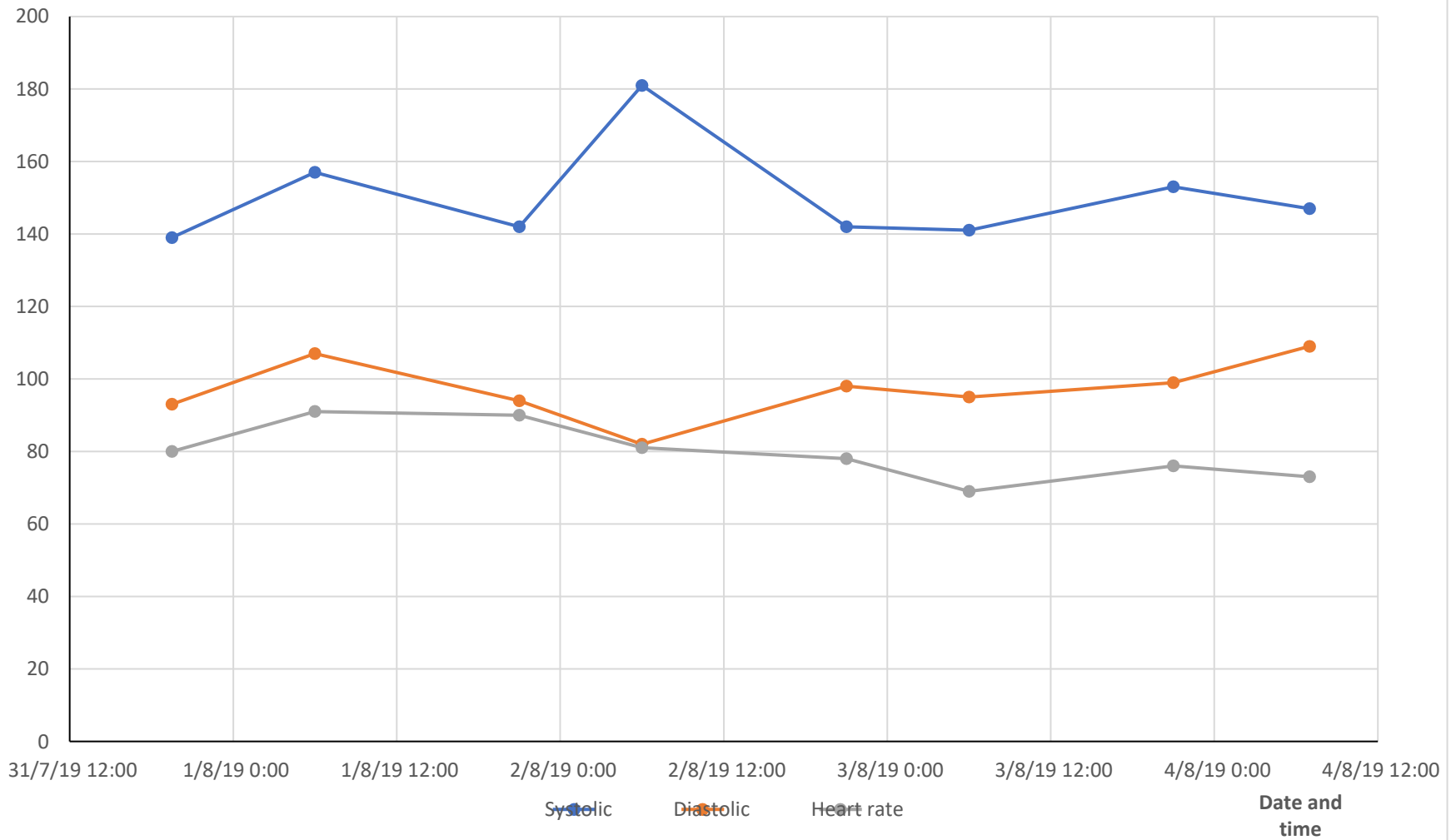
Subjective self-evaluation. **Positive effect on psychological well-being.** Less tired - better quality and depth of sleep, in accordance with the trend of the low BP increase.



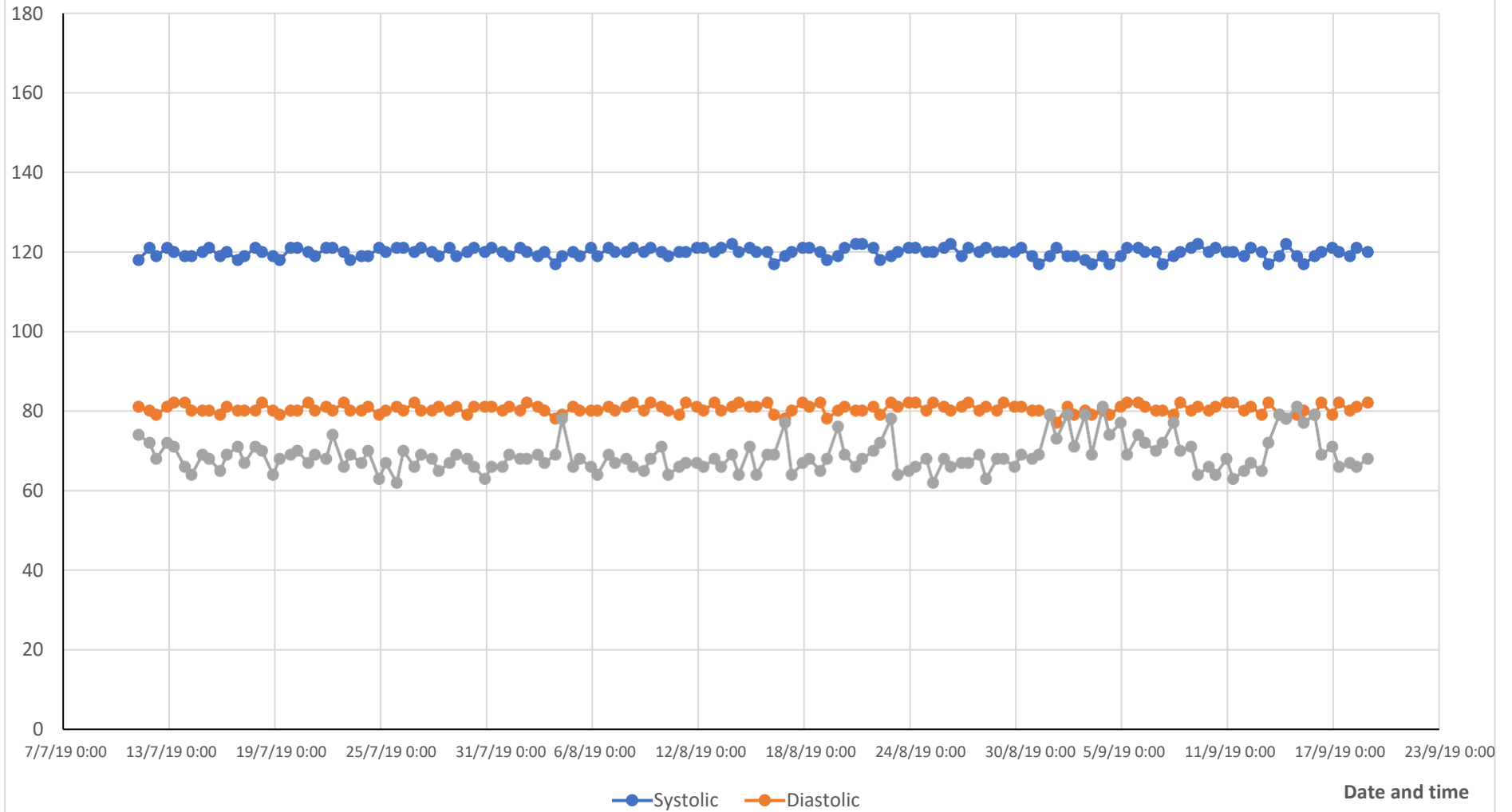
**Appendix no. 5 BP and HR progress graphs for individual cases 1–12**



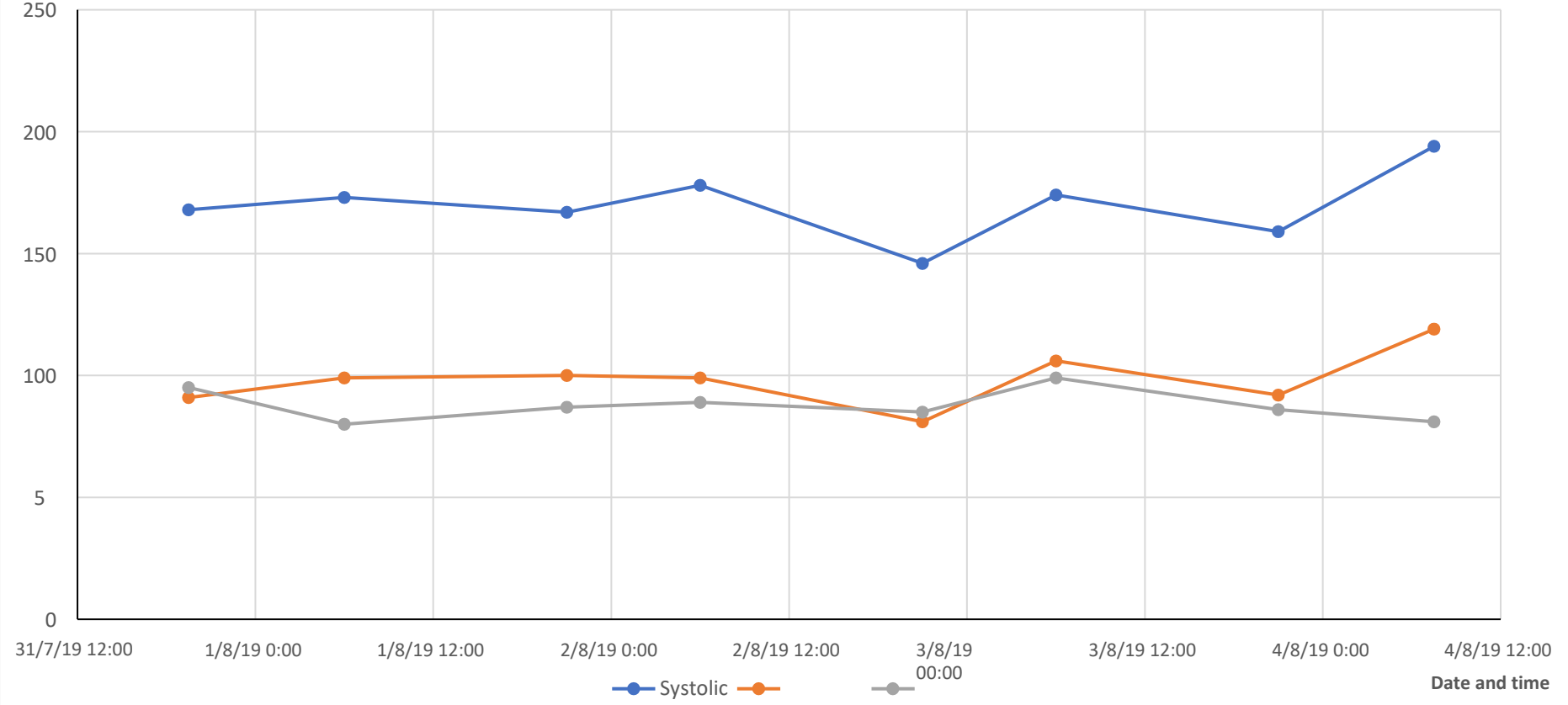
2 BP and HR rates



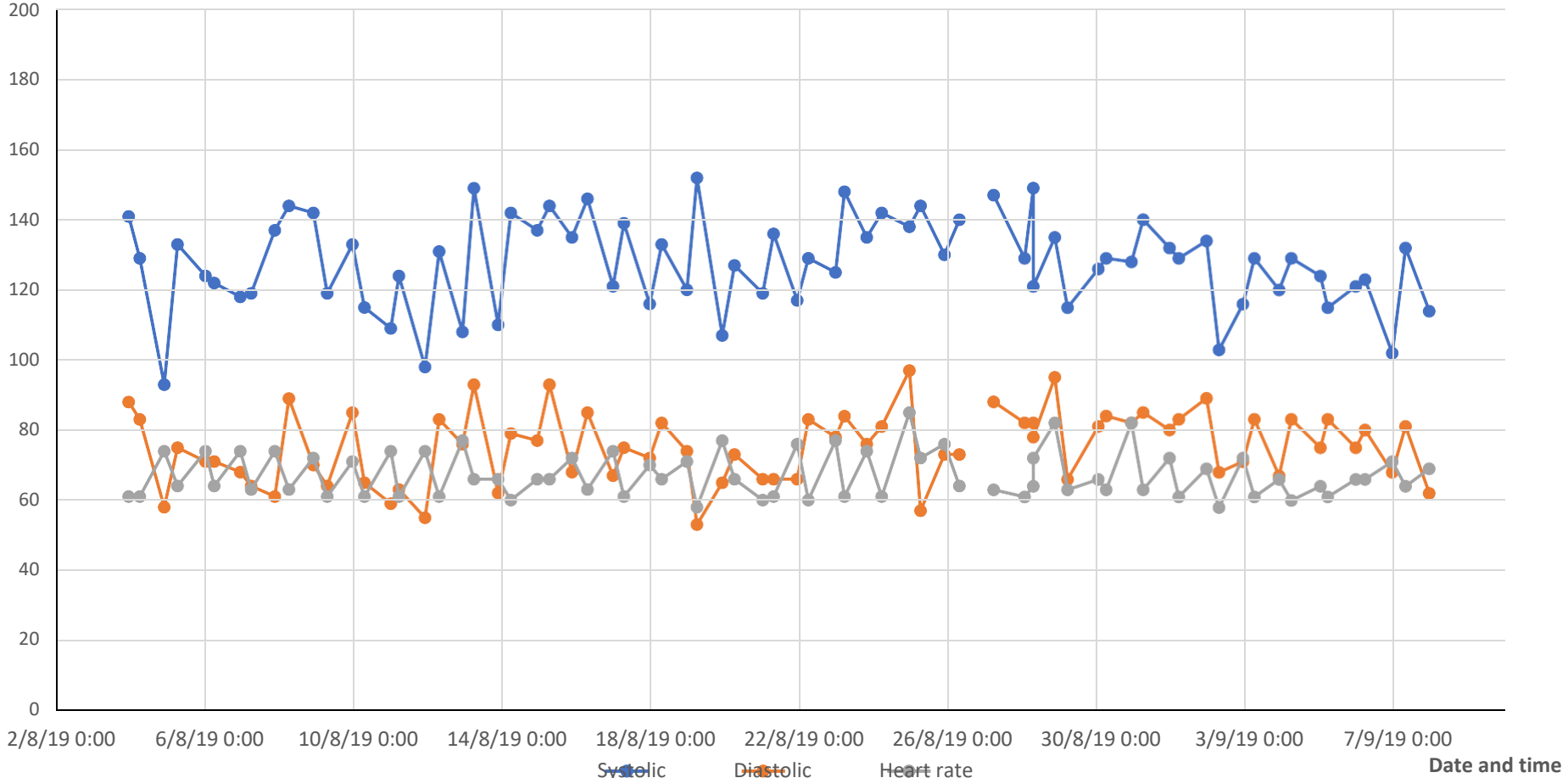
### 3 Graph BP and HR rates



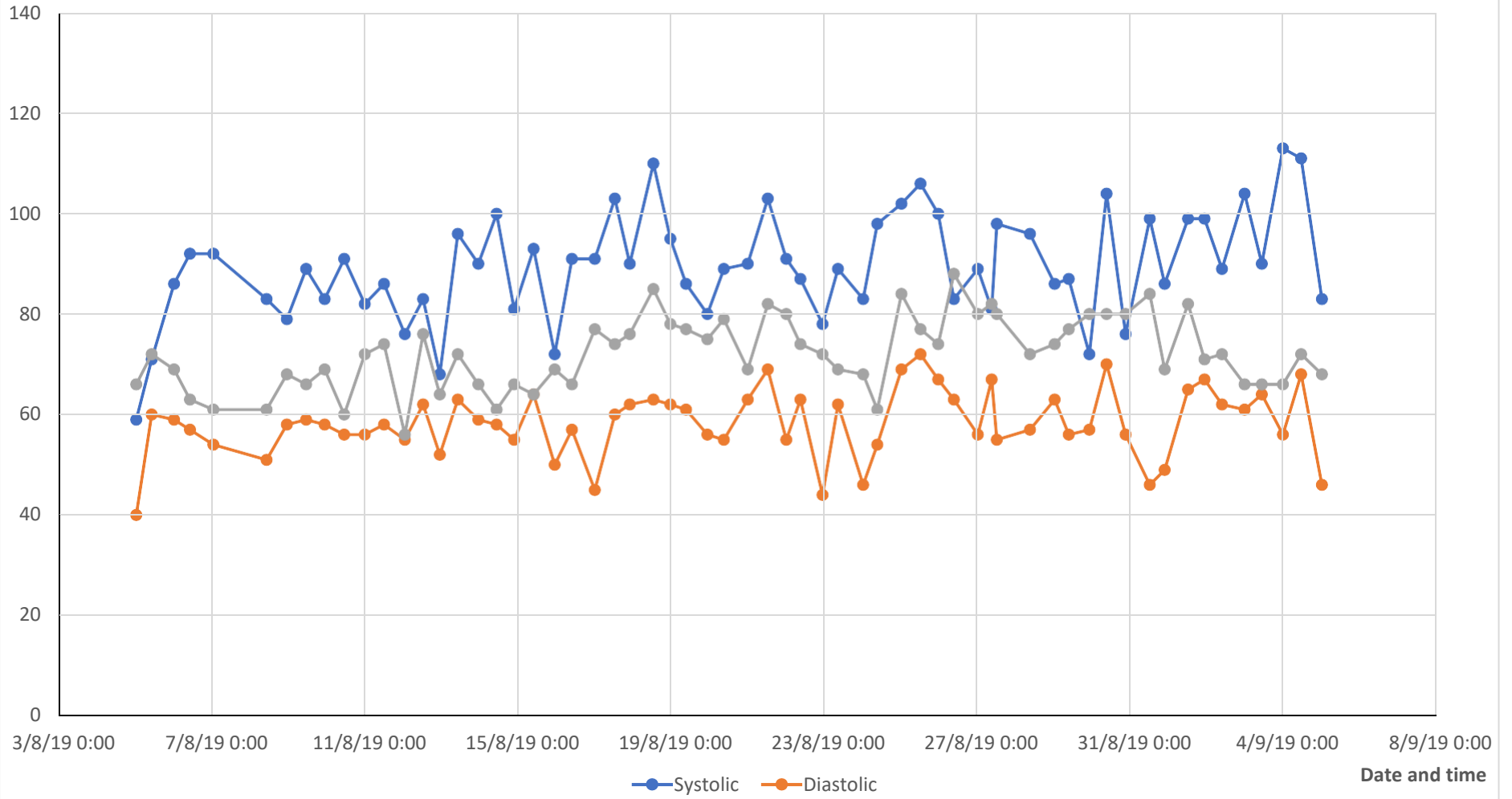
4 Graph BP and HR rates



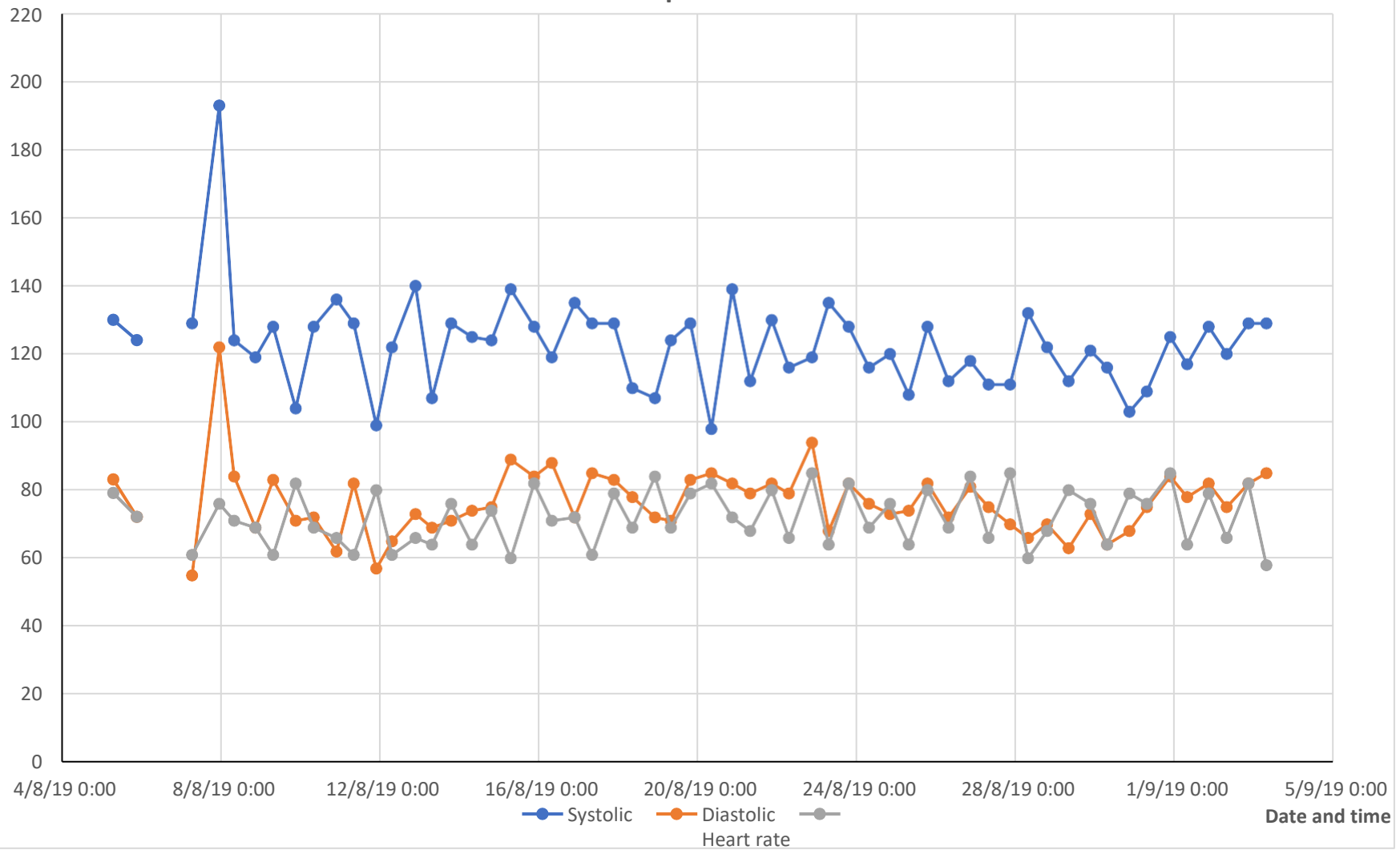
5 Graph BP and HR rates

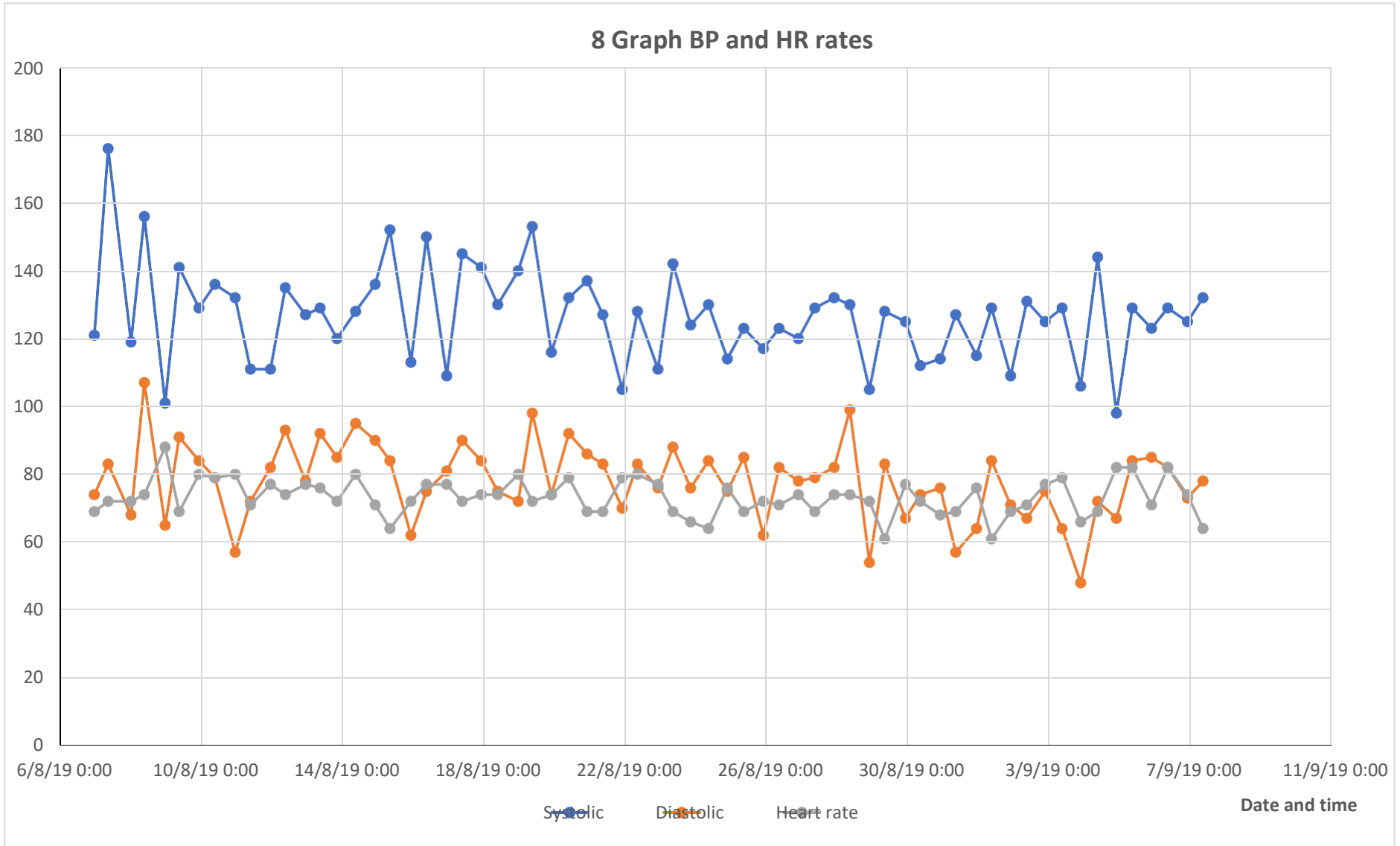


6 Graph BP and HR rates



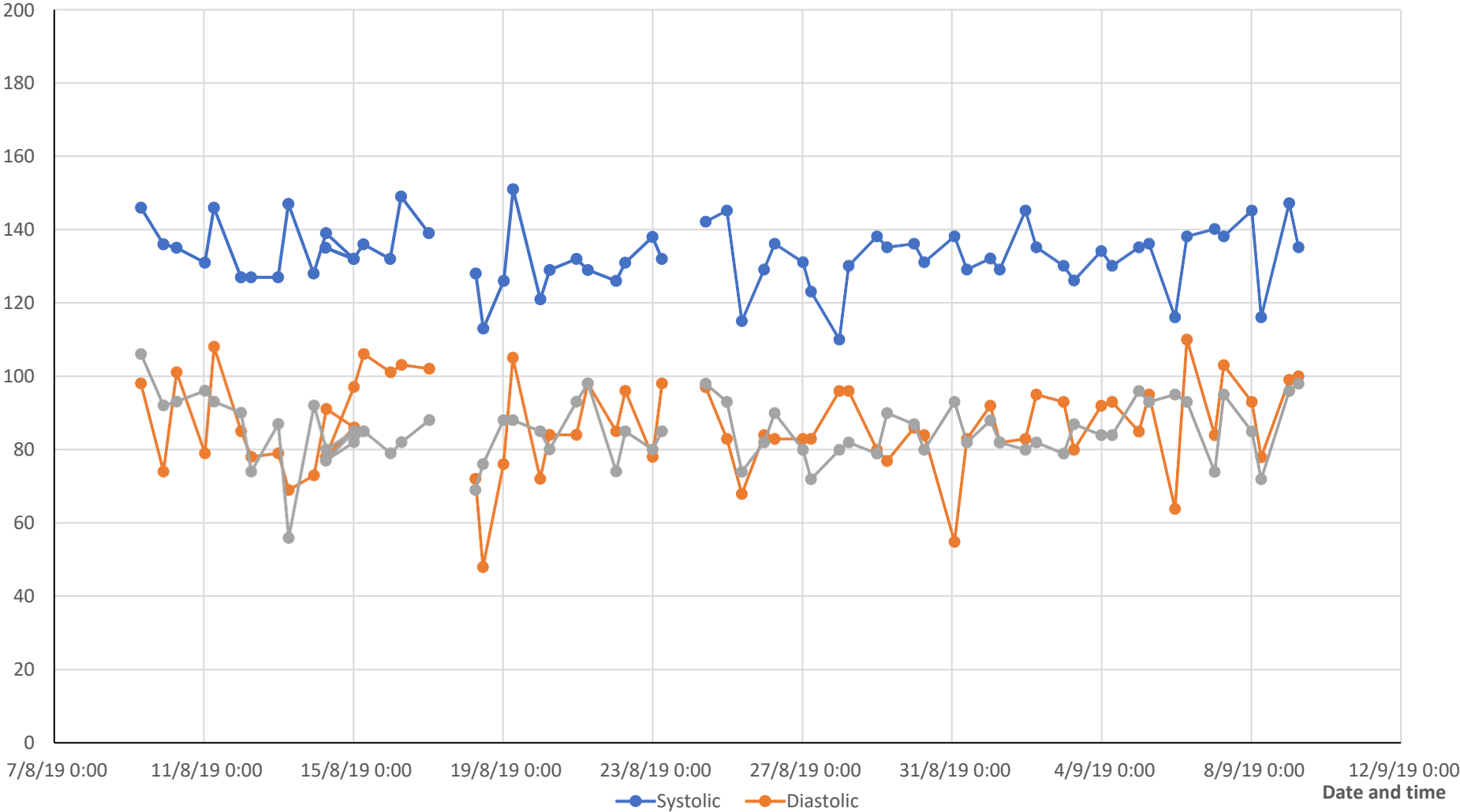
7 Graph BP and HR rates



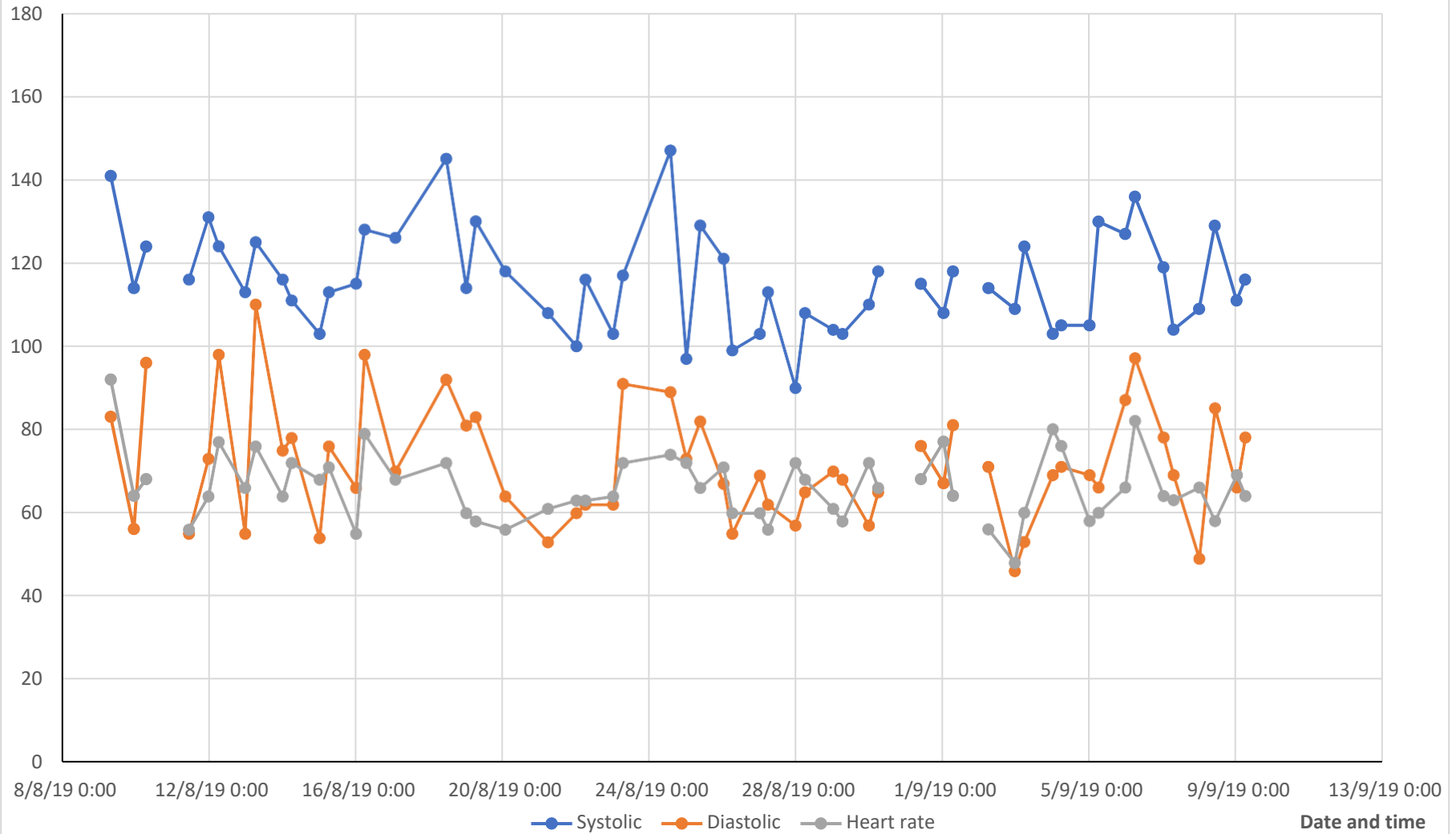




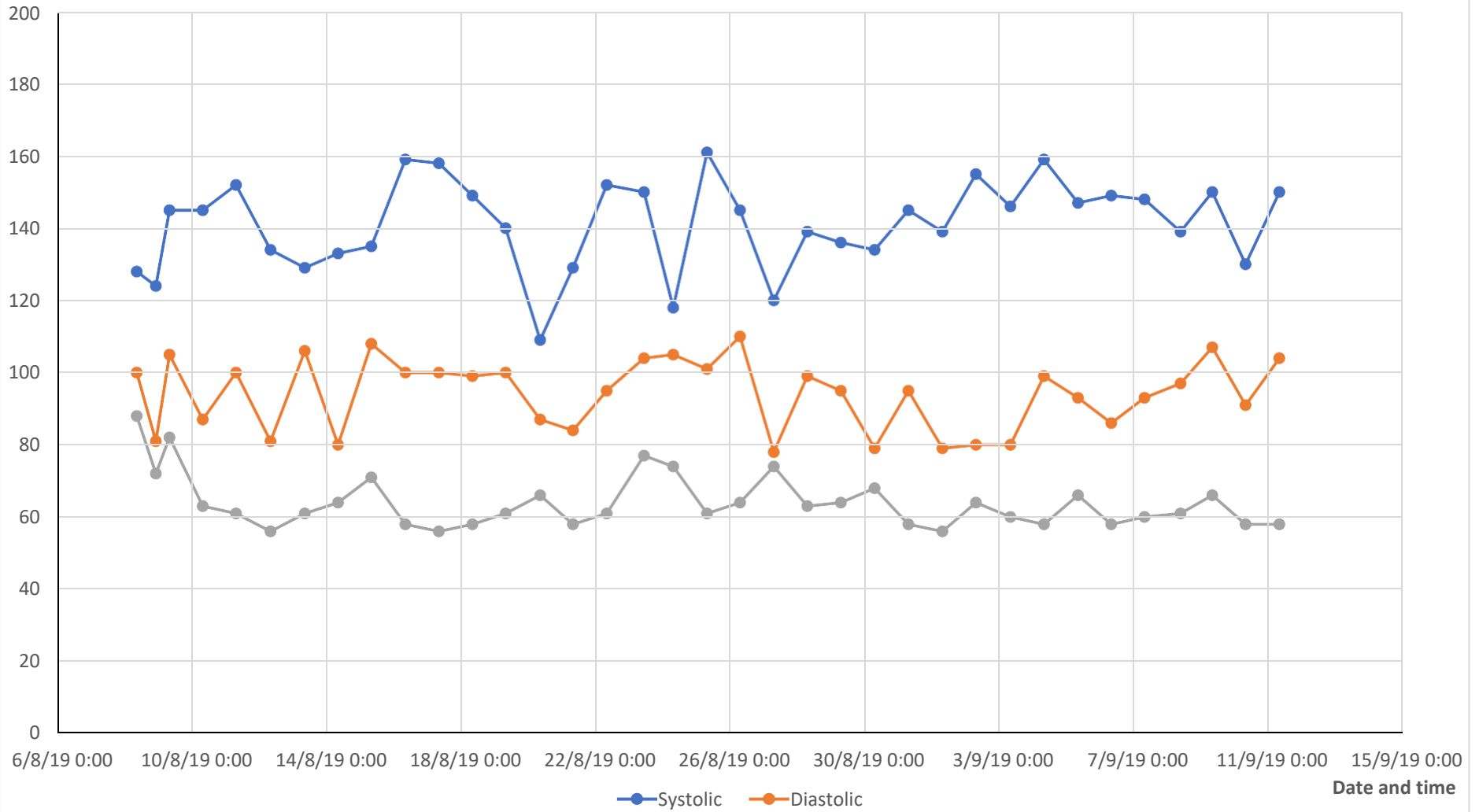
9 Graph BP and HR rates



10 Graph BP and HR rates



11 Graph BP and HR rates



12 Graph BP and HR rates

