Supplementary Materials

Appendix A. Full search strategy (completed on October 23, 2020)

1) Database

Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily and Ovid MEDLINE® 1946-Present, ***Embase Classic+Embase*** 1947 to 2020 October 22, ***PsycINFO*** 1806 to October Week 2 2020, ***Ovid Healthstar*** 1966 to August 2020

	Searches	**Results**
1	sbar.mp.	798
2	(situation adj4 background adj4 assess* adj4 recommend*).mp.	640
3	1 or 2	965
4	remove duplicates from 3	503

CINAHL

	Searches	**Results**
S1	(MH "SBAR Technique")	142
S2	TX sbar	389
S3	TX (situation N4 background N4 assess* N4 recommend*)	219
S4	S1 OR S2 OR S3	432
	Limited to Academic Journals	331

2) Hand search:

Variants of SBAR (ISBAR, ISBARR, ISoBAR, ISBARQ, SBARR) were hand searched as keywords within Pubmed, retrieving 48 results (25 after dedup).

Relevant journals in quality improvement and patient safety (BMJ Quality and Safety, Journal of Patient Safety, International Journal for Quality in Health Care, American Journal of Medical Quality, Journal for Healthcare Quality, and The Joint Commission Journal of Quality and Patient Safety) searched for SBAR as keyword, retrieving 3 results not found from database searches.

Appendix B: Supplementary Tables and Figures

Supplementary Table 1 Representative excluded studies and reasons for exclusion

Study	**Reason for Exclusion**
Campbell D, Dontje K. Implementing Bedside Handoff in the Emergency Department: A Practice Improvement Project. J Emerg Nurs. 2019;45(2):149-154.	Critical risk of bias
Christie P, Robinson H. Using a communication framework at handover to boost patient outcomes. Nurs Times. 2009;105(47):13-15.	Critical risk of bias
Freitag M, Carroll VS. Handoff communication: using failure modes and effects analysis to improve the transition in care process. Qual Manag Health Care. 2011;20(2):103-109.	Critical risk of bias
Haig KM, Sutton S, Whittington J. SBAR: a shared mental model for improving communication between clinicians. Jt Comm J Qual Patient Saf. 2006;32(3):167-175	Critical risk of bias
Hamilton P, Gemeinhardt G, Mancuso P, et al. SBAR and nurse-physician communication: Pilot testing an educational intervention. Nurs Adm Q. 2006;30(3):295-299.	Critical risk of bias
Martin HA, Ciurzynski SM. Situation, background, assessment, and recommendation–Guided huddles improve communication and teamwork in the emergency department. J Emerg Nurs. 2015;41(6):484-488.	Critical risk of bias
Ashcraft AS, Owen DC. Comparison of standardized and customized SBAR communication tools to prevent nursing home resident transfer. Appl Nurs Res. 2017;38:64-69.	Ineligible design (head-to-head comparison with no control)
Compton J, Copeland K, Flanders S, et al. Implementing SBAR across a large multihospital health system. Jt Comm J Qual Patient Saf. 2012;38(6):261-268.	Ineligible design (post-intervention data with no control)

Fabila TS, Hee HI, Sultana R, Assam PN, Kiew A, Chan YH. Improving postoperative handover from anaesthetists to non-anaesthetists in a children's intensive care unit: the receiver's perception. Singapore Med J. 2016;57(5):242-253.	Ineligible design (head-to-head comparison of SBAR techniques with no control)
Vardaman JM, Cornell P, Gondo MB, Amis JM, Townsend-Gervis M, Thetford C. Beyond communication: the role of standardized protocols in a changing health care environment. Health Care Manage Rev. 2012;37(1):88-97.	Ineligible design (qualitative)
van der Wulp I, Poot EP, Nanayakkara PWB, Loer SA, Wagner C. Handover Structure and Quality in the Acute Medical Assessment Unit: A Prospective Observational Study. J Patient Saf. 2019;15(3):224-229.	Ineligible design (post-intervention data with no control)
Zabar S, Adams J, Kurland S, et al. Charting a Key Competency Domain: Understanding Resident Physician Interprofessional Collaboration (IPC) Skills. J Gen Intern Med. 2016;31(8):846-853.	Ineligible design (post-intervention data with no control)
Blyth C, Bost N, Shiels S. Impact of an education session on clinical handover between medical shifts in an emergency department: A pilot study. Emerg Med Australas. 2017;29(3):336-341.	No eligible outcome (only one observer judged fidelity to SBAR)
Bowling AM. The effect of simulation on skill performance: a need for change in pediatric nursing education. J Pediatr Nurs. 2015;30(3):439-446.	No eligible outcome (only one observer judged fidelity to SBAR)
Brust-Sisti LA, Sturgill M, Volino LR. Situation, background, assessment, recommendation (SBAR) technique education enhances pharmacy student communication ability and confidence. Curr Pharm Teach Learn. 2019;11(4):409-416.	No eligible outcome (only one observer judged clarity of communication)
Cornell P, Gervis MT, Yates L, Vardaman JM. Improving shift report focus and consistency with the situation, background, assessment, recommendation protocol. J Nurs Adm. 2013;43(7-8):422-428.	No eligible outcome (focused on average time for shift reports)

Eberhardt S. Improve handoff communication with SBAR. Nursing. 2014;44(11):17-20.	No eligible outcome (focused on compliance with documentation)
Fahim Yegane SA, Shahrami A, Hatamabadi HR, Hosseini-Zijoud SM. Clinical Information Transfer between EMS Staff and Emergency Medicine Assistants during Handover of Trauma Patients. Prehosp Disaster Med. 2017;32(5):541-547.	No eligible outcome (only one observer judged fidelity to SBAR)
Halterman RS, Gaber M, Janjua MST, Hogan GT, Cartwright SMI. Use of a Checklist for the Postanesthesia Care Unit Patient Handoff. J Perianesth Nurs. 2019;34(4):834-841.	No eligible outcome (only one observer judged fidelity and communication outcomes)
Joffe E, Turley JP, Hwang KO, Johnson TR, Johnson CW, Bernstam EV. Evaluation of a problem-specific SBAR tool to improve after-hours nurse-physician phone communication: a randomized trial. Jt Comm J Qual Patient Saf. 2013;39(11):495-501.	No eligible outcome (only one observer judged fidelity to SBAR)
Kitney P, Tam R, Bennett P, Buttigieg D, Bramley D, Wang W. Handover between anaesthetists and post-anaesthetic care unit nursing staff using ISBAR principles: A quality improvement study. Journal of Perioperative Nursing in Australia. 2017;35(1):13-18.	No eligible outcome (only one observer judged communication outcomes)
Lautz AJ, Martin KC, Nishisaki A, et al. Focused Training for the Handover of Critical Patient Information During Simulated Pediatric Emergencies. Hosp Pediatr. 2018;8(4):227-231.	No eligible outcome (only one observer judged clarity of communication)
Moseley BD, Smith JH, Diaz-Medina GE, et al. Standardized sign-out improves completeness and perceived accuracy of inpatient neurology handoffs. Neurology. 2012;79(10):1060-1064.	No eligible outcome (self-reported knowledge and attitudes to SBAR)

Panesar RS, Albert B, Messina C, Parker M. The Effect of an Electronic SBAR Communication Tool on Documentation of Acute Events in the Pediatric Intensive Care Unit. Am J Med Qual. 2016;31(1):64-68.	No eligible outcome (focused on documentation quality for event notes)
Ramasubbu B, Stewart E, Spiritoso R. Introduction of the identification, situation, background, assessment, recommendations tool to improve the quality of information transfer during medical handover in intensive care. J Intensive Care Soc. 2017;18(1):17-23.	No eligible outcome (focused on documentation compliance and quality)
Raymond M, Harrison MC. The structured communication tool SBAR (Situation, Background, Assessment and Recommendation) improves communication in neonatology. S Afr Med J. 2014;104(12):850-852.	No eligible outcome (only one observer judged fidelity to SBAR)
Stevens N, McNiesh S, Goyal D. Utilizing an SBAR Workshop With Baccalaureate Nursing Students to Improve Communication Skills. Nurs Educ Perspect. 2020;41(2):117-118.	No eligible outcome (self-reported knowledge and attitudes to SBAR)
Toru V, Anggorowati, Santoso A. Effects of SBAR communication through telephone on the improvement of effective communication in implementing the patient safety program. Pakistan Journal of Medical & Health Sciences 2018;12(3):1334-1339.	No eligible outcome (only one observer judged communication outcomes)
Woodhall LJ, Vertacnik L, McLaughlin M. Implementation of the SBAR communication technique in a tertiary center. J Emerg Nurs. 2008;34(4):314-317.	No eligible outcome (self-reported knowledge and attitudes to SBAR)
Yu M, Kang KJ. Effectiveness of a role-play simulation program involving the sbar technique: A quasi-experimental study. Nurse Educ Today. 2017;53:41-47.	No eligible outcome (only one observer judged SBAR fidelity and clarity communication)

Supplementary Table 2. Study characteristics and outcomes

Author, Year	Study design	Setting	Study purpose and intervention	Type of communication	Outcome(s) included in review
*Classroom-based studies**					
Cunningham, 2012 [25]	RCT	University-affiliated hospital in Australia (Classroom)	To determine if teaching SBAR to junior doctors improves the quality of telephone referrals to more senior consulting physicians	Intradisciplinary (physician-physician) communication over telephone for help with patient	Fidelity of SBAR use Clarity of Communication
Marshall, 2009 [26]	RCT	Medical school in Australia (Classroom)	Teach ISBAR to final year medical students to improve how they communicate key clinical information in telephone referrals to consultant physicians	Intradisciplinary (physician-physician) telephone communication from students seeking help with patient management from supervising physicians	Fidelity of SBAR use Clarity of Communication
McCrory, 2012 [44]	Uncontrolled before-after	Academic medical centre in US (Classroom)	To improve communication between pediatric residents about deteriorating patients by teaching them a modified version of SBAR	Intradisciplinary (physician-physician) communication between pediatric residents calling rapid response team	Fidelity of SBAR use
Uhm, 2019 [27]	Controlled before-after	Nursing school and hospital in South Korea (Classroom)	To use experiential learning focused on SBAR to improve communication clarity and effectiveness for final-year nursing students concerning changes in patient status to physicians	Interdisciplinary (nurse-physician) for communicating potentially concerning changes in patient status	Fidelity of SBAR use Clarity of Communication
Studies in clinical setting					
Abbaszade, 2020 [48]	Uncontrolled before-after	Coronary care units at 2 public hospitals in Iran	To improve quality of nursing care by implementing SBAR at bedside nursing shift change	Intra disciplinary (nurse-nurse) communication for bedside shift change	Impact beyond communication • patient satisfaction
Andreoli, 2010 [31]	Controlled before-after	Two clinical units in a rehabilitation hospital at an academic medical center in Canada	To use SBAR to improve team communication related to falls risk assessment, prevention and management	Intradisciplinary and interdisciplinary - communication within clinical team (nurses, physicians, allied health professionals, unit managers, and non-clinical support staff) around fall prevention	Impact beyond communication • teamwork & patient safety climate
Beckett, 2013 [43]	Uncontrolled before-after	Large regional hospital in Scotland	To reduce unexpected cardiac arrests on hospital wards through a multifaceted intervention including an early warning system, other safety initiatives, and use of SBAR for communication during nursing handover	Intradisciplinary (nurse-nurse) communication during handover at change of shift	Impact beyond communication • cardiac arrest rate • cardiac arrest calls to team • 30-day mortality

Beckett, 2009 [46]	Uncontrolled before-after	5 pediatric and perinatal services units at community hospital in US	To improve communication, teamwork, staff satisfaction, and improved patient quality and safety by teaching SBAR to nurses and physicians from 5 units in pediatric/perinatal services department for handover	Interdisciplinary (nurse-physician) communication over telephone about urgent patient issues and intradisciplinary (nurse-nurse) during in-person for handover at shift change	Impact beyond communication • teamwork & safety climate
De Meester, 2013 [42]	Uncontrolled before-after	16 medical and surgical wards at a tertiary hospital in Belgium	To use SBAR to improve communication during nurse handover as well as calls to physicians about deteriorating patients as the second phase in an initiative that first implemented a rapid response team and modified early warning score	Intradisciplinary (nurse-nurse) and interdisciplinary (nurse-physician) communication during handover at nursing change of shift and telephone calls to physicians about potentially deteriorating patients	Impact beyond communication • unplanned ICU admissions • unexpected deaths
Field, 2011 [24]	RCT	26 Nursing homes in US	To improve anticoagulation management of nursing home residents by implementing a protocol involving SBAR to facilitate structured telephone communication between nurses and physicians	Interdisciplinary (nurse-physician) telephone communication over possible changes to warfarin dosing given current laboratory results and relevant clinical details	Impact beyond communication • quality of anticoagulation management
Leonard, 2019 [50]	Uncontrolled before-after	Privately owned Medicaid licensed home care agency in US	To improve management of care for heart failure patients by implementing modified SBAR communication tool	Interdisciplinary (nurse-physician) communication between home health nurse and physician	Impact beyond communication • referrals to ED • acute HF admissions
Ludikhuize, 2015 [40]	Uncontrolled before-after	Medical and surgical units at 12 university and non-teaching hospitals in The Netherlands	To improve timely recognition and management of deteriorating ward patients by implementing rapid response team, modified early warning score, and structured communication using SBAR	Interdisciplinary (nurse-physician) communication ward nurses requesting help for patients with concerning early warning scores and physicians on medical emergency team	Impact beyond communication • composite of cardiopulmonary arrest, unplanned ICU admission, or death • cardiopulmonary arrest • unplanned ICU admission • death
Mullany, 2016 [39]	Uncontrolled before-after	University-affiliated tertiary Hospital in Australia	To improve recognition and management of deteriorating ward patients by implementing a rapid response system including a medical emergency team, use of a modified early warning score and ISBAR tool for communication	Interdisciplinary (nurse-physician) communication between ward nurse requesting help and physician on medical emergency team	Impact beyond communication • hospital mortality • in-hospital cardiac arrest • emergency ICU admissions

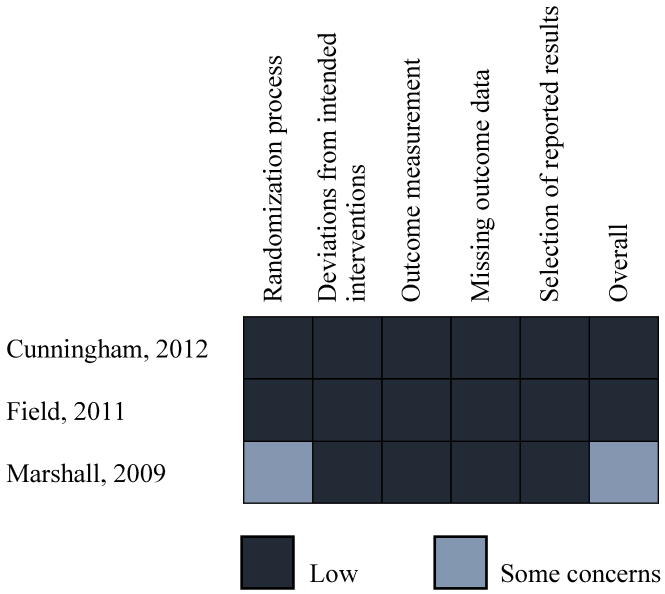
Potts, 2018 [34]	Uncontrolled before-after	Academic medical centre in US	To improve handover from the ED to medical units receiving newly admitted patient by changing from unstructured verbal handover to structured tool informed by SBAR and embedded in electronic medical record	Intradisciplinary (nurse-nurse) communication between ED nurse and nurse on medical ward	Impact beyond communication • efficiency of patient flow
Randmaa, 2014 [28] & 2016 [29]	Controlled before-after	2 Hospitals in Sweden	To evaluate the effects of structured communication using SBAR on post-operative handover	Interdisciplinary handover communication from operating room personnel (nurses or physicians) to nurses in post-anaesthesia care unit	Clarity of Communication Impact beyond communication • teamwork & safety climate • incident reports involving communication errors
Sermersheim, 2020 [49]	Uncontrolled before-after	Academic medical centre in US	To improve handover of patients moving to lateral or lower levels of care units by implementing SBAR-based handover tool embedded in electronic medical record	Intradisciplinary (nurse-nurse) communication between ED nurse and nurse on medical ward	Impact beyond communication • efficiency of patient flow (patient throughput, aka assign-to-occupy time)
Shahid, 2020 [47]	Uncontrolled before-after	Paediatric referral hospital in Canada	To improve communication between neonatal transport team members and physicians about patients in need of urgent transportation from referring hospital by implementing modified SBAR	Interdisciplinary (nurse-physician) communication over telephone between neonatal transport team members or nurses operating from remote sites and physicians providing decision-making support at receiving care facilities	Fidelity of SBAR use Clarity of Communication
Smith, 2018 [35]	Uncontrolled before-after	University hospital in US	To use structured communication based on a modified version of SBAR to improve at handover from ED to medical unit for newly admitted patients	Intradisciplinary (physician-physician) telephone communication between ED physician and physician on medical unit	Fidelity of SBAR use Quality of Communication
Street, 2018 [33]	Uncontrolled before-after	Post-anaesthesia care units at 3 affiliated hospitals in Australia	To use a structured communication tool (ISOBAR) to improve handover for post-operative patients	Intradisciplinary (nurse-nurse) communication between post-anaesthetic care unit and ward receiving patient	Impact beyond communication • nurses' recognition of and responsiveness to common postoperative complications • adverse events • length of stay
Telem, 2011 [30]	Controlled before-after	Academic medical centre in US	To improve daily handoffs among surgical residents by incorporating SBAR	Intradisciplinary (physician-physician) communication about patient status at end-of- shift handover	Impact beyond communication • sentinel events • physician order entry errors

Thompson, 2011 [45]	Uncontrolled before-after	Tertiary teaching hospital in Australia	To improve communication between medical trainees at end of shift handover by teaching them ISBAR	Intradisciplinary (physician-physician) communication between junior doctor finishing shift and incoming colleague	Fidelity of SBAR use
Ting, 2017 [38]	Uncontrolled before-after	Obstetrics department in hospital in Taiwan	To evaluate the effects of implementing SBAR when nurses communicate abnormal fetal heart tracings to obstetricians	Interdisciplinary (nurse-physician) telephone communication between nurse in labour and delivery unit and covering obstetrician	Impact beyond communication • teamwork & safety climate • Apgar scores
Townsend-Gervis, 2014 [41]	Uncontrolled before-after	3 medical/surgical units at an acute care hospital in US	To improve patient outcomes through structured communication using SBAR in daily interdisciplinary rounds	Intradisciplinary (nurse-nurse) communication for shift reports Interdisciplinary (nurse-allied health) communication during rounds	Impact beyond communication • patient satisfaction • appropriate removal of urinary catheters • 30-day readmission
Uhm, 2018 [36]	Uncontrolled before-after	Paediatric hospital in South Korea	To improve communication about patients being transferred from intensive care to general ward by using structured handover tool based on SBAR	Intradisciplinary (nurse-nurse) communication between intensive care nurse and nurse receiving patient on ward	Fidelity of SBAR use
Velji, 2008 [32]	Controlled before-after	Stroke unit at an academic rehabilitation hospital in Canada	To use SBAR to improve communication among team members regarding both urgent and non-urgent patient safety issues	Intradisciplinary and interdisciplinary - team general communication (e.g., change in patient care plan, discharge planning, specific safety issues)	Impact beyond communication • team communication and patient safety climate
Vlitos, 2016 [51]	Uncontrolled before-after	2 adult mental health units in Scotland	To improve communication between multidisciplinary team members by implementing modified SBAR communication tool	Interdisciplinary (nurse-physician) communication between ward staff and physician on duty	Clarity of Communication
Wilson, 2017 [37]	Uncontrolled before-after	Paediatric referral hospital in Canada	To improve quality of communication about patients in need of urgent transportation from referring hospitals by implementing SBAR	Interdisciplinary (nurse-physician-respiratory therapist) communication over telephone between inter-hospital transport team and receiving hospital	Fidelity of SBAR use Clarity of Communication

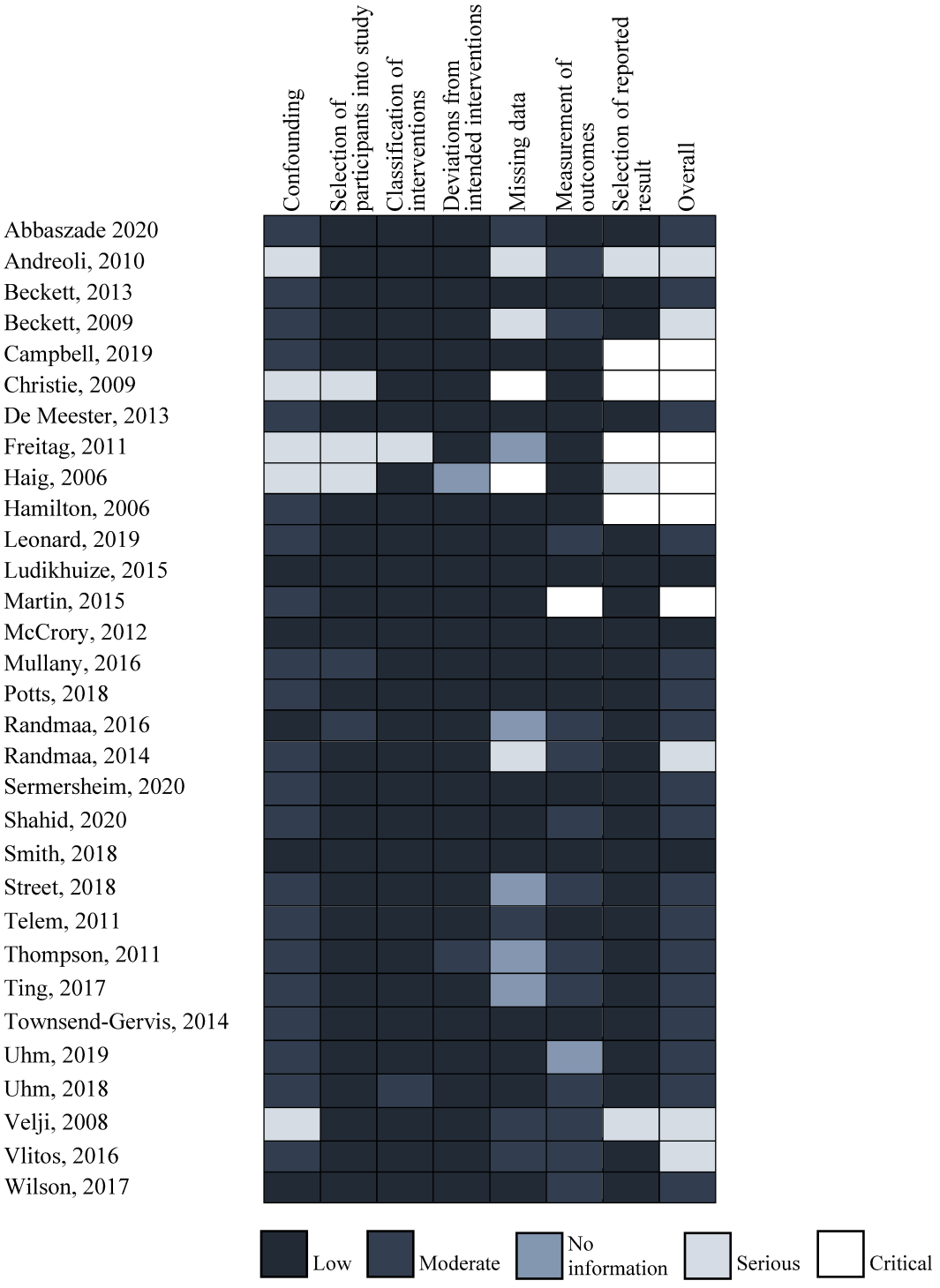
RCT – Randomized controlled trial; SBAR – Situation, Background, Assessment, Recommendation; ISBAR – Identification of self followed by standard SBAR; ISOBAR – Introduction/Identification, Situation, Observation, Background, Assessment, Request (for action to be performed by recipient of handover); ED – Emergency Department; US – United States

* The setting is characterised as in classroom when the outcomes were measured in a simulation centre or classroom setting. Some studies taught participants how to perform SBAR using simulation but then measured use of SBAR in clinical practice. Such studies were not considered to take place in the classroom.

Supplementary Figure 1a. Risk of Bias Assessment of Included Studies using ROB 2.0



Supplementary Figure 1b. Risk of Bias Assessment of Included Studies using ROBINS-I tool



Supplementary Table 3. Effect of SBAR on impacts beyond communication

Author, Year	SBAR intervention	SBAR training modality, duration and intensity	Intervention components other than SBAR	Outcome Measures	Reported Results	Relative improvement
Abbaszade, 2020 [48]	SBAR training and implementation for nurses for nurse-nurse communication at shift change in coronary care units	Didactic for 1 hr (offered 5 times)	None	Patient Satisfaction (Quality Patient Care Scale)	Psychosocial Dimension: 55.34 ± 12.27 (pre) to 67.70 ± 7.26 (post), p<0.001	Moderate (22%)
					Physical Dimension: 48.86 ± 15.90 (pre) to 60.18 ± 7.82 (post), p<0.001	Moderate (23%)
					Communicative Dimension: 23.86 ± 7.57 (pre) to 30.09 ± 4.61 (post), p<0.001	Moderate (26%)
Andreoli, 2010 [31]	SBAR implementation and training for nurses, physicians, other health disciplines, support staff, unit leaders in geriatric and the musculoskeletal rehabilitation units for communication for falls prevention and management	Didactic and role-playing for 4h	None	Patient safety culture (AHRQ Hospital Survey on Patient Safety Culture)	Between the study units and rest of the hospital, 2 of the 12 dimensions (organizational learning, and teamwork across hospital units), significant based on critical ratio test	Small* (10% - 18%)
Beckett, 2013 [43]	SBAR implementation and training for nursing handover in acute admissions unit	Not reported	Early warning system and other larger safety initiatives targeting cardiac arrest rate	Cardiac arrests / 1000 admissions	2.8 (pre) to 0.8 (post), significant (p-value unreported)	Large (71%)
				Cardiac arrest calls from AAU to team / 1000 admissions	4.9 (pre) to 1.3 (post), significant (p-value unreported)	Large (73%)
				30-day mortality of patients admitted to AAU	6.3% (pre) to 4.8% (post), significant (p-value unreported)	Moderate (24%)
Beckett, 2009 [46]	SBAR training for nurses and physicians (though none attended) in pediatric / perinatal services department for nurse-physician communication for multiple purposes, including patient status	Didactic, role-playing and video vignettes for 1h (offered over 16 sessions)	None	Safety climate (Teamwork and Safety Climate Survey)	6 of 14 items showed statistically significant changes	Small to Moderate* (9% - 21%)
				Teamwork (Teamwork and Safety Climate Survey)	6 of 13 items with statistically significant changes	Small to Moderate* (7% - 20%)
De Meester, 2013 [42]	SBAR training for nurses for nurse-nurse communication at rounds or shift change handover and nurse-physician communication about deteriorating patient on medical/surgical wards	Didactic and role-playing for 2d on SBAR for reference nurses, for 2h on SBAR for other nurses, and 4h on early detection	Efferent Rapid Response System (included modified early warning system, emphasis on patient assessment, policy to communicate with providers of efferent limb of RRS)	Unplanned ICU admissions / 1000 admissions	13.1 (pre) to 14.8 (post), p = 0.001	Small (13%) *intended direction*
				Unexpected deaths / 1000 admissions	1.0 (pre) to 0.3 (post), p<0.001	Large (66%)
				Mortality / 1000 admissions	10.3 (pre) to 10.6 (post), not significant	Small (3%)

Field, 2011 [24]	Implementation of clinically-embedded paper SBAR template (with prompts) and SBAR training to standardize nurse-physician telephone communication about residents on warfarin in nursing homes	Not reported	Warfarin protocol, (includes methods to identify and highlight residents on warfarin, procedures for tracking and communicating INR results)	Time INR values in therapeutic range	SBAR exposure: 53.1% vs Control: 50.0%, significant (p-value unreported)	Small (6%)
				INR ≥4.5 obtaining follow-up INR within 3 days	SBAR exposure: 64.6% vs Control: 71.7%, not significant	Small (10%)
				Preventable adverse warfarin-related events / 100 resident months	SBAR exposure: 2.3 vs Control: 2.4, not significant	Small (5%)
Leonard, 2019 [50]	SBAR implementation and training for nurses for nurse-physician communication for immediate help with patient	Didactic	None	Referrals to ED	0/10 (pre) to 0/11 (post)	No effect
				Acute HF admissions	5/10 (pre) to 0/11 (post)	Large (100%)
Ludikhuize, 2015 [40]	SBAR implementation and training for nurses and physicians for nurse-physician communications of modified early warning score ≥ 3 for immediate assessment of patient in medical/surgical wards	Not reported	Rapid Response System (includes modified early warning system)	Cardiopulmonary arrest, unplanned ICU admission, or death / 1000 admissions	37.1 (pre) to 32.9 (post), p=0.04	Small (11%)
				Cardiopulmonary arrests / 1000 admissions	1.9 (pre) to 1.2 (post), p=0.02	Moderate (37%)
				In-hospital mortality / 1000 admissions	20.4 (pre) to 17.7 (post), p=0.05	Small (13%)
				Unplanned ICU admission / 1000 admissions	19.8 (pre) to 17.7 (post), not significant	Small (11%)
Mullany, 2016 [39]	ISBAR training for nurses and physician for escalation of patient status in teaching hospital	Role-playing for 2h in single session	Rapid Response System (includes medical emergency team and modified early warning system)	MET calls / 1000 separations	8.2 (pre) to 9.5 (post), significance unreported	Small (16%)
				Cardiac arrest calls / 1000 separations	5.5 (pre) to 3.3 (post), p <0.001	Moderate (40%)
Potts, 2018 [34]	Implementation of clinically-embedded SBAR for nursing handover from ED to medical unit	Didactic for 1h on 3 shifts of work day	None	RTM-to-occupied times	83.6 min (pre) to 49 min (3 weeks post), significance not reported	Large (41%)
					83.6 min (pre) to 47 min (10 months post), significance not reported	Large (44%)
Randmaa, 2014 [28]	SBAR implementation and training for nurses and physicians in anaesthetic clinic for nurse-nurse communication and nurse-physician communication for multiple purposes, including handoffs	Didactic and role-playing for 2.5h	None	Safety climate (Safety Attitudes Questionnaire)	63.1 ± 15.8 (pre) to 66.4 ± 16.2 (post), p=0.011	Small (5%)
Sermersheim, 2020 [49]	Implementation of clinically-embedded electronic SBAR tool for nursing handover between units (e.g., ED to general medical unit)	Didactic	None	Assign-to-occupied times	97 min (pre) to 55 min (1 week post), significance not reported	Large (43%)
					97 min (pre) to 60 min (2.5 years post), significance not reported	Moderate (38%)

Street, 2018 [33]	Implementation of iSoBAR (with prompts) within post-anaesthetic care tool (PACT) and training (targeting nurses) for nurse-nurse handover on discharge in three PACUs	Not reported	Other parts of PACT: e.g., additional assessment criteria for patient readiness for discharge from PACU	Recognition of Adverse events in PACU	8.3% (pre) to 16.7% (post), p<0.001	Large (101%)
				LOS in PACU for all patients in mins	45 (pre) to 53 (post), p<0.001	Small (18%)
				LOS in PACU for patients with PACU adverse event in mins	100 (pre) to 84 (post), p=0.027	Small (16%)
				LOS in hospital for all PACU patients in days	0.5 (pre) to 1.0 (post), p=0.026	Large (100%)
Telem, 2011 [30]	SBAR training for general surgery interns for nurse-physician communication for immediate help with patient and physician-physician communication about patient status at handover	Video scenario discussions and role-playing for 2.5h in single session	None	Duplicated, cancelled, and wrong patient order entries	SBAR exposure: 14.5% (pre) to 12.2% (post), p=0.003	Small (16%)
Ting, 2017 [38]	SBAR Implementation and training for nurses to support nurse-physician communication when abnormal fetal heart beat tracings occurred in obstetrics department	Didactic and video demonstrations for 15 mins	None	Safety climate (Safety Attitudes Questionnaire)	61.1 ± 10.9 (pre) to 71.0 ± 15.5 (2nd post), p=0.0007	Small (16%)
				Teamwork (Safety Attitudes Questionnaire)	58.6 ± 11.2 (pre) to 70.8 ± 15.1 (2nd post), p=0.006	Moderate (21%)
				Number of neonates with <7 5-minute scores	4.3% (pre) to 5% (post), p=0.49	Small (16%)
Townsend-Gervis, 2014 [41]	SBAR implementation and training (targeting nurses) for nurse-nurse and nurse-allied health communications in daily interdisciplinary rounds on medical/surgical units	Didactic and role-playing	Re-admission risk assessment (efforts to highlight risk factors in structured manner)	Foley catheter removal	78% (pre) to 94% (post), p<0.001	Moderate (20%)
				Re-admission rate	14.5% (pre) to 5.2% (post), p<0.001	Large (64%)
				Patient satisfaction	69% (pre) to 74% (post), not significant	Small (7%)
Velji, 2008 [32]	SBAR implementation and training for nurses, physicians, other health disciplines, support staff and unit leaders for nurse-nurse communication at rounds or shift change and nurse-physician communication for immediate help with patient	Didactic and role-playing for 4h	None	Patient safety culture (AHRQ Hospital Survey on Patient Safety Culture)	Between the study unit and rest of the hospital, 2 of the 12 dimensions (organizational learning, and feedback and communication about error), significant based on critical ratio test	Moderate* (25% - 42%)

SBAR – Situation, Background, Assessment, Recommendation; ISBAR – Identification of self followed by SBAR; iSoBAR – Identification of self and patient, Situation, Observations, Background, Agreed plan, Read back

*refers only to items that are statistically significant