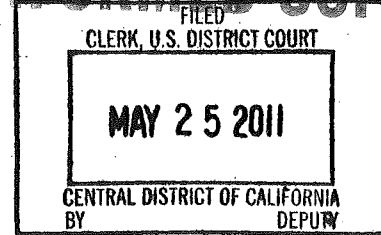


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Attorneys for Plaintiff MEDSQUIRE, LLC

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

MEDSQUIRE, LLC

Plaintiff,

vs.

SPRING MEDICAL SYSTEMS, INC.;
QUEST DIAGNOSTICS, INC.;
NEXTGEN HEALTHCARE
INFORMATION SYSTEMS, INC.;
HENRY SCHEIN MEDICAL SYSTEMS,
INC.; HEWLETT-PACKARD
COMPANY; APRIMA MEDICAL
SOFTWARE, INC.;
eCLINICALWORKS, LLC; MED3000,
INC.; PULSE SYSTEMS, INC.;
COMPULINK BUSINESS SYSTEMS,
INC.; NEXTECH SYSTEMS, INC.;
NAVINET, INC.; successEHS, INC.;
athenaHEALTH, INC.

Defendants.

Case No. **CV 11-4504** (DSF (AGR))

COMPLAINT FOR PATENT
INFRINGEMENT

DEMAND FOR JURY TRIAL

HENNIGAN DORMAN LLP
LAWYERS
LOS ANGELES, CALIFORNIA

COMPLAINT

1 For its Complaint against SPRING MEDICAL SYSTEMS, INC.; QUEST
 2 DIAGNOSTICS, INC.; NEXTGEN HEALTHCARE INFORMATION SYSTEMS,
 3 INC.; HENRY SCHEIN MEDICAL SYSTEMS, INC.; HEWLETT-PACKARD
 4 COMPANY; APRIMA MEDICAL SOFTWARE, INC.; eCLINICALWORKS, LLC;
 5 MED3000, INC.; PULSE SYSTEMS, INC.; COMPULINK BUSINESS
 6 SYSTEMS, INC.; NEXTECH SYSTEMS, INC.; NAVINET, INC.; successEHS,
 7 INC.; and athenaHEALTH, INC. (collectively, "Defendants"), Plaintiff
 8 MEDSQUIRE, LLC ("Plaintiff" or "Medsquire") alleges as follows:

9 THE PARTIES

10 1. Plaintiff Medsquire, LLC is a limited liability company duly organized
 11 and existing under the laws of the State of California, with its principal place of
 12 business at 225 South Lake Avenue, Suite 300, Pasadena, California 91101. Plaintiff
 13 is the owner, by assignment, of all right, title and interest to U.S. Patent No.
 14 5,682,526.

15 2. Defendant Spring Medical Systems, Inc. ("Spring Medical") is a
 16 corporation duly organized and existing under the laws of the State of Delaware, with
 17 its principal place of business at 14511 Falling Creek Dr Ste 305, Houston, TX
 18 77014-1280. Defendant Spring Medical's registered agent for service of process is
 19 Patricia Watson, 14511 Falling Creek Dr Ste 305, Houston, TX 77014-1280.

20 3. Defendant Quest Diagnostics, Inc. ("Quest") is a corporation duly
 21 organized and existing under the laws of the State of Delaware, with its principal
 22 place of business at 3 Giralda Farms, Madison, NJ 07940. Defendant Quest's
 23 registered agent for service of process in California is Corporation Service Company
 24 Which Will Do Business In California As CSC - Lawyers Incorporating, 2730
 25 Gateway Oaks Dr Ste 100, Sacramento, CA 95833-3503.

26 4. Defendant Nextgen Healthcare Information Systems, Inc. ("Nextgen") is
 27 a corporation duly organized and existing under the laws of the State of California,
 28 with its principal place of business at 18111 Von Karman Ave Ste 700, Irvine, CA

1 92612-7110. Defendant Nextgen's registered agent for service of process in
 2 California is CT Corporation System, 818 W 7th St, Los Angeles, CA 90017-3407.

3 5. Defendant Henry Schein Medical Systems, Inc. ("Henry Schein
 4 Medical") is a corporation duly organized and existing under the laws of the State of
 5 Ohio, with its principal place of business at 760 Boardman Canfield Rd, Youngstown,
 6 OH 44512-4344. Defendant Henry Schein Medical's registered agent for service of
 7 process is CSC-Lawyers Incorporating Service (Corporation Service Company) 50 W
 8 Broad St Ste 1800, Columbus, OH 43215-5910.

9 6. Defendant Hewlett-Packard Company ("HP") is a corporation duly
 10 organized and existing under the laws of the State of Delaware, with its principal
 11 place of business at 3000 Hanover St, Palo Alto, CA 94304-1112. Defendant HP's
 12 registered agent for service of process in California is CT Corporation System, 818 W
 13 7th St, Los Angeles, CA 90017-3407.

14 7. Defendant Aprima Medical Software, Inc. ("Aprima") is a corporation
 15 duly organized and existing under the laws of the State of Delaware, with its principal
 16 place of business at 3330 Keller Springs Rd., Ste. 201, Carrollton, TX 75006.
 17 Defendant Aprima's registered agent for service of process is Corporation Service
 18 Company dba CSC - Lawyers Incorporating Service Company, 211 E 7th St Ste 620,
 19 Austin, TX 78701-3218.

20 8. Defendant eClinicalWorks, LLC ("eClinicalWorks") is a Limited
 21 Liability Company duly organized and existing under the laws of the State of
 22 Massachusetts, with its principal place of business at 110 Turnpike Rd, Westborough,
 23 MA 01581-2864. Defendant eClinicalWorks's registered agent for service of process
 24 in California is CT Corporation System, 818 W 7th St, Los Angeles, CA 90017-3407.

25 9. Defendant Med3000, Inc. ("Med3000") is a corporation duly organized
 26 and existing under the laws of the State of Delaware, with its principal place of
 27 business at 680 Andersen Drive Foster Plz, Pittsburgh, PA 15220. Defendant
 28 Med3000's registered agent for service of process in California is Corporation Service

1 Company Which Will Do Business In California As CSC - Lawyers Incorporating,
2 2730 Gateway Oaks Dr Ste 100, Sacramento, CA 95833-3503.

3 10. Defendant Pulse Systems, Inc ("Pulse") is a corporation duly organized
4 and existing under the laws of the State of Kansas, with its principal place of business
5 at 3017 North Cypress Drive, Wichita, KS 67226. Defendant Pulse's registered agent
6 for service of process is Alif Hourani, 2959 N Rock Rd Ste 400, Wichita, KS 67226-
7 1197.

8 11. Defendant Compulink Business Systems, Inc. ("Compulink") is a
9 corporation duly organized and existing under the laws of the State of California, with
10 its principal place of business at 2645 Townsgate Rd Ste 200, Westlake Village, CA
11 91361-2722. Defendant Compulink's registered agent for service of process in
12 California is Wilson Lwk, 6440 Twin Spgs, Agoura, CA 91327.

13 12. Defendant Nextech Systems, Inc. ("Nextech") is a corporation duly
14 organized and existing under the laws of the State of California, with its principal
15 place of business at 1065 Castlerock Ln, Santa Ana, CA 92705-6110. Defendant
16 Nextech's registered agent for service of process in California is Gregory C.
17 McKhann, 1065 Castlerock Ln, Santa Ana, CA 92705-6110.

18 13. Defendant Navinet, Inc. ("Navinet") is a corporation duly organized and
19 existing under the laws of the State of Delaware, with its principal place of business at
20 8 CAMBRIDGE CTR, CAMBRIDGE, MA 02142-1413. Defendant Navinet's
21 registered agent for service of process in California is Corporation Service Company
22 Which Will Do Business In California As CSC - Lawyers Incorporating, 2730
23 Gateway Oaks Dr Ste 100, Sacramento, CA 95833-3503.

24 14. Defendant SuccessEHS, Inc. ("SucessEHS") is a corporation duly
25 organized and existing under the laws of the State of Alabama, with its principal place
26 of business at 1 Metroplex Dr Ste 500, Birmingham, AL 35209-7801. Defendant
27 sucessEHS's registered agent for service of process is Ross N. Cohen, 1200 Amsouth
28 Harbert Plaza 1901 S Ave N, Birmingham, AL 35203.

NATURE OF THE ACTION

JURISDICTION AND VENUE

FIRST CLAIM FOR RELIEF AGAINST ALL DEFENDANTS FOR

DIRECT INFRINGEMENT OF U.S. PATENT NO. 5,682,526

20. Plaintiff incorporates herein by reference the allegations set forth in paragraphs 1-19 of this Complaint as though fully set forth herein.

1 21. Plaintiff is the owner by assignment of the entire right, title, and interest,
2 including the right to enforce U.S. Patent Number 5,682,526, entitled "Method and
3 System For Flexibly Organizing, Recording, and Displaying Medical Patient Care
4 Information Using Fields In a Flowsheet" ("the '526 patent"). A true and correct
5 copy of the '526 patent is attached as Exhibit A and incorporated herein by reference.

6 22. Defendant Spring Medical has directly infringed and continues to
7 directly infringe the '526 patent by making, using, selling, and/or offering for sale its
8 Spring Charts system, which embodies and/or otherwise practices one or more of the
9 claims of the '526 patent. As a direct and proximate result of Spring Medical's
10 infringement of the '526 patent, Plaintiff has been and continues to be damaged in an
11 amount yet to be determined.

12 23. Defendant Quest has directly infringed and continues to directly infringe
13 the '526 patent by making, using, selling, and/or offering for sale its Care360 system,
14 which embodies and/or otherwise practices one or more of the claims of the '526
15 patent. As a direct and proximate result of Quest's infringement of the '526 patent,
16 Plaintiff has been and continues to be damaged in an amount yet to be determined.

17 24. Defendant Nextgen has directly infringed and continues to directly
18 infringe the '526 patent by making, using, selling, and/or offering for sale its NextGen
19 Inpatient Clinicals system, which embodies and/or otherwise practices one or more of
20 the claims of the '526 patent. As a direct and proximate result of Nextgen's
21 infringement of the '526 patent, Plaintiff has been and continues to be damaged in an
22 amount yet to be determined.

23 25. Defendant Henry Schein Medical has directly infringed and continues to
24 directly infringe the '526 patent by making, using, selling, and/or offering for sale its
25 MicroMD EMR system, which embodies and/or otherwise practices one or more of
26 the claims of the '526 patent. As a direct and proximate result of Henry Schein
27 Medical's infringement of the '526 patent, Plaintiff has been and continues to be
28 damaged in an amount yet to be determined.

1 26. Defendant HP has directly infringed and continues to directly infringe
2 the '526 patent by making, using, selling, and/or offering for sale its EHReady
3 Program system, which embodies and/or otherwise practices one or more of the
4 claims of the '526 patent. As a direct and proximate result of HP's infringement of
5 the '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
6 determined.

7 27. Defendant Aprima has directly infringed and continues to directly
8 infringe the '526 patent by making, using, selling, and/or offering for sale its Aprima
9 2011 system, which embodies and/or otherwise practices one or more of the claims of
10 the '526 patent. As a direct and proximate result of Aprima's infringement of the
11 '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
12 determined.

13 28. Defendant eClinicalWorks has directly infringed and continues to
14 directly infringe the '526 patent by making, using, selling, and/or offering for sale its
15 eClinicalWorks EMR Version 8.0.48 system, which embodies and/or otherwise
16 practices one or more of the claims of the '526 patent. As a direct and proximate
17 result of eClinicalWorks's infringement of the '526 patent, Plaintiff has been and
18 continues to be damaged in an amount yet to be determined.

19 29. Defendant Med3000 has directly infringed and continues to directly
20 infringe the '526 patent by making, using, selling, and/or offering for sale its
21 InteGreat EHR V6.4 system, which embodies and/or otherwise practices one or more
22 of the claims of the '526 patent. As a direct and proximate result of Med3000's
23 infringement of the '526 patent, Plaintiff has been and continues to be damaged in an
24 amount yet to be determined.

25 30. Defendant Pulse has directly infringed and continues to directly infringe
26 the '526 patent by making, using, selling, and/or offering for sale its 2011 Pulse
27 Complete EHR system, which embodies and/or otherwise practices one or more of the
28 claims of the '526 patent. As a direct and proximate result of Pulse's infringement of

1 the '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
2 determined.

3 31. Defendant Compulink has directly infringed and continues to directly
4 infringe the '526 patent by making, using, selling, and/or offering for sale its
5 Advantage/EHR Version 10 system, which embodies and/or otherwise practices one
6 or more of the claims of the '526 patent. As a direct and proximate result of
7 Compulink's infringement of the '526 patent, Plaintiff has been and continues to be
8 damaged in an amount yet to be determined.

9 32. Defendant Nextech has directly infringed and continues to directly
10 infringe the '526 patent by making, using, selling, and/or offering for sale its NexTech
11 Practice 2011 version 9.7 system, which embodies and/or otherwise practices one or
12 more of the claims of the '526 patent. As a direct and proximate result of Nextech's
13 infringement of the '526 patent, Plaintiff has been and continues to be damaged in an
14 amount yet to be determined.

15 33. Defendant Navinet has directly infringed and continues to directly
16 infringe the '526 patent by making, using, selling, and/or offering for sale its NaviNet
17 EMR system, which embodies and/or otherwise practices one or more of the claims of
18 the '526 patent. As a direct and proximate result of Navinet's infringement of the
19 '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
20 determined.

21 34. Defendant SuccessEHS has directly infringed and continues to directly
22 infringe the '526 patent by making, using, selling, and/or offering for sale its
23 SuccessEHS 6.0 system, which embodies and/or otherwise practices one or more of
24 the claims of the '526 patent. As a direct and proximate result of SuccessEHS's
25 infringement of the '526 patent, Plaintiff has been and continues to be damaged in an
26 amount yet to be determined.

27 35. Defendant athenaHEALTH has directly infringed and continues to
28 directly infringe the '526 patent by making, using, selling, and/or offering for sale its

1 athenaClinicals SM system, which embodies and/or otherwise practices one or more
2 of the claims of the '526 patent. As a direct and proximate result of
3 athenaHEALTH's infringement of the '526 patent, Plaintiff has been and continues to
4 be damaged in an amount yet to be determined.

5 **SECOND CLAIM FOR RELIEF AGAINST ALL DEFENDANTS FOR**
6 **INDIRECTLY INFRINGING U.S. PATENT NO. 5,682,526**

7 36. Plaintiff incorporates herein by reference the allegations set forth in
8 paragraphs 1-35 of this Complaint as though fully set forth herein.

9 37. On information and belief, Defendant Spring Medical has indirectly
10 infringed and continues to indirectly infringe the '526 patent by actively inducing
11 direct infringement by other persons – specifically, customers and partners of Spring
12 Medical, who make, use, sell or offer for sale its SpringCharts system, which
13 embodies and/or otherwise practices one or more of the claims of the '526 patent,
14 when Defendant had knowledge of the '526 Patent and knew or should have known
15 that their actions would induce direct infringement by others and intended that their
16 actions would induce direct infringement by others. As a direct and proximate result
17 of Spring Medical's indirect infringement of the '526 patent, Plaintiff has been and
18 continues to be damaged in an amount yet to be determined.

19 38. On information and belief, Defendant Quest has indirectly infringed and
20 continues to indirectly infringe the '526 patent by actively inducing direct
21 infringement by other persons – specifically, customers and partners of Quest, who
22 make, use, sell or offer for sale its Care360 system, which embodies and/or otherwise
23 practices one or more of the claims of the '526 patent, when Defendant had
24 knowledge of the '526 Patent and knew or should have known that their actions
25 would induce direct infringement by others and intended that their actions would
26 induce direct infringement by others. As a direct and proximate result of Quest's
27 indirect infringement of the '526 patent, Plaintiff has been and continues to be
28 damaged in an amount yet to be determined.

1 39. On information and belief, Defendant Nextgen has indirectly infringed
2 and continues to indirectly infringe the '526 patent by actively inducing direct
3 infringement by other persons – specifically, customers and partners of Nextgen, who
4 make, use, sell or offer for sale its NexGen Inpatient Clinicals system, which embodies
5 and/or otherwise practices one or more of the claims of the '526 patent, when
6 Defendant had knowledge of the '526 Patent and knew or should have known that
7 their actions would induce direct infringement by others and intended that their
8 actions would induce direct infringement by others. As a direct and proximate result
9 of Nextgen's indirect infringement of the '526 patent, Plaintiff has been and continues
10 to be damaged in an amount yet to be determined.

11 40. On information and belief, Defendant Henry Schein Medical has
12 indirectly infringed and continues to indirectly infringe the '526 patent by actively
13 inducing direct infringement by other persons – specifically, customers and partners
14 of Henry Schein Medical, who make, use, sell or offer for sale its MicroMD EMR
15 Version 7.5 system, which embodies and/or otherwise practices one or more of the
16 claims of the '526 patent, when Defendant had knowledge of the '526 Patent and
17 knew or should have known that their actions would induce direct infringement by
18 others and intended that their actions would induce direct infringement by others. As
19 a direct and proximate result of Henry Schein Medical's indirect infringement of the
20 '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
21 determined.

22 41. On information and belief, Defendant HP has indirectly infringed and
23 continues to indirectly infringe the '526 patent by actively inducing direct
24 infringement by other persons – specifically, customers and partners of HP, who
25 make, use, sell or offer for sale its EHReady Program system, which embodies and/or
26 otherwise practices one or more of the claims of the '526 patent, when Defendant had
27 knowledge of the '526 Patent and knew or should have known that their actions
28 would induce direct infringement by others and intended that their actions would

1 induce direct infringement by others. As a direct and proximate result of HP's
2 indirect infringement of the '526 patent, Plaintiff has been and continues to be
3 damaged in an amount yet to be determined.

4 42. On information and belief, Defendant Aprima has indirectly infringed
5 and continues to indirectly infringe the '526 patent by actively inducing direct
6 infringement by other persons – specifically, customers and partners of Aprima, who
7 make, use, sell or offer for sale its Aprima 2011 system, which embodies and/or
8 otherwise practices one or more of the claims of the '526 patent, when Defendant had
9 knowledge of the '526 Patent and knew or should have known that their actions
10 would induce direct infringement by others and intended that their actions would
11 induce direct infringement by others. As a direct and proximate result of Aprima's
12 indirect infringement of the '526 patent, Plaintiff has been and continues to be
13 damaged in an amount yet to be determined.

14 43. On information and belief, Defendant eClinicalWorks has indirectly
15 infringed and continues to indirectly infringe the '526 patent by actively inducing
16 direct infringement by other persons – specifically, customers and partners of
17 eClinicalWorks, who make, use, sell or offer for sale its eClinicalWorks EMR
18 Version 8.0.48 system, which embodies and/or otherwise practices one or more of the
19 claims of the '526 patent, when Defendant had knowledge of the '526 Patent and
20 knew or should have known that their actions would induce direct infringement by
21 others and intended that their actions would induce direct infringement by others. As
22 a direct and proximate result of eClinicalWorks's indirect infringement of the '526
23 patent, Plaintiff has been and continues to be damaged in an amount yet to be
24 determined.

25 44. On information and belief, Defendant Med3000 has indirectly infringed
26 and continues to indirectly infringe the '526 patent by actively inducing direct
27 infringement by other persons – specifically, customers and partners of Med3000,
28 who make, use, sell or offer for sale its InteGreat EHR V6.4 system, which embodies

1 and/or otherwise practices one or more of the claims of the '526 patent, when
2 Defendant had knowledge of the '526 Patent and knew or should have known that
3 their actions would induce direct infringement by others and intended that their
4 actions would induce direct infringement by others. As a direct and proximate result
5 of Med3000's indirect infringement of the '526 patent, Plaintiff has been and
6 continues to be damaged in an amount yet to be determined.

7 45. On information and belief, Defendant Pulse has indirectly infringed and
8 continues to indirectly infringe the '526 patent by actively inducing direct
9 infringement by other persons – specifically, customers and partners of Pulse, who
10 make, use, sell or offer for sale its 2011 Pulse Complete EHR system, which
11 embodies and/or otherwise practices one or more of the claims of the '526 patent,
12 when Defendant had knowledge of the '526 Patent and knew or should have known
13 that their actions would induce direct infringement by others and intended that their
14 actions would induce direct infringement by others. As a direct and proximate result
15 of Pulse's indirect infringement of the '526 patent, Plaintiff has been and continues to
16 be damaged in an amount yet to be determined.

17 46. On information and belief, Defendant Compulink has indirectly infringed
18 and continues to indirectly infringe the '526 patent by actively inducing direct
19 infringement by other persons – specifically, customers and partners of Compulink,
20 who make, use, sell or offer for sale its Advantage/EHR Version 10 system, which
21 embodies and/or otherwise practices one or more of the claims of the '526 patent,
22 when Defendant had knowledge of the '526 Patent and knew or should have known
23 that their actions would induce direct infringement by others and intended that their
24 actions would induce direct infringement by others. As a direct and proximate result
25 of Compulink's indirect infringement of the '526 patent, Plaintiff has been and
26 continues to be damaged in an amount yet to be determined.

27 47. On information and belief, Defendant Nextech has indirectly infringed
28 and continues to indirectly infringe the '526 patent by actively inducing direct

1 infringement by other persons – specifically, customers and partners of Nextech, who
2 make, use, sell or offer for sale its NexTech Practice 2011 version 9.7 system, which
3 embodies and/or otherwise practices one or more of the claims of the ‘526 patent,
4 when Defendant had knowledge of the ‘526 Patent and knew or should have known
5 that their actions would induce direct infringement by others and intended that their
6 actions would induce direct infringement by others. As a direct and proximate result
7 of Nextech’s indirect infringement of the ‘526 patent, Plaintiff has been and continues
8 to be damaged in an amount yet to be determined.

9 48. On information and belief, Defendant Navinet has indirectly infringed
10 and continues to indirectly infringe the ‘526 patent by actively inducing direct
11 infringement by other persons – specifically, customers and partners of Navinet, who
12 make, use, sell or offer for sale its NaviNet EMR system, which embodies and/or
13 otherwise practices one or more of the claims of the ‘526 patent, when Defendant had
14 knowledge of the ‘526 Patent and knew or should have known that their actions
15 would induce direct infringement by others and intended that their actions would
16 induce direct infringement by others. As a direct and proximate result of Navinet’s
17 indirect infringement of the ‘526 patent, Plaintiff has been and continues to be
18 damaged in an amount yet to be determined.

19 49. On information and belief, Defendant SuccessEHS has indirectly
20 infringed and continues to indirectly infringe the ‘526 patent by actively inducing
21 direct infringement by other persons – specifically, customers and partners of
22 SuccessEHS, who make, use, sell or offer for sale its SuccessEHS 6.0 system, which
23 embodies and/or otherwise practices one or more of the claims of the ‘526 patent,
24 when Defendant had knowledge of the ‘526 Patent and knew or should have known
25 that their actions would induce direct infringement by others and intended that their
26 actions would induce direct infringement by others. As a direct and proximate result
27 of SuccessEHS’s indirect infringement of the ‘526 patent, Plaintiff has been and
28 continues to be damaged in an amount yet to be determined.

50. On information and belief, Defendant SuccessEHS has indirectly infringed and continues to indirectly infringe the '526 patent by actively inducing direct infringement by other persons – specifically, customers and partners of SuccessEHS, who make, use, sell or offer for sale its athenaClinicals SM system, which embodies and/or otherwise practices one or more of the claims of the '526 patent, when Defendant had knowledge of the '526 Patent and knew or should have known that their actions would induce direct infringement by others and intended that their actions would induce direct infringement by others. As a direct and proximate result of SuccessEHS's indirect infringement of the '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be determined.

THIRD CLAIM FOR RELIEF AGAINST ALL DEFENDANTS FOR CONTRIBUTING TO THE INFRINGEMENT OF U.S. PATENT NO. 5,682,526

51. Plaintiff incorporates herein by reference the allegations set forth in paragraphs 1-50 of this Complaint as though fully set forth herein.

52. On information and belief, Defendant Spring Medical has contributorily infringed and continues to contributorily infringe the '526 patent by providing non-staple articles of commerce to others for use in an infringing system or method with knowledge of the '526 patent and knowledge that these non-staple articles of commerce are used as a material part of the claimed invention of the '526 patent. As a direct and proximate result of Spring Medical's contributory infringement of the '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be determined.

53. On information and belief, Defendant Quest has contributorily infringed and continues to contributorily infringe the '526 patent by providing non-staple articles of commerce to others for use in an infringing system or method with knowledge of the '526 patent and knowledge that these non-staple articles of commerce are used as a material part of the claimed invention of the '526 patent. As

1 a direct and proximate result of Quest's contributory infringement of the '526 patent,
2 Plaintiff has been and continues to be damaged in an amount yet to be determined.

3 54. On information and belief, Defendant Nextgen has contributorily
4 infringed and continues to contributorily infringe the '526 patent by providing non-
5 staple articles of commerce to others for use in an infringing system or method with
6 knowledge of the '526 patent and knowledge that these non-staple articles of
7 commerce are used as a material part of the claimed invention of the '526 patent. As
8 a direct and proximate result of Nextgen's contributory infringement of the '526
9 patent, Plaintiff has been and continues to be damaged in an amount yet to be
10 determined.

11 55. On information and belief, Defendant Henry Schein Medical has
12 contributorily infringed and continues to contributorily infringe the '526 patent by
13 providing non-staple articles of commerce to others for use in an infringing system or
14 method with knowledge of the '526 patent and knowledge that these non-staple
15 articles of commerce are used as a material part of the claimed invention of the '526
16 patent. As a direct and proximate result of Henry Schein Medical's contributory
17 infringement of the '526 patent, Plaintiff has been and continues to be damaged in an
18 amount yet to be determined.

19 56. On information and belief, Defendant HP has contributorily infringed
20 and continues to contributorily infringe the '526 patent by providing non-staple
21 articles of commerce to others for use in an infringing system or method with
22 knowledge of the '526 patent and knowledge that these non-staple articles of
23 commerce are used as a material part of the claimed invention of the '526 patent. As
24 a direct and proximate result of HP's contributory infringement of the '526 patent,
25 Plaintiff has been and continues to be damaged in an amount yet to be determined.

26 57. On information and belief, Defendant Aprima has contributorily
27 infringed and continues to contributorily infringe the '526 patent by providing non-
28 staple articles of commerce to others for use in an infringing system or method with

1 knowledge of the '526 patent and knowledge that these non-staple articles of
2 commerce are used as a material part of the claimed invention of the '526 patent. As
3 a direct and proximate result of Aprima's contributory infringement of the '526
4 patent, Plaintiff has been and continues to be damaged in an amount yet to be
5 determined.

6 58. On information and belief, Defendant eClinicalWorks has contributorily
7 infringed and continues to contributorily infringe the '526 patent by providing non-
8 staple articles of commerce to others for use in an infringing system or method with
9 knowledge of the '526 patent and knowledge that these non-staple articles of
10 commerce are used as a material part of the claimed invention of the '526 patent. As
11 a direct and proximate result of eClinicalWorks's contributory infringement of the
12 '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
13 determined.

14 59. On information and belief, Defendant Med3000 has contributorily
15 infringed and continues to contributorily infringe the '526 patent by providing non-
16 staple articles of commerce to others for use in an infringing system or method with
17 knowledge of the '526 patent and knowledge that these non-staple articles of
18 commerce are used as a material part of the claimed invention of the '526 patent. As
19 a direct and proximate result of Med3000's contributory infringement of the '526
20 patent, Plaintiff has been and continues to be damaged in an amount yet to be
21 determined.

22 60. On information and belief, Defendant Pulse has contributorily infringed
23 and continues to contributorily infringe the '526 patent by providing non-staple
24 articles of commerce to others for use in an infringing system or method with
25 knowledge of the '526 patent and knowledge that these non-staple articles of
26 commerce are used as a material part of the claimed invention of the '526 patent. As
27 a direct and proximate result of Pulse's contributory infringement of the '526 patent,
28 Plaintiff has been and continues to be damaged in an amount yet to be determined.

1 61. On information and belief, Defendant Compulink has contributorily
2 infringed and continues to contributorily infringe the '526 patent by providing non-
3 staple articles of commerce to others for use in an infringing system or method with
4 knowledge of the '526 patent and knowledge that these non-staple articles of
5 commerce are used as a material part of the claimed invention of the '526 patent. As
6 a direct and proximate result of Compulink's contributory infringement of the '526
7 patent, Plaintiff has been and continues to be damaged in an amount yet to be
8 determined.

9 62. On information and belief, Defendant Nextech has contributorily
10 infringed and continues to contributorily infringe the '526 patent by providing non-
11 staple articles of commerce to others for use in an infringing system or method with
12 knowledge of the '526 patent and knowledge that these non-staple articles of
13 commerce are used as a material part of the claimed invention of the '526 patent. As
14 a direct and proximate result of Nextech's contributory infringement of the '526
15 patent, Plaintiff has been and continues to be damaged in an amount yet to be
16 determined.

17 63. On information and belief, Defendant Navinet has contributorily
18 infringed and continues to contributorily infringe the '526 patent by providing non-
19 staple articles of commerce to others for use in an infringing system or method with
20 knowledge of the '526 patent and knowledge that these non-staple articles of
21 commerce are used as a material part of the claimed invention of the '526 patent. As
22 a direct and proximate result of Navinet's contributory infringement of the '526
23 patent, Plaintiff has been and continues to be damaged in an amount yet to be
24 determined.

25 64. On information and belief, Defendant SuccessEHS has contributorily
26 infringed and continues to contributorily infringe the '526 patent by providing non-
27 staple articles of commerce to others for use in an infringing system or method with
28 knowledge of the '526 patent and knowledge that these non-staple articles of

1 commerce are used as a material part of the claimed invention of the '526 patent. As
 2 a direct and proximate result of SuccessEHS's contributory infringement of the '526
 3 patent, Plaintiff has been and continues to be damaged in an amount yet to be
 4 determined.

5 65. On information and belief, Defendant athenaHEALTH has contributorily
 6 infringed and continues to contributorily infringe the '526 patent by providing non-
 7 staple articles of commerce to others for use in an infringing system or method with
 8 knowledge of the '526 patent and knowledge that these non-staple articles of
 9 commerce are used as a material part of the claimed invention of the '526 patent. As
 10 a direct and proximate result of athenaHEALTH's contributory infringement of the
 11 '526 patent, Plaintiff has been and continues to be damaged in an amount yet to be
 12 determined.

13 **PRAYER FOR RELIEF**

14 WHEREFORE, Plaintiff prays for judgment against Defendant Sage as
 15 follows:

16 1. For a judicial determination and declaration that Defendants have
 17 infringed and continues to infringe the '526 patent by making, using, importing,
 18 offering for sale, and/or selling EHR systems;

19 2. For a judicial determination and declaration that Defendants have
 20 induced, and continues to induce, the infringement of the '526 patent;

21 3. For a judicial determination and declaration that Defendants have
 22 contributorily infringed, and continues to contributorily infringe, the '526 patent;

23 4. For damages resulting from Defendants' past and present infringement of
 24 the '526 patent;


25 5. For a declaration that this is an exceptional case under 35 U.S.C. § 285
 26 and for an award of attorneys' fees and costs in this action;

27 6. For an assessment of prejudgment interest; and
 28

1 7. For such other and further relief as the Court may deem just and proper
2 under the circumstances.

3
4 DATED: May 24, 2011

HENNIGAN DORMAN LLP

5
6 By 
7 Lawrence M. Hadley

8 Attorneys for Plaintiff, MEDSQUIRE LLC
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HENNIGAN DORMAN LLP
LAWYERS
LOS ANGELES, CALIFORNIA

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a jury trial pursuant to Rule 38 of the Federal Rules of Civil Procedure as to all issues in this lawsuit.

DATED: May 24, 2011

HENNIGAN DORMAN LLP

By 
Lawrence M. Hadley

Attorneys for Plaintiff MEDSQUIRE, LLC

HENNIGAN DORMAN LLP
LAWYERS
LOS ANGELES, CALIFORNIA

EXHIBIT A



US005682526A

United States Patent [19]

Smokoff et al.

[11] Patent Number: 5,682,526
[45] Date of Patent: Oct. 28, 1997

[54] METHOD AND SYSTEM FOR FLEXIBLY ORGANIZING, RECORDING, AND DISPLAYING MEDICAL PATIENT CARE INFORMATION USING FIELDS IN A FLOWSHEET

[75] Inventors: Timothy L. Smokoff, Renton; Tom Marlin, Edmonds, both of Wash.; Herbert J. Uhrig, Duluth, Ga.

[73] Assignee: SpaceLabs Medical, Inc., Redmond, Wash.

[21] Appl. No.: 504,801

[22] Filed: Jul. 20, 1995

[51] Int. Cl.⁶ G06F 17/30

[52] U.S. Cl. 395/615; 395/602; 395/611; 128/710

[58] Field of Search 364/413.01; 395/161, 395/600, 700, 608, 764, 768, 601, 603, 765, 202; 340/172.5; 128/710

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Primary Examiner—Thomas G. Black

Assistant Examiner—Charles L. Rones

Attorney, Agent, or Firm—Seed and Berry LLP

[57] ABSTRACT

A method and system for flexibly organizing, recording, and displaying medical patient care information is provided. In a preferred embodiment, a patient information management facility enables users to customize a patient information hierarchy, which defines and organizes the information that may be stored about each patient, as well as patient data flowsheets, which define views in which the patient data stored according to the hierarchy may be entered and viewed, in a way that is optimized for the structure and procedures of the particular health care organization. The facility enables users to add, modify, and rearrange global or local patient information parameters that make up the hierarchy. Users may define the parameters to be any of a number of types. The user may also customize flowsheets used for entering and displaying result values of parameters defined in the hierarchy for particular patients. The user may expand and contract overview encapsulating parameters to display or hide the encapsulated parameters encapsulated therein. The facility also allows the user to link a result value of one parameter to other parameters, causing the linked-to parameters to be displayed when the result value is entered.

25 Claims, 21 Drawing Sheets

parameter id	parameter name	select from parameter	parameter data type	normal value	data type - specific information
10001	cough	yes	select	none	none non-productive productive 10013, 10014
10002	respiration	no	select	normal	normal heavy shallow rapid soft
10003	chest sounds	no	select	none	none crackles wheezes rhales
10004	sleep	no	select		asleep awake asleep
10005	Delirium	no	encapsulating		*10007, 10008, 10009
10006	Anoxia/oxia	no	encapsulating		*10010, 10011, 10012
10007	dose	no	integer		
10008	dose units	no	select	cc	mg cc
10009	route	no	select	intravenous	oral intravenous
10010	dose	no	integer		
10011	dose units	no	select	mg	mg cc
10012	route	no	select	oral	oral intravenous
10013	sputum color	no	select		white yellow green brown yellow green
10014	sputum amount	no	select		

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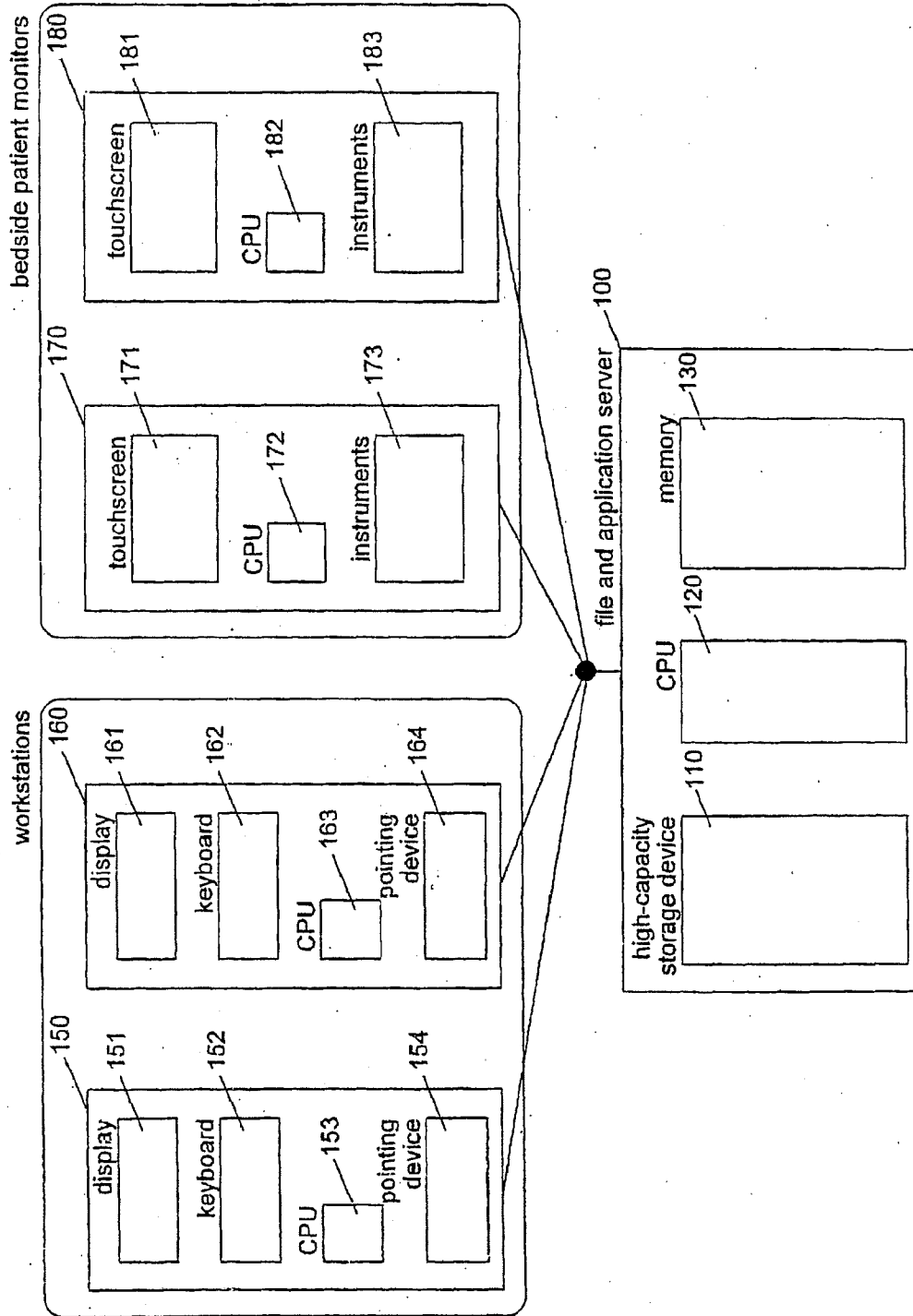


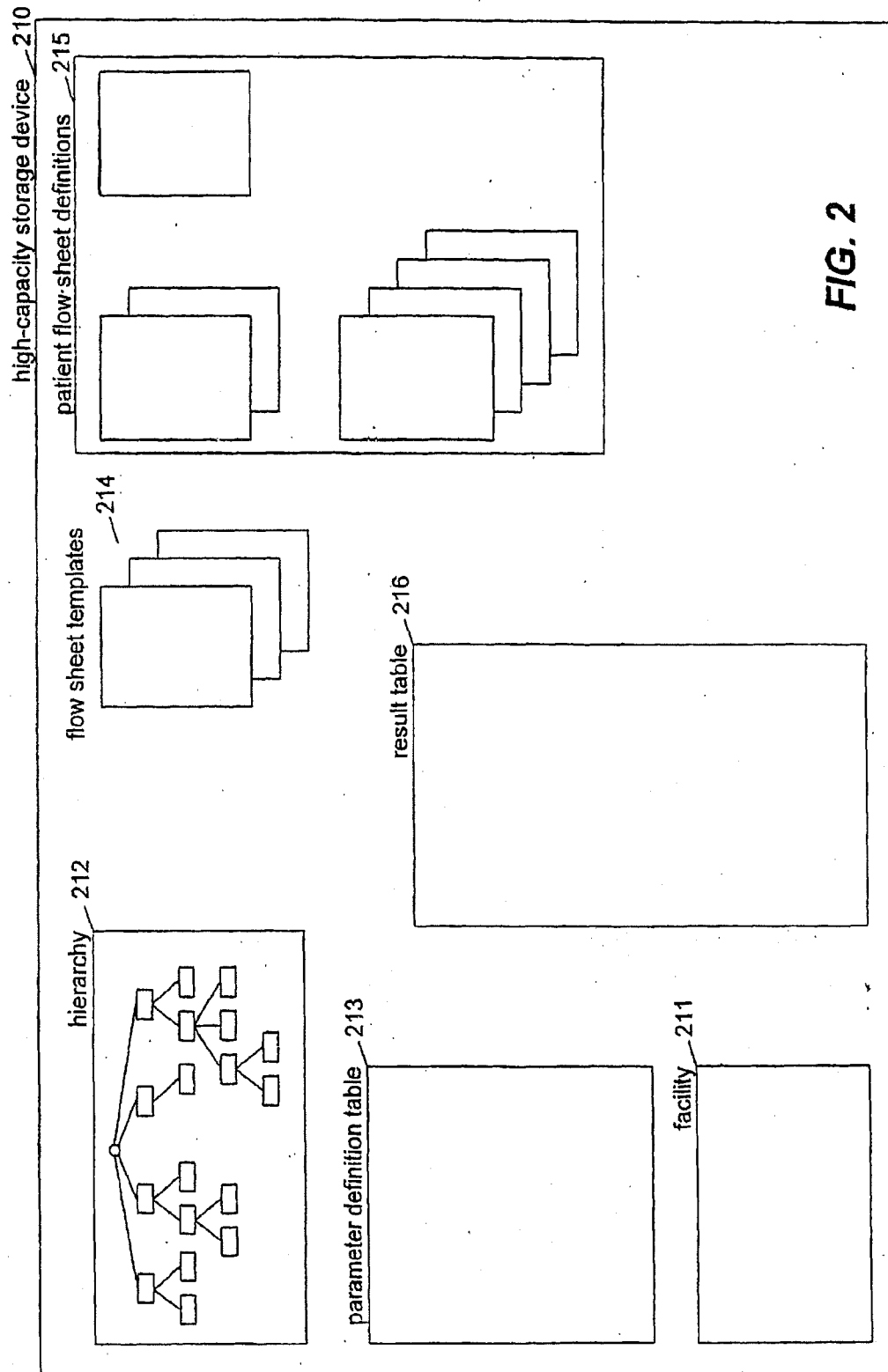
FIG. 1

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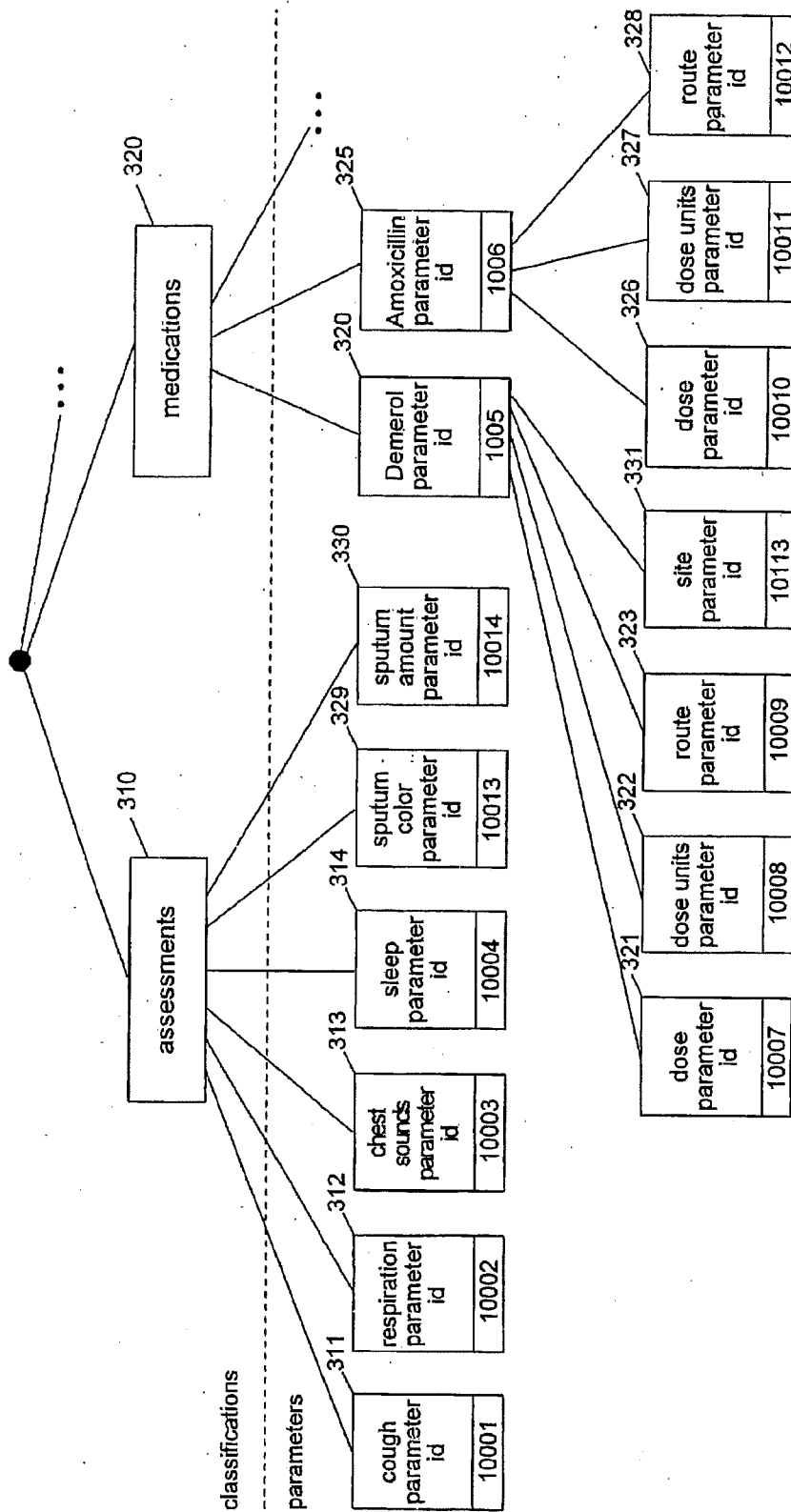


FIG. 3

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parameter definition table 400

parameter id 401	parameter name 402	linked from parameter 403	parameter data type 404	normal value 405	data type - specific information 406
10001	cough	yes	select	none	none
10002	respiration	no	select	normal	non-productive 10013, 10014
10003	chest sounds	no	select	none	normal heavy shallow none
10004	sleep	no	select		soft loud awake asleep
10005	Demerol	no	encapsulating		*10007, 10008, 10009
10006	Amoxcillin	no	encapsulating		*10010, 10011, 10012
10007	dose	no	integer		
10008	dose units	no	select	cc	mg cc
10009	route	no	select	intravenous	oral intravenous
10010	dose	no	integer		
10011	dose units	no	select	mg	mg cc
10012	route	no	select	oral	oral intravenous
10013	sputum color	no	select		white yellow green
10014	sputum amount	no	select		white yellow green
...					

FIG. 4

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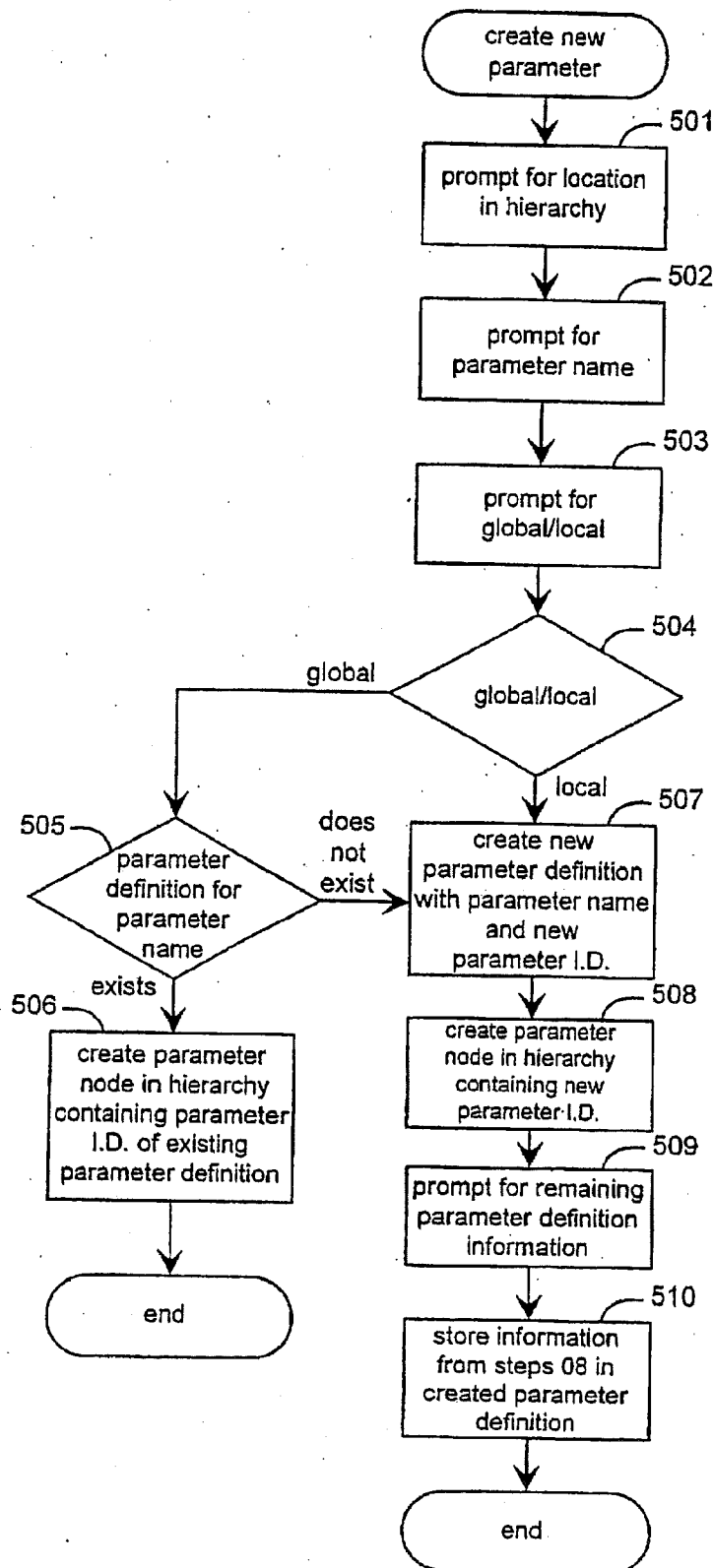


FIG. 5

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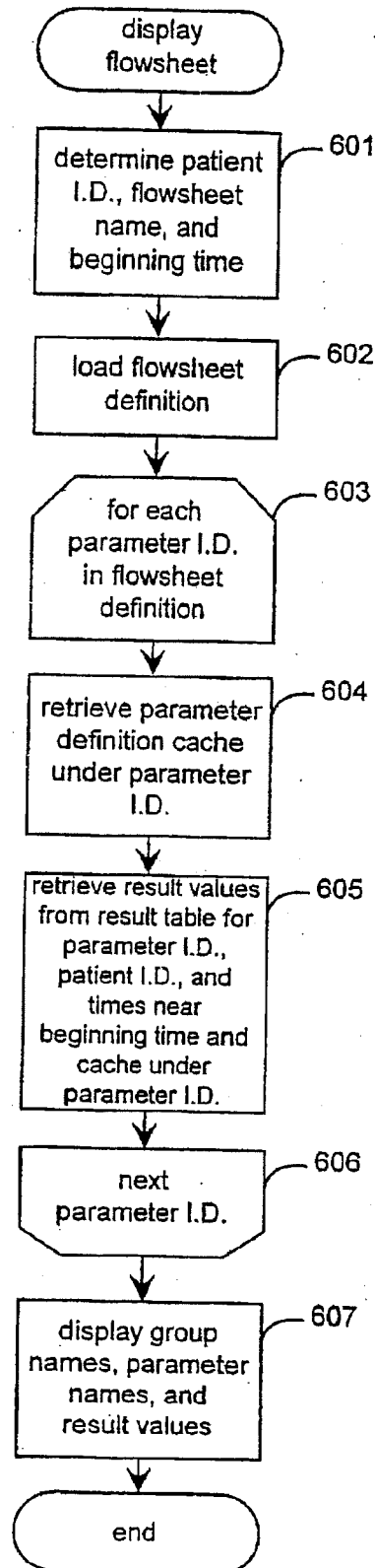


FIG. 6

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FIG. 7

result table

patient i.d.	parameter i.d.	result time	result value
100001	10001	01/25 23:00	none
100001	10003	01/25 23:00	soft
100002	10001	01/25 23:00	non-productive
100002	10001	01/26 00:00	productive
100002	10004	01/25 23:00	asleep
100002	10004	01/26 00:00	asleep
100003	10007	01/26 00:00	100
100003	10008	01/26 00:00	mg
⋮			

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flowsheet 800

patient name 801

patient I.D. 802

flowsheet name 803

general

	851	852	853	854	855
	01/25 23:00	01/26 00:00	01/26 01:00	01/26 02:00	01/26 03:00
811 cough	none 891				
812 chest sounds					
813 • endotracheal tube					
810					
821 • Demerol			50 892		
822 • Aminophylline					
823 • Amoxicillin					
824 medication infusions					
820 PLACEHOLDER					

800

FIG. 8

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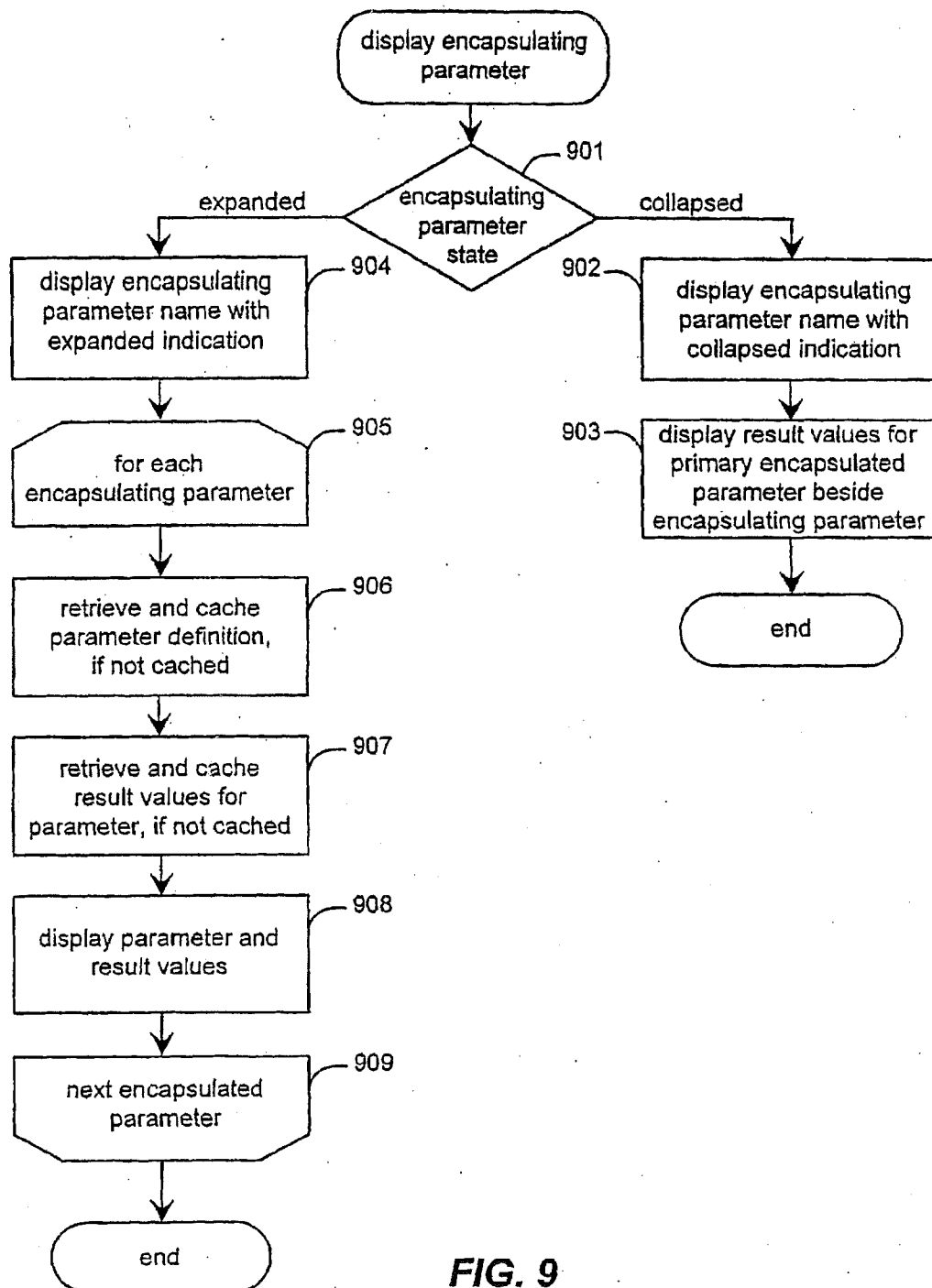


FIG. 9

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flowsheet 1000

patient name 1001 patient I.D. 1002

flowsheet name 1003
general

	1051 01/25 23:00	1052 01/26 00:00	1053 01/26 01:00	1054 01/26 02:00	1055 01/26 03:00
1011 cough	none				
1012 chest sounds					
1013 • endotracheal tube					
1010					
1021 - Demerol					
1026 dose			1096 50		
1027 dose units			1097 cc		
1028 routine			1098 intravenous		
1022 • Aminophylline					
1013 • Amoxicillin					
1020 medication infusions					
1024 PLACEHOLDER					

FIG. 10

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1100
flowsheet

1101 patient name

1102 patient I.D.

1103 flowsheet name
general

	1151 01/25 23:00	1152 01/26 00:00	1153 01/26 01:00	1154 01/26 02:00	1155 01/26 03:00
1111 cough		productive			
1112 chest sounds					
1113 • endotracheal tube					
1110					
1121 • Demerol					
1122 • Aminophylline					
1123 • Amoxicillin					
1124 medication infusions					
1120 PLACEHOLDER					

1100
flowsheet

FIG. 11

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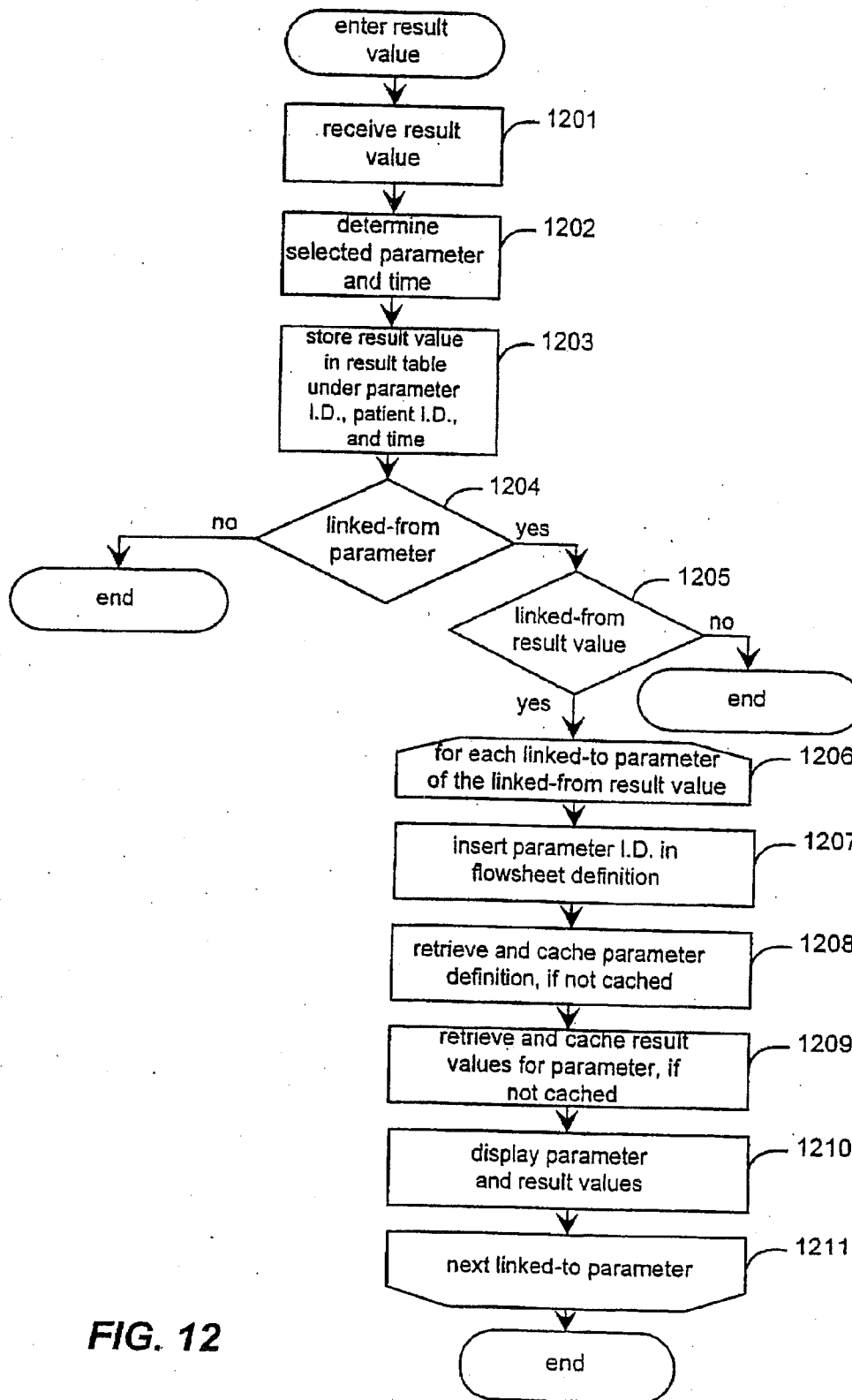


FIG. 12

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flowsheet 1300

patient name 1301

patient I.D. 1302

flowsheet name 1303

general

	1351 01/25 23:00	1352 01/26 00:00	1353 01/26 01:00	1354 01/26 02:00	1355 01/26 03:00
1311 cough	none	productive 1361			
1314 sputum color					
1315 sputum amount					
1312 chest sounds					
1315 • endotracheal tube					
1310 • Demerol					
1321 • Aminophylline					
1322 • Amoxicillin					
1323 medication infusions					
1324 PLACEHOLDER					
1320					

1300

FIG. 13

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flowsheet 1400

patient name 1401

patient I.D. 1402

flowsheet name 1403

general

	1451 01/25 23:00	1452 01/26 00:00	1453 01/26 01:00	1454 01/26 02:00	1455 01/26 03:00
1411 cough					
1412 chest sounds					
1413 • endotracheal tube					
1416 respiratory notes					
1421 • Demerol					
1422 • Aminophylline					
1423 • Amoxicillin					
1424 medication infusions PLACEHOLDER					

1410
r e s p i r a t o r y

1420
m e d i c a t i o n

FIG. 14

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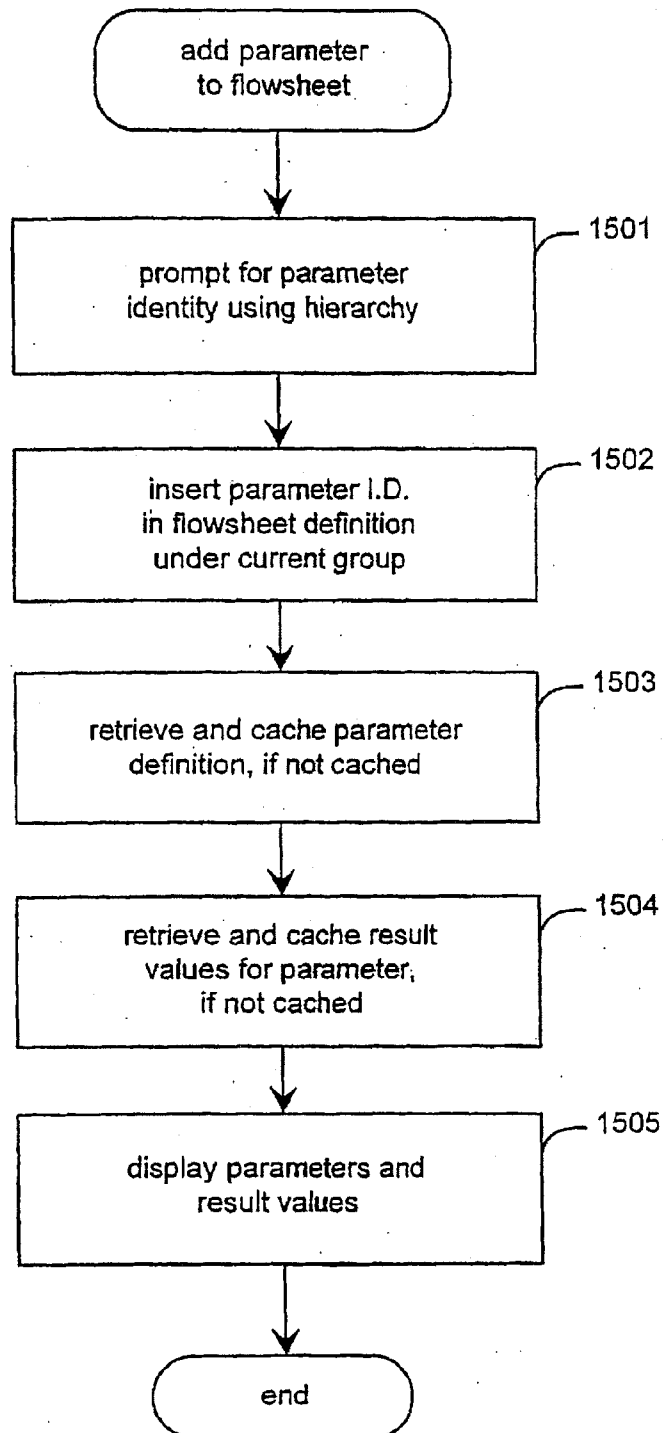


FIG. 15

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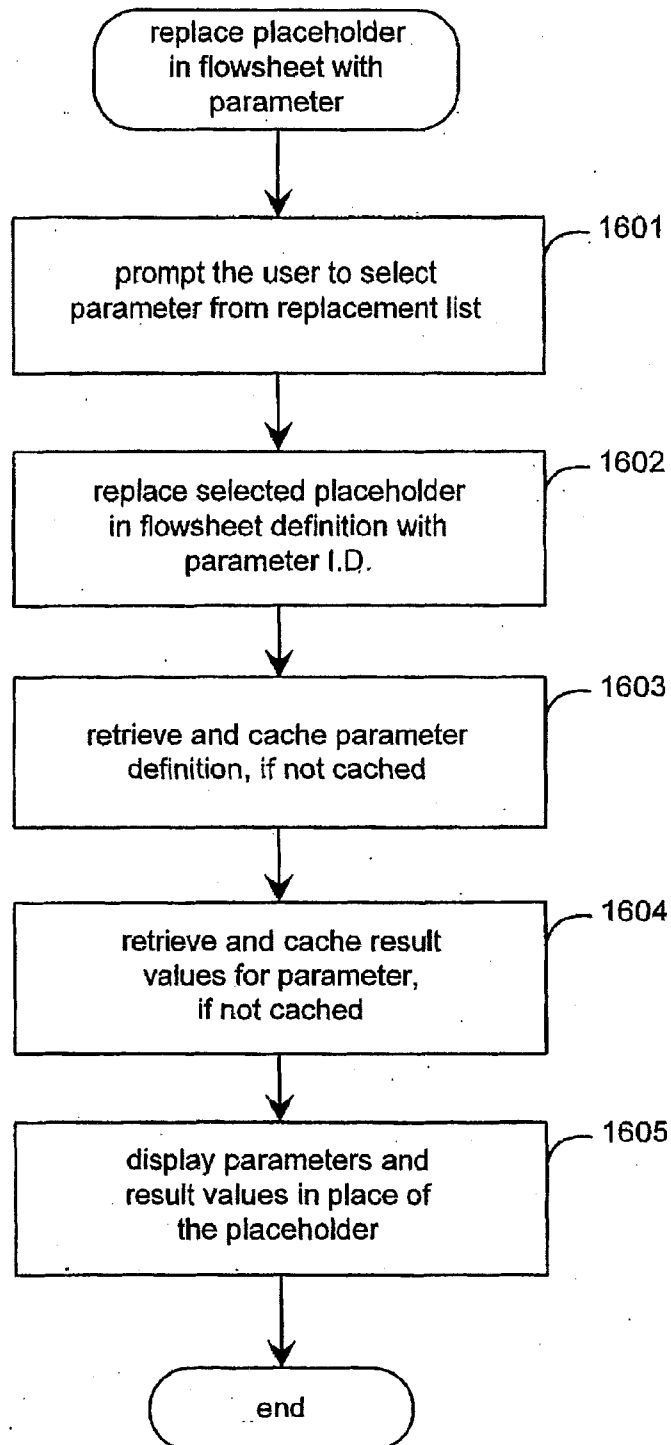


FIG. 16

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1700
flowsheet

1701 patient Name

1702 patient I.D.

1703 flowsheet name
general

	1751 01/25 23:00	1752 01/26 00:00	1753 01/26 01:00	1754 01/26 02:00	1755 01/26 03:00
1711 cough					
1712 chest sounds					
1713 • endotracheal tube					
1710					
1721 • Demerol					
1722 • Aminophylline					
1723 • Amoxicillin					
1725 • Dopamine infusion					
1720					

1700
flowsheet

1701 patient Name

1702 patient I.D.

1703 flowsheet name
general

1711 cough

1712 chest sounds

1713 • endotracheal tube

1710

1721 • Demerol

1722 • Aminophylline

1723 • Amoxicillin

1725 • Dopamine infusion

1720

FIG. 17

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group detail window 1800

group 1801
respiratory

time 1802
01/26
1:00

parameter	result value
cough	
chest sounds	
● endotracheal tube	

1810

1811

1812

1813

1821 OK

1822 Cancel

1823 normal values

1824 last values

FIG. 18

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1900 flowsheet

1901 patient name

1902 patient I.D.

1903 flowsheet name
general

	1951 01/25 23:00	1952 01/26 00:00	1953 01/26 01:00	1954 01/26 02:00	1955 01/26 03:00
1911 cough			none		
1912 chest sounds			none		
1913 • endotracheal tube					
1910					
1921 • Demerol					
1922 • Aminophylline					
1923 • Amoxicillin					
1924 medication infusions					
1920 PLACEHOLDER					

1900 flowsheet

FIG. 19

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flowsheet 2000

patient name 2001 patient I.D. 2002

flowsheet name 2003
general

	2051 01/25 23:00	2052 01/26 00:00	2053 01/26 01:00	2054 01/26 02:00	2055 01/26 03:00
2011 cough					
2012 chest sounds					
2013 • endotracheal tube					
2016 respiratory notes				shale	2008
2010					
2021 • Demerol					
2022 • Aminophylline					
2023 • Amoxicillin					
2024 medication infusions PLACEHOLDER					
2020					

2000

FIG. 20

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flowsheet 2100

patient name 2101 patient I.D. 2102

flowsheet name 2103
general

	2151	2152	2153	2154	2155
2111 cough	01/25 23:00	01/26 00:00	01/26 01:00	01/26 02:00	01/26 03:00
2112 chest sounds					
2113 • endotracheal tube					
2116 respiratory notes					2188 shale
2110					

2121 written by Martha Shale, R.N.

2122 time 01/26 02:00

2123 text

2124 Staff not available to observe respiratory parameters.

2120 medication infusions PLACEHOLDER

2194 OK 2195 cancel

2190

FIG. 21

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1

METHOD AND SYSTEM FOR FLEXIBLY ORGANIZING, RECORDING, AND DISPLAYING MEDICAL PATIENT CARE INFORMATION USING FIELDS IN A FLOWSHEET

TECHNICAL FIELD

The invention relates generally to the field of patient information management, and, more specifically, to the field of medical patient care information organization and display.

BACKGROUND OF THE INVENTION

The provision of health care services to patients depends on the maintenance of significant quantities of patient information, including both clinical information relating to patient treatment and patient management information, such as referral, admission, insurance, and billing information. Health care providers have traditionally maintained such patient information manually, on physical "charts" comprised of paper forms, also known as "flowsheets." Such flowsheets typically show a time series progression of different pieces of patient information. Such pieces of patient information are commonly called "parameters," and may include information about indications of patient condition, laboratory test results, assessments, and the administration of treatments. Parameters may also include administrative information, such as details relating to facility, supply, and human resource usage.

The maintenance of patient information in physical charts often has significant disadvantages. Physical charts may only be viewed or modified in a single physical location. Also, data collected automatically from medical sensors and medical laboratories may not be automatically posted to physical charts. Physical charts further are subject to inadvertent destruction, and may contain illegible information. Disadvantages such as the above militate toward automating the maintenance of patient information.

Existing alternatives for automating the maintenance of patient information fall into the categories of general-purpose databases and rigid patient information databases, both of which have significant disadvantages. General-purpose databases generally lack any measure of support for the medical environment, as they generally do not include tools for entering and viewing information in familiar flowsheet formats and do not provide any basis for organizing patient information in a manner useful to health care providers. Rigid patient information databases, on the other hand, define a particular organization of particular parameters. Neither the parameter organization nor the parameters themselves are typically modifiable by the health care provider. It can be difficult for a health care provider to adapt to a rigid organization of patient information. More seriously, a health care provider that deems the tracking of a particular parameters not specified by the rigid patient information database to be necessary for responsible patient care may be precluded from recording these parameters, or may at least be forced to record these parameters manually. The above-discussed drawbacks of general-purpose databases and rigid patient information databases demonstrate a need for a method and system for flexibly organizing, recording, and displaying medical patient care information.

SUMMARY OF THE INVENTION

The present invention provides a method and system for flexibly organizing, recording, and displaying medical

2

patient care information. In a preferred embodiment, a patient information management facility enables users to customize a patient information hierarchy, which defines and organizes the information that may be stored about each patient, as well as patient data flowsheets, which define views in which the patient data stored according to the hierarchy may be entered and viewed, in a way that is optimized for the structure and procedures of the particular health care organization. The facility enables users to add, modify, and rearrange global or local patient information parameters that make up the hierarchy. Users may define the parameters to be any of a number of types. The user may also customize flowsheets used for entering and displaying result values of parameters defined in the hierarchy for particular patients. The user may expand and contract overview encapsulating parameters to display or hide the encapsulated parameters encapsulated therein. The facility also allows the user to link a result value of one parameter to other parameters, causing the linked-to parameters to be displayed when the result value is entered.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a high-level block diagram of the general-purpose computer system upon which the facility preferably operates.

FIG. 2 is a block diagram showing the contents of the high-capacity storage device of the file and application server computer system.

FIG. 3 is a diagram showing the patient information hierarchy.

FIG. 4 is a tabular diagram showing the parameter definition table.

FIG. 5 is a flow diagram showing the steps performed by the facility in order to create a new parameter.

FIG. 6 is a flow diagram showing the steps preferably performed by the facility in order to display a flowsheet for a particular patient.

FIG. 7 is a diagram showing the contents of a sample result table.

FIG. 8 shows the display of a flowsheet having the sample flowsheet definition.

FIG. 9 is a flow diagram showing the steps preferably performed by the facility in order to display each encapsulating parameter.

FIG. 10 is a screen diagram of the sample flowsheet in which an encapsulating parameter has been expanded.

FIG. 11 is a screen diagram showing the user entering a result value.

FIG. 12 is a flow diagram showing the steps preferably performed by the facility in order to enter a received result value.

FIG. 13 is a display diagram showing the addition of linked-to parameters to the flowsheet in response to the entry of a linked-from result value.

FIG. 14 is a screen diagram showing the addition of a respiration parameter to the sample flowsheet.

FIG. 15 is a flow diagram showing the steps preferably performed by the facility in order to add a parameter to a flowsheet.

FIG. 16 is a flow diagram showing the steps preferably performed by the facility in order to replace such a placeholder with a particular parameter.

FIG. 17 is a display diagram showing the replacement of placeholder 824 with the Ibuprofen parameter 925.

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3

FIG. 18 is a partial screen diagram showing such a group detail window 1800 that contains indications of the selected group 1801 and of the selected time 1802.

FIG. 19 is a screen diagram showing the entry of the normal values for the respiratory group 1910 at 1:00 A.M. on Jan. 26th.

FIG. 20 is a screen diagram showing a parameter of the note data type displayed in abbreviated form.

FIG. 21 is a screen diagram showing the display of an entire note parameter result value.

DETAILED DESCRIPTION OF THE INVENTION

A method and system for flexibly organizing, recording, and displaying medical patient care information is provided. In a preferred embodiment, health care organizations are provided with a patient information system. A patient information management facility of the patient information system ("the facility") is comprised of software tools that enable each health care organization to customize the patient information system in a way that is optimized for the structure and procedures of the health care organization. The facility permits users to customize a patient information hierarchy ("the hierarchy"), which defines and organizes the information that may be stored about each patient. The facility further permits users to customize patient data flowsheets ("flowsheets"), which define views in which patient data stored according to the hierarchy may be entered and viewed.

The facility enables authorized users of the patient information system to add to, modify, and rearrange the patient information parameters ("parameters") that make up the hierarchy. If parameters at two different points in the hierarchy have the same name, the parameters may either be global or local. If the parameters are global, they share a single set of result values for each patient. On the other hand, if they are local, the parameters each have their own set of result values for each patient. Users may flexibly define the parameters to be any of a number of types. Many of the parameter types specify a time sequence of values.

The facility further enables users to customize flowsheets that may be used for entering and displaying result values for subsets of the parameters defined in the hierarchy for particular patients. Flowsheets may contain parameters defined in the hierarchy as encapsulating parameters and parameters that are linked to other parameters. When displaying a flowsheet containing an encapsulating parameter that encapsulating one or more other parameters, the facility preferably enables the user to toggle between expanding the encapsulating parameter to display its encapsulated parameters and their result values and contracting the encapsulating parameter to display only the encapsulating parameter name. When displaying a flowsheet containing a parameter defined as a linked-from parameter, if the user enters a result value for the linked-from parameter that is linked to other fields, the facility preferably adds these linked-to parameters to the flowsheet. The flowsheets displayed by the facility may further contain parameter placeholders that the user may replace with particular parameters.

FIG. 1 is a high level block diagram showing the computer network upon which the facility preferably operates. The network connects a file and application server computer system 100 with workstation computer systems, such as 150 and 160, and bedside patient monitor in computer systems, such as 170 and 180. While only a small number of workstation computer systems and bedside patient monitor-

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ing computer systems are shown for clarity, it will be recognized by those skilled in the art that a typical network may contain many more of both types of computer systems. The file and application server computer system 100 contains a high-capacity storage device 110, such as a hard disk drive; one or more central processing units (CPUs) 120; and random access memory 130. The patient information system is maintained on the file and application server 100. Workstation computer systems, such as 150, contain a display device 151 such as a video monitor, a keyboard 152; one or more CPUs 153; and a pointing device 154 such as a mouse. The workstation computer systems 150, 160 may be used to access the patient information system. Bedside patient monitoring computer systems, such as 170, are used for collecting data from electronic medical instruments 173 and displaying it on a touch screen 171. The bedside patient monitoring computer systems 170, 180 also have one or more CPUs 172, and may be used to access the patient information system. While the preferred embodiment is shown in FIG. 1, those skilled in the art will appreciate that the facility may operate on virtually any network configuration.

FIG. 2 is a block diagram showing the contents of the high-capacity storage device 110 of the file and application server computer system 100. The high-capacity storage device 110 contains a facility 211 that enables users to interact with the patient information system. The facility is discussed in greater detail below. The high-capacity storage device contains a patient information hierarchy 212. The patient information hierarchy is used to organize the parameters, in conjunction with which pieces of patient information are stored, in a logical organization from which users may easily select them. Authorized users may modify the hierarchy by adding or deleting parameters, or by relocating parameters within the hierarchy. The patient information hierarchy is discussed in greater detail below in conjunction with FIG. 3. The high-capacity storage device also contains a parameter definition table 213. The parameter definition table contains definitional information for each parameter identified in the patient information hierarchy 212, and is discussed below in greater detail in conjunction with FIG. 4. The high-capacity storage device also contains flowsheet definition templates 214. Authorized users may modify existing flowsheet definition templates and add new flowsheet definition templates. The flowsheet definition templates each define a patient-independent flowsheet for entering and viewing parameters in their result values. Any of the flowsheet definition templates may be used for any patient. The high-capacity storage device further contains patient flowsheet definitions 215. The patient flowsheet definitions are used for particular patients to enter and display parameters and their result values. The patient flowsheet definitions may either be automatically copied ("templated") from the flowsheet definition templates 214, or may be created from scratch. Users may modify patient flowsheet definitions. The high-capacity storage device further contains a result table 216. The result table stores all of the parameter result values corrected for each station. The result table is discussed in greater detail below in conjunction with FIG. 7.

FIG. 3 is a diagram showing the patient information hierarchy, which is comprised of classifications, such as 310 and 320, and parameters, such as 311-331. The classifications correspond to different categories of parameters, under which parameters may be grouped in a way that is logical to users of the patient information system. For example, the assessments classification 310 contains parameters relating to observable aspects of patient condition, while the medi-

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cations 320 contains parameters relating to the administration of particular medications. The parameters correspond to actual pieces of patient data that may be stored and displayed for each patient. For example, the cough parameter 311 corresponds to a parameter that indicates whether a particular patient at a particular time exhibits no cough, a non-productive cough, or a productive cough. Each of the parameters contains a parameter identifier ("parameter i.d."). The labels shown in conjunction with each parameter, such as "cough parameter i.d." shown in conjunction with cough parameter 311, are for illustrative purposes only and not actually stored in the tree comprising the patient information hierarchy. Each of the parameters that constitutes a leaf of the tree, e.g., 311-314, 321-323, 326-328, and 329-331, is called a result parameter, and may contain a result value for a particular patient at a particular time. Parameters that are not leaves of the tree, e.g., 320 and 325, are called encapsulating parameters. Encapsulating parameters may not contain result values, but rather "encapsulate," or represent at a high level, one or more other parameters, called "encapsulated parameters." For example, encapsulating parameter 320 (Demerol) encapsulates encapsulated parameters 321, 322, 323, and 331 (dose, dose units, route, and site).

FIG. 4 is a tabular diagram showing the parameter definition table. The parameter definition table contains definitional information for each parameter identified in the patient information hierarchy. The parameter definition table 400 contains the following columns, or fields, which may each contain information for each parameter: parameter i.d. column 401, parameter name 402, linked-from parameter column 403 which contains an indication of whether the parameter is linked to any other parameters, a parameter data type 404, a normal value 405 containing a result value for the parameter that a well patient, and a column containing data type-specific information 406. Table 1 below shows the nature of data type-specific information for several data types.

TABLE 1

parameter data type	data type-specific information
selection	choices, linked parameters i.d.s therefor and primary encapsulated parameter
encapsulating	parameter i.d.s of encapsulated parameters
calculated	formula
string	(none)
integer	(none)
note	(none)
float	(none)

The rows are preferably indexed on the parameter i.d. column to allow the row for a particular parameter to be quickly retrieved using the parameter i.d. of the parameter. Each row of the table corresponds to a single parameter identified in the patient information hierarchy. For example, the row for parameter i.d. 10001 shows the name of the parameter to be cough, the parameter to be a linked-from parameter, the parameter to be of the select data type, the normal value of the parameter to be none and the selection choices stored in the data-type-specific information column to be none, non-productive, and productive. The data-type-specific information column further indicates that the productive selection choice is linked to the parameters having parameter i.d.s 10013 and 10014. The row for parameter i.d. 1005 shows that the Demerol parameter is of the encapsulating data type, that it encapsulates the parameters having parameter i.d.s 10007, 10008, and 10009, and that the

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parameter having parameter i.d. 10007 is its primary encapsulated parameter.

Authorized users may create new parameters in order to store and display new pieces of patient information, or to represent an existing piece of patient information at an additional location in the hierarchy. FIG. 5 is a flow diagram showing the steps performed by the facility in order to create a new parameter. In step 501, the facility prompts the user for the location of the parameter in the hierarchy. Step 501 preferably involves presenting the user with a list of classifications and receiving input from the user selecting one of the classifications. Step 501 further preferably involves displaying a list of the encapsulating parameters for the selected classification and receiving from the user an indication of which of the encapsulating parameters, if any, the new parameter should be an encapsulated parameter of. In step 502, the facility prompts the user for the name of the new parameter and receives the name of the new parameter from the user. In step 503, the facility prompts the user for an indication of whether the new parameter is global or local. An indication that the new parameter is local indicates that a new row in the parameter definition table should be created for the new parameter, and that a new, unique parameter i.d. should be assigned to the new parameter. A global indication indicates that the facility should search for an existing parameter in the parameter definition table having the same parameter name, and assign the parameter i.d. of the existing parameter to the new parameter. In step 504, if the user indicates that the new parameter is global, then the facility continues at step 505, else if the user indicates that the new parameter should be local, then the facility continues at step 507. In step 505, if a parameter definition for the parameter name selected by the user exists, then the facility continues at step 506, else the facility continues at step 507. In step 506, the facility creates a parameter node in the hierarchy containing the parameter i.d. of the existing parameter definition for the selected parameter name. After step 506, these steps conclude.

In step 507, the facility creates a new parameter definition in the parameter definition table having the selected parameter name and a new, unique parameter i.d. In step 508, the facility creates a parameter node in the hierarchy containing the new parameter i.d. In step 509, the facility prompts the user for the remaining parameter definition information, including parameter data type, normal value, and data type-specific information. The facility preferably uses the data type to determine which data type-specific information to prompt the user for. For example, for a parameter having the encapsulating data type, the facility preferably prompts the user to identify encapsulated parameters, and to indicate which of the encapsulated parameters is the primary encapsulated parameter that is to be displayed in conjunction with the encapsulating parameter when the encapsulating parameter is collapsed. The facility preferably prompts the user for encapsulated parameters by prompting the user to choose them from a list of parameters organized according to the hierarchy. As is discussed in further detail below, to do so, the facility preferably displays a list of default encapsulated parameters associated with the new parameter's classification as encapsulated parameters of the encapsulating parameter, which may each either be retained or deleted by the user. For parameters of the select data type, the facility preferably prompts the user for the selection choices for parameters of the select data type. The facility further preferably prompts the user for any linked-to parameters for each of the selection choices. For parameters of the calculated type, the facility preferably prompts the user for a

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formula from which result values for the parameter may be calculated. The facility preferably allows the user to enter such a formula using a special visual interface discussed in detail in U.S. application Ser. No. 08/504,703 which is filed concurrently herewith and is hereby incorporated by reference. In step 510, the facility stores the information received in step 509 and the parameter definition created in step 507. These steps then conclude.

A user may use a flowsheet to display a set of parameters and their result values for a particular patient over a time. FIG. 6 is a flow diagram showing the steps preferably performed by the facility in order to display a flowsheet for a particular patient. In step 601, the facility determines the name of the flowsheet to display, the patient i.d. of the patient for which the flowsheet is to be displayed, and a beginning time at which to begin displaying result values. The user may select either the name of an existing patient flowsheet definition 215, or the name of a flowsheet definition template 214. If a patient flowsheet definition having the selected name exists for the selected patient i.d., the facility loads this patient flowsheet definition in step 602. If no patient flowsheet definition exists for this flowsheet name, the facility preferably copies the flowsheet definition template having this flowsheet name to create a patient flowsheet definition having this name and the patient i.d. of the selected patient in step 602. The facility then loads this new patient flowsheet definition in step 602. Table 2 below shows a sample flowsheet definition.

TABLE 2

Sample flowsheet definition	
1	group respiratory
2	{ <cough parameter i.d.> 10001
3	<chest sounds parameter i.d.> 10103
4	<endotracheal tube parameter i.d.> 10204
5	}
6	
7	group medications
8	{ <Demerol parameter i.d.> 10005
9	<Aminophylline parameter i.d.> 10037
10	<Amoxicillin parameter i.d.> 10006
11	<medication infusions placeholder> 90005
12	}

The sample flowsheet definition is comprised of definitions for two flowsheet groups. A flowsheet group is a collection of parameters that are related for purposes of displaying result values for and adding result values to parameters in the flowsheet. The parameters contained in a particular flowsheet group may be selected from any point in the hierarchy, including points in the hierarchy under different classifications. A respiratory group is defined in lines 1-5, and a medications group is defined in lines 7-12. Each of lines 2-4 identify a parameter in the respiratory group. For example, line 2 identifies the cough parameter of the assessments classification, and contains the parameter i.d. for the cough parameter, 10001. The label text, e.g., "<cough parameter i.d. >", is merely illustrative, and is not actually included in the flowsheet definition. The sample flowsheet definition further contains a parameter placeholder on line 11, which allows users to easily add a particular parameter to the flowsheet during flowsheet use. Lines 3 and 4 identify a chest sounds parameter of the respiratory assessments classification and an endotracheal tube parameter of the tubes classification. The sample flowsheet definition causes the facility to display a flowsheet containing a respiratory group and a medications group. Each parameter identified with each group is displayed in conjunction with its result

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values for the relevant period of time. FIG. 8 shows the display of a flowsheet having the sample flowsheet definition, and is discussed in greater detail below.

In steps 602-606, the facility loops through each parameter i.d. contained in the flowsheet definition. Steps 604-605 are therefore repeated for each parameter i.d. In step 604, the facility retrieves the parameter definition for the parameter i.d. from the parameter definition table 400 and caches it in memory, indexed by the parameter i.d. In step 605, the facility retrieves the result values from the result table 700 having the parameter i.d., the current patient i.d., and a time near the beginning time. The facility further caches the retrieved result values in memory, indexed by the parameter i.d.

FIG. 7 is a diagram showing the contents of a sample result table. The sample result table contains patient i.d. column 701, parameter i.d. column 702, result time column 703, and result value column 704. The table is preferably indexed by the patient i.d., parameter i.d., and result time columns to facilitate rapid retrieval of its rows. Each row of the result table, e.g., 711-718, contains a single result value for a particular parameter at a particular time for a particular patient. For example, row 712 indicates that the patient having patient i.d. 100001 for the respiration parameter having parameter i.d. 100003 at 11:00 p.m. on Jan. 25th had a result value of high. While the contents of the result time and the result value column may be encoded to minimize the storage resources consumed by the result table, the contents of these columns are preferably stored in full textual form in order to ensure that backups of the result table will be restorable. After each parameter i.d. in the flowsheet definition has been processed, the facility continues at step 607. In step 607, the facility displays the group names in the flowsheet definition, and, for each parameter i.d. in the flowsheet definition, the parameter name and result values. These steps then conclude.

FIG. 8 is a screen diagram showing the display of the sample flowsheet 800. The flowsheet displays the name of the patient 801 and the corresponding patient i.d. 802 to identify the patient for which result values are displayed. The flowsheet also displays the name of the flowsheet 803. Along the left, the flowsheet displays the names of the parameters in each of the groups identified in the flowsheet definition. For example, the respiratory group 810 is displayed, which contains the cough parameter 811, the chest sounds parameter 812, and the endotracheal parameter 813. The medications group 820 similarly contains parameters 821-823. To the right of each parameter is a series of cells in which to display result values for that parameter for the designated patient times near the beginning time. Above the cells are time labels 851-855. Each time label represents a point in time for which parameters may have a result value. For example, cell 891 shows that the cough parameter 811 has a result value of none for time 851, i.e., 11:00 p.m. on Jan. 25th.

In FIG. 8, the facility has displayed round bullets in from of parameter names for parameters 821-823, indicating that they are encapsulating parameters rather than result parameters and that they do not directly contain any result values. As discussed above, encapsulating parameters may either be displayed in collapsed form, in which only the encapsulating parameter is displayed (as shown in FIG. 8), or in an expanded form, in which the encapsulated parameters encapsulated by the encapsulating parameter are displayed beneath the encapsulating parameter.

FIG. 9 is a flow diagram showing the steps preferably performed by the facility in order to display each encapsu-

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lating parameter. The collapsed/expanded state of the encapsulating parameter may be toggled by the user by clicking on the expanded or collapsed indication with which the encapsulating parameter name is displayed. In step 901, if the encapsulating parameter is collapsed, then the facility continues at step 902, else if the encapsulating parameter is expanded, then the facility continues at step 904. In step 902, the facility displays the name of the encapsulating parameter with a round bullet to indicate that the encapsulating parameter is collapsed. In step 903, if a primary encapsulated parameter is defined in the parameter definition for the encapsulating parameter, the facility displays result values for the primary encapsulated parameter beside the encapsulating parameter. An example is result value 892, which is a result value for the dose encapsulated parameter of the Demerol encapsulating parameter that is displayed beside the Demerol encapsulating parameter. After step 903, these steps conclude.

In step 904, the facility displays the encapsulating parameter name with an expanded indication. FIG. 10 is a screen diagram of the sample flowsheet in which the Demerol parameter 1021 has been expanded. The diagram shows that the Demerol parameter 1021 is displayed with a horizontal bar indicating that the encapsulating parameter is expanded. In steps 905-909, the facility loops through each encapsulated parameter of the encapsulating parameter. Steps 906-908 are therefore repeated for each encapsulated parameter. In step 906, the facility retrieves and caches the parameter definition for the encapsulated parameter if it is not already cached. In step 907, if the encapsulated parameter has a result value, the facility retrieves and caches result values for the parameter if result values are not already cached. In step 908, the facility displays the encapsulated parameter and any result values. If the encapsulated parameter is itself an encapsulating parameter, it has its own collapsed/expanded state, and the facility preferably repeats the steps of FIG. 9 recursively for the encapsulated parameter. FIG. 10 shows the display of encapsulated parameters 1026-1028, as well as their corresponding result values 1096-1098. After the facility loops through each encapsulated parameter, these steps conclude.

Users may use a flowsheet to enter one or more result values. Result values may also preferably be entered automatically in response to automatically receiving data from electronic medical sensors or from medical laboratories. If the user enters a linked-from result value, the parameters to which the result value are linked are added to the flowsheet. FIG. 12 is a flow diagram showing the steps preferably performed by the facility in order to enter such a received result value. In step 1201, the facility receives the result value. In step 1202, the facility determines the parameter and time for which the result value were received. If the result value is received from a user, step 1202 is performed by determining the parameter and time of the cell that the user selected before entering the result value. FIG. 11 is a screen diagram showing the user entering a result value. The diagram shows the user entering a productive result value 1161 for the cough parameter 1111 at midnight on Jan. 26th. If the result value is received from an external source such as an electronic medical sensor or a medical laboratory, the parameter and time for which the result value was sent is preferably transmitted with the result value. In step 1203, the facility stores the result value by creating a new row in the result table containing the current parameter i.d., patient i.d., and time and the received result value. In step 1204, if the cached parameter definition indicates that the current parameter is a linked-from parameter, then the facility continues at

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step 1205, else these steps conclude. In step 1205, if the received result value is a linked-from result value for which linked-to parameters are listed in the parameter definition, then the facility continues at step 1206, else these steps conclude. In steps 1206-1211, the facility loops through each linked-to parameter to which the result value is linked. Steps 1207-1210 are therefore repeated for each linked-to parameter. In step 1207, the facility inserts the parameter i.d. for the linked-to parameter in the flowsheet definition after the linked-from parameter. In step 1208, the facility retrieves and caches the parameter definition for the linked-to parameter if it is not already cached. In step 1209, the facility retrieves and caches result values for the linked-to parameter, if not already cached. In step 1210, the facility displays the linked-to parameter and its result values beneath the linked-from parameter. After the facility processes each linked-to parameter, these steps conclude.

FIG. 13 is a display diagram showing the addition of linked-to parameters to the flowsheet in response to the entry of the productive result value 1361 for the linked-from cough parameter 1311. Linked-to parameters sputum color 1314 and sputum amount 1315 have been added to the flowsheet and are displayed under the cough parameter 1311. This permits the user to enter results for these parameters, which often occur in conjunction with the linked-from result value.

Users may also add a parameter to a flowsheet. A new parameter may be added either to a patient flowsheet or to a flowsheet template. FIG. 14 is a screen diagram showing the addition of a respiratory notes parameter 1416 to the sample flowsheet. FIG. 15 is a flow diagram showing the steps preferably performed by the facility in order to add a parameter to a flowsheet. In step 1501, the facility prompts the user for the identity of the parameter to add to the flowsheet. Step 1501 preferably involves displaying the parameters according to the patient information hierarchy and allowing the user to select one. In step 1502, the facility inserts the parameter i.d. in the flowsheet definition under the current group of the flowsheet. Table 3 shows the addition of line 4A to the sample flowsheet definition, which contains the respiratory notes parameter i.d. 10251.

TABLE 3

Sample flowsheet definition	
1	group respiratory
2	{ <cough parameter i.d.> 10001
3	<chest sounds parameter i.d.> 10103
4	<endotracheal tube parameter i.d.> 10204
4A	respiratory notes parameter i.d.> 10251
5	}
6	
7	group medications
8	{ <Demerol parameter i.d.> 10005
9	<Aminophylline parameter i.d.> 10037
10	<Amoxicillin parameter i.d.> 10006
11	<medication infusion placeholder i.d.> 90005
12	}

In step 1503, the facility retrieves and caches the parameter definition for the new parameter if it is not already cached. In step 1504, the facility retrieves and caches result values for the new parameter if they are not already cached. In step 1505, the facility displays the new parameter and its result values. These steps then conclude.

The facility permits parameter placeholders to be included in flowsheet definitions in order to represent a large number of combinations of parameters that are likely to be displayed

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on the flowsheet. For example, displaying information about a medication infusion can involve the display of many different combinations of parameters. Placeholders are preferably defined in a table analogous to the parameter definition table. Each placeholder has a placeholder i.d., a name, and a list of parameters with which the placeholder may be replaced by the user. When the flowsheet is displayed, a user may select a display placeholder and replace it with one of its replacement parameters. In response, the facility replaces the placeholders with the selected replacement parameter, including any encapsulated parameters encapsulated by the selected replacement parameter. Placeholders, like parameters, may preferably be created and modified by authorized users in order to optimize them for the procedures of a particular health care organization. A placeholder may also encapsulate one or more other parameters or placeholders. Placeholders and parameters encapsulated by a placeholder are handled in the same manner as other placeholders and parameters. FIG. 16 is a flow diagram showing the steps preferably performed by the facility in order to replace such a placeholder with a particular parameter. These steps are largely similar to those shown in FIG. 15 for adding a parameter to the flowsheet, with the following exceptions: step 1601 prompts the user to select the parameter with which to replace the placeholder from the replacement list defined for the placeholder; step 1602 replaces the selected placeholder in the flowsheet definition with the selected parameter i.d.; and step 1605 displays the selected parameter and its results in place of the placeholder. FIG. 17 is a display diagram showing the replacement of medication infusion placeholder 824 with the dopamine infusion parameter 925.

The facility preferably also enables a user to quickly enter normal result values for each parameter in a group at a particular time. If the user selects a group, such as respiratory group 810 and a time label, such as time label 853 for 1:00 A.M. on Jul. 26th, the facility displays a group detail window. FIG. 18 is a partial screen diagram showing such a group detail window 1800 that contains indications of the selected group 1801 and of the selected time 1802. The window 1800 further contains a table 1810 containing the current result values 1811-1813 for the parameters of the selected group. The window 1800 further contains a normal values button 1823. If the user issues a normal values command by pressing the normal values button, the normal values for each of the parameters in the group are retrieved from their cached parameter definitions and entered as the result values for these parameters at the selected time. FIG. 19 is a screen diagram showing the entry of the normal values for the respiratory group 1910 at 1:00 A.M. on Jan. 26th. For example, the result value for the cough parameter 1911 is none, the normal value for the cough parameter.

Similarly, the facility preferably also enables a user to quickly copy the last result values recorded for each parameter in a flowsheet group forward to a later time. In order to do so, the user presses a last values button 1824 (FIG. 18).

Users may enter result values for parameters of a notes type, which can contain several paragraphs of text. Result values of parameters of the notes type are shown normally shown within a flowsheet in an abbreviated form. FIG. 20 is a screen diagram that showing a note parameter result value 2088 in abbreviated form, which is the last name of the writer. FIG. 21 is a screen diagram showing the display of the entire note parameter result value 2190 when the user selects the cell containing the abbreviated note parameter result value 2188. The entire result value shows all of the information associated with the note, including the full name

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of the writer 2191, the time at which the note was written 2192, and the complete note text 2193. The user may dismiss the window containing the entire result value by selecting either the OK button 2194 or the cancel button 2195.

The facility further permits users to specify, for each classification, one or more default parameters. When the user creates a new encapsulating parameter in a classification, the facility displays the default parameters for the classification as proposed encapsulated parameters for the encapsulating parameters. The user may then delete any of the default parameters, and add any other desired encapsulated parameters to the created encapsulating parameters. Default parameters are useful in classifications such as medications, in which many drug parameters encapsulate the same encapsulated parameters, such as dose, dose units, and route.

In an additional preferred embodiment, the facility permits encapsulating parameters, as well as non-encapsulating result parameters, to be defined to contain result values. Those skilled in the art will recognize that the description of the facility described above may straightforwardly be adapted to enable encapsulating parameters to have result values. Such an adaptation merely requires the separation of data type and encapsulating information in the parameter definition table, which is discussed above in conjunction with FIG. 4; separate treatment of encapsulation and data type information in the parameter creation process, which is discussed above in conjunction with FIG. 5; and displaying an encapsulating parameter's result values instead of the result values of a primary encapsulated parameter of the encapsulating parameter beside the encapsulating parameter's name in a flowsheet, which is discussed above in conjunction with FIG. 8.

While this invention has been shown and described with reference to preferred embodiments, it will be understood by those skilled in the art that various changes or modifications in form and detail may be made without departing from the scope of the invention.

We claim:

1. A method in a computer system for designing, under the control of a user, a patient information hierarchy, the hierarchy containing a plurality of parameters including a linked-from parameter having a linked-from possible result value that is linked to one or more linked-to parameters, the method comprising the steps of:

- (a) receiving an instruction from the user to create a new parameter within the patient information hierarchy;
- (b) in response to step (a), creating a new parameter within the patient information hierarchy;
- (c) receiving an instruction from the user to specify a plurality of indicated possible result values for the new parameter;
- (d) in response to step (c), specifying the indicated possible result values as possible result values of the new parameter;
- (e) receiving an instruction from the user to link an indicated linked-from possible result value among the possible result values of the new parameter to one or more indicated linked-to parameters contained within the patient information hierarchy; and
- (f) in response to step (e), within the patient information hierarchy, linking the indicated linked-from possible result value to the indicated linked-to parameters, such that the new parameter is a linked-from parameter, and such that, when the new parameter is displayed for a particular patient, if the new parameter has the linked-

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from possible result value, the linked-to parameters are displayed in conjunction with the new parameter.

2. The method of claim 1 wherein step (e) comprises the steps of:

(e)(1) receiving an instruction from the user to link an indicated linked-from possible result value among the possible result values for the new parameter to other parameters within the patient information hierarchy;

(e)(2) in response to step (e)(1), displaying a representation of the patient information hierarchy showing the parameters contained therein; and

(e)(3) receiving one or more indications each indicating that an indicated parameter contained within the patient information hierarchy displayed in step (e)(2) has been selected as a linked-to parameter by the user.

3. The method of claim 1, further including the steps of, for a particular patient:

displaying the linked-from parameter;

receiving a result value for the linked-from parameter;

determining whether the received result value is a linked-from possible result value; and

in response to determining that the received result value is a linked-from possible result value, displaying each of the linked-to parameters that are linked to the linked-from possible result value.

4. A method in a computer system for designing, under the control of a user, a patient information hierarchy, the patient information hierarchy containing a plurality of parameters that may be displayed in conjunction with a particular patient, the parameters including both result parameters that may have a result value for each patient and encapsulating parameters that each identify and encapsulate one or more other parameters to represent them together at a higher conceptual level, the method comprising the steps of:

(a) receiving an instruction to create a first result parameter that may have a result value for each patient, the instruction specifying a parameter name and a data type;

(b) in response to step (a), creating within the patient information hierarchy a first result parameter having the parameter name and data type specified in the instruction received in step (a);

(c) receiving an instruction to create a second result parameter that may have a result value for each patient, the instruction specifying a parameter name and a data type;

(d) in response to step (c), creating within the patient information hierarchy a second result parameter having the parameter name and data type specified in the instruction received in step (c);

(e) receiving an instruction to create a first encapsulating parameter and for encapsulating one or more other parameters to represent them together at a higher conceptual level, the instruction specifying a parameter name and a list of encapsulated parameters, the specified list of encapsulated parameters including the first result parameter and excluding the second result parameter;

(f) in response to step (e), creating within the patient information hierarchy a first encapsulating parameter having the parameter name and the list of encapsulated parameters specified in the instruction received in step (e);

(g) receiving an instruction to display the patient information hierarchy for a particular patient in a user-

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selected flowsheet, the user-selected flowsheet including the second result parameter and the first encapsulating parameter; and

(h) in response to step (g), displaying a list of parameters including the first encapsulating parameter and the second result parameter and excluding the first result parameter.

5. The method of claim 4, further including the steps of:

(i) after step (h), receiving an instruction from the user to expand the first encapsulating parameter; and

(j) in response to step (i), displaying the encapsulated parameters of the first encapsulating parameter, including the first result parameter, in conjunction with the first encapsulating parameter.

6. The method of claim 5, further including the steps of:

(k) after step (j), receiving an instruction from the user to collapse the first encapsulating parameter; and

(l) in response to step (k), displaying the first encapsulating parameter without the encapsulated parameters of the first encapsulating parameter, including the first result parameter.

7. The method of claim 4, further including the step of receiving an instruction to display the result value for a selected primary one of the list of encapsulated parameters of the first encapsulating parameter as the result value for the first encapsulating parameter, and wherein step (h) includes the step of displaying the result value for the selected primary encapsulated parameter as the result value for the first encapsulating parameter.

8. The method of claim 4 wherein the patient information hierarchy further includes a plurality of classifications each for grouping related parameters, each of the parameters in the patient information hierarchy being associated with one of the classifications, and wherein a set of default encapsulated parameters may be associated with each classification, and wherein step (e) includes the step of receiving an indication of a classification with which to associate the first encapsulating parameter, and wherein step (f) includes the step of defaulting the list of encapsulated parameters of the created first encapsulating parameter to contain the parameters in the set of default encapsulated parameters associated with the classification indicated by the received classification indication.

9. The method of claim 8, further including the step of permitting the user to override the default encapsulated parameters in the list of encapsulated parameters of the first encapsulating parameter.

10. A method in a computer system for designing and maintaining the contents of a patient information hierarchy comprised of a plurality of parameters that may contain result values for a particular patient, the patient information hierarchy having associated with it one or more flowsheets for displaying and modifying the result values of parameters for a particular patient, each flowsheet being comprised of one or more flowsheet groups that specify a subset of the parameters of the patient information hierarchy, the method comprising the steps of:

(a) associating predetermined result values with a plurality of the parameters specified by a selected flowsheet group of a selected flowsheet;

(b) receiving an instruction from the user to display the parameters specified by the selected flowsheet group of the selected flowsheet for a specified patient;

(c) in response to step (b), displaying the parameters specified by the selected flowsheet group of the selected flowsheet for the specified patient;

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(d) receiving an instruction from the user to set to the predetermined result values the result values for the specified patient of the displayed the parameters specified by the selected flowsheet group of the selected flowsheet; and

(e) in response to step (d), for each parameter specified by the selected flowsheet group of the selected flowsheet with which a predetermined result value is associated, storing the predetermined result value in conjunction with the parameter for the specified patient.

11. A method in a computer system for designing and maintaining the contents of a plurality of named parameters identified by parameter identifiers that may contain result values for a particular patient, the parameters being arranged in a patient information hierarchy, the method comprising the steps of:

(a) receiving instructions from a user to create a parameter having a first name at a first location in the patient information hierarchy and a second location in the patient information hierarchy, the instructions further specifying that the parameter having the first name is a global parameter;

(b) in response to step (a), creating parameters at the first and second locations in the patient information hierarchy that are both identified by a first parameter identifier;

(c) receiving instructions from a user to create a parameter having a second name at a third location in the patient information hierarchy and a fourth location in the patient information hierarchy, the instructions further specifying that the parameter having the second name is a local parameter;

(d) in response to step (c), creating a parameter at the third location in the patient information hierarchy that is identified by a second parameter identifier and creating a parameter at the fourth location in the patient information hierarchy that is identified by a third parameter identifier, wherein the second and third parameter identifiers are distinct.

12. The method of claim 11 wherein each result value contained by a parameter is stored in a row of a result table containing the parameter identifier that identifies the parameter, further including the steps of:

(e) receiving a first result value for the parameter having the first name at the first location in the patient information hierarchy;

(f) in response to step (e), storing the first result value in a row of the result table containing the first parameter identifier;

(g) receiving a second result value for the parameter having the first name at the second location in the patient information hierarchy;

(h) in response to step (g), storing the second result value in a row of the result table containing the first parameter identifier;

(i) receiving a third result value for the parameter having the second name at the third location in the patient information hierarchy;

(j) in response to step (i), storing the third result value in a row of the result table containing the second parameter identifier;

(k) receiving a fourth result value for the parameter having the second name at the fourth location in the patient information hierarchy; and

(l) in response to step (k), storing the fourth result value in a row of the result table containing the third parameter identifier.

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13. The method of claim 12, further including the steps of:

(m) after step (e), receiving an instruction to display the result value for the parameter having the first name at the first location in the patient information hierarchy;

(n) in response to step (m), retrieving the first result value from the row of the result table containing the first parameter identifier;

(o) after step (g), receiving an instruction to display the result value for the parameter having the first name at the second location in the patient information hierarchy;

(p) in response to step (o), retrieving the second result value from a row of the result table containing the first parameter identifier;

(q) after step (i), receiving an instruction to display the result value for the parameter having the second name at the third location in the patient information hierarchy;

(r) in response to step (q), retrieving the third result value from a row of the result table containing the second parameter identifier;

(s) after step (k), receiving an instruction to display the result value for the parameter having the second name at the fourth location in the patient information hierarchy; and

(t) in response to step (s), retrieving the fourth result value from a row of the result table containing the third parameter identifier.

14. A method in a computer system for designing and maintaining the contents of a patient information hierarchy comprised of a plurality of parameters that may contain result values for a particular patient, the patient information hierarchy having associated with it a flowsheet for displaying and modifying the result values of a subset of the parameters of the patient information hierarchy for a particular patient, the subset of the parameters that may be displayed and modified using the flowsheet including a parameter of a patient note type, having a result value comprising an author name field, a time field, and a note text field, the method comprising the steps of:

(a) receiving an instruction from the user to display parameter result values for a selected patient using the flowsheet;

(b) in response to step (a), displaying parameter result values for the selected patient using the flowsheet such that the result value of the parameter of the patient note type is displayed in an abbreviated form in conjunction with the other parameters in the subset, such that at least a portion of the author name field is displayed;

(c) receiving an indication that the user has selected the result value of the parameter of the patient note type is displayed in an abbreviated form; and

(d) in response to step (c), displaying the entire contents of the result value of the parameter of the patient note type, such that the complete contents of the author name, time and note text fields are displayed.

15. A method in a computer system for designing and maintaining the contents of a patient information hierarchy comprised of a plurality of parameters that may contain result values for a particular patient, the patient information hierarchy having associated with it one or more flowsheets for displaying and modifying the result values of parameters for a particular patient, each flowsheet being comprised of one or more flowsheet groups that specify a subset of the parameters of the patient information hierarchy, a selected

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flowsheet group of a selected flowsheet further specifying a parameter placeholder not associated with any particular parameter, the method comprising the steps of:

- (a) receiving an instruction from the user to display the parameters specified by the selected flowsheet group of the selected flowsheet for a specified patient;
- (b) in response to step (a), displaying the parameters and the parameter placeholder specified by the selected flowsheet group of the selected flowsheet for the specified patient;
- (c) receiving an instruction from the user to replace the parameter placeholder with a selected parameter of the patient information hierarchy;
- (d) in response to step (c), replacing the parameter placeholder specified by the selected flowsheet group of the selected flowsheet for the specified patient with the selected parameter; and
- (e) after step (d), displaying the parameters specified by the selected flowsheet group of the selected flowsheet for the specified patient, including the selected parameter and excluding the parameter placeholder.

16. The method of claim 15, further including the steps of: after step (d), receiving a result value for the selected parameter for the selected patient; and

storing the received result value in conjunction with the selected parameter for the selected patient, and wherein step (e) includes the step of displaying the received result value in conjunction with the selected parameter.

17. The method of claim 15 wherein the parameter placeholder encapsulates an encapsulated parameter, and wherein step (b) also displays the encapsulated parameter.

18. The method of claim 15 wherein the parameter placeholder encapsulates a second parameter placeholder, and wherein step (b) also displays the second parameter placeholder, further including the steps of:

- (f) receiving an instruction from the user to replace the second parameter placeholder with a second selected parameter of the patient information hierarchy;
- (g) in response to step (f), replacing the second parameter placeholder with the second selected parameter; and
- (h) after step (g), displaying the parameters specified by the selected flowsheet group of the selected flowsheet for the specified patient, including the second selected parameter and excluding the second parameter placeholder.

19. The method of claim 15 wherein the selected parameter is an encapsulating parameter encapsulating one or more encapsulated parameters, and wherein step (e) includes the step of displaying the encapsulated parameters of the selected parameter.

20. The method of claim 15 wherein a list of a plurality of parameters of the hierarchy that may be substituted for the parameter placeholder is associated with the parameter placeholder, and wherein step (c) includes the steps of:

- displaying the list of parameters that may be substituted for the parameter placeholder; and
- receiving input indicating that the user has selected the selected parameter from the displayed list.

21. A method in a computer system for designing, under the control of a user, a patient information hierarchy, the hierarchy containing a plurality of parameters that may each have a result value for each patient, the hierarchy further containing a plurality of classifications each for grouping related parameters, each of the parameters in the patient information hierarchy being associated with one of the

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classifications, and wherein the patient information hierarchy has associated with it one or more flowsheets for displaying and modifying the result values of parameters for a particular patient, each flowsheet being comprised of one or more flowsheet groups that specify a subset of the parameters of the patient information hierarchy, the method comprising the steps of, in response to a step of receiving an instruction from the user to create a new parameter:

- (a) prompting the user for the name of a new parameter;
- (b) receiving from the user the name of a new parameter;
- (c) prompting the user to identify the classification with which the new parameter should be associated;
- (d) receiving from the user an indication of the classification with which the new parameter should be associated;
- (e) prompting the user to select the data type of the new parameter;
- (f) receiving from the user an indication of the data type of the new parameter;
- (g) creating in the patient information hierarchy a new parameter that has the received name, that is associated with the indicated classification, and that has the indicated data type;

(h) displaying the parameters specified by a selected flowsheet group of a selected flowsheet in conjunction with their result values for a selected patient, the displayed parameters excluding the new parameter;

(i) receiving an instruction from the user to add a parameter to the selected flowsheet group of the selected flowsheet;

(j) in response to step (i), displaying a portion of the patient information hierarchy including the name of the new parameter;

(k) receiving an instruction from the user selecting the displayed name of the new parameter;

(l) in response to step (k), adding the new parameter to the selected flowsheet group of the selected flowsheet; and

(m) in response to step (l), displaying the new parameter among the parameters specified by a selected flowsheet group of a selected flowsheet in conjunction with their result values for a selected patient.

22. The method of claim 21 wherein step (e) includes the step of prompting the user to select the data type of the new parameter from a plurality of available data types, and wherein the plurality of data types includes a selection data type, parameters of which may contain one of a predefined set of possible result values, and further including the steps of, if the indication of the data type of the new parameter received in step (f) indicates the selection data type:

- (h) prompting the user to input the set of possible result values for the new parameter; and
- (i) receiving from the user the set of possible result values for the new parameter, and wherein step (g) creates a new parameter having the received set of possible result values.

23. The method of claim 21 wherein step (e) includes the step of prompting the user to select the data type of the new parameter from a plurality of available data types, and wherein the plurality of data types includes a calculated data type, parameters of which may contain a formula based on the result values of other parameters, and further including the steps of, if the indication of the data type of the new parameter received in step (f) indicates the selection data type:

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(h) prompting the user to input the formula for the new parameter; and

(i) receiving from the user the formula for the new parameter, and wherein step (g) creates a new parameter having the received formula.

24. The method of claim 21 wherein step (c) includes the step of displaying a list of the plurality of classifications, and wherein step (d) includes the step of receiving an indication that the user has selected a particular one of the classifications in the displayed list, and wherein step (e) includes the

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step of displaying a list of available data types, and wherein step (f) includes the step of receiving an indication that the user has selected a particular one of the available data types in the displayed list.

25. The method of claim 10 wherein the associating step associates with the plurality of the parameters specified by the selected flowsheet group of the selected flowsheet normal result values for these parameters.

* * * * *

**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

NOTICE OF ASSIGNMENT TO UNITED STATES MAGISTRATE JUDGE FOR DISCOVERY

This case has been assigned to District Judge Dale S. Fischer and the assigned discovery Magistrate Judge is Alicia G. Rosenberg.

The case number on all documents filed with the Court should read as follows:

CV11- 4504 DSF (AGR~~x~~)

Pursuant to General Order 05-07 of the United States District Court for the Central District of California, the Magistrate Judge has been designated to hear discovery related motions.

All discovery related motions should be noticed on the calendar of the Magistrate Judge

=====

NOTICE TO COUNSEL

A copy of this notice must be served with the summons and complaint on all defendants (if a removal action is filed, a copy of this notice must be served on all plaintiffs).

Subsequent documents must be filed at the following location:

☒ **Western Division**
312 N. Spring St., Rm. G-8
Los Angeles, CA 90012

☐ **Southern Division**
411 West Fourth St., Rm. 1-053
Santa Ana, CA 92701-4516

☐ **Eastern Division**
3470 Twelfth St., Rm. 134
Riverside, CA 92501

Failure to file at the proper location will result in your documents being returned to you.

AO 440 (Rev. 12/09) Summons in a Civil Action

ORIGINAL

UNITED STATES DISTRICT COURT
for the
CENTRAL DISTRICT OF CALIFORNIA

MEDSQUIRE, LLC

Plaintiff

v.

SPRING MEDICAL SYSTEMS, INC.; QUEST
DIAGNOSTICS, INC.;, NEXTGEN HEALTHCARE
INFORMATION SYSTEMS, INC.; et al.

Defendant

CV11-4504 ^{DSF}
(AG12x)

Civil Action No.

SUMMONS IN A CIVIL ACTION

To: *(Defendant's name and address)*

SEE ATTACHMENT A

A lawsuit has been filed against you.

Within 21 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are:

Hennigan Dorman LLP
Lawrence M. Hadley
865 South Figueroa Street, Suite 2900
Los Angeles, California 90017

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

CLERK OF COURT

Date: 5-25-11



Signature of Clerk or Deputy Clerk

MEDSQUIRE, LLC v. S. G MEDICAL SYSTEMS, INC.;

ATTACHMENT A TO SUMMONS IN A CIVIL ACTION

1. Spring Medical Systems, Inc.
c/o Patricia Watson
14511 Falling Creek Drive, Suite 305
Houston, TX 77014-1280
2. Quest Diagnostics, Inc.
c/o Corporation Service Company
Which Will Do Business In California As
CSC - Lawyers Incorporating
2730 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833-3503
3. Nextgen Healthcare Information Systems, Inc.
c/o CT Corporation System
818 West 7th Street
Los Angeles, CA 90017-3407
4. Henry Schein Medical Systems, Inc.
c/o CSC-Lawyers Incorporating Service
(Corporation Service Company)
50 W. Broad Street, Suite 1800
Columbus, Ohio 43215-5910
5. Hewlett-Packard Company
c/o CT Corporation System
818 West 7th Street
Los Angeles, CA 90017-3407
6. Aprima Medical Software, Inc.
c/o Corporation Service Company
dba CSC – Lawyers Incorporating Service Company
211 East 7th Street, Suite 620
Austin, Texas 78701-3218
7. eClinicalWorks, LLC
c/o CT Corporation System
818 West 7th Street
Los Angeles, CA 90017-3407

MEDSQUIRE, LLC v. S. G MEDICAL SYSTEMS, INC.;

ATTACHMENT A TO SUMMONS IN A CIVIL ACTION

8. Med3000, Inc.
c/o Corporation Service Company
Which Will Do Business In California As
CSC – Lawyers Incorporating
2730 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833-3503
9. Pulse Systems, Inc.
c/o Alif Hourani
2959 N. Rock Road, Suite 400
Wichita, Kansas 67226-1197
10. Compulink Business Systems, Inc.
c/o Wilson Lwk
6440 Twin Springs
Agoura, CA 91327
11. Nextech Systems, Inc.
c/o Gregory C. McKhann
1065 Castlerock Lane
Santa Ana, CA 92705-6110
12. Navinet, Inc.
c/o Corporation Service Company
Which Will Do Business In California As
CSC – Lawyers Incorporating
2730 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833-3503
13. SuccessEHS, Inc.
c/o Ross N. Cohen
1200 Amsouth Harbert Plaza
1901 S. Ave N
Birmingham, AL 35203

MEDSQUIRE, LLC v. S. G MEDICAL SYSTEMS, INC.;

ATTACHMENT A TO SUMMONS IN A CIVIL ACTION

14. athenaHEALTH, Inc.
c/o Corporation Service Company
Which Will Do Business In California As
CSC – Lawyers Incorporating
2730 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833-3503

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT
CIVIL COVER SHEET

UNFORMED COPY

I (a) PLAINTIFFS (Check box if you are representing yourself ☐)
MEDSQUIRE, LLCDEFENDANTS
SPRING MEDICAL SYSTEMS, INC.; QUEST DIAGNOSTICS, INC.; NEXTGEN HEALTHCARE INFORMATION SYSTEMS, INC.; HENRY SCHEIN MEDICAL SYSTEMS, INCL; HEWLETT-PACKARD COMPANY; APRIMA MEDICAL SOFTWARE, et al.

(b) Attorneys (Firm Name, Address and Telephone Number. If you are representing yourself, provide same.)

Hennigan Dorman LLP

Lawrence M. Hadley

865 South Figueroa Street, Suite 2900

Los Angeles, CA 90017

(213) 694-1200

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an X in one box only.)

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES - For Diversity Cases Only
(Place an X in one box for plaintiff and one for defendant.)

- | | PTF | DEF | | PTF | DEF |
|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
| Citizen of This State | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | Incorporated or Principal Place of Business in this State | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Citizen of Another State | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 | Incorporated and Principal Place of Business in Another State | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Citizen or Subject of a Foreign Country | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 | Foreign Nation | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |

IV. ORIGIN (Place an X in one box only.)

- ☒ 1 Original Proceeding
- ☐ 2 Removed from State Court
- ☐ 3 Remanded from Appellate Court
- ☐ 4 Reinstated or Reopened
- ☐ 5 Transferred from another district (specify):
- ☐ 6 Multi-District Litigation
- ☐ 7 Appeal to District Judge from Magistrate Judge

V. REQUESTED IN COMPLAINT: JURY DEMAND: ☒ Yes ☐ No (Check 'Yes' only if demanded in complaint.)CLASS ACTION under F.R.C.P. 23: ☐ Yes ☒ No

MONEY DEMANDED IN COMPLAINT: \$

VI. CAUSE OF ACTION (Cite the U. S. Civil Statute under which you are filing and write a brief statement of cause. Do not cite jurisdictional statutes unless diversity.)

35 U.S.C. Section 1, Patent Infringement

VII. NATURE OF SUIT (Place an X in one box only.)

OTHER STATUTES	CONTRACT	TORTS PERSONAL INJURY	TORTS PERSONAL PROPERTY	PRISONER PETITIONS	LABOR
<input type="checkbox"/> 400 State Reapportionment	<input type="checkbox"/> 110 Insurance	<input type="checkbox"/> 310 Airplane	<input type="checkbox"/> 370 Other Fraud	<input type="checkbox"/> 510 Motions to Vacate Sentence Habeas Corpus	<input type="checkbox"/> 710 Fair Labor Standards Act
<input type="checkbox"/> 410 Antitrust	<input type="checkbox"/> 120 Marine	<input type="checkbox"/> 315 Airplane Product Liability	<input type="checkbox"/> 371 Truth in Lending	<input type="checkbox"/> 530 General	<input type="checkbox"/> 720 Labor/Mgmt. Relations
<input type="checkbox"/> 430 Banks and Banking	<input type="checkbox"/> 130 Miller Act	<input type="checkbox"/> 320 Assault, Libel & Slander	<input type="checkbox"/> 380 Other Personal Property Damage	<input type="checkbox"/> 535 Death Penalty	<input type="checkbox"/> 730 Labor/Mgmt. Reporting & Disclosure Act
<input type="checkbox"/> 450 Commerce/ICC Rates/etc.	<input type="checkbox"/> 140 Negotiable Instrument	<input type="checkbox"/> 330 Fed. Employers' Liability	<input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 540 Mandamus/Other	<input type="checkbox"/> 740 Railway Labor Act
<input type="checkbox"/> 460 Deportation	<input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment	<input type="checkbox"/> 340 Marine	BANKRUPTCY	<input type="checkbox"/> 550 Civil Rights	<input type="checkbox"/> 790 Other Labor Litigation
<input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations	<input type="checkbox"/> 151 Medicare Act	<input type="checkbox"/> 345 Marine Product Liability	<input type="checkbox"/> 22 Appeal 28 USC 158	<input type="checkbox"/> 555 Prison Condition	<input type="checkbox"/> 791 Empl. Ret. Inc. Security Act
<input type="checkbox"/> 480 Consumer Credit	<input type="checkbox"/> 152 Recovery of Defaulted Student Loan (Excl. Veterans)	<input type="checkbox"/> 350 Motor Vehicle	<input type="checkbox"/> 423 Withdrawal 28 USC 157	FORFEITURE / PENALTY	PROPERTY RIGHTS
<input type="checkbox"/> 490 Cable/Sat TV	<input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits	<input type="checkbox"/> 355 Motor Vehicle Product Liability	CIVIL RIGHTS	<input type="checkbox"/> 610 Agriculture	<input type="checkbox"/> 820 Copyrights
<input type="checkbox"/> 810 Selective Service	<input type="checkbox"/> 160 Stockholders' Suits	<input type="checkbox"/> 360 Other Personal Injury	<input type="checkbox"/> 441 Voting	<input type="checkbox"/> 620 Other Food & Drug	<input checked="" type="checkbox"/> 830 Patent
<input type="checkbox"/> 850 Securities/Commodities/Exchange	<input type="checkbox"/> 190 Other Contract	<input type="checkbox"/> 362 Personal Injury-Med Malpractice	<input type="checkbox"/> 442 Employment	<input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881	<input type="checkbox"/> 840 Trademark
<input type="checkbox"/> 875 Customer Challenge 12 USC 3410	<input type="checkbox"/> 195 Contract Product Liability	<input type="checkbox"/> 365 Personal Injury-Product Liability	<input type="checkbox"/> 443 Housing/Accommodations	<input type="checkbox"/> 630 Liquor Laws	SOCIAL SECURITY
<input type="checkbox"/> 890 Other Statutory Actions	<input type="checkbox"/> 196 Franchise	<input type="checkbox"/> 368 Asbestos Personal Injury Product Liability	<input type="checkbox"/> 444 Welfare	<input type="checkbox"/> 640 R.R. & Truck	<input type="checkbox"/> 61 HIA(1395ff)
<input type="checkbox"/> 891 Agricultural Act	REAL PROPERTY	IMMIGRATION	<input type="checkbox"/> 445 American with Disabilities - Employment	<input type="checkbox"/> 650 Airline Regs	<input type="checkbox"/> 862 Black Lung (923)
<input type="checkbox"/> 892 Economic Stabilization Act	<input type="checkbox"/> 210 Land Condemnation	<input type="checkbox"/> 462 Naturalization Application	<input type="checkbox"/> 446 American with Disabilities - Other	<input type="checkbox"/> 660 Occupational Safety /Health	<input type="checkbox"/> 863 DIWC/DIWW 405(g))
<input type="checkbox"/> 893 Environmental Matters	<input type="checkbox"/> 220 Foreclosure	<input type="checkbox"/> 463 Habeas Corpus-Alien Detainee	<input type="checkbox"/> 440 Other Civil Rights	<input type="checkbox"/> 690 Other	<input type="checkbox"/> 864 SSID Title XVI
<input type="checkbox"/> 894 Energy Allocation Act	<input type="checkbox"/> 230 Rent Lease & Ejectment	<input type="checkbox"/> 465 Other Immigration Actions			<input type="checkbox"/> 865 RSI (405(g))
<input type="checkbox"/> 895 Freedom of Info. Act	<input type="checkbox"/> 240 Torts to Land				FEDERAL TAX SUITS
<input type="checkbox"/> 900 Appeal of Fee Determination Under Equal Access to Justice	<input type="checkbox"/> 245 Tort Product Liability				<input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant)
<input type="checkbox"/> 950 Constitutionality of State Statutes	<input type="checkbox"/> 290 All Other Real Property				<input type="checkbox"/> 871 IRS-Third Party 26 USC 7609

FOR OFFICE USE ONLY: Case Number:

CV11-4504

AFTER COMPLETING THE FRONT SIDE OF FORM CV-71, COMPLETE THE INFORMATION REQUESTED BELOW.

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA
CIVIL COVER SHEET

VIII(a). IDENTICAL CASES: Has this action been previously filed in this court and dismissed, remanded or closed? ☒ No ☐ Yes

If yes, list case number(s):

VIII(b). RELATED CASES: Have any cases been previously filed in this court that are related to the present case? ☐ No ☒ Yes

If yes, list case number(s): CV 11-1755 JHN

Civil cases are deemed related if a previously filed case and the present case:

- (Check all boxes that apply) ☐ A. Arise from the same or closely related transactions, happenings, or events; or
☒ B. Call for determination of the same or substantially related or similar questions of law and fact; or
☒ C. For other reasons would entail substantial duplication of labor if heard by different judges; or
☒ D. Involve the same patent, trademark or copyright, and one of the factors identified above in a, b or c also is present.

IX. VENUE: (When completing the following information, use an additional sheet if necessary.)

- (a) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which **EACH** named plaintiff resides.
☐ Check here if the government, its agencies or employees is a named plaintiff. If this box is checked, go to item (b).

County in this District:*

California County outside of this District; State, if other than California; or Foreign Country

Los Angeles

- (b) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which **EACH** named defendant resides.
☐ Check here if the government, its agencies or employees is a named defendant. If this box is checked, go to item (c).

County in this District:*

California County outside of this District; State, if other than California; or Foreign Country

SEE ATTACHMENT A

SEE ATTACHMENT A

- (c) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which **EACH** claim arose.
Note: In land condemnation cases, use the location of the tract of land involved.

County in this District:*

California County outside of this District; State, if other than California; or Foreign Country

Los Angeles

* Los Angeles, Orange, San Bernardino, Riverside, Ventura, Santa Barbara, or San Luis Obispo Counties

Note: In land condemnation cases, use the location of the tract of land involved

X. SIGNATURE OF ATTORNEY (OR PRO PER):

Lawrence M. Hadley
 Lawrence M. Hadley

Date

May 24, 2011

Notice to Counsel/Parties: The CV-71 (JS-44) Civil Cover Sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law. This form, approved by the Judicial Conference of the United States in September 1974, is required pursuant to Local Rule 3 -1 is not filed but is used by the Clerk of the Court for the purpose of statistics, venue and initiating the civil docket sheet. (For more detailed instructions, see separate instructions sheet.)

MEDSQUIRE, LLC. V. SPRING MEDICAL SYSTEMS, INC.,

ATTACHMENT A TO CIVIL COVER SHEET

(b) County in this District	California County outside of this District; State, if other than California, or Foreign Country
Netgen Healthcare Information Systems ORANGE	Spring Medical Systems, Inc. TEXAS
Hewlett-Packard Company – SANTA CLARA	Quest Diagnostics, Inc. NEW JERSEY
Compulink Business Systems, Inc. LOS ANGELES	Henry Schein Medical Systems OHIO
Nextech Systems, Inc. ORANGE	Aprima Medical Software, Inc. TEXAS
	eClinicalWorks, LLC MASSACHUSETTS
	Med3000, Inc. PENNSYLVANIA
	Pulse Systems, Inc. KANSAS
	Navinet, Inc. MASSACHUSETTS
	SuccessEHS, Inc. ALABAMA
	athenaHEALTH, Inc. MASSACHUSETTS