

## EVIDENCE SEARCH REPORT

<b>RESEARCH QUESTION:</b>	Does data exist on the performance of triage or resource allocation frameworks for COVID-19 and other pandemics?		<b>UNIQUE IDENTIFIER:</b>	CC120401-01 ESR
<b>CONTEXT:</b>	Want to know the best way to allocate resources to COVID-19 patients in ICU			
<b>RESOURCES USED:</b>	<ul style="list-style-type: none"> <li>• CDC database</li> <li>• Google Scholar</li> <li>• LitCovid</li> <li>• MEDLINE</li> <li>• MedRxiv</li> <li>• Embase</li> <li>• PHAC website</li> <li>• PubMed</li> <li>• WHO Global Research</li> <li>• FDA</li> <li>• PanSurg.org</li> <li>• Society of Critical Care Medicine</li> <li>• Centre for Evidence-Based Medicine</li> <li>• National Health Library &amp; Knowledge Service (Ireland)</li> <li>• WHO COVID-19 Knowledge Hub</li> <li>• William Osler Health, COVID Critical Care</li> <li>• Centre for Evidence-Based Medicine (Oxford)</li> <li>• Agency for Clinical Innovation &amp; New South Wales Government</li> <li>• Disaster Information Management Research Center</li> <li>• Center for Infectious Disease Research and Policy (CIDRAP)</li> <li>• Technical Resources, Assistance Center, and Information Exchange (TRACIE)</li> <li>• University of Washington Medicine COVID-19 Resource Site</li> <li>• MLA COVID-19 Resources for Medical Librarians &amp; Other Health Information Professionals</li> <li>• Newfoundland &amp; Labrador Centre for Applied Health Research</li> <li>• University of Toronto, Interdepartmental Division of Critical Care Medicine</li> <li>• National Collaborating Centre for Methods and Tools (McMaster)</li> <li>• Strategy for Patient-Oriented Research (SPOR)</li> <li>• University of Edinburgh, Usher Institute, Usher Network for COVID-19 Evidence Reviews (UNCOVER)</li> <li>• Johns Hopkins, Bloomberg School of Public Health</li> <li>• Methods and Applications Group for Indirect Comparisons</li> </ul>			
<b>LIMITS/EXCLUSIONS/INCLUSIONS:</b>	English	<b>REFERENCE INTERVIEW COMPLETED:</b>	December 3, 2020	
<b>DATE:</b>	December 8, 2020			
<b>LIBRARIAN:</b>	Lukas Miller Brianna Howell-Spooner	<b>REQUESTOR:</b>	Dr. Sabira Valiani	
<b>TEAM:</b>	Critical Care			
<b>SEARCH ALERTS CREATED: Y/N (MEDLINE, ETC.)</b>	N			
<b>CITE AS:</b>	Miller, L; Howell-Spooner, B. Does data exist on the performance of triage or resource allocation frameworks for COVID-19 and other pandemics? 2020 Dec 8; Document no.: CC120401-01 ESR. In: COVID-19 Rapid Evidence Reviews [Internet]. SK: SK COVID Evidence Support Team, c2020. 20 p. (CEST evidence search report)			

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## LIBRARIAN NOTES/COMMENTS

Hello,

This database search produced a high volume of literature surrounding triage and resource allocation during pandemics for the critically ill. References range from the current year back to 2006 to include past respiratory pandemics.

173 references were exported from databases and a numbered list has been provided below – The abstracts have been omitted given the exceptional length of the document that would result. Instead, please find an attached .RIS file for use with a reference manager to browse the findings in more detail. If you require assistance with a reference manager, please contact the library ([library@saskhealthauthority.ca](mailto:library@saskhealthauthority.ca)) for information.

Sincerely,  
Lukas & Brianna

## SEARCH RESULTS

To obtain full-text articles email [library@saskhealthauthority.ca](mailto:library@saskhealthauthority.ca).

## SUMMARIES, GUIDELINES & OTHER RESOURCES

### Government Documents

Public Health Ontario. Tools for Preparedness: Triage, Screening and Patient Management for Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infections in Acute Care Settings. [2016, May].  
<https://www.publichealthontario.ca/-/media/documents/M/2016/mers-cov-preparedness-tools.pdf?la=en>

### Guidance

**American College of Emergency Physicians.** Risk Stratification Guide for Severity Assessment and Triage of Suspected or Confirmed COVID-19 Patients (Adults) in Urgent Care. [2020, May 18].

[https://www.ucaoa.org/Portals/80/pdfs/COVID-19/CUCM\\_ACEP\\_Joint%20Statement\\_Risk%20Stratification%20Guide%20for%20Severity%20Assessment%20COVID19-Revised%2005182020.pdf?ver=2020-05-18-124807-833](https://www.ucaoa.org/Portals/80/pdfs/COVID-19/CUCM_ACEP_Joint%20Statement_Risk%20Stratification%20Guide%20for%20Severity%20Assessment%20COVID19-Revised%2005182020.pdf?ver=2020-05-18-124807-833)

**Centre for Evidence-Based Medicine.** What Clinical Features or Scoring System, if Any, Might Best Predict a Benefit From Hospital Admission for Patients with COVID-19?. [2020, April 20]. <https://www.cebm.net/covid-19/what-clinical-features-or-scoring-system-if-any-might-best-predict-a-benefit-from-hospital-admission-for-patients-with-covid-19/>

**Agency for Clinical Innovation & New South Wales Government.** Triage Tools for ICU Admission During COVID-19. [2020, April 13]. [https://aci.health.nsw.gov.au/\\_data/assets/pdf\\_file/0007/578473/20200413-Evidence-Check-ICU-Triage-and-Risk.pdf](https://aci.health.nsw.gov.au/_data/assets/pdf_file/0007/578473/20200413-Evidence-Check-ICU-Triage-and-Risk.pdf)

**Beth Israel Lahey Health.** Allocation of Scarce Critical Care Resources During a Public Health Emergency. [2020, April 9] [https://covid-19.bilh.org/wp-content/uploads/2020/04/BILH-Critical-Care-Resource-Allocation-Policy\\_4.9.20.pdf](https://covid-19.bilh.org/wp-content/uploads/2020/04/BILH-Critical-Care-Resource-Allocation-Policy_4.9.20.pdf)

**Center for Infectious Disease Research And Policy (CIDRAP).** Development of a Triage Protocol for Critical Care During an Influenza Pandemic. [2006, April]. <https://www.cidrap.umn.edu/practice/development-triage-protocol-critical-care-during-influenza-pandemic-ontario-canada>

### Society of Critical Care Medicine.

Society of Critical Care Medicine Crisis Standard of Care Recommendations for Triaging Critical Resources During the COVID-19 Pandemic. [2020, April 25].

<https://www.sccm.org/getattachment/179d65cb-9076-4cf2-a06a-3ae7c928e634/Triaging-Critical-Resources>

Adult ICU Triage During the Coronavirus Disease 2019 Pandemic: Who Will Live and Who Will Die? Recommendations to Improve Survival. [2020, August].

<https://www.sccm.org/COVID19RapidResources/Resources/Adult-ICU-Triage-During-the-Coronavirus-Disease-20>

### Tools

**CDC.** Pandemic Influenza Triage Tools. [2016, March 31]. <https://www.cdc.gov/cpr/healthcare/pan-flu-app/desktop/d.index.html>

**Technical Resources, Assistance Center, and Information Exchange (TRACIE).** Hospital Operations Toolkit – Patient Care Policies/Processes: Triage – Identify, Isolate, Inform. [2020, November 30].

<https://files.asprtracie.hhs.gov/documents/hospital-operations-toolkit-for-covid-19-patient-care-triage.pdf>

## ARTICLES

**Note: References are sorted by year (newest to oldest)**

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## SEARCH STRATEGIES

### Ovid MEDLINE(R) ALL <1946 to December 04, 2020>

#	Searches	Results
1	(coronavirus/ or betacoronavirus/ or coronavirus infections/) and (disease outbreaks/ or epidemics/ or pandemics/)	39561
2	(nCoV* or 2019nCoV or 19nCoV or COVID19* or COVID or SARS-COV-2 or SARSCOV-2 or SARSCOV2 or Severe Acute Respiratory Syndrome Coronavirus 2 or Severe Acute Respiratory Syndrome Corona Virus 2).ti,ab,kf,nm,ox,rx,px.	78659
3	((new or novel or "19" or "2019" or Wuhan or Hubei or China or Chinese) adj3 (coronavirus* or corona virus* or betacoronavirus* or CoV or HCoV)).ti,ab,kf.	26121
4	((coronavirus* or corona virus* or betacoronavirus*) adj3 (pandemic* or epidemic* or outbreak* or crisis)).ti,ab,kf.	5196
5	((Wuhan or Hubei) adj5 pneumonia).ti,ab,kf.	279
6	SARS virus/ or Severe Acute Respiratory Syndrome/ or Middle East Respiratory Syndrome Coronavirus/	8291
7	(SARSCOV* or Severe Acute Respiratory Syndrome* or sudden acute respiratory syndrome* or SARS like or MERSCoV* or Middle East Respiratory or camel flu or EMC	16115

	2012).ti,ab,kf.	
8	((SARS or MERS) adj5 (virus* or coronavirus* or betacoronavirus* or CoV or CoV2 or HCoV or pandemic or epidemic or outbreak* or infect* or respiratory or pathogen*)).ti,ab,kf.	33179
9	*pandemics/	20413
10	pandemic*.ti.	25899
11	((flu or influenza*) adj3 (pandemic* or epidemic*)).ti,ab,kf.	14808
12	or/1-11	108368
13	Triage/	12243
14	(triage? or triaging).ti. or (triage? or triaging).ab. /freq=2	9477
15	(patient? adj1 prioritiz*).tw,kf.	759
16	((casualt* or patient? or treatment? or care) adj2 (priorit* or sorting or classification? or hierarch* or urgency)).ti.	2937
17	((casualt* or patient? or treatment? or care) adj2 (priorit* or sorting or classification? or hierarch* or urgency)).ab. /freq=2	1301
18	or/13-17	20229
19	exp Resource Allocation/	17807
20	(resource allocation or "allocation of resources" or allocative efficienc* or (ration adj2 (resource? or healthcare or health care))).tw,kf.	11851
21	((equal or equitable) adj2 (resourc* or distribution or apportion* or allocat* or ration* or supply or treat*)).tw,kf.	4639
22	(resource adj3 (availability or accessibility or utilization or communication? or organization* or institution* or accountability or security or operation*)).tw,kf.	14518
23	((scarce or scarcity) adj3 (resource? or supply or supplies or equipment or manpower or workforce)).tw,kf.	5484
24	or/19-23	50312
25	12 and 18 and 24	149
26	12 and 18	913
27	12 and 24	1064
28	((resource allocation or resourcing or triage) adj4 (framework or frame-work or plan or planning or procedure? or policy or policies or protocol? or frame? or structure? or program? or programme? or strateg* or scheme? or guideline? or guidance or consensus or operation* or operating)).tw,kf.	3591
29	(26 or 27) and 28	217
30	25 or 29	321
31	(hospital* or acute care or inpatient? or critical care or crisis care or intensive care or CCU or ICU or primary care or critical* ill* or health care or healthcare or clinical care).tw,kf.	2060359
32	30 and 31	239
33	from 32 keep 1-5, 7-8, 10-11, 13-15, 17-19, 22-23...	159
34	remove duplicates from 33	157

Search history sorted by search number ascending

#### Embase <1974 to 2020 December 07>

#	Searches	Results
1	sars-related coronavirus/	468
2	(coronavirinae/ or betacoronavirus/ or coronavirus infection/) and (epidemic/ or pandemic/)	11199
3	(nCoV* or 2019nCoV or 19nCoV or COVID19* or COVID or SARS-COV-2 or SARSCOV-2 or SARS-COV2 or SARSCOV2 or Severe Acute Respiratory Syndrome Coronavirus 2 or Severe	76738

	Acute Respiratory Syndrome Corona Virus 2).ti,ab,kw,hw,ot.	
4	((new or novel or "19" or "2019" or Wuhan or Hubei or China or Chinese) adj3 (coronavirus* or corona virus* or betacoronavirus* or CoV or HCoV)).ti,ab,kw,hw,ot.	72691
5	((coronavirus* or corona virus* or betacoronavirus*) adj3 (pandemic* or epidemic* or outbreak* or crisis)).ti,ab,kw,ot.	4985
6	((Wuhan or Hubei) adj5 pneumonia).ti,ab,kw,ot.	329
7	(SARS coronavirus/ or severe acute respiratory syndrome/ or Middle East respiratory syndrome/ or Middle East respiratory syndrome coronavirus/) and (epidemic/ or pandemic/)	4727
8	(SARSCOV* or Severe Acute Respiratory Syndrome* or sudden acute respiratory syndrome* or SARS like or MERSCoV* or Middle East Respiratory or camel flu or EMC 2012).ti,ab,kw,hw,ot.	36422
9	((SARS or MERS) adj5 (virus* or coronavirus* or betacoronavirus* or CoV or CoV2 or HCoV or pandemic or epidemic or outbreak* or infect* or respiratory or pathogen*)).ti,ab,kw,hw,ot.	35869
10	*epidemic/ or *pandemic/	53906
11	pandemic*.ti.	27133
12	pandemic influenza/	4882
13	((flu or influenza*) adj3 (pandemic* or epidemic*)).ti,ab,kw,hw,ot.	18073
14	or/1-13	147446
15	(triage? or triaging).ti. or (triage? or triaging).ab. /freq=2	14174
16	((casualt* or patient? or treatment? or care) adj2 (priorit* or sorting or classification? or hierarch* or urgency)).ti.	3568
17	((casualt* or patient? or treatment? or care) adj2 (priorit* or sorting or classification? or hierarch* or urgency)).ab. /freq=2	1971
18	or/15-17	19155
19	resource allocation/	21518
20	(resource allocation or "allocation of resources" or allocative efficienc* or (ration adj2 (resource? or healthcare or health care))).tw,kw,hw.	30423
21	((equal or equitable) adj2 (resourc* or distribution or apportion* or allocat* or ration* or supply or treat*)).tw,kw,hw.	6655
22	(resource adj3 (availability or accessibility or utilization or communication? or organization* or institution* or accountability or security or operation*)).tw,kw,hw.	23696
23	((scarce or scarcity) adj3 (resource? or supply or supplies or equipment or manpower or workforce)).tw,kw,hw.	6805
24	or/19-23	65407
25	((resource allocation or resourcing or triage) adj4 (framework or frame-work or plan or planning or procedure? or policy or policies or protocol? or frame? or structure? or program? or programme? or strateg* or scheme? or guideline? or guidance or consensus or operation* or operating)).tw,kw,hw.	4846
26	(hospital* or acute care or inpatient? or critical care or crisis care or intensive care or CCU or ICU or primary care or critical* ill* or health care or healthcare or clinical care).tw,kw,hw.	4338043
27	14 and 18 and 24	71
28	14 and 18	587
29	14 and 24	1213
30	(28 or 29) and 28	587
31	(27 or 30) and 26	464

<b>32</b>	limit 31 to medline	119
<b>33</b>	31 not 32	345
<b>34</b>	remove duplicates from 33	345

Search history sorted by search number ascending