

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Title	Authors	Year	Journal	Volume	Issue	Pages	DOI	Covidence #	Exclusion reason
'ALLHAT' and innovations in nursing: how a project based on findings of the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial is changing practice at one hospital	Phillips-Edwards, A.; Collins-Smith, R.; Camacho Del Rio, G.; Brown, C.; Wu, L.; Singh, H.	2007	American Journal of Nursing	107	5	72C-H		#9615	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A 3-armed randomized controlled trial of nurses' continuing education meetings on adverse drug reactions	Sarayani, A.; Naderi-Behdani, F.; Hadavand, N.; Javadi, M.; Farsad, F.; Hadjibabaie, M.; Gholami, K.	2015	J Contin Educ Health Prof	35	2	123-30	10.1002/chp.21276	#14515	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A Clinical Decision Support System to Prevent Aggression and Reduce Restrictive Practices in a Forensic Mental Health Service	Griffith, J. J.; Meyer, D.; Maguire, T.; Ogloff, J. R. P.; Daffern, M.	2021	Psychiatr Serv	72	8	885-890	10.1176/appi.ps.202000315	#20582	Exclusion reason: Wrong intervention (not an implementation intervention)
A clinical trial of chronic care diabetic clinics in general practice in the United Arab Emirates: a preliminary analysis	Reed, R. L.; Revel, A. O.; Carter, A.; Saadi, H. F.; Dunn, E. V.	2001	Arch Physiol Biochem	109	3	272-80	10.1076/apab.109.3.272.11591	#2329	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A clinical trial of tailored office systems for preventive service delivery: The Study to Enhance Prevention by Understanding Practice (STEP-UP)	Goodwin, M. A.; Zyzanski, S. J.; Zronek, S.; Ruhe, M.; Weyer, S. M.; Konrad, N.; Esola, D.; Stange, K. C.	2001	American Journal of Preventive Medicine	21	1	20-28	http://dx.doi.org/10.1016/S0749-3797%2801%2900310-5	#3118	Exclusion reason: Wrong population (not nurses)
A cluster randomised trial: Comfort around dying in older people	Beernaert, K.; Smets, T.; Cohen, J.; Verhofstede, R.; Costantini, M.; Eecloo, K.; Van Den Noortgate, N.; Deliens, L.	2016	European Geriatric Medicine	7	Supplement 1	S21		#14707	Exclusion reason: Wrong type of paper (not a research article)
A Cluster-Randomized Clinical Trial to Decrease Prescription Opioid Misuse: Improving the Safety of Opioid Therapy (ISOT)	Morasco, B. J.; Adams, M. H.; Hooker, E. R.; Maloy, P. E.; Krebs, E. E.; Lovejoy, T. I.; Saha, S.; Dobscha, S. K.	2022	JOURNAL OF GENERAL INTERNAL MEDICINE	37	15	3805-3813	https://dx.doi.org/10.1007/s11606-022-07476-7	#21476	Exclusion reason: Wrong population (not nurses)
A cluster-randomized trial of an educational intervention to reduce the use of physical restraints with psychogeriatric nursing home residents	Huizing, A. R.; Hamers, J. P.; Gulpers, M. J.; Berger, M. P.	2009	J Am Geriatr Soc	57	7	1139-48	10.1111/j.1532-5415.2009.02309.x	#8321	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A clustered randomized control trial of pocket alcohol-based hand rubs intervention in the control of infections in long-term care facilities	Yeung, Wing Kin	2012		73		3573-3573		#17030	Exclusion reason: Wrong population (not nurses)
A collaborative care intervention to improve opioid prescribing among providers caring for persons with HIV: Impact on satisfaction, confidence, and trust	Colasanti, J. A.; Del Rio, C.; Cheng, D. M.; Liebschutz, J. M.; Lira, M. C.; Tsui, J. I.; Walley, A. Y.; Forman, L. S.; Root, C.; Shanahan, C. W.; Briden, C. L.; Harris, C.; Outlaw, K.; Armstrong, W. S.; Samet, J. H.	2022	Drug Alcohol Depend	231		109250	10.1016/j.drugalcdep.2021.109250	#20201	Exclusion reason: Wrong population (not nurses)
A comparative study on effect of e-learning and instructor-led methods on nurses' documentation competency	Abbaszadeh, Abbas; Sabeghi, Hakimeh; Borhani, Fariba; Heydari, Abbas	2011	Iranian journal of nursing and midwifery research	16	3	235		#19717	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A comprehensive assessment program to improve blood-administering practices using the FOCUS-PDCA model	Saxena, S.; Ramer, L.; Shulman, I. A.	2004	Transfusion	44	9	1350-6	10.1111/j.1537-	#1396	Exclusion reason: Wrong study design (not a RCT)

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							2995.2004.03 117.x		or a nonrandomized controlled study)
A computerized intervention to decrease the use of calcium channel blockers in hypertension	Rossi, R. A.; Every, N. R.	1997	J Gen Intern Med	12	11	672-8		#3968	Exclusion reason: Wrong population (not nurses)
A controlled evaluation of a lifts and transfer educational program for nurses	Gray, J.; Cass, J.; Harper, D. W.; O'Hara, P. A.	1996	Geriatr Nurs	17	2	May-81		#4225	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A controlled quality improvement trial to reduce the use of physical restraints in older hospitalized adults	Enns, E.; Rhemtulla, R.; Ewa, V.; Fruetel, K.; Holroyd-Leduc, J. M.	2014	J Am Geriatr Soc	62	3	541-5	10.1111/jgs.12710	#15977	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
A controlled trial of an intervention to increase resident choice in long term care	Schnelle, J. F.; Rahman, A.; Durkin, D. W.; Beuscher, L.; Choi, L.; Simmons, S. F.	2013	J Am Med Dir Assoc	14	5	345-51	10.1016/j.jamda.2012.11.013	#16311	Exclusion reason: Wrong population (not nurses)
A cooperative communication intervention for nursing home staff and family members of residents	Pillemer, K.; Suitor, J. J.; Henderson, C. R., Jr.; Meador, R.; Schultz, L.; Robison, J.; Hegeman, C.	2003	Gerontologist	43 Spec No 2		96-106		#1975	Exclusion reason: Wrong population (not nurses)
A course for nurses to handle difficult communication situations. A randomized controlled trial of impact on self-efficacy and performance	Doyle, D.; Copeland, H. L.; Bush, D.; Stein, L.; Thompson, S.	2011	Patient Educ Couns	82	1	100-9	10.1016/j.pec.2010.02.013	#7321	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice);
A flowchart system to improve fall data documentation in a long-term care institution: a pilot study	Montero-Odasso, M.; Levinson, P.; Gore, B.; Epid, D.; Tremblay, L.; Bergman, H.	2007	J Am Med Dir Assoc	8	5	300-6	10.1016/j.jamda.2006.12.031	#9670	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
A knowledge translation intervention to improve cholesterol management in diabetes in remote aboriginal communities	Bhattacharyya, Onil Kumar Yves	2007		68		3668-3668		#9801	Exclusion reason: Wrong type of paper (not a research article)
A mixed-methods evaluation of the effectiveness of tailored smoking cessation training for healthcare practitioners who work with older people	Kerr, S.; Whyte, R.; Watson, H.; Tolson, D.; McFadyen, A. K.	2011	Worldviews on evidence-based nursing / Sigma Theta Tau International, Honor Society of Nursing	8	3	177-186		#6647	Exclusion reason: Wrong population (not nurses)
A Mobile Device App to Reduce Time to Drug Delivery and Medication Errors During Simulated Pediatric Cardiopulmonary Resuscitation: A Randomized Controlled Trial	Siebert, Johan N.; Ehrler, Frederic; Combescure, Christophe; Lacroix, Laurence; Haddad, Kevin; Sanchez, Oliver; Gervaix, Alain; Lovis, Christian; Manzano, Sergio	2017	Journal of Medical Internet Research	19	2	01-Jan	10.2196/jmir.7005	#12442	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A multi-faceted tailored strategy to implement an electronic clinical decision support system for pressure ulcer prevention in nursing homes: a two-armed randomized controlled trial	Beeckman, D.; Clays, E.; Van Hecke, A.; Vanderwee, K.; Schoonhoven, L.; Verhaeghe, S.	2013	Int J Nurs Stud	50	4	475-86	10.1016/j.ijnursta.2012.09.007	#16913	Exclusion reason: Wrong population (not nurses)
A multicenter study using positive deviance for improving hand hygiene compliance	Marra, A. R.; Noritomi, D. T.; Westheimer Cavalcante, A. J.; Sampaio Camargo, T. Z.; Bortoleto, R. P.; Durao Junior, M. S.; Apisarnthanarak, A.;	2013	American Journal of Infection Control	41	11	984-988	http://dx.doi.org/10.1016/j.ajic.2013.05.013	#16977	Exclusion reason: Wrong population (not nurses);

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	Laselva, C.; De Souza Pimentel, W.; Rolim Ferraz, L. J.; Fatima Dos Santos Cardoso, M.; Da Silva Victor, E.; Pavao Dos Santos, O. F.; Neto, M. C.; Edmond, M. B.									
A multicentre randomised controlled trial of an intervention to improve the accuracy of linear growth measurement	Lipman, T. H.; Hench, K. D.; Benyi, T.; Delaune, J.; Gilluly, K. A.; Johnson, L.; Johnson, M. G.; McKnight-Menci, H.; Shorkey, D.; Shults, J.; Waite, F. L.; Weber, C.	2004	Arch Dis Child	89	4	342-6		#1442	Exclusion reason: Wrong population (not nurses)	
A multicentre randomised controlled trial of reciprocal lung cancer peer review and supported quality improvement: results from the improving lung cancer outcomes project	Russell, G. K.; Jimenez, S.; Martin, L.; Stanley, R.; Peake, M. D.; Woolhouse, I.	2014	Br J Cancer	110	8	1936-42	10.1038/bjc.2014.146	#15924	Exclusion reason: Wrong population (not nurses)	
A multicentre randomized controlled trial of an intervention to improve the accuracy of linear growth measurement	Lipman, T. H.; Hench, K. D.; Benyi, T.; Delaune, J.; Gilluly, K. A.; Johnson, L.; Johnson, M. G.; McKnight-Menci, H.; Shorkey, D.; Shults, J.; Waite, F. L.; Weber, C.	2004	Archives of Disease in Childhood	89	4	342-346	http://dx.doi.org/10.1136/adc.2003.030072	#1441	Exclusion reason: Wrong population (not nurses)	
A multidisciplinary approach for improving services in primary care: randomised controlled trial of screening for haemoglobin disorders	Modell, M.; Wonke, B.; Anionwu, E.; Khan, M.; Tai, S. S.; Lloyd, M.; Modell, B.	1998	BMJ	317	7161	788-91		#3692	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
A multidisciplinary community hospital program for early and rapid resuscitation of shock in nontrauma patients	Sebat, F.; Johnson, D.; Musthafa, A. A.; Watnik, M.; Moore, S.; Henry, K.; Saari, M.	2005	CHEST	127	5	1729-43	10.1378/chest.127.5.1729	#725	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
A Multifaceted Antimicrobial Stewardship Program for the Treatment of Uncomplicated Cystitis in Nursing Home Residents	Nace, D. A.; Hanlon, J. T.; Crnich, C. J.; Drinka, P. J.; Schweon, S. J.; Anderson, G.; Perera, S.	2020	JAMA Intern Med	180	7	944-951	10.1001/jamainternmed.2020.1256	#18512	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
A multifaceted intervention improves antibiotic stewardship for skin and soft tissues infections	May, L.; Nguyen, M. H.; Trajano, R.; Tancredi, D.; Aliyev, E. R.; Mooso, B.; Anderson, C.; Ondak, S.; Yang, N.; Cohen, S.; Wiedeman, J.; Miller, L. G.	2020	American Journal of Emergency Medicine.						#18618	Exclusion reason: Wrong population (not nurses)
A multifaceted intervention improves antibiotic stewardship for skin and soft tissues infections	May, L.; Nguyen, M. H.; Trajano, R.; Tancredi, D.; Aliyev, E. R.; Mooso, B.; Anderson, C.; Ondak, S.; Yang, N.; Cohen, S.; Wiedeman, J.; Miller, L. G.	2021	Am J Emerg Med	46		374-381	10.1016/j.ajem.2020.10.017	#21355	Exclusion reason: Wrong population (not nurses)	
A Multifaceted Intervention to Implement Guidelines Did Not Affect Hospitalization Rates for Nursing Home-Acquired Pneumonia	Hutt, E.; Ruscini, J. M.; Linnebur, S. A.; Fish, D. N.; Oman, K. S.; Fink, R. M.; Radcliff, T. A.; Van Dorsten, B.; Liebrecht, D.; Fish, R.; McNulty, M. C.	2011	Journal of the American Medical Directors Association	12	7	499-507	10.1016/j.jamd.2010.03.011	#6697	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
A multifaceted intervention to implement guidelines improved treatment of nursing home-acquired pneumonia in a state veterans home	Hutt, E.; Ruscini, J. M.; Corbett, K.; Radcliff, T. A.; Kramer, A. M.; Williams, E. M.; Liebrecht, D.; Klenke, W.; Hartmann, S.	2006	Journal of the American Geriatrics Society	54	11	1694-1700	10.1111/j.1532-5415.2006.00937.x	#10667	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
A Multimethod Improvement Project to Strengthen Intermittent Auscultation	Romano, A. M.; Buxton, M.	2020	Journal of Midwifery &	65	3	362-369	10.1111/jmwh.13113	#17807	Exclusion reason: Wrong study design (not a RCT)	

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Practice Among Nurse-Midwives and Nurses			Womens Health						or a nonrandomized controlled study)
A multisite randomized trial of the effects of physician education and organizational change in chronic-asthma care: health outcomes of the Pediatric Asthma Care Patient Outcomes Research Team II Study	Lozano, P.; Finkelstein, J. A.; Carey, V. J.; Wagner, E. H.; Inui, T. S.; Fuhlbrigge, A. L.; Soumerai, S. B.; Sullivan, S. D.; Weiss, S. T.; Weiss, K. B.	2004	Arch Pediatr Adolesc Med	158	9	875-83	10.1001/archpedi.158.9.875	#1436	Exclusion reason: Wrong population (not nurses)
A new evidence-based model for weight management in primary care: the Counterweight Programme	Laws, R.	2004	J Hum Nutr Diet	17	3	191-208	10.1111/j.1365-277X.2004.00517.x	#1458	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
A nurse-facilitated depression screening program in an army primary care clinic: An evidence-based project	Yackel, Edward E.; McKennan, Madelyn S.; Fox-Deise, Adrianna	2010	Nursing Research	59	Suppl 1	S58-S65	10.1097/NNR.0b013e3181c3cab6	#7060	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
A nursing-implemented sedation protocol and the duration of mechanical ventilation	McKinley, S.	2000	Aust Crit Care	13	2	Apr-72		#2885	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A pilot study testing the feasibility of skin temperature monitoring to reduce recurrent foot ulcers in patients with diabetes--a randomized controlled trial	Skafjeld, A.; Iversen, M. M.; Holme, I.; Ribu, L.; Hvaal, K.; Kilhovd, B. K.	2015	BMC Endocr Disord	15		55	10.1186/s12902-015-0054-x	#14985	Exclusion reason: Wrong population (not nurses)
A prospective controlled trial of the effect of a multi-faceted intervention on early recognition and intervention in deteriorating hospital patients	Mitchell, I. A.; McKay, H.; Van Leuvan, C.; Berry, R.; McCutcheon, C.; Avar, B.; Slater, N.; Neeman, T.; Lamberth, P.	2010	Resuscitation	81	6	658-66	10.1016/j.resuscitation.2010.03.001	#7183	Exclusion reason: Wrong population (not nurses)
A public health approach to increase treatment of latent TB among household contacts in Brazil	Bastos, M. L.; Oxlade, O.; Benedetti, A.; Fregonese, F.; Valiquette, C.; Lira, S. C. C.; Carvalho-Cordeiro, D.; Cavalcante, J. R.; Faerstein, E.; Albuquerque, M. F. M.; Cordeiro-Santos, M.; Hill, P. C.; Menzies, D.; Trajman, A.	2020	International Journal of Tuberculosis and Lung Disease	24	10	1000-1008		#19418	Exclusion reason: Wrong population (not nurses)
A quality improvement initiative advancing CLL care practices across four US health systems	Davids, M. S.; Mato, A. R.; Pagel, J. M.; Lad, T.; Mateka, J. J. L.; Heggen, C.; Carter, J. D.; Sapir, T.	2017	Blood	130	Supplement 1			#12803	Exclusion reason: Wrong type of paper (not a research article)
A quality improvement intervention to address provider behaviour as it relates to utilisation of CA-MRSA guidelines	Velez, Roseann P.; Becker, Kathleen Lent; Davidson, Patricia; Sloand, Elizabeth	2015	Journal of Clinical Nursing	24	04-Mar	556-562	10.1111/jocn.12684	#14342	Exclusion reason: Wrong population (not nurses)
A quality improvement intervention to increase palliative care in nursing homes	Hanson, L. C.; Reynolds, K. S.; Henderson, M.; Pickard, C. G.	2005	J Palliat Med	8	3	576-84	10.1089/jpm.2005.8.576	#1001	Exclusion reason: Wrong population (not nurses)
A quasi-experiment assessing the six-months effects of a nurse care coordination program on patient care experiences and clinician teamwork in community health centers	Nembhard, I. M.; Buta, E.; Lee, Y. S. H.; Anderson, D.; Zlateva, I.; Cleary, P. D.	2020	BMC Health Serv Res	20	1	137	10.1186/s12913-020-4986-0	#18492	Exclusion reason: Wrong intervention (not an implementation intervention)
A randomised controlled trial and cost effectiveness study of systematic screening (targeted and total population screening) versus routine practice for the	Swanutt, D.; Hobbs, R.; Fitzmaurice, D.; Mant, J.; Murray, E.; Jowett, S.; Raftery, J.; Bryan, S.; Davies, M.; Lip, G.	2004	BMC Cardiovasc Disord	4		12	10.1186/1471-2261-4-12	#1344	Exclusion reason: Wrong intervention (not an implementation intervention);

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detection of atrial fibrillation in the over 65s: (SAFE) [ISRCTN19633732]										
A randomised controlled trial and cost effectiveness study of systematic screening (targeted and total population screening) versus routine practice for the detection of atrial fibrillation in the over 65s: (SAFE) [ISRCTN19633732]	Swancutt, D.; Hobbs, R.; Fitzmaurice, D.; Mant, J.; Murray, E.; Jowett, S.; Raftery, J.; Bryan, S.; Davies, M.; Lip, G.	2004	BMC Cardiovascular Disorders	4		12	http://dx.doi.org/10.1186/1471-2261-4-12	#1343	Exclusion reason: Wrong type of paper (not a research article)	
A randomised controlled trial of clinical supervision: Selected findings from a novel Australian attempt to establish the evidence base for causal relationships with quality of care and patient outcomes, as an informed contribution to mental health nursing practice development	White, Edward; Winstanley, Julie	2010	Journal of Research in Nursing	15	2	151-167	10.1177/1744987109357816	#7085	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)	
A randomized controlled trial assessing the impact of an innovative approach to educating new to practice nurses	Lengetti, Evelyn	2018		78		No Pagination Specified-No Pagination Specified		#11180	Exclusion reason: Wrong type of paper (not a research article)	
A randomized controlled trial assessing the impact of an innovative approach to educating new to practice nurses	Lengetti, Evelyn	2016	Randomized controlled trial assessing the impact of an innovative approach to educating new to practice nurses			01-Jan		#13672	Exclusion reason: Wrong type of paper (not a research article)	
A Randomized Controlled Trial of a Digital Adaptation of the WHELD Person-Centered Nursing Home Training Program	McDermid, J.; Da Silva, M. V.; Williams, G.; Khan, Z.; Corbett, A.; Ballard, C.	2022	J Am Med Dir Assoc	23	7	1166-1170	10.1016/j.jamd.2022.02.016	#21372	Exclusion reason: Wrong population (not nurses)	
A randomized controlled trial of a serious illness communication workshop for nurses in critical care...Dynamics of Critical Care 2018, Calgary, Alberta Canada, Sept 24-25th 2018	Maries, Maria Mia; Kryworuchko, Jennifer; Bains, Vininder Kour; Venis, Janie; Robinson, Wallace; McNamee, Kate; Willett, Katherine; Bakke, Danielle	2018	Canadian Journal of Critical Care Nursing	29	2	58-58		#11121	Exclusion reason: Wrong type of paper (not a research article)	
A randomized controlled trial of an intervention designed to improve the care given in general practice to Type II diabetic patients: patient outcomes and professional ability to change behaviour	Pill, R.; Stott, N. C.; Rollnick, S. R.; Rees, M.	1998	Fam Pract	15	3	229-35		#3672	Exclusion reason: Wrong population (not nurses)	
A randomized trial of a consultation service to reduce falls in nursing homes	Ray, W. A.; Taylor, J. A.; Meador, K. G.; Thapa, P. B.; Brown, A. K.; Kajihara, H. K.; Davis, C.; Gideon, P.; Griffin, M. R.	1997	JAMA	278	7	557-62		#3975	Exclusion reason: Wrong population (not nurses)	
A randomized trial of a program to reduce the use of psychoactive drugs in nursing homes	Avorn, J.; Soumerai, S. B.; Everitt, D. E.; Ross-Degnan, D.; Beers, M. H.; Sherman, D.; Salem-Schatz, S. R.; Fields, D.	1992	N Engl J Med	327	3	168-73	10.1056/nejm199207163270306	#4390	Exclusion reason: Wrong population (not nurses)	
A randomized trial of dementia care in nursing homes	Rovner, B. W.; Steele, C. D.; Shmueli, Y.; Folstein, M. F.	1996	J Am Geriatr Soc	44	1	13-Jul		#4106	Exclusion reason: Wrong population (not nurses)	
A randomized trial of work condition interventions in primary care: Effects on clinical outcomes	Linzer, M.; Poplau, S.; Brown, R.; Grossman, E.; Varkey, A. B.; Yale, S. H.; Williams, E.; Hicks, L.; Wallock, J.; Kohnhorst, D.; Barbouche, M.	2016	Journal of General Internal Medicine	31	2 SUPPL. 1	S106		#14131	Exclusion reason: Wrong type of paper (not a research article)	
A reminder reduces urinary catheterization in hospitalized patients	Saint, S.; Kaufman, S. R.; Thompson, M.; Rogers, M. A. M.; Chenoweth, C. E.	2005	Joint Commission Journal on	31	8	455-462		#429	Exclusion reason: Wrong population (not nurses)	

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			Quality & Patient Safety						
A standardized nurse initiated protocol to improve management of severe hypertension in pregnancy	Miller, M. J.; Butler, P.; Drake, E.; Taylor, A.; Lutgendorf, M. A.	2017	Obstetrics and Gynecology	129	Supplement 1	129S		#11890	Exclusion reason: Wrong type of paper (not a research article)
A stepped wedge randomized controlled trial of a pragmatic, nurse-led intervention to support surrogate decision makers in ICUs	White, D. B.; Angus, D. C.; Shields, A.; Pidro, C.; Paner, C.; Buddadhumaruk, P.; Chang, C. H.; Kahn, J. M.; Kowinsky, A.; Martin, S.; Arnold, R. M.	2018	American Journal of Respiratory and Critical Care Medicine	197	MeetingAbstracts			#10971	Exclusion reason: Wrong type of paper (not a research article)
A strategy to promote research, evidence-based nursing care: Effects on childbirth outcomes	Hodnett, Ellen D; Kaufman, Karyn; O'Brien, Pallas, Linda; Chipman, Mary; Watson, MacDonell, Jo; Hunsburger, Winifred	1996	Research in nursing & health	19	1	13-20		#19711	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A structural multidisciplinary approach to depression management in nursing-home residents: a multicentre, stepped-wedge cluster-randomised trial	Leontjevas, R.; Gerritsen, D. L.; Smalbrugge, M.; Teerenstra, S.; Vernooij-Dassen, M. J.; Koopmans, R. T.	2013	Lancet	381	9885	2255-64	10.1016/s0140-6736(13)60590-5	#17012	Exclusion reason: Wrong population (not nurses)
A structured education programme increased hip protector use and may reduce hip fractures in nursing homes	Birks, Y.	2003	Evidence Based Nursing	6	4	115-114		#1774	Exclusion reason: Wrong type of paper (not a research article)
A structured training program for health workers in intravenous treatment with fluids and antibiotics in nursing homes: A modified stepped-wedge cluster-randomised trial to reduce hospital admissions	Romoren, M.; Gjelstad, S.; Lindbaek, M.	2017	PLoS ONE	12	9	e0182619	10.1371/journal.pone.0182619	#12507	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
A tailored implementation strategy to reduce the duration of intravenous antibiotic treatment in community-acquired pneumonia: a controlled before-and-after study	Engel, M. F.; Bruns, A. H. W.; Hulscher, Mejl; Gaillard, Cajm; Sankatsing, S. U. C.; van Berkhout, F. T.; Emmelot-Vonk, M. H.; Kuck, E. M.; Steeghs, M. H. M.; den Breeijen, J. H.; Stellato, R. K.; Hoepelman, A. I. M.; Oosterheert, J. J.	2014	European Journal of Clinical Microbiology & Infectious Diseases	33	11	1897-1908	10.1007/s10096-014-2158-z	#15980	Exclusion reason: Wrong population (not nurses)
A training intervention to improve information management in primary care	Schifferdecker, K. E.; Reed, V. A.; Homa, K.	2008	Fam Med	40	6	423-32		#8739	Exclusion reason: Wrong population (not nurses)
A Videotape-Based Training Method for Improving the Detection of Depression in Residents of Long-Term Care Facilities	Wood, Stacey; Cummings, Jeffrey L.; Schnelle, Betha; Stephens, Mary		Gerontologist	42	1	114-121		#5304	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Academic detailing improves identification and reporting of adverse drug events	Schlienger, R. G.; Luscher, T. F.; Schoenenberger, R. A.; Haefeli, W. E.	1999	Pharm World Sci	21	3	110-5		#3385	Exclusion reason: Wrong population (not nurses)
Academic detailing to increase colorectal cancer screening by primary care practices in Appalachian Pennsylvania	Curry, W. J.; Lengerich, E. J.; Kluhsman, B. C.; Graybill, M. A.; Liao, J. Z.; Schaefer, E. W.; Spleen, A. M.; Dignan, M. B.	2011	BMC Health Services Research	11		112	http://dx.doi.org/10.1186/1472-6963-11-112	#7353	Exclusion reason: Wrong population (not nurses)
Accuracy and efficiency of computer-aided nursing diagnosis	Kurashima, S.; Kobayashi, K.; Toyabe, S.; Akazawa, K.	2008	Int J Nurs Terminol Classif	19	3	95-101	10.1111/j.1744-618X.2008.00088.x	#9013	Exclusion reason: Wrong intervention (not an implementation intervention)

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Adaptation of a best practice model for recognition and treatment of postpartum depression in a private obstetrics practice	Long, Vicki Elizabeth	2010		71		3597-3597		#7218	Exclusion reason: Wrong type of paper (not a research article)
Adoption and implementation of the original strict glycemic control guideline is feasible and safe in adult critically ill patients	Schultz, M. J.; Harmsen, R. E.; Korevaar, J. C.; Abu-Hanna, A.; Van Braam Houckgeest, F.; Van Der Sluijs, J. P.; Spronk, P. E.	2012	Minerva Anesthesiol	78	9	982-95		#17181	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Advancing quality of urinary incontinence evaluation and treatment in nursing homes through translational research	Watson, N. M.	2004	Worldviews Evid Based Nurs	1 Suppl 1		S21-5	10.1111/j.1524-475X.2004.04043.x	#1293	Exclusion reason: Wrong type of paper (not a research article)
Agitation in nursing home residents with dementia (VIDEANT trial): effects of a cluster-randomized, controlled, guideline implementation trial	Rapp, M. A.; Mell, T.; Majic, T.; Treusch, Y.; Nordheim, J.; Niemann-Mirmehdi, M.; Gutzmann, H.; Heinz, A.	2013	J Am Med Dir Assoc	14	9	690-5	10.1016/j.jamda.2013.05.017	#16368	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Ambulatory Voice Biofeedback: Relative Frequency and Summary Feedback Effects on Performance and Retention of Reduced Vocal Intensity in the Daily Lives of Participants With Normal Voices	Van Stan, J. H.; Mehta, D. D.; Sternad, D.; Petit, R.; Hillman, R. E.	2017	J Speech Lang Hear Res	60	4	853-864	10.1044/2016_jslhr-s-16-0164	#12331	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
An analysis of critical care staff's attitudes to donation in a country with presumed-consent legislation	Pelleriaux, B.; Roels, L.; Van Deynse, D.; Smits, J.; Cornu, O.; Delloye, C.	2008	Progress in transplantation (Aliso Viejo, Calif.)	18	3	173-178		#8871	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
An ED orientation/fellowship: an experiment in process-oriented training and learning to think like an emergency nurse	Wolf, L.	2005	J Emerg Nurs	31	3	298-301	10.1016/j.jen.2005.04.018	#316	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
An Educational and Administrative Intervention to Promote Rational Laboratory Test Ordering on an Academic General Medicine Service	Wertheim, B. M.; Aguirre, A. J.; Bhattacharyya, R. P.; Chorba, J.; Jadhav, A. P.; Kerry, V. B.; Macklin, E. A.; Motyckova, G.; Raju, S.; Lewandrowski, K.; Hunt, D. P.; Wright, D. E.	2017	Am J Med	130	1	47-53	10.1016/j.amjmed.2016.08.021	#12295	Exclusion reason: Wrong population (not nurses)
An educational implementation of a cancer pain algorithm for ambulatory care	Du Pen, A. R.; Du Pen, S.; Hansberry, J.; Miller-Kraybill, B.; Millen, J.; Everly, R.; Hansen, N.; Syrjala, K.	2000	Pain Manag Nurs	1	4	116-28	10.1053/jpmn.2000.19333	#2950	Exclusion reason: Wrong population (not nurses)
An educational intervention can prevent delirium on acute medical wards	Tabet, N.; Hudson, S.; Sweeney, V.; Sauer, J.; Bryant, C.; Macdonald, A.; Howard, R.	2005	Age and Ageing	34	2	152-156	10.1093/ageing/af031	#386	Exclusion reason: Wrong population (not nurses)
An educational intervention on drug use in nursing homes improves health outcomes resource utilization and reduces inappropriate drug prescription	Garcia-Gollarte, F.; Baleriola-Julvez, J.; Ferrero-Lopez, I.; Cuenllas-Diaz, A.; Cruz-Jentoft, A. J.	2014	J Am Med Dir Assoc	15	12	885-91	10.1016/j.jamda.2014.04.010	#15938	Exclusion reason: Wrong population (not nurses)
An educational intervention to enhance nurse leaders' perceptions of patient safety culture	Ginsburg, L.; Norton, P. G.; Casebeer, A.; Lewis, S.	2005	Health Serv Res	40	4	997-1020	10.1111/j.1475-6773.2005.00401.x	#1029	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
An educational intervention to reduce acute health care consumption in elderly patients with inappropriate drugs - A cluster randomised trial in primary care	Schmidt-Mende, K.; Andersen, M.; Wettermark, B.; Hasselstrom, J.	2016	Pharmacoepidemiology and Drug Safety	25	Supplement 3	378-379	http://dx.doi.org/10.1002/pds.4070	#13794	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

An efficiency evaluation of protocols for tight glycemic control in intensive care units	Malesker, M. A.; Foral, P. A.; McPhillips, A. C.; Christensen, K. J.; Chang, J. A.; Hilleman, D. E.	2007	Am J Crit Care	16	6	589-98		#9718	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
An electronic hand hygiene surveillance device: a pilot study exploring surrogate markers for hand hygiene compliance	Sahud, A. G.; Bhanot, N.; Radhakrishnan, A.; Bajwa, R.; Manyam, H.; Post, J. C.	2010	Infect Control Hosp Epidemiol	31	6	634-9	10.1086/652527	#7657	Exclusion reason: Wrong population (not nurses)
An enhanced role in comprehensive geriatric assessment for community-nurse case managers	Stolee, P.; Patterson, M. L.; Wiancko, D. C.; Esbaugh, J.; Arcese, Z. A.; Vinke, A. M.; Waddell, S.; Hatt, J.; Wells, K.; Crilly, R. G.	2003	Canadian Journal on Aging-Revue Canadienne Du Vieillessement	22	2	177-184	10.1017/s0714980800004499	#1905	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
An evaluation of a medication management training programme for community mental health professionals; service user level outcomes: a cluster randomised controlled trial	Harris, N.; Lovell, K.; Day, J.; Roberts, C.	2009	International Journal of Nursing Studies	46	5	645-652	10.1016/j.ijnurstu.2008.10.010	#8360	Exclusion reason: Wrong population (not nurses)
An evaluation of an educational programme to prepare family health nurses	Macduff, C.; West, B. J.	2004	Nurse Educ Today	24	7	575-83	10.1016/j.nedt.2004.08.001	#1430	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
An evaluation of educational outreach to improve evidence-based prescribing in Medicaid: a cautionary tale	Zillich, A. J.; Ackermann, R. T.; Stump, T. E.; Ambuehl, R. J.; Downs, S. M.; Holmes, A. M.; Katz, B.; Inui, T. S.	2008	J Eval Clin Pract	14	5	854-60	10.1111/j.1365-2753.2008.01035.x	#8642	Exclusion reason: Wrong population (not nurses)
An evaluation of practice nurses working with general practitioners to treat people with depression	Mann, A. H.; Blizard, R.; Murray, J.; Smith, J. A.; Botega, N.; Macdonald, E.; Wilkinson, G.	1998	British Journal of General Practice	48	426	875-879		#3709	Exclusion reason: Wrong population (not nurses)
An Evaluation of Staff Training in Positive Behavioural Support	MacDonald, Anne; McGill, Peter; Murphy, Glynis		Journal of Applied Research in Intellectual Disabilities	31	6	1046-1061		#5636	Exclusion reason: Wrong population (not nurses)
An evidence-based project to improve depression and alcohol use screening	Valente, S.; Nemece, C.	2006	J Nurs Care Qual	21	1	Aug-93		#10018	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
An innovative approach to educating nurses to clinical competence: A randomized controlled trial	Lengetti, E.; Kronk, R.; Ulmer, K. W.; Wilf, K.; Murphy, D.; Rosanelli, M.; Taylor, A.	2018	Nurse Educ Pract	33		159-163	10.1016/j.nepr.2018.08.007	#11179	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
An Integrated eDiagnosis Approach (IeDA) versus standard IMCI for assessing and managing childhood illness in Burkina Faso: a stepped-wedge cluster randomised trial	Sarrasat, S.; Lewis, J. J.; Some, A. S.; Somda, S.; Cousens, S.; Blanchet, K.	2021	BMC Health Serv Res	21	1	354	10.1186/s12913-021-06317-3	#21960	Exclusion reason: Wrong population (not nurses)
An intervention to improve antibiotic delivery and sputum procurement in patients hospitalized with community acquired pneumonia	Lawrence, S. J.; Shadel, B. N.; Leet, T. L.; Hall, J. B.; Mundy, L. M.	2002	CHEST	122	3	913-919	10.1378/chest.122.3.913	#2604	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

ANALYSIS of the EFFECT of HOMOGENEOUS MANAGEMENT on NURSES' DIATHESIS and QUALITY of NURSING	Si, Q.; Xia, H.; Liu, G.; Wan, F.; C. Hen H	2022	Acta Medica Mediterranea	38	2	1377-1382	https://dx.doi.org/10.19193/0393-6384_2022_2_209	#22055	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Antibiotic use, hospital admissions, and mortality before and after implementing guidelines for nursing home-acquired pneumonia	Naughton, B. J.; Mylotte, J. M.; Ramadan, F.; Karuza, J.; Priore, R. L.	2001	J Am Geriatr Soc	49	8	1020-4		#2373	Exclusion reason: Wrong population (not nurses)
Antimicrobial stewardship in rural continuing care: Impact of interprofessional education and clinical decision tool implementation on urinary tract infection treatment	Sadowski, C.; Pasay, D.; Slobodan, J.; Guirguis, M.; Bresee, L.	2017	Canadian Pharmacists Journal	150	4	S8	http://dx.doi.org/10.1177/1715163517719855	#12494	Exclusion reason: Wrong type of paper (not a research article)
Application of a theory-based educational intervention to increase the frequency of performing oral health assessments on children among advanced practice registered nurses and nurses	Claiborne, Denise Michelle	2016	Application of a Theory-Based Educational Intervention to Increase the Frequency of Performing Oral Health Assessments on Children Among Advanced Practice Registered Nurses & Nurses			01-Jan		#14184	Exclusion reason: Wrong type of paper (not a research article)
Application of clinical pathway management in the training and practice of nursing staff for cancer patients	Zhou, J.; Ruan, J.; Liao, R.; Wu, X.	2017	Biomedical Research (India)	28	17	7574-7577		#12729	Exclusion reason: Wrong population (not nurses)
Applying the RE-AIM framework to evaluate two implementation strategies used to introduce a tool for lifestyle intervention in Swedish primary health care	Carlford, S.; Andersson, A.; Bendtsen, P.; Nilsen, P.; Lindberg, M.	2012	Health Promot Int	27	2	167-76	10.1093/heapro/dar016	#6512	Exclusion reason: Wrong population (not nurses)
Appropriate outcome criteria to assess the efficiency of intervention aiming at improving acute stroke management	Schott, A. M.; Haesebaert, J.; Mercier, C.; Cakmak, S.; Termoz, A.; Perreton, N.; Rabilloud, M.; Derex, L.; Detante, O.; Blanclasserre, K.; Marcel, S.; Rodier, G.; Philippeau, F.; Vallet, A. E.	2017	European Stroke Journal	2	1 Supplement 1	159	http://dx.doi.org/10.1177/2396987317705242	#12468	Exclusion reason: Wrong type of paper (not a research article)
Assessing the impact of staff development on nursing practice	Brazil, K.; Jewell, A.; Lyle, C.; Zuraw, L.; Stanton, S.	1998	J Nurses Staff Dev	14	4	198-204		#3772	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Association of the Resident Assessment Instrument (RAI) with changes in function, cognition, and psychosocial status	Phillips, C. D.; Morris, J. N.; Hawes, C.; Fries, B. E.; Mor, V.; Nennstiel, M.; Iannacchione, V.	1997	Journal of the American Geriatrics Society	45	8	986-993	10.1111/j.1532-5415.1997.tb02971.x	#3982	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Audit and feedback and educational outreach did not differ from printed educational materials for improving community nursing practice	Hannon, R.	2007	Evidence Based Nursing	10	1	26-26		#10154	Exclusion reason: Wrong type of paper (not a research article)
Auditing the status of prioritization of nursing actions in the trauma emergency department	Malekifar, Esmaeil; Khalili, Robabe; Sadat Moayed, Malihe; Tayeb Moradian, Seyed; Mahmoudi, Hosein	2022	INTERNATIONAL EMERGENCY NURSING	64		N.PAG - N.PAG	10.1016/j.ienj.2022.101215	#21298	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Augmented Nurse Care Management in CKD Stages 4 to 5: A Randomized Trial	Fishbane, S.; Agoritsas, S.; Bellucci, A.; Halinski, C.; Shah, H. H.; Sakhiya, V.; Balsam, L.	2017	Am J Kidney Dis	70	4	498-505	10.1053/j.ajkd.2017.02.366	#12228	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Automated standing orders to nurses increase influenza and pneumococcal vaccination rates among inpatients compared with reminders to physicians	Dexter, PR	2005	Evidence, Å&sb ased Healthcare and Public Health	9	3	211-2		#19714	Exclusion reason: Wrong population (not nurses)
Basic life support trained nurses ventilate more efficiently with laryngeal mask supreme than with facemask or laryngeal tube suction-disposable--a prospective, randomized clinical trial	Gruber, E.; Oberhammer, R.; Balkenhol, K.; Strapazzon, G.; Procter, E.; Brugger, H.; Falk, M.; Paal, P.	2014	Resuscitation	85	4	499-502	10.1016/j.resuscitation.2014.01.004	#15888	Exclusion reason: Wrong intervention (not an implementation intervention)
Basic life support-trained nurses ventilate more efficiently with laryngeal mask supreme than with facemask or disposable laryngeal tube suction: A prospective, randomized clinical trial	Gruber, E.; Oberhammer, R.; Balkenhol, K.; Strapazzon, G.; Procter, E.; Brugger, H.; Falk, M.; Paal, P.	2014	High Altitude Medicine and Biology	15	2	A284	http://dx.doi.org/10.1089/ham.2014.1451	#15887	Exclusion reason: Wrong type of paper (not a research article)
Behavioural management in nursing and residential homes: a randomised controlled trial	Proctor, R.; Burns, A.; Powell, H. S.; Tarrier, N.; Faragher, B.; Richardson, G.; Davies, L.; South, B.	1999	Lancet	354	9172	26-Sep	10.1016/s0140-6736(98)08237-3	#3413	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Bridging the gap in sexual healthcare in nursing practice: implementing a sexual healthcare training programme to improve outcomes	Sung, S. C.; Jiang, H. H.; Chen, R. R.; Chao, J. K.	2016	J Clin Nurs	25	19-20	2989-3000	10.1111/jocn.13441	#13275	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Building on existing tools to improve chronic disease prevention and screening in public health: a cluster randomized trial	Lofters, A. K.; O'Brien, M. A.; Sutradhar, R.; Pinto, A. D.; Baxter, N. N.; Donnelly, P.; Elliott, R.; Glazier, R. H.; Huizinga, J.; Kyle, R.; Manca, D.; Pietrusiak, M. A.; Rabeneck, L.; Riordan, B.; Selby, P.; Sivayoganathan, K.; Snider, C.; Sopcak, N.; Thorpe, K.; Tinmouth, J.; Wall, B.; Zuo, F.; Grunfeld, E.; Paszat, L.	2021	BMC Public Health	21	1	1496	10.1186/s12889-021-11452-x	#21235	Exclusion reason: Wrong population (not nurses)
Can a multifaceted educational intervention targeting both nurses and physicians change the prescribing of antibiotics to nursing home residents? A cluster randomized controlled trial	Pettersson, E.; Vernby, A.; Molstad, S.; Lundborg, C. S.	2011	J Antimicrob Chemother	66	11	2659-66	10.1093/jac/dkr312	#6912	Exclusion reason: Wrong population (not nurses)
Can a workbook work? Examining whether a practitioner evaluation toolkit can promote instrumental use	Campbell, R.; Townsend, S. M.; Shaw, J.; Karim, N.; Markowitz, J.	2015	Evaluation and Program Planning	52		107-117	http://dx.doi.org/10.1016/j.evalprogplan.2015.04.005	#15584	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Can in-service education help prepare nurses for spiritual care?	Gerra, A.; Fitzpatrick, J. J.	2008	J Christ Nurs	25	4	204-9		#9284	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Can just-in-time, evidence-based "reminders" improve pain management among home health care nurses and their patients?	McDonald, M. V.; Pezzin, L. E.; Feldman, P. H.; Murtaugh, C. M.; Peng, T. R.	2005	J Pain Symptom Manage	29	5	474-88	10.1016/j.jpain-symman.2004.08.018	#557	Exclusion reason: Wrong population (not nurses)
Can multifaceted educational intervention improve clinical practice and patient outcomes regarding delirium in nursing homes?	Jeong, Eunhye; Chang, Sung Ok	2022	JAPAN JOURNAL OF NURSING SCIENCE	19	1	10-Jan	10.1111/jjns.12447	#20853	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Can proactive rapid response team rounding improve surveillance and reduce unplanned escalations in care? A controlled before and after study	Danesh, V.; Neff, D.; Jones, T. L.; Aroian, K.; Unruh, L.; Andrews, D.; Guerrier, L.; Venus, S. J.; Jimenez, E.	2019	International Journal of Nursing Studies	91		128-133		#18996	Exclusion reason: Wrong intervention (not an implementation intervention)
Can the PROPER intervention reduce psychotropic drug prescription in nursing home residents with dementia? Results of a cluster-randomized controlled trial	Smeets, C. H. W.; Smalbrugge, M.; Koopmans, Rtcn; Nelissen-Vrancken, Mhjm; van der Spek, K.; Teerenstra, S.; Gerritsen, D. L.; Zuidema, S. U.	2021	Int Psychogeriatr	33	6	577-586	10.1017/s1041610220000629	#22079	Exclusion reason: Wrong population (not nurses)
Can training community mental health nurses to support family carers reduce behavioural problems in dementia? An exploratory pragmatic randomised controlled trial	Moniz-Cook, E.; Elston, C.; Gardiner, E.; Agar, S.; Silver, M.; Win, T.; Wang, M.	2008	Int J Geriatr Psychiatry	23	2	185-91	10.1002/gps.1860	#8942	Exclusion reason: Wrong intervention (not an implementation intervention)
Can we propose the 4Ds along with the 6Cs for modern British nursing in the care of older patients? An evaluative study shows the effect training can have on nursing care	Sharma, J.; Tadros, G.	2013	Int J Geriatr Psychiatry	28	9	988-9	10.1002/gps.3938	#16298	Exclusion reason: Wrong type of paper (not a research article)
Cardiopulmonary resuscitation feedback improves the quality of chest compression provided by hospital health care professionals	Pozner, C. N.; Almozlino, A.; Elmer, J.; Poole, S.; McNamara, D.; Barash, D.	2011	Am J Emerg Med	29	6	618-25	10.1016/j.ajem.2010.01.008	#6352	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Causal Attribution Training to Help Nurses Identify Causes of Medical Errors: A Randomized Controlled Trial	Er, Fatma; Ercf [∞] , Behice	2021	Turkiye Klinikleri Journal of Nursing Sciences	13	4	926-936	10.5336/nurses.2021-82037	#20403	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Change in antihypertensive drug prescribing after guideline implementation: a controlled before and after study	Sipila, R.; Helin-Salmivaara, A.; Korhonen, M. J.; Ketola, E.	2011	BMC Family Practice	12		12	10.1186/1471-2296-12-87	#6280	Exclusion reason: Wrong population (not nurses)
Changing caring behaviours in rehabilitation after a hip fracture - A tool for empowerment?	Lindberg, L.; Ekstrom, W.; Hedstrom, M.; Flodin, L.; Lofgren, S.; Ryd, L.	2017	Psychology Health & Medicine	22	6	663-672	10.1080/13548506.2016.1211294	#11978	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Changing nurses' pain assessment practice: a collaborative research utilization approach	Dufault, M. A.; Bielecki, C.; Collins, E.; Willey, C.	1995	J Adv Nurs	21	4	634-45		#4828	Exclusion reason: Wrong population (not nurses)
Changing preventive practice: a controlled trial on the effects of outreach visits to organise prevention of cardiovascular disease	Hulscher, M. E.; van Drenth, B. B.; van der Wouden, J. C.; Mookink, H. G.; van Weel, C.; Grol, R. P.	1997	Qual Health Care	6	1	19-24		#4040	Exclusion reason: Wrong population (not nurses);
Chart reminders increase referrals for inpatient smoking cessation intervention	McDaniel, A. M.; Kristeller, J. L.; Hudson, D. M.	1999	Nicotine Tob Res	1	2	175-80		#3843	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Classroom and simulation team training: a randomized controlled trial	Clay-Williams, R.; McIntosh, C. A.; Kerridge, R.; Braithwaite, J.	2013	Int J Qual Health Care	25	3	314-21	10.1093/intqhc/mzt027	#17315	Exclusion reason: Wrong population (not nurses)
Clinical Nurse Specialist-Led Implementation of an Early Discharge Protocol After Cardiac Surgery	Chanyeong, Kwak; Young, Ko	2019	Clinical Nurse Specialist: The Journal for Advanced	33	4	184-190	10.1097/NUR.0000000000000457	#19666	Exclusion reason: Wrong intervention (not an implementation intervention)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

			Nursing Practice						
Clinical trial of a prevention and treatment protocol for skin breakdown in two nursing homes	Hunter, S.; Anderson, J.; Hanson, D.; Thompson, P.; Langemo, D.; Klug, M. G.	2003	J Wound Ostomy Continence Nurs	30	5	250-8	10.1067/mjw.2003.149	#1650	Exclusion reason: Wrong population (not nurses)
Clinical Trial of an Educational Program to Decrease Monitor Alarms in a Medical Intensive Care Unit...Presented at the AACN National Teaching Institute in Houston, Texas, May 22-25, 2017	McMurtry, James	2017	American Journal of Critical Care	26	3	e33-e33	10.4037/ajcc2017676	#11911	Exclusion reason: Wrong type of paper (not a research article)
Cluster randomised controlled trial of an infection control education and training intervention programme focusing on meticillin-resistant Staphylococcus aureus in nursing homes for older people	Baldwin, N. S.; Gilpin, D. F.; Tunney, M. M.; Kearney, M. P.; Crymble, L.; Cardwell, C.; Hughes, C. M.	2010	J Hosp Infect	76	1	36-41	10.1016/j.jhin.2010.03.006	#7854	Exclusion reason: Wrong population (not nurses)
Cluster randomized control trial of nursing home residents' oral hygiene following the Mouth Care Matters education program for certified nursing assistants	Hartshorn, J. E.; Cowen, H. J.; Connick, C. L.	2021	Spec Care Dentist	41	3	372-380	10.1111/scd.12577	#20658	Exclusion reason: Wrong population (not nurses)
Cluster randomized trial to evaluate the effect of a multimodal hand hygiene improvement strategy in primary care	Martin-Madrado, C.; Soto-Diaz, S.; Canada-Dorado, A.; Salinero-Fort, M. A.; Medina-Fernandez, M.; Carrillo de Santa Pau, E.; Gomez-Campelo, P.; Abanades-Herranz, J. C.	2012	Infect Control Hosp Epidemiol	33	7	681-8	10.1086/666343	#6213	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Cluster-randomized controlled trial of dissemination strategies of an online quality improvement programme for alcohol-related disorders	Ruf, D.; Berner, M.; Kriston, L.; Lohmann, M.; Mundle, G.; Lorenz, G.; Niebling, W.; Harter, M.	2010	Alcohol Alcohol	45	1	Aug-70	10.1093/alcalc/agg079	#7665	Exclusion reason: Wrong population (not nurses)
Clustered randomised trial of an intervention to improve the management of asthma: Greenwich asthma study	Premaratne, U. N.; Sterne, J. A. C.; Marks, G. B.; Webb, J. R.; Azima, H.; Burney, P. G. J.	1999	BMJ: British Medical Journal (International Edition)	318	7193	1251-1255	10.1136/bmj.318.7193.1251	#3414	Exclusion reason: Wrong population (not nurses)
Collaborative care for bipolar disorder: part I. Intervention and implementation in a randomized effectiveness trial	Bauer, M. S.; McBride, L.; Williford, W. O.; Glick, H.; Kinosian, B.; Altshuler, L.; Beresford, T.; Kilbourne, A. M.; Sajatovic, M.	2006	Psychiatr Serv	57	7	927-36	10.1176/ps.2006.57.7.927	#245	Exclusion reason: Wrong population (not nurses)
Coming to grips with challenging behavior: a cluster randomized controlled trial on the effects of a multidisciplinary care program for challenging behavior in dementia	Zwijssen, S. A.; Smalbrugge, M.; Eefsting, J. A.; Twisk, J. W. R.; Gerritsen, D. L.; Pot, A. M.; Hertogh, Cmpm	2014	J Am Med Dir Assoc	15	7	531.e1-531.e10	10.1016/j.jamd.2014.04.007	#15098	Exclusion reason: Wrong population (not nurses)
Communicating about Death and Dying: Developing Training for Staff Working in Services for People with Intellectual Disabilities	Tuffrey-Wijne, Irene; Rose, Tracey; Grant, Robert; Wijne, Astrid		Journal of Applied Research in Intellectual Disabilities	30	6	1099-1110		#5555	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Comparative Safety, Efficiency, and Nursing Preference Among 3 Methods for Intravenous Push Medication Preparation:	Burger, Maureen; Degnan, Dan	2019	Journal of Patient Safety	15	3	238-245	10.1097/PTS.0000000000000269	#19118	Exclusion reason: Wrong intervention (not an implementation intervention)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

A Randomized Crossover Simulation Study										
Comparing effects of two higher intensity feedback interventions with simple feedback on improving staff communication in nursing homes-the INFORM cluster-randomized controlled trial	Hoben, Matthias; Ginsburg, Liane R.; Easterbrook, Adam; Norton, Peter G.; Anderson, Ruth A.; Andersen, Elizabeth A.; Boström, Anne-Marie; Cranley, Lisa A.; Lanham, Holly J.; Weeks, Lori E.; Cummings, Greta G.; Holroyd-Leduc, Jayna M.; Squires, Janet E.; Wagg, Adrian S.; Estabrooks, Carole A.	2020	Implementation Science	15	1	N.PAG - N.PAG	10.1186/s13012-020-01038-3	#18061	Exclusion reason: Wrong population (not nurses)	
Comparing the Effect of Lecture-Based and Clinical Training on Nurses' Knowledge and Skill in Caring for Patients with Angina Pectoris: A Clinical Trial	Yousefi, Reza; Farsi, Zahra; Rajai, Nahid	2019	Medical-Surgical Nursing Journal	8	3	07-Jan	10.5812/msnj.95895	#17436	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
Comparing the effectiveness of a blended learning approach with a conventional learning approach for basic emergency obstetric and newborn care training in Ethiopia	Yigzaw, Mulneh; Tebekaw, Yibeltal; Kim, Young-Mi; Kols, Adrienne; Ayalew, Firew; Eyassu, Gizachew	2019	Midwifery	78		42-49	10.1016/j.midw.2019.07.014	#17453	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
Comparison of Computer Based Instruction to Behavior Skills Training for Teaching Staff Implementation of Discrete-Trial Instruction with an Adult with Autism	Nosik, Melissa R.; Williams, W. Larry; Garrido, Natalia; Lee, Sarah		Research in Developmental Disabilities: A Multidisciplinary Journal	34	1	461-468		#5608	Exclusion reason: Wrong population (not nurses)	
Comparison of the Efficacy of two Different Training Methods on the Surgical Safety Checklist: A Randomized Study	Melike Tasci, Sena; Gezginci, Elif; Goktas, Sonay	2020	International Journal of Caring Sciences	13	1	53-60		#18593	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
Compassionate care intervention for hospital nursing teams caring for older people: a pilot cluster randomised controlled trial	Gould, L. J.; Griffiths, P.; Barker, H. R.; Libberton, P.; Mesa-Eguiagaray, I.; Pickering, R. M.; Shipway, L. J.; Bridges, J.	2018	BMJ Open	8	2	e018563	10.1136/bmjopen-2017-018563	#12009	Exclusion reason: Wrong population (not nurses)	
Computer decision support software safely improves glycemic control in the burn intensive care unit: a randomized controlled clinical study	Mann, Elizabeth A.; Jones, John A.; Wolf, Steven E.; Wade, Charles E.	2011	Journal of Burn Care & Research	32	2	246-255	10.1097/BCR.0b013e31820aaebf	#7030	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
Computer Decision Support to Improve Autism Screening and Care in Community Pediatric Clinics	Bauer, Nerissa S.; Sturm, Lynne A.; Carroll, Aaron E.; Downs, Stephen M.		Infants and Young Children	26	4	306-317		#5826	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)	
Computer-assisted interventions to improve QTc documentation in patients receiving QT-prolonging drugs	Sandau, K. E.; Sendelbach, S.; Fletcher, L.; Frederickson, J.; Drew, B. J.; Funk, M.	2015	American journal of critical care : an official publication, American Association of Critical-Care Nurses	24	2	e6-e15	http://dx.doi.org/10.4037/ajcc.2015240	#14517	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)	

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Computer-assisted versus traditional classroom instruction to promote change in the nursing management of the second stage of labor	Nurse, Rachelle	2009		Ph.D.		189 p-189 p		#8098	Exclusion reason: Wrong type of paper (not a research article)
CONNECT for better fall prevention in nursing homes: results from a pilot intervention study	Colon-Emeric, C. S.; McConnell, E.; Pinheiro, S. O.; Corazzini, K.; Porter, K.; Earp, K. M.; Landerman, L.; Beales, J.; Lipscomb, J.; Hancock, K.; Anderson, R. A.	2013	J Am Geriatr Soc	61	12	Sep-50	10.1111/jgs.12550	#17313	Exclusion reason: Wrong population (not nurses)
Constipation challenge: randomized controlled trial of interactive spaced education to improve primary care management of pediatric constipation	Mallon, D.; Fei, L.; Farrell, M.; Iyer, S.; Klein, M.	2018	Journal of Pediatric Gastroenterology and Nutrition	67	Supplement 1	S13-S14	http://dx.doi.org/10.1097/MPG.00000000000002164	#11128	Exclusion reason: Wrong type of paper (not a research article)
Consultation training of nurses for cardiovascular prevention - a randomized study of 2 years duration	Drevenhorn, E.; Bengtson, A.; Nilsson, P. M.; Nyberg, P.; Kjellgren, K. I.	2012	Blood Press	21	5	293-9	10.3109/08037051.2012.680734	#6868	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Controlled trials of CQI and academic detailing to implement a clinical practice guideline for depression	Brown, J. B.; Shye, D.; McFarland, B. H.; Nichols, G. A.; Mullooly, J. P.; Johnson, R. E.	2000	Jt Comm J Qual Improv	26	1	39-54		#2996	Exclusion reason: Wrong population (not nurses)
Cosmos - Improving the Quality of Life in Nursing Home Patients: An Effectiveness-Implementation Cluster Randomized and Controlled Trial (cRCT)	Husebo, B.	2021	International Journal of Psychophysiology	168	Supplement	S33	https://dx.doi.org/10.1016/j.ijpsycho.2021.07.099	#20787	Exclusion reason: Wrong type of paper (not a research article)
Cost-effectiveness of educational outreach to primary care nurses to increase tuberculosis case detection and improve respiratory care: economic evaluation alongside a randomised trial	Fairall, L.; Bachmann, M. O.; Zwarenstein, M.; Bateman, E. D.; Niessen, L. W.; Lombard, C.; Majara, B.; English, R.; Bheekie, A.; van Rensburg, D.; Mayers, P.; Peters, A.; Chapman, R.	2010	Trop Med Int Health	15	3	277-86	10.1111/j.1365-3156.2009.02455.x	#7555	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Counselling on lifestyle factors in hypertension care after training on the stages of change model	Drevenhorn, E.; Bengtson, A.; Allen, J. K.; Saljo, R.; Kjellgren, K. I.	2007	Eur J Cardiovasc Nurs	6	1	46-53	10.1016/j.ejcnurse.2006.03.007	#10242	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Cultural competency training and performance reports to improve diabetes care for black patients: a cluster randomized, controlled trial	Sequist, T. D.; Fitzmaurice, G. M.; Marshall, R.; Shaykevich, S.; Marston, A.; Safran, D. G.; Ayanian, J. Z.	2010	Ann Intern Med	152	1	Jun-40	10.7326/0003-4819-152-1-201001050-00009	#7635	Exclusion reason: Wrong population (not nurses)
Decision support system in prehospital care: a randomized controlled simulation study	Hagiwara, M. A.; Sjoqvist, B. A.; Lundberg, L.; Suserud, B. O.; Henricson, M.; Jonsson, A.	2013	Am J Emerg Med	31	1	145-53	10.1016/j.ajem.2012.06.030	#16760	Exclusion reason: Wrong intervention (not an implementation intervention)
Decision support tools improve clinicians' ability to interpret structured SMBG data	Schnell, O.; Rodbard, H. W.; Unger, J.; Rees, C.; Parkin, C.; Jelsovsky, Z.; Amstutz, L.; Wegmann, N.; Schweitzer, M.; Wagner, R.	2011	Diabetologia	54	SUPPL. 1	S393	http://dx.doi.org/10.1007/s00125-011-2276-4	#6305	Exclusion reason: Wrong type of paper (not a research article)
Decreasing urinary tract infections through staff development, outcomes, and nursing process	Ribby, K. J.	2006	J Nurs Care Qual	21	3	272-6		#10119	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Delirium Care Bundle On Sedation And Orientation Among Icu-Acquired Delirium A Randomized Controlled Trial	Theresa, S. J.; Fathima, L.; Kayalvizhi, E.; Puliken, M.	2022	Journal of Pharmaceutical Negative Results	13		1991-1999	https://dx.doi.org/10.47750/pnr.2022.13.S04.243	#22227	Exclusion reason: Wrong intervention (not an implementation intervention)
Delirium knowledge and recognition: a randomized controlled trial of a web-based educational intervention for acute care nurses	McCrow, J.; Sullivan, K. A.; Beattie, E. R.	2014	Nurse Educ Today	34	6	912-7	10.1016/j.nedt.2013.12.006	#15715	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Delivery of home-based postpartum contraception in Southwest Trifinio, Guatemala: Reach, adoption, and implementation in a cluster-randomized trial	Harrison, M. S.; Jimenez-Zambrano, A.; Rivera, C.; Bunge-Montes, S.; Huebschmann, A. G.	2021	Contraception	104	4	406-413	10.1016/j.contraception.2021.07.003	#20654	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Dental auscultation for nursing personnel as a model of oral health care education: development, baseline, and 6-month follow-up assessments	Wardh, I.; Berggren, U.; Hallberg, L. R.; Andersson, L.; Sorensen, S.	2002	Acta Odontol Scand	60	1	13-Sep		#2032	Exclusion reason: Wrong population (not nurses)
Description and Impact of a Comprehensive Multispecialty Multidisciplinary Intervention to Decrease Opioid Prescribing in Surgery	Kaafarani, H. M. A.; Eid, A. I.; Antonelli, D. M.; Chang, D. C.; Elsharkawy, A. E.; Elahad, J. A.; Lancaster, E. A.; Schulz, J. T.; Melnitchouk, S. I.; Kastrinakis, W. V.; Hutter, M. M.; Masiakos, P. T.; Colwell, A. S.; Wright, C. D.; Lillemoe, K. D.	2019	Annals of Surgery	270	3	452-462	10.1097/sla.00000000000003462	#18793	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Designing and evaluating an interactive multimedia Web-based simulation for developing nurses' competencies in acute nursing care: randomized controlled trial	Liaw, S. Y.; Wong, L. F.; Chan, S. W.; Ho, J. T.; Mordiffi, S. Z.; Ang, S. B.; Goh, P. S.; Ang, E. N.	2015	J Med Internet Res	17	1	e5	10.2196/jmir.3853	#15209	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Developing, Implementing, and Evaluating a Nurse-Driven Rapid Reversal Protocol for Patients With Traumatic Intracerebral Hemorrhage in the Presence of Preinjury Warfarin	Blackmore, A. R.; Caputo, L. M.; Bourg, P. W.; Mains, C. W.	2016	Journal of Trauma Nursing	23	3	138-143	10.1097/jtn.0000000000000201	#14687	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Development and evaluation of a nurse-led hypertension management model: A randomized controlled trial	Zhu, X.; Wong, F. K. Y.; Wu, C. L. H.	2018	Int J Nurs Stud	77		171-178	10.1016/j.ijnur.2017.10.006	#22607	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Development and Evaluation of a Quick Response Code,ÄiBased Nursing Education Program for Operating and Recovery Room Nurses	Park, Eun Woo; Lee, Hanna; Yun, Eun Kyoung	2019	CIN: Computers, Informatics, Nursing	37	11	599-605	10.1097/CIN.0000000000000550	#18002	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Development and Evaluation of a Web-based Learning Course for Clinical Nurses: Anticancer Chemotherapy and Nursing	Mi Yeong, Mun; Seon Young, Hwang	2020	Korean Journal of Adult Nursing	32	4	364-373	10.7475/kjan.2020.32.4.364	#18585	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Development and evaluation of an education program for professional palliative care nursing	Yeun, Y. R.; Kwon, M.; Lee, K. S.	2015	J Korean Acad Nurs	45	1	139-46	10.4040/jkan.2015.45.1.139	#14283	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Development of an Enhanced Recovery After Surgery Guideline and	McLeod, R. S.; Aarts, M. A.; Chung, F.; Eskicioglu, C.; Forbes, S. S.; Conn, L. G.; McCluskey, S.; McKenzie, M.;	2015	Annals of Surgery	262	6	1016-1025	10.1097/sla.0000000000000067	#14800	Exclusion reason: Wrong study design (not a RCT)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Implementation Strategy Based on the Knowledge-to-action Cycle	Morningstar, B.; Nadler, A.; Okraïneç, A.; Pearsall, E. A.; Sawyer, J.; Siddique, N.; Wood, T.								or a nonrandomized controlled study)
Development, implementation and evaluation of a disaster training programme for nurses: a Switching Replications randomized controlled trial	Pesiridis, T.; Sourtzi, P.; Galanis, P.; Kalokairinou, A.	2015	Nurse Educ Pract	15	1	Jul-63	10.1016/j.nepr.2014.02.001	#14585	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Differentiated practice, patient-oriented care and quality of work in a hospital in the Netherlands	Boumans, N. P.; Landeweerd, J. A.; Visser, M.	2004	Scand J Caring Sci	18	1	37-48		#1108	Exclusion reason: Wrong intervention (not an implementation intervention)
Dissemination of Evidence-Based Antipsychotic Prescribing Guidelines to Nursing Homes: A Cluster Randomized Trial	Tjia, J.; Field, T.; Mazor, K.; Lemay, C. A.; Kanaan, A. O.; Donovan, J. L.; Briesacher, B. A.; Peterson, D.; Pandolfi, M.; Spenard, A.; Gurwitz, J. H.	2015	J Am Geriatr Soc	63	7	1289-98	10.1111/jgs.13488	#14436	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Distance-Learning, ADHD Quality Improvement in Primary Care: A Cluster-Randomized Trial	Fiks, A. G.; Mayne, S. L.; Michel, J. J.; Miller, J.; Abraham, M.; Suh, A.; Jawad, A. F.; Guevara, J. P.; Grundmeier, R. W.; Blum, N. J.; Power, T. J.	2017	J Dev Behav Pediatr	38	8	573-583	10.1097/dbp.0000000000000490	#12229	Exclusion reason: Wrong population (not nurses)
Documentation of chemotherapy administration by nursing staff in inpatient and outpatient oncology/hematology settings: a best practice implementation project	Turner, Allison; Stephenson, Matthew	2015	JBÍ Database of Systematic Reviews & Implementation Reports	13	10	316-334	10.11124/jbisri-r-2015-2157	#14422	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Does an electronic cognitive aid have an effect on the management of severe gynaecological TURP syndrome? A prospective, randomised simulation study	St Pierre, M.; Breuer, G.; Strembski, D.; Schmitt, C.; Luetcke, B.	2017	BMC Anesthesiol	17	1	72	10.1186/s12871-017-0365-8	#12418	Exclusion reason: Wrong population (not nurses)
Does training increase the use of more emotionally laden words by nurses when talking with cancer patients? A randomised study	Razavi, D.; Delvaux, N.; Marchal, S.; Durieux, J. F.; Farvacques, C.; Dubus, L.; Hogenraad, R.	2002	Br J Cancer	87	1	07-Jan	10.1038/sj.bjc.6600412	#2121	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Drug Safety for Nursing-Home Residents-Findings of a Pragmatic, Cluster-Randomized, Controlled Intervention Trial in 44 Nursing Homes	Junius-Walker, U.; Krause, O.; Thörmann, P.; Bernhard, S.; Fuchs, A.; Sparenberg, L.; Wollny, A.; Stolz, R.; Haumann, H.; Freytag, A.; Kirsch, C.; Usacheva, S.; Wilm, S.; Wiese, B.	2021	Dtsch Arztebl Int	118	42	705-712	10.3238/arztebl.m2021.0297	#20904	Exclusion reason: Wrong population (not nurses)
Durable improvements in prostate cancer screening from online spaced education: A randomized controlled trial	Kerfoot, B. P.; Lawler, E. V.; Sokolovskaya, G.; Gagnon, D.; Conlin, P. R.	2010	American Journal of Preventive Medicine	39	5	472-478	http://dx.doi.org/10.1016/j.amepre.2010.07.016	#7416	Exclusion reason: Wrong population (not nurses)
E-learning education program for registered nurses: the experience of a teaching medical center	Sheen, S. T. H.; Chang, W. Y.; Chen, H. L.; Chao, H. L.; Tseng, C. P.	2008	Journal of Nursing Research	16	3	195-201	10.1097/01.JN.R.0000387306.34741.70	#17363	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
E-learning: a comparative study for knowledge apprehension among nurses	Padalino, Y.; Peres, H. H.	2007	Rev Lat Am Enfermagem	15	3	397-403		#9633	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Economic Evaluation of a Reablement Training Program for Homecare Staff Targeting Sedentary Behavior in	Rooijackers, T. H.; Metzelthin, S. F.; van Rossum, E.; Kempen, Gijm; Evers, Smaa; Gabrio, A.; Zijlstra, G. A. R.	2021	Clin Interv Aging	16		2095-2109	10.2147/cia.S341221	#21885	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Community-Dwelling Older Adults Compared to Usual Care: A Cluster Randomized Controlled Trial									
Educating Nursing Home Nurses on Efficient Use of the Emergency Department	Mercer, S.; Robinson, S.	2008	Journal of Emergency Nursing	34	1	74-76	http://dx.doi.org/10.1016/j.jen.2007.05.002	#9314	Exclusion reason: Wrong type of paper (not a research article)
Educating nursing home staff on fracture prevention: a cluster randomised trial	Cox, H.; Puffer, S.; Morton, V.; Cooper, C.; Hodson, J.; Masud, T.; Oliver, D.; Preedy, D.; Selby, P.; Stone, M.; Sutcliffe, A.; Torgerson, D.	2008	Age Ageing	37	2	167-72	10.1093/agein/g/afm168	#9243	Exclusion reason: Wrong population (not nurses)
Education for ward nurses influences on the quality of inpatient's bowel preparation for colonoscopy	Cho, K. B.; Kim, E. S.; Park, K. S.; Choi, E. S.; Lee, S. M.; Yang, C. H.	2014	United European Gastroenterology Journal	2	1 SUPPL. 1	A334-A335	http://dx.doi.org/10.1177/2050640614548980	#16459	Exclusion reason: Wrong type of paper (not a research article)
Education to reduce potentially harmful medication use among residents of assisted living facilities: a randomized controlled trial	Pitkala, K. H.; Juola, A. L.; Kautiainen, H.; Soini, H.; Finne-Soveri, U. H.; Bell, J. S.; Bjorkman, M.	2014	J Am Med Dir Assoc	15	12	892-8	10.1016/j.jamda.2014.04.002	#15381	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Educational Intervention Improves Communication Abilities of Nurses Encountering Workplace Incivility	Howard, Matthew S.; Embree, Jennifer L.	2020	Journal of Continuing Education in Nursing	51	3	138-144	10.3928/0022-0124-20200216-09	#18039	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Educational intervention on medication reviews aiming to reduce acute healthcare consumption in elderly patients with potentially inappropriate medicines-A pragmatic open-label cluster-randomized controlled trial in primary care	Schmidt-Mende, K.; Andersen, M.; Wettermark, B.; Hasselstrom, J.	2017	Pharmacoepidemiol Drug Saf	26	11	1347-1356	10.1002/pds.4263	#12471	Exclusion reason: Wrong population (not nurses)
Educational outreach in diabetes to encourage practice nurses to use primary care hypertension and hyperlipidaemia guidelines (EDEN): a randomized controlled trial	New, J. P.; Mason, J. M.; Freemantle, N.; Teasdale, S.; Wong, L.; Bruce, N. J.; Burns, J. A.; Gibson, J. M.	2004	Diabet Med	21	6	599-603	10.1111/j.1464-5491.2004.01213.x	#2281	Exclusion reason: Wrong population (not nurses)
Educational outreach visits to primary care nurses improved tuberculosis detection and treatment of obstructive lung disease	Carrier, J.	2006	Evidence Based Nursing	9	2	58-58		#489	Exclusion reason: Wrong type of paper (not a research article)
Educational Outreach with an Integrated Clinical Tool for Nurse-Led Non-communicable Chronic Disease Management in Primary Care in South Africa: A Pragmatic Cluster Randomised Controlled Trial	Fairall, L. R.; Folb, N.; Timmerman, V.; Lombard, C.; Steyn, K.; Bachmann, M. O.; Bateman, E. D.; Lund, C.; Cornick, R.; Faris, G.; Gaziano, T.; Georgeu-Pepper, D.; Zwarenstein, M.; Levitt, N. S.	2016	PLoS Med	13	11	e1002178	10.1371/journal.pmed.1002178	#14014	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Educational program for nursing home physicians and staff to reduce use of non-steroidal anti-inflammatory drugs among nursing home residents: a randomized controlled trial	Stein, C. M.; Griffin, M. R.; Taylor, J. A.; Pichert, J. W.; Brandt, K. D.; Ray, W. A.	2001	Med Care	39	5	436-45		#2178	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effect of a facility-based multifaceted intervention on the quality of obstetrical care: a cluster randomized controlled trial in Mali and Senegal	Pirkle, Catherine M.; Dumont, Alexandre; Traoré, Mamadou; Zunzunegui, Maria-Victoria	2013	BMC Pregnancy & Childbirth	13	1	24-24	10.1186/1471-2393-13-24	#16388	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Effect of a guideline-based multicomponent intervention on use of physical restraints in nursing homes: a randomized controlled trial	Kopke, S.; Muhlhauser, I.; Gerlach, A.; Haut, A.; Haastert, B.; Mohler, R.; Meyer, G.	2012	JAMA	307	20	2177-84	10.1001/jama.2012.4517	#5934	Exclusion reason: Wrong population (not nurses)
Effect of a model consultation informed by guidelines on recorded quality of care of osteoarthritis (MOSAICS): a cluster randomised controlled trial in primary care	Jordan, K. P.; Edwards, J. J.; Porcheret, M.; Healey, E. L.; Jinks, C.; Bedson, J.; Clarkson, K.; Hay, E. M.; Dziedzic, K. S.	2017	Osteoarthritis Cartilage	25	10	1588-1597	10.1016/j.joca.2017.05.017	#12982	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effect of a multifaceted intervention on number of antimicrobial prescriptions for suspected urinary tract infections in residents of nursing homes: cluster randomised controlled trial	Loeb, M.; Brazil, K.; Lohfeld, L.; McGeer, A.; Simor, A.; Stevenson, K.; Zoutman, D.; Smith, S.; Liu, X.; Walter, S. D.	2005	BMJ	331	7518	669	10.1136/bmj.38602.586343.55	#579	Exclusion reason: Wrong population (not nurses)
Effect of a Simulation-based Education on Cardio-pulmonary Emergency Care Knowledge, Clinical Performance Ability and Problem Solving Process in New Nurses	Kim Yun, Hee; Jang Keum, Seong	2011	Journal of Korean Academy of Nursing	41	2	245-255	10.4040/jkan.2011.41.2.245	#6448	Exclusion reason: Wrong language (not English or French)
Effect of an education program on decreasing catheter-related bloodstream infections in the surgical intensive care unit	Coopersmith, C. M.; Rebmann, T. L.; Zack, J. E.; Ward, M. R.; Corcoran, R. M.; Schallom, M. E.; Sona, C. S.; Buchman, T. G.; Boyle, W. A.; Polish, L. B.; Fraser, V. J.	2002	Critical Care Medicine	30	1	59-64		#17374	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Effect of an educational intervention for telephone triage nurses on out-of-hours attendance: a pragmatic randomized controlled study	Lindberg, B. H.; Rebnord, I. K.; Hvilby, S.	2023	BMC Health Serv Res	23	1	4	10.1186/s12913-022-08994-0	#21193	Exclusion reason: Wrong population (not nurses)
Effect of an electronic medication reconciliation application and process redesign on potential adverse drug events: a cluster-randomized trial	Schnipper, J. L.; Hamann, C.; Ndumele, C. D.; Liang, C. L.; Carty, M. G.; Karson, A. S.; Bhan, I.; Coley, C. M.; Poon, E.; Turchin, A.; Labonville, S. A.; Diedrichsen, E. K.; Lipsitz, S.; Broverman, C. A.; McCarthy, P.; Gandhi, T. K.	2009	Arch Intern Med	169	8	771-80	10.1001/archinternmed.2009.51	#7996	Exclusion reason: Wrong population (not nurses)
Effect of clinician communication skills training on patient satisfaction. A randomized, controlled trial	Brown, J. B.; Boles, M.; Mullooly, J. P.; Levinson, W.	1999	Ann Intern Med	131	11	822-9		#3481	Exclusion reason: Wrong population (not nurses)
Effect of communication skills training on nurses' detection of patients' distress and related factors after cancer diagnosis: a randomized study	Fukui, S.; Ogawa, K.; Ohtsuka, M.; Fukui, N.	2009	Psychooncology	18	11	1156-64	10.1002/pon.1429	#8407	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effect of computerised evidence based guidelines on management of asthma and angina in adults in primary care: cluster randomised controlled trial	Eccles, M.; McColl, E.; Steen, N.; Rousseau, N.; Grimshaw, J.; Parkin, D.; Purves, I.	2002	BMJ	325	7370	941		#2636	Exclusion reason: Wrong population (not nurses)
Effect of e-learning and repeated performance feedback on spirometry test quality in family practice: a cluster trial	Schermer, T. R.; Akkermans, R. P.; Crockett, A. J.; van Montfort, M.; Grootens-Stekelenburg, J.; Stout, J. W.; Pieters, W.	2011	Ann Fam Med	9	4	330-6	10.1370/afm.1258	#6308	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effect of e-learning program on risk assessment and pressure ulcer classification - A randomized study	Bredesen, I. M.; Bjoro, K.; Gunningberg, L.; Hofoss, D.	2016	Nurse Educ Today	40		191-7	10.1016/j.nedt.2016.03.008	#14663	Exclusion reason: Wrong outcomes (not related to)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

									behaviour/clinical practice)
Effect of enhanced psychosocial care on antipsychotic use in nursing home residents with severe dementia: cluster randomised trial	Fossey, J.; Ballard, C.; Juszcak, E.; James, I.; Alder, N.; Jacoby, R.; Howard, R.	2006	BMJ	332	7544	756-61	10.1136/bmj.38782.575868.7C	#61	Exclusion reason: Wrong population (not nurses)
Effect of implementation of Integrated Management of Neonatal and Childhood Illness (IMNCI) programme on neonatal and infant mortality: cluster randomised controlled trial	Bhandari, N.; Mazumder, S.; Taneja, S.; Sommerfelt, H.; Strand, T. A.	2012	BMJ	344		e1634	10.1136/bmj.e1634	#6550	Exclusion reason: Wrong population (not nurses)
Effect of Increased Interprofessional Familiarity on Team Performance, Communication, and Psychological Safety on Inpatient Medical Teams: A Randomized Clinical Trial	Iyasere, C. A.; Wing, J.; Martel, J. N.; Healy, M. G.; Park, Y. S.; Finn, K. M.	2022	JAMA Intern Med	182	11	1190-1198	10.1001/jamainternmed.2022.4373	#20820	Exclusion reason: Wrong intervention (not an implementation intervention)
Effect of monitoring surgical outcomes using control charts to reduce major adverse events in patients: cluster randomised trial	Duclos, A.; Chollet, F.; Pascal, L.; Ormando, H.; Carty, M. J.; Polazzi, S.; Lifante, J. C.	2020	Bmj	371		m3840	10.1136/bmj.m3840	#18449	Exclusion reason: Wrong population (not nurses)
Effect of multifaceted intervention promoting early switch from intravenous to oral acetaminophen for postoperative pain: Controlled, prospective, before and after study	Ripouteau, Claire; Conort, Ornella; Lamas, Jean Paul; Auleley, Guy-Robert; Hazebroucq, Georges; Durieux, Pierre	2000	BMJ: British Medical Journal	321	7274	1460-1463	10.1136/bmj.321.7274.1460	#2830	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Effect of on-The-Job versus off-the-Job Training Related to Patient Safety Goals on Staff Nurses' Performance	Hamed, Mohammed Mohammed; Fakhry, Samah Faisal; Saad, Nema Fathy	2022	HIV Nursing	22	2	1791-1798	10.31838/hiv22.02.343	#20630	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effect of Peer Benchmarking on Specialist Electronic Consult Performance in a Los Angeles Safety-Net: a Cluster Randomized Trial	Meeker, D.; Friedberg, M. W.; Knight, T. K.; Doctor, J. N.; Zein, D.; Cayasso-McIntosh, N.; Goldstein, N. J.; Fox, C. R.; Linder, J. A.; Persell, S. D.; Dea, S.; Giboney, P.; Yee, H. F.	2022	JOURNAL OF GENERAL INTERNAL MEDICINE	37	6	1400-1407	https://dx.doi.org/10.1007/s11606-021-07002-1	#21387	Exclusion reason: Wrong population (not nurses)
Effect of Promoting High-Quality Staff Interactions on Fall Prevention in Nursing Homes: A Cluster-Randomized Trial	Colon-Emeric, C. S.; Corazzini, K.; McConnell, E. S.; Pan, W.; Toles, M.; Hall, R.; Cary, M. P., Jr.; Batchelor-Murphy, M.; Yap, T.; Anderson, A. L.; Burd, A.; Amarasekara, S.; Anderson, R. A.	2017	JAMA Intern Med	177	11	1634-1641	10.1001/jamainternmed.2017.5073	#12818	Exclusion reason: Wrong population (not nurses)
Effect of provider prompts on adolescent immunization rates: a randomized trial	Szilagyi, P. G.; Serwint, J. R.; Humiston, S. G.; Rand, C. M.; Schaffer, S.; Vincelli, P.; Dhepyasuwan, N.; Blumkin, A.; Albertin, C.; Curtis, C. R.	2015	Acad Pediatr	15	2	149-57	10.1016/j.acap.2014.10.006	#14455	Exclusion reason: Wrong intervention (not an implementation intervention)
Effect of the Geriatric Emergency Department Intervention on outcomes of care for residents of aged care facilities: A non-Randomised trial	Marsden, Elizabeth; Taylor, Andrea; Wallis, Marianne; Craswell, Alison; Broadbent, Marc; Barnett, Adrian; Crilly, Julia	2020	Emergency Medicine Australasia	32	3	422-429	10.1111/1742-6723.13415	#18631	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effect of Varying Repositioning Frequency on Pressure Injury Prevention in Nursing Home Residents: TEAM-UP Trial Results	Yap, Tracey L.; Horn, Susan D.; Sharkey, Phoebe D.; Zheng, Tianyu; Bergstrom, Nancy; Colon-Emeric, Cathleen; Sabol, Valerie K.; Alderden,	2022	ADVANCES IN SKIN & WOUND CARE	35	6	315-325	10.1097/01.ASW.0000817840.68588.04	#22508	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

	Jenny; Yap, Winston; Kennerly, Susan M.								
Effect of virtual reality simulation training on the response capability of public health emergency reserve nurses in China: A quasiexperimental study	Zhang, D.; Liao, H.; Jia, Y.; He, P.; Wang, D.; Chen, Y.; Yang, W.; Zhang, Y. P.	2021	BMJ Open	11	9	e048611	https://dx.doi.org/10.1136/bmjopen-2021-048611	#22560	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of a 'do not interrupt' vest intervention to reduce medication errors during medication administration: a multicenter cluster randomized controlled trial	Berdot, S.; Vilfailot, A.; Bezie, Y.; Perrin, G.; Berge, M.; Corny, J.; Thi, T. T. P.; Depoisson, M.; Guihaire, C.; Valin, N.; Decelle, C.; Karras, A.; Durieux, P.; Le, L. M. M.; Sabatier, B.	2021	BMC NURSING	20	1		10.1186/s12912-021-00671-7	#19930	Exclusion reason: Wrong intervention (not an implementation intervention)
Effectiveness of a clinic-based strategy for implementing the AHRQ Smoking Cessation Guideline in primary care	Katz, D. A.; Muehlenbruch, D. R.; Brown, R. B.; Fiore, M. C.; Baker, T. B.	2002	Prev Med	35	3	293-301		#3033	Exclusion reason: Wrong population (not nurses)
Effectiveness Of A Multicomponent Implementation Strategy On Increasing Uptake Of USPSTF Hypertension Screening Recommendations In A Primary Care Network: The Embrace Cluster Randomized Trial	Kronish, I. M.; Phillips, E.; Carter, E.; Alcantara, C.; Schwartz, J. E.; Razon, D. T.; Serafini, M. A.; Flatow, J.; Sanchez, J.; Shimbo, D.; Moise, N.	2022	Hypertension	79	Supplement 1		https://dx.doi.org/10.1161/hypertension.119.000000	#21056	Exclusion reason: Wrong type of paper (not a research article)
Effectiveness of a Multicomponent Intervention to Reduce Multidrug-Resistant Organisms in Nursing Homes: A Cluster Randomized Clinical Trial	Mody, L.; Gontjes, K. J.; Cassone, M.; Gibson, K. E.; Lansing, B. J.; Mantey, J.; Kabeto, M.; Galecki, A.; Min, L.	2021	JAMA Netw Open	4	7	e211655	10.1001/jamanetworkopen.2021.16555	#21446	Exclusion reason: Wrong population (not nurses)
Effectiveness of a multifaceted intervention to improve emergency department care of low back pain: A stepped-wedge, cluster-randomised trial	Coombs, D. M.; Machado, G. C.; Richards, B.; Needs, C.; Buchbinder, R.; Harris, I. A.; Howard, K.; McCaffery, K.; Billot, L.; Edwards, J.; Rogan, E.; Facer, R.; Li, Q.; Maher, C. G.	2021	BMJ Quality and Safety	30	10	825-835	https://dx.doi.org/10.1136/bmjqs-2020-012337	#20217	Exclusion reason: Wrong population (not nurses)
Effectiveness of a multifactorial intervention to reduce physical restraints in nursing home residents	Koczy, P.; Becker, C.; Rapp, K.; Klie, T.; Beische, D.; Buchele, G.; Kleiner, A.; Guerra, V.; Rissmann, U.; Kurrle, S.; Bredthauer, D.	2011	J Am Geriatr Soc	59	2	333-9	10.1111/j.1532-5415.2010.03278.x	#6442	Exclusion reason: Wrong population (not nurses)
Effectiveness of a Non-pharmacological Intervention to Control Diabetes Mellitus in a Primary Care Setting in Kerala: A Cluster-Randomized Controlled Trial	Rahul, A.; Chintha, S.; Anish, T. S.; Prajitha, K. C.; Indu, P. S.	2021	Front Public Health	9		747065	10.3389/fpubh.2021.747065	#21803	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of a tailored intervention to reduce antibiotics for urinary tract infections in nursing home residents: a cluster, randomised controlled trial	Arnold, S. H.; Nygaard Jensen, J.; Bjerrum, L.; Siersma, V.; Winther Bang, C.; Brostrøm Kousgaard, M.; Holm, A.	2021	Lancet Infect Dis	21	11	1549-1556	10.1016/s1473-3099(21)00001-3	#19842	Exclusion reason: Wrong population (not nurses)
Effectiveness of a Technology-Enhanced Integrated Care Model for Frail Older People: A Stepped-Wedge Cluster Randomized Trial in Nursing Homes	Kim, H.; Jung, Y. I.; Kim, G. S.; Choi, H.; Park, Y. H.	2021	Gerontologist	61	3	460-469	10.1093/geront/gnaa090	#20990	Exclusion reason: Wrong population (not nurses)
Effectiveness of an animation case-based learning approach to improve frontline nurses' knowledge and attitude on vital sign monitoring towards detecting clinical deterioration: A multi-site, pilot randomised controlled trial	Lin, Y. P.; Liaw, S. Y.; Chua, W. L.; Mok, W. Q.	2015	Annals of the Academy of Medicine Singapore	44	10 SUPPL. 1	S238		#14838	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Effectiveness of an Evidence-Based Practice Training Program for Nurse Educators: A Cluster-Randomized Controlled Trial	D'Souza, Preethy; George, Anice; Nair, Sreekumaran; Noronha, Judith; Renjith, Vishnu	2021	WORLDVIEW S ON EVIDENCE-BASED NURSING	18	4	261-271	10.1111/wvn.12521	#20259	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of communication skill training on cancer truth-telling for advanced practice nurses in Taiwan: a pilot study	Chen, S. Y.; Yang, S. C.; Chien, R. N.; Chen, S. H.; Chu, T. P.; Fujimori, M.; Tang, W. R.	2021	Psycho-oncology				https://dx.doi.org/10.1002/po.n.5629	#20140	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of educational program using printed educational material on care burden distress among staff of residential aged care facilities without medical specialists and/or registered nurses: Cluster quasi-randomization study	Fukuda, Koji; Hattori, Hideyuki; Toba, Kenji; Terada, Seishi; Hashimoto, Mamoru; Ukai, Katsuyuki; Kumagai, Ryo; Suzuki, Mizue; Nagaya, Masahiro; Yoshida, Mika; Murotani, Kenta	2018	Geriatrics & Gerontology International	18	3	487-494	10.1111/ggi.13207	#11437	Exclusion reason: Wrong population (not nurses)
Effectiveness of electronic point-of-care reminders versus monthly feedback to improve adherence to 10 clinical recommendations in primary care: a cluster randomized clinical trial	Coma, E.; Medina, M.; M@ndez, L.; Hermosilla, E.; Iglesias, M.; Olmos, C.; Calero, S.	2019	BMC Med Inform Decis Mak	19	1	245	10.1186/s12911-019-0976-8	#19048	Exclusion reason: Wrong population (not nurses)
Effectiveness of Evidence-Based Practice (EBP) Education on Emergency Nurses' EBP Attitudes, Knowledge, Self-Efficacy, Skills, and Behavior: A Randomized Controlled Trial	Koota, E.; K√\$ri√\$inen, M.; Kyng√\$s, H.; L√\$peri, M.; Melender, H. L.	2021	Worldviews Evid Based Nurs	18	1	23-32	10.1111/wvn.12485	#21034	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of health care worker training on the oral health of elderly residents of nursing homes	Nicol, R.; Petrina Sweeney, M.; McHugh, S.; Bagg, J.	2005	Community Dent Oral Epidemiol	33	2	115-24	10.1111/j.1600-0528.2004.00212.x	#515	Exclusion reason: Wrong population (not nurses)
Effectiveness of interactive discussion group in suicide risk assessment among general nurses in Taiwan: a randomized controlled trial	Wu, C. Y.; Lin, Y. Y.; Yeh, M. C.; Huang, L. H.; Chen, S. J.; Liao, S. C.; Lee, M. B.	2014	Nurse Educ Today	34	11	1388-94	10.1016/j.nedt.2014.03.015	#15121	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of multidisciplinary team training in obstetric emergencies: A randomized controlled trial	Van De Ven, J.	2012	American Journal of Obstetrics and Gynecology	206	1 SUPPL. 1	S68	http://dx.doi.org/10.1016/j.ajog.2011.10.145	#17080	Exclusion reason: Wrong type of paper (not a research article)
Effectiveness of multifaceted hand hygiene interventions in long-term care facilities in Hong Kong: a cluster-randomized controlled trial	Ho, M. L.; Seto, W. H.; Wong, L. C.; Wong, T. Y.	2012	Infect Control Hosp Epidemiol	33	8	761-7	10.1086/666740	#6001	Exclusion reason: Wrong population (not nurses)
Effectiveness of Nursing Care Bundle in Terms of Knowledge and Practices Regarding Care of Patients on Mechanical Ventilator among Nursing Personnel	Aradhna,; Uma, D.; Amoldeep, S.	2022	International Journal of Nursing Education	14	2	50-57	10.37506/ijone.v14i2.17969	#19836	Exclusion reason: Wrong intervention (not an implementation intervention);
Effectiveness of short-term, enhanced, infection control support in improving compliance with infection control guidelines and practice in nursing homes: a cluster randomized trial	Rao, G Gopal; Jeanes, A; Russell, H; Wilson, D; Atere-Roberts, E; O'SULLIVAN, D; Donaldson, N	2009	Epidemiology & Infection	137	10	1465-1471		#19721	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Effectiveness of simulation based educational intervention on pediatric nurses' practice about tracheal intubation in Covid-19 pediatric Intensive Care Unit	Hegazy, S. M. A.; Aboeisa, N. G.	2022	BIOSCIENCE RESEARCH	19	2	1084-1097		#20689	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effectiveness of supervised implementation of an oral health care guideline in care homes; a single-blinded cluster randomized controlled trial	van der Putten, G. J.; Mulder, J.; de Baat, C.; De Visschere, L. M.; Vanobbergen, J. N.; Schols, J. M.	2013	Clin Oral Investig	17	4	1143-53	10.1007/s00784-012-0793-2	#16199	Exclusion reason: Wrong population (not nurses)
Effectiveness of the Extension for Community Health Outcomes Model as Applied to Primary Care for Autism: A Partial Stepped-Wedge Randomized Clinical Trial	Mazurek, Micah O.; Parker, Robert A.; Chan, James; Kuhlthau, Karen; Sohl, Kristin	2020	JAMA Pediatrics	174	5	e196306-e196306	10.1001/jamapediatrics.2019.6306	#18616	Exclusion reason: Wrong population (not nurses);
Effectiveness of Web-based versus face-to-face delivery of education in prescription of falls-prevention exercise to health professionals: randomized trial	Maloney, S.; Haas, R.; Keating, J. L.; Molloy, E.; Jolly, B.; Sims, J.; Morgan, P.; Haines, T.	2011	J Med Internet Res	13	4	e116	10.2196/jmir.1680	#7033	Exclusion reason: Wrong population (not nurses)
Effects of a computerised guideline support tool on child healthcare professionals' response to suspicions of child abuse and neglect: a community-based intervention trial	Konijnendijk, A. A. J.; Boere-Boonekamp, M. M.; Haasnoot, M. E.; Need, A.	2019	BMC Med Inform Decis Mak	19	1	161	10.1186/s12911-019-0884-y	#19201	Exclusion reason: Wrong population (not nurses)
Effects of a cultural competence promotion program for multicultural maternity nursing care: Case-based small group learning	Park, M. S.; Kweon, Y. R.	2013	Journal of Korean Academy of Nursing	43	5	626-635	http://dx.doi.org/10.4040/jkan.2013.43.5.626	#16408	Exclusion reason: Wrong language (not English or French)
Effects of a Just-in-Time Educational Intervention Placed on Dressing Packages: A Multicenter Randomized Controlled Trial	Kent, D.	2011	Journal of Wound, Ostomy & Continence Nursing	38		S13-S13		#6649	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of a multicomponent intervention on functional outcomes and process of care in hospitalized older patients: a randomized controlled trial of Acute Care for Elders (ACE) in a community hospital	Counsell, S. R.; Holder, C. M.; Liebenauer, L. L.; Palmer, R. M.; Fortinsky, R. H.; Kresevic, D. M.; Quinn, L. M.; Allen, K. R.; Covinsky, K. E.; Landefeld, C. S.	2000	J Am Geriatr Soc	48	12	1572-81		#2972	Exclusion reason: Wrong intervention (not an implementation intervention)
Effects of a multifaceted intervention to narrow the evidence-based gap in the treatment of high cardiovascular risk patients: The bridge cv prevention cluster randomized trial	Berwanger, O.; Machline-Carrion, M. J.; Soares, R. M.; Santos, J. Y.; Sampaio, B. D.; Damiani, L. P.; Campos, V.; Guimaraes, H. P.; Pontes-Neto, O. M.; Barros, P. G. M.; Stein, A. T.; Lopes, R. D.; Izar, M. C.; Piegas, L. S.; Fonseca, F. A.	2018	Circulation	138	25	e756-e757	http://dx.doi.org/10.1161/CIR.0000000000000636	#11838	Exclusion reason: Wrong type of paper (not a research article)
Effects of a restraint minimization program on staff knowledge, attitudes, and practice: a cluster randomized trial	Pellfolk, T. J.; Gustafson, Y.; Bucht, G.; Karlsson, S.	2010	J Am Geriatr Soc	58	1	Sep-62	10.1111/j.1532-5415.2009.02629.x	#7700	Exclusion reason: Wrong population (not nurses)
Effects of a restraint reduction intervention and OBRA '87 regulations on psychoactive drug use in nursing homes	Siegler, E. L.; Capezuti, E.; Maislin, G.; Baumgarten, M.; Evans, L.; Strumpf, N.	1997	J Am Geriatr Soc	45	7	791-6		#3956	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Effects of a simulation-based education programme on delirium care for critical care nurses: A randomized controlled trial	Ho, M. H.; Yu, L. F.; Lin, P. H.; Chang, H. C.; Traynor, V.; Huang, W. C.; Montayre, J.; Chen, K. H.	2021	JOURNAL OF ADVANCED NURSING	77	8	3483-3493	10.1111/jan.14938	#20718	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of a virtual reality intervention on dementia care education among acute care nurses in Japan: A non-randomised controlled trial	Yamaguchi, Y.; Ryuno, H.; Fukuda, A.; Kabaya, S.; Isowa, T.; Hiramatsu, M.; Kitagawa, A.; Hattori, Y.; Williamson, A.; Greiner, C.	2022	Geriatr Nurs	48		269-273	10.1016/j.gerinurse.2022.10.013	#22488	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of an educational intervention on nurse practitioners' clinical breast examination techniques and ability to detect lumps in silicone breast models	Waldmeier, V. P.	2006		Ph.D.		146 p-146 p		#10001	Exclusion reason: Wrong type of paper (not a research article)
Effects of an Electrocardiography Training Program: Team-Based Learning for Early-Stage Intensive Care Unit Nurses	Kim, Soomi; Kim, Chul-Gyu	2020	Journal of Continuing Education in Nursing	51	4	174-180	10.3928/0022-0124-20200317-07	#18721	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of an ethical empowerment program on critical care nurses' ethical decision-making	Jamshidian, Fatemeh; Shahriari, Mohsen; Aderyani, Mohsen Rezaei	2019	Nursing Ethics	26	4	1256-1264	10.1177/0969733018759830	#10891	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of an interprofessional Quality Circle-Deprescribing Module (QC-DeMo) in Swiss nursing homes: a randomised controlled trial	Cateau, D.; Ballabeni, P.; Niquille, A.	2021	BMC Geriatr	21	1	289	10.1186/s12877-021-02220-y	#20084	Exclusion reason: Wrong population (not nurses)
Effects of an intervention aimed at improving nurse-patient communication in an oncology outpatient clinic	Rask, M. T.; Jensen, M. L.; Andersen, J.; Zachariae, R.	2009	Cancer Nurs	32	1	E1-11	10.1097/01.Nc.c.0000343365.13871.12	#8047	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of case-based confusion assessment methods for intensive care unit training on delirium knowledge and delirium assessment accuracy of intensive care units: A quasi-experimental study	Kim, Young-Nam; Kim, Dong-Hee	2021	NURSE EDUCATION TODAY	103		N.PAG - N.PAG	10.1016/j.nedt.2021.104954	#20998	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of community of practice and knowledge translation strategies on nurse practitioners' knowledge and practice behavior	Holman, H. M.	2009		D.N.P.		147 p-147 p		#8335	Exclusion reason: Wrong type of paper (not a research article)
Effects of different methods of reflection on nurses' gaze and judgement in a task using a touch panel	Nishimura, A.	2018	J Clin Nurs	27	04-Mar	e569-e577	10.1111/jocn.14096	#11708	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of Early Warning Score (EWS) Tutorial Simulation on Nurses' Knowledge and Clinical Performance	Damayanti, Roshy; Trisyani, Yanny; Nuraeni, Aan	2019	Nurse Media Journal of Nursing	9	2	231-241	10.14710/nmjn.v9i2.24821	#18998	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of monitor alarm management training on nurses' alarm fatigue: A randomised controlled trial	Bi, Jiasi; Yin, Xin; Li, Hongyan; Gao, Ruitong; Zhang, Qing; Zhong, Tangsheng; Zan, Tao; Guan, Baoxing; Li, Zhen	2020	Journal of Clinical Nursing (John Wiley & Sons, Inc.)	29	21/22	4203-4216	10.1111/jocn.15452	#19380	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Effects of multidrug-resistant organism infection control simulation program on the infection control fatigue, job stress, and performance of nurses	Lee, M. H.	2021	Medico-Legal Update	21	1	1267-1272	https://dx.doi.org/10.37506/mlu.v21i1.2493	#21125	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of PACE guide training on the management of asthma and chronic obstructive pulmonary disease by primary care clinicians: a pragmatic cluster randomised controlled trial in Florianopolis, Brazil	Bachmann, M. O.; Bateman, E. D.; Stelmach, R.; Cruz, A. A.; de Andrade, M. P.; Zonta, R.; Zepeda, J.; Natal, S.; Cornick, R. V.; Wattrus, C.; Anderson, L.; Georgeu--Pepper, D.; Lombard, C.; Fairall, L. R.	2019	Bmj Global Health	4	6		10.1136/bmjgh-2019-001921	#19444	Exclusion reason: Wrong population (not nurses)
Effects of perceived educational support on usage of an internet nursing reference center	Marshall, B. L.; Sabbagh, L.	2015	J Contin Educ Nurs	46	4	161-8; quiz 169-70	10.3928/00220124-20150320-01	#14818	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of primary care antimicrobial stewardship outreach on antibiotic use by general practice staff: pragmatic randomized controlled trial of the TARGET antibiotics workshop	McNulty, Clodna; Hawking, Meredith; Lecky, Donna; Jones, Leah; Owens, Rebecca; Charlett, Andr©; Butler, Chris; Moore, Philippa; Francis, Nick	2018	Journal of Antimicrobial Chemotherapy (JAC)	73	5	1423-1432	10.1093/jac/dky004	#11759	Exclusion reason: Wrong population (not nurses)
Effects of reflection on clinical decision-making of intensive care unit nurses	Razieh, S.; Somayeh, G.; Fariba, H.	2018	Nurse Education Today	66		14-Oct	10.1016/j.nedt.2018.03.009	#11632	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of Standardized Patient-Based Training on Surgical Nurses' Competencies for Managing Hand Injuries	Hong, Hyun Seon; Issenberg, S. Barry; Roh, Young Sook	2020	Journal of Continuing Education in Nursing	51	4	189-196	10.3928/00220124-20200317-09	#18049	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects of the implementation of the web-based patient support system on staff's attitudes towards computers and IT use: a randomised controlled trial	Koivunen, M.; Valimaki, M.; Patel, A.; Knapp, M.; Hatonen, H.; Kuosmanen, L.; Pitkanen, A.; Anttila, M.; Katajisto, J.	2010	Scand J Caring Sci	24	3	592-9	10.1111/j.1471-6712.2009.00755.x	#7403	Exclusion reason: Wrong intervention (not an implementation intervention)
Effects of using human patient simulator versus a CD-ROM on learning the management of patients exposed to chemical agents	Johnson, D.; Flagg, A.; Dremsa, T. L.	2010	US Army Med Dep J			16-Sep		#7440	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Effects on staff outcomes and process evaluation of the educating nursing staff effectively (TENSE) program for managing challenging behavior in nursing home residents with dementia: A cluster-randomized controlled trial	Bielderman, A.; Nieuwenhuis, A.; Hazelhof, Tjgm; van Gaal, B. G. I.; Schoonhoven, L.; Akkermans, R. P.; Spijker, A.; Koopmans, Rtc; Gerritsen, D. L.	2021	Int J Nurs Stud	120		103982	10.1016/j.ijnurstu.2021.103982	#19948	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Efficacy of a behavioral intervention to decrease medication transcription errors among professional nurses	Becker, K.	2009		Ph.D.		117 p-117 p		#8587	Exclusion reason: Wrong type of paper (not a research article)
Efficacy of a Simulation Program to Improve Clinical Judgment and Clinical Competence Among Graduate Nurses	Cantrell, M. A.; Mariani, B.; Lengetti, E.	2021	Nurs Educ Perspect	42	3	142-147	10.1097/01.Ne p.0000000000000805	#20059	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Efficacy of a skin tear education program: improving the knowledge of nurses practicing in acute care settings	McTigue, T.; D'Andrea, S.; Doyle-Munoz, J.; Forrester, D. A.	2009	J Wound Ostomy Continence Nurs	36	5	486-92	10.1097/WON.0b013e3181b35ebd	#8523	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Efficacy of a theory-driven program to implement alcohol screening and brief interventions in primary health-care: a cluster randomized controlled trial	Rosario, F.; Vasiljevic, M.; Pas, L.; Angus, C.; Ribeiro, C.; Fitzgerald, N.	2022	Addiction	117	6	1609-1621	10.1111/add.15782	#21887	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Efficacy of evidence-based medicine training for primary healthcare professionals: a non-randomized controlled trial	Fei, J.; Li, Y.; Gao, W.; Li, J.	2018	BMC Med Educ	18	1	299	10.1186/s12909-018-1404-y	#11460	Exclusion reason: Wrong population (not nurses)
Efficacy of feedback from quarterly laboratory comparison in maintaining quality of a hospital capillary blood glucose monitoring program	Jones, H. E.; Cleave, B.; Zinman, B.; Szalai, J. P.; Nichol, H. L.; Hoffman, B. R.	1996	Diabetes Care	19	2	168-70		#4205	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Efficacy of the end-of-life nursing care continuing education program for nurses in general wards in Japan	Yoshioka, S.; Moriyama, M.; Ohno, Y.	2014	Am J Hosp Palliat Care	31	5	513-20	10.1177/1049909113491133	#15113	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Electronic alerts for triage protocol compliance among emergency department triage nurses: a randomized controlled trial	Holmes, J. F.; Freilich, J.; Taylor, S. L.; Buettner, D.	2015	Nurs Res	64	3	226-30	10.1097/nnr.000000000000094	#14934	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Electronic health record innovations to improve referral for asymptomatic hypertension in the emergency department	Souffront, K.; Richardson, L.	2017	Annals of Emergency Medicine	70	4 Supplement 1	S103		#12423	Exclusion reason: Wrong type of paper (not a research article)
Electronic Learning Management System Integration Impact on Tertiary Care Hospital Learners' Educational Performance	Tassi, Ahmad	2016	ProQuest LLC					#13261	Exclusion reason: Wrong type of paper (not a research article)
Engaging Caregivers in Health-Related Housing Decisions for Older Adults With Cognitive Impairment: A Cluster Randomized Trial	Adekpedjou, R.; Stacey, D.; Briere, N.; Freitas, A.; Garvelink, M. M.; Dogba, M. J.; Durand, P. J.; Desroches, S.; Croteau, J.; Rivest, L. P.; Lavigne, F.	2020	Gerontologist	60	5	947-957	10.1093/geront/gnz045	#19685	Exclusion reason: Wrong population (not nurses)
Enhanced coordination of care to reduce medication risks in older home care clients in primary care: a randomized controlled trial	Toivo, Terhi; Airaksinen, Marja; Dimitrow, Maarit; Savela, Eeva; Pelkonen, Katariina; Kiuru, Valtteri; Suominen, Tuula; Uunimäki, Mira; Kivelä, Sirkka-Liisa; Leikola, Saija; Puustinen, Juha	2019	Bmc Geriatrics	19	1	11-Jan	10.1186/s12877-019-1353-2	#17663	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluating an educational intervention of central venous catheter maintenance among oncology nurses	Bubb, T. N.	2015	American Journal of Infection Control	43	6 Supplement 1	S37		#15592	Exclusion reason: Wrong type of paper (not a research article)
Evaluating an Online Intervention to Improve Provider Management of Prenatal Depression: Randomized Control Trial	Leiferman, J. A.; Lee-Winn, A. E.; Lacy, R.; Paulson, J. F.	2022	Women's Health Issues				https://dx.doi.org/10.1016/j.whi.2022.08.009	#21134	Exclusion reason: Wrong population (not nurses)
Evaluating the efficacy of the infection control liaison nurse in the hospital	Ching, T. Y.; Seto, W. H.	1990	J Adv Nurs	15	10	1128-31		#5400	Exclusion reason: Wrong intervention (not an implementation intervention)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Evaluating the Implementation of a Multi-Component Intervention to Prevent Surgical Site Infection and Promote Evidence-Based Practice	Lin, F. C.; Marshall, A. P.; Gillespie, B.; Li, Y.; O'Callaghan, F.; Morrissey, S.; Whitelock, K.; Morley, N.; Chaboyer, W.	2020	Worldviews on Evidence-Based Nursing	17	3	193-201	10.1111/wvn.12436	#19581	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Evaluating the Utility of a Structured Clinical Protocol for Reducing the Impact of Behavioural and Psychological Symptoms of Dementia in Progressive Neurological Diseases: A Pilot Study	Ryan, N. P.; Scott, L.; McPhee, M.; Mathers, S.; Davis, M. C.; Maule, R.; Fisher, F.	2018	Behav Neurol	2018		5420531	10.1155/2018/5420531	#11592	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of a fetal monitoring education program	Trepanier, M. J.; Niday, P.; Davies, B.; Sprague, A.; Nimrod, C.; Dulberg, C.; Watters, N.	1996	J Obstet Gynecol Neonatal Nurs	25	2	137-44		#4076	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of a Hospital-Based Nursing Research and Evidence-Based Practice Mentorship Program on Improving Nurses' Knowledge, Attitudes, and Evidence-Based Practice	Chan, Ee-Yuee; Glass, George Frederick; Phang, Koh Ni	2020	Journal of Continuing Education in Nursing	51	1	46-52	10.3928/00220124-20191217-09	#19079	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Evaluation of a nurse-led dementia education and knowledge translation programme in primary care: A cluster randomized controlled trial	Wang, Y.; Xiao, L. D.; Ullah, S.; He, G. P.; De Bellis, A.	2017	Nurse Educ Today	49		07-Jan	10.1016/j.nedt.2016.10.016	#12309	Exclusion reason: Wrong population (not nurses)
Evaluation of a Palliative Care Program for Nursing Homes in 7 Countries: The PACE Cluster-Randomized Clinical Trial	Van den Block, L.; Honinx, E.; Pivodic, L.; Miranda, R.; Onwuteaka-Philipsen, B. D.; van Hout, H.; Pasma, H. R. W.; Oosterveld-Vlug, M.; Ten Koppel, M.; Piers, R.; Van Den Noortgate, N.; Engels, Y.; Vernooij-Dassen, M.; Hockley, J.; Froggatt, K.; Payne, S.; Szczerbinska, K.; Kylvonen, M.; Gambassi, G.; Pautex, S.; Bassal, C.; De Buysser, S.; Deliens, L.; Smets, T.	2020	JAMA Intern Med	180	2	233-242	10.1001/jamainternmed.2019.5349	#17602	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of a pilot training program in alcohol screening, brief intervention, and referral to treatment for nurses in inpatient settings	Broyles, L. M.; Gordon, A. J.; Rodriguez, K. L.; Hanusa, B. H.; Kengor, C.; Kraemer, K. L.	2013	J Addict Nurs	24	1	19-Aug	10.1097/JAN.0b013e31828767ef	#16879	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of a Training to Improve Management of Pediatric Overweight	Hinchman, Josephine; Beno, Luke; Dennison, David; Trowbridge, Frederick		Journal of Continuing Education in the Health Professions	25	4	259-267		#5683	Exclusion reason: Wrong population (not nurses)
Evaluation of a web-based course for community nurses on postpartum emotional distress	Ingadottir, E.; Thome, M.	2006	Scand J Caring Sci	20	1	86-92	10.1111/j.1471-6712.2006.00385.x	#10532	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of a Web-based education program on reducing medication dosing error: a multicenter, randomized controlled trial	Frush, K.; Hohenhaus, S.; Luo, X.; Gerardi, M.; Wiebe, R. A.	2006	Pediatric Emergency Care	22	1	62-70		#57	Exclusion reason: Wrong population (not nurses)
Evaluation of a web-based graduate continuing nursing education program in Japan: A randomized controlled trial	Horiuchi, S.; Yaju, Y.; Koyo, M.; Sakyō, Y.; Nakayama, K.	2009	Nurse Education Today	29	2	140-149	10.1016/j.nedt.2008.08.009	#17370	Exclusion reason: Wrong outcomes (not related to)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

									behaviour/clinical practice)
Evaluation of a WeChat-based dementia-specific training program for nurses in primary care settings: A randomized controlled trial	Wang, F.; Xiao, L. D.; Wang, K.; Li, M.; Yang, Y.	2017	Appl Nurs Res	38		51-59	10.1016/j.apnr.2017.09.008	#12311	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of an education package in leg ulcer management	Jones, J. E.; Nelson, E. A.	1997	J Wound Care	6	7	342-3		#4037	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of an educational "toolbox" for improving nursing staff competence and psychosocial work environment in elderly care: results of a prospective, non-randomized controlled intervention	Arnetz, J. E.; Hasson, H.	2007	Int J Nurs Stud	44	5	723-35	10.1016/j.ijnurstu.2006.01.012	#9926	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of an electronic health record prompt for hepatitis c antibody screening of baby boomers in primary care-a cluster randomized control trial	Krauskopf, K.; Kil, N.; Sofianou, A.; Toribio, W.; Lyons, J.; Singer, M.; Kannry, J.; Smiith, B.; Rein, D. B.; Federman, A.	2014	Journal of General Internal Medicine	29	SUPPL. 1	S88-S89		#16185	Exclusion reason: Wrong type of paper (not a research article)
Evaluation of fundamental critical care course in Kenya: knowledge, attitude, and practice	Macleod, J. B.; Jones, T.; Aphivantrakul, P.; Chupp, M.; Poenaru, D.	2011	J Surg Res	167	2	223-30	10.1016/j.jss.2009.08.030	#7043	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of Helping Babies Breathe Quality Improvement Cycle (HBB-QIC) on retention of neonatal resuscitation skills six months after training in Nepal	Kc, A.; Wrammert, J.; Nelin, V.; Clark, R. B.; Ewald, U.; Peterson, S.; Malqvist, M.	2017	BMC Pediatr	17	1	103	10.1186/s12887-017-0853-5	#12962	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Evaluation of IMproving Palliative care Education and Training Using Simulation in Dementia (IMPETUS-D) a staff simulation training intervention to improve palliative care of people with advanced dementia living in nursing homes: a cluster randomised controlled trial	Tropea, J.; Nestel, D.; Johnson, C.; Hayes, B. J.; Hutchinson, A. F.; Brand, C.; Le, B. H.; Blackberry, I.; Caplan, G. A.; Bicknell, R.; Hepworth, G.; Lim, W. K.	2022	BMC Geriatr	22	1	127	10.1186/s12877-022-02809-x	#22269	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Evaluation of team training impact on surgical outcomes: A cluster randomized trial	Duclos, A.; Peix, J. L.; Piriou, V.; Colin, C.	2016	International Journal for Quality in Health Care	28	Supplement 1	19	http://dx.doi.org/10.1093/intqhc/mzw104.25	#14050	Exclusion reason: Wrong type of paper (not a research article)
Evaluation of the contributions of an electronic web-based reporting system: enabling action	Levtzion-Korach, O.; Alcalai, H.; Orav, E. J.; Graydon-Baker, E.; Keohane, C.; Bates, D. W.; Frankel, A. S.	2009	J Patient Saf	5	1	15-Sep	10.1097/PTS.0b013e318198dc8d	#8151	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Evaluation of the effect of information integration in displays for ICU nurses on situation awareness and task completion time: A prospective randomized controlled study	Koch, Sven H.; Weir, Charlene; Westenskow, Dwayne; Gondan, Matthias; Agutter, Jim; Haar, Maral; Liu, David; Gvårges, Matthias; Staggers, Nancy	2013	International Journal of Medical Informatics	82	8	665-675	10.1016/j.ijmeinf.2012.10.002	#16631	Exclusion reason: Wrong intervention (not an implementation intervention)
Evaluation of the effect of nurse education on patient-reported foot checks and foot care behaviour of people with diabetes receiving haemodialysis	Brand, S. L.; Musgrove, A.; Jeffcoate, W. J.; Lincoln, N. B.	2016	Diabet Med	33	2	204-7	10.1111/dme.12831	#14666	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Evaluation of the Effectiveness of Testicular Cancer and Testicular Self-Examination Training for Patient Care Personnel: Intervention Study	Akar, Serife Zehra; Bebis, Hatice		Health Education Research	29	6	966-976		#5841	Exclusion reason: Wrong population (not nurses)
Evaluation of the impact of an educational initiative in diabetic foot management	Jones, J.; Gorman, A.	2004	Br J Community Nurs	9	3	S20-6	10.12968/bjcn.2004.9.Sup1.12504	#1505	Exclusion reason: Wrong population (not nurses)
Extended scope of nursing practice: a multicentre randomised controlled trial of appropriately trained nurses and pre-registration house officers in pre-operative assessment in elective general surgery	Kinley, H.; Czoski-Murray, C.; George, S.; McCabe, C.; Primrose, J.; Reilly, C.; Wood, R.; Nicolson, P.; Healy, C.; Read, S.; Norman, J.; Janke, E.; Alhameed, H.; Fernandez, N.; Thomas, E.	2001	Health Technology Assessment	5	35	1-87		#2449	Exclusion reason: Wrong type of paper (not a research article)
Five-year impact of quality improvement for depression: results of a group-level randomized controlled trial	Wells, K.; Sherbourne, C.; Schoenbaum, M.; Ettner, S.; Duan, N.; Miranda, J.; Unutzer, J.; Rubenstein, L.	2004	Arch Gen Psychiatry	61	4	378-86	10.1001/archpsyc.61.4.378	#1286	Exclusion reason: Wrong population (not nurses)
Forensic nursing science knowledge and competency: the use of simulation	Drake, S. A.; Langford, R.; Young, A.; Ayers, C.	2015	Crit Care Nurs Q	38	1	Aug-81	10.1097/cnq.000000000000045	#15486	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Formatting an experiential learning education module to encourage dysphagia assessment in apheresis patients	West, J.; Stutzman, S. E.; Atem, F.; Olson, D. M.	2018	J Clin Apher	33	1	72-77	10.1002/jca.21572	#10975	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Fostering evidence-based practice to improve nurse and cost outcomes in a community health setting: a pilot test of the advancing research and clinical practice through close collaboration model	Levin, R. F.; Fineout-Overholt, E.; Melnyk, B. M.; Barnes, M.; Vetter, M. J.	2011	Nurs Adm Q	35	1	21-33	10.1097/NAQ.0b013e31820320ff	#6394	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Frequency of Hand Decontamination of Intraoperative Providers and Reduction of Postoperative Healthcare-Associated Infections: A Randomized Clinical Trial of a Novel Hand Hygiene System	Koff, M. D.; Brown, J. R.; Marshall, E. J.; O'Malley, A. J.; Jensen, J. T.; Heard, S. O.; Longtine, K.; O'Neill, M.; Longtine, J.; Houston, D.; Robison, C.; Moulton, E.; Patel, H. M.; Loftus, R. W.	2016	Infect Control Hosp Epidemiol	37	8	888-95	10.1017/ice.2016.106	#13730	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
From evidence-base to practice: implementation of the Nurse Family Partnership programme in England	Barnes, J.	2010	Journal of Children's Services	5	4	17-Apr		#7849	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Handheld ultrasound-guided cannulation of difficult hemodialysis arteriovenous access: A randomized controlled trial	Chen, S.; Liu, J. S.; Chai, C. C.; Si, C.; Tan, S. H.; Ravindran, H. R.; Martinez, M. T. P.; Gao, Y.; Yeap, Y. R.; Liu, A. Y. L.	2023	Hemodial Int	27	1	21-27	10.1111/hdi.13050	#20138	Exclusion reason: Wrong intervention (not an implementation intervention)
Handwashing program for the prevention of nosocomial infections in a neonatal intensive care unit	Won, S. P.; Chou, H. C.; Hsieh, W. S.; Chen, C. Y.; Huang, S. M.; Tsou, K. I.; Tsao, P. N.	2004	Infect Control Hosp Epidemiol	25	9	742-6	10.1086/502470	#866	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Healthcare professional improvement in confidence and competence in delivering allergy care following attendance at a 1-day allergic rhinitis and asthma workshop	Hammersley, V.; Elton, R.; Walker, S.; Sheikh, A.; Akdis, C.; Bohle, B.; Bonadonna, P.; Bonini, S.; Calderon, M.; Cecchi, L.; Corrigan, C.; Custovic, A.; del Giacco, S.; Durham, S.; Eigenmann, P.; Eng, P.; Frew, A.;	2010	Allergy: European Journal of Allergy and Clinical Immunology	65	SUPPL. 92	143-144	http://dx.doi.org/10.1111/j.1398-9995.2010.02392.x	#7508	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

	Gevaert, P.; Grattan, C.; Hellings, P.; Hoffmann-Sommergruber, K.; Kalayci, O.; Knol, E.; Mari, A.; Moreira, A.; Moscato, G.; Ollert, M.; Pagani, M.; Passalacqua, G.; Powell, R.; Raulf-Heimsoth, M.; Roberts, G.; Rueff, F.; Scadding, G.; Scharf, C.; Schmid-Grendelmeier, P.; Schwarze, J.; Smith, H.; Virchow, J. C.; Wardlaw, A.; Werfel, T.								
HealthTracker: Does electronic decision support improve identification and management of cardiovascular risk in australian primary health care	Panaretto, K. S.; Peiris, D.; Usherwood, T.; Harris, M.; Hunt, J.; Patel, A.	2012	Circulation	125	19	e808	http://dx.doi.org/10.1161/CIR.0b013e31824fcd3	#17348	Exclusion reason: Wrong type of paper (not a research article)
Helping hands: a cluster randomised trial to evaluate the effectiveness of two different strategies for promoting hand hygiene in hospital nurses	Huis, A.; Schoonhoven, L.; Grol, R.; Borm, G.; Adang, E.; Hulscher, M.; van Achterberg, T.	2011	Implement Sci	6		101	10.1186/1748-5908-6-101	#6700	Exclusion reason: Wrong type of paper (not a research article)
High-Fidelity Simulation Nurse Training Reduces Unplanned Interruption of Continuous Renal Replacement Therapy Sessions in Critically Ill Patients: The SimHeR Randomized Controlled Trial	Lemarie, P.; Husser Vidal, S.; Gergaud, S.; Verger, X.; Rineau, E.; Berton, J.; Parot-Schinkel, E.; Hamel, J. F.; Lasocki, S.	2019	Anesth Analg	129	1	121-128	10.1213/ane.0000000000003581	#19624	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
How Feasible Is Implementation of Distress Screening by Cancer Clinicians in Routine Clinical Care?	Mitchell, A. J.; Lord, K.; Slattery, J.; Grainger, L.; Symonds, P.	2012	Cancer	118	24	6260-6269	10.1002/cncr.27648	#5884	Exclusion reason: Wrong population (not nurses)
How the Routine Use of Patient-Reported Outcome Measures for Hemodialysis Care Influences Patient-Clinician Communication A Mixed-Methods Study	Schick-Makaroff, K.; Wozniak, L. A.; Short, H.; Davison, S. N.; Klarenbach, S.; Buzinski, R.; Walsh, M.; Johnson, J. A.	2022	Clinical Journal of the American Society of Nephrology	17	11	1631-1645	https://dx.doi.org/10.2215/CJN.05940522	#21977	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Impact of a computerized information system on quality of nutritional support in the ICU	Berger, M. M.; Revelly, J. P.; Wasserfallen, J. B.; Schmid, A.; Bouvry, S.; Cayeux, M. C.; Musset, M.; Maravic, P.; Chiolero, R. L.	2006	Nutrition	22	3	221-229	10.1016/j.nut.2005.04.017	#237	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Impact of a continuing education activity on the quality of telephone interventions by nurses in an adult asthma client base	Boutin, H.; Robichaud, P.; Valois, P.; Labrecque, M.	2006	J Nurs Care Qual	21	4	335-43		#223	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Impact of a formal breastfeeding education program	Mellin, P. S.; Poplawski, D. T.; Gole, A.; Mass, S. B.	2011	MCN Am J Matern Child Nurs	36	2	82-8; quiz 89-90	10.1097/NMC.0b013e318205589e	#6992	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Impact of a Formal Educational Skill, "Building Program Based on the ARCC Model to Enhance Evidence-Based Practice Competency in Nurse Teams	Gorsuch, Col Penelope F.; Gallagher Ford, Lynn; Koshy Thomas, Bindu; Melnyk, Bernadette Mazurek; Connor, Linda	2020	Worldviews on Evidence-Based Nursing	17	4	258-268	10.1111/wvn.12463	#18347	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Impact of a multicomponent hand hygiene-related intervention on the infectious risk in nursing homes: A cluster randomized trial	Temime, L.; Cohen, N.; Ait-Bouziad, K.; Denormandie, P.; Dab, W.; Hocine, M. N.	2018	Am J Infect Control	46	2	173-179	10.1016/j.ajic.2017.08.030	#11042	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Impact of a multifaceted intervention on nurses' and physicians' attitudes and behaviors toward family presence during resuscitation	Mian, P.; Warchal, S.; Whitney, S.; Fitzmaurice, J.; Tancredi, D.	2007	Crit Care Nurse	27	1	52-61		#9681	Exclusion reason: Wrong population (not nurses)
Impact of a multifaceted intervention to improve the clinical management of osteoporosis. The ESOSVAL-F study	Sanfeliix-Genoves, J.; Peiro, S.; Sanfeliix-Gimeno, G.; Hurtado, I.; Pascual de la Torre, M.; Trillo-Mata, J. L.; Giner-Ruiz, V.	2010	BMC Health Serv Res	10		292	10.1186/1472-6963-10-292	#7653	Exclusion reason: Wrong population (not nurses)
Impact of a nurse-led intervention to improve screening for cardiovascular risk factors in people with severe mental illnesses. Phase-two cluster randomised feasibility trial of community mental health teams	Osborn, D. P.; Nazareth, I.; Wright, C. A.; King, M. B.	2010	BMC Health Serv Res	10		61	10.1186/1472-6963-10-61	#7719	Exclusion reason: Wrong population (not nurses)
Impact of a nursing education program about caring for patients in Japan with malignant pleural mesothelioma on nurses' knowledge, difficulties and attitude: a randomized control trial	Nagamatsu, Y.; Natori, Y.; Yanai, H.; Horiuchi, S.	2014	Nurse Educ Today	34	7	1087-93	10.1016/j.nedt.2014.02.007	#15447	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Impact of a structured HIV testing program in a hospital emergency department and a primary care center	Gomez-Ayerbe, C.; Martinez-Sanz, J.; Muriel, A.; Elias, P. P.; Moreno, A.; Barea, R.; Polo, L.; Cano, A.; Uranga, A.; Santos, C.; Casado, J. L.; Quereda, C.; Robledillo, G.; Diaz-de Santiago, A.; Vivancos, M. J.; Drona, F.; Navas, E.; Moreno, S.; Elias, M. J. P.	2019	PLoS One	14	8		10.1371/journal.pone.0220375	#18352	Exclusion reason: Wrong population (not nurses)
Impact of an early detection program on breast cancer services, incidence, and stage in Rural Rwanda	Pace, L. E.; Keating, N. L.; Dusengimana, J. M. V.; Hategekimana, V.; Rugema, V.; Muvugabigwi, G.; Schleimer, L. E.; Umwizerwa, A.; Shyirambere, C.; Shulman, L. N.; Mpunga, T.	2018	Journal of Global Oncology	4	Supplement 3	34S	http://dx.doi.org/10.1200/JGO.18.10380	#11684	Exclusion reason: Wrong type of paper (not a research article)
Impact of Antipsychotic Review and Nonpharmacological Intervention on Antipsychotic Use, Neuropsychiatric Symptoms, and Mortality in People With Dementia Living in Nursing Homes: A Factorial Cluster-Randomized Controlled Trial by the Well-Being and Health for People With Dementia (WHELD) Program	Ballard, C.; Orrell, M.; YongZhong, S.; Moniz-Cook, E.; Stafford, J.; Whittaker, R.; Woods, B.; Corbett, A.; Garrod, L.; Khan, Z.; Woodward-Carlton, B.; Wenborn, J.; Fossey, J.	2016	Am J Psychiatry	173	3	252-62	10.1176/appi.ajp.2015.15010130	#14723	Exclusion reason: Wrong population (not nurses)
Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial	Wells, K. B.; Sherbourne, C.; Schoenbaum, M.; Duan, N.; Meredith, L.; Unutzer, J.; Miranda, J.; Carney, M. F.; Rubenstein, L. V.	2000	JAMA	283	2	212-20		#2485	Exclusion reason: Wrong intervention (not an implementation intervention)
Impact of eLearning course on nurses' professional competence in seclusion and restraint practices: 9-month follow-up results of a randomized controlled study (ISRCTN32869544)	Kontio, R.; Hatonen, H.; Joffe, G.; Pitkanen, A.; Lahti, M.; Valimaki, M.	2013	J Psychiatr Ment Health Nurs	20	5	411-8	10.1111/j.1365-2850.2012.01933.x	#16628	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Impact of function focused care in assisted living using the evidence	Resnick, B.; Galik, E.; Boltz, M.	2021	JOURNAL OF THE AMERICAN	69	SUPPL 1	S182	https://dx.doi.org/10.1111/jgs.17115	#21843	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

integration triangle (FFC-al-EIT) intervention on residents and facilities			GERIATRICS SOCIETY							
Impact of implementation of a novel antimicrobial stewardship tool on antibiotic use in nursing homes: a prospective cluster randomized control pilot study	Fleet, E.; Gopal Rao, G.; Patel, B.; Cookson, B.; Charlett, A.; Bowman, C.; Davey, P.	2014	J Antimicrob Chemother	69	8	2265-73	10.1093/jac/dku115	#15964	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)	
Impact of information letters on the reporting rate of adverse drug reactions and the quality of the reports: a randomized controlled study	Johansson, M. L.; Hagg, S.; Wallerstedt, S. M.	2011	BMC Clin Pharmacol	11		14	10.1186/1472-6904-11-14	#6678	Exclusion reason: Wrong population (not nurses)	
Impact of interact implementation on nursing home resident safety	Tappen, R.; Engstrom, G.; Ouslander, J.	2014	Journal of the American Geriatrics Society	62	SUPPL. 1	S143	http://dx.doi.org/10.1111/jgs.12870	#15278	Exclusion reason: Wrong type of paper (not a research article)	
Impact of interprofessional education about psychological and medical comorbidities on practitioners' knowledge and collaborative practice: mixed method evaluation of a national program	Phillips, C. B.; Hall, S.; Irving, M.	2016	BMC Health Services Research	16		465	http://dx.doi.org/10.1186/s12913-016-1720-z	#13409	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)	
Impact of nursing education on clinical practice	Tarsis, H. H.	2014	Nurs J India	105	1	10-Aug		#15277	Exclusion reason: Wrong population (not nurses)	
Impact of Nursing Home Palliative Care Teams on End-of-Life Outcomes: A Randomized Controlled Trial	Temkin-Greener, H.; Mukamel, D. B.; Ladd, H.; Ladwig, S.; Caprio, T. V.; Norton, S. A.; Quill, T. E.; Olsan, T. H.; Cai, X.	2018	Med Care	56	1	18-Nov	10.1097/mlr.0000000000000835	#11041	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)	
Impact of person-centred care training and person-centred activities on quality of life, agitation, and antipsychotic use in people with dementia living in nursing homes: A cluster-randomised controlled trial	Ballard, C.; Corbett, A.; Orrell, M.; Williams, G.; Moniz-Cook, E.; Romeo, R.; Woods, B.; Garrod, L.; Testad, I.; Woodward-Carlton, B.; Wenborn, J.; Knapp, M.; Fossey, J.	2018	PLoS Med	15	2	e1002500	10.1371/journal.pmed.1002500	#12662	Exclusion reason: Wrong population (not nurses)	
Impact of psychologically tailored hand hygiene interventions on nosocomial infections with multidrug-resistant organisms: results of the cluster-randomized controlled trial PSYGIENE	von Lengerke, T.; Ebadi, E.; Schock, B.; Krauth, C.; Lange, K.; Stahmeyer, J. T.; Chaberny, I. F.	2019	Antimicrobial Resistance and Infection Control	8		11	10.1186/s13756-019-0507-5	#10732	Exclusion reason: Wrong population (not nurses)	
Impact of training dementia caregivers in sensitivity to nonverbal emotion signals	Magai, C.; Cohen, C. I.; Gomberg, D.	2002	Int Psychogeriatr	14	1	25-38		#2581	Exclusion reason: Wrong population (not nurses)	
IMPACT: Effects of an Online Capacity-Building Intervention for IPV Prevention Professionals	Drabkin, Anya S.; Baden, Lucy; Solomon, Julie; Card, Josefina J.	2021	JOURNAL OF INTERPERSONAL VIOLENCE	36	15/16	NP7899-NP7919	10.1177/0886260519838498	#20346	Exclusion reason: Wrong population (not nurses)	
Implementation and evaluation of an education programme for nursing staff on recognising, reporting and managing resident-to-resident elder mistreatment in aged care facilities	Ellis, J. M.; Ayala Quintanilla, B. P.; Ward, L.; Campbell, F.	2019	Journal of Advanced Nursing	75	1	187-196	http://dx.doi.org/10.1111/jan.13819	#11292	Exclusion reason: Wrong type of paper (not a research article)	
Implementation and evaluation of the '5As of obesity management' in primary care: Results from the 5As team (5AsT) study	Campbell-Scherer, D.; Asselin, J.; Osunlana, A.; Ogunleye, A.; Fielding, S.; Anderson, R.; Cave, A.; Johnson, J.; Sharma, A.	2017	Obesity Facts	10	Supplement 1	185-186	http://dx.doi.org/10.1159/000468958	#12868	Exclusion reason: Wrong type of paper (not a research article)	

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Implementation and initial evaluation of a Web-based nurse order entry system for multidrug-resistant tuberculosis patients in Peru	Choi, S. S.; Jazayeri, D. G.; Mitnick, C. D.; Chalco, K.; Bayona, J.; Fraser, H. S.	2004	Stud Health Technol Inform	107	Pt 1	202-6		#1068	Exclusion reason: Wrong intervention (not an implementation intervention)
Implementation of a multifaceted nurse-led intervention to reduce indwelling urinary catheter use in four Australian hospitals: A pre- and postintervention study	Giles, Michelle; Graham, Laura; Ball, Jean; King, Jennie; Watts, Wendy; Harris, Alison; Oldmeadow, Christopher; Ling, Rod; Paul, Michelle; O'Brien, Anthony; Parker, Vicki; Wiggers, John; Foureur, Maralyn	2020	Journal of Clinical Nursing (John Wiley & Sons, Inc.)	29	06-May	872-886	10.1111/jocn.15142	#18370	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementation of a nurse-driven ventilation weaning protocol in critically ill children: Can it improve patient outcome?	Duynham, A.; Houmes, R. J.; van Rosmalen, J.; Tibboel, D.; van Dijk, M.; Ista, E.	2020	Australian Critical Care	33	1	80-88	10.1016/j.aucc.2019.01.005	#18440	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementation of a nurse-led behaviour change intervention to support medication taking in type 2 diabetes: beyond hypothesised active ingredients (SAMS Consultation Study)	Hardeman, W.; Lamming, L.; Kellar, I.; De Simoni, A.; Graffy, J.; Boase, S.; Sutton, S.; Farmer, A.; Kinmonth, A. L.	2014	Implement Sci	9		70	10.1186/1748-5908-9-70	#15869	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementation of a protocol for integrated management of pain, agitation, and delirium can improve clinical outcomes in the intensive care unit: a randomized clinical trial	Mansouri, P.; Javadpour, S.; Zand, F.; Ghodsbin, F.; Sabetian, G.; Masjedi, M.; Tabatabaee, H. R.	2013	J Crit Care	28	6	918-22	10.1016/j.jcrc.2013.06.019	#16984	Exclusion reason: Wrong population (not nurses)
Implementation of an Evidence-Based Guideline of Enteral Nutrition for Infants With Congenital Heart Disease: A Controlled Before-and-After Study*	Gu, Y.; Hu, Y.; Zhang, H. W.; Fu, W. J.; Yang, Y. X.; Latour, J. M.	2020	Pediatric Critical Care Medicine	21	6	E369-E377	10.1097/pcc.0000000000002296	#18315	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementation of an innovative hands-on training to improve adherence to hygiene rules: A feasibility Study	Stock, S.; Tebest, R.; Westermann, K.; Samel, C.; Strohbucker, B.; Stosch, C.; Wenchel, H. M.; Redaelli, M.	2016	Nurse Education Today	36		407-411	10.1016/j.nedt.2015.10.012	#13304	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementation of an Oral Care Protocol for Primary Diabetes Care: A Pilot Cluster-Randomized Controlled Trial	Verhulst, M. J. L.; Teeuw, W. J.; Gerdes, V. E. A.; Loos, B. G.	2021	Ann Fam Med	19	3	197-206	10.1370/afm.2645	#22347	Exclusion reason: Wrong population (not nurses)
Implementation of cancer pain guidelines by acute care nurse practitioners using an audit and feedback strategy	Dulko, D.; Hertz, E.; Julien, J.; Beck, S.; Mooney, K.	2010	J Am Acad Nurse Pract	22	1	45-55	10.1111/j.1745-7599.2009.00469.x	#7568	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementation of cytospongetm device training for nurses in primary care	Beecham, I. D.; Alias, B.; Nuckcheddy, T.; Bowers, B.; Murray, L.; Wilson, A.; Muldrew, B.; Khan, Z.; O'Donovan, M.; MacRae, S.; Sasieni, P.; Fitzgerald, R.	2018	Gut	67	Supplement 1	A269	http://dx.doi.org/10.1136/gutjnl-2018-BSGAbstracts.525	#11848	Exclusion reason: Wrong type of paper (not a research article)
Implementation of evidence-based preventive services delivery processes in primary care: an Oklahoma Physicians Resource/Research Network (OKPRN) study	Mold, J. W.; Aspy, C. A.; Nagykaldi, Z.	2008	J Am Board Fam Med	21	4	334-44	10.3122/jabfm.2008.04.080006	#8944	Exclusion reason: Wrong population (not nurses)
Implementation of the champions for skin integrity model to improve leg and foot	Parker, Chrisina N.; Shuter, Patricia; Maresco, & Pennisi, Diane; Sargent,	2019	Journal of Clinical Nursing			No Pagination	10.1111/jocn.14826	#10808	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

ulcer care in the primary healthcare setting	Jodie; Collins, Lou; Edwards, Helen E.; Finlayson, Kathleen J.					Specified-No Paginat ion Specifi ed			
Implementation of the dutch clinical practice guideline pain in patients with cancer: A clustered randomised controlled trial with short message service (SMS) and interactive voice response (IVR)	Te Bovelde, N. D.; Engels, Y.; Besse, T. C.; Vissers, K. C. P.; Vernooij-Dassen, M. J. F. J.	2012	Palliative Medicine	26	4	455-456	http://dx.doi.org/10.1177/0269216312446391	#17116	Exclusion reason: Wrong type of paper (not a research article)
Implementation of the evidence review on best practice for confirming the correct placement of nasogastric tube in patients in an acute care hospital	Tho, Poh Chi; Mordiffi, Siti; Ang, Emily; Chen, Helen	2011	International Journal of Evidence-Based Healthcare	9	1	51-60	10.1111/j.1744-1609.2010.00200.x	#6245	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementing a nursing symptom self-management intervention: The Symptom Navi Program	Bana, M.; Ribi, K.; Kropf-Staub, S.; Zurcher-Florin, S.; Naf, E.; Blauer, C.; Borner, M.; Cantoni, N.; Seeger, T.; Betticher, D.; Butikofer, L.; Peters, S.; Eicher, M.	2020	Annals of Oncology	31 (Supplement 4)		S1138		#19428	Exclusion reason: Wrong type of paper (not a research article)
Implementing a Pilot Trial of an Infection Control Program in Nursing Homes: Results of a Matched Cluster Randomized Trial	McConeghy, K. W.; Baier, R.; McGrath, K. P.; Baer, C. J.; Mor, V.	2017	J Am Med Dir Assoc	18	8	707-712	10.1016/j.jamd.2017.03.003	#11918	Exclusion reason: Wrong population (not nurses)
Implementing a Standardized Communication Tool in an Intensive Care Unit	Murphy, M.; Engel, J. R.; McGugan, L.; McKenzie, R.; Thompson, J. A.; Turner, K. M.	2022	CRITICAL CARE NURSE	42	3	56+	10.4037/ccn2022154	#21518	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementing collaborative care for depression treatment in primary care: a cluster randomized evaluation of a quality improvement practice redesign	Chaney, E. F.; Rubenstein, L. V.; Liu, C. F.; Yano, E. M.; Bolkan, C.; Lee, M.; Simon, B.; Lanto, A.; Felker, B.; Uman, J.	2011	Implement Sci	6		121	10.1186/1748-5908-6-121	#7383	Exclusion reason: Wrong population (not nurses)
Implementing distress management guidelines in ambulatory oncology: A quality improvement project	Hammelef, Karen J.; Friese, Christopher R.; Breslin, Tara M.; Riba, Michelle; Schneider, Susan M.	2014	Clinical Journal of Oncology Nursing	18	1, Suppl	31-36	10.1188/14.CJON.S1.31-36	#15876	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementing evidence-based practice: effectiveness of a structured multifaceted mentorship programme	Wallen, G. R.; Mitchell, S. A.; Melnyk, B.; Fineout, Overholt, E.; Miller, Davis, C.; Yates, J.; Hastings, C.	2010	Journal of Advanced Nursing	66	12	2761-2771	10.1111/j.1365-2648.2010.05442.x	#17376	Exclusion reason: Wrong population (not nurses)
Implementing family services at mental health clinics	Cohen, A.; Glynn, S.; Young, A.; Hamilton, A.	2010	Journal of General Internal Medicine	25	SUPPL. 3	S305-S306	http://dx.doi.org/10.1007/s11606-010-1338-5	#7754	Exclusion reason: Wrong type of paper (not a research article)
Implementing guidelines for smoking cessation: comparing the efforts of nurses and medical assistants	Katz, D. A.; Brown, R. B.; Muehlenbruch, D. R.; Fiore, M. C.; Baker, T. B.	2004	Am J Prev Med	27	5	411-6	10.1016/j.amepre.2004.07.015	#1496	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementing guidelines to routinely prevent chronic vascular disease in primary care: the Preventive Evidence	Harris, M. F.; Parker, S. M.; Litt, J.; van Driel, M.; Russell, G.; Mazza, D.; Jayasinghe, U. W.; Del Mar, C.; Lloyd,	2015	BMJ Open	5	12	e009397	10.1136/bmjopen-2015-009397	#14954	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

into Practice cluster randomised controlled trial	J.; Smith, J.; Zwar, N.; Taylor, R.; Powell Davies, G.								
Implementing mandatory early warning scoring impacts nurses, Æ practice of documenting free text notes	Bunkenborg, Gitte; Smith, Æ Hansen, Lars; Poulsen, Ingrid	2019	Journal of Clinical Nursing			No Paginat ion Specifi ed-No Paginat ion Specifi ed	10.1111/jocn.14870	#11333	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementing Motivational Interviewing for Substance Misuse on Medical Inpatient Units: a Randomized Controlled Trial	Martino, S.; Zimbrea, P.; Forray, A.; Kaufman, J. S.; Desan, P. H.; Olmstead, T. A.; Gilstad-Hayden, K.; Gueorguieva, R.; Yonkers, K. A.	2019	J Gen Intern Med	34	11	2520-2529	10.1007/s11606-019-05257-3	#18626	Exclusion reason: Wrong population (not nurses)
Implementing osteoarthritis guidelines in UK primary care: Mosaics cluster randomised controlled trial	Dziedzic, K.	2015	Osteoarthritis and Cartilage	23	SUPPL. 2	A30		#15473	Exclusion reason: Wrong type of paper (not a research article)
Implementing practice guides to improve cancer symptom management in homecare: A comparative case study	Stacey, Dawn; Ludwig, Claire; Truant, Tracy; Carley, Meg; Bennis, Cindy; Gifford, Wendy; Kuziemsy, Craig; Nichol, Kathryn; Lafreniere-Davis, Nicole; Owens, Glenda; Roscoe, Diane; Roberts, Pamela; Verhaegen, Melina	2019	Home Health Care Management & Practice	31	3	139-146	10.1177/1084822318817896	#17754	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Implementing referral to an electronic alcohol brief advice website in primary healthcare: results from the ODHIN implementation trial	Bendtsen, P.; Mussener, U.; Karlsson, N.; Lopez-Pelayo, H.; Palacio-Vieira, J.; Colom, J.; Gual, A.; Reynolds, J.; Wallace, P.; Segura, L.; Anderson, P.	2016	BMJ Open	6	6	e010271	10.1136/bmjopen-2015-010271	#14698	Exclusion reason: Wrong population (not nurses)
Implementing the Dynamic Appraisal of Situational Aggression in Mental Health Units	Lantta, T.; Daffern, M.; Kontio, R.; Valimaki, M.	2015	Clinical Nurse Specialist	29	4	230-243	10.1097/nur.0000000000000140	#15232	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Improved cardiovascular prevention using best CME practices: a randomized trial	Laprise, R.; Thivierge, R.; Gosselin, G.; Bujas-Bobanovic, M.; Vandal, S.; Paquette, D.; Luneau, M.; Julien, P.; Goulet, S.; Desaulniers, J.; Maltais, P.	2009	J Contin Educ Health Prof	29	1	16-31	10.1002/chp.20002	#8168	Exclusion reason: Wrong population (not nurses)
Improved detection of incident HIV infection and uptake of PMTCT services in labor and delivery in a high HIV prevalence setting	Kieffer, M. P.; Nhlabatsi, B.; Mahdi, M.; Hoffman, H. J.; Kudiabor, K.; Wilfert, C. M.	2011	J Acquir Immune Defic Syndr	57	4	e85-91	10.1097/QAI.0b013e31821acc6e	#6453	Exclusion reason: Wrong population (not nurses)
Improved electrocardiographic monitoring practices in the practical use of the latest standards of electrocardiography (PULSE) trial	Funk, M.; Fennie, K. P.; May, J. L.; Stephens, K.; Feder, S. L.; Chang, P. S.; Drew, B. J.	2013	Circulation	128	22 SUPPL. 1			#16815	Exclusion reason: Wrong type of paper (not a research article)
Improved HIV and TB Knowledge and Competence among Mid-level Providers in a Cluster-Randomized Trial of One-on-One Mentorship for Task Shifting	Naikoba, S.; Senjovu, K. D.; Mugabe, P.; McCarthy, C. F.; Riley, P. L.; Kadengye, D. T.; Dalal, S.	2017	Journal of Acquired Immune Deficiency Syndromes	75	5	e120-e127	http://dx.doi.org/10.1097/QAI.00000000000001378	#11854	Exclusion reason: Wrong population (not nurses)
Improved quality of nursing documentation: results of a nursing	Muller-Staub, M.; Needham, I.; Odenbreit, M.; Lavin, M. A.; van Achterberg, T.	2007	Int J Nurs Terminol Classif	18	1	17-May	10.1111/j.1744-	#9660	Exclusion reason: Wrong study design (not a RCT

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

diagnoses, interventions, and outcomes implementation study							618X.2007.00043.x		or a nonrandomized controlled study)
Improvement in provider immunization knowledge and behaviors following a peer education intervention	Boom, J. A.; Nelson, C. S.; Laufman, L. E.; Kohrt, A. E.; Kozinetz, C. A.	2007	Clin Pediatr (Phila)	46	8	706-17	10.1177/0009922807301484	#9790	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Improvement of drug dose calculations by classroom teaching or e-learning: a randomised controlled trial in nurses	Simonsen, B. O.; Daehlin, G. K.; Johansson, I.; Farup, P. G.	2014	BMJ Open	4	10	e006025	10.1136/bmjopen-2014-006025	#15326	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Improvement of Iranian nurses' competence through professional portfolio: a quasi-experimental study	Bahreini, M.; Moattari, M.; Shahamat, S.; Dobaradaran, S.; Ravanipour, M.	2013	Nurs Health Sci	15	1	Jul-51	10.1111/j.1442-2018.2012.00733.x	#16931	Exclusion reason: Wrong intervention (not an implementation intervention)
Improving adherence to guidelines for hypertension drug prescribing: cluster-randomized controlled trial of general versus patient-specific recommendations	Goldstein, M. K.; Lavori, P.; Coleman, R.; Advani, A.; Hoffman, B. B.	2005	Am J Manag Care	11	11	677-85		#1024	Exclusion reason: Wrong population (not nurses)
Improving Adherence to Long-term Opioid Therapy Guidelines to Reduce Opioid Misuse in Primary Care: A Cluster-Randomized Clinical Trial	Liebschutz, J. M.; Xuan, Z.; Shanahan, C. W.; LaRochelle, M.; Keosaian, J.; Beers, D.; Guara, G.; O'Connor, K.; Alford, D. P.; Parker, V.; Weiss, R. D.; Samet, J. H.; Crosson, J.; Cushman, P. A.; Lasser, K. E.	2017	JAMA Intern Med	177	9	1265-1272	10.1001/jamainternmed.2017.2468	#12029	Exclusion reason: Wrong population (not nurses)
Improving cancer pain management in communities: Main results from a randomized controlled trial	Elliott, T. E.; Murray, D. M.; Oken, M. M.; Johnson, K. M.; Braun, B. L.; Elliott, B. A.; PostWhite, J.	1997	Journal of Pain and Symptom Management	13	4	191-203	10.1016/s0885-3924(96)00275-8	#4413	Exclusion reason: Wrong population (not nurses)
Improving care for minorities: can quality improvement interventions improve care and outcomes for depressed minorities? Results of a randomized, controlled trial	Miranda, J.; Duan, N.; Sherbourne, C.; Schoenbaum, M.; Lagomasino, I.; Jackson-Triche, M.; Wells, K. B.	2003	Health Serv Res	38	2	613-30		#2011	Exclusion reason: Wrong population (not nurses)
Improving clinician self-efficacy does not increase asthma guideline use by primary care clinicians	Cloutier, M. M.; Tennen, H.; Wakefield, D. B.; Brazil, K.; Hall, C. B.	2012	Acad Pediatr	12	4	312-8	10.1016/j.acap.2012.04.004	#6474	Exclusion reason: Wrong population (not nurses)
Improving comfort around dying in elderly people: a cluster randomised controlled trial	Beernaert, K.; Smets, T.; Cohen, J.; Verhofstede, R.; Costantini, M.; Eecloo, K.; Van Den Noortgate, N.; Deliens, L.	2017	Lancet	390	10090	125-134	10.1016/s0140-6736(17)31265-5	#12935	Exclusion reason: Wrong population (not nurses)
Improving Geriatric Care Processes on Two Medical-Surgical Acute Care Units: A Pilot Study	Booth, K. A.; Simmons, E. E.; Viles, A. F.; Gray, W. A.; Kennedy, K. R.; Biswal, S. H.; Lowe, J. A.; Xhaja, A.; Kennedy, R. E.; Brown, C. J.; Flood, K. L.	2019	Journal for Healthcare Quality	41	1	23-31	10.1097/jhq.000000000000140	#19348	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Improving hand hygiene adherence among nursing staff	Harne-Britner, S.; Allen, M.; Fowler, K. A.	2011	J Nurs Care Qual	26	1	39-48	10.1097/NCQ.0b013e3181e0575f	#6728	Exclusion reason: Wrong population (not nurses)
Improving nurses' knowledge, attitude, and performance in relation to ethical codes through group reflection strategy	Momennasab, Marzieh; Ghanbari, Marjan; Rivaz, Mozghan	2021	BMC NURSING	20	1	09-Jan	10.1186/s12912-021-00749-2	#21460	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Improving nursing practice with staff education: the challenges of dysphagia	Hansel, D. E.; Heinemann, D.	1996	Gastroenterol Nurs	19	6	201-6		#4219	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Improving oral health in nursing home residents: A cluster randomized trial of a shared oral care intervention	Overgaard, C.; Bv[]ggild, H.; Hede, B.; Bagger, M.; Hartmann, L. G.; Aagaard, K.	2022	Community Dent Oral Epidemiol	50	2	115-123	10.1111/cdoe.12638	#21641	Exclusion reason: Wrong population (not nurses)
Improving outcomes of nursing home interactions	Williams, K. N.	2006	Res Nurs Health	29	2	121-33	10.1002/nur.20117	#9980	Exclusion reason: Wrong population (not nurses)
Improving quality of delirium care in a general medical service with established interdisciplinary care: a controlled trial	Mudge, A. M.; Maussen, C.; Duncan, J.; Denaro, C. P.	2013	Intern Med J	43	3	270-7	10.1111/j.1445-5994.2012.02840.x	#16569	Exclusion reason: Wrong population (not nurses)
Improving rates of pneumococcal vaccination on discharge from a tertiary center medical teaching unit: a prospective intervention	Thomas, C. M.; Loewen, A.; Coffin, C.; Campbell, N. R.	2005	BMC Public Health	5		110	10.1186/1471-2458-5-110	#376	Exclusion reason: Wrong intervention (not an implementation intervention)
Improving resident outcomes with GAPN organization level interventions	Krichbaum, K.; Pearson, V.; Savik, K.; Mueller, C.	2005	West J Nurs Res	27	3	322-37	10.1177/0193945904270300	#612	Exclusion reason: Wrong intervention (not an implementation intervention)
Improving smoking cessation care in pregnancy at Aboriginal Medical Services: ICAN QUIT in Pregnancy' step-wedge cluster randomised study	Bar-Zeev, Y.; Bovill, M.; Bonevski, B.; Gruppetta, M.; Oldmeadow, C.; Palazzi, K.; Atkins, L.; Reath, J.; Gould, G. S.	2019	BMJ Open	9	6			#19426	Exclusion reason: Wrong population (not nurses)
Improving the care for depression in patients with comorbid medical illness	Koike, A. K.; Unutzer, J.; Wells, K. B.	2002	Am J Psychiatry	159	10	1738-45	10.1176/appi.aip.159.10.1738	#3020	Exclusion reason: Wrong population (not nurses)
Improving the Delivery of Chronic Opioid Therapy Among People Living With Human Immunodeficiency Virus: A Cluster Randomized Clinical Trial	Samet, J. H.; Tsui, J. I.; Cheng, D. M.; Liebschutz, J. M.; Lira, M. C.; Walley, A. Y.; Colasanti, J. A.; Forman, L. S.; Root, C.; Shanahan, C. W.; Sullivan, M. M.; Briden, C. L.; Abrams, C.; Harris, C.; Outlaw, K.; Armstrong, W. S.; Del Rio, C.	2021	Clin Infect Dis	73	7	e2052-e2058	10.1093/cid/ciaa1025	#21937	Exclusion reason: Wrong population (not nurses)
Improving the knowledge of labour and delivery nurses in India: a randomized controlled trial of mentoring and case sheets in primary care centres	Bradley, J.; Jayanna, K.; Shaw, S.; Cunningham, T.; Fischer, E.; Mony, P.; Ramesh, B. M.; Moses, S.; Avery, L.; Crockett, M.; Blanchard, J. F.	2017	BMC Health Serv Res	17	1	14	10.1186/s12913-016-1933-1	#12894	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Improving the quality of nurse clinical documentation for chronic patients at primary care clinics: A multifaceted intervention	Mahomed, O. H.; Naidoo, S.; Asmall, S.; Taylor, M.	2015	Curationis	38	1		http://dx.doi.org/10.4102/curationis.v38i1.1497	#14821	Exclusion reason: Wrong population (not nurses)
Improving the referral process for familial breast cancer genetic counselling: findings of three randomised controlled trials of two interventions	Wilson, B. J.; Torrance, N.; Mollison, J.; Wordsworth, S.; Gray, J. R.; Haites, N. E.; Grant, A.; Campbell, M. K.; Miedzybrodzka, Z.; Clarke, A.; Watson, M. S.; Douglas, A.	2005	Health Technol Assess	9	3	iii-iv, 1-126		#318	Exclusion reason: Wrong population (not nurses)
Improving use of targeted temperature management after out-of-hospital cardiac arrest: a stepped wedge cluster randomized controlled trial	Morrison, L. J.; Brooks, S. C.; Dainty, K. N.; Dorian, P.; Needham, D. M.; Ferguson, N. D.; Rubenfeld, G. D.; Slutsky, A. S.; Wax, R. S.; Zwarenstein, M.; Thorpe, K.; Zhan, C.; Scales, D. C.	2015	Crit Care Med	43	5	954-64	10.1097/ccm.0000000000000864	#14772	Exclusion reason: Wrong population (not nurses)
Increasing preventive care by primary care nursing and allied health clinicians: a non-randomized controlled trial	McElwaine, K. M.; Freund, M.; Campbell, E. M.; Knight, J.; Bowman, J. A.; Wolfenden, L.; McElduff, P.;	2014	Am J Prev Med	47	4	424-34	10.1016/j.amepre.2014.06.018	#15712	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

	Bartlem, K. M.; Gillham, K. E.; Wiggers, J. H.								
Increasing smoking cessation care in a preoperative clinic: a randomized controlled trial	Wolfenden, L.; Wiggers, J.; Knight, J.; Campbell, E.; Spigelman, A.; Kerridge, R.; Moore, K.	2005	Prev Med	41	1	284-90	10.1016/j.ypmed.2004.11.011	#315	Exclusion reason: Wrong population (not nurses)
Insights about the process and impact of implementing nursing guidelines on delivery of care in hospitals and community settings	Davies, B.; Edwards, N.; Ploeg, J.; Virani, T.	2008	BMC Health Services Research	8		29-29		#9232	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Instructional design affects the efficacy of simulation-based training in central venous catheterization	Craft, C.; Feldon, D. F.; Brown, E. A.	2014	Am J Surg	207	5	782-9	10.1016/j.amjsurg.2013.06.003	#16430	Exclusion reason: Wrong intervention (not an implementation intervention)
Integrating screening and interventions for unhealthy behaviors into primary care practices	Aspy, C. B.; Mold, J. W.; Thompson, D. M.; Blondell, R. D.; Landers, P. S.; Reilly, K. E.; Wright-Eakers, L.	2008	Am J Prev Med	35	5 Suppl	S373-80	10.1016/j.amepre.2008.08.015	#9373	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Integration of a multicomponent intervention for hypertension into primary healthcare services in Singapore-A cluster randomized controlled trial	Jafar, T. H.; Tan, N. C.; Shirore, R. M.; Allen, J. C.; Finkelstein, E. A.; Hwang, S. W.; Koong, A. Y. L.; Moey, P. K. S.; Kang, G. C.; Goh, C. W. T.; Subramanian, R. C.; Thiagarajah, A. G.; Ramakrishnan, C.; Lim, C. W.; Liu, J.	2022	PLoS Med	19	6	e1004026	10.1371/journal.pmed.1004026	#20828	Exclusion reason: Wrong population (not nurses)
Interactive online education is comparable to inperson training to teach insulin adjustment skills in a low-resource setting: A pilot study with noncommunicable disease providers in Rwanda	Chen, M.; Niyonsenga, S. P.; Rwagasore, E.; Rutagarama, F.; Dudzinski, J.; Wilson, C.; Lyden, E.; Delair, S.	2019	Pediatric Diabetes	20 (Supplement 28)		168		#19654	Exclusion reason: Wrong type of paper (not a research article)
Interactive Spaced Education improves clinicians' screening for prostate cancer: A multi-institutional randomized controlled trial	Kerfoot, B. P.; Lawler, E. V.; Sokolovskaya, G.; Gagnon, D.; Conlin, P. R.	2009	Journal of Urology	181	4 SUPPL. 1	190		#8206	Exclusion reason: Wrong type of paper (not a research article)
Interdisciplinary Educational Approaches to Promote Team-Based Geriatrics and Palliative Care	Howe, Judith L.; Sherman, Deborah Witt	2006	Gerontology & Geriatrics Education	26	3	16-Jan		#10676	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Intervention Adherence and Self-Efficacy as Predictors of Child Outcomes in School Nurse-Delivered Interventions for Anxiety	Caron, E. B.; Drake, K. L.; Stewart, C. E.; Muggeo, M. A.; Ginsburg, G. S.	2022	The Journal of school nursing : the official publication of the National Association of School Nurses	38	3	249-258	https://dx.doi.org/10.1177/1059840520925522	#20062	Exclusion reason: Wrong intervention (not an implementation intervention)
Intervention targeted at nurses to improve venous thromboprophylaxis	Labarere, J.; Bosson, J. L.; Sevestre, M. A.; Sellier, E.; Richaud, C.; Legagneux, A.	2007	International Journal for Quality in Health Care	19	5	301-308	http://dx.doi.org/10.1093/intqhc/mzm034	#10563	Exclusion reason: Wrong population (not nurses)
Interventions to address deficits of pharmacological pain management in	Konner, F.; Budnick, A.; Kuhnert, R.; Wulff, I.; Kalinowski, S.; Martus, P.; Drager, D.; Kreutz, R.	2015	Eur J Pain	19	9	1331-41	10.1002/ejp.663	#15254	Exclusion reason: Wrong outcomes (not related to

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

nursing home residents--A cluster-randomized trial										behaviour/clinical practice)
Introduction of a comprehensive management protocol for severe sepsis is associated with sustained improvements in timeliness of care and survival	MacRedmond, R.; Hollohan, K.; Stenstrom, R.; Nebre, R.; Jaswal, D.; Dodek, P.	2010	Quality & Safety in Health Care	19	5	7	10.1136/qsch.2009.033407	#7213		Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Investigation of correct application of ventilators' humidifier systems before and after nursing education in intensive care units	Pouryaghobi, S. M.; Ahmadinejad, M.; Hajimaghsoodi, L.; Ebrahimi, M.; Bolvardi, E.; Hashemian, A. M.; Ahmadi, K.	2015	Biosciences Biotechnology Research Asia	12	3	2789-2793	http://dx.doi.org/10.13005/bbra/1962	#14572		Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Is it possible to strengthen psychiatric nursing staff's clinical supervision? RCT of a meta-supervision intervention	Gonge, H.; Buus, N.	2015	J Adv Nurs	71	4	909-21	10.1111/jan.12569	#14993		Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Is slide-based or video-based eLearning better at achieving behavioural change in bronchiolitis management? A cluster-based randomised control trial	Talati, R.; Fonseca, B.; Mallitt, K. A.; Mackenzie, J.	2022	J Paediatr Child Health	58	12	2177-2182	10.1111/jpc.16178	#22194		Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Lessons Learned From a Theory of Planned Behavior-Derived Study on Educational Interventions Inspired by the Affective Domain	Russell-Babin, Kathleen A.	2017	Journal of Continuing Education in Nursing	48	12	543-551	10.3928/00220124-20171115-05	#12496		Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Longitudinal Comparison of Hospital Nurses' Values, Knowledge, and Implementation of Evidence-Based Practice	Duffy, Joanne R.; Culp, Stacey; Marchessault, Patricia; Olmsted, Katherine	2020	Journal of Continuing Education in Nursing	51	5	209-214	10.3928/00220124-20200415-05	#18448		Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Managing Premature Infant Stress: Training Does Make a Difference?	Wyly, M. Virginia; et al.,	1988						#5482		Exclusion reason: Wrong type of paper (not a research article)
Medication Identification Device to Reduce Medication Errors in Nursing Homes: A Controlled Pilot Study	Vogelsmeier, A.; Jacobs, A.; Owen, C.; Mosa, A. S. M.; Subramanian, R.	2022	J Gerontol Nurs	48	4	11-May	10.3928/00989134-20220304-01	#22357		Exclusion reason: Wrong intervention (not an implementation intervention)
Methods for evaluating practice change toward a patient-centered medical home	Jaen, C. R.; Crabtree, B. F.; Palmer, R. F.; Ferrer, R. L.; Nutting, P. A.; Miller, W. L.; Stewart, E. E.; Wood, R.; Davila, M.; Stange, K. C.	2010	Annals of Family Medicine	8 Suppl 1		S9-S92	http://dx.doi.org/10.1370/afm.1108	#7449		Exclusion reason: Wrong population (not nurses)
Modeling and evaluating evidence-based continuing education program in nursing home dementia care (MEDCED)--training of care home staff to reduce use of restraint in care home residents with dementia. A cluster randomized controlled trial	Testad, I.; Mekki, T. E.; Forland, O.; Oye, C.; Tveit, E. M.; Jacobsen, F.; Kirkevold, O.	2016	Int J Geriatr Psychiatry	31	1	24-32	10.1002/gps.4285	#13253		Exclusion reason: Wrong population (not nurses)
Motivational interviewing competencies among UK family nurse partnership nurses: a process evaluation component of the building blocks trial	Channon, Sue; Bekkers, Marie-Jet; Sanders, Julia; Cannings-John, Rebecca; Robertson, Laura; Bennert, Kristina; Butler, Christopher; Hood, Kerenza; Robling, Michael	2016	BMC Nursing	15		11-Jan	10.1186/s12912-016-0176-0	#14210		Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Moving Online: A Pilot Clinical Trial of the Changing Talk Online Communication Education for Nursing Home Staff	Williams, K. N.; Coleman, C. K.; Perkhounkova, Y.; Beachy, T.; Hein, M.; Shaw, C. A.; Berkley, A.	2021	Gerontologist	61	8	1338-1345	10.1093/geront/gnaa210	#22434		Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Multicomponent Staff Training Intervention to Improve Residential Dementia Care (PROCUIDA-Demencia): A Mixed-Methods 2-Arm Cluster Randomized Controlled Pilot and Clinical Outcomes Study	Torres-Castro, S.; Rabaneda-Bueno, R.; López-Ortega, M.; Gutiérrez-Robledo, L. M.; Guzmán, A.	2022	J Am Med Dir Assoc	23	3	350-358.e5	10.1016/j.jamda.2021.09.035	#22263	Exclusion reason: Wrong population (not nurses)
Multidimensional team-based intervention using musical cues to reduce odds of facility-acquired pressure ulcers in long-term care: a paired randomized intervention study	Yap, T. L.; Kennerly, S. M.; Simmons, M. R.; Buncher, C. R.; Miller, E.; Kim, J.; Yap, W. Y.	2013	J Am Geriatr Soc	61	9	1552-9	10.1111/jgs.12422	#16103	Exclusion reason: Wrong population (not nurses)
Multimodal intervention to improve osteoporosis care in home health settings: results from a cluster randomized trial	Kilgore, M. L.; Outman, R.; Locher, J. L.; Allison, J. J.; Mudano, A.; Kitchin, B.; Saag, K. G.; Curtis, J. R.	2013	Osteoporos Int	24	10	2555-60	10.1007/s00198-013-2340-7	#16641	Exclusion reason: Wrong population (not nurses)
Multisite Web-based training in using the Braden Scale to predict pressure sore risk	Magnan, M. A.; Maklebust, J.	2008	Adv Skin Wound Care	21	3	124-33	10.1097/01.ASW.0000305420.73597.d2	#8969	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Neonatal skin care: clinical outcomes of the AWHONN/NANN evidence-based clinical practice guideline. Association of Women's Health, Obstetric and Neonatal Nurses and the National Association of Neonatal Nurses	Lund, C. H.; Osborne, J. W.; Kuller, J.; Lane, A. T.; Lott, J. W.; Raines, D. A.	2001	J Obstet Gynecol Neonatal Nurs	30	1	41-51		#2413	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Neonatal skin care: evaluation of the AWHONN/NANN research-based practice project on knowledge and skin care practices. Association of Women's Health, Obstetric and Neonatal Nurses/National Association of Neonatal Nurses	Lund, C. H.; Kuller, J.; Lane, A. T.; Lott, J. W.; Raines, D. A.; Thomas, K. K.	2001	J Obstet Gynecol Neonatal Nurs	30	1	30-40		#2414	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Neurological assessment with validated tools in general ICU: Multicenter, randomized, before and after, pragmatic study to evaluate the effectiveness of an e-learning platform for continuous medical education	Mistraletti, G.; Umbrello, M.; Anania, S.; Andrichi, E.; Di Carlo, A.; Marti Netti, F.; Barello, S.; Sabbati Ni, G.; Formenti, P.; Maraffi, T.; Marrazzo, F.; Palo, A.; Bellani, G.; Russo, R.; Francesconi, S.; Valdambrini, F.; Cigada, M.; Riccardi, F.; Moja, E. A.; Iapichino, G.	2017	Minerva Anestesiologica	83	2	145-154	http://dx.doi.org/10.23736/S0375-9393.16.11103-4	#11885	Exclusion reason: Wrong population (not nurses)
Non-pharmacological management of behavioural symptoms in nursing homes	Deudon, A.; Maubourguet, N.; Gervais, X.; Leone, E.; Brocker, P.; Carcaillon, L.; Riff, S.; Lavallart, B.; Robert, P. H.	2009	Int J Geriatr Psychiatry	24	12	1386-95	10.1002/gps.2275	#8412	Exclusion reason: Wrong population (not nurses)
Nurse caring behaviors and patient satisfaction: improvement after a multifaceted staff intervention	Yeakel, S.; Maljanian, R.; Bohannon, R. W.; Coulombe, K. H.	2003	J Nurs Adm	33	9	434-6		#1177	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Nurse-Family Partnership nurses' attitudes and confidence in identifying and responding to intimate partner violence: An explanatory sequential mixed methods evaluation	Jack, S. M.; Kimber, M.; Davidov, D.; Ford-Gilboe, M.; Wathen, C. N.; McKee, C.; Tanaka, M.; Boyle, M.; Johnston, C.; Coben, J.; Gasbarro, M.; McNaughton, D.; O'Brien, R.; Olds, D. L.; Scribano, P.; MacMillan, H. L.	2021	JOURNAL OF ADVANCED NURSING	77	9	3894-3910	10.1111/jan.14979	#20824	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Nursing Education Intervention Effects on Pain Intensity of Nursing Home Residents with Different Levels of Cognitive Impairment: A Cluster-Randomized Controlled Trial	Kutschar, P.; Berger, S.; Brandauer, A.; Freywald, N.; Osterbrink, J.; Seidenspinner, D.; Gnass, I.	2020	Journal of Pain Research	13		633-648	10.2147/jpr.S237056	#19168	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Nursing Intervention Protocol to Improve Chemotherapy Induced Neutropenic Complications among Children with Cancer: A Cluster RCT	Nagar, P. K.; Trehan, A.; Kaur, S.; Kaur, R.	2021	Pediatric Blood and Cancer	68	SUPPL 5		https://dx.doi.org/10.1002/pbc.29349	#21537	Exclusion reason: Wrong type of paper (not a research article)
Nutrition of the critically ill patient and effects of implementing a nutritional support algorithm in ICU	Woien, H.; Bjork, I. T.	2006	J Clin Nurs	15	2	168-77	10.1111/j.1365-2702.2006.01262.x	#9976	Exclusion reason: Wrong intervention (not an implementation intervention)
Online End-of-Life Nursing Education Consortium Core Curriculum for Staff Nurses: An Education Strategy to Improve Clinical Practice	Bishop, Caitlin Tabler; Mazanec, Polly; Bullington, Jessica; Craven, Heather; Dunkerley, Melissa; Pritchett, Jessica; Coyne, Patrick J.	2019	Journal of Hospice & Palliative Nursing	21	6	531-539	10.1097/NJH.0000000000000593	#19372	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Optimizing drug treatment among older people in residential care facilities in Helsinki-a randomized, controlled trial	Juola, A. L.; Bjorkman, M.; Pylkkanen, S.; Finne-Soveri, H.; Pitkala, K. H.	2013	European Geriatric Medicine	4	SUPPL. 1	S182	http://dx.doi.org/10.1016/j.eurger.2013.07.609	#16665	Exclusion reason: Wrong type of paper (not a research article)
Optimizing nursing care by integrating theory-driven evidence-based practice	Pipe, T. B.	2007	J Nurs Care Qual	22	3	234-8	10.1097/01.Ncq.0000277780.27771.91	#9613	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Optimizing treatment of respiratory tract infections in nursing homes: Nurse-initiated polymerase chain reaction testing	Dowson, L.; Marshall, C.; Buising, K.; Friedman, N. D.; Kong, D. C. M.; Stuart, R. L.	2019	American Journal of Infection Control	47	8	911-915		#18451	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Outcomes of developmentally supportive nursing care for very low birth weight infants	Becker, P. T.; Grunwald, P. C.; Moorman, J.; Stuhr, S.	1991	Nursing Research	40	3	150-155		#4571	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Outreach education for integration of HIV/AIDS care, antiretroviral treatment, and tuberculosis care in primary care clinics in South Africa: PALSA PLUS pragmatic cluster randomised trial	Zwarenstein, M.; Fairall, L. R.; Lombard, C.; Mayers, P.; Bheekie, A.; English, R. G.; Lewin, S.; Bachmann, M. O.; Bateman, E.	2011	BMJ	342		d2022	10.1136/bmj.d2022	#6630	Exclusion reason: Wrong population (not nurses)
P.r.n. medication use in a psychiatric high-dependency unit following the introduction of a nurse-led activity programme	Thomas, B.; Jones, M.; Johns, P.; Trauer, T.	2006	Int J Ment Health Nurs	15	4	266-71	10.1111/j.1447-0349.2006.00433.x	#10647	Exclusion reason: Wrong population (not nurses)
Pain assessment and training: the impact on pain control after cardiac surgery	Silva, M. A. D.; Pimenta, C. A. D.; da Cruz, D. A. M.	2013	Revista Da Escola De Enfermagem Da Usp	47	1	83-91		#16287	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Pain Management Algorithms for Implementing Best Practices in Nursing Homes: Results of a Randomized Controlled Trial	Ersek, M.; Neradilek, M. B.; Herr, K.; Jablonski, A.; Polissar, N.; Du Pen, A.	2016	J Am Med Dir Assoc	17	4	348-56	10.1016/j.jamd.2016.01.001	#14023	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Palliative care nurses' experiences of training in cognitive behaviour therapy and taking part in a randomized controlled trial	Cort, E.; Moorey, S.; Hotopf, M.; Kapari, M.; Monroe, B.; Hansford, P.	2009	Int J Palliat Nurs	15	6	290-8	10.12968/ijpn.2009.15.6.42988	#8447	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Partners in caregiving in a special care environment: cooperative communication between staff and families on dementia units	Robison, J.; Curry, L.; Gruman, C.; Porter, M.; Henderson, C. R., Jr.; Pillemer, K.	2007	Gerontologist	47	4	504-15		#9517	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Pediatric sepsis: Evidence-based guidelines that support the nurse's role in early recognition	Lovelace, Cathy Diane	2018		79		No Pagination Specified-No Pagination Specified		#11153	Exclusion reason: Wrong type of paper (not a research article)
Peripheral venous catheter care in the emergency department: education and feedback lead to marked improvements	Fakih, M. G.; Jones, K.; Rey, J. E.; Takla, R.; Szpunar, S.; Brown, K.; Boelstler, A.; Saravolatz, L.	2013	Am J Infect Control	41	6	531-6	10.1016/j.ajic.2012.07.010	#17242	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Positive deviance: a new strategy for improving hand hygiene compliance	Marra, A. R.; Guastelli, L. R.; de Araujo, C. M.; dos Santos, J. L.; Lamblet, L. C.; Silva, M., Jr.; de Lima, G.; Cal, R. G.; Paes, A. T.; Cendoroglo Neto, M.; Barbosa, L.; Edmond, M. B.; dos Santos, O. F.	2010	Infect Control Hosp Epidemiol	31	1	20-Dec	10.1086/649224	#7205	Exclusion reason: Wrong population (not nurses)
Possible effects of a course in cardiovascular nursing on prehospital care of patients experiencing suspected acute coronary syndrome: a cluster randomised controlled trial	Wireklint Sundström, Birgitta; Holmberg, Mats; Herlitz, Johan; Karlsson, Thomas; Andersson, Henrik	2016	BMC Nursing	15		09-Jan	10.1186/s12912-016-0175-1	#13567	Exclusion reason: Wrong population (not nurses)
Practice-level effects of interventions to improve asthma care in primary care settings: The pediatric asthma care patient outcomes research team	Finkelstein, J. A.; Lozano, P.; Fuhlbrigge, A. L.; Carey, V. J.; Inui, T. S.; Soumerai, S. B.; Sullivan, S. D.; Wagner, E. H.; Weiss, S. T.; Weiss, K. B.	2005	Health Services Research	40	6	1737-1757	10.1111/j.1475-6773.2005.00451.x	#1055	Exclusion reason: Wrong population (not nurses)
Prescribe to Save Lives: Improving Buprenorphine Prescribing among HIV Clinicians	Jawa, R.; Walley, A. Y.; Wilson, D. J.; Green, T. C.; McKenzie, M.; Hoskinson, R.; Bratberg, J.; Ramsey, S.; Rich, J. D.; Friedmann, P. D.	2022	Journal of Acquired Immune Deficiency Syndromes	90	5	546-552	https://dx.doi.org/10.1097/QAI.00000000000003001	#20843	Exclusion reason: Wrong population (not nurses)
Pressure ulcers: implementation of evidence-based nursing practice	Clarke, H. F.; Bradley, C.; Whytock, S.; Handfield, S.; van der Wal, R.; Gundry, S.	2005	Journal of Advanced Nursing	49	6	578-590	10.1111/j.1365-2648.2004.03333.x	#732	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Pressure-relieving equipment: promoting its correct use amongst nurses via differing modes of educational delivery	Wedge, C.; Gosney, M.	2005	J Clin Nurs	14	4	473-8	10.1111/j.1365-2702.2004.01082.x	#331	Exclusion reason: Wrong population (not nurses)
Primary care drug therapy training: the solution for PHC nurses?	Rothmann, J. C.; Gerber, J. J.; Venter, O. M.; Steyn, H. S.; Monteith, J. L.	2000	Curationis	23	1	43-52		#2819	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Promoting hygienic hand disinfection as an ongoing task: Results of a cluster-randomized controlled trial to (re-)raise compliance of physicians and nurses	Von Lengerke, T.; Lutze, B.; Krauth, C.; Lange, K.; Stahmeyer, J. T.; Chaberny, I. F.	2015	Antimicrobial Resistance and Infection Control	4	SUPPL. 1			#14331	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

based on psychological tailoring in a tertiary intensive care setting										
Promoting hygienic hand disinfection as an ongoing task: Results of the psygiene cluster-randomized controlled trial to (Re-)raise compliance of physicians and nurses based on psychological tailoring in a tertiary intensive care setting	Von Lengerke, T.; Lutze, B.; Krauth, C.; Lange, K.; Stahmeyer, J.; Chaberny, I.	2015	International Journal of Medical Microbiology	305	SUPPL. 1	27		#14332	Exclusion reason: Wrong type of paper (not a research article)	
Prompting primary providers to increase community exercise referrals for older adults: a randomized trial	Ackermann, R. T.; Deyo, R. A.; LoGerfo, J. P.	2005	J Am Geriatr Soc	53		2	283-9	10.1111/j.1532-5415.2005.53115.x	#840	Exclusion reason: Wrong population (not nurses)
Providing Competency Training to Clinical Supervisors through an Interactional Supervision Approach	Tebes, Jacob Kraemer; Matlin, Samantha L.; Migdole, Scott J.; Farkas, Melanie S.; Money, Roy W.; Shulman, Lawrence; Hoge, Michael A.		Research on Social Work Practice	21		2	190-199		#5560	Exclusion reason: Wrong population (not nurses)
Psychological skills training for managing difficult patient encounters: Results of a pilot randomized controlled trial for oncology nurses	Traeger, L.; Eusebio, J.; Park, E.; Repper-Delisi, J.; Jacobo, M.; Convery, M. S.; Pirl, W.	2013	Psycho-Oncology	22	SUPPL. 2		80-81	http://dx.doi.org/10.1002/po.n.3245	#16220	Exclusion reason: Wrong type of paper (not a research article)
Psychosocial behaviour management programme for home-dwelling people with dementia: A cluster-randomized controlled trial	Nakanishi, M.; Endo, K.; Hirooka, K.; Granvik, E.; Minthon, L.; Nagga, K.; Nishida, A.	2018	Int J Geriatr Psychiatry	33		3	495-503	10.1002/gps.4784	#11724	Exclusion reason: Wrong population (not nurses)
Quality improvement report - Effect of multifaceted intervention promoting early switch from intravenous to oral acetaminophen for postoperative pain: controlled, prospective, before and after study	Ripouteau, C.; Conort, O.; Lamas, J. P.; Auleley, G. R.; Hazebroucq, G.; Durieux, P.	2000	British Medical Journal	321		7274	1460-1463	10.1136/bmj.321.7274.1460	#2828	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Quality of telephone-based cancer symptom management by nurses: a quality improvement project	Stacey, D.; Ludwig, C.; Jolicoeur, L.; Carley, M.; Balchin, K.; Jibb, L.; Kelly, F.; Kuziemy, C.; Madore, S.; Rambout, L.; Vickers, M. M.; Martelli, L.	2021	Supportive Care in Cancer	29		2	841-849	10.1007/s00520-020-05551-5	#17755	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Randomised controlled trial of training health visitors to identify and help couples with relationship problems following a birth	Simons, J.; Reynolds, J.; Morison, L.	2001	British Journal of General Practice	51		471	793-799		#17362	Exclusion reason: Wrong population (not nurses)
Randomized controlled trial comparing four strategies for delivering e-curriculum to health care professionals [ISRCTN88148532]	Kemper, K. J.; Gardiner, P.; Gobble, J.; Mitra, A.; Woods, C.	2006	BMC Med Educ	6			2	10.1186/1472-6920-6-2	#10514	Exclusion reason: Wrong population (not nurses)
Randomized controlled trial of teaching practice nurses to carry out structured assessments of patients receiving depot antipsychotic injections	Burns, T.; Millar, E.; Garland, C.; Kendrick, T.; Chisholm, B.; Ross, F.	1998	Br J Gen Pract	48		437	1845-8		#3769	Exclusion reason: Wrong population (not nurses)
Randomized trial of an internet curriculum on herbs and other dietary supplements for health care professionals	Kemper, K. J.; Amata-Kynvi, A.; Sanghavi, D.; Whelan, J. S.; Dvorkin, L.; Woolf, A.; Samuels, R. C.; Hibberd, P.	2002	Acad Med	77		9	882-9		#3028	Exclusion reason: Wrong population (not nurses)
RANDOMIZED TRIAL of PATIENT ACTOR TRAINING to IMPROVE PrEP SERVICES for AGYW in KENYA	Kohler, P.; Kinuthia, J.; Larsen, A.; Abuna, F.; Owiti, G.; Sila, J.; Owens, T.; Kemunto, V.; Lagat, H.; Vera, M.;	2022	Topics in Antiviral Medicine	30	1 SUPPL		369		#21024	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

	Richardson, B. A.; Pintye, J.; John-Stewart, G.								
Randomized trial to improve fracture prevention in nursing home residents	Colon-Emeric, C. S.; Lyles, K. W.; House, P.; Levine, D. A.; Schenck, A. P.; Allison, J.; Gorospe, J.; Fermazin, M.; Oliver, K.; Curtis, J. R.; Weissman, N.; Xie, A.; Saag, K. G.	2007	Am J Med	120	10	886-92	10.1016/j.amjmed.2007.04.020	#10295	Exclusion reason: Wrong population (not nurses)
Rapid Learning of Adverse Medical Event Disclosure and Apology	Raemer, D. B.; Locke, S.; Walzer, T. B.; Gardner, R.; Baer, L.; Simon, R.	2016	J Patient Saf	12	3	140-7	10.1097/pts.000000000000080	#13871	Exclusion reason: Wrong population (not nurses)
Reducing intrapartum fetal deaths through low-dose high frequency clinical mentorship in a rural hospital in Western Kenya: a quasi-experimental study	Shikuku, D. N.; Mukosa, R.; Peru, T.; Yaite, A.; Ambuchi, J.; Sisimwo, K.	2019	BMC Pregnancy Childbirth	19	1	518	10.1186/s12884-019-2673-0	#18136	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Reducing pressure ulcer prevalence rates in the long-term acute care setting	Milne, C. T.; Trigilia, D.; Houle, T. L.; Delong, S.; Rosenblum, D.	2009	Ostomy Wound Manage	55	4	Sep-50		#8516	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Reducing Treatment Errors Through Point-of-Care Glucometer Configuration	Estock, J. L.; Pham, I. T.; Curinga, H. K.; Sprague, B. J.; Boudreaux-Kelly, M. Y.; Acevedo, J.; Jacobs, K.	2018	Joint Commission Journal on Quality and Patient Safety	44	11	683-694	http://dx.doi.org/10.1016/j.jcjq.2018.03.014	#11469	Exclusion reason: Wrong intervention (not an implementation intervention)
Reduction of catheter-associated bloodstream infections in pediatric patients: experimentation and reality	McKee, C.; Berkowitz, I.; Cosgrove, S. E.; Bradley, K.; Beers, C.; Perl, T. M.; Winner, L.; Pronovost, P. J.; Miller, M. R.	2008	Pediatr Crit Care Med	9	1	Jun-40	10.1097/01.Pcc.0000299821.46193.A3	#8953	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Remote Stewardship for Medically Underserved Nurseries: A Stepped-Wedge, Cluster Randomized Study	Cantey, J. B.; Correa, C. C.; Dugi, D. D.; Huff, E.; Olaya, J. E.; Farnar, R.	2022	Pediatrics	149	5		10.1542/peds.2021-055686	#20058	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Remote video auditing with real-time feedback in an academic surgical suite improves safety and efficiency metrics: a cluster randomised study	Overdyk, F. J.; Dowling, O.; Newman, S.; Glatt, D.; Chester, M.; Armellino, D.; Cole, B.; Landis, G. S.; Schoenfeld, D.; DiCapua, J. F.	2016	BMJ Qual Saf	25	12	947-953	10.1136/bmjqs-2015-004226	#13437	Exclusion reason: Wrong population (not nurses)
Removal of C-spine protection by A&E triage nurses: a prospective trial of a clinical decision making instrument	Pitt, E.; Pedley, D. K.; Nelson, A.; Cumming, M.; Johnston, M.	2006	Emerg Med J	23	3	214-5	10.1136/emj.2005.023697	#10335	Exclusion reason: Wrong type of paper (not a research article)
Research on the effect of cooperative learning model on nursing skills of practice nurses and standardized training of newly-recruited nurses	Yang, L.; Jiang, D.; Nie, H.; Tang, S.	2018	Biomedical Research (India)	29	9	1788-1791		#10953	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Responding to Young People's Health Risks in Primary Care: A Cluster Randomised Trial of Training Clinicians in Screening and Motivational Interviewing	Sanci, L.; Chondros, P.; Sawyer, S.; Pirkis, J.; Ozer, E.; Hegarty, K.; Yang, F.; Grabsch, B.; Shiell, A.; Cahill, H.; Ambresin, A. E.; Patterson, E.; Patton, G.	2015	PLoS ONE	10	9	e0137581	10.1371/journal.pone.0137581	#14518	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Results of a multi-site pragmatic hybrid type 3 cluster randomized trial comparing level of facilitation while implementing an intervention in community-dwelling	Spoelstra, S. L.; Schueller, M.; Basso, V.; Sikorskii, A.	2022	Implement Sci	17	1	57	10.1186/s13012-022-01232-5	#22120	Exclusion reason: Wrong intervention (not an implementation intervention)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

disabled and older adults in a Medicaid waiver									
Results of a multicentre randomised controlled trial of statistical process control charts and structured diagnostic tools to reduce ward-acquired methicillin-resistant Staphylococcus aureus: the CHART Project	Curran, E.; Harper, P.; Loveday, H.; Gilmour, H.; Jones, S.; Benneyan, J.; Hood, J.; Pratt, R.	2008	J Hosp Infect	70	2	127-35	10.1016/j.jhin.2008.06.013	#9238	Exclusion reason: Wrong population (not nurses)
Results of implementing a pain management algorithm in intensive care unit patients: The impact on pain assessment, length of stay, and duration of ventilation	Olsen, B. F.; Rustoen, T.; Sandvik, L.; Jacobsen, M.; Valeberg, B. T.	2016	Journal of Critical Care	36		207-211	http://dx.doi.org/10.1016/j.jcr.2016.07.011	#13447	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Safety culture in French nursing homes: A randomised controlled study to evaluate the effectiveness of a risk management intervention associated with care	Teignin, D.; Mabileau, G.; Lucas, M.; Moret, L.; Terrien, N.	2022	PLoS One	17	12	e0277121	10.1371/journal.pone.0277121	#22217	Exclusion reason: Wrong population (not nurses)
Safety, efficacy, and cost effectiveness of evidence-based guidelines for the management of acute low back pain in primary care	McGuirk, B.; King, W.; Govind, J.; Lowry, J.; Bogduk, N.	2001	Spine (Phila Pa 1976)	26	23	2615-22		#2397	Exclusion reason: Wrong population (not nurses)
Satisfaction with nursing care and work during a year of clinical supervision and individualized care. Comparison between two wards for the care of severely demented patients	Hallberg, I. R.; Hansson, U. W.; Axelsson, K.	1993	J Nurs Manag	1	6	297-307	10.1111/j.1365-2834.1993.tb00231.x	#5042	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Scaling Up Patient-Centered Interdisciplinary Care for Multimorbidity: A Pragmatic Mixed-Methods Randomized Controlled Trial	Fortin, M.; Stewart, M.; Ngangue, P.; Almirall, J.; Belanger, M.; Brown, J. B.; Couture, M.; Gallagher, F.; Katz, A.; Loinon, C.; Ryan, B. L.; Sampalli, T.; Wong, S. T.; Zwarenstein, M.	2021	ANNALS OF FAMILY MEDICINE	19	2	126-134	10.1370/afm.2650	#20460	Exclusion reason: Wrong population (not nurses)
Self-directed Versus Traditional Classroom Training for Neonatal Resuscitation	Weiner, Gary M.; Menghini, Karin; Zaichkin, Jeanette; Caid, Ann E.; Jacoby, Carrie J.; Simon, Wendy M.	2011	Pediatrics	127	4	713-719	10.1542/pedS.2010-2829	#6134	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
SEPSIS SCREENING IN TRIAGE TO DECREASE DOOR-TO-ANTIBIOTIC TIME	Mitzkewich, M.	2019	Journal of Emergency Nursing	45	3	254-256	10.1016/j.jen.2018.08.002	#10829	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Service-learning and nursing professional values development: an experimental research study	Fowler, D. L.	2013	Nurs Educ Perspect	34	1	Jan-50		#16821	Exclusion reason: Wrong population (not nurses)
Simulation exercise to improve retention of cardiopulmonary resuscitation priorities for in-hospital cardiac arrests: A randomized controlled trial	Sullivan, N. J.; Duval-Arnould, J.; Twilley, M.; Smith, S. P.; Aksamit, D.; Boone-Guercio, P.; Jeffries, P. R.; Hunt, E. A.	2015	Resuscitation	86		13-Jun	10.1016/j.resuscitation.2014.10.021	#14461	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Simulation- vs. Didactic-Based Learning for Rehabilitation Nurses Caring for Patients With Autonomic Dysreflexia	Alvarado, V.; Stutzman, S. E.; Nairon, E.; Olson, D. M.	2023	Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses				https://dx.doi.org/10.1097/RN.J.0000000000000401	#19815	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Simulation-based education to decrease CAUTI rates in the intensive care	Bell, Janet	2018		79		No Pagination Specified-No Pagination Specified	#11845	Exclusion reason: Wrong type of paper (not a research article)
Simulation-based team training for multi-professional obstetric care teams to improve patient outcome: a multicentre, cluster randomised controlled trial	Fransen, A. F.; van de Ven, J.; Schuit, E.; van Tetering, A. A. C.; Mol, B. W.; Oei, S. G.	2017	BJOG: An International Journal of Obstetrics and Gynaecology	124	4	641-650 http://dx.doi.org/10.1111/1471-0528.14369	#12215	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Soundscape Awareness Intervention Reduced Neuropsychiatric Symptoms in Nursing Home Residents With Dementia: A Cluster-Randomized Trial With MoSART	Kosters, J.; Janus, S. I. M.; van den Bosch, K. A.; Andringa, T. C.; Hoop, E. O.; de Boer, M. R.; Elburg, R. A. J.; Warmelink, S.; Zuidema, S. U.; Luijendijk, H. J.	2023	J Am Med Dir Assoc	24	2	192-198.e5 10.1016/j.jamd.2022.11.010	#21041	Exclusion reason: Wrong population (not nurses)
Specialized emergency nurses treating ankle and foot injuries: a randomized controlled trial	Derksen, R. J.; Bakker, F. C.; de Lange-de Klerk, E. S.; Spaans, I. M.; Heilbron, E. A.; Veenings, B.; Haarman, H. J.	2007	Am J Emerg Med	25	2	144-51 10.1016/j.ajem.2006.06.011	#10253	Exclusion reason: Wrong intervention (not an implementation intervention)
Spirometry in primary care practice: the importance of quality assurance and the impact of spirometry workshops	Eaton, T.; Withy, S.; Garrett, J. E.; Mercer, J.; Whitlock, R. M.; Rea, H. H.	1999	CHEST	116	2	416-23	#3440	Exclusion reason: Wrong population (not nurses)
Staff Nurse Utilization of Kangaroo Care as an Intervention for Procedural Pain in Preterm Infants	Benoit, B.; Campbell-Yeo, M.; Johnston, C.; Latimer, M.; Caddell, K.; Orr, T.	2016	Advances in Neonatal Care	16	3	229-238 10.1097/anc.0000000000000262	#14697	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Staff outcomes from the caring for aged dementia care resident study (CADRES): a cluster randomised trial	Jeon, Y. H.; Luscombe, G.; Chenoweth, L.; Stein-Parbury, J.; Brodaty, H.; King, M.; Haas, M.	2012	Int J Nurs Stud	49	5	508-18 10.1016/j.ijnurstu.2011.10.020	#5968	Exclusion reason: Wrong intervention (not an implementation intervention)
Standardized Attending Rounds to Improve the Patient Experience: A Pragmatic Cluster Randomized Controlled Trial	Monash, B.; Najafi, N.; Mourad, M.; Rajkomar, A.; Ranji, S. R.; Fang, M. C.; Glass, M.; Milev, D.; Ding, Y.; Shen, A.; Sharpe, B. A.; Harrison, J. D.	2017	J Hosp Med	12	3	143-149 10.12788/jhm.2694	#11875	Exclusion reason: Wrong intervention (not an implementation intervention)
STAR: a dementia-specific training program for staff in assisted living residences	Teri, L.; Huda, P.; Gibbons, L.; Young, H.; van Leynseele, J.	2005	Gerontologist	45	5	686-693	#379	Exclusion reason: Wrong population (not nurses)
Stepwise interventions for improving hand hygiene compliance in a level 3 academic neonatal intensive care unit in north India	Gopalakrishnan, S.; Chaurasia, S.; Sankar, M. J.; Paul, V. K.; Deorari, A. K.; Joshi, M.; Agarwal, R.	2021	Journal of Perinatology	41	12	2834-2839 https://dx.doi.org/10.1038/s41372-021-01141-3	#20565	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Strengthening the afferent limb of rapid response systems: an educational intervention using web-based learning for early recognition and responding to deteriorating patients	Liaw, S. Y.; Wong, L. F.; Ang, S. B.; Ho, J. T.; Siau, C.; Ang, E. N.	2016	BMJ Qual Saf	25	6	448-56 10.1136/bmjqs-2015-004073	#13662	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Successful cardiovascular risk reduction in Type 2 diabetes by nurse-led care using an open clinical algorithm	Woodward, A.; Wallymahmed, M.; Wilding, J.; Gill, G.	2006	Diabetic Medicine	23	7	780-787 http://dx.doi.org/10.1111/j.1464-5491.2006.01889.x	#9972	Exclusion reason: Wrong intervention (not an implementation intervention)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Successful e-learning programme on the detection of child abuse in emergency departments: a randomised controlled trial	Smeeckens, A. E.; Broekhuijsen-van Henten, D. M.; Sittig, J. S.; Russel, I. M.; ten Cate, O. T.; Turner, N. M.; van de Putte, E. M.	2011	Arch Dis Child	96	4	330-4	10.1136/adc.2010.190801	#6276	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Successful knowledge translation intervention in long-term care: final results from the vitamin D and osteoporosis study (ViDOS) pilot cluster randomized controlled trial	Kennedy, C. C.; Ioannidis, G.; Thabane, L.; Adachi, J. D.; Marr, S.; Giangregorio, L. M.; Morin, S. N.; Crilly, R. G.; Josse, R. G.; Lohfeld, L.; Pickard, L. E.; van der Horst, M. L.; Campbell, G.; Stroud, J.; Dolovich, L.; Sawka, A. M.; Jain, R.; Nash, L.; Papaioannou, A.	2015	Trials	16		214	10.1186/s13063-015-0720-3	#14871	Exclusion reason: Wrong population (not nurses)
Surgical nurses' attitudes towards caring for patients dying of cancer - a pilot study of an educational intervention on existential issues	Udo, C.; Melin-Johansson, C.; Henoch, I.; Axelsson, B.; Danielson, E.	2014	Eur J Cancer Care (Engl)	23	4	426-40	10.1111/ecc.12142	#15197	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Sustainability takes time: Effects of the psychologically tailored interventions on hand hygiene compliance in the PSYGIENE cluster-randomized controlled trial after two years of follow-up	Von Lengerke, T.; Lutze, B.; Krauth, C.; Lange, K.; Stahmeyer, J. T.; Chaberny, I. F.	2016	International Journal of Medical Microbiology	306	8 Supplement 1	16	http://dx.doi.org/10.1016/j.ijmm.2016.11.008	#13182	Exclusion reason: Wrong type of paper (not a research article)
Sustained benefits of a community dietetics intervention designed to improve oral nutritional supplement prescribing practices	Kennelly, S.; Kennedy, N. P.; Corish, C. A.; Flanagan-Rughoobur, G.; Glennon-Slattery, C.; Sugrue, S.	2011	Journal of Human Nutrition and Dietetics	24	5	496-504	10.1111/j.1365-277X.2011.01197.x	#6650	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Sustaining a best-care practice in a nursing home	Beck, C.; Heacock, P.; Mercer, S. O.; Doan, R.; O'Sullivan, P. S.; Stevenson, J. G.; Schnelle, J. F.; Hoskins, J. G.	2005	J Healthc Qual	27	4	16-May		#801	Exclusion reason: Wrong population (not nurses)
Synergistic Impact of Training Followed by On-Site Support on HIV Clinical Practice: A Mixed-Design Study in Uganda with Pre/Post and Cluster-Randomized Trial Components	Burnett, S. M.; Mubiru, N.; Imani, P.; Mbonye, M. K.; Fisher, L.; Colebunders, R.; Manabe, Y. C.; Weaver, M. R.	2018	Journal of Acquired Immune Deficiency Syndromes	77	5	467-475	http://dx.doi.org/10.1097/QAI.00000000000001630	#11799	Exclusion reason: Wrong population (not nurses)
System Level Informatics to Improve Triage Practices for Sickle Cell Disease Vaso-Occlusive Crisis: A Cluster Randomized Controlled Trial	Linton, E.; Souffront, K.; Gordon, L.; Loo, G. T.; Genes, N.; Glassberg, J.	2021	J Emerg Nurs	47	5	742-751.e1	10.1016/j.jen.2021.05.007	#21207	Exclusion reason: Wrong intervention (not an implementation intervention)
Task shifting of antiretroviral treatment from doctors to primary-care nurses in South Africa (STRETCH): a pragmatic, parallel, cluster-randomised trial	Fairall, L.; Bachmann, M. O.; Lombard, C.; Timmerman, V.; Uebel, K.; Zwarenstein, M.; Boulle, A.; Georgeu, D.; Colvin, C. J.; Lewin, S.; Faris, G.; Cornick, R.; Draper, B.; Tshabalala, M.; Kotze, E.; van Vuuren, C.; Steyn, D.; Chapman, R.; Bateman, E.	2012	Lancet	380	9845	889-98	10.1016/s0140-6736(12)60730-2	#6085	Exclusion reason: Wrong intervention (not an implementation intervention)
Teaching and maintaining behavior management skills in the nursing home	Burgio, L. D.; Stevens, A.; Burgio, K. L.; Roth, D. L.; Paul, P.; Gerstle, J.	2002	Gerontologist	42	4	487-96		#2695	Exclusion reason: Wrong population (not nurses);
Teaching aseptic technique for central venous access under ultrasound guidance: a randomized trial comparing didactic training alone to didactic plus simulation-based training	Latif, R. K.; Bautista, A. F.; Memon, S. B.; Smith, E. A.; Wang, C.; Wadhwa, A.; Carter, M. B.; Akca, O.	2012	Anesth Analg	114	3	626-33	10.1213/ANE.0b013e3182405eb3	#5918	Exclusion reason: Wrong population (not nurses);

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Teaching basic life support to nurses	Makinen, M.; Castren, M.; Tolska, T.; Nurmi, J.; Niemi-Murola, L.	2006	Eur J Anaesthesiol	23	4	327-31	10.1017/s0265021506000032	#10445	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Teaching nurses how to teach: an evaluation of a workshop on patient education	Lamiani, G.; Furey, A.	2009	Patient Educ Couns	75	2	270-3	10.1016/j.pec.2008.09.022	#8171	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Teaching nurses therapeutic conversation: a pilot study	Paxton, R.; Rhodes, D.; Crooks, I.	1988	J Adv Nurs	13	3	401-4		#5500	Exclusion reason: Wrong population (not nurses)
Telemedicine enhances quality of forced spirometry in primary care	Burgos, F.; Disdier, C.; de Santamaria, E. L.; Galdiz, B.; Roger, N.; Rivera, M. L.; Hervas, R.; Duran-Tauleria, E.; Garcia-Aymerich, J.; Roca, J.	2012	Eur Respir J	39	6	1313-8	10.1183/09031936.00168010	#6525	Exclusion reason: Wrong population (not nurses)
Testing the Impact of FFC-AL-EIT on Psychosocial and Behavioral Outcomes in Assisted Living	Resnick, B.; Boltz, M.; Galik, E.; Fix, S.; Holmes, S.; Zhu, S.; Barr, E.	2021	J Am Geriatr Soc	69	2	459-466	10.1111/jgs.16886	#21838	Exclusion reason: Wrong population (not nurses)
Testing the Implementation of Function-focused Care in Assisted Living Settings	Resnick, B.; Boltz, M.; Galik, E.; Fix, S.; Holmes, S.; Zhu, S.; Barr, E.	2021	J Am Med Dir Assoc	22	8	1706-1713.e1	10.1016/j.jamda.2020.09.026	#21837	Exclusion reason: Wrong population (not nurses)
The "ABCs of AD": A pilot test of an online educational module to increase use of the autonomic dysreflexia clinical practice guidelines among paramedic and nurse trainees	Tomasone, J. R.; Ginis, K. A. M.; Pulkkinen, W.; Krassioukov, A.	2014	Journal of Spinal Cord Medicine	37	5	598-607	10.1179/2045772314y.0000000253	#15262	Exclusion reason: Wrong population (not nurses)
The American Medical Association Older Driver Curriculum for Health Professionals: Changes in Trainee Confidence, Attitudes, and Practice Behavior	Meuser, Thomas M.; Carr, David B.; Irmiter, Cheryl; Schwartzberg, Joanne G.; Ulfarsson, Gudmundur F.	2010	Gerontology & Geriatrics Education	31	4	290-309		#7189	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
The CKD-DETECT study: An RCT aimed at improving intention to initiate a kidney health check in Australian practice nurses	Sinclair, P. M.; Kable, A.; Levett-Jones, T.; Holder, C.; Oldmeadow, C. J.	2019	J Clin Nurs	28	15-16	2745-2759	10.1111/jocn.14882	#18118	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The CLUES study: a cluster randomized clinical trial for the evaluation of cardiovascular guideline implementation in primary care	Etxeberria, A.; Perez, I.; Alcorta, I.; Emparanza, J. I.; Ruiz de Velasco, E.; Iglesias, M. T.; Orozco-Beltran, D.; Rotaeche, R.	2013	BMC Health Serv Res	13		438	10.1186/1472-6963-13-438	#17246	Exclusion reason: Wrong population (not nurses)
The collaborative practice model for bipolar disorder: design and implementation in a multi-site randomized controlled trial	Bauer, M. S.	2001	Bipolar Disord	3	5	233-44		#3239	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
The CPR outcomes of online medical video instruction versus on-scene medical instruction using simulated cardiac arrest stations	Yuksen, C.; Sawatmongkornkul, S.; Tuangsirisup, J.; Sawanyawisuth, K.; Sittichanbuncha, Y.	2016	BMC Emerg Med	16	1	25	10.1186/s12873-016-0092-3	#13537	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The Delta Project: increasing breast cancer screening among rural minority and older women by targeting rural healthcare providers	Coleman, E. A.; Lord, J.; Heard, J.; Coon, S.; Cantrell, M.; Mohrmann, C.; O'Sullivan, P.	2003	Oncology Nursing Forum	30	4	669-677	10.1188/03.ONF.669-677	#1754	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

The design and conduct of a pragmatic cluster randomized trial of an advance care planning program for nursing home residents with dementia	Hickman, S. E.; Mitchell, S. L.; Hanson, L. C.; Tu, W.; Stump, T. E.; Unroe, K. T.	2022	Clin Trials	19	6	623-635	10.1177/17407745221108992	#20707	Exclusion reason: Wrong population (not nurses)
The development and effect of the education program on hand hygiene and use of personal protective equipment	Jeong, I.; Kim, E. G.	2017	Antimicrobial Resistance and Infection Control	6	Supplement 3		http://dx.doi.org/10.1186/s13756-017-0201-4	#12997	Exclusion reason: Wrong type of paper (not a research article)
The dissemination of a smoking cessation program to 23 antenatal clinics: the predictors of initial program adoption by managers	Cooke, M.; Mattick, R. P.; Campbell, E.	1999	Aust N Z J Public Health	23	1	99-103		#3461	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The EDUCATE Study: A Continuing Education Exemplar for Clinical Practice Guideline Implementation	Friedman, L.; Engelking, C.; Wickham, R.; Harvey, C.; Read, M.; Whitlock, K. B.	2009	Clinical Journal of Oncology Nursing	13	2	219-230	10.1188/09.Cjon.219-230	#8761	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The educational impact of web-based and face-to-face patient deterioration simulation programs: An interventional trial	Chung, Catherine; Cooper, Simon J.; Cant, Robyn P.; Connell, Cliff; McKay, Angela; Kinsman, Leigh; Gazula, Swapnali; Boyle, Jayne; Cameron, Amanda; Cash, Penny; Evans, Lisa; Kim, Jeong-Ah; Masud, Rana; McInnes, Denise; Norman, Lisa; Penz, Erika; Rotter, Thomas; Tanti, Erin; Breakspear, Tom	2018	Nurse Education Today	64		93-98	10.1016/j.nedt.2018.01.037	#11553	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice);
The effect of a checklist on the quality of post-anaesthesia patient handover: a randomized controlled trial	Salzwedel, C.; Bartz, H. J.; Kuhnelt, I.; Appel, D.; Haupt, O.; Maisch, S.; Schmidt, G. N.	2013	Int J Qual Health Care	25	2	176-81	10.1093/intqhc/mzt009	#16321	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The Effect of a Freely Available Flipped Classroom Course on Health Care Worker Patient Safety Culture: A Prospective Controlled Study	Ling, Lowell; Gomersall, Charles David; Samy, Winnie; Joynt, Gavin Matthew; Leung, Czarina C. H.; Wai-Tat, Wong; Lee, Anna; Leung, Czarina Ch; Wong, Wai-Tat	2016	Journal of Medical Internet Research	18	7	26-26	10.2196/jmir.5378	#14134	Exclusion reason: Wrong population (not nurses)
The effect of a simulation-based training intervention on the performance of established critical care unit teams	Frengley, R. W.; Weller, J. M.; Torrie, J.; Dzendrowskyj, P.; Yee, B.; Paul, A. M.; Shulruf, B.; Henderson, K. M.	2011	Crit Care Med	39	12	Nov-05	10.1097/CCM.0b013e3182282a98	#7273	Exclusion reason: Wrong population (not nurses)
The effect of a training course in aggression management on mental health nurses' perceptions of aggression: a cluster randomised controlled trial	Needham, I.; Abderhalden, C.; Halfens, R. J.; Dassen, T.; Haug, H. J.; Fischer, J. E.	2005	Int J Nurs Stud	42	6	649-55	10.1016/j.ijnurstu.2004.10.003	#517	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effect of an e-learning supported Train-the-Trainer programme on implementation of suicide guidelines in mental health care	de Beurs, D. P.; de Groot, M. H.; de Keijser, J.; Mokkenstorm, J.; van Duijn, E.; de Winter, R. F.; Kerkhof, A. J.	2015	J Affect Disord	175		446-53	10.1016/j.jad.2015.01.046	#15494	Exclusion reason: Wrong population (not nurses)
The effect of an International competitive leaderboard on self-motivated simulation-based CPR practice among healthcare professionals: A randomized control trial	Chang, T. P.; Raymond, T.; Dewan, M.; MacKinnon, R.; Whitfill, T.; Harwayne-Gidansky, I.; Doughty, C.; Frisell, K.; Kessler, D.; Wolfe, H.; Auerbach, M.; Rutledge, C.; Mitchell, D.; Jani, P.; Walsh, C. M.	2019	Resuscitation	138		273-281		#19068	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

The Effect of an Intimate Partner Violence Against Women Training Program Based on the Theory of Planned Behavior on the Approaches of Nurses and Midwives: A Randomized Controlled Study	Koçtu, N.; Toraman, A. U.	2022	J Interpers Violence	37	17-18	Np16157-np16179	10.1177/08862605211022064	#21044	Exclusion reason: Wrong population (not nurses)
The Effect Of Clinician Feedback Interventions On Opioid Prescribing	Navathe, Amol S.; Liao, Joshua M.; Yan, Xiaowei S.; Delgado, M. Kit; Isenberg, William M.; Landa, Howard M.; Bond, Barbara L.; Small, Dylan S.; Raeshide, Charles A. L.; Zijun, Shen; Pepe, Rebecca S.; Refai, Farah; Lei, Victor J.; Volpp, Kevin G.; Patel, Mitesh S.	2022	Health Affairs	41	3	424-433	10.1377/hlthaff.2021.01407	#21547	Exclusion reason: Wrong population (not nurses)
The effect of education on hypothetical and actual oxygen administration decisions	Considine, J.; Botti, M.; Thomas, S.	2007	Nurse Educ Today	27	6	651-60	10.1016/j.nedt.2006.10.001	#10293	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effect of education on knowledge and management of elder abuse: a randomized controlled trial	Richardson, B.; Kitchen, G.; Livingston, G.	2002	Age Ageing	31	5	335-41		#2116	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effect of educational intervention on use of psychotropics in defined daily doses and related costs: A randomized controlled trial	Ulla L, Aalto; Mervi, Rantsi; Anna-Liisa, Juola; Hannu, Kautiainen; Kaisu H, Pitkälä	2022	SCANDINAVIAN JOURNAL OF PRIMARY HEALTH CARE	40	2	246-252	10.1080/02813432.2022.2074055	#22288	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effect of evidence-based nursing education on nurses' clinical decision making: A randomized controlled trial	Astan, P. G.; Goli, R.; Maslakh, M. H.; Rasouli, J.; Alilu, L.	2022	HEALTH SCIENCE REPORTS	5	5		10.1002/hsr.2837	#19857	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The Effect of Implementation of a Pain Monitoring Protocol on the Pain Intensity in the Intensive Care Unit Semiconscious Patients	Akhond, Majid; Froutan, Razieh; Malekzadeh, Javad; Mazlom, Seyed Reza	2017	Journal of Evidence-based Care	7	2	37-45	10.22038/ebcj.2017.23797.1504	#13138	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effect of interprofessional education on interprofessional professionalism behaviors of the surgical team members	Hosseinpour, Azam; Keshmiri, Fatemeh; Jambarsang, Sara; Jabinian, Fatemeh; Shiryazdi, Seyed Mostafa	2022	BMC NURSING	21	1	08-Jan	10.1186/s12912-022-01015-9	#20750	Exclusion reason: Wrong population (not nurses)
The effect of nurse empowerment educational program on patient safety culture: a randomized controlled trial	Amiri, M.; Khademian, Z.; Nikandish, R.	2018	BMC Med Educ	18	1	158	10.1186/s12909-018-1255-6	#12691	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effect of random voice hand hygiene messages delivered by medical, nursing, and infection control staff on hand hygiene compliance in intensive care	McGuckin, M.; Shubin, A.; McBride, P.; Lane, S.; Strauss, K.; Butler, D.; Pitman, A.	2006	Am J Infect Control	34	10	673-5	10.1016/j.ajic.2006.01.013	#10428	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
The effect of simulation-based education on parental management of fever in children: a quasi-experimental study	Tavan, Asghar; Monemi, Elnaz; Keshavarz, Fateme; Kazemi, Behrooz; Nematollahi, Monirsadat	2022	BMC NURSING	21	1	07-Jan	10.1186/s12912-022-00938-7	#22206	Exclusion reason: Wrong population (not nurses)
The effect of staff training on agitation and use of restraint in nursing home residents with dementia: a single-blind, randomized controlled trial	Testad, I.; Ballard, C.; Bronnick, K.; Aarsland, D.	2010	J Clin Psychiatry	71	1	Jun-80	10.4088/JCP.09m05486oli	#7137	Exclusion reason: Wrong population (not nurses)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

The effect of staff training on the use of restraint in dementia: a single-blind randomised controlled trial	Testad, I.; Aasland, A. M.; Aarsland, D.	2005	Int J Geriatr Psychiatry	20	6	587-90	10.1002/gps.1329	#378	Exclusion reason: Wrong population (not nurses)
The effectiveness of an integrated pain management program for older persons and staff in nursing homes	Tse, M. M.; Vong, S. K.; Ho, S. S.	2012	Arch Gerontol Geriatr	54	2	e203-12	10.1016/j.archger.2011.04.015	#17092	Exclusion reason: Wrong population (not nurses)
The Effectiveness of Four Translation Strategies on Nurses' Adoption of an Evidence-Based Bladder Protocol	Frasure, J. S.	2014	Journal of Neuroscience Nursing	46	4	218-226	10.1097/jnn.000000000000069	#15952	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
The effectiveness of guideline implementation strategies on improving antipsychotic medication management for schizophrenia	Owen, R. R.; Hudson, T.; Thrush, C.; Thapa, P.; Armitage, T.; Landes, R. D.	2008	Med Care	46	7	686-91	10.1097/MLR.0b013e3181653d43	#8887	Exclusion reason: Wrong population (not nurses)
The effectiveness of the care programme for the last days of life (CAREFUL) to improve comfort and quality of care in acute geriatric hospital wards: A cluster randomized controlled trial	Beernaert, K.; Smets, T.; Cohen, J.; Verhofstede, R.; Costantini, M.; Eecloo, K.; Van Den Noortgate, N.; Deliens, L.	2016	Journal of Pain and Symptom Management	52	6	e6	http://dx.doi.org/10.1016/j.jpainsymman.2016.10.004	#14708	Exclusion reason: Wrong type of paper (not a research article)
The effectiveness of the Pain Resource Nurse Program to improve pain management in the hospital setting: A cluster randomized controlled trial	Gunnarsdottir, Sigrídur; Zo'vga, Sigrídur; Serlin, Ronald C.; Sveinsdottir, Herdis; Hafsteinsdottir, Elin Johanna Gudrun; Fridriksdottir, Nanna; Gretarsdottir, Elfa Tholl; Ward, Sandra Evelyn	2017	International Journal of Nursing Studies	75		83-90	10.1016/j.ijnurstu.2017.07.009	#12146	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effectiveness of web-based and face-to-face continuing education methods on nurses' knowledge about AIDS: a comparative study	Khatony, A.; Nayery, N. D.; Ahmadi, F.; Haghani, H.; Vehvilainen-Julkunen, K.	2009	BMC Medical Education	9		41	10.1186/1472-6920-9-41	#17369	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effects of a 24-h psychological training program on attitudes, communication skills and occupational stress in oncology: a randomised study	Razavi, D.; Delvaux, N.; Marchal, S.; Bredart, A.; Farvacques, C.; Paesmans, M.	1993	Eur J Cancer	29a	13	1858-63		#5012	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effects of computer-based training on immediate and residual learning of nursing facility staff	Harrington, S. S.; Walker, B. L.	2004	J Contin Educ Nurs	35	4	154-63; quiz 186-7		#1559	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effects of interactive E-learning on delirium recognition ability and delirium-related strain of care among critical care nurses	Najafi Ghezalje, T.; Rahnamaei, F.; Omrani, S.; Haghani, S.	2020	Journal of the Intensive Care Society.					#18509	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effects of intervention based on supportive leadership behaviour on Iranian nursing leadership performance: a randomized controlled trial	Shirazi, M.; Emami, A. H.; Mirmoosavi, S. J.; Alavinia, S. M.; Zamanian, H.; Fathollahbeigi, F.; Masiello, I.	2016	J Nurs Manag	24	3	400-8	10.1111/jonm.12335	#13359	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The effects of nutritional guideline implementation on nursing home staff performance: a controlled trial	T'ðrmv\$, Johanna; Winblad, Ulrika; Saletti, Anja; Cederholm, Tommy	2018	Scandinavian Journal of Caring Sciences	32	2	622-633	10.1111/scs.12487	#11029	Exclusion reason: Wrong population (not nurses)
The effects of two teaching methods upon staff nurses learning and applying problem oriented charting	Johnson-Forsythe, G.; Merkel, S.	1977	Abstracts of Hospital	14	2			#5243	Exclusion reason: Wrong type of paper (not a research article)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

			Management Studies						
The effects of virtual intravenous and patient simulator training compared to the traditional approach of teaching nurses: a research project on peripheral IV catheter	Wilfong, Donamarie N.; Falsetti, Donna J.; McKinnon, Jewel L.; Daniel, Laura H.; Wan, Qingping Ching-Ping	2011	Journal of Infusion Nursing	34	1	55-62	10.1097/NAN.0b013e31820219e2	#6123	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The efficacy of visual cues to improve hand hygiene compliance	Nevo, I.; Fitzpatrick, M.; Thomas, R. E.; Gluck, P. A.; Lenchus, J. D.; Arheart, K. L.; Birnbach, D. J.	2010	Simul Healthc	5	6	325-31	10.1097/SIH.0b013e3181f69482	#7742	Exclusion reason: Wrong population (not nurses)
The emergency department action in smoking cessation (EDASC) trial: impact on cessation outcomes	Katz, D. A.; Holman, J. E.; Nugent, A. S.; Baker, L. J.; Johnson, S. R.; Hillis, S. L.; Tinkelman, D. G.; Titler, M. G.; Vander Weg, M. W.	2013	Nicotine Tob Res	15	6	1032-43	10.1093/ntr/nts219	#16655	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
The impact of a brief lifestyle intervention delivered by generalist community nurses (CN SNAP trial)	Harris, M. F.; Chan, B. C.; Laws, R. A.; Williams, A. M.; Davies, G. P.; Jayasinghe, U. W.; Fanaian, M.; Orr, N.; Milat, A.	2013	BMC Public Health	13		375	10.1186/1471-2458-13-375	#16756	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The impact of a training programme incorporating the conceptual framework of the International Classification of Functioning (ICF) on behaviour regarding interprofessional practice in Rwandan health professionals: A cluster randomized control trial	Sagahutu, J. B.; Kagwiza, J.; Cilliers, F.; Jelsma, J.	2020	PLoS One	15	2	e0226247	10.1371/journal.pone.0226247	#18228	Exclusion reason: Wrong population (not nurses)
The impact of an educational intervention for elderly care nurses on care recipients' and family relatives' ratings of quality of care: a prospective, controlled intervention study	Hasson, H.; Arnetz, J. E.	2008	Int J Nurs Stud	45	2	166-79	10.1016/j.ijnurstu.2006.09.001	#9173	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The impact of an educational intervention on nursing staff ratings of quality of older people care: a prospective, controlled intervention study	Hasson, H.; Arnetz, J. E.	2009	Int J Nurs Stud	46	4	470-8	10.1016/j.ijnurstu.2008.04.007	#8357	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The impact of an educational program on improving diabetes knowledge and changing behaviors of nurses in long-term care facilities	Parker, M. T.; Leggett-Frazier, N.; Vincent, P. A.; Swanson, M. S.	1995	Diabetes Educ	21	6	541-5	10.1177/014572179502100608	#4744	Exclusion reason: Wrong population (not nurses)
The impact of continuous quality improvement on coverage of antenatal HIV care tests in rural South Africa: Results of a stepped-wedge cluster-randomised controlled implementation trial	Manisha Yapa, H.; De Neve, J. W.; Chetty, T.; Herbst, C.; Post, F. A.; Jiamsakul, A.; Geldsetzer, P.; Harling, G.; Dhlomo-Mphatswe, W.; Moshabela, M.; Matthews, P.; Ogbuoi, O.; Tanser, F.; Gareta, D.; Herbst, K.; Pillay, D.; Wyke, S.; Barnighausen, T.	2020	Plos Medicine	17	10			#17459	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The Impact of Nursing Delirium Preventive Interventions in the ICU: A Multicenter Cluster-randomized Controlled Clinical Trial	Rood, P. J. T.; Zegers, M.; Ramnarain, D.; Koopmans, M.; Klarenbeek, T.; Ewalds, E.; van der Steen, M. S.; Oldenbeuving, A. W.; Kuiper, M. A.; Teerenstra, S.; Adang, E.; van Loon, L. M.; Wassenaar, A.; Vermeulen, H.; Pickkers, P.; van den Boogaard, M.	2021	Am J Respir Crit Care Med	204	6	682-691	10.1164/rccm.202101-0082OC	#21882	Exclusion reason: Wrong intervention (not an implementation intervention)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

The impact of the International Nosocomial Infection Control Consortium (INICC) multicenter, multidimensional hand hygiene approach in two cities of India	Chakravarthy, M.; Myatra, S. N.; Rosenthal, V. D.; Udawadia, F. E.; Gokul, B. N.; Divatia, J. V.; Poojary, A.; Sukanya, R.; Kelkar, R.; Koppikar, G.; Pushparaj, L.; Biswas, S.; Bhandarkar, L.; Raut, S.; Jadhav, S.; Sannpat, S.; Chavan, N.; Bahirune, S.; Durgad, S.	2015	Journal of Infection and Public Health	8	2	177-186	10.1016/j.jiph.2014.08.004	#15572	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
The interaction between teamwork and leadership in pediatric resuscitation	Delaloye, N.; Grant, E.; Krueger, C.; Deacon, A.; O'Neill, T.; Koot, D.; Gilfoyle, E.	2016	Critical Care Medicine	44	12 Supplement 1	156	http://dx.doi.org/10.1097/01.ccm.0000508998.21691.36	#14078	Exclusion reason: Wrong type of paper (not a research article)
The introduction of a nursing guideline on depression at psychogeriatric nursing home wards: effects on certified nurse assistants	Verkaik, R.; Francke, A. L.; van Meijel, B.; Spreeuwenberg, P. M.; Ribbe, M. W.; Bensing, J. M.	2011	Int J Nurs Stud	48	6	710-9	10.1016/j.ijnurstu.2010.06.007	#6160	Exclusion reason: Wrong population (not nurses)
The introduction of a rapid response system in acute hospitals: A pragmatic stepped wedge cluster randomised controlled trial	Haegdorens, F.; Van Bogaert, P.; Roelant, E.; De Meester, K.; Misselyn, M.; Wouters, K.; Monsieurs, K. G.	2018	Resuscitation	129		127-134	http://dx.doi.org/10.1016/j.resuscitation.2018.04.018	#11993	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
The practical use of the latest standards of electrocardiography (PULSE) trial: Nursing-focused intervention improves nurses' knowledge and quality of ECG monitoring	Funk, M.; Fennie, K. P.; Stephens, K.; May, J. L.; Winkler, C.; Chang, P. S.; Feder, S.; Knudson, K.; Bovino, L. R.; Turkman, Y.; Drew, B. J.	2014	Circulation	130	SUPPL. 2			#15945	Exclusion reason: Wrong type of paper (not a research article)
The Trial to Reduce Antimicrobial Use in Nursing Home Residents With Alzheimer Disease and Other Dementias (TRAIN-AD): A Cluster Randomized Clinical Trial	Mitchell, S. L.; D'Agata, E. M. C.; Hanson, L. C.; Loizeau, A. J.; Habtemariam, D. A.; Tsai, T.; Anderson, R. A.; Shaffer, M. L.	2021	JAMA Intern Med	181	9	1174-1182	10.1001/jamainternmed.2021.3098	#21438	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
TIME to reduce agitation in persons with dementia in nursing homes. A process evaluation of a complex intervention	Lichtwarck, Bjørn; Myhre, Janne; Selbaek, Geir; Kirkevold, Øyvind; Rokstad, Anne Marie Mork; Benth, Jørn; ratfó ≈taltytfó; Bergh, Sverre	2019	BMC Health Services Research	19	1	N.PAG - N.PAG	10.1186/s12913-019-4168-0	#10855	Exclusion reason: Wrong population (not nurses)
Top care-a multi component intervention to improve adherence to chronic opioid therapy guidelines and reduce opioid misuse in primary care: A cluster randomized controlled trial	Liebschutz, J. M.; Xuan, Z.; Shanahan, C. W.; Laroche, M.; Keosaian, J.; Alford, D. P.; Weiss, R.; Samet, J. H.; Lasser, K. E.	2017	Journal of General Internal Medicine	32	2 Supplement 1	S357		#12030	Exclusion reason: Wrong type of paper (not a research article)
Training and support for nursing home staff reduced neuroleptic drug use and did not increase aggression in residents with dementia	Coker, E.	2006	Evidence Based Nursing	9	4	122-122		#159	Exclusion reason: Wrong type of paper (not a research article)
Training family physicians and primary care nurses improves diagnostic assessment of dementia: Results of a randomized controlled trial	Perry, M.	2011	Alzheimer's and Dementia	7	4 SUPPL. 1	S498	http://dx.doi.org/10.1016/j.jalz.2011.05.2393	#6915	Exclusion reason: Wrong type of paper (not a research article)
Training in dementia care: a cluster-randomized controlled trial of a training program for nursing home staff in Germany	Kuske, B.; Luck, T.; Hanns, S.; Matschinger, H.; Angermeyer, M. C.; Behrens, J.; Riedel-Heller, S. G.	2009	Int Psychogeriatr	21	2	295-308	10.1017/s1041610208008387	#8175	Exclusion reason: Wrong population (not nurses)
Training intervention for health care staff in the provision of existential support to	Henoch, I.; Danielson, E.; Strang, S.; Browall, M.; Melin-Johansson, C.	2013	J Pain Symptom Manage	46	6	785-94	10.1016/j.jpainsymman.2013.01.013	#16731	Exclusion reason: Wrong outcomes (not related to

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

patients with cancer: a randomized, controlled study									behaviour/clinical practice)
Training nursing home care staff to recognise psychopathology improves their ability to identify depressed residents	Burgio, L.	2006	Evidence Based Mental Health	9	1	18-18		#205	Exclusion reason: Wrong type of paper (not a research article)
Training nursing home staff to improve psychosocial care reduces neuroleptic use in people with dementia without an increase in agitation	Byrne, G. J.	2006	Evidence Based Mental Health	9	4	103-103		#499	Exclusion reason: Wrong type of paper (not a research article)
Training practitioners to deliver opportunistic multiple behaviour change counselling in primary care: a cluster randomised trial	Butler, C. C.; Simpson, S. A.; Hood, K.; Cohen, D.; Pickles, T.; Spanou, C.; McCambridge, J.; Moore, L.; Randell, E.; Alam, M. F.; Kinnersley, P.; Edwards, A.; Smith, C.; Rollnick, S.	2013	BMJ	346		f1191	10.1136/bmj.f1191	#16875	Exclusion reason: Wrong population (not nurses)
Training Staff to Implement Brief Stimulus Preference Assessments	Weldy, Christina R.; Rapp, John T.; Capocasa, Kelli		Journal of Applied Behavior Analysis	47	1	214-218		#5313	Exclusion reason: Wrong population (not nurses)
Training Support Staff to Modify Fluids to Appropriate Safe Consistencies for Adults with Intellectual Disabilities and Dysphagia: An Efficacy Study	Chadwick, D. D.; Stubbs, J.; Fovargue, S.; Anderson, D.; Stacey, G.; Tye, S.		Journal of Intellectual Disability Research	58	1	84-98		#5808	Exclusion reason: Wrong population (not nurses)
Transferring Central Line Care Evidence Into Practice on Pediatric Acute Care Units	McCaskey, M. S.	2013	Journal of Pediatric Nursing-Nursing Care of Children & Families	28	6	E57-E63	10.1016/j.pedn.2013.02.027	#16603	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Translating evidence-based falls prevention into clinical practice in nursing facilities: Results and lessons from a quality improvement collaborative	Colon-Emeric, C.; Schenck, A.; Gorospe, J.; McArdle, J.; Dobson, L.; Deporter, C.; McConnell, E.	2006	J Am Geriatr Soc	54	9	1414-8	10.1111/j.1532-5415.2006.00853.x	#155	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Translating Pressure Ulcer Prevention Into Intensive Care Nursing Practice	Tayyib, Nahla; Coyer, Fiona	2017	Journal of Nursing Care Quality	32	1	14-Jun	10.1097/NCQ.0000000000000199	#12378	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Translating the evidence-based NICU COPE program for parents of premature infants into clinical practice: impact on nurses' evidence-based practice and lessons learned	Melnyk, B. M.; Bullock, T.; McGrath, J.; Jacobson, D.; Kelly, S.; Baba, L.	2010	J Perinat Neonatal Nurs	24	1	74-80	10.1097/JPN.0b013e3181ce314b	#7190	Exclusion reason: Wrong population (not nurses)
Translation squared: improving asthma care for high-disparity populations through a safety net practice-based research network	Daniels, E. C.; Bacon, J.; Denasio, S.; Fry, Y. W.; Murray, V.; Quarshie, A.; Rust, G.	2005	J Asthma	42	6	499-505	10.1081/JAS-67598	#22600	Exclusion reason: Wrong population (not nurses)
Translation to practice: a randomised, controlled study of an evidence-based booklet for breast-care nurses in the United Kingdom	Kirshbaum, M.	2008	Worldviews Evid Based Nurs	5	2	60-74	10.1111/j.1741-6787.2008.00113.x	#9026	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

Trivia-psychotica: the development and evaluation of an educational game for the revision of psychiatric disorders in a nurse training programme	Kelly, S.	1995	J Psychiatr Ment Health Nurs	2	6	366-7		#4782	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Urinary Tract Infection Knowledge of Long-Term Care Nursing Staff: The Effect of an Educational Intervention	Viner, Sophia	2020	Urologic Nursing	40	1	21-Jul	10.7257/1053-816X.2020.40.1.7	#17865	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Use of a computerized guideline for glucose regulation in the intensive care unit improved both guideline adherence and glucose regulation	Rood, E.; Bosman, R. J.; van der Spoel, J. I.; Taylor, P.; Zandstra, D. F.	2005	J Am Med Inform Assoc	12	2	172-80	10.1197/jamia.M1598	#22604	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Use of a training program to enhance NICU nurses' cognitive abilities for assessing preterm infant behaviors and offering supportive interventions	Liaw, J. J.	2003	J Nurs Res	11	2	82-92		#1262	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Use of an automated decision support tool optimizes clinicians' ability to interpret and appropriately respond to structured self-monitoring of blood glucose data	Rodbard, H. W.; Schnell, O.; Unger, J.; Rees, C.; Amstutz, L.; Parkin, C. G.; Jelsovsky, Z.; Wegmann, N.; Axel-Schweitzer, M.; Wagner, R. S.	2012	Diabetes Care	35	4	693-8	10.2337/dc11-1351	#17214	Exclusion reason: Wrong population (not nurses)
Use of an automated hand hygiene compliance system by emergency room nurses and technicians is associated with decreased employee absenteeism	Strauch, J.; Braun, T. M.; Short, H.	2020	American Journal of Infection Control	48	5	575-577	10.1016/j.ajic.2019.11.023	#17740	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Use of Electronic and Paper-based Standardized Nursing Care Plans to Improve Nurses' Documentation Quality in a Nigerian Teaching Hospital	Adereti, Chinma Stella; Olaogun, Adenike Ayobola	2019	International Journal of Nursing Knowledge	30	4	219-227	10.1111/2047-3095.12232	#19684	Exclusion reason: Wrong intervention (not an implementation intervention)
Use of High-Fidelity Simulation to Enhance Interdisciplinary Collaboration and Reduce Patient Falls	Bursiek, A. A.; Hopkins, M. R.; Breitkopf, D. M.; Grubbs, P. L.; Joswiak, M. E.; Klipfel, J. M.; Johnson, K. M.	2020	Journal of Patient Safety	16	3	245-250		#19113	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Using lean six sigma to decrease delivery time of blood to the operating room	Wong, C.; Stevens, W. T.; Garvanovic, S.; Lauer, R.; Ramsingh, D.; Gatling, J.	2016	Transfusion	56	Supplement 4	215A-216A	http://dx.doi.org/10.1111/trf.13807	#13563	Exclusion reason: Wrong type of paper (not a research article)
Using simulation to enhance knowledge and confidence	Corbridge, S. J.; McLaughlin, R.; Tiffen, J.; Wade, L.; Templin, R.; Corbridge, T. C.	2008	Nurse Pract	33	6	03-Dec		#9250	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Using the internet to deliver education on drug safety	Franklin, B. D.; O'Grady, K.; Parr, J.; Walton, I.	2006	BMJ Quality & Safety	15	5	329-333	10.1136/qshc.2005.017608	#17372	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Using Virtual Patient Simulations to Prepare Primary Health Care Professionals to Conduct Substance Use and Mental Health Screening and Brief Intervention	Albright, Glenn; Bryan, Craig; Adam, Cyrille; McMillan, Jeremiah; Shockley, Kristen	2018	Journal of the American Psychiatric Nurses Association	24	3	247-259	10.1177/1078390317719321	#12698	Exclusion reason: Wrong intervention (not an implementation intervention)
Utilizing Geriatrics-Focused Web-Based Continuing Education to Reach Practitioners in Rural Practice	Ford, Channing R.; Sawyer, Patricia; Brown, Cynthia J.		TechTrends: Linking Research and Practice to	62	3	286-295		#5718	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)

Additional file 4. Excluded articles at full text assessment stage and reasons for exclusion.

			Improve Learning						
Utilizing peer academic detailing to improve childhood immunization coverage levels	Boom, J. A.; Nelson, C. S.; Kohrt, A. E.; Kozinetz, C. A.	2010	Health Promot Pract	11	3	377-86	10.1177/1524839908321487	#7821	Exclusion reason: Wrong population (not nurses)
Video Modeling to Train Staff to Implement Discrete-Trial Instruction	Catania, Cynthia N.; Almeida, Daniel; Liu-Constant, Brian; Reed, Florence D. DiGennaro		Journal of Applied Behavior Analysis	42	2	387-392		#5809	Exclusion reason: Wrong study design (not a RCT or a nonrandomized controlled study)
Video-Assisted Health Education Promotes Rehabilitation Training of Total Knee Arthroplasty Patients and Reduces Stress and Burnout in Nurses Compared to Oral Education	Li, Ping; Li, Xing; Meng, Hua; Huang, Ling; Zhang, Li; Wang, Shuang; Chen, Shaohua	2021	BioMed Research International			06-Jan	10.1155/2021/5058899	#21158	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Virtual Learning Environment in Continuing Education for Nursing in Oncology: an Experimental Study	das Gracas Silva Matsubara, M.; De Domenico, E. B. L.	2016	J Cancer Educ	31	4	804-810	10.1007/s13187-015-0889-x	#14140	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)
Web-based training for primary care providers on screening, brief intervention, and referral to treatment (SBIRT) for alcohol, tobacco, and other drugs	Stoner, S. A.; Mikko, A. T.; Carpenter, K. M.	2014	J Subst Abuse Treat	47	5	362-70	10.1016/j.jsat.2014.06.009	#15302	Exclusion reason: Wrong population (not nurses)
Working alliance in communication skills training for oncology clinicians: a controlled trial	Meystre, C.; Bourquin, C.; Despland, J. N.; Stiefel, F.; de Roten, Y.	2013	Patient Educ Couns	90	2	233-8	10.1016/j.pec.2012.10.013	#16588	Exclusion reason: Wrong population (not nurses)
Workshop and package education intervention to knowledge, attitude and practice of ICU nurses on the use of physical restraints	Khajeh, Mohammad; Bazghaleh, Milad; Tabarraie, Yaser; Mohammadpourhodki, Reza; Koushan, Mohsen	2020	Journal of Complementary & Integrative Medicine	17	1	09-Jan	10.1515/jcim-2019-0065	#18742	Exclusion reason: Wrong outcomes (not related to behaviour/clinical practice)