

**Registered Nurses' Association of Ontario**  
*Pressure injury management: Risk assessment, prevention and treatment*  
**Fourth edition**  
**November 2024**

## Systematic review search strategies

Originally, six systematic reviews of recent literature were conducted to inform the recommendations included in this Best Practice Guideline (BPG). The search strategies were developed by RNAO's BPG team and a health sciences librarian in 2023. Three systematic reviews also had an indirect search completed. The original six systematic reviews were updated prior to publication in 2024. All search strategies are outlined in the document.

In addition, panel members were asked to review personal libraries to identify key articles not found through the search strategies. Articles identified by panel members were included in the search results if two guideline development methodologists independently determined the articles had not been identified by the literature search and met the inclusion criteria.

**Databases searched:** APA PsycInfo, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Cumulative Index to Nursing and Allied Health (CINAHL), EMBASE Classic+Embase, Emcare Nursing, MEDLINE (R) ALL.

### Inclusion criteria:

The following criteria were used to guide the systematic reviews:

- A primary focus on the following interventions for health service organizations, academic institutions, health providers and/or students, and the prioritized outcomes per topic:

#### Recommendations question #1

- **Intervention** – Health technologies used for early detection and assessment of pressure injuries
- **Outcomes** – Incidence rate of pressure injury, accuracy of predicting pressure injury development, pressure injury precursor signs and symptoms, health provider compliance with use of health technology, person/caregiver satisfaction

#### Recommendation question #2:

- **Intervention** – Repositioning frequency for persons with pressure injuries or those at risk of developing them
- **Outcomes** – Prevalence or incidence rate of pressure injury, pressure injury healing rate, worsening of pressure injury, pressure injury precursor signs and symptoms, person/family satisfaction

#### Recommendation question #3:

- **Intervention** – Preventative care bundles to prevent pressure injuries
- **Outcome** – Prevalence or incidence rate of pressure injury, pressure injury precursor signs and symptoms, health provider compliance with care bundle, adverse events, person/caregiver satisfaction

Recommendation question #4:

- **Intervention** – Use of prophylactic dressings for the prevention of pressure injuries
- **Outcome** – Incidence rate of pressure injury, pressure injury precursor signs and symptoms, pain, quality of life, person/caregiver satisfaction

Recommendation question #5:

- **Intervention** – Health technologies used for treatment of pressure injuries
- **Outcome** – Healing rate of existing pressure injury, worsening pressure injuries, health provider compliance with use of health technology, patient/family satisfaction, pain

Recommendation # 6:

- **Intervention** – Powered support surfaces
- **Outcome** – Prevalence or incidence rate of pressure injury, healing rate of existing pressure injury, worsening pressure injury, pressure injury precursor signs and symptoms, pain
- A focus on pressure injuries
- Published after January 2018
- Published in English
- All populations across the lifespan (e.g., infant, pediatric, adult and older adult)
- Accessible for retrieval
- Conducted in any geographic region
- Applicable to all health service organizations and academic institutions
- Applicable to all health providers and students
- Peer-reviewed literature
- Any study design (quantitative, qualitative, mixed methods, systematic reviews)

\*Note: when conducting the indirect searches, only systematic reviews and meta-analyses were include

**Exclusion criteria:**

The following criteria were used to exclude literature from the search:

- Topics NOT related to the aforementioned interventions or prioritized outcomes
- A focus on diabetic foot ulcers, venous/arterial ulcers, moisture associated skin damage including incontinence-associated dermatitis (IAD), surgical wounds, ostomy related wounds, lacerations, abrasions or skin tears
- Dissertations, commentaries, narratives, discussion papers, case studies, expert reports, consensus documents, studies with no specific methodology
- Studies not published in English
- Unpublished literature (e.g., grey literature)
- Studies published prior to 2018

## Searches

**Recommendation #1:** Should the use of health technologies be recommended or not for early detection and assessment of pressure injuries?

### Original Search

#### Databases:

- Medline (R) ALL
- EMBASE Classic+Embase
- Emcare Nursing
- EBM Reviews - Cochrane Central Register of Controlled Trials February 2023
- EBM Reviews - Cochrane Database of Systematic Reviews 2005 to March 7, 2023
- APA PsycInfo 1806 to February Week 4 2023
- Cumulative Index to Nursing and Allied Health (CINAHL)

Dates searched: January 2018 - March, 2023.

**MEDLINE(R) ALL** 1946 to March 07, 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	13771
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	15566
3	or/1-2	19145
4	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kf.	474654
5	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kf.	265128
6	("non visible" or nonvisible).tw,kf.	739
7	Risk Assessment/	304333
8	((risk or risks) adj2 (assess* or evaluat*)).tw,kf.	174995
9	or/4-8	1104847
10	3 and 9	2266
11	pressure ulcer/di	966
12	10 or 11	2890
13	limit 12 to english language	2668
14	limit 13 to yr="2018 -Current"	742
15	Point-of-Care Systems/	16212
16	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kf.	4355
17	Bedside Technologies/	16212
18	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kf.	177

19	Cell Phone/ or Smartphone/	18536
20	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kf.	27633
21	Mobile Applications/	11094
22	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kf.	15890
23	Wireless Technology/	4616
24	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kf.	3344
25	wearable electronic devices/	7330
26	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kf.	6398
27	exp artificial intelligence/	167611
28	(artificial intelligence or machine intelligence).tw,kf.	32182
29	decision support systems, clinical/	9355
30	("decision support system*" or "decision support techniques").tw,kf.	8746
31	Biosensing Techniques/	55636
32	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors).tw,kf.	53821
33	Monitoring, Physiologic/	58535
34	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kf.	23543
35	Blood Gas Monitoring, Transcutaneous/	2470
36	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kf.	948
37	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kf.	55958
38	Body Temperature/ or Skin Temperature/	57582
39	((skin or body or cutaneous) adj5 temperature?).tw,kf.	52757
40	machine learning/	31246
41	(machine learning or learning machine*).tw,kf.	83045
42	Neural Networks, Computer/	46057
43	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kf.	91265
44	deep learning/	14685
45	(deep learning or hierarchical learning).tw,kf.	43703
46	(sensor or sensors).tw,kf.	195725
47	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kf.	38257
48	Photoacoustic Techniques/	3018
49	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kf.	4240

50	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kf.	245
51	exp Diagnostic Imaging/s	2895035
52	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kf.	2608303
53	Laser-Doppler Flowmetry/	8682
54	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kf.	6686
55	Thermography/	8107
56	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kf.	12967
57	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kf.	7892
58	Biomarkers/	343914
59	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kf.	438462
60	or/15-59	5665659
61	14 and 60	180

### Embase Classic+Embase 1947 to 2023 March 07

#### Search Strategy:

#	Searches	Results
1	decubitus/	26630
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	20750
3	or/1-2	31384
4	early diagnosis/	135287
5	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kw.	717939
6	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kw.	376903
7	("non visible" or nonvisible).tw,kw.	1131
8	risk assessment/	731923
9	((risk or risks) adj2 (assess* or evaluat*)).tw,kw.	235241
10	or/4-9	1856670
11	3 and 10	3738
12	decubitus/di [Diagnosis]	926
13	or/11-12	4362
14	limit 13 to english language	4016

15	limit 14 to yr="2018 -Current"	1287
16	"point of care system"/	3674
17	("point of care" adj3 (device or devices or system or systems or technolog*).tw,kw.	5201
18	bedside information system/ or bedside information system software/	29
19	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kw.	233
20	mobile phone/ or smartphone/	45850
21	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kw.	36418
22	mobile application/ or mobile health application/	23884
23	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kw.	20487
24	wireless communication/	7331
25	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kw.	3449
26	wearable computer/	1227
27	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kw.	6916
28	exp artificial intelligence/	77244
29	("artificial intelligence" or "machine intelligence").tw,kw.	39649
30	clinical decision support system/	5539
31	("decision support system*" or "decision support techniques").tw,kw.	10761
32	biosensor/	39093
33	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors").tw,kw.	57908
34	body temperature monitoring/	865
35	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kw.	32533
36	transcutaneous oxygen monitoring/	2572
37	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kw.	1222
38	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kw.	75069
39	body temperature/ or skin temperature/	84571
40	((skin or body or cutaneous) adj5 temperature?).tw,kw.	67915
41	machine learning/	85009
42	("machine learning" or "learning machine*").tw,kw.	101456
43	artificial neural network/	48205
44	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kw.	108853
45	deep learning/	39058
46	(deep learning or hierarchical learning).tw,kw.	52741
47	exp sensor/	154638
48	(sensor or sensors).tw,kw.	208211

49	pressure measurement/	15612
50	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kw.	55936
51	exp photoacoustics/	9252
52	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kw.	4416
53	skin/ and moisture/	570
54	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kw.	308
55	exp diagnostic imaging/	251628
56	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kw.	3422030
57	laser doppler flowmetry/	12197
58	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kw.	8811
59	thermography/	15086
60	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kw.	16018
61	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kw.	8589
62	biological marker/	434106
63	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kw.	674301
64	or/16-63	4919480
65	15 and 64	285
66	limit 65 to (books or chapter or conference abstract or conference paper or "conference review")	51
67	65 not 66	234

### Emcare Nursing 1995 to Present

#### Search Strategy:

#	Searches	Results
1	decubitus/	9810
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	9956
3	or/1-2	12821

4	early diagnosis/	24824
5	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kf.	151728
6	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kf.	60954
7	("non visible" or nonvisible).tw,kf.	257
8	risk assessment/	152663
9	((risk or risks) adj2 (assess* or evaluat*)).tw,kf.	63043
10	or/4-9	388009
11	3 and 10	1962
12	limit 11 to english language	1817
13	limit 12 to yr="2018 -Current"	582
14	"point of care system"/	199
15	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kf.	1479
16	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kf.	93
17	mobile phone/ or smartphone/	11058
18	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kf.	13823
19	mobile application/ or mobile health application/	4655
20	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kf.	8521
21	wireless communication/	1304
22	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kf.	942
23	wearable computer/	50
24	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kf.	1830
25	exp artificial intelligence/	10110
26	("artificial intelligence" or "machine intelligence").tw,kf.	10971
27	clinical decision support system/	1040
28	("decision support system*" or "decision support techniques").tw,kf.	5639
29	biosensor/	2851
30	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors").tw,kf.	3331
31	body temperature monitoring/	256
32	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kf.	9099
33	transcutaneous oxygen monitoring/	385
34	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kf.	227
35	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kf.	14244
36	body temperature/ or skin temperature/	11477
37	((skin or body or cutaneous) adj5 temperature?).tw,kf.	11157



38	machine learning/	10321
39	("machine learning" or "learning machine*").tw,kf.	26959
40	artificial neural network/	5728
41	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kf.	23599
42	deep learning/	4886
43	(deep learning or hierarchical learning).tw,kf.	13941
44	exp sensor/	20068
45	(sensor or sensors).tw,kf.	31666
46	pressure measurement/	4414
47	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kf.	12280
48	exp photoacoustics/	901
49	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kf.	859
50	skin/ and moisture/	243
51	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kf.	88
52	exp diagnostic imaging/	52368
53	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kf.	728689
54	laser Doppler flowmetry/	2073
55	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kf.	1503
56	thermography/	1324
57	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kf.	2598
58	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kf.	2224
59	biological marker/	41741
60	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kf.	119680
61	or/14-60	998740
62	13 and 61	125
63	limit 62 to (book or book series or conference proceeding)	3
64	62 not 63	122

## EBM Reviews - Cochrane Central Register of Controlled Trials February 2023

### Search Strategy:

#	Searches	Results
1	pressure ulcer/	900
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	2152
3	or/1-2	2261
4	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kw.	21399
5	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kw.	12977
6	("non visible" or nonvisible).tw,kw.	40
7	Risk Assessment/	11703
8	((risk or risks) adj2 (assess* or evaluat*)).tw,kw.	23631
9	or/4-8	64626
10	3 and 9	172
11	pressure ulcer/di	0
12	10 or 11	172
13	limit 12 to english language	161
14	limit 13 to yr="2018 -Current"	67
15	Point-of-Care Systems/	562
16	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kw.	270
17	Bedside Technologies/	562
18	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kw.	12
19	Cell Phone/ or Smartphone/	1786
20	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kw.	8160
21	Mobile Applications/	1501
22	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kw.	5944
23	Wireless Technology/	62
24	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kw.	144
25	wearable electronic devices/	223
26	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kw.	522
27	exp artificial intelligence/	2422
28	(artificial intelligence or machine intelligence).tw,kw.	1231
29	decision support systems, clinical/	551
30	("decision support system*" or "decision support techniques").tw,kw.	1704
31	Biosensing Techniques/	83

32	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors).tw,kw.	183
33	Monitoring, Physiologic/	2509
34	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kw.	3741
35	Blood Gas Monitoring, Transcutaneous/	238
36	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kw.	166
37	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kw.	9265
38	Body Temperature/ or Skin Temperature/	3265
39	((skin or body or cutaneous) adj5 temperature?).tw,kw.	8631
40	machine learning/	450
41	(machine learning or learning machine*).tw,kw.	2151
42	Neural Networks, Computer/	285
43	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kw.	1698
44	deep learning/	215
45	(deep learning or hierarchical learning).tw,kw.	905
46	(sensor or sensors).tw,kw.	5250
47	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kw.	10050
48	Photoacoustic Techniques/	6
49	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kw.	16
50	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner").tw,kw.	110
51	exp Diagnostic Imaging/	58868
52	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kw.	145278
53	Laser-Doppler Flowmetry/	700
54	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kw.	976
55	Thermography/	197
56	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kw.	721
57	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kw.	727
58	Biomarkers/	17900
59	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or	40904

	"surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kw.	
60	or/15-59	272797
61	14 and 60	16

## EBM Reviews - Cochrane Database of Systematic Reviews 2005 to March 7, 2023

### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	199
2	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kw.	1953
3	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kw.	1390
4	("non visible" or nonvisible).tw,kw.	6
5	((risk or risks) adj2 (assess* or evaluat*)).tw,kw.	8713
6	or/2-5	9046
7	1 and 6	180
8	limit 7 to last 5 years	31
9	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kw.	36
10	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kw.	4
11	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kw.	179
12	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kw.	104
13	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kw.	24
14	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kw.	24
15	("artificial intelligence" or "machine intelligence").tw,kw.	37
16	("decision support system*" or "decision support techniques").tw,kw.	84
17	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors").tw,kw.	6
18	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kw.	181
19	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kw.	22
20	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kw.	284
21	((skin or body or cutaneous) adj5 temperature?).tw,kw.	258
22	("machine learning" or "learning machine*").tw,kw.	133
23	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kw.	56

24	(deep learning or hierarchical learning).tw,kw.	5
25	(sensor or sensors).tw,kw.	143
26	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kw.	204
27	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kw.	2
28	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kw.	0
29	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kw.	3773
30	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kw.	8
31	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kw.	26
32	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kw.	28
33	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kw.	973
34	or/9-33	4998
35	8 and 34	19

#### APA PsycInfo 1806 to February Week 4 2023

##### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,id.	945
2	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,id.	64522
3	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,id.	31504
4	("non visible" or nonvisible).tw,id.	202
5	risk assessment/	15367
6	((risk or risks) adj2 (assess* or evaluat*)).tw,id.	23498
7	or/2-6	120712
8	1 and 7	145
9	limit 8 to english language	130
10	limit 9 to yr="2018 -Current"	36

11	("point of care" adj3 (device or devices or system or systems or technolog*).tw,id.	94
12	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,id.	7
13	mobile phones/ or smartphones/ or "smartphone use"/	7742
14	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,id.	9737
15	mobile applications/ or mobile health/	3744
16	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,id.	4347
17	wireless technologies/	597
18	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,id.	354
19	wearable devices/	680
20	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,id.	601
21	exp artificial intelligence/	29075
22	("artificial intelligence" or "machine intelligence").tw,id.	7764
23	decision support systems/	3677
24	("decision support system*" or "decision support techniques").tw,id.	2274
25	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors").tw,id.	400
26	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,id.	2436
27	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,id.	7
28	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,id.	1872
29	body temperature/ or skin temperature/	3577
30	((skin or body or cutaneous) adj5 temperature?).tw,id.	6452
31	machine learning/	11520
32	("machine learning" or "learning machine*").tw,id.	11866
33	artificial neural networks/	4778
34	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,id.	23665
35	(deep learning or hierarchical learning).tw,id.	3257
36	(sensor or sensors).tw,id.	7775
37	(pressure adj (map or mapping or maps or mapped or measur*)).tw,id.	1160
38	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,id.	12
39	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,id.	14

40	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,id.	279320
41	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,id.	213
42	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,id.	328
43	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,id.	255
44	biological markers/	17371
45	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,id.	30529
46	or/11-45	384526
47	10 and 46	5

#### CINHAL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15,800
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,667
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18,910
S4	(MH "Early Diagnosis")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,287

S5	TI ((early or earliest or earlier) N5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)) OR AB ((early or earliest or earlier) N5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	115,606
S6	TI ((early or earliest or earlier or initial) N5 (stage or stages)) OR AB ((early or earliest or earlier or initial) N5 (stage or stages))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	39,296
S7	TI ("non visible" or nonvisible) OR AB ("non visible" or nonvisible)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	174
S8	(MH "Risk Assessment")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	144,243
S9	TI ((risk or risks) N2 (assess* or evaluat*)) OR AB ((risk or risks) N2 (assess* or evaluat*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	58,765
S10	S4 OR S5 OR S6 OR S7 OR S8 OR S9	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	326,970
S11	S3 AND S10	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,286
S12	(MH "Pressure Ulcer/DI")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	764
S13	S11 OR S12	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,813
S14	(MH "Clinical Information Systems")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,538
S15	TI ("point of care" N3 (device or devices or system or systems or technolog*)) OR AB ("point of care" N3 (device or devices or system or systems or technolog*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,132
S16	TI ("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*") OR AB ("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	92



	information system*" or "bed side information system*")		
S17	(MH "Cellular Phone") OR (MH "Smartphone")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,336
S18	TI ("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones") OR AB ("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,680
S19	(MH "Mobile Applications")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,948
S20	TI ("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*") OR AB ("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,468
S21	(MH "Wireless Communications")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	12,511
S22	TI ("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*") OR AB ("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	535
S23	(MH "Wearable Sensors")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,970
S24	TI ("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices") OR AB ("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	910

S25	(MH "Artificial Intelligence")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	8,654
S26	TI ("artificial intelligence" or "machine intelligence") OR AB ("artificial intelligence" or "machine intelligence")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,530
S27	(MH "Decision Support Systems, Clinical")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,528
S28	TI ("decision support system*" or "decision support techniques") OR AB ("decision support system*" or "decision support techniques")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,860
S29	(MH "Biosensing Techniques+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	542
S30	TI (bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors") OR AB (bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	720
S31	(MH "Monitoring, Physiologic")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	24,529
S32	(MH "Body Temperature Determination")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,555
S33	TI (monitor* N5 (device or devices or physiologic* or technology or technologies)) OR AB (monitor* N5 (device or devices or physiologic* or technology or technologies))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,622
S34	(MH "Blood Gas Monitoring, Transcutaneous")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	613
S35	TI ("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension") OR AB ("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	175
S36	TI ((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpo2" or "tcpco2") N5 (assess* or detect* or measur*	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,653

	or monitor* or scan*)) OR AB ((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") N5 (assess* or detect* or measur* or monitor* or scan*))		
S37	(MH "Body Temperature") OR (MH "Skin Temperature")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,846
S38	TI ((skin or body or cutaneous) N5 temperature#) OR AB ((skin or body or cutaneous) N5 temperature#)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,880
S39	(MH "Machine Learning")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,248
S40	TI ("machine learning" or "learning machine*") OR AB ("machine learning" or "learning machine*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	12,087
S41	(MH "Neural Networks (Computer)")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,556
S42	TI ("neural network" or "connectionist model" or "neural networks" or "connectionist models") OR AB ("neural network" or "connectionist model" or "neural networks" or "connectionist models")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,122
S43	(MH "Deep Learning")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,524
S44	TI (deep learning or hierarchical learning) OR AB (deep learning or hierarchical learning)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,871
S45	TI (sensor or sensors) OR AB (sensor or sensors)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	12,110
S46	TI ("pressure map" or "pressure mapping" or "pressure maps" or "pressure mapped" or "pressure measur*") OR AB ("pressure map" or "pressure mapping" or "pressure maps" or "pressure mapped" or "pressure measur*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	8,321
S47	TI ("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	231

	technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics) OR AB ("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics)		
S48	TI ("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*") OR AB ("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	87
S49	(MH "Diagnostic Imaging+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	506,207
S50	TI ("diagnostic imaging" OR imag* OR therm* OR ultraviolet OR ultraso* OR spectrophotometr* OR colorimetr* OR photograph* OR moisture OR infrared OR "alternate light") OR AB ("diagnostic imaging" OR imag* OR therm* OR ultraviolet OR ultraso* OR spectrophotometr* OR colorimetr* OR photograph* OR moisture OR infrared OR "alternate light")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	412,187
S51	TI ("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry") OR AB ("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	712
S52	(MH "Thermography")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,387
S53	TI ("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,377

	video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*) OR AB ("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*)		
S54	TI ("temperature* map" or "temperature* mapping" or "temperature* maps" or "temperature* mapped" or "temperature* measur*") or AB ("temperature* map" or "temperature* mapping" or "temperature* maps" or "temperature* mapped" or "temperature* measur*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,025
S55	(MH "Biological Markers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	59,355
S56	TI ("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers") OR AB ("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	82,960

S57	S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	941,039
S58	S13 AND S57	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	538
S59	S13 AND S57	Limiters - English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	516
S60	S13 AND S57	Limiters - Published Date: 20180101-20231231; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	198

### Indirect search for recommendation 1

Database searched: MEDLINE (R) ALL

Dates searched: January 2018 – October 2023

**MEDLINE(R) ALL** 1946 to October 10, 2023

Search Strategy:

#	Searches – NEW	Results	#	Searches - OLD	Results
1	pressure ulcer/	14038	62	pressure ulcer/	14038
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16061	63	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16061
3	or/1-2	19646	64	or/62-63	19646

4	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kf.	496781	65	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kf.	496781
5	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kf.	275461	66	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kf.	275461
6	("non visible" or nonvisible).tw,kf.	774	67	("non visible" or nonvisible).tw,kf.	774
7	Risk Assessment/	307538	68	Risk Assessment/	307538
8	(risk or risks).tw,kf.	2948317	69	((risk or risks) adj2 (assess* or evaluat*)).tw,kf.	185033
9	or/4-8	3643847	70	or/65-69	1145829
10	3 and 9	5882	71	64 and 70	2329
11	pressure ulcer/di	985	72	pressure ulcer/di	985
12	10 or 11	6367	73	71 or 72	2963
13	limit 12 to english language	5906	74	limit 73 to english language	2739
14	limit 13 to yr="2018 -Current"	2007	75	limit 74 to yr="2018 -Current"	813
15	Point-of-Care Systems/	16706	76	Point-of-Care Systems/	16706
16	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kf.	4653	77	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kf.	4653
17	Bedside Technologies/	16706	78	Bedside Technologies/	16706
18	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kf.	179	79	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kf.	179
19	Cell Phone/ or Smartphone/	19272	80	Cell Phone/ or Smartphone/	19272
20	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kf.	30128	81	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kf.	30128
21	Mobile Applications/	11768	82	Mobile Applications/	11768
22	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kf.	17543	83	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kf.	17543
23	Wireless Technology/	4704	84	Wireless Technology/	4704
24	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kf.	3659	85	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kf.	3659
25	wearable electronic devices/	7990	86	wearable electronic devices/	7990

26	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kf.	7313	87	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kf.	7313
27	exp artificial intelligence/	180583	88	exp artificial intelligence/	180583
28	(artificial intelligence or machine intelligence).tw,kf.	40793	89	(artificial intelligence or machine intelligence).tw,kf.	40793
29	decision support systems, clinical/	9541	90	decision support systems, clinical/	9541
30	("decision support system*" or "decision support techniques").tw,kf.	9315	91	("decision support system*" or "decision support techniques").tw,kf.	9315
31	Biosensing Techniques/	57714	92	Biosensing Techniques/	57714
32	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors).tw,kf.	57279	93	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors).tw,kf.	57279
33	Monitoring, Physiologic/	58826	94	Monitoring, Physiologic/	58826
34	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kf.	25004	95	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kf.	25004
35	Blood Gas Monitoring, Transcutaneous/	2476	96	Blood Gas Monitoring, Transcutaneous/	2476
36	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kf.	957	97	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kf.	957
37	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kf.	57370	98	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kf.	57370
38	Body Temperature/ or Skin Temperature/	57870	99	Body Temperature/ or Skin Temperature/	57870
39	((skin or body or cutaneous) adj5 temperature?).tw,kf.	54084	100	((skin or body or cutaneous) adj5 temperature?).tw,kf.	54084
40	machine learning/	34788	101	machine learning/	34788
41	(machine learning or learning machine*).tw,kf.	98204	102	(machine learning or learning machine*).tw,kf.	98204
42	Neural Networks, Computer/	49073	103	Neural Networks, Computer/	49073
43	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kf.	101819	104	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kf.	101819
44	deep learning/	16804	105	deep learning/	16804
45	(deep learning or hierarchical learning).tw,kf.	53593	106	(deep learning or hierarchical learning).tw,kf.	53593



46	(sensor or sensors).tw,kf.	207975	107	(sensor or sensors).tw,kf.	207975
47	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kf.	39245	108	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kf.	39245
48	Photoacoustic Techniques/	3114	109	Photoacoustic Techniques/	3114
49	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kf.	4523	110	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kf.	4523
50	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kf.	265	111	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kf.	265
51	exp Diagnostic Imaging/	2929152	112	exp Diagnostic Imaging/	2929152
52	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kf.	2718659	113	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kf.	2718659
53	Laser-Doppler Flowmetry/	8714	114	Laser-Doppler Flowmetry/	8714
54	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kf.	6753	115	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kf.	6753
55	Thermography/	8158	116	Thermography/	8158
56	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kf.	13601	117	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kf.	13601
57	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kf.	8172	118	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kf.	8172
58	Biomarkers/	351827	119	Biomarkers/	351827

59	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kf.	468934	120	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kf.	468934
60	or/15-59	5854009	121	or/76-120	5854009
61	14 and 60	408	122	75 and 121	196
			123	61 not 122 [NEW CITATIOONS]	212

### Update search for recommendation 1

#### Databases searched:

- Medline (R) ALL
- EBM Reviews - Cochrane Database of Systematic Reviews
- CINAHL

Dates Searched: March 2023 to June 2024

**MEDLINE(R) ALL** 1946 to June 04, 2024

#### Search Strategy:

#	Searches	Results
1	pressure ulcer/	14368
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16686
3	or/1-2	20280
4	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kf.	522951
5	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kf.	286777
6	("non visible" or nonvisible).tw,kf.	793
7	Risk Assessment/	312631
8	((risk or risks) adj2 (assess* or evaluat*)).tw,kf.	197199
9	or/4-8	1194540
10	3 and 9	2441

11	pressure ulcer/di	1019
12	10 or 11	3094
13	limit 12 to english language	2867
14	Point-of-Care Systems/	17301
15	("point of care" adj3 (device or devices or system or systems or technolog*).tw,kf.	4992
16	Bedside Technologies/	17301
17	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kf.	183
18	Cell Phone/ or Smartphone/	20196
19	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kf.	32992
20	Mobile Applications/	12654
21	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kf.	19438
22	Wireless Technology/	4802
23	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kf.	3935
24	wearable electronic devices/	8950
25	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kf.	8481
26	exp artificial intelligence/	198665
27	(artificial intelligence or machine intelligence).tw,kf.	52596
28	decision support systems, clinical/	9813
29	("decision support system*" or "decision support techniques").tw,kf.	9905
30	Biosensing Techniques/	60477
31	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors).tw,kf.	61089
32	Monitoring, Physiologic/	59272
33	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kf.	26863
34	Blood Gas Monitoring, Transcutaneous/	2483
35	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kf.	967
36	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kf.	59086
37	Body Temperature/ or Skin Temperature/	58241
38	((skin or body or cutaneous) adj5 temperature?).tw,kf.	55563
39	machine learning/	39967
40	(machine learning or learning machine*).tw,kf.	116959
41	Neural Networks, Computer/	52935
42	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kf.	113597
43	deep learning/	20198
44	(deep learning or hierarchical learning).tw,kf.	65697

45	(sensor or sensors).tw,kf.	221491
46	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kf.	40289
47	Photoacoustic Techniques/	3263
48	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kf.	4799
49	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kf.	285
50	exp Diagnostic Imaging/	2972563
51	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kf.	2843078
52	Laser-Doppler Flowmetry/	8748
53	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kf.	6814
54	Thermography/	8237
55	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kf.	14187
56	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kf.	8493
57	Biomarkers/	363623
58	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kf.	503879
59	or/14-58	6071810
60	13 and 59	565
61	limit 60 to ed=20230307-20240604	46
62	60 and ("20230307*" or "20230308*" or "20230309*" or "20230310*" or "20230311*" or "20230312*" or "20230313*" or "20230314*" or "20230315*" or "20230316*" or "20230317*" or "20230318*" or "20230319*" or "20230320*" or "20230321*" or "20230322*" or "20230323*" or "20230324*" or "20230325*" or "20230326*" or "20230327*" or "20230328*" or "20230329*" or "20230330*" or "20230331*" or "202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "202309*" or "202310*" or "202311*" or "202312*" or "2024*").dt.	53
63	61 or 62	60

### EBM Reviews - Cochrane Database of Systematic Reviews 2005 to May 29, 2024

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus	205

	ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	
2	((early or earliest or earlier) adj5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)).tw,kw.	2011
3	((early or earliest or earlier or initial) adj5 (stage or stages)).tw,kw.	1436
4	("non visible" or nonvisible).tw,kw.	7
5	((risk or risks) adj2 (assess* or evaluat*)).tw,kw.	8892
6	or/2-5	9224
7	1 and 6	185
8	("point of care" adj3 (device or devices or system or systems or technolog*)).tw,kw.	36
9	("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*").tw,kw.	4
10	("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones").tw,kw.	197
11	("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*").tw,kw.	120
12	("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*").tw,kw.	26
13	("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices").tw,kw.	26
14	("artificial intelligence" or "machine intelligence").tw,kw.	45
15	("decision support system*" or "decision support techniques").tw,kw.	84
16	(bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors").tw,kw.	8
17	(monitor* adj5 (device or devices or physiologic* or technology or technologies)).tw,kw.	198
18	("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension").tw,kw.	22
19	((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") adj5 (assess* or detect* or measur* or monitor* or scan*)).tw,kw.	292
20	((skin or body or cutaneous) adj5 temperature?).tw,kw.	265
21	("machine learning" or "learning machine*").tw,kw.	158
22	("neural network" or "connectionist model" or "neural networks" or "connectionist models").tw,kw.	60
23	(deep learning or hierarchical learning).tw,kw.	6
24	(sensor or sensors).tw,kw.	155
25	(pressure adj (map or mapping or maps or mapped or measur*)).tw,kw.	208
26	("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics).tw,kw.	2
27	("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*").tw,kw.	0

28	("diagnostic imaging" or imag* or therm* or ultraviolet or ultraso* or spectrophotometr* or colorimetr* or photograph* or moisture or infrared or "alternate light").tw,kw.	3894
29	("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry").tw,kw.	8
30	("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*).tw,kw.	26
31	(temperature* adj (map or mapping or maps or mapped or measur*)).tw,kw.	28
32	("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers").tw,kw.	1022
33	or/8-32	5155
34	7 and 33	118
35	limit 34 to last 2 years	0
36	from 34 keep 2-5, 7-9, 13, 15-16, 39	11

#### CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16,159
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,812
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,138
S4	(MH "Early Diagnosis")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	14,854

S5	TI ((early or earliest or earlier) N5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*)) OR AB ((early or earliest or earlier) N5 (assess* or diagnos* or detect* or evidence or identif* or indicat* or predict* or recogn* or sign or signs or warn*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	119,094
S6	TI ((early or earliest or earlier or initial) N5 (stage or stages)) OR AB ((early or earliest or earlier or initial) N5 (stage or stages))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	40,855
S7	TI ("non visible" or nonvisible) OR AB ("non visible" or nonvisible)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	181
S8	(MH "Risk Assessment")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	167,588
S9	TI ((risk or risks) N2 (assess* or evaluat*)) OR AB ((risk or risks) N2 (assess* or evaluat*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	60,688
S10	S4 OR S5 OR S6 OR S7 OR S8 OR S9	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	354,900
S11	S3 AND S10	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,502
S12	(MH "Pressure Ulcer/DI")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	777
S13	S11 OR S12	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,026
S14	(MH "Clinical Information Systems")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,451
S15	TI ("point of care" N3 (device or devices or system or systems or technolog*)) OR AB ("point of care" N3 (device or devices or system or systems or technolog*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,128
S16	TI ("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*") OR AB ("bedside comput*" or "bedside technolog*" or "bed side comput*" or "bed side technolog*" or "bedside information system*" or "bed side information system*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	88

S17	(MH "Cellular Phone") OR (MH "Smartphone")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,174
S18	TI ("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones") OR AB ("cell* phone" or "cell* phones" or cellphone or cellphones or smartphone or smartphones or "smart phone" or "smart phones")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,366
S19	(MH "Mobile Applications")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,766
S20	TI ("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*") OR AB ("mobile app" or "mobile app*" or "mobile health app*" or "mobile health (mHealth) app*" or "portable electronic app*" or "portable software app*" or "smartphone app*" or "tablet app*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,270
S21	(MH "Wireless Communications")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	10,862
S22	TI ("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*") OR AB ("wireless communication*" or "wireless technolog*" or "wire less communication*" or "wire less technolog*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	456
S23	(MH "Wearable Sensors")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,819
S24	TI ("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices") OR AB ("wearable electronic device" or "wearable electronic devices" or "wearable computer" or "wearable computers" or "wearable device" or "wearable devices")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	966
S25	(MH "Artificial Intelligence")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	12,811
S26	TI ("artificial intelligence" or "machine intelligence") OR AB ("artificial intelligence" or "machine intelligence")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,752



S27	(MH "Decision Support Systems, Clinical")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,963
S28	TI ("decision support system*" or "decision support techniques") OR AB ("decision support system*" or "decision support techniques")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,988
S29	(MH "Biosensing Techniques+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	568
S30	TI (bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors") OR AB (bioprobe or bioprobes or biosensing or "bio sensing" or biosensor or biosensors or "bio sensor" or "bio sensors")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	727
S31	(MH "Monitoring, Physiologic")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	24,880
S32	(MH "Body Temperature Determination")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,565
S33	TI (monitor* N5 (device or devices or physiologic* or technology or technologies)) OR AB (monitor* N5 (device or devices or physiologic* or technology or technologies))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,525
S34	(MH "Blood Gas Monitoring, Transcutaneous")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	624
S35	TI ("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension") OR AB ("cutaneous oximetr*" or "transcutaneous blood gas monitor*" or "transcutaneous capnometr*" or "transcutaneous oximetr*" or "transcutaneous oxygen tension")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	177
S36	TI ((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") N5 (assess* or detect* or measur* or monitor* or scan*)) OR AB ((oxygen* or "o2" or "o(2)" or "po(2)" or "po2" or "ptco2" or "sto2" or "tcpoO2" or "tcpco2") N5 (assess* or detect* or measur* or monitor* or scan*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,810
S37	(MH "Body Temperature") OR (MH "Skin Temperature")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,929
S38	TI ((skin or body or cutaneous) N5 temperature#) OR AB ((skin or body or cutaneous) N5 temperature#)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,897

S39	(MH "Machine Learning")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,552
S40	TI ("machine learning" or "learning machine*") OR AB ("machine learning" or "learning machine*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	14,698
S41	(MH "Neural Networks (Computer)")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,420
S42	TI ("neural network" or "connectionist model" or "neural networks" or "connectionist models") OR AB ("neural network" or "connectionist model" or "neural networks" or "connectionist models")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	7,858
S43	(MH "Deep Learning")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,637
S44	TI (deep learning or hierarchical learning) OR AB (deep learning or hierarchical learning)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,603
S45	TI (sensor or sensors) OR AB (sensor or sensors)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	12,089
S46	TI ("pressure map" or "pressure mapping" or "pressure maps" or "pressure mapped" or "pressure measur*") OR AB ("pressure map" or "pressure mapping" or "pressure maps" or "pressure mapped" or "pressure measur*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	8,476
S47	TI ("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics) OR AB ("opto acoustic imaging" or "opto acoustic method*" or "opto acoustic technique*" or "optoacoustic imaging" or "optoacoustic method*" or "optoacoustic technique*" or "optoacoustic technology" or "photo acoustic imaging" or "photo acoustic technique*" or "photoacoustic imaging" or "photoacoustic method*" or "photoacoustic technique*" or "photoacoustic technolog*" or photoacoustics)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	248

S48	TI ("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*") OR AB ("skin moisture content" or "skin water content" or "subepidermal moisture" or "sub epidermal moisture" or "SEM measurement" or "SEM scanner*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	95
S49	(MH "Diagnostic Imaging+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	514,357
S50	TI ("diagnostic imaging" OR imag* OR therm* OR ultraviolet OR ultraso* OR spectrophotometr* OR colorimetr* OR photograph* OR moisture OR infrared OR "alternate light") OR AB ("diagnostic imaging" OR imag* OR therm* OR ultraviolet OR ultraso* OR spectrophotometr* OR colorimetr* OR photograph* OR moisture OR infrared OR "alternate light")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	415,498
S51	TI ("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry") OR AB ("doppler laser flowmetry" or "laser doppler flowmetry" or "laser doppler velocimetry")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	717
S52	(MH "Thermography")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,380
S53	TI ("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*) OR AB ("infra red imaging" or "infra red thermometry" or "infrared imaging" or "infrared scanning" or "IR imaging" or "IR scanning" or "IR thermometry" or "thermal imaging" or "thermal scanning" or "thermal video" or thermogram* or "thermographic imaging" or thermography or thermology or thermoscan*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,353
S54	TI ("temperature* map" or "temperature* mapping" or "temperature* maps" or "temperature* mapped" or "temperature* measur*") or AB ("temperature* map" or "temperature* mapping" or "temperature* maps" or "temperature* mapped" or "temperature* measur*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,033
S55	(MH "Biological Markers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	62,773

S56	TI ("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers") OR AB ("biologic marker" or "biologic markers" or "biological marker" or "biological markers" or "biomarker" or "biomarkers" or "clinical marker" or "clinical markers" or "immune marker" or "immune markers" or "immunologic marker" or "immunologic markers" or "laboratory marker" or "laboratory markers" or "serum marker" or "serum markers" or "surrogate end point" or "surrogate end points" or "surrogate endpoint" or "surrogate endpoints" or "surrogate marker" or "surrogate markers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	88,129
S57	S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	965,652
S58	S13 AND S57	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	591
S59	S13 AND S57	Limiters - English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	512
S60	EM 20230307-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	315,290
S61	S59 AND S60	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	73

**Recommendation question #2:** Should a specific repositioning frequency be recommended over another frequency for persons with pressure injuries or those at risk of developing them?

**Original search**

Databases searched:

- Medline (R)
- MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed Citations
- Embase Classic and Embase
- Emcare Nursing
- EBM Reviews - Cochrane Central Register of Controlled Trials
- EBM Reviews - Cochrane Database of Systematic Reviews
- APA PsycInfo
- CINAHL

Dates searched: January 2018 – Feb 2023

**MEDLINE(R)** 1946 to February 01, 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	13405
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	13838
3	1 or 2	17412
4	Patient Positioning/	7754
5	((patient or patients) adj5 (position* or reposition*)).tw,kf.	25210
6	((("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kf.	8531
7	((("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kf.	2564
8	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kf.	21527
9	(position change* adj5 (interval? or schedul*)).tw,kf.	8
10	or/4-9	59900
11	3 and 10	669
12	limit 11 to english language	598
13	limit 12 to yr="2018 -Current"	186

**MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed Citations** February 01, 2023

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	1657
2	((patient or patients) adj5 (position* or reposition*)).tw,kf.	3964
3	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kf.	1030
4	(("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kf.	623
5	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kf.	4182
6	or/2-5	9557
7	1 and 6	67
8	limit 7 to english language	65
9	limit 8 to yr="2018 -Current"	32

#### Embase Classic+Embase 1947 to 2023 February 01

Search Strategy:

#	Searches	Results
1	decubitus/	26145
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	20374
3	1 or 2	30808
4	patient positioning/	22674
5	((patient or patients) adj5 (position* or reposition*)).tw,kw.	49601
6	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kw.	13254
7	(("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kw.	4166
8	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kw.	37258
9	or/4-8	116783
10	3 and 9	1766
11	limit 10 to english language	1602
12	limit 11 to yr="2018 -Current"	399
13	limit 12 to (books or chapter or conference abstract or conference paper or "conference review")	78
14	12 not 13	321

#### Emcare Nursing 1995 to Present

Search Strategy:

#	Searches	Results
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1	decubitus/	9784
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	9849
3	1 or 2	12731
4	patient positioning/	7080
5	((patient or patients) adj5 (position* or reposition*)).tw,kf.	13223
6	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kf.	3359
7	((("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kf.	1070
8	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kf.	6760
9	or/4-8	28550
10	3 and 9	787
11	limit 10 to english language	691
12	limit 11 to yr="2018 -Current"	167

### EBM Reviews - Cochrane Central Register of Controlled Trials January 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	880
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	2132
3	or/1-2	2241
4	patient positioning/	614
5	((patient or patients) adj5 (position* or reposition*)).tw,kw.	5524
6	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kw.	1130
7	((("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kw.	261
8	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kw.	5480
9	or/4-8	11932
10	3 and 9	200
11	limit 10 to english language	190
12	limit 11 to yr="2018 -Current"	74

### EBM Reviews - Cochrane Database of Systematic Reviews 2005 to January 31, 2023

Search Strategy:

#	Searches	Results
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1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	199
2	((patient or patients) adj5 (position* or reposition*)).tw,kw.	182
3	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kw.	70
4	(("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kw.	34
5	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kw.	225
6	or/2-5	456
7	1 and 6	31
8	limit 7 to last 5 years	7

### APA PsycInfo 1806 to January Week 4 2023

#### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,id.	942
2	((patient or patients) adj5 (position* or reposition*)).tw,id.	1546
3	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,id.	1254
4	(("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,id.	1041
5	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,id.	2048
6	or/2-5	5798
7	1 and 6	37
8	limit 7 to english language	36
9	limit 8 to yr="2018 -Current"	8

### CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15,777
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,607



	OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")		
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18,844
S4	(MH "Patient Positioning")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	10,019
S5	(MH "Patient Handling")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	474
S6	TI ((patient or patients) N4 (position* or reposition*)) OR AB ((patient or patients) N4 (position* or reposition*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,007
S7	TI ((turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (patient or patients)) OR AB ((turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (patient or patients))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,790
S8	TI ("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (frequen* or interval* or regular* or routine* or schedul*) OR AB ("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (frequen* or interval* or regular* or routine* or schedul*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	750
S9	TI ((frequen* or reposition* or "re-position*" or position*) N4 (h or hour or hours or min or mins or minute?)) OR AB ((frequen* or reposition* or "re-position*" or position*) N4 (h or hour or hours or min or mins or minute?))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,623
S10	S4 OR S5 OR S6 OR S7 OR S8 OR S9	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	24,130
S11	S3 AND S10	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,302
S12	S3 AND S10	Limiters - Published Date: 20180101-20231231; English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	262

## Update search for recommendation 2:

### Databases searched:

- MEDLINE(R) ALL
- MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed Citations
- EBM Reviews - Cochrane Database of Systematic Reviews
- CINAHL

Dates searched: Mar 7, 2023 to June 04, 2024

**MEDLINE(R) All** 1946 to June 04, 2024

Search Strategy:

#	Searches	Results
1	pressure ulcer/	14368
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	14784
3	1 or 2	18378
4	Patient Positioning/	7986
5	((patient or patients) adj5 (position* or reposition*)).tw,kf.	26662
6	((("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kf.	9010
7	((("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kf.	2694
8	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kf.	22382
9	(position change* adj5 (interval? or schedul*)).tw,kf.	10
10	or/4-9	62736
11	3 and 10	729
12	limit 11 to english language	653
13	limit 12 to ed=20230201-20240604	70

## MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed

Citations June 04, 2024

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	1902
2	((patient or patients) adj5 (position* or reposition*)).tw,kf.	4550
3	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kf.	1226
4	("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*).tw,kf.	729
5	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kf.	4741
6	or/2-5	10972
7	1 and 6	86
8	limit 7 to english language	82
9	("202302*" or "202303*" or "202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "202309*" or "202310*" or "202311*" or "202312*" or "2024*").dt.	977376
10	8 and 9	24

## EBM Reviews - Cochrane Database of Systematic Reviews 2005 to May 29, 2024

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	205
2	((patient or patients) adj5 (position* or reposition*)).tw,kw.	184

3	((turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (patient or patients)).tw,kw.	69
4	(("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) adj5 (frequen* or interval* or regular* or routine* or schedul*)).tw,kw.	36
5	((frequen* or reposition* or "re-position*" or position*) adj5 (h or hour or hours or min or mins or minute?)).tw,kw.	232
6	or/2-5	465
7	1 and 6	31
8	from 7 keep 1	1

### CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16,159
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,812
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,138

S4	(MH "Patient Positioning")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,973
S5	(MH "Patient Handling")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	572
S6	TI ((patient or patients) N4 (position* or reposition*)) OR AB ((patient or patients) N4 (position* or reposition*))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,071
S7	TI ((turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (patient or patients)) OR AB ((turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (patient or patients))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,789
S8	TI ("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (frequen* or interval* or regular* or routine* or schedul*) OR AB ("re-position*" or reposition* or turn or turning or turns or turned or tilt or tilts or tilting or tilted) N4 (frequen* or interval* or regular* or routine* or schedul*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	767
S9	TI ((frequen* or reposition* or "re-position*" or position*) N4 (h or hour or hours or min or mins or minute?)) OR AB ((frequen* or reposition* or "re-position*" or position*) N4 (h or hour or hours or min or mins or minute?))	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,717
S10	S4 OR S5 OR S6 OR S7 OR S8 OR S9	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	24,310
S11	S3 AND S10	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,332
S12	EM 20230201-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	336,670

S13	S11 AND S12	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	108
S14	S11 AND S12	Limiters - English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	94

**Recommendation question #3:** Should preventative care bundles be recommended or not for the prevention of pressure injuries?

### Original search

#### Databases searched:

- Medline(R) ALL
- MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed
- Embase Classic and Embase
- Emcare Nursing
- EBM Reviews - Cochrane Central Register of Controlled Trials
- EBM Reviews - Cochrane Database of Systematic Reviews
- APA PsycInfo
- CINAHL 1981-current

Dates searched: January 2018 – January, 2023

**MEDLINE(R) ALL** 1946 to January 20, 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	13390
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	13814
3	or/1-2	17388
4	patient care bundles/	1194

5	(bundle or bundles or bundled or bundling).tw,kf.	67755
6	or/4-5	67898
7	3 and 6	113
8	limit 7 to english language	106
9	limit 8 to yr="2018 -Current"	50

**MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed Search Strategy:**

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	1624
2	(bundle or bundles or bundled or bundling).tw,kf.	9880
3	1 and 2	20
4	limit 3 to english language	20
5	limit 4 to yr="2018 -Current"	13

**Embase Classic+Embase 1947 to 2023 January 23 Search Strategy:**

#	Searches	Results
1	decubitus/	26122
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	20359
3	or/1-2	30780
4	care bundle/	1879
5	(bundle or bundles or bundled or bundling).tw,kw.	107064
6	or/4-5	107288
7	3 and 6	225
8	limit 7 to english language	213

9	limit 8 to yr="2018 -Current"	90
10	limit 9 to (books or chapter or conference abstract or conference paper or "conference review")	27
11	9 not 10	63

### Emcare Nursing 1995 to Present

#### Search Strategy:

#	Searches	Results
1	decubitus/	9780
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	9869
3	or/1-2	12735
4	care bundle/	431
5	(bundle or bundles or bundled or bundling).tw,kf.	18420
6	or/4-5	18471
7	3 and 6	127
8	limit 7 to english language	121
9	limit 8 to yr="2018 -Current"	58

### EBM Reviews - Cochrane Central Register of Controlled Trials December 2022

#### Search Strategy:

#	Searches	Results
1	pressure ulcer/	788
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	2112
3	or/1-2	2199
4	patient care bundles/	40
5	(bundle or bundles or bundled or bundling).tw,kw.	2742



6	or/4-5	2744
7	3 and 6	27
8	limit 7 to english language	27
9	limit 8 to yr="2018 -Current"	11

**EBM Reviews - Cochrane Database of Systematic Reviews 2005 to January 18, 2023**

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	199
2	(bundle or bundles or bundled or bundling).tw,kw.	149
3	1 and 2	9
4	limit 3 to last 5 years	2

**APA PsycInfo 1806 to January Week 3 2023**

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,id.	942
2	(bundle or bundles or bundled or bundling).tw,id.	5459
3	1 and 2	11
4	limit 3 to english language	10
5	limit 4 to yr="2018 -Current"	3
6	limit 5 to (bibliography or chapter or dissertation)	2
7	5 not 6	1

**CINAHL**

#	Query	Limiters/Expanders	Results
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S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15,753
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,598
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18,833
S4	TI (bundle or bundles or bundled or bundling) OR AB (bundle or bundles or bundled or bundling)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,679
S5	S3 AND S4	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	160
S6	S3 AND S4	Limiters - English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	153
S7	S3 AND S4	Limiters - Published Date: 20180101-20231231; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	60

### Update search for recommendation question 3

#### Databases searched:

- MEDLINE(R) ALL
- MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed Citations
- EBM Reviews - Cochrane Database of Systematic Reviews
- CINAHL

Dates searched: January 2023 to June 2024

**MEDLINE(R)** 1946 to June 04, 2024

Search Strategy:

#	Searches	Results
1	pressure ulcer/	14368
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	14784
3	or/1-2	18378
4	patient care bundles/	1289
5	(bundle or bundles or bundled or bundling).tw,kf.	70822
6	or/4-5	70966
7	3 and 6	133
8	limit 7 to english language	126
9	limit 8 to ed=20230120-20240604	32

**MEDLINE(R) Epub Ahead of Print and In-Process, In-Data-Review & Other Non-Indexed Citations** June 04, 2024

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	1902
2	(bundle or bundles or bundled or bundling).tw,kf.	11585
3	1 and 2	25
4	limit 3 to english language	25
5	("20230120*" or "20230121*" or "20230122*" or "20230123*" or "20230124*" or "20230125*" or "20230126*" or "20230127*" or "20230128*" or "20230129*" or "20230130*" or "20230131*" or "202302*" or "202303*" or "202304*" or "202305*" or	1008715

	"202306*" or "202307*" or "202308*" or "202309*" or "202310*" or "202311*" or "202312*" or "2024*").dt.	
6	4 and 5	9

**EBM Reviews - Cochrane Database of Systematic Reviews 2005 to May 29, 2024**

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	205
2	(bundle or bundles or bundled or bundling).tw,kw.	159
3	1 and 2	11
4	from 3 keep 1-2	2

**CINAHL**

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16,159
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,812

	or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")		
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,138
S4	TI (bundle or bundles or bundled or bundling) OR AB (bundle or bundles or bundled or bundling)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,915
S5	S3 AND S4	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	178
S6	S3 AND S4	Limiters - English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	168
S7	EM 20230120-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	341,745
S8	S6 AND S7	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	22

**Recommendation question #4:** Should the use of prophylactic dressings be recommended or not for the prevention of pressure injuries?

### Original Search

#### Databases searched:

- Medline (R) ALL
- Embase Classic and Embase
- Emcare Nursing
- EBM Reviews - Cochrane Central Register of Controlled Trials
- EBM Reviews - Cochrane Database of Systematic Reviews
- APA PsycInfo
- CINAHL

Dates searched: January 2018 - February, 2023

**MEDLINE(R) ALL** 1946 to February 22, 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	13711
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	15512
3	or/1-2	19089
4	Bandages, Hydrocolloid/	987
5	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kf.	328
6	Bandages/	19316
7	(bandage or bandages or dressing or dressings).tw,kf.	35407
8	or/6-7	44299
9	Silicones/	13185
10	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kf.	34218
11	8 and (9 or 10)	690
12	Polyurethanes/	10432
13	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kf.	15452
14	8 and (12 or 13)	1016
15	foam dressing*.tw,kf.	575
16	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kf.	2808
17	prophylactic dressing*.tw,kf.	72
18	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or silicone gel sheet dressing or "Silon-SES").tw,kf.	79
19	or/4-5,11,14-18	5790
20	3 and 19	430
21	limit 20 to english language	388
22	limit 21 to yr="2018 -Current"	152

### Embase Classic+Embase 1947 to 2023 February 22

#### Search Strategy:

#	Searches	Results
1	decubitus/	26573
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	20715
3	1 or 2	31320
4	hydrocolloid dressing/	1375

5	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kw.	621
6	"bandages and dressings"/ or bandage/	14780
7	(bandage or bandages or dressing or dressings).tw,kw.	49076
8	6 or 7	55986
9	silicone/	19430
10	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kw.	42811
11	8 and (9 or 10)	979
12	polyurethan/	16920
13	polyurethan foam/	2785
14	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kw.	17174
15	8 and (12 or 13 or 14)	1459
16	foam dressing/ or polyurethane foam dressing/ or silicone foam dressing/	1423
17	"foam dressing*".tw,kw.	843
18	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kw.	3888
19	"prophylactic dressing*".tw,kw.	84
20	silicone dressing/	248
21	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES").tw,kw.	140
22	or/4-5,11,15-21	9119
23	3 and 22	718
24	limit 23 to english language	639
25	limit 24 to yr="2018 -Current"	273
26	limit 25 to (books or chapter or conference abstract or conference paper or "conference review")	32
27	25 not 26	241

### Emcare Nursing 1995 to Present

#### Search Strategy:

#	Searches	Results
1	decubitus/	9801
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	9925
3	1 or 2	12791
4	hydrocolloid dressing/	370

5	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kf.	184
6	"bandages and dressings"/ or bandage/	2939
7	(bandage or bandages or dressing or dressings).tw,kf.	13347
8	6 or 7	14786
9	silicone/	4739
10	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kf.	7727
11	8 and (9 or 10)	351
12	polyurethan/	2849
13	polyurethan foam/	462
14	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kf.	3444
15	8 and (12 or 13 or 14)	423
16	foam dressing/ or polyurethane foam dressing/ or silicone foam dressing/	393
17	"foam dressing*".tw,kf.	383
18	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kf.	1088
19	"prophylactic dressing*".tw,kf.	75
20	silicone dressing/	32
21	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES").tw,kf.	52
22	or/4-5,11,15-21	2534
23	3 and 22	335
24	limit 23 to english language	304
25	limit 24 to yr="2018 -Current"	128

### EBM Reviews - Cochrane Central Register of Controlled Trials January 2023

#### Search Strategy:

#	Searches	Results
1	pressure ulcer/	880
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	2132
3	1 or 2	2241
4	bandages, hydrocolloid/	214
5	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kw.	200
6	bandages/	1957
7	(bandage or bandages or dressing or dressings).tw,kw.	8985



8	6 or 7	9668
9	silicones/	488
10	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kw.	2881
11	8 and (9 or 10)	268
12	polyurethanes/	463
13	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kw.	695
14	8 and (12 or 13)	302
15	"foam dressing*".tw,kw.	302
16	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kw.	386
17	"prophylactic dressing*".tw,kw.	22
18	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES").tw,kw.	88
19	or/4-5,11,14-18	1381
20	3 and 19	201
21	limit 20 to english language	190
22	limit 21 to yr="2018 -Current"	69

**EBM Reviews - Cochrane Database of Systematic Reviews 2005 to February 22, 2023**

**Search Strategy:**

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	199
2	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegisorb or Varihesive).tw,kw.	38
3	(bandage or bandages or dressing or dressings).tw,kw.	516
4	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kw.	159
5	3 and 4	45
6	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kw.	86
7	3 and 6	56
8	"foam dressing*".tw,kw.	33
9	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kw.	120

10	"prophylactic dressing*".tw,kw.	0
11	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES").tw,kw.	17
12	or/2,5,7-11	192
13	1 and 12	33
14	limit 13 to last 5 years	5

### APA PsycInfo 1806 to February Week 2 2023

#### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,id.	945
2	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,id.	2
3	(bandage or bandages or dressing or dressings).tw,id.	1846
4	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,id.	273
5	3 and 4	4
6	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,id.	54
7	3 and 6	6
8	"foam dressing*".tw,id.	4
9	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,id.	1034
10	"prophylactic dressing*".tw,id.	4
11	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES").tw,id.	0
12	or/2,5,7-11	1050
13	1 and 12	11
14	limit 13 to english language	9
15	limit 14 to yr="2018 -Current"	4

#### CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15,801
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	8,840

	ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")		
S3	AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,824
S4	S1 OR S2 OR S3	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18,894
S5	(MH "Hydrocolloid Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	687
S6	TI (duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive) OR AB (duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	229
S7	(MH "Bandages and Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,408
S8	TI (bandage or bandages or dressing or dressings) OR AB (bandage or bandages or dressing or dressings)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,835
S9	S7 OR S8	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	20,082
S10	(MH "Silicones")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,850
S11	TI (silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen) OR AB (silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,444
S12	S10 OR S11	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5,432

S13	S9 AND S12	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	490
S14	(MH "Polyurethanes")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	909
S15	TI (adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon) OR AB (adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,328
S16	S14 OR S15	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,763
S17	S9 AND S16	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	320
S18	(MH "Foam Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,055
S19	TI ("foam dressing*") OR AB ("foam dressing*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	566
S20	TI (Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell) OR AB (Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,784
S21	TI ("prophylactic dressing*") OR AB ("prophylactic dressing*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	71
S22	TI ("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES") OR AB ("Advasil Conform" or Mepiform or Mepitel or "silicone	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	58

	gel dressing" or "silicone gel sheet dressing*" or "Silon-SES")		
S23	S5 OR S6 OR S13 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,137
S24	S4 AND S23	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	558
S25	S4 AND S23	Limiters - English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	498
S26	S4 AND S23	Limiters - Published Date: 20180101-20231231; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	166
S27	S4 AND S23	Limiters - Published Date: 20180101-20231231; English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	157

#### Indirect search for recommendation question 4

Database searched: MEDLINE (R) ALL

Dates searched: January 2018 - October 10, 2023

**MEDLINE(R) ALL** 1946 to October 10, 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	14038
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16061
3	or/1-2	19646
4	Bandages, Hydrocolloid/	1001

5	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kf.	331
6	Bandages/	19789
7	(bandage or bandages or dressing or dressings).tw,kf.	37275
8	or/6-7	46227
9	Silicones/	13321
10	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kf.	35288
11	8 and (9 or 10)	717
12	Polyurethanes/	10611
13	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kf.	16293
14	8 and (12 or 13)	1042
15	foam dressing*.tw,kf.	596
16	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kf.	3028
17	prophylactic dressing*.tw,kf.	82
18	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or silicone gel sheet dressing or "Silon-SES").tw,kf.	92
19	or/4-5,11,14-18	6105
20	3 and 19	456
21	limit 20 to english language	413
22	limit 21 to yr="2018 -Current"	176
23	limit 22 to ed=20230221-20231010	12
24	("20230221*" or "20230222" or "20230223" or "20230224" or "20230225" or "20230226" or "20230227").dt.	48678
25	("202303*" or "202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "2023019*" or "202310*").dt.	838015
26	22 and 24	0

27	22 and 25	17
28	23 or 27	23

#### Update search for recommendation question 4

Databases searched:

- MEDLINE(R) ALL
- EBM Reviews - Cochrane Database of Systematic Reviews
- CINAHL

Dates searched: Feb 2023 - June 2024

**MEDLINE(R) ALL** 1946 to June 04, 2024

Search Strategy:

#	Searches	Results
1	pressure ulcer/	14368
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16686
3	or/1-2	20280
4	Bandages, Hydrocolloid/	1016
5	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kf.	336
6	Bandages/	20327
7	(bandage or bandages or dressing or dressings).tw,kf.	39446
8	or/6-7	48433
9	Silicones/	13519
10	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kf.	36449
11	8 and (9 or 10)	750
12	Polyurethanes/	10851

13	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kf.	17226
14	8 and (12 or 13)	1078
15	foam dressing*.tw,kf.	630
16	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kf.	3255
17	prophylactic dressing*.tw,kf.	83
18	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or silicone gel sheet dressing or "Silon-SES").tw,kf.	99
19	or/4-5,11,14-18	6437
20	3 and 19	472
21	limit 20 to english language	429
22	limit 21 to ed=20230222-20240604	32
23	21 and ("20230222*" or "20230223*" or "20230224*" or "20230225*" or "20230226*" or "20230227*" or "20230228*" or "202303*" or "202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "202309*" or "202310*" or "202311*" or "202312*" or "2024*").dt.	41
24	22 or 23	45

### EBM Reviews - Cochrane Database of Systematic Reviews 2005 to May 29, 2024

#### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	205
2	(duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive).tw,kw.	38
3	(bandage or bandages or dressing or dressings).tw,kw.	521



4	(silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen).tw,kw.	165
5	3 and 4	46
6	(adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon).tw,kw.	86
7	3 and 6	56
8	"foam dressing*".tw,kw.	33
9	(Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell).tw,kw.	117
10	"prophylactic dressing*".tw,kw.	0
11	("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon-SES").tw,kw.	17
12	or/2,5,7-11	189
13	1 and 12	33
14	from 13 keep 1-2	2

## CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16,159
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,168

S3	AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,636
S4	S1 OR S2 OR S3	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,138
S5	(MH "Hydrocolloid Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	698
S6	TI (duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive) OR AB (duoderm or Comfeel or ConvaTec or Exuderm or Granuflex or PrimaSeal or Tegaserb or Varihesive)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	212
S7	(MH "Bandages and Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,414
S8	TI (bandage or bandages or dressing or dressings) OR AB (bandage or bandages or dressing or dressings)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,724
S9	S7 OR S8	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,964
S10	(MH "Silicones")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,867
S11	TI (silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,360

	OR AB (silicone or silicones or covicone or "dc antifoam" or "kp 555" or meteorex or myalanta or polysilicone or silazulone or silicoderm or silicum or siopel or vasogen)		
S12	S10 OR S11	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5,361
S13	S9 AND S12	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	492
S14	(MH "Polyurethanes")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	919
S15	TI (adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon) OR AB (adiprene or ducor or estane or mitrathane or ostamer or ostamers or pellethane or pellethanes or polyisocyanate or polyisocyanates or polyurethan or polyurethane or polyurethanes or spandex or spandices or "urethan polymer" or "urethane polymer" or vialon)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,349
S16	S14 OR S15	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,779
S17	S9 AND S16	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	333
S18	(MH "Foam Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,071

S19	TI ("foam dressing*") OR AB ("foam dressing*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	595
S20	TI (Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell) OR AB (Allevyn or Biatain or Cavicare or Contreet or Granufoam or "IoPlex Iodophor" or Kendall or Ligasano or Lyofoam or Mepilex or Optifoam or Polymem or Simpurity or Spyrosorb or Urgocell)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,849
S21	TI ("prophylactic dressing*") OR AB ("prophylactic dressing*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	79
S22	TI ("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon–SES") OR AB ("Advasil Conform" or Mepiform or Mepitel or "silicone gel dressing" or "silicone gel sheet dressing*" or "Silon–SES")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	59
S23	S5 OR S6 OR S13 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4,254
S24	S4 AND S23	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	579
S25	S4 AND S23	Limiters - English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	518
S26	EM 20230222-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	323,174

S27	S25 AND S26	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	56
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**Recommendation question #5:** Should the use of health technologies be recommended or not for the treatment of pressure injuries?

### Original Search

#### Databases searched:

- Medline (R) ALL
- Embase Classic and Embase
- Emcare Nursing
- EBM Reviews - Cochrane Central Register of Controlled Trials
- EBM Reviews - Cochrane Database of Systematic Reviews
- APA PsycInfo
- CINAHL

Dates searched: January 2018 – March 2023

**MEDLINE(R) ALL** 1946 to March 17, 2023

Search Strategy:

#	Searches	Results
1	Pressure Ulcer/	13762
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	15582
3	or/1-2	19161
4	Biological Dressings/	1473
5	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kf.	475
6	("skin regeneration template*" or "wound matrix solution*").tw,kf.	3
7	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kf.	239
8	Biotechnology/	34104
9	(biotechnolog* or "bio technolog*").tw,kf.	50765
10	Biomedical Technology/	7249
11	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kf.	13126

12	Bioengineering/ or Biomedical Engineering/	13800
13	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kf.	8298
14	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kf.	4230
15	Tissue Engineering/	43670
16	("tissue engineering*" or "tissue bioengineering*").tw,kf.	54799
17	Biocompatible Materials/	68442
18	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kf.	61290
19	Electrical Stimulation/	116483
20	Electric Stimulation Therapy/	21908
21	Transcutaneous Electric Nerve Stimulation/	5536
22	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kf.	72756
23	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kf.	743
24	Hyperbaric Oxygenation/	12645
25	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kf.	8442
26	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kf.	3
27	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kf.	80
28	Negative-Pressure Wound Therapy/	3902
29	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kf.	5655
30	"vacuum dressing*".tw,kf.	86
31	Ultrasonic Therapy/	10270
32	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kf.	1803
33	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kf.	5460
34	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kf.	9
35	Skin, Artificial/	2914
36	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kf.	3220
37	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kf.	182
38	or/4-37	480356
39	3 and 38	794

40	limit 39 to english language	728
41	limit 40 to yr="2018 -Current"	183
42	animals/ not humans.sh.	5069501
43	41 not 42	178

### Embase Classic+Embase 1947 to 2023 March 17

#### Search Strategy:

#	Searches	Results
1	decubitus/	26663
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	20778
3	1 or 2	31430
4	biological dressing/ or wound matrix/ or xenograft dressing/	654
5	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kw.	719
6	("skin regeneration template*" or "wound matrix solution*").tw,kw.	3
7	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kw.	362
8	biotechnology/	56867
9	(biotechnolog* or "bio technolog*").tw,kw.	70221
10	medical technology/	37590
11	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kw.	18359
12	bioengineering/ or biomedical engineering/	37510
13	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kw.	11520
14	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kw.	6639
15	tissue engineering/	65147
16	("tissue engineering*" or "tissue bioengineering*").tw,kw.	69288
17	biomaterial/	61611
18	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kw.	72882
19	electrostimulation/	96851
20	electrotherapy/	2468
21	electrostimulation therapy/	13239
22	transcutaneous electrical nerve stimulation/	3515
23	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kw.	96486

24	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kw.	806
25	hyperbaric oxygen therapy/	5088
26	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kw.	11306
27	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kw.	15
28	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kw.	100
29	vacuum assisted closure/	9734
30	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kw.	7597
31	"vacuum dressing*".tw,kw.	161
32	ultrasound therapy/	10033
33	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kw.	2345
34	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kw.	6974
35	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kw.	21
36	artificial skin/	3038
37	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kw.	4275
38	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kw.	242
39	or/4-38	556381
40	3 and 39	1404
41	limit 40 to english language	1285
42	limit 41 to yr="2018 -Current"	380
43	limit 42 to (books or chapter or conference abstract or conference paper or "conference review")	58
44	42 not 43	322
45	44 not ((exp animal/ or nonhuman/) not exp human/)	311

### Emcare Nursing 1995 to Present

#### Search Strategy:

#	Searches	Results
1	decubitus/	9817
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	9969
3	1 or 2	12834



4	biological dressing/ or amniotic membrane dressing/ or wound matrix/ or xenograft dressing/	117
5	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kf.	173
6	("skin regeneration template*" or "wound matrix solution*").tw,kf.	1
7	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kf.	160
8	biotechnology/	5385
9	(biotechnolog* or "bio technolog*").tw,kf.	6104
10	medical technology/	10213
11	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kf.	7961
12	bioengineering/ or biomedical engineering/	9062
13	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kf.	2588
14	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kf.	1580
15	tissue engineering/	10685
16	("tissue engineering*" or "tissue bioengineering*").tw,kf.	17317
17	biomaterial/	11272
18	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kf.	14992
19	electrostimulation/	9993
20	electrotherapy/	282
21	transcutaneous electrical nerve stimulation/	609
22	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kf.	14426
23	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kf.	314
24	hyperbaric oxygen therapy/	573
25	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kf.	2137
26	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kf.	3
27	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kf.	50
28	vacuum assisted closure/	2379
29	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kf.	2755

30	"vacuum dressing*".tw,kf.	32
31	ultrasound therapy/	1855
32	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kf.	713
33	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kf.	1275
34	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kf.	0
35	artificial skin/	377
36	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kf.	1082
37	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kf.	42
38	or/4-37	99354
39	3 and 38	514
40	limit 39 to english language	487
41	limit 40 to yr="2018 -Current"	111
42	limit 41 to (book or book series or conference proceeding)	1
43	41 not 42	110

## EBM Reviews - Cochrane Central Register of Controlled Trials February 2023

### Search Strategy:

#	Searches	Results
1	pressure ulcer/	900
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	2152
3	1 or 2	2261
4	biological dressings/	103
5	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kw.	110
6	("skin regeneration template*" or "wound matrix solution*").tw,kw.	0
7	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kw.	73
8	biotechnology/	26
9	(biotechnolog* or "bio technolog*").tw,kw.	659
10	biomedical technology/	51
11	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kw.	1618
12	bioengineering/ or biomedical engineering/	28

13	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kw.	182
14	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kw.	84
15	tissue engineering/	65
16	("tissue engineering*" or "tissue bioengineering*").tw,kw.	362
17	Biocompatible Materials/	1090
18	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kw.	792
19	electric stimulation/	2114
20	electric stimulation therapy/	2207
21	transcutaneous electric nerve stimulation/	1416
22	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kw.	9475
23	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kw.	529
24	Hyperbaric Oxygenation/	503
25	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kw.	1022
26	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kw.	2
27	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kw.	17
28	negative-pressure wound therapy/	328
29	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kw.	1026
30	"vacuum dressing*".tw,kw.	36
31	ultrasonic therapy/	848
32	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kw.	810
33	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kw.	451
34	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kw.	2
35	skin, artificial/	131
36	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kw.	165
37	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kw.	19
38	or/4-37	21946
39	3 and 38	153
40	limit 39 to english language	144

41	limit 40 to yr="2018 -Current"	43
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### EBM Reviews - Cochrane Database of Systematic Reviews 2005 to March 15, 2023

#### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	199
2	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kw.	16
3	("skin regeneration template*" or "wound matrix solution*").tw,kw.	0
4	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kw.	8
5	(biotechnolog* or "bio technolog*").tw,kw.	68
6	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kw.	934
7	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kw.	12
8	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kw.	7
9	("tissue engineering*" or "tissue bioengineering*").tw,kw.	9
10	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kw.	61
11	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kw.	369
12	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kw.	75
13	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kw.	71
14	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kw.	0
15	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kw.	0
16	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kw.	39
17	"vacuum dressing*".tw,kw.	7
18	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kw.	55

19	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kw.	58
20	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kw.	0
21	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kw.	14
22	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kw.	6
23	or/2-22	1528
24	1 and 23	73
25	limit 24 to last 5 years	13

**APA PsycInfo** 1806 to March Week 2 2023

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,id.	948
2	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,id.	1
3	("skin regeneration template*" or "wound matrix solution*").tw,id.	0
4	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,id.	0
5	biotechnology/	559
6	(biotechnolog* or "bio technolog*").tw,id.	1227
7	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,id.	1749
8	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,id.	134
9	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,id.	486
10	("tissue engineering*" or "tissue bioengineering*").tw,id.	151
11	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,id.	352
12	electrical stimulation/	5912
13	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,id.	12963
14	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,id.	70
15	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,id.	236

16	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,id.	1
17	("topical oxygen therap*" or "topical oxygen wound therap*").tw,id.	0
18	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,id.	14
19	"vacuum dressing*".tw,id.	0
20	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,id.	20
21	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,id.	54
22	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,id.	0
23	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,id.	16
24	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,id.	0
25	or/2-24	19914
26	1 and 25	11
27	limit 26 to english language	11
28	limit 27 to yr="2018 -Current"	3
29	limit 28 to (chapter or dissertation)	2
30	28 not 29	1

#### CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15,815
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,680

S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18,926
S4	(MH "Biological Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	546
S5	TI ("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*") OR AB ("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	116
S6	TI ("skin regeneration template*" or "wound matrix solution*") OR AB ("skin regeneration template*" or "wound matrix solution*")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	4,173
S7	TI (Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte) OR AB (Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	191
S8	(MH "Biotechnology")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,876
S9	TI (biotechnolog* or "bio technolog*") OR AB (biotechnolog* or "bio technolog*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,563
S10	(MH "Technology, Medical")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	14,516
S11	TI ("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*") OR AB ("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,222

S12	(MH "Biomedical Engineering")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,493
S13	TI ("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*") OR AB ("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	530
S14	TI ("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*") OR AB ("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	482
S15	(MH "Tissue Engineering")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,358
S16	TI ("tissue engineering*" or "tissue bioengineering*") OR AB ("tissue engineering*" or "tissue bioengineering*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,240
S17	(MH "Biocompatible Materials")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5,851
S18	TI ("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*) OR AB ("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,686
S19	(MH "Electric Stimulation")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,836
S20	(MH 'Transcutaneous Electric Nerve Stimulation')	Expanders - Apply equivalent subjects Search modes - SmartText Searching	3,597
S21	TI ("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*) OR AB ("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,416



	"electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*)		
S22	TI ("electric nerve stimul*" or "transcutaneous nerve stimul*") OR AB ("electric nerve stimul*" or "transcutaneous nerve stimul*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	176
S23	(MH "Hyperbaric Oxygenation")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,595
S24	TI ("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*") OR AB ("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,657
S25	TI ("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*") OR AB ("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S26	TI ("topical oxygen therap*" or "topical oxygen wound therap*") OR AB ("topical oxygen therap*" or "topical oxygen wound therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	55
S27	(MH "Negative Pressure Wound Therapy")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,170
S28	TI ("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*") OR AB ("negative pressure wound therap*" or "negative pressure	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,850

	<p>dressings*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*")</p>		
S29	<p>TI "vacuum dressing*" OR AB "vacuum dressing*"</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	25
S30	<p>(MH "Ultrasonic Therapy")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	2,925
S31	<p>TI ("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*") OR AB ("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	390
S32	<p>TI ("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*") OR AB ("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	731
S33	<p>TI ("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*") OR AB ("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	2
S34	<p>(MH "Skin, Artificial")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	959
S35	<p>TI ("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*") OR AB ("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	736
S36	<p>TI (Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X") OR AB (Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X")</p>	<p>Expanders - Apply equivalent subjects Search modes - Boolean/Phrase</p>	38

S37	S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	67,966
S38	S3 AND S37	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	725
S39	S3 AND S37	Limiters - English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	692
S40	S3 AND S37	Limiters - Published Date: 20180101-20231231; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	151
S41	S3 AND S37	Limiters - Published Date: 20180101-20231231; English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	127

### Indirect search for recommendation question #5

Databases searched: MEDLINE (R) ALL

Dates searched: January 2018 - October 2023

**MEDLINE(R) ALL** 1946 to October 10, 2023

Search Strategy:

#	Searches	Results
1	Pressure Ulcer/	14038
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16061
3	or/1-2	19646

4	Biological Dressings/	1478
5	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kf.	488
6	("skin regeneration template*" or "wound matrix solution*").tw,kf.	3
7	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kf.	240
8	Biotechnology/	34495
9	(biotechnolog* or "bio technolog*").tw,kf.	53172
10	Biomedical Technology/	7326
11	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kf.	13984
12	Bioengineering/ or Biomedical Engineering/	13912
13	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kf.	8783
14	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kf.	4456
15	Tissue Engineering/	44766
16	("tissue engineering*" or "tissue bioengineering*").tw,kf.	57353
17	Biocompatible Materials/	69373
18	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kf.	64452
19	Electrical Stimulation/	116821
20	Electric Stimulation Therapy/	22060
21	Transcutaneous Electric Nerve Stimulation/	5659
22	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kf.	73963
23	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kf.	765
24	Hyperbaric Oxygenation/	12732

25	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kf.	8625
26	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kf.	4
27	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kf.	87
28	Negative-Pressure Wound Therapy/	4002
29	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kf.	5900
30	"vacuum dressing*".tw,kf.	90
31	Ultrasonic Therapy/	10357
32	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kf.	1864
33	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kf.	5698
34	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kf.	9
35	Skin, Artificial/	2946
36	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kf.	3369
37	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kf.	189
38	or/4-37	491701
39	3 and 38	820
40	limit 39 to english language	754
41	limit 40 to yr="2018 -Current"	209
42	animals/ not humans.sh.	5127720
43	41 not 42	204
44	limit 40 to ed=20230317-20231010	17

45	("202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "2023019*" or "202310*").dt.	690226
46	("20230318" or "20230319" or "20230320" or "20230321" or "20230322" or "20230323" or "20230324" or "20230325" or "20230326" or "20230327" or "20230328" or "20230329" or "20230330" or "20230331").dt.	70517
47	45 or 46	760743
48	40 and 47	22
49	44 or 48 [NEW CITATIONS]	29

### Update search for recommendation question #5

#### Databases searched:

- MEDLINE(R) ALL
- EBM Reviews - Cochrane Database of Systematic Reviews
- CINAHL

Dates searched: March 2023 to June 2024

**MEDLINE(R) ALL** 1946 to June 04, 2024

#### Search Strategy:

#	Searches	Results
1	Pressure Ulcer/	14368
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16686
3	or/1-2	20280
4	Biological Dressings/	1484
5	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kf.	505
6	("skin regeneration template*" or "wound matrix solution*").tw,kf.	3
7	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kf.	245
8	Biotechnology/	34923
9	(biotechnolog* or "bio technolog*").tw,kf.	56033
10	Biomedical Technology/	7403
11	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kf.	15118
12	Bioengineering/ or Biomedical Engineering/	14053

13	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kf.	9415
14	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kf.	4746
15	Tissue Engineering/	46314
16	("tissue engineering*" or "tissue bioengineering*").tw,kf.	60256
17	Biocompatible Materials/	70817
18	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kf.	68028
19	Electrical Stimulation/	117262
20	Electric Stimulation Therapy/	22323
21	Transcutaneous Electric Nerve Stimulation/	5812
22	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kf.	75533
23	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kf.	786
24	Hyperbaric Oxygenation/	12859
25	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kf.	8890
26	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kf.	4
27	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kf.	101
28	Negative-Pressure Wound Therapy/	4155
29	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kf.	6200
30	"vacuum dressing*".tw,kf.	97
31	Ultrasonic Therapy/	10494
32	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kf.	1944
33	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kf.	5959
34	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kf.	9
35	Skin, Artificial/	2998
36	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kf.	3546
37	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kf.	200
38	or/4-37	505725
39	3 and 38	847
40	animals/ not humans.sh.	5194239

41	39 not 40	815
42	limit 41 to english language	750
43	limit 42 to ed=20230317-20240604	36
44	42 and ("20230317*" or "20230318*" or "20230319*" or "20230320*" or "20230321*" or "20230322*" or "20230323*" or "20230324*" or "20230325*" or "20230326*" or "20230327*" or "20230328*" or "20230329*" or "20230330*" or "20230331*" or "202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "202309*" or "202310*" or "202311*" or "202312*" or "2024*").dt.	55
45	43 or 44	58

## EBM Reviews - Cochrane Database of Systematic Reviews 2005 to May 29, 2024

### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	205
2	("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*").tw,kw.	16
3	("skin regeneration template*" or "wound matrix solution*").tw,kw.	0
4	(Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte).tw,kw.	8
5	(biotechnolog* or "bio technolog*").tw,kw.	69
6	("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*").tw,kw.	958
7	("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*").tw,kw.	12
8	("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*").tw,kw.	7
9	("tissue engineering*" or "tissue bioengineering*").tw,kw.	9
10	("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*).tw,kw.	60
11	("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*).tw,kw.	385
12	("electric nerve stimul*" or "transcutaneous nerve stimul*").tw,kw.	75
13	("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*").tw,kw.	71
14	("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*").tw,kw.	0
15	("topical oxygen therap*" or "topical oxygen wound therap*").tw,kw.	0



16	("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*").tw,kw.	40
17	"vacuum dressing*".tw,kw.	7
18	("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*").tw,kw.	56
19	("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*").tw,kw.	57
20	("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*").tw,kw.	0
21	("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*").tw,kw.	14
22	(Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X").tw,kw.	6
23	or/2-22	1567
24	1 and 23	77
25	limit 24 to last 2 years	0
26	from 24 keep 1-4, 7-8	6

## CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16,159
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcer" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcer" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,812
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,138

S4	(MH "Biological Dressings")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	540
S5	TI ("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*") OR AB ("allograft dressing*" or "amniotic membrane dressing*" or "biologic dressing*" or "biological dressing*" or "heterograft dressing*" or "homograft dressing*" or "pig skin dressing*" or "xenograft dressing*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	114
S6	TI ("skin regeneration template*" or "wound matrix solution*") OR AB ("skin regeneration template*" or "wound matrix solution*")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	4,251
S7	TI (Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte) OR AB (Apligraf or Dermagraft or "Integra Bilayer Matrix Wound Dressing" or "Integra Dermal Regeneration Template" or "Integra Flowable Wound Matrix" or "Integra Matrix Wound Dressing" or TransCyte)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	158
S8	(MH "Biotechnology")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,908
S9	TI (biotechnolog* or "bio technolog*") OR AB (biotechnolog* or "bio technolog*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,055
S10	(MH "Technology, Medical")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	14,945
S11	TI ("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*") OR AB ("biomedical technolog*" or "bio medical technolog*" or "healthcare technolog*" or "health care technolog*" or "health technolog*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6,093
S12	(MH "Biomedical Engineering")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,929

S13	TI ("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*") OR AB ("bio engineering*" or "bioengineering*" or "biologic engineering*" or "biological engineering*" or "human engineering*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	485
S14	TI ("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*") OR AB ("biomedical engineering*" or "bio medical engineering*" or "clinical engineering*" or "medical engineering*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	394
S15	(MH "Tissue Engineering")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,357
S16	TI ("tissue engineering*" or "tissue bioengineering*") OR AB ("tissue engineering*" or "tissue bioengineering*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,204
S17	(MH "Biocompatible Materials")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5,844
S18	TI ("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*) OR AB ("biologic material*" or "biological material*" or "bioartificial material*" or "biocompatible material*" or "bio artificial material*" or "bio compatible material*" or biomaterial*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,665
S19	(MH "Electric Stimulation")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,572
S20	(MH "Transcutaneous Electric Nerve Stimulation")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	3,646
S21	TI ("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*) OR AB ("electric* field stimul*" or "electric* stimul*" or "electrostimul*" or "electro stimul*" or "electro therap*" or electrotherap* or "galvano stimul*" or galvanostimul*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9,383

S22	TI ("electric nerve stimul*" or "transcutaneous nerve stimul*") OR AB ("electric nerve stimul*" or "transcutaneous nerve stimul*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	176
S23	(MH "Hyperbaric Oxygenation")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,603
S24	TI ("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*") OR AB ("HBO therap*" or "high pressure oxygen" or "high tension o2" or "high tension oxygen" or "hyperbaric medicine" or "hyperbaric o2" or "hyperbaric oxygen therap*" or "hyperbaric oxygen treatment*" or "hyperbaric oxygenation*" or "hyperbaric oxygenisation*" or "hyperbaric oxygenization*" or "hyperbaric therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,669
S25	TI ("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*") OR AB ("hyper baric o2" or "hyper baric oxygen therap*" or "hyper baric oxygen treatment*" or "hyper baric oxygenation*" or "hyper baric oxygenisation*" or "hyper baric oxygenization*" or "hyper baric therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S26	TI ("topical oxygen therap*" or "topical oxygen wound therap*") OR AB ("topical oxygen therap*" or "topical oxygen wound therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	64
S27	(MH "Negative Pressure Wound Therapy")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,240
S28	TI ("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*") OR AB ("negative pressure wound therap*" or "negative pressure dressing*" or "negative pressure therap*" or "negative pressure wound therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,933

	therap*" or "topical negative pressure*" or "vacuum assisted closure*" or "vacuum therap*" or "negative pressure assisted wound therap*" or "negative pressure wound vacuum*" or "negative pressure device*")		
S29	TI "vacuum dressing*" OR AB "vacuum dressing*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	30
S30	(MH "Ultrasonic Therapy")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,002
S31	TI ("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*") OR AB ("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	404
S32	TI ("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*") OR AB ("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	748
S33	TI ("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*") OR AB ("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S34	(MH "Skin, Artificial")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	958
S35	TI ("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*") OR AB ("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	727
S36	TI (Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X") OR AB (Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	32
S37	S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	67,112

	OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36		
S38	S3 AND S37	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	729
S39	S3 AND S37	Limiters - English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	577
S40	EM 20230317-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	308,504
S41	S39 AND S40	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	44
S30	(MH "Ultrasonic Therapy")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,002
S31	TI ("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*") OR AB ("ultrasonic therap*" or "ultrasound therap*" or "ultra sonic therap*" or "ultra sound therap*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	404
S32	TI ("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*") OR AB ("ultrasonic irradiation*" or "ultrasonic radiation*" or "ultrasonic stimulation*" or "ultrasonic treatment*" or "therapeutic ultrasound*" or "ultrasound ablation*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	748
S33	TI ("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*") OR AB ("ultra sonic irradiation*" or "ultra sonic radiation*" or "ultra sonic stimulation*" or "ultra sonic treatment*" or "therapeutic ultra sound*" or "ultra sound ablation*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S34	(MH "Skin, Artificial")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	958
S35	TI ("artificial skin*" or "bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*") OR AB ("artificial skin*" or	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	727

	"bioengineered skin*" or "dermal substitute*" or "skin substitute*" or "synthetic skin*")		
S36	TI (Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X") OR AB (Omnigraft or Orcel or StrataGraft or "synthetic skin" or "Vitro Skin N19-5X")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	32
S37	S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	67,112
S38	S3 AND S37	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	729
S39	S3 AND S37	Limiters - English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	577
S40	EM 20230317-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	308,504
S41	S39 AND S40	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	44

**Recommendation question #6:** Should the use of powered support surfaces (active or reactive) for the prevention and management of pressure injuries be recommended or not?

### Original Search

#### Databases searched:

- Medline (R) ALL
- Embase Classic and Embase
- Emcare Nursing
- EBM Reviews - Cochrane Central Register of Controlled Trials
- EBM Reviews - Cochrane Database of Systematic Reviews
- APA PsycInfo
- CINAHL

Dates searched: January 2018 – March, 2023

## MEDLINE(R) ALL 1946 to March 28, 2023

Search Strategy:

#	Searches	Results
1	pressure ulcer/	13778
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	15603
3	1 or 2	19183
4	Beds/	4466
5	"Bedding and Linens"/	4076
6	(bed or bedding* or beds or mattress or mattresses).tw,kf.	133271
7	or/4-6	137410
8	Air Pressure/	2675
9	(air pressure or air pressures).tw,kf.	2715
10	8 or 9	4902
11	7 and 10	125
12	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kf.	357
13	"Micropulse system".tw,kf.	3
14	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kf.	33
15	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kf.	3
16	"active support surface*".tw,kf.	3
17	"active air support surface*".tw,kf.	0
18	("air filled bed overlay*" or "air filled overlay*").tw,kf.	3
19	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,kf.	117
20	"air inflated insulating mattress pad*".tw,kf.	1
21	"air pressure mattress*".tw,kf.	12
22	"air pressure support surface*".tw,kf.	1
23	("air suspension bed" or "air suspension beds").tw,kf.	6
24	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kf.	65
25	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kf.	55
26	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kf.	19
27	"alternating pressure (active) air surface*".tw,kf.	7
28	"alternating pressure surface*".tw,kf.	8
29	"assisted turn* mattress*".tw,kf.	1
30	((foam or gel or water) adj4 mattress*).tw,kf.	366



31	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,kf.	3
32	("high tech* support surface*" or "high tech* pressure support surface*").tw,kf.	3
33	("low tech* support surface*" or "low tech* pressure support surface*").tw,kf.	3
34	("low air loss bed" or "low air loss beds").tw,kf.	44
35	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,kf.	2
36	"non power* advanced pressure reduc* mattress*".tw,kf.	1
37	("pressure relieving cushion*" or "pressure relieving mattress*").tw,kf.	52
38	"pressure relieving support surface*".tw,kf.	21
39	"pressure relief".tw,kf.	642
40	("power* air flotation bed" or "power* air flotation beds").tw,kf.	1
41	"power* pressure reduc* air mattress*".tw,kf.	1
42	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,kf.	1
43	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,kf.	13
44	"special* support surface*".tw,kf.	23
45	"static air mattress*".tw,kf.	14
46	"static air support surface*".tw,kf.	6
47	or/11-46	1682
48	3 and 47	700
49	limit 48 to english language	663
50	limit 49 to yr="2018 -Current"	126

### Embase Classic+Embase 1947 to 2023 March 28

#### Search Strategy:

#	Searches	Results
1	decubitus/	26710
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	20818
3	1 or 2	31478
4	bed/ or bed mattress/	6653
5	bed linen/	184
6	(bed or bedding* or beds or mattress or mattresses).tw,kw.	213105
7	or/4-6	216349
8	air pressure/	1409
9	(air pressure or air pressures).tw,kw.	3733
10	8 or 9	4337
11	7 and 10	181
12	air mattress/	141
13	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech*	474

	overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kw.	
14	"Micropulse system".tw,kw.	1
15	circoelectric bed/	6
16	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kw.	44
17	flotation bed/ or air fluidized bed/	188
18	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kw.	6
19	"active support surface*".tw,kw.	3
20	"active air support surface*".tw,kw.	0
21	("air filled bed overlay*" or "air filled overlay*").tw,kw.	3
22	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,kw.	149
23	"air inflated insulating mattress pad*".tw,kw.	1
24	"air pressure mattress*".tw,kw.	12
25	"air pressure support surface*".tw,kw.	1
26	("air suspension bed" or "air suspension beds").tw,kw.	7
27	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kw.	74
28	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kw.	62
29	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kw.	18
30	"alternating pressure (active) air surface*".tw,kw.	8
31	"alternating pressure surface*".tw,kw.	7
32	"assisted turn* mattress*".tw,kw.	1
33	((foam or gel or water) adj4 mattress*).tw,kw.	449
34	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,kw.	4
35	("high tech* support surface*" or "high tech* pressure support surface*").tw,kw.	4
36	("low tech* support surface*" or "low tech* pressure support surface*").tw,kw.	3
37	("low air loss bed" or "low air loss beds").tw,kw.	44
38	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,kw.	1
39	"non power* advanced pressure reduc* mattress*".tw,kw.	0
40	("pressure relieving cushion*" or "pressure relieving mattress*").tw,kw.	65
41	"pressure relieving support surface*".tw,kw.	23
42	"pressure relief".tw,kw.	877
43	("power* air flotation bed" or "power* air flotation beds").tw,kw.	0
44	"power* pressure reduc* air mattress*".tw,kw.	0
45	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,kw.	1
46	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,kw.	21
47	"special support surface*".tw,kw.	11
48	"static air mattress*".tw,kw.	13
49	"static air support surface*".tw,kw.	6
50	or/11-49	2412

51	3 and 50	904
52	limit 51 to english language	834
53	limit 52 to yr="2018 -Current"	191
54	limit 53 to (books or chapter or conference abstract or conference paper or "conference review")	34
55	53 not 54	157

### Emcare Nursing 1995 to Present

#### Search Strategy:

#	Searches	Results
1	decubitus/	9822
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	9996
3	or/1-2	12859
4	bed/ or bed mattress/	479
5	bed linen/	5
6	(bed or bedding* or beds or mattress or mattresses).tw,kf.	42600
7	or/1-4	13220
8	air pressure/	174
9	(air pressure or air pressures).tw,kf.	736
10	or/8-9	768
11	7 and 10	24
12	air mattress/	47
13	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kf.	199
14	"Micropulse system".tw,kf.	1
15	circoelectric bed/	2
16	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kf.	20
17	flotation bed/ or air fluidized bed/	89
18	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kf.	1
19	"active support surface*".tw,kf.	2
20	"active air support surface*".tw,kf.	0
21	("air filled bed overlay*" or "air filled overlay*").tw,kf.	1
22	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,kf.	20
23	"air inflated insulating mattress pad*".tw,kf.	0
24	"air pressure mattress*".tw,kf.	10
25	"air pressure support surface*".tw,kf.	1

26	("air suspension bed" or "air suspension beds").tw,kf.	2
27	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kf.	49
28	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kf.	43
29	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kf.	17
30	"alternating pressure (active) air surface*".tw,kf.	7
31	"alternating pressure surface*".tw,kf.	3
32	"assisted turn* mattress*".tw,kf.	1
33	((foam or gel or water) adj4 mattress*).tw,kf.	189
34	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,kf.	0
35	("high tech* support surface*" or "high tech* pressure support surface*").tw,kf.	1
36	("low tech* support surface*" or "low tech* pressure support surface*").tw,kf.	3
37	("low air loss bed" or "low air loss beds").tw,kf.	18
38	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,kf.	2
39	"non power* advanced pressure reduc* mattress*".tw,kf.	0
40	("pressure relieving cushion*" or "pressure relieving mattress*").tw,kf.	48
41	"pressure relieving support surface*".tw,kf.	15
42	"pressure relief".tw,kf.	363
43	("power* air flotation bed" or "power* air flotation beds").tw,kf.	0
44	"power* pressure reduc* air mattress*".tw,kf.	0
45	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,kf.	1
46	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,kf.	16
47	"special support surface*".tw,kf.	5
48	"static air mattress*".tw,kf.	13
49	"static air support surface*".tw,kf.	5
50	or/11-49	908
51	3 and 50	483
52	limit 51 to english language	464
53	limit 52 to yr="2018 -Current"	110

## EBM Reviews - Cochrane Central Register of Controlled Trials February 2023

### Search Strategy:

#	Searches	Results
1	pressure ulcer/	900
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	2152
3	1 or 2	2261
4	Beds/	319

5	"Bedding and Linens"/	384
6	(bed or bedding* or beds or mattress or mattresses).tw,kw.	13848
7	or/4-6	14093
8	air pressure/	151
9	(air pressure or air pressures).tw,kw.	163
10	8 or 9	309
11	7 and 10	17
12	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kw.	89
13	"Micropulse system".tw,kw.	0
14	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kw.	3
15	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kw.	0
16	"active support surface*".tw,kw.	1
17	"active air support surface*".tw,kw.	0
18	("air filled bed overlay*" or "air filled overlay*").tw,kw.	0
19	("air fluidized bed*" or "air fluidised bed*" or Clinatron).tw,kw.	14
20	"air inflated insulating mattress pad*".tw,kw.	0
21	"air pressure mattress*".tw,kw.	6
22	"air pressure support surface*".tw,kw.	1
23	("air suspension bed" or "air suspension beds").tw,kw.	3
24	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kw.	26
25	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kw.	17
26	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kw.	6
27	"alternating pressure (active) air surface*".tw,kw.	0
28	"alternating pressure surface*".tw,kw.	2
29	"assisted turn* mattress*".tw,kw.	1
30	((foam or gel or water) adj4 mattress*).tw,kw.	124
31	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,kw.	0
32	("high tech* support surface*" or "high tech* pressure support surface*").tw,kw.	1
33	("low tech* support surface*" or "low tech* pressure support surface*").tw,kw.	0
34	("low air loss bed" or "low air loss beds").tw,kw.	10
35	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,kw.	0
36	"non power* advanced pressure reduc* mattress*".tw,kw.	0
37	("pressure relieving cushion*" or "pressure relieving mattress*").tw,kw.	8
38	"pressure relieving support surface*".tw,kw.	10
39	"pressure relief".tw,kw.	124
40	("power* air flotation bed" or "power* air flotation beds").tw,kw.	0

41	"power* pressure reduc* air mattress*".tw,kw.	0
42	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,kw.	0
43	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,kw.	1
44	"special support surface*".tw,kw.	6
45	"static air mattress*".tw,kw.	5
46	"static air support surface*".tw,kw.	3
47	or/11-46	382
48	3 and 47	147
49	limit 48 to english language	142
50	limit 49 to yr="2018 -Current"	35

### EBM Reviews - Cochrane Database of Systematic Reviews 2005 to March 28, 2023

#### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	199
2	(bed or bedding* or beds or mattress or mattresses).tw,kw.	927
3	or/1-2	1015
4	(air pressure or air pressures).tw,kw.	26
5	3 and 4	12
6	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kw.	12
7	"Micropulse system".tw,kw.	2
8	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kw.	2
9	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kw.	5
10	"active support surface*".tw,kw.	3
11	"active air support surface*".tw,kw.	0
12	("air filled bed overlay*" or "air filled overlay*").tw,kw.	2
13	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,kw.	7
14	"air inflated insulating mattress pad*".tw,kw.	0
15	"air pressure mattress*".tw,kw.	2
16	"air pressure support surface*".tw,kw.	0
17	("air suspension bed" or "air suspension beds").tw,kw.	3
18	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kw.	5
19	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kw.	4
20	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kw.	4

21	"alternating pressure (active) air surface*".tw,kw.	6
22	"alternating pressure surface*".tw,kw.	8
23	"assisted turn* mattress*".tw,kw.	0
24	((foam or gel or water) adj4 mattress*).tw,kw.	22
25	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*).tw,kw.	0
26	("high tech* support surface*" or "high tech* pressure support surface*).tw,kw.	2
27	("low tech* support surface*" or "low tech* pressure support surface*).tw,kw.	1
28	("low air loss bed" or "low air loss beds").tw,kw.	3
29	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*).tw,kw.	0
30	"non power* advanced pressure reduc* mattress*".tw,kw.	0
31	("pressure relieving cushion*" or "pressure relieving mattress*).tw,kw.	8
32	"pressure relieving support surface*".tw,kw.	3
33	"pressure relief".tw,kw.	31
34	("power* air flotation bed" or "power* air flotation beds").tw,kw.	0
35	"power* pressure reduc* air mattress*".tw,kw.	0
36	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*).tw,kw.	0
37	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*).tw,kw.	6
38	"special support surface*".tw,kw.	2
39	"static air mattress*".tw,kw.	4
40	"static air support surface*".tw,kw.	0
41	or/5-40	57
42	limit 41 to last 5 years	13

**APA PsycInfo** 1806 to March Week 3 2023

Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,id.	949
2	(bed or bedding* or beds or mattress or mattresses).tw,id.	14709
3	(air pressure or air pressures).tw,id.	256
4	2 and 3	0
5	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*).tw,id.	18
6	"Micropulse system".tw,id.	0

7	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,id.	0
8	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,id.	1
9	"active support surface*".tw,id.	0
10	"active air support surface*".tw,id.	0
11	("air filled bed overlay*" or "air filled overlay*").tw,id.	0
12	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,id.	2
13	"air inflated insulating mattress pad*".tw,id.	0
14	"air pressure mattress*".tw,id.	0
15	"air pressure support surface*".tw,id.	0
16	("air suspension bed" or "air suspension beds").tw,id.	0
17	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,id.	3
18	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,id.	1
19	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,id.	0
20	"alternating pressure (active) air surface*".tw,id.	0
21	"alternating pressure surface*".tw,id.	0
22	"assisted turn* mattress*".tw,id.	0
23	((foam or gel or water) adj4 mattress*).tw,id.	8
24	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,id.	0
25	("high tech* support surface*" or "high tech* pressure support surface*").tw,id.	0
26	("low tech* support surface*" or "low tech* pressure support surface*").tw,id.	0
27	("low air loss bed" or "low air loss beds").tw,id.	0
28	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,id.	0
29	"non power* advanced pressure reduc* mattress*".tw,id.	0
30	("pressure relieving cushion*" or "pressure relieving mattress*").tw,id.	2
31	"pressure relieving support surface*".tw,id.	0
32	"pressure relief".tw,id.	27
33	("power* air flotation bed" or "power* air flotation beds").tw,id.	0
34	"power* pressure reduc* air mattress*".tw,id.	0
35	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,id.	0
36	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,id.	0
37	"special support surface*".tw,id.	0
38	"static air mattress*".tw,id.	0
39	"static air support surface*".tw,id.	0
40	or/4-39	58
41	1 and 40	22
42	limit 41 to english language	22
43	limit 42 to yr="2018 -Current"	2



## CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15,830
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,712
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18,963
S4	(MH "Beds and Mattresses")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,740
S5	(MH "Bedding and Linens")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,479
S6	TI (bed or bedding* or beds or mattress or mattresses) OR AB (bed or bedding* or beds or mattress or mattresses)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	29,696
S7	S4 OR S5 OR S6	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	32,658
S8	TI (air pressure or air pressures) OR AB (air pressure or air pressures)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	391
S9	S7 AND S8	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	22
S10	TI ("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	195

	"low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*") OR AB ("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*")		
S11	TI "Micropulse system" OR AB "Micropulse system"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	7
S12	TI ("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest) OR AB ("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15
S13	(MH "Air-Suspension Beds") OR (MH "Flotation Beds") OR (MH "Air-Fluidized Beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	250
S14	TI ("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds") OR AB ("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S15	TI "active support surface*" OR AB "active support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	5
S16	TI "active air support surface*" OR AB "active air support surface*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	861
S17	TI ("air filled bed overlay*" or "air filled overlay*") OR AB ("air filled bed overlay*" or "air filled overlay*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S18	TI ("air fluidized bed*" or "air fluidised bed*" or Clinitron) OR AB ("air fluidized bed*" or "air fluidised bed*" or Clinitron)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	58
S19	TI "air inflated insulating mattress pad*" OR AB "air inflated insulating mattress pad*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	18

S20	TI "air pressure mattress*" OR AB "air pressure mattress*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13
S21	TI "air pressure support surface*" OR AB "air pressure support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S22	TI ("air suspension bed" or "air suspension beds") OR AB ("air suspension bed" or "air suspension beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6
S23	TI ("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*") OR AB ("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	62
S24	TI ("alternating pressure mattress*" or "alternating pressure (AP) mattress*") OR AB ("alternating pressure mattress*" or "alternating pressure (AP) mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	56
S25	TI ("alternating pressure overlay*" or "alternating pressure (AP) overlay*") OR AB ("alternating pressure overlay*" or "alternating pressure (AP) overlay*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	12
S26	TI "alternating pressure (active) air surface*" OR AB "alternating pressure (active) air surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S27	TI "alternating pressure surface*" OR AB "alternating pressure surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4
S28	TI "assisted turn* mattress*" OR AB "assisted turn* mattress*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	48
S29	TI ((foam or gel or water) N3 mattress*) OR AB ((foam or gel or water) N3 mattress*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	204
S30	TI ("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*") OR AB ("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	48
S31	TI ("high tech* support surface*" or "high tech* pressure support surface*") OR AB ("high tech* support surface*" or "high tech* pressure support surface*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1

S32	TI ("low tech* support surface*" or "low tech* pressure support surface*") OR AB ("low tech* support surface*" or "low tech* pressure support surface*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S33	TI ("low air loss bed" or "low air loss beds") OR AB ("low air loss bed" or "low air loss beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	39
S34	TI ("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*") OR AB ("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S35	TI "non power* advanced pressure reduc* mattress*" OR AB "non power* advanced pressure reduc* mattress*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	649
S36	TI ("pressure relieving cushion*" or "pressure relieving mattress*") OR AB ("pressure relieving cushion*" or "pressure relieving mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	50
S37	TI "pressure relieving support surface*" OR AB "pressure relieving support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19
S38	TI "pressure relief" OR AB "pressure relief"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	360
S39	TI ("power* air flotation bed" or "power* air flotation beds") OR AB ("power* air flotation bed" or "power* air flotation beds")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	1,351
S40	TI "power* pressure reduc* air mattress*" OR AB "power* pressure reduc* air mattress*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	651
S41	TI ("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*") OR AB ("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	0
S42	TI ("reactive air surface*" or "reactive air support surface*" or "reactive support surface*") OR AB ("reactive air surface*" or "reactive air support surface*" or "reactive support surface*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	9
S43	TI "special support surface*" OR AB "special support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	10
S44	TI "static air mattress*" OR AB "static air mattress*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16

S45	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,192
S46	S3 AND S45	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	741
S47	S3 AND S45	Limiters - Published Date: 20180101-20231231; English Language Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	115
S48	S3 AND S45	Limiters - Published Date: 20180101-20231231; English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	109

### Update search for recommendation # 6

#### Databases searched:

- MEDLINE(R) ALL
- EBM Reviews - Cochrane Database of Systematic Reviews
- CINAHL

Dates searched: March 2023 to June 2024

#### **MEDLINE(R) ALL** 1946 to June 04, 2024

#### Search Strategy:

#	Searches	Results
1	pressure ulcer/	14368
2	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kf.	16686
3	1 or 2	20280
4	Beds/	4500

5	"Bedding and Linens"/	4101
6	(bed or bedding* or beds or mattress or mattresses).tw,kf.	140491
7	or/4-6	144641
8	Air Pressure/	2688
9	(air pressure or air pressures).tw,kf.	2941
10	8 or 9	5129
11	7 and 10	129
12	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kf.	381
13	"Micropulse system".tw,kf.	3
14	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kf.	33
15	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kf.	3
16	"active support surface*".tw,kf.	4
17	"active air support surface*".tw,kf.	0
18	("air filled bed overlay*" or "air filled overlay*").tw,kf.	3
19	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,kf.	118
20	"air inflated insulating mattress pad*".tw,kf.	1
21	"air pressure mattress*".tw,kf.	14
22	"air pressure support surface*".tw,kf.	1
23	("air suspension bed" or "air suspension beds").tw,kf.	6
24	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kf.	68
25	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kf.	55
26	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kf.	20
27	"alternating pressure (active) air surface*".tw,kf.	7
28	"alternating pressure surface*".tw,kf.	8
29	"assisted turn* mattress*".tw,kf.	1
30	((foam or gel or water) adj4 mattress*).tw,kf.	378
31	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,kf.	3
32	("high tech* support surface*" or "high tech* pressure support surface*").tw,kf.	3
33	("low tech* support surface*" or "low tech* pressure support surface*").tw,kf.	3
34	("low air loss bed" or "low air loss beds").tw,kf.	44
35	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,kf.	2
36	"non power* advanced pressure reduc* mattress*".tw,kf.	1
37	("pressure relieving cushion*" or "pressure relieving mattress*").tw,kf.	52
38	"pressure relieving support surface*".tw,kf.	21
39	"pressure relief".tw,kf.	694
40	("power* air flotation bed" or "power* air flotation beds").tw,kf.	1

41	"power* pressure reduc* air mattress*".tw,kf.	1
42	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,kf.	1
43	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,kf.	13
44	"special* support surface*".tw,kf.	24
45	"static air mattress*".tw,kf.	14
46	"static air support surface*".tw,kf.	6
47	or/11-46	1772
48	3 and 47	733
49	limit 48 to english language	694
50	limit 49 to ed=20230328-20240604	29
51	49 and ("20230328*" or "20230329*" or "20230330*" or "20230331*" or "202304*" or "202305*" or "202306*" or "202307*" or "202308*" or "202309*" or "202310*" or "202311*" or "202312*" or "2024*").dt.	31
52	50 or 51	38

### EBM Reviews - Cochrane Database of Systematic Reviews 2005 to May 29, 2024

#### Search Strategy:

#	Searches	Results
1	("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcerus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcerus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers").tw,kw.	205
2	(bed or bedding* or beds or mattress or mattresses).tw,kw.	948
3	or/1-2	1038
4	(air pressure or air pressures).tw,kw.	28
5	3 and 4	13
6	("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*").tw,kw.	12
7	"Micropulse system".tw,kw.	2
8	("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest).tw,kw.	2
9	("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds").tw,kw.	5
10	"active support surface*".tw,kw.	3
11	"active air support surface*".tw,kw.	0
12	("air filled bed overlay*" or "air filled overlay*").tw,kw.	2
13	("air fluidized bed*" or "air fluidised bed*" or Clinitron).tw,kw.	7
14	"air inflated insulating mattress pad*".tw,kw.	0
15	"air pressure mattress*".tw,kw.	2
16	"air pressure support surface*".tw,kw.	0
17	("air suspension bed" or "air suspension beds").tw,kw.	3

18	("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*").tw,kw.	5
19	("alternating pressure mattress*" or "alternating pressure (AP) mattress*").tw,kw.	4
20	("alternating pressure overlay*" or "alternating pressure (AP) overlay*").tw,kw.	4
21	"alternating pressure (active) air surface*".tw,kw.	6
22	"alternating pressure surface*".tw,kw.	8
23	"assisted turn* mattress*".tw,kw.	0
24	((foam or gel or water) adj4 mattress*).tw,kw.	22
25	("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*").tw,kw.	0
26	("high tech* support surface*" or "high tech* pressure support surface*").tw,kw.	2
27	("low tech* support surface*" or "low tech* pressure support surface*").tw,kw.	1
28	("low air loss bed" or "low air loss beds").tw,kw.	3
29	("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*").tw,kw.	0
30	"non power* advanced pressure reduc* mattress*".tw,kw.	0
31	("pressure relieving cushion*" or "pressure relieving mattress*").tw,kw.	8
32	"pressure relieving support surface*".tw,kw.	3
33	"pressure relief".tw,kw.	31
34	("power* air flotation bed" or "power* air flotation beds").tw,kw.	0
35	"power* pressure reduc* air mattress*".tw,kw.	0
36	("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*").tw,kw.	0
37	("reactive air surface*" or "reactive air support surface*" or "reactive support surface*").tw,kw.	6
38	"special support surface*".tw,kw.	2
39	"static air mattress*".tw,kw.	4
40	"static air support surface*".tw,kw.	0
41	or/5-40	58
42	limit 41 to last 2 years	0
43	from 41 keep 2-4, 11	4

### CINAHL

#	Query	Limiters/Expanders	Results
S1	(MH "Pressure Ulcer")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16,159
S2	TI ("bed sore" or "bed sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers") OR AB ("bed sore" or "bed	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13,812



	sores" or "bedsore" or "bedsores" or "decubital ulcer" or "decubital ulcus" or "decubitus ulcer" or "decubitus ulceration" or "decubitus ulcers" or "decubitus ulcus" or "decubus ulcer" or "pressure injury" or "pressure injuries" or "pressure sore" or "pressure sores" or "pressure ulcer" or "pressure ulcers")		
S3	S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	19,138
S4	(MH "Beds and Mattresses")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	3,726
S5	(MH "Bedding and Linens")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,436
S6	TI (bed or bedding* or beds or mattress or mattresses) OR AB (bed or bedding* or beds or mattress or mattresses)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	29,172
S7	S4 OR S5 OR S6	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	32,115
S8	TI (air pressure or air pressures) OR AB (air pressure or air pressures)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	382
S9	S7 AND S8	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	23
S10	TI ("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*") OR AB ("air cushion*" or "air filled cushion*" or "air filled overlay*" or "air mattress*" or "air overlay*" or "constant low air mattress*" or "constant low pressure support mattress*" or "constant low pressure support surfaces*" or "low tech* mattress*" or "low tech* overlay*" or "non power* mattress*" or "non power* overlay*" or "static cushion*" or "static mattress*" or "static overlay*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	193

S11	TI "Micropulse system" OR AB "Micropulse system"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	4
S12	TI ("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest) OR AB ("circoelectric bed" or "circoelectric beds" or "kinetic bed" or "kinetic beds" or RotoRest)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	16
S13	(MH "Air-Suspension Beds") OR (MH "Flotation Beds") OR (MH "Air-Fluidized Beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	254
S14	TI ("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds") OR AB ("flotation mattress*" or "flotation therapy bed" or "flotation therapy beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S15	TI "active support surface*" OR AB "active support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6
S16	TI "active air support surface*" OR AB "active air support surface*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	643
S17	TI ("air filled bed overlay*" or "air filled overlay*") OR AB ("air filled bed overlay*" or "air filled overlay*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S18	TI ("air fluidized bed*" or "air fluidised bed*" or Clinitron) OR AB ("air fluidized bed*" or "air fluidised bed*" or Clinitron)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	57
S19	TI "air inflated insulating mattress pad*" OR AB "air inflated insulating mattress pad*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	19
S20	TI "air pressure mattress*" OR AB "air pressure mattress*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13
S21	TI "air pressure support surface*" OR AB "air pressure support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S22	TI ("air suspension bed" or "air suspension beds") OR AB ("air suspension bed" or "air suspension beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	6
S23	TI ("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air mattress*" or "alternating air pressure mattress*") OR AB ("alternating air mattress*" or "alternating pressure air mattress*" or "alternating pressure (AP) air	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	61

	mattress*" or "alternating air pressure mattress*")		
S24	TI ("alternating pressure mattress*" or "alternating pressure (AP) mattress*") OR AB ("alternating pressure mattress*" or "alternating pressure (AP) mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	59
S25	TI ("alternating pressure overlay*" or "alternating pressure (AP) overlay*") OR AB ("alternating pressure overlay*" or "alternating pressure (AP) overlay*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	13
S26	TI "alternating pressure (active) air surface*" OR AB "alternating pressure (active) air surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S27	TI "alternating pressure surface*" OR AB "alternating pressure surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	4
S28	TI "assisted turn* mattress*" OR AB "assisted turn* mattress*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	44
S29	TI ((foam or gel or water) N3 mattress*) OR AB ((foam or gel or water) N3 mattress*)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	200
S30	TI ("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*") OR AB ("inflatable air mattress*" or "inflatable airbag mattress*" or "inflatable air bag mattress*")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	44
S31	TI ("high tech* support surface*" or "high tech* pressure support surface*") OR AB ("high tech* support surface*" or "high tech* pressure support surface*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S32	TI ("low tech* support surface*" or "low tech* pressure support surface*") OR AB ("low tech* support surface*" or "low tech* pressure support surface*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S33	TI ("low air loss bed" or "low air loss beds") OR AB ("low air loss bed" or "low air loss beds")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	37
S34	TI ("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*") OR AB ("minimum pressure air mattress*" or "minimum pressure air (MPA) mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2
S35	TI "non power* advanced pressure reduc* mattress*" OR AB "non power* advanced pressure reduc* mattress*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	666

S36	TI ("pressure relieving cushion*" or "pressure relieving mattress*") OR AB ("pressure relieving cushion*" or "pressure relieving mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	53
S37	TI "pressure relieving support surface*" OR AB "pressure relieving support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	18
S38	TI "pressure relief" OR AB "pressure relief"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	364
S39	TI ("power* air flotation bed" or "power* air flotation beds") OR AB ("power* air flotation bed" or "power* air flotation beds")	Expanders - Apply equivalent subjects Search modes - SmartText Searching	1,293
S40	TI "power* pressure reduc* air mattress*" OR AB "power* pressure reduc* air mattress*"	Expanders - Apply equivalent subjects Search modes - SmartText Searching	667
S41	TI ("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*") OR AB ("pressure redistribut* air mattress*" or "pressure re distribut* air mattress*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1
S42	TI ("reactive air surface*" or "reactive air support surface*" or "reactive support surface*") OR AB ("reactive air surface*" or "reactive air support surface*" or "reactive support surface*")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11
S43	TI "special support surface*" OR AB "special support surface*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	10
S44	TI "static air mattress*" OR AB "static air mattress*"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	15
S45	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	1,207
S46	S3 AND S45	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	747
S47	S3 AND S45	Limiters - English Language; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	620

S48	EM 20230328-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	302,995
S49	S47 AND S48	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	33