

Appendix A – Search String

Embase

('early warning score'/de OR 'early warning system'/de OR (('alarm monitor'/de OR 'scoring system'/de OR 'risk assessment'/de OR 'vital sign'/de OR 'early diagnosis'/de) AND ('telemonitoring'/de OR 'teleconsultation'/de OR 'telemedicine'/de OR 'telehealth'/de)) OR (((early OR in-hospital*) NEAR/3 (warn* OR response* OR recogn*) NEAR/3 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR criter*)) OR (EWS NOT ewing*-sarcoma*) OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR track-and-trigger* OR ((arrest*) NEAR/3 (risk NEAR/3 (triage)) OR AWTTTS OR SPTTS OR ((tele* OR remote*) NEAR/6 (alarm* OR alert* OR early-respons* OR vital-sign*) NEAR/6 (monitor* OR telemonitor* OR consult*)) OR (Daily NEAR/6 monitor* NEAR/6 vital-sign*)):ab,ti,kw) AND ('sensitivity and specificity'/de OR 'diagnostic test accuracy study'/de OR 'receiver operating characteristic'/de OR 'diagnostic accuracy'/de OR 'diagnostic value'/de OR 'likelihood ratio'/de OR 'likelihood ratio test'/de OR 'validation study'/de OR 'validation process'/de OR 'calibration'/de OR (sensitiv* OR specificit* OR ((diagnostic) NEAR/3 (accurac* OR value*)) OR ((receiver*) NEAR/3 (operating*) NEAR/3 (characteristic*)) OR ((likelihood*) NEAR/3 (ratio*)) OR ((validation*) NEAR/3 (stud* OR proces*)) OR discriminat* OR calibration* OR ((development* OR developing*) NEAR/6 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR tool OR system* OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR track-and-trigger*)):ab,ti,kw) AND ('mortality'/de OR 'fatality'/de OR 'heart arrest'/exp OR 'intensive care unit'/exp OR 'serious adverse event'/de OR 'major adverse cardiac event'/de OR 'length of stay'/de OR 'all cause mortality'/de OR 'cardiovascular mortality'/de OR 'hospital mortality'/de OR 'mortality rate'/exp OR 'mortality risk'/de OR (mortalit* OR fatal* OR ((heart* OR cardiac* OR circulat* OR cardiopulm*) NEAR/3 (arrest* OR standstill* OR death*)) OR ICU OR intensive-care* OR ((serious*) NEAR/3 (advers*) NEAR/3 (event*)) OR SAE OR length-of-stay* OR LOS):ab,ti,kw) NOT ((animal/exp OR animal*:de OR nonhuman/de) NOT ('human'/exp)) NOT (('juvenile'/exp OR (juvenil* OR adolescen* OR preadolescenc* OR youth* OR child* OR schoolchild* OR minors OR teen OR teens OR teenager* OR infan* OR toddler* OR pediatr* OR paediatr* OR puber* OR baby OR babies OR girl* OR boy* OR newborn* OR neonate* OR premature* OR pre-matur* OR kid OR kids OR underag* OR kindergar* OR pubescen* OR prepubesc* OR school* OR preschool* OR highschool* OR suckling OR PICU OR NICU OR PICUs OR NICUs):ab,ti,kw) NOT ('adult'/exp OR (adult* OR elderl* OR man OR men OR woman OR women):ab,ti,kw))

Medline

(Early Warning Score/ OR ((Clinical Alarms/ OR Risk Assessment/ OR Vital Signs/ OR Early Diagnosis/) AND (Remote Consultation/ OR Telemedicine/)) OR (((early OR in-hospital*) ADJ3 (warn* OR response* OR recogn*) ADJ3 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor*)) OR (EWS NOT ewing*-sarcoma*) OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR track-and-trigger* OR ((arrest*) ADJ3 (risk) ADJ3 (triage)) OR AWTTTS OR SPTTS OR ((tele* OR remote*) ADJ6 (alarm* OR alert* OR early-respons* OR vital-sign*) ADJ6 (monitor* OR telemonitor* OR consult*)) OR (Daily ADJ6 monitor* ADJ6 vital-sign*)):ab,ti,kf.) AND (exp Sensitivity and Specificity/ OR Likelihood Functions/ OR Validation Study/ OR Calibration/ OR (sensitiv* OR specificit* OR ((diagnostic) ADJ3 (accurac* OR value*)) OR ((receiver*) ADJ3 (operating*) ADJ3 (characteristic*)) OR ((likelihood*) ADJ3 (ratio*)) OR ((validation*) ADJ3 (stud* OR proces*)) OR

discriminat* OR calibration* OR ((development* OR developing*) ADJ6 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR tool OR system* OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR track-and-trigger*))) .ab,ti,kf.) AND (exp Mortality/ OR mortality.fs. OR Fatal Outcome/ OR Heart Arrest/ OR exp Intensive Care Units/ OR Length of Stay/ OR (mortalit* OR fatal* OR ((heart* OR cardiac* OR circulat* OR cardiopulm*) ADJ3 (arrest* OR standstill* OR death*)) OR ICU OR intensive-care* OR ((serious*) ADJ3 (advers*) ADJ3 (event*)) OR SAE OR length-of-stay* OR LOS).ab,ti,kf.) NOT ((Animals/) NOT (Humans/)) NOT ((exp Child/ OR exp Adolescent/ OR exp Infant/ OR (juvenil* OR adolescen* OR preadolescenc* OR youth* OR child* OR schoolchild* OR minors OR teen OR teens OR teenager* OR infan* OR toddler* OR pediater* OR paediatr* OR puber* OR baby OR babies OR girl* OR boy* OR newborn* OR neonate* OR premature* OR pre-matur* OR kid OR kids OR underag* OR kindergar* OR pubescen* OR prepubesc* OR school* OR preschool* OR highschool* OR suckling OR PICU OR NICU OR PICUs OR NICUs).ab,ti,kf.) NOT (exp Adult/ OR (adult* OR elderl* OR man OR men OR woman OR women).ab,ti,kf.))

Cochrane

((((early OR in NEXT hospital*) NEAR/3 (warn* OR response* OR recogn*) NEAR/3 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor*)) OR (EWS NOT ewing* NEXT sarcoma*) OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR "track and trigger" OR ((arrest*) NEAR/3 (risk) NEAR/3 (triage)) OR AWTTTS OR SPTTS OR ((tele* OR remote*) NEAR/6 (alarm* OR alert* OR early NEXT respons* OR vital NEXT sign*) NEAR/6 (monitor* OR telemonitor* OR consult*)) OR (Daily NEAR/6 monitor* NEAR/6 vital NEXT sign*)):ab,ti,kw) AND ((sensitivit* OR specificit* OR ((diagnostic) NEAR/3 (accurac* OR value*)) OR ((receiver*) NEAR/3 (operating*) NEAR/3 (characteristic*)) OR ((likelihood*) NEAR/3 (ratio*)) OR ((validation*) NEAR/3 (stud* OR proces*)) OR discriminat* OR calibration* OR ((development* OR developing*) NEAR/6 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR tool OR system* OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR "track and trigger*"))):ab,ti,kw) AND ((mortalit* OR fatal* OR ((heart* OR cardiac* OR circulat* OR cardiopulm*) NEAR/3 (arrest* OR standstill* OR death*)) OR ICU OR intensive NEXT care* OR ((serious*) NEAR/3 (advers*) NEAR/3 (event*)) OR SAE OR length NEXT of NEXT stay* OR LOS):ab,ti,kw) NOT (((juvenil* OR adolescen* OR preadolescenc* OR youth* OR child* OR schoolchild* OR minors OR teen OR teens OR teenager* OR infan* OR toddler* OR pediater* OR paediatr* OR puber* OR baby OR babies OR girl* OR boy* OR newborn* OR neonate* OR premature* OR pre NEXT matur* OR kid OR kids OR underag* OR kindergar* OR pubescen* OR prepubesc* OR school* OR preschool* OR highschool* OR suckling OR PICU OR NICU OR PICUs OR NICUs):ab,ti,kw) NOT ((adult* OR elderl* OR man OR men OR woman OR women):ab,ti,kw))

Web of Science

TS=(((early* OR in-hospital*) NEAR/2 (warn* OR response* OR recogn*) NEAR/2 (scor* OR system* OR indicator* OR scale* OR "monitoring" OR telemonitor*)) OR "MEWS" OR "NEWS2" OR "SEWS" OR "EWSS" OR VitalPAC* OR "track and trigger" OR ((arrest*) NEAR/2 ("risk") NEAR/2 (triage*)) OR AWTTTS OR SPTTS OR ((tele* OR remote*) NEAR/5 (alarm* OR alert* OR early-respons* OR vital-sign*) NEAR/5 (monitor* OR telemonitor* OR consult*)) OR (Daily* NEAR/5 monitor* NEAR/5 vital-sign*)) AND (((sensitivit* OR specificit* OR ((diagnostic) NEAR/2 (accurac* OR value*)) OR ((receiver*) NEAR/2 (operating*) NEAR/2 (characteristic*)) OR ((likelihood*) NEAR/2 (ratio*)) OR ((validation*) NEAR/2 (stud* OR proces*)) OR discriminat* OR calibration* OR ((development* OR

developing*) NEAR/5 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR tool OR system* OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR "track and trigger*")) AND ((mortalit* OR fatal* OR ((heart* OR cardiac* OR circulat* OR cardiopulm*) NEAR/2 (arrest* OR standstill* OR death*)) OR ICU OR intensive NEXT care* OR ((serious*) NEAR/2 (advers*) NEAR/2 (event*)) OR SAE OR length NEXT of NEXT stay* OR LOS))) NOT (((juvenil* OR adolescen* OR preadolescenc* OR youth* OR child* OR schoolchild* OR "minors" OR "teen" OR "teens" OR teenager* OR infan* OR toddler* OR pediater* OR paediatr* OR puber* OR "baby" OR "babies" OR girl* OR boy* OR newborn* OR neonate* OR premature* OR pre-matur* OR "kid" OR "kids" OR underag* OR kindergar* OR pubescen* OR prepubesc* OR school* OR preschool* OR highschool* OR suckling OR PICU OR NICU OR PICUs OR NICUs)) NOT ((adult* OR elderl* OR "man" OR "men" OR woman OR women))) NOT ((animal* OR "rat" OR rats OR mouse OR mice OR murine OR "dog" OR dogs OR canine OR "cat" OR "cats" OR feline OR rabbit OR "cow" OR "cows" OR bovine OR rodent* OR sheep OR ovine OR "pig" OR swine OR porcine OR veterinar* OR chick* OR zebrafish* OR baboon* OR nonhuman* OR primate* OR cattle* OR goose OR geese OR duck OR macaque* OR avian* OR bird* OR fish*) NOT (human* OR patient* OR women OR woman OR "men" OR "man")) AND (medic* OR biomedic* OR diseas* OR patient* OR health* OR clinic* OR hospital* OR transfus* OR cardiac* OR pulmon* OR dialys* OR blood* OR ulcer* OR stroke OR complication* OR adverse-event* OR adverse-effect* OR side-effect* OR adverse-effect* OR glucose* OR creatin* OR vitamin* OR hypotens* OR surger* OR intensive-care OR ICU OR IC OR operation* OR anesth* OR PACU OR "X-ray" OR death* OR intra-operat* OR post-operat* OR injur* OR organ* OR troponin* OR intub* OR reintub* OR readmis* OR emergenc*))

Cinahl

(TI(MH Early Warning Score OR ((MH Risk Assessment OR MH Vital Signs OR MH Early Diagnosis) AND (MH Remote Consultation OR MH Telemedicine OR MH Telenursing OR MH Telehealth)) OR (((early OR in-hospital*) N2 (warn* OR response* OR recogn*) N2 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor*)) OR (EWS NOT ewing*-sarcoma*) OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR "track and trigger" OR ((arrest*) N2 (risk) N2 (triage)) OR AWTTTS OR SPTTS OR ((tele* OR remote*) N5 (alarm* OR alert* OR early-respons* OR vital-sign*) N5 (monitor* OR telemonitor* OR consult*)) OR (Daily N5 monitor* N5 vital-sign*))) OR AB(MH Early Warning Score OR ((MH Risk Assessment OR MH Vital Signs OR MH Early Diagnosis) AND (MH Remote Consultation OR MH Telemedicine OR MH Telenursing OR MH Telehealth)) OR (((early OR in-hospital*) N2 (warn* OR response* OR recogn*) N2 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor*)) OR (EWS NOT ewing*-sarcoma*) OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR "track and trigger" OR ((arrest*) N2 (risk) N2 (triage)) OR AWTTTS OR SPTTS OR ((tele* OR remote*) N5 (alarm* OR alert* OR early-respons* OR vital-sign*) N5 (monitor* OR telemonitor* OR consult*)) OR (Daily N5 monitor* N5 vital-sign*))) AND (TI("Sensitivity and Specificity" OR MH Validity OR MH Calibration OR MH ROC Curve OR (sensitivit* OR specificit* OR ((diagnostic) N2 (accurac* OR value*)) OR ((receiver*) N2 (operating*) N2 (characteristic*)) OR ((likelihood*) N2 (ratio*)) OR ((validation*) N2 (stud* OR proces*)) OR discriminat* OR calibration* OR ((development* OR developing*) N5 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR tool OR system* OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR track-and-trigger*)))) OR AB("Sensitivity and Specificity" OR MH Validity OR MH Calibration OR MH ROC Curve OR (sensitivit* OR specificit* OR ((diagnostic) N2 (accurac* OR value*)) OR ((receiver*) N2 (operating*) N2 (characteristic*)) OR ((likelihood*) N2 (ratio*)) OR ((validation*) N2

(stud* OR proces*) OR discriminat* OR calibration* OR ((development* OR developing*) N5 (scor* OR system* OR indicator* OR scale* OR monitoring OR telemonitor* OR tool OR system* OR MEWS OR NEWS2 OR SEWS OR EWSS OR VitalPAC* OR track-and-trigger*)))) AND (TI((MH Mortality+ OR MH Fatal Outcome OR MH Heart Arrest+ OR MH Intensive Care Units+ OR MH Length of Stay OR (mortalit* OR fatal* OR ((heart* OR cardiac* OR circulat* OR cardiopulm*) N2 (arrest* OR standstill* OR death*)) OR ICU OR intensive-care* OR ((serious*) N2 (advers*) N2 (event*)) OR SAE OR length-of-stay* OR LOS))) OR AB((MH Mortality+ OR MH Fatal Outcome OR MH Heart Arrest+ OR MH Intensive Care Units+ OR MH Length of Stay OR (mortalit* OR fatal* OR ((heart* OR cardiac* OR circulat* OR cardiopulm*) N2 (arrest* OR standstill* OR death*)) OR ICU OR intensive-care* OR ((serious*) N2 (advers*) N2 (event*)) OR SAE OR length-of-stay* OR LOS))) NOT (TI((MH Child+ OR MH Adolescence+ OR (juvenil* OR adolescen* OR preadolescenc* OR youth* OR child* OR schoolchild* OR minors OR teen OR teens OR teenager* OR infan* OR toddler* OR pediater* OR paediatr* OR puber* OR baby OR babies OR girl* OR boy* OR newborn* OR neonate* OR premature* OR pre-matur* OR kid OR kids OR underag* OR kindergar* OR pubescen* OR prepubesc* OR school* OR preschool* OR highschool* OR suckling OR PICU OR NICU OR PICUs OR NICUs)) NOT (MH Adult+ OR (adult* OR elderl* OR man OR men OR woman OR women)))) OR AB((MH Child+ OR MH Adolescence+ OR (juvenil* OR adolescen* OR preadolescenc* OR youth* OR child* OR schoolchild* OR minors OR teen OR teens OR teenager* OR infan* OR toddler* OR pediater* OR paediatr* OR puber* OR baby OR babies OR girl* OR boy* OR newborn* OR neonate* OR premature* OR pre-matur* OR kid OR kids OR underag* OR kindergar* OR pubescen* OR prepubesc* OR school* OR preschool* OR highschool* OR suckling OR PICU OR NICU OR PICUs OR NICUs)) NOT (MH Adult+ OR (adult* OR elderl* OR man OR men OR woman OR women))))

Google Scholar

'early warning score|system|indicator|scale'|MEWS|NEWS2|SEWS|EWSS|VitalPAC
sensitivity|specificity|'diagnostic accuracy|value'|'receiver operating characteristic'|'likelihood ratio'
mortality|fatality|'heart|cardiac arrest|death'|ICU|SAE|los -child