Claims

1. A computer system for alerting emergency services, comprising:

at least one monitoring device;

at least one physical symptom device, each being:

a movement sensor device;

an image capture device; or

an audio receiver device;

a transmitter;

a processor; and

memory, the memory storing:

a predetermined baseline including a normal or expected reading for the vital sign for one or more vital signs of a user during normal activity;

at least one physical symptom baseline, each corresponding to a device of the at least one physical symptom device and being:

a predetermined baseline movement for one or more arms of the user;

a predetermined baseline arrangement of facial features of the user; or

a predetermined baseline speech of the user; and

instructions that, when executed by the processor, cause:

the at least one monitoring device to measure one or more vital signs of the user;

the processor to compare the vital sign(s) to the respective predetermined baseline for the one or more vital signs; and

if the measured vital sign(s) exceed the predetermined baseline, detect one or more physical symptoms corresponding to the at least one physical symptom baseline, by delivering instructions to prompt:

a movement of the one or more arms of the user;

a facial arrangement of the user; and/or

a speech of the user,

and causing:

the movement sensor device to measure movement of the one or more arms;

the image capture device to image the facial arrangement; and/or

the audio receiver device to listen to the speech;

the processor to compare the one or more physical symptoms to the respective physical symptom baseline; and

initiate contact of emergency services using the transmitter, if at least one of the one or more physical symptoms deviates from the respective physical symptom baseline, wherein the at least one physical symptom device includes the image capture device and the image capture device is attached to one arm of the user and the processor is configured to determine a relative position of another arm of the user by analysing images of the another arm taken by the image capture device.

2. The computer system according to claim 1, wherein the processor determines if the predetermined baseline is exceeded by determining if the respective vital sign exceeds the respective predetermined baseline by a threshold amount.

3. The computer system according to claim 1, wherein the computer system is mounted to one of the one or more arms of the user (the **one arm**).

4. The computer system according to claim 3, wherein a device of the at least one physical symptom device is a movement sensor device that directly measures an acceleration or vibration of the one arm.

5. The computer system according to claim 1, wherein a device of the at least one physical symptom device is a movement sensor device, the movement sensor device comprising an image capture device and measuring the movement of the arm comprises comparing positions of the arm in successive images captured by the image capture device.

6. The computer system according to claim 1, wherein a device of the at least one physical symptom device is an image capture device, the image capture device imaging the facial arrangement by determining relative positions of two or more facial features identified from one or more images captured by the image capture device.

7. The computer system according to claim 1, wherein a device of the at least one physical symptom device is an audio receiver device, the audio receiver device comparing the speech to the predetermined baseline speech by identifying one or more artefacts in the speech and comparing the artefact(s) to corresponding artefact(s) in the predetermined baseline speech.

8. The computer system according to claim 1, wherein the processor is configured to record in the memory a recording of the movement, facial arrangement and/or speech corresponding to the at least one physical symptom device, and the transmitter is configured to transmit the recording to a medical professional.

9. A computer process for alerting emergency services, comprising:

measuring one or more vital signs of a user;

comparing the vital sign(s) to a predetermined baseline including a normal or expected reading for the vital sign(s) of the user during normal activity; and

if the measured vital sign(s) exceeds the predetermined baseline, detecting one or more physical symptoms corresponding to at least one physical symptom baseline of the user, by at least one of:

measuring a movement of one or more arms of the user;

imaging a facial arrangement of a face of the user; and/or

listening to a speech of the user;

comparing the one or more physical symptoms to the respective physical symptom baseline; and

initiating contact of emergency services if one or more of the physical symptoms deviates from the respective physical symptom baseline, wherein the one or more physical symptoms include the movement of one or more arms of the user and measuring a movement of one or more arms of the user comprises measuring a movement of one arm of the user by analysing images captured by an image capture device attached to another arm of the user.

10. The computer process according to claim 9, wherein exceeding the predetermined baseline comprises exceeding the predetermined baseline by a threshold amount for the or each vital sign.

11. The computer process according to claim 9, wherein the computer process is performed by a device mounted to one arm of the one or more arms of the user (the **one arm**) and comprising

a movement sensor device, and at least one of the one or more physical symptoms is detectable by measuring movement of the one arm, the movement being measured by the movement sensor device.

12. The computer process according to claim 11, wherein the movement sensor comprises an acceleration or vibration sensor and measuring the movement comprises directly measuring the movement of the one arm.

13. The computer process according to claim 9, wherein measuring a movement of the one or more arms comprises comparing positions of at least one of the one or more arms in successive images captured by an image capture device.

14. (Currently Amended) The computer process according to claim 9, wherein at least one of the one or more physical symptoms is detectable by imaging the facial arrangement, imaging the facial arrangement comprising capturing an image of the face of the user from a device mounted to one of the one or more arms of the user.

15. The computer process according to claim 9, wherein at least one of the one or more physical symptoms is detectable by imaging the facial arrangement, imaging the facial arrangement comprising comparing relative positions of two or more facial features.

16. The computer process according to claim 9, wherein at least one of the one or more physical symptoms is detectable by listening to a speech of the user, comparing the speech to a predetermined baseline speech comprising identifying one or more artefacts in the speech and comparing the artefact(s) to corresponding artefact(s) in the predetermined baseline speech.

17. The computer process according to claim 9, comprising providing a recording of the movement, facial arrangement and/or speech corresponding to the one or more physical symptoms to a medical professional for review.

18. The computer process according to claim 9, wherein, if the measured vital sign(s) do not exceed the predetermined baseline, the measured vital sign(s) are incorporated into the predetermined baseline.