

APPENDIX

Appendix Table S1: List of search strings

Database: Ovid MEDLINE(R) ALL <1946 to May 14, 2020>

Search Strategy:

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- 1 impact?bility.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (9)
 - 2 'propensity to succeed'.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (6)
 - 3 interven?bility.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (3)
 - 4 case finding.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (4937)
 - 5 casefinding.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (86)
 - 6 Patient selection.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (83162)
 - 7 Patient Selection/ (64332)
 - 8 target* patient*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2387)

- 9 (target* adj2 segment*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (947)
- 10 case selection.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1810)
- 11 risk stratif*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (32437)
- 12 (predict* adj3 risk factor*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (7856)
- 13 risk factors/ (815581)
- 14 protective factor*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (21359)
- 15 protective factors/ (4040)
- 16 (risk adj2 population*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (34671)
- 17 susceptible population?.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2135)
- 18 Vulnerable Populations/ (10281)
- 19 (risk adj2 analy*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (26586)
- 20 risk assess*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (298996)

- 21 Risk Assessment/mt, sn [Methods, Statistics & Numerical Data] (33887)
- 22 risk segment*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (101)
- 23 Health Status Indicators/ (23314)
- 24 (characterist* adj4 respon*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (19693)
- 25 (characterist* adj3 nonrespon*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (118)
- 26 (care adj3 sensitiv*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2767)
- 27 (receptiv* adj3 care).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (60)
- 28 (Likel* adj2 benefit*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (9537)
- 29 (Likel* adj2 accept*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1021)
- 30 (Likel* adj2 respon*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (9788)
- 31 (Likel* adj2 succe*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (3232)
- 32 (Likel* adj2 prevent*).mp. [mp=title, abstract, original title, name of substance word, subject heading word,

floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1163)

33 (Predict* adj2 benefit*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2225)

34 (Predict* adj2 accept*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1508)

35 Predict* responder*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (192)

36 (Predict* adj2 succe*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (13782)

37 (Probab* adj2 benefit*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (801)

38 (Probab* adj2 accept*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (488)

39 (Probab* adj2 respon*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (6492)

40 (Probab* adj2 succe*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2744)

41 (Probab* adj2 prevent*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1058)

42 (propensity adj2 benefit*).mp. [mp=title, abstract, original title, name of substance word, subject heading word,

floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (14)

43 (propensity adj2 accept*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (19)

44 (propensity adj2 respond*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (57)

45 (propensity adj2 succe*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (41)

46 (propensity adj2 prevent*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (21)

47 (Potential* adj2 benefit*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (38647)

48 (Potential* adj2 accept*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1341)

49 (Potential* adj2 respon*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (11907)

50 (Potential* adj2 succe*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2061)

51 (Potential* adj2 prevent*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (13813)

52 (Model* adj2 benefit*).mp. [mp=title, abstract, original title, name of substance word, subject heading word,

- floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1163)
- 53 (Model* adj2 accept*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (4006)
- 54 (Model* adj2 responder*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (71)
- 55 (Model* adj2 prevent*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (2359)
- 56 "Patient acceptance of health care"/ (46068)
- 57 (predict* adj3 model*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (118731)
- 58 Adverse Outcome Pathways/ (83)
- 59 Markov Chains/ (14167)
- 60 logistic* model*.mp. (143517)
- 61 logistic models/ (137961)
- 62 population model*.mp. (3652)
- 63 Patient-Specific Modeling/ (969)
- 64 patient specific model*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1904)
- 65 ambulatory care sensitive condition?.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (561)
- 66 Hospitalization/ (105786)
- 67 Patient Admission/ (24023)
- 68 Patient Readmission/ (16915)

- 69 preventive medicine.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (16812)
- 70 Preventive Medicine/ (11679)
- 71 preventive health*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (17200)
- 72 Primary Prevention/ (18315)
- 73 secondary prevention/ (20153)
- 74 (early adj3 intervention*).mp. (37091)
- 75 Early Medical Intervention/ (2939)
- 76 Target* health*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1545)
- 77 Target* healthcare.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (160)
- 78 (Target* adj3 care*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (4252)
- 79 (prevent* adj3 intervention*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (40728)
- 80 (care adj3 management).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (26779)
- 81 population health*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (12278)
- 82 Population Health/ (792)

- 83 Decision Support Systems, Clinical/ (7841)
- 84 Health Policy/ (65651)
- 85 Health* management.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (6159)
- 86 System? management.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1650)
- 87 Patient care management/ (4035)
- 88 Public Health/mt, og, sn [Methods, Organization & Administration, Statistics & Numerical Data] (5126)
- 89 public health*.mp. (319968)
- 90 public health administration/ (15359)
- 91 health service? management.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (411)
- 92 Models, Organizational/ (18878)
- 93 health care system?.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (38577)
- 94 health* system?.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (74494)
- 95 "Delivery of Health Care"/ (89529)
- 96 "Delivery of Health Care, Integrated"/ (12500)
- 97 Managed Care Programs/ (24211)
- 98 multidisciplinary service?.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (204)
- 99 integrated service?.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept

word, rare disease supplementary concept word, unique identifier, synonyms] (1229)

100 amenability.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1110)

101 1 or 2 or 3 (18)

Annotation: Impactability

102 4 or 5 (5020)

Annotation: Case finding

103 6 or 7 or 8 or 9 or 10 (88016)

Annotation: Patient selection

104 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 (1128808)

105 24 or 25 (19768)

Annotation: Characteristic response

106 26 or 27 (2827)

Annotation: Care sensitivity

107 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 (172438)

Annotation: Likely to benefit

108 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 (275227)

109 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 (251550)

Annotation: Preventive healthcare

110 80 or 81 or 82 or 83 or 84 or 85 or 86 or 87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 (614599)

Annotation: Population health management

111 109 and 110 (25971)

Annotation: Preventive health and population health management

112 109 or 110 (840178)

Annotation: Preventive healthcare or population health management

113 100 and 112 (27)

114 107 or 108 (439630)

- 115 102 and 114 (325)
- 116 111 and 115 (7)
- 117 103 and 114 (5324)
- 118 111 and 117 (35)
- 119 104 and 107 and 108 and 111 (26)
- 120 105 and 114 (975)
- 121 112 and 120 (84)
- 122 106 and 114 (278)
- 123 111 and 122 (39)
- 124 102 and 112 and 114 (102)
- 125 101 or 113 or 124 or 118 or 119 or 121 or 123 (329)

Database: HMIC Health Management Information Consortium <1979 to March 2020>

Search Strategy:

-
- 1 impact?bility.mp. [mp=title, other title, abstract, heading words] (1)
 - 2 'propensity to succeed'.mp. [mp=title, other title, abstract, heading words] (0)
 - 3 interven?bility.mp. [mp=title, other title, abstract, heading words] (0)
 - 4 case finding.mp. [mp=title, other title, abstract, heading words] (201)
 - 5 casefinding.mp. [mp=title, other title, abstract, heading words] (3)
 - 6 screening/ (3706)
 - 7 Patient selection.mp. [mp=title, other title, abstract, heading words] (93)
 - 8 Patient selection/ (47)
 - 9 target* patient*.mp. [mp=title, other title, abstract, heading words] (81)
 - 10 (target* adj2 segment*).mp. [mp=title, other title, abstract, heading words] (6)
 - 11 case selection.mp. [mp=title, other title, abstract, heading words] (16)
 - 12 (risk adj2 population*).mp. [mp=title, other title, abstract, heading words] (516)
 - 13 exp "Risk adjusted monitors of outcome"/ (20)
 - 14 exp vulnerability/ (1261)
 - 15 susceptible population*.mp. [mp=title, other title, abstract, heading words] (10)

- 16 risk stratif*.mp. [mp=title, other title, abstract, heading words] (106)
- 17 (predict* adj3 risk factor*).mp. [mp=title, other title, abstract, heading words] (55)
- 18 risk factors/ (4430)
- 19 protective factor*.mp. [mp=title, other title, abstract, heading words] (144)
- 20 (risk adj2 analy*).mp. [mp=title, other title, abstract, heading words] (238)
- 21 risk assess*.mp. [mp=title, other title, abstract, heading words] (2572)
- 22 risk assessment/ (1859)
- 23 risk segment*.mp. [mp=title, other title, abstract, heading words] (1)
- 24 (characterist* adj4 respon*).mp. [mp=title, other title, abstract, heading words] (163)
- 25 (characterist* adj3 nonrespon*).mp. [mp=title, other title, abstract, heading words] (0)
- 26 (care adj3 sensitiv*).mp. [mp=title, other title, abstract, heading words] (196)
- 27 (receptiv* adj3 care).mp. [mp=title, other title, abstract, heading words] (1)
- 28 (Likel* adj2 benefit*).mp. [mp=title, other title, abstract, heading words] (183)
- 29 (Likel* adj2 accept*).mp. [mp=title, other title, abstract, heading words] (38)
- 30 (Likel* adj2 respon*).mp. [mp=title, other title, abstract, heading words] (72)
- 31 (Likel* adj2 succe*).mp. [mp=title, other title, abstract, heading words] (105)
- 32 (Likel* adj2 prevent*).mp. [mp=title, other title, abstract, heading words] (22)
- 33 (Predict* adj2 benefit*).mp. [mp=title, other title, abstract, heading words] (26)
- 34 (Predict* adj2 accept*).mp. [mp=title, other title, abstract, heading words] (11)
- 35 Predict* responder*.mp. [mp=title, other title, abstract, heading words] (1)
- 36 (Predict* adj2 succe*).mp. [mp=title, other title, abstract, heading words] (78)
- 37 (Probab* adj2 benefit*).mp. [mp=title, other title, abstract, heading words] (19)
- 38 (Probab* adj2 accept*).mp. [mp=title, other title, abstract, heading words] (5)
- 39 (Probab* adj2 respon*).mp. [mp=title, other title, abstract, heading words] (19)
- 40 (Probab* adj2 succe*).mp. [mp=title, other title, abstract, heading words] (10)
- 41 (Probab* adj2 prevent*).mp. [mp=title, other title, abstract, heading words] (10)
- 42 (propensity adj2 benefit*).mp. [mp=title, other title, abstract, heading words] (0)
- 43 (propensity adj2 accept*).mp. [mp=title, other title, abstract, heading words] (0)
- 44 (propensity adj2 respon*).mp. [mp=title, other title, abstract, heading words] (4)
- 45 (propensity adj2 succe*).mp. [mp=title, other title, abstract, heading words] (0)

- 46 (propensity adj2 prevent*).mp. [mp=title, other title, abstract, heading words] (1)
47 (Potential* adj2 benefit*).mp. [mp=title, other title, abstract, heading words] (882)
48 (Potential* adj2 accept*).mp. [mp=title, other title, abstract, heading words] (23)
49 (Potential* adj2 respon*).mp. [mp=title, other title, abstract, heading words] (46)
50 (Potential* adj2 succe*).mp. [mp=title, other title, abstract, heading words] (49)
51 (Potential* adj2 prevent*).mp. [mp=title, other title, abstract, heading words] (186)
52 (Model* adj2 benefit*).mp. [mp=title, other title, abstract, heading words] (41)
53 (Model* adj2 accept*).mp. [mp=title, other title, abstract, heading words] (40)
54 (Model* adj2 responder*).mp. [mp=title, other title, abstract, heading words] (1)
55 (Model* adj2 prevent*).mp. [mp=title, other title, abstract, heading words] (75)
56 (predict* adj3 model*).mp. [mp=title, other title, abstract, heading words] (554)
57 exp Decision Support Systems/ (218)
58 logistic* model*.mp. (74)
59 population model*.mp. (22)
60 exp Computer aided decision making/ (29)
61 exp models/ (3243)
62 patient specific model*.mp. (0)
63 ambulatory care sensitive condition?.mp. [mp=title, other title, abstract, heading words] (45)
64 exp Ambulatory care/ (914)
65 exp Pre hospital care/ (49)
66 exp hospital admission/ (3371)
67 exp Hospitalisation/ (7032)
68 exp Health impact assessment/ (360)
69 exp Preventive Medicine/ (21451)
70 preventive medicine.mp. [mp=title, other title, abstract, heading words] (2305)
71 exp preventive medicine health services/ (210)
72 preventive health*.mp. [mp=title, other title, abstract, heading words] (228)
73 exp Health improvement programmes/ (237)
74 prevention/ (5896)
75 (early adj3 intervention*).mp. (749)

- 76 early intervention/ (0)
77 Target* health*.mp. [mp=title, other title, abstract, heading words] (120)
78 Target* healthcare.mp. [mp=title, other title, abstract, heading words] (12)
79 (Target* adj3 care*).mp. [mp=title, other title, abstract, heading words] (364)
80 (prevent* adj3 intervention*).mp. [mp=title, other title, abstract, heading words] (1001)
81 (care adj3 management).mp. [mp=title, other title, abstract, heading words] (2858)
82 population health*.mp. [mp=title, other title, abstract, heading words] (1085)
83 exp care management/ (500)
84 exp health policy/ (5647)
85 Health* management.mp. [mp=title, other title, abstract, heading words] (505)
86 System? management.mp. [mp=title, other title, abstract, heading words] (79)
87 public health*.mp. (16612)
88 exp public health/ (11196)
89 exp Health systems/ (44916)
90 health service? management.mp. [mp=title, other title, abstract, heading words] (5830)
91 health care system?.mp. [mp=title, other title, abstract, heading words] (3136)
92 health* system?.mp. [mp=title, other title, abstract, heading words] (7548)
93 multidisciplinary service?.mp. [mp=title, other title, abstract, heading words] (555)
94 integrated service?.mp. [mp=title, other title, abstract, heading words] (329)
95 amen?bility.mp. [mp=title, other title, abstract, heading words] (2)
96 1 or 2 or 3 (1)
Annotation: Impactibility
97 4 or 5 or 6 (3859)
Annotation: Case finding
98 7 or 8 or 9 or 10 or 11 (195)
Annotation: Patient selection
99 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 (8794)
Annotation: Risk stratification
100 24 or 25 (163)
Annotation: Characteristic response

101 26 or 27 (197)

Annotation: Care sensitivity

102 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 (1906)

Annotation: Likelihood of benefit

103 56 or 57 or 58 or 59 or 60 or 61 or 62 (4005)

Annotation: Modelling

104 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 77 or 78 or 79 or 80 (35800)

Annotation: Preventive health

105 81 or 82 or 83 or 84 or 85 or 86 or 87 or 88 or 90 or 91 or 92 or 93 or 94 (38931)

Annotation: Population health management

106 104 or 105 (69322)

107 104 and 105 (5409)

108 102 or 103 (5838)

109 97 and 108 (119)

110 106 and 109 (38)

111 98 and 108 (8)

112 99 and 108 (313)

113 107 and 112 (6)

114 100 and 108 (9)

115 101 and 108 (17)

116 95 or 96 or 110 or 111 or 113 or 114 or 115 (79)

Ovid Technologies, Inc. Email Service

Search for: 84 or 96 or 99 or 100 or 102 or 104 or 105

Results: 163

Database: Global Health <1973 to 2020 Week 18>

Search Strategy:

-
- 1 impact?bility.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (4)
 - 2 'propensity to succeed'.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1)
 - 3 interven?bility.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (0)
 - 4 case finding.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1946)
 - 5 casefinding.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (5)
 - 6 Patient selection.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (611)
 - 7 target* patient*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (283)
 - 8 (target* adj2 segment*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (144)
 - 9 case selection.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (88)
 - 10 (risk adj2 population*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (11708)
 - 11 susceptible population*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1174)
 - 12 risk stratif*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (2127)
 - 13 (predict* adj3 risk factor*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1472)
 - 14 protective factor*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (6071)
 - 15 exp protective factors/ (279)
 - 16 (risk adj2 analy*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (10280)
 - 17 exp risk analysis/ (58968)

- 18 risk assess*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (63092)
- 19 risk segment*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (19)
- 20 (characterist* adj4 respon*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (2195)
- 21 (characterist* adj3 nonrespon*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (18)
- 22 (care adj3 sensitiv*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (447)
- 23 (receptiv* adj3 care).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (10)
- 24 (Likel* adj2 benefit*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (982)
- 25 (Likel* adj2 accept*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (281)
- 26 (Likel* adj2 respon*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1060)
- 27 (Likel* adj2 succe*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (413)
- 28 (Likel* adj2 prevent*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (236)
- 29 (Predict* adj2 benefit*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (138)
- 30 (Predict* adj2 accept*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (292)
- 31 Predict* responder*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (8)
- 32 (Predict* adj2 succe*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1054)
- 33 (Probab* adj2 benefit*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (108)

- 34 (Probab* adj2 accept*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (74)
- 35 (Probab* adj2 respon*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (800)
- 36 (Probab* adj2 succe*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (198)
- 37 (Probab* adj2 prevent*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (183)
- 38 (propensity adj2 benefit*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (0)
- 39 (propensity adj2 accept*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (2)
- 40 (propensity adj2 respon*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (19)
- 41 (propensity adj2 succe*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (3)
- 42 (propensity adj2 prevent*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (3)
- 43 (Potential* adj benefit*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (4703)
- 44 (Potential* adj2 accept*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (267)
- 45 (Potential* adj2 respon*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1196)
- 46 (Potential* adj2 succe*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (302)
- 47 (Potential* adj2 prevent*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (3556)
- 48 (Model* adj2 benefit*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (185)

- 49 (Model* adj2 accept*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (500)
- 50 (Model* adj2 responder*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (5)
- 51 (Model* adj2 prevent*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (619)
- 52 (predict* adj3 model*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (16099)
- 53 logistic* model*.mp. (2180)
- 54 population model*.mp. (497)
- 55 patient specific model*.mp. (4)
- 56 exp mathematical models/ (20591)
- 57 ambulatory care sensitive condition?.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (133)
- 58 exp hospital admission/ (7087)
- 59 exp Preventive Medicine/ (5152)
- 60 preventive medicine.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (6066)
- 61 preventive health*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (1554)
- 62 prevention/ (24792)
- 63 (early adj3 intervention*).mp. (4352)
- 64 early intervention/ (0)
- 65 Target* health*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (727)
- 66 Target* healthcare.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (44)
- 67 (Target* adj3 care*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (808)
- 68 (prevent* adj3 intervention*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers,

- cabicodes] (13708)
- 69 (care adj3 management).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (2707)
- 70 population health*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (4811)
- 71 exp health policy/ (21123)
- 72 Health* management.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (2399)
- 73 System? management.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (295)
- 74 public health*.mp. (263888)
- 75 exp public health/ (114710)
- 76 exp public health services/ (5031)
- 77 health service? management.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (79)
- 78 health care system?.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (7683)
- 79 health* system?.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (22197)
- 80 multidisciplinary service?.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (27)
- 81 integrated service?.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (314)
- 82 amen?bility.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (96)
- 83 animal*.mp. (2706683)
- 84 1 or 2 or 3 (5)
- Annotation: Impactibility
- 85 4 or 5 (1950)
- Annotation: Case finding
- 86 6 or 7 or 8 or 9 (1121)

Annotation: Patient selection

87 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 (90642)

Annotation: Risk stratification

88 20 or 21 (2208)

Annotation: Characteristic response

89 22 or 23 (457)

Annotation: Care sensitivity

90 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 (16886)

Annotation: Likelihood benefit

91 52 or 53 or 54 or 55 or 56 (35958)

Annotation: Model

92 57 or 58 or 59 or 60 or 61 or 62 or 63 or 65 or 66 or 67 or 68 (56126)

Annotation: Preventive

93 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 (299016)

Annotation: Population

94 92 and 93 (8599)

95 92 or 93 (346543)

96 82 and 95 (15)

97 90 or 91 (52153)

98 85 and 97 (58)

99 95 and 98 (20)

100 86 and 97 (41)

101 87 and 97 (3893)

102 94 and 101 (42)

103 88 and 97 (82)

104 95 and 103 (17)

105 89 and 97 (25)

106 84 or 96 or 99 or 100 or 102 or 104 or 105 (163)

Ovid Technologies, Inc. Email Service

Search for: 104 or 116 or 118 or 121 or 123 or 125 or 128

Results: 320

Database: Embase Classic+Embase <1947 to 2020 May 14>

Search Strategy:

-
- 1 impact?bility.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (12)
 - 2 'propensity to succeed'.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (7)
 - 3 interven?bility.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (2)
 - 4 case finding.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (8308)
 - 5 casefinding.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (200)
 - 6 case finding/ (4164)
 - 7 Patient selection.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (106833)
 - 8 Patient selection/ (93046)
 - 9 target* patient*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (4078)
 - 10 (target* adj2 segment*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1381)
 - 11 case selection.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug

manufacturer, device trade name, keyword, floating subheading word, candidate term word] (2699)

12 (risk adj2 population*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (170420)

13 high risk population/ (121003)

14 vulnerable population/ (16512)

15 susceptible population/ (1056)

16 risk stratif*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (58670)

17 (predict* adj3 risk factor*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (12148)

18 risk factor/ (1025885)

19 protective factor*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (24469)

20 protection/ (67132)

21 susceptible population*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (3245)

22 risk stratif*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (58670)

23 (risk adj2 analy*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (95347)

24 risk assess*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (585434)

25 risk assessment/ (558053)

26 risk segment*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (137)

27 (characterist* adj4 respon*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (26743)

28 (characterist* adj3 nonrespon*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (147)

29 (care adj3 sensitiv*).mp. [mp=title, abstract, heading word, drug trade name, original title, device

manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (3472)
30 (receptiv* adj3 care).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (85)
31 (Likel* adj2 benefit*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (14595)
32 (Likel* adj2 accept*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1390)
33 (Likel* adj2 respon*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (14021)
34 (Likel* adj2 succe*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer,
drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (4394)
35 (Likel* adj2 prevent*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1613)
36 (Predict* adj2 benefit*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (3898)
37 (Predict* adj2 accept*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1966)
38 Predict* responder*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer,
drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (385)
39 (Predict* adj2 succe*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (19014)
40 (Probab* adj2 benefit*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1190)
41 (Probab* adj2 accept*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (648)
42 (Probab* adj2 respon*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (8877)
43 (Probab* adj2 succe*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (3579)
44 (Probab* adj2 prevent*).mp. [mp=title, abstract, heading word, drug trade name, original title, device

manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1538)
45 (propensity adj2 benefit*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (21)
46 (propensity adj2 accept*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (21)
47 (propensity adj2 respon*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (141)
48 (propensity adj2 succe*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (67)
49 (propensity adj2 prevent*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (26)
50 (Potential* adj2 benefit*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (53571)
51 (Potential* adj2 accept*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1587)
52 (Potential* adj2 respon*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (15605)
53 (Potential* adj2 succe*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (2679)
54 (Potential* adj2 prevent*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (18959)
55 (Model* adj2 benefit*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1562)
56 (Model* adj2 accept*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (4879)
57 (Model* adj2 responder*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (144)
58 (Model* adj2 prevent*).mp. [mp=title, abstract, heading word, drug trade name, original title, device
manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (3286)
59 (predict* adj3 model*).mp. [mp=title, abstract, heading word, drug trade name, original title, device

- manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (155268)
- 60 adverse outcome pathway/ (358)
 - 61 logistic* model*.mp. (11456)
 - 62 population model*.mp. (10416)
 - 63 information model/ (253)
 - 64 process model/ (8488)
 - 65 population model/ (7092)
 - 66 markov chain/ (5170)
 - 67 patient specific model*.mp. (1434)
 - 68 ambulatory care sensitive condition?.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (687)
 - 69 ambulatory care/ (38902)
 - 70 hospital readmission/ (62928)
 - 71 hospital admission/ (194263)
 - 72 hospitalization/ (376388)
 - 73 hospital utilization/ (2228)
 - 74 Preventive Medicine/ (28102)
 - 75 preventive medicine.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (34859)
 - 76 preventive health*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (33684)
 - 77 preventive health service/ (28680)
 - 78 prevention/ (283203)
 - 79 (early adj3 intervention*).mp. (64519)
 - 80 early intervention/ (24768)
 - 81 Target* health*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1919)
 - 82 Target* healthcare.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (213)
 - 83 (Target* adj3 care*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer,

drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (6204)
84 (prevent* adj3 intervention*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (52335)
85 (care adj3 management).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (62219)
86 population health*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (14536)
87 population health management/ (117)
88 health care policy/ (192062)
89 population health/ (2476)
90 Health* management.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (7921)
91 System? management.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (959)
92 public health*.mp. (457567)
93 public health/ (187251)
94 public health service/ (74031)
95 health service? management.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (538)
96 health care system?.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (138922)
97 integrated health care system/ (11078)
98 health* system?.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (103788)
99 multidisciplinary service?.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (406)
100 integrated service?.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1673)
101 safety net hospital/ (2077)
102 amen?bility.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug

manufacturer, device trade name, keyword, floating subheading word, candidate term word] (1356)

103 animal*.mp. (6389036)

104 1 or 2 or 3 (21)

Annotation: Impactibility

105 4 or 5 or 6 (8461)

Annotation: Case finding

106 7 or 8 or 9 or 10 or 11 (114598)

Annotation: Patient selection

107 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 (1764975)

Annotation: risk

108 27 or 28 (26841)

Annotation: Characteristic response

109 29 or 30 (3557)

Annotation: Care sensitivity

110 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 (176187)

Annotation: Likelihood of benefit

111 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 (189338)

Annotation: Predictive modelling

112 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 (1060770)

Annotation: Preventive healthcare

113 85 or 86 or 87 or 88 or 89 or 90 or 91 or 92 or 93 or 95 or 96 or 97 or 98 or 99 or 100 or 101 (840792)

114 112 or 113 (1821615)

115 112 and 113 (79947)

116 102 and 114 (51)

117 107 and 110 and 111 (877)

118 115 and 117 (30)

119 110 or 111 (360103)

Annotation: likely benefit or modelling

120 109 and 119 (192)

- 121 115 and 120 (37)
- 122 108 and 119 (948)
- 123 114 and 122 (66)
- 124 106 and 119 (4043)
- 125 115 and 124 (52)
- 126 105 and 119 (166)
- 127 115 and 126 (9)
- 128 105 and 114 and 119 (67)
- 129 104 or 116 or 118 or 121 or 123 or 125 or 128 (320)

Appendix Table S2: Full inclusion and exclusion criteria

		Yes	No
1	Does the title or abstract talk about amenability?	Continue	Go to 3
2	Is the paper about youth offending or amenability of specific diseases to treatment?	Exclude/STOP	Go to 4
3	Does the title or abstract talk about impactibility/ intervenability or 'propensity to succeed' modelling in a population health context?	Include/STOP	Continue
4	Is there an intervention that aims to prevent or ameliorate a future health event?	Continue	Exclude/STOP
6	Is the intervention solely aiming to increase screening programme detection rates?	Exclude/STOP	Continue
7	Does the study include case finding or selection of potential responders from the wider population?	Continue	Exclude/STOP
8	Is modelling limited to identifying subjects at 'high risk' of a disease or health event?	Exclude/STOP	Continue

9	Does the extended modelling identify subjects who may respond better to the intervention?	Include/STOP	Continue
10	Does the extended modelling identify subjects who are more likely to start and complete the intervention?	Include/STOP	Exclude/STOP

INCLUSION

- Papers that include Impactibility OR intervenability OR 'propensity to succeed' modelling OR Amenability in a population health context
- OR
- Studies that include ALL of:
 - 1) an intervention that aims to prevent or ameliorate a future health event
 - AND
 - 2) case finding OR selection of potential responders from the general population
 - AND
 - 3) extended modelling that identifies subjects who may respond better to the intervention OR extended modelling that identifies subjects who are more likely to start and complete the intervention

EXCLUSION

- Amenability AND youth offending
- Amenability of specific diseases to treatment
- Modelling limited to identifying subjects at 'high risk' of a disease or health event
- Intervention solely aiming to increase diagnoses or screening programme detection rates

Definitions:

Case finding: a systematic or opportunistic process that identifies individuals (e.g. people with COPD) from a larger population for a specific purpose for example, 'Flu vaccination'

<https://www.england.nhs.uk/wp-content/uploads/2015/01/2015-01-20-CFRS-v0.14-FINAL.pdf>

Intervention: A health intervention is an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions. <https://www.who.int/classifications/ichi/en/>

In medical terms this could be a drug treatment, surgical procedure, diagnostic test or psychological therapy. Examples of public health interventions could include action to help someone to be physically active or to eat a more healthy diet. Examples of social care interventions could include safeguarding or support for carers.

<https://www.nice.org.uk/Glossary?letter=l>

Appendix Table S3: Google search string

# results (2 November 2020)	
207	("impactability" OR "impactibility") AND (site:nhs.uk OR site:cdc.gov OR site:.ac.uk OR site:.gov.uk OR site:.edu OR site:.gov OR site:.ac.au OR site:.ac.ca OR site:elsevier.com OR site:researchgate.net) AND "case finding" AND (guide OR protocol OR process OR method)

Appendix Table S4: Studies of the development, validation or application of impactability models included in the qualitative synthesis

Study Name/Ref		Population studied	Impactability model	Results/author conclusions	
Impactability determined by presence of a health condition amenable to preventive intervention					
Buja et al. 2019	Country	Italy (Azienda ULSS4-Veneto local health unit)	Patients over 65 years, residing in the area served by. All patients had heart failure and "complex health care needs", as defined by Resource Utilization Band 4 or 5 (respectively high morbidity or very high morbidity) out of 5.	"Impactability model" based on ACG created by identifying homogenous clinical subgroups of patients with a high risk of at least 1 "preventable admission" that may be addressed using case management	No statistical difference between algorithm and ACG risk scores. This will help policy makers develop "tool kits" for homogeneous groups of patients that improve health outcomes.
	Data source	Routinely collected administrative data			
	Aims	Case management by development of an impactability model			
	Outcomes and measures	Predictive performance of algorithm to identify common sets of diseases most predictive for hospital admission or readmission compared with ACG risk scores.			
Guthrie et al. 2017	Country	UK	Patients with ACSCs who had "psychosocial risk factors for increased use of unscheduled care", including recent use of unscheduled care, depression, living alone or social stressors.	ACSC diagnosis	Depression was an important factor in unscheduled care use. However, there was no evidence that this intervention impacted unscheduled care as patients and HCPs seem unaware or unlikely to acknowledge the role of psychosocial factors and integration of tools might not have been complete.
	Data source	CHOICE: Choosing Health Options In Chronic Care Emergencies			
	Aims	Assess relationship between psychological morbidity and use of unscheduled care in people with long-term conditions by a literature review and prospective study of care use to develop a targeted intervention.			
	Outcomes and measures	Identification of factors that could reduce use of unscheduled care.			
McCormick 2012	Country	USA	Patients with cardiovascular ACSCs (congestive heart failure, angina, hypertension)	ACSC diagnosis	ACSC hospitalisations increased more in the intervention group than the control group over the intervention period.
	Data source	Acute hospital admission data			

	Aims	Difference-in-differences analysis of the impact of healthcare reforms aimed at improving access to care and coverage for preventable ACSCs.			Therefore the intervention did not decrease the risk of avoidable hospitalisations.
	Outcomes and measures	Hospital admission rates before and after reform versus control states without changes			
Steventon et al. 2012	Country	UK	Patients aged 18 and over with a diagnosis of COPD, diabetes, or heart failure, based on QOF register or confirmed diagnosis based on GP records or confirmation of disease status by a local clinician. Patients were not excluded for any other reasons	ACSC diagnosis	Logistic regression showed that telehealth was associated with lower hospital (OR 0.82, 95% CI 0.70–0.97, p=0.017) and Emergency (0.81, 0.65–1.00, p=0.046) admission rates and mortality (0.54, 0.39–0.75, p<0.001).
	Data source	HES data for England, mortality, (May 2008 to November 2009)			
	Aims	Assess the effects of home-based telehealth interventions			
	Outcomes and measures	Reductions in admission to hospital and mortality over 12 months versus usual care			
Steventon et al. 2013	Country	UK	Inclusion was restricted to patients with a recorded diagnosis of COPD, CHF, coronary heart disease or diabetes; a minimum level of disease severity in the past 15 months; age 18 or older; ability to communicate on the telephone; a recorded address and practice registration. Patients also had a history of inpatient or outpatient hospital use.	ACSC diagnosis augmented with clinical judgement of which patients were likely to benefit	Logistic regression showed that telephone health coaching intervention did not lead to the expected reductions in hospital admissions or secondary care costs over 12 months and could have led to increases.
	Data source	Primary care data (not specified)			
	Aims	Assess the effects of a personalised telephone health coaching service			
	Outcomes and measures	Reductions in number of emergency hospital admissions, hospital bed days, elective hospital admissions, outpatient attendances, and secondary care costs over 12 months versus usual care			
Steventon et al. 2016	Country	UK	Patients with ACSCs including COPD, CHF, and diabetes	ACSC diagnosis	Logistic regression showed that the telehealth intervention may have led to increased risk of emergency admission or death (adjusted HR 1.34, 95% CI 1.16–1.56,
	Data source	Hospital administrative data and linked telehealth referral data			
	Aims	Assess the effects of home-based telehealth management of existing			

		conditions by a monitoring centre in a rural setting			p<0.001). Authors recommend investing resources in other forms of preventive care for which an evidence base exists
	Outcomes and measures	Changes in time to first emergency hospitalisation or death versus usual care			
Impactibility based on PTS					
Dubard et al. 2018	Country	USA (North Carolina)	Medicaid beneficiaries who received some level of care management support and had at least 1 potentially preventable admission, readmission or ED visit in the year prior to initiation of case management. Patients were considered to have received care management support if they had at least 1 direct encounter with a care manager by phone or face to face.	Impactibility score developed using linear regression analysis. Independent variables: <ul style="list-style-type: none"> • Age, sex, race, ethnicity, disability status, foster care status • ED visit count, inpatient visit count • CRG weight • Presence of specific chronic conditions • Number of chronic conditions • Number of chronic medications filled • Number of acute medications filled • Total cost of care Derived variables include: <ul style="list-style-type: none"> • “Above expected potentially preventable costs” (AEPPC), which includes costs related to potentially preventable 	Model variables related to medication adherence and historical utilization unexplained by disease burden were more important predictors of impactibility than any given diagnosis or event, disease profile, or overall costs of care. Impactibility based targeting could lead to two to three times greater return on investment that risk stratification by high ED use or inpatient admissions and high-risk disorders This study helps highlight the difference between “high-frequency/high-cost” users and “highly impactible” users, noting that there's a real difference between the two groups which makes traditional algorithms unhelpful.
	Data source	Administrative data available for the whole population (January 2010-May 2017) including eligibility and enrolment files; Medical and pharmacy claims paid by Medicaid and encounter claims from all managed care organisations; Disease burden categorised by hierarchical Clinical Risk Group (CRG)			
	Aims	Development of an impactibility score to estimate intervention effects and achievable savings for community-based care management			
	Outcomes and measures	Multivariable modelling including costs various risk stratification strategies to build a predictive model of expected cost savings versus usual care			

				admissions, readmissions and ED visits	
				<ul style="list-style-type: none"> • Monthly spending trajectory over the most recent 12 months • 2 indicators of adherence to chronic medications 	
Hawkins et al. 2015	Country	USA (pilots in California, Florida, New York, North Carolina and Ohio)	Individuals with Medicare Supplement plans with multiple chronic health conditions who may benefit from additional care coordination and ancillary support. Patients are referred either directly from a provider or Nurse HealthLine, or data-driven referrals based on Hierarchical Condition Category risk score >3.74.	PTS model based on logistic regression.	The score significantly improved the ability to identify patients most likely to engage with treatment and succeed (predicted success rate 0.761, 95% CI 0.754–0.764) and financial success probabilities (0.697, 0.665–0.707), but not quality of care.
	Data sources	United Healthcare (AARP Medicare Supplement plan provider) December 2008–December 2011.		Independent variables included:	
	Aims	Develop and validate a PTS score to support a high-risk-case management programme		<ul style="list-style-type: none"> • dates and locations of service • indicators of the types of services, drugs, and procedures provided • AmeriLINK Data Sourcing system (generated by the KBM Group) to find information about socioeconomic status • Local supply of health care services in areas where qualified members lived was derived from the Dartmouth Atlas of Healthcare 	The validated score helped to prioritise outreach to efforts to maximise programme engagement and savings.
	Outcomes and measures	Identify among programme members those most likely to: <ol style="list-style-type: none"> 1) engage with the programme (yes/no) 2) receive the highest quality of care (meeting 70% or more of the relevant clinical care guidelines) and cost savings associated with the HRCM program 			“Using PTS models may help increase program engagement and financial success of care coordination programs.”
Hommer et al. 2013	Country	USA	Patients with depressive symptoms measured by PHQ-9 and AARP Medigap supplement insurance.	PTS model based on characteristics of “engaged patients” compared with qualified but non-engaged patients.	The score enabled more efficient utilisation of health resources by refining targeting and outreach efforts to those
	Data source	United Healthcare (AARP Medicare Supplement plan provider) combined			

		with inferred sociodemographic data (Dec 2009-Dec 2010)			most likely to be successful in the programme.
	Aims	Develop and validate a PTS score to support a depression management programme		Predictors of outcomes of interest included:	
	Outcomes and measures	Changes in identification of patients likely to engage, individual-level costs (ROI >1) and health-care quality outcomes (hospital readmission, EBM metrics)		<ul style="list-style-type: none"> • patient demographics • plan type • location • participation in other programmes • health status measures • various supply side measures 	
Hsueh et al. 2018	Country	USA	Review of records of patients recently discharged from an acute hospital admission and assigned to a transitional care programme with the objective of reducing hospital admissions.	Goal attainment factors assessed by logistic regression include:	Accuracy for goal attainment was greatest at the individual level (87.24%), outperforming population-level strategies (85.70%), and no planning (28.98%).
	Data source	The GOAL dataset: care management records from a private not-for-profit healthcare network (Jan 2016 to Feb 17)		<ul style="list-style-type: none"> • demographics (age, gender) • patient care programme context (programme experience, days in the programme) • interactions between care managers and patients (day of call) 	“Increased patient behavioral understanding could potentially benefit augmented intelligence for care management decision support”
	Aims	Develop models of conditional probability distributions for individual-level effect estimation to enable recognition of behavioural responses that could affect care planning			
	Outcomes and measures	Improved likelihood of goal attainment, categorised as: education (e.g., post-discharge understanding); medication (e.g., adherence); reducing risk (e.g., resolve care gaps); self-care (e.g., heart failure home self-management); implementation (e.g. installing fall prevention facility), and others (e.g., obtaining accurate patient information) in an observational data set.		and fivefold cross validation on the task of predicting whether a goal would be achieved given the recommended intervention	
Mattie et al. 2019	Country	USA		A random forest machine learning model to	The impactability model reached an overall

	Data source	Anonymised insurance claims data (June 2015 to May 2018) combined with inferred sociodemographic and patient-generated data	Commercially insured, “low-risk” (not defined) population	categorise new patients as impactable versus not impactable based on cost savings with vs without a digital health intervention.	accuracy of 71.9% (sensitivity 0.77 and specificity of 0.65) and is generalisable to assess the impactability of any intervention.
	Aims	Develop machine learning models to identify patients most likely to benefit from a digital health intervention for care management		The model was based on: <ul style="list-style-type: none"> • Administrative claims data • Age • Education level, employment status, income and poverty status inferred from zip code • Data derived from a patient-held mobile application. 	“This demonstrates the potential to successfully target, based on impactability, lower risk members of the population with a digital health intervention.
	Outcomes and measures	Expected cost savings compared with no predictive intervention			
Menard et al. 2018	Country	USA	Pregnant Medicaid beneficiaries	Retrospective analysis of risk screen and care management data, matched to birth certificate pregnancy outcome data. Analysis of degree of low birthweight and number of completed care tasks led to creation of a three-tier score (highest score range = greatest risk reduction with higher number of face-to-face care management tasks)	The score effectively identified women who would benefit most from pregnancy care management (OR for highest score range 0.80, p<0.05) “For every 100 women in Tier 1 who receive care management, 8 low birthweight outcomes can potentially be prevented”
	Data source	Birth certificate pregnancy outcome data from the 2011-14 birth cohort			
	Aims	Development and validation of a pregnancy care management strategy to identify women most likely to benefit from pregnancy care management to reduce the rate of low birthweight			
	Outcomes and measures	Associations between low birthweight and number of completed care management tasks during pregnancy			
Ozminkowski et al. 2015 (MyCarePath)	Country	USA	Individuals are qualified for MyCarePath either through direct or indirect referral.	PTS summary scores were calculated through logistic regression to generate predicted probability that a qualified individual:	PTS models had higher specificity than sensitivity, suggesting they were better able to predict who would not participate/achieve cost
	Data source	Administrative claims data and health risk assessment from AARP Medicare Supplement Insurance Plan insured	Indirect referrals use claims experience to calculate CMS Hierarchical Condition		

		by UnitedHealthcare Insurance Company	Category (HCC) score >3.74. Most individuals are age 65 and older, with a Medigap plan. Individuals may also be referred directly through their provider who “perceives a benefit” or nurses on a telephone advice line.	(1) participated in MyCarePath, (2) was managed in a way that was consistent with evidence-based guidelines for treating their medical problems, and (3) was managed in a way that reduced the cost of their medical care and prescription pharmaceuticals.	savings/improve care quality.
	Aims	Describe how big and small data are used to support care coordination programmes			Comparing the 3 months prior to the implementation to the 9 months after implementation, the average number of new participants rose by 11%.
	Outcomes and measures	Change in calculation of risk scores after implementation of PTS modelling was	<i>Note: individuals purchasing AARP Medigap insurance are asked to complete a health risk assessment after purchasing the plan. Answers to these questions may trigger referral to MyCarePath.</i>	Independent variables included: <ul style="list-style-type: none"> • Demographic data • Health status • Medigap plan type • Healthcare supply • Location variables <p>External consumer-generated variables have been studied but did not increase the model’s predictive ability.</p>	“To date, program evaluations have reported positive returns on investment and improved quality of healthcare among program participants.”
Navratil-Strawn 2016	Country	USA	Patients covered by an AARP Medicare Supplement (Medigap) plan	PTS modelling by means of logistic regression to identify characteristics associated with programme engagement.	PTS modelling was found to be “stable and valid” according to a K-fold cross-validation study
	Data sources	United Healthcare (AARP Medicare Supplement plan provider) combined with inferred sociodemographic data			
	Aims	Increase use of a nurse telephone triage programme		Model covariates included:	“PTS modelling may help to target and engage callers, thus increasing use

Outcomes and measures	Changes after PTS in 1) Utilisation of the Nurse Healthline 2) Triage engagement 3) Adherence to nurse recommendations Compared with no intervention	<ul style="list-style-type: none"> demographic measures (age, sex) residential location: rural vs urban, census region, residence in 1 of 5 locations with other care coordination pilots ongoing socioeconomic variables (zip code level proxies of race and income) health status (OptumInsight ImpactPro prospective risk score) local supply of health services (hospital beds per 1000, primary care physicians and specialists per 100,000 residents) Previous emergency healthcare use in 6 months (yes/no) Time of call (weekday/weekend) 	of the Nurse Healthline and triage service." "This in turn should lead to more efficient use of healthcare services and reduce unnecessary health care expenditures"
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Studies incorporating or comparing clinical judgement of impactability					
Cohen C et al. 2015	Country	Israel	Exclusion criteria based on physician input were: active cancer, schizophrenia, dialysis, residence in nursing homes or long-term care facilities, and age 95 years or older.	Model based on ACG predictive model risk scores for risk of future high costs, augmented with a survey of clinical considerations from six physicians	C-statistics for the model before and after exclusions applied were 0.80 and 0.75, respectively. After exclusion, the PPV for the 6% highest risk patients
	Data source	Clalit Health Services' (managed care organization) database 2010-11			
	Aims	Develop a patient selection process for multimorbid care management based on physician knowledge and predictive model risk scores			

	Outcomes and measures	Improve discriminatory power for selecting multimorbid patients most amenable to proactive management			was 40%. High-risk patients' age, number of chronic conditions, and utilization were substantially higher than those of all other patients. This study shows that a validated predictive modelling tool provides acceptable discriminatory power for selecting multimorbid patients for participation in proactive care management, even after some of the highest risk patients are excluded because of priori clinical considerations.
Corbin et al. 2019	Country	USA	Outpatient primary care patients "at risk of hospitalisation in the next 12 months"	Clinical team assessment of the "potential of care to impact outcomes" based on medical and social factors as an adjunct to a risk predictive model developed by EPIC, which identified 19 variables predictive of ED visits or hospitalisation in the next 12 months.	Validation showed an average C-statistic of 0.71. Average risk score of patients under care management increased from 33% to 40.4% over the first 2 months of the programme. Full results for other outcomes not yet available.
	Data source	Primary care database (not specified)			
	Aims	Develop and validate a patient selection tool to guide allocation of care management based on physician knowledge and predictive model risk scores			
	Outcomes and measures	Changes in 1) Average risk score of patients under care management 2) Number of ED visits 3) Number of hospitalisation in the next 12 months after introduction of tool			
Flaks-Manov et al. 2020	Country	Israel	Patients aged 65 years and older who were hospitalized for at least 1 night in an internal medicine ward	Nurse and internal medicine physicians (in charge of direct patient care) assessment of impactability, compared with a risk prediction model	Physician assessment of likelihood to benefit vs risk prediction model showed 65% overlap, 19% of patients had high predicted risk scores but
	Data source	HCP interview May 2016-June 2017			
	Aims	Explore healthcare providers' perspectives of patients' characteristics associated with decisions about which patients should			

		be referred to readmission prevention programs			were not referred, and 16% had low predicted risk scores but were referred.
	Outcomes and measures	Identify similarities and differences in recommendations for referral to a readmission prevention program based on physicians' opinions and a risk prediction model			There is a mismatch between being risk classification by modelling and perceived impactability. Additional research is required to understand how combining modelled data with provider insights might improve the selection of patients
Fleming et al. 2017	Country	USA	High cost "superutilizers" at two public urban safety-net hospitals	Physician assessment of patient engagement to determine "likelihood to benefit" determined through interviews and ethnographic research	Providers considered 'likelihood to benefit' assessments to be highly challenging and oftentimes inaccurate, particularly because they understood low patient engagement to be the result of difficult socioeconomic conditions..."
	Data source	HCP interview conducted 2015 to 2016			
	Aims	Investigate how health care providers describe engagement for high-cost patients requiring complex care management			
	Outcomes and measures	Assess accuracy of health-care professional and provider definitions and predictions of engagement in relation to socioeconomic status			Health-care professionals look for more subtle signs of engagement and considered fluctuating trajectories of engagement due to living circumstances
Freund et al. 2010, 2011, 2012, 2013	Country	Germany	Index condition: T2DM, COPD, asthma, CHF or late-life depression (age >60 years).	Family physician assessment of likelihood to benefit (vs risk predictive model)	Predictive modelling was numerically more accurate than physicians at predicting risk of future hospitalisation, but rates
	Data source/setting	10 primary care practices in southwestern Germany			

	Aims	Compare physician referrals with risk prediction based on insurance claims data	Exclusion criteria: age under 18, dementia, palliative care, or nursing home residents, active cancer or dialysis		for the latter increased over time and patients had better receptivity to care management programmes
	Outcomes and measures	Selection of patients for primary-care-based management of complex and chronic illness, assessed by: 1) Hospitalisation within 12 months 2) Mortality			The authors recommend a combined approach between risk prediction and physician-determined impactability.
Hudon et al. 2018	Country	Canada	Patients with at least one chronic disease, including diabetes, CVD, respiratory, musculoskeletal or chronic pain, with "complex care needs whom family physicians felt could benefit from a case management intervention" and at least three ED visits or hospital admissions. Patients with serious cognitive problems were excluded.	Randomised control trial of intervention and thematic analysis of in-depth interviews	The intervention reduced psychological distress (OR 0.43, 95% CI 0.19–0.95, p=0.04), but did not have any significant effect on patient activation
	Data source	V1SAGES (Vulnerable Patients in Primary Care: Nurse Case management and Self-management support)			
	Aims	Assess effects of case-management intervention on psychological distress and patient activation in frequent health-care users			Patients and spouses benefitted from the case management intervention, gaining a sense of security, and stakeholders noted better patient self-management of health
	Outcomes and measures	Effects of intervention on 1) Psychological distress 2) Patient activation Stakeholder's perceptions of interventions			"Case management is a promising avenue to improve outcomes among frequent users of health care with complex needs"

Abbreviations: ACG=adjusted clinical groups. ACSCs=ambulatory care sensitive conditions. OR=odds ratio. PTS=propensity to succeed.