Claims

1. A computer-implemented method performed on a dispatch center computer to assist a dispatcher when communicating with a caller via telephone regarding a medical emergency of a patient, comprising:

providing on the dispatch center computer system an emergency dispatch protocol to assist the dispatcher, the protocol presenting a plurality of pre-scripted interrogatories for the dispatcher to ask the caller to gather information regarding the emergency and generate an emergency dispatch response by emergency responders;

initiating a diagnostic tool on the dispatch center computer, the diagnostic tool configured to assist the dispatcher in guiding the caller to obtain information that can be used by the diagnostic tool to diagnose whether the patient has meningitis;

the diagnostic tool presenting to the dispatcher a user interface comprising a diagnostic indicators pane and a criteria summary pane;

the diagnostic tool providing one or more questions via the user interface, the questions being intended for the dispatcher to vocally relay to the caller over the telephone to guide the caller in identifying signs and symptoms that the patient has meningitis;

the diagnostic tool receiving dispatcher-entered input indicative of caller-relayed information concerning the caller's observations of the patient, including signs and symptoms that indicate whether the patient has meningitis, wherein the caller's observations are vocally relayed over the telephone to the dispatcher;

presenting, on the diagnostic indicators pane of the user interface of the diagnostic tool, a listing of one or more signs and symptoms that indicate whether the patient has meningitis that are received through the dispatcher-entered input;

presenting, on the criteria summary pane of the user interface of the diagnostic tool, a plurality of tally fields to convey a basis for a likelihood that the patient meningitis, each tally field of the plurality of tally fields displaying a tally of signs and symptoms of a level of severity that is different from a level of severity corresponding to other of the plurality of tally fields; and

the diagnostic tool determining a likelihood that the patient has meningitis based on the dispatcher-entered input indicative of the caller-relayed information and the tallies of signs and symptoms displayed by the plurality of tally fields.

2. The computer-implemented method of claim 1, further comprising the diagnostic tool indicating to the dispatcher, via the user interface, a result of the determination whether the patient has meningitis.

3. The computer-implemented method of claim 1, further comprising:

the diagnostic tool generating a recommendation that can be relayed to the emergency responders based on a result of the determination whether the patient has meningitis; and

displaying on the user interface of the diagnostic tool the recommendation.

4. The computer-implemented method of claim 1, wherein the dispatch center computer system initiates the diagnostic tool based on dispatcher-entered input indicative of one or more responses of the caller to the interrogatories presented to the dispatcher by the emergency dispatch protocol.

5. The computer-implemented method of claim 1, further comprising the diagnostic tool communicating to the emergency dispatch protocol a result of determining a likelihood that the patient has meningitis.

6. The computer-implemented method of claim 5, further comprising the dispatch center computer system determining a priority for the emergency dispatch response based on a result of the diagnostic tool determining a likelihood that the patient has meningitis.

7. The computer-implemented method of claim 6, wherein the dispatch center computer system determining the priority further comprises determining a determinant value.

8. The computer-implemented method of claim 1, further comprising the dispatch center computer system presenting to the dispatcher an emergency dispatch protocol user interface having a diagnostic tool launch input to initiate the diagnostic tool, wherein the dispatch center computer system initiates the diagnostic tool in response to actuation of the diagnostic tool launch input.

9. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a rash.

10. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a stiff neck.

11. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient is limp or acting like a rag doll.

12. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient appears confused or not alert.

13. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient wants to avoid bright lights.

14. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a severe headache.

15. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient is nauseated or vomiting.

16. The computer-implemented method of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient's hands or feet are cold to the touch.

17. The computer-implemented method of claim 1, further comprising:

the diagnostic tool providing via the user interface a question directed to the dispatcher; and

the diagnostic tool receiving dispatcher-entered input indicative of a response of the dispatcher to a question directed to the dispatcher.

18. The computer-implemented method of claim 17, wherein the question directed to the dispatcher comprises a question asking if the caller reported that the glass/blanch test was performed.

19. The computer-implemented method of claim 17, wherein the question directed to the dispatcher comprises a question asking if the caller ever said that the patient does not look right.

20. The computer-implemented method of claim 1, the diagnostic tool providing one or more input components via the user interface to receive dispatcher entered-input indicative of an age grouping of the patient, wherein the one or more questions provided by the diagnostic tool via the user interface are dependent on the indicated age grouping of the patient.

21. A computer system to assist a dispatcher when communicating with a caller via telephone regarding a medical emergency of a patient, the computer system comprising:

a processor;

an input device in electrical communication with the processor;

an output device in electrical communication with the processor; and

a memory in electrical communication with the processor, and having stored thereon:

an emergency dispatch protocol including a plurality of pre-scripted interrogatories for the dispatcher to ask the caller to generate an emergency dispatch response; and

a diagnostic tool to assist the dispatcher in guiding the caller to obtain information that can be used by the diagnostic tool to determine a likelihood that the patient has meningitis, wherein the diagnostic tool is configured to present to the dispatcher a user interface comprising:

one or more questions for the dispatcher to vocally relay to the caller over the telephone to guide the caller in identifying signs and symptoms that the patient has meningitis,

one or more input components associated with the one or more questions, the input components to receive dispatcher-entered input indicative of caller-relayed information concerning the caller's observations of the patient, including signs and symptoms that indicate whether the patient has meningitis,

a diagnostic indicators pane to present a listing of one or more signs and symptoms that indicate whether the patient has meningitis that are received through the dispatcher-entered input, and

a criteria summary pane to present a plurality of tally fields to convey a basis for a likelihood that the patient meningitis, each tally field of the plurality of tally fields displaying a tally of signs and symptoms of a level of severity that is different from a level of severity corresponding to other of the plurality of tally fields,

wherein the caller-relayed information is vocally relayed over the telephone to the dispatcher, and

wherein the diagnostic tool determines the likelihood that the patient has meningitis based on tallies of signs and symptoms displayed by the plurality of tally fields on the criteria summary pane.

22. The computer system of claim 21, wherein the diagnostic tool is further configured to provide to the emergency dispatch protocol an indication of a likelihood that the patient has meningitis.

23. The computer system of claim 21, further comprising a determinant value calculator stored on the memory to calculate a determinant value to prioritize an emergency response, wherein the diagnostic tool is configured to provide to the determinant value calculator a likelihood that the patient has meningitis.

24. The computer system of claim 21, further comprising a reporting module stored on the memory to measure how well a dispatcher performs, wherein the diagnostic tool is configured to provide to the reporting module a likelihood that the patient has meningitis.

25. A non-transitory computer-readable storage medium including computer-readable instructions that, when executed by a computing device, cause the computing device to perform operations to assist a dispatcher when communicating with a caller via telephone regarding a medical emergency of a patient, the operations comprising:

providing on the computing device an emergency dispatch protocol to assist the dispatcher, the protocol presenting a plurality of pre-scripted interrogatories for the dispatcher to ask the caller to gather information regarding the emergency and generate an emergency dispatch response by emergency responders;

initiating a diagnostic tool on the computing device, the diagnostic tool configured to assist the dispatcher in guiding the caller to obtain information that can be used by the diagnostic tool to diagnose whether the patient has meningitis; and

the diagnostic tool presenting to the dispatcher a user interface comprising one or more questions for the dispatcher to vocally relay to the caller over the telephone to guide the caller in identifying signs and symptoms that the patient has meningitis, comprising one or more input components associated with the one or more questions, and comprising a diagnostic indicators pane and a criteria summary pane;

the diagnostic tool receiving dispatcher-entered input via the input fields of the user interface, the dispatcher-entered input indicative of caller-relayed information concerning the caller's observations of the patient, including signs and symptoms that indicate whether the patient has meningitis, wherein the caller's observations are vocally relayed over the telephone to the dispatcher;

presenting, on the diagnostic indicators pane of the user interface of the diagnostic tool, a listing of one or more signs and symptoms that indicate whether the patient has meningitis that are received through the dispatcher-entered input;

presenting, on the criteria summary pane of the user interface of the diagnostic tool, a plurality of tally fields to convey a basis for a likelihood that the patient meningitis, each tally field of the plurality of tally fields displaying a tally of signs and symptoms of a level of severity that is different from a level of severity corresponding to other of the plurality of tally fields; and

the diagnostic tool determining the likelihood that the patient has meningitis based on the dispatcher-entered input indicative of the caller-relayed information and the tallies of signs and symptoms displayed by the plurality of tally fields.

Claims

1. A computer system to assist a dispatcher when communicating with a caller via telephone regarding a medical emergency of a patient, the computer system comprising:

a processor;

an input device in electrical communication with the processor;

an output device in electrical communication with the processor; and

a memory in electrical communication with the processor, and having stored thereon:

an emergency dispatch protocol including a plurality of pre-scripted interrogatories for the dispatcher to ask the caller to generate an emergency dispatch response; and

a diagnostic tool to assist the dispatcher in guiding the caller to obtain information that can be used by the diagnostic tool to determine a likelihood that the patient has meningitis, wherein the diagnostic tool is configured to present to the dispatcher a user interface comprising:

one or more questions for the dispatcher to vocally relay to the caller over the telephone to guide the caller in identifying signs and symptoms that the patient has meningitis,

one or more input components associated with the one or more questions, the input components to receive dispatcher-entered input indicative of caller-

relayed information concerning the caller's observations of the patient, including signs and symptoms that indicate whether the patient has meningitis,

a diagnostic indicators pane to present a listing of one or more signs and symptoms that indicate whether the patient has meningitis that are received through the dispatcher-entered input, and

a criteria summary pane to present a plurality of tally fields to convey a basis for a likelihood that the patient meningitis, each tally field of the plurality of tally fields displaying a tally of signs and symptoms of a level of severity that is different from a level of severity corresponding to other of the plurality of tally fields,

wherein the caller-relayed information is vocally relayed over the telephone to the dispatcher, and

wherein the diagnostic tool determines the likelihood that the patient has meningitis based on tallies of signs and symptoms displayed by the plurality of tally fields on the criteria summary pane.

2. The computer system of claim 1, wherein the diagnostic tool is further configured to provide to the emergency dispatch protocol an indication of a likelihood that the patient has meningitis.

3. The computer system of claim 1, further comprising a determinant value calculator stored on the memory to calculate a determinant value to prioritize an

emergency response, wherein the diagnostic tool is configured to provide to the determinant value calculator a likelihood that the patient has meningitis.

4. The computer system of claim 1, further comprising a reporting module stored on the memory to measure how well a dispatcher performs, wherein the diagnostic tool is configured to provide to the reporting module a likelihood that the patient has meningitis.

5. A non-transitory computer-readable storage medium including computer-readable instructions that, when executed by a computing device, cause the computing device to perform operations to assist a dispatcher when communicating with a caller via telephone regarding a medical emergency of a patient, the operations comprising:

providing on the computing device an emergency dispatch protocol to assist the dispatcher, the protocol presenting a plurality of pre-scripted interrogatories for the dispatcher to ask the caller to gather information regarding the emergency and generate an emergency dispatch response by emergency responders;

initiating a diagnostic tool on the computing device, the diagnostic tool configured to assist the dispatcher in guiding the caller to obtain information that can be used by the diagnostic tool to diagnose whether the patient has meningitis; and

the diagnostic tool presenting to the dispatcher a user interface comprising one or more questions for the dispatcher to vocally relay to the caller over the telephone to guide the caller in identifying signs and symptoms that the patient has meningitis

comprising one or more input components associated with the one or more questions, and comprising a diagnostic indicators pane and a criteria summary pane;

the diagnostic tool receiving dispatcher-entered input via the input fields of the user interface, the dispatcher-entered input indicative of caller-relayed information concerning the caller's observations of the patient, including signs and symptoms that indicate whether the patient has meningitis, wherein the caller's observations are vocally relayed over the telephone to the dispatcher;

presenting, on the diagnostic indicators pane of the user interface of the diagnostic tool, a listing of one or more signs and symptoms that indicate whether the patient has meningitis that are received through the dispatcher-entered input;

presenting, on the criteria summary pane of the user interface of the diagnostic tool, a plurality of tally fields to convey a basis for a likelihood that the patient meningitis, each tally field of the plurality of tally fields displaying a tally of signs and symptoms of a level of severity that is different from a level of severity corresponding to other of the plurality of tally fields; and

the diagnostic tool determining the likelihood that the patient has meningitis based on the dispatcher-entered input indicative of the caller-relayed information and the tallies of signs and symptoms displayed by the plurality of tally fields.

6. The computer system of claim 1, wherein the diagnostic tool is further configured to generate a recommendation that can be relayed to emergency responders based on a result of the determination whether the patient has meningitis and display on the user interface the recommendation.

7. The computer system of claim 1, wherein the diagnostic tool initiates based on dispatcher-entered input indicative of one or more responses of the caller to the interrogatories presented to the dispatcher.

8. The computer system of claim 1, wherein the user interface includes a diagnostic tool launch input to initiate the diagnostic tool, wherein the computer system initiates the diagnostic tool in response to actuation of the diagnostic tool launch input.

9. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a rash.

10. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a stiff neck.

11. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient is limp or acting like a rag doll.

12. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient appears confused or not alert.

13. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient wants to avoid bright lights.

14. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a severe headache.

15. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient is nauseated or vomiting.

16. The computer system of claim 1, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient’s hands or feet are cold to the touch.

17. The computer system of claim 1, wherein the diagnostic tool provides via the user interface a question directed to the dispatcher and the diagnostic tool receives

dispatcher-entered input indicative of a response of the dispatcher to a question directed to the dispatcher.

18. The computer system of claim 17, wherein the question directed to the dispatcher comprises a question asking if the caller reported that the glass/blanch test was performed.

19. The computer system of claim 17, wherein the question directed to the dispatcher comprises a question asking if the caller ever said that the patient does not look right.

20. The computer system of claim 1, wherein the diagnostic tool provides one or more input components via the user interface to receive dispatcher entered-input indicative of an age grouping of the patient, wherein the one or more questions provided by the diagnostic tool via the user interface are dependent on the indicated age grouping of the patient.

21. The non-transitory computer-readable storage medium of claim 5, wherein the diagnostic tool is further configured to provide to the emergency dispatch protocol an indication of a likelihood that the patient has meningitis.

22. The non-transitory computer-readable storage medium of claim 5, wherein the operations further comprise providing a determinant value calculator to calculate a

determinant value to prioritize an emergency response, wherein the diagnostic tool provides to the determinant value calculator a likelihood that the patient has meningitis.

23. The non-transitory computer-readable storage medium of claim 5, wherein the operations further comprise providing a reporting module to measure how well a dispatcher performs, wherein the diagnostic tool is configured to provide to the reporting module a likelihood that the patient has meningitis.

24. The non-transitory computer-readable storage medium of claim 5, wherein the diagnostic tool is further configured to generate a recommendation that can be relayed to emergency responders based on a result of the determination whether the patient has meningitis and display on the user interface the recommendation.

25. The non-transitory computer-readable storage medium of claim 5, wherein the diagnostic tool initiates based on dispatcher-entered input indicative of one or more responses of the caller to the interrogatories presented to the dispatcher.

26. The non-transitory computer-readable storage medium of claim 5, wherein the user interface includes a diagnostic tool launch input to initiate the diagnostic tool.

27. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a rash.

28. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a stiff neck.

29. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient is limp or acting like a rag doll.

30. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient appears confused or not alert.

31. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient wants to avoid bright lights.

32. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient has a severe headache.

33. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient is nauseated or vomiting.

34. The non-transitory computer-readable storage medium of claim 5, wherein the one or more questions provided by the user interface for the dispatcher to vocally relay to the caller comprise a question asking if the patient's hands or feet are cold to the touch.

35. The non-transitory computer-readable storage medium of claim 5, wherein the diagnostic tool provides via the user interface a question directed to the dispatcher and the diagnostic tool receives dispatcher-entered input indicative of a response of the dispatcher to a question directed to the dispatcher.

36. The non-transitory computer-readable storage medium of claim 5, wherein the question directed to the dispatcher comprises a question asking if the caller reported that the glass/blanch test was performed.

37. The non-transitory computer-readable storage medium of claim 5, wherein the question directed to the dispatcher comprises a question asking if the caller ever said that the patient does not look right.

38. The non-transitory computer-readable storage medium of claim 5, wherein the diagnostic tool provides one or more input components via the user interface to receive dispatcher entered-input indicative of an age grouping of the patient, wherein the one or more questions provided by the diagnostic tool via the user interface are dependent on the indicated age grouping of the patient.