Appendix D: Clinical evidence tables

Study	Coaching model of structured interdisciplinary rounds trial: Artenstein 2015[4]
Study type	Before and after study.
Number of studies (number of participants)	1 (n=739).
Countries and setting	Conducted in USA; setting: before-and-after comparison pilot study of patients on 1 general medical/surgical ward of a 716-bed tertiary, academic medical centre in Springfield, USA. Data collected for 3 months post-implementation in 2013 compared to data from the same ward in the same 3 month period in 2012. The pilot ward comprises 32 beds primarily managing adult inpatients with respiratory-related diagnoses and also general medical patients.
Line of therapy	1st line.
Duration of study	Other: 3 months before and 3 months after intervention introduction (same time of year).
Method of assessment of guideline condition	Unclear method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	All adult inpatients on the pilot ward during the time of data collection.
Exclusion criteria	To control for outliers, patients with a length of stay 20 or more days were excluded from the analysis. Patients seen by the same consultant of the Broder service but located on other wards were not included in the analysis.
Recruitment/selection of patients	All adult inpatients on the pilot ward during the time of data collection. To control for outliers, patients with a length of stay 20 or more days were excluded from the analysis. Patients seen by the same consultant of the Broder service but located on other wards were not included in the analysis.
Age, gender and ethnicity	Age - Other: not provided. Gender (M:F): not provided. Ethnicity: n/a.
Further population details	1. Critical care patients: not applicable (respiratory and general medical ward). 2. Frail elderly: not stated. 3. Speciality/profession: not applicable (respiratory and general medical ward).
Extra comments	Data collection was from mid-September to mid-December on a mainly respiratory ward.
Indirectness of population	No indirectness.
Interventions	(n=381) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Broder/coaching service: Broder service rounds were conference room-based and occurred 7 days a week at 11am. They included the consistent participation of the Broder physician (an experienced physician coach), 2 ward-assigned, recently appointed consultants, 2 case managers, the nurse manager, a social worker, pharmacist, respiratory therapist and bedside nurses. The room had access to electronic patient records. Rounds were scripted

Study	Coaching model of structured interdisciplinary rounds trial: Artenstein 2015[4]
	and standardised to address patient progress, anticipated day of discharge, potential discharge needs and barriers and review of selected quality indicators (such as VTE prophylaxis or indwelling urinary catheter utilisation). The script was limited to the follow-up plan for patients who were being discharged that day. The Broder physician did not provide in-depth clinical input about patients but facilitated rounds, redirecting team members to focus on the script, and used case-specific issues to provide coaching on progress optimisation and on the relative value, or lack thereof, of specific clinical decisions. The Broder physicians comprised 5 internists and subspecialists with at least 10 years of post-training experience caring for inpatients. Duration: 3 months. Concurrent medication/care: n/a. (n=358) Intervention 2: No round checklists or daily goal charts - no ward rounds. Control group: paper does not describe what came before the introduction of the Broder service. Assuming there were 'normal' interdisciplinary ward rounds. Duration: 3 months during same season of the previous year. Concurrent medication/care: n/a. Comments: It is not described what came before the pilot of the Broder service.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: BRODER/COACHING ROUNDING SERVICE (SCRIPTED AND STANDARDISED) versus 'NORMAL' ROUNDING SERVICE (NOT DESCRIBED IN PAPER). Protocol outcome 1: Length of stay. - Actual outcome: Length of stay on the unit at 3 months before and 3 months after; Risk of bias: All domain - Very high, Selection - Very high, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Structured hourly nurse rounds trial: Brosey 2015[11]
Study type	Before and after study.
Number of studies (number of participants)	1 (n=116).
Countries and setting	Conducted in unknown; setting: a 24-bed medical surgical nursing unit with private and semiprivate rooms.
Line of therapy	1st line.
Duration of study	Follow up (post intervention): 1 year.
Method of assessment of guideline condition	-

Study	**Structured hourly nurse rounds trial: Brosey 2015[11]**
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Not stated.
Exclusion criteria	Not stated.
Recruitment/selection of patients	Selection of unit on the basis of its need for improvement in patient satisfaction scores.
Age, gender and ethnicity	Age: not stated. Gender (M:F): not stated. Ethnicity: not stated.
Further population details	1. Critical care patients: not stated 2. Frail elderly: not stated 3. Speciality/profession: not stated.
Indirectness of population	-
Interventions	(n=81) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Hourly nurse rounding was considered to have been performed when a staff member entered the patient's room, evaluated the patient for pain, elimination, environment and position (PEEP), and documented the activity on designated flow sheets. Duration: on-going (unclear). Concurrent medication/care: process of implementation included development of a structured approach to staff education, historical data analysis, observations of staff workflow, evaluation of the current state of hourly nurse rounding and development of guidelines for structured hourly nurse rounding. A fact sheet was presented to the staff for their reference. (n=35) Intervention 2: No round checklists or daily goal charts - no ward rounds. Standard nurse ward round - details not given about how they were completed prior to implementation. Duration: baseline. Concurrent medication/care: None given. (n=472) Intervention 3: Structured ward round models - ward round checklists (generic checklists, not condition specific). Hourly nurse rounding was considered to have been performed when a staff member entered the patient's room, evaluated the patient for pain, elimination, environment and position (PEEP), and documented the activity on designated flow sheets. Duration: 1 year (follow-up). Concurrent medication/care: process of implementation included development of a structured approach to staff education, historical data analysis, observations of staff workflow, evaluation of the current state of hourly nurse rounding and development of guidelines for structured hourly nurse rounding. A fact sheet was presented to the staff for their reference.
Funding	No funding.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: POSTIMPLEMENTATION OF HOURLY NURSE ROUNDING versus FOLLOW-UP AFTER IMPLEMENTATION OF HOURLY NURSE ROUNDING.	

Study	Structured hourly nurse rounds trial: Brosey 2015[11]
Protocol outcome 1: Patient/family satisfaction. - Actual outcome: Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Domain: Overall satisfaction at Unclear; Comments: Pre-implementation = 48.6% (n=35); 1 year after project implemenation = 72.2% (n=472) Percentage of "always", "yes" and "9 or 10" responses; Risk of bias: All domain - Very high, Selection - Very high, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Length of stay; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Electronic checklist trial: Conroy 2015[19]
Study type	Before and after study
Number of studies (number of participants)	1 (n=293)
Countries and setting	Conducted in Australia; setting: 19-bed general ICU and high dependency unit (HDU) within a tertiary hospital located in Metropolitan NSW, Australia. Closed medical model with patients admitted under the care of intensive care specialist physicians. A 1:1 nurse-patient-ratio was the model of care used. (1:2 for high dependency patients). At the time of the study, the ICU was funded for 13 ICU beds and 5 high dependency beds, case mix was flexible. The unit was separated into 2 physical pods, both with central nursing stations. During morning ward rounds, medical staff were divided into 2 groups, each commencing in a different pod.
Line of therapy	1st line.
Duration of study	Intervention + follow up: baseline and intervention period: 6 weeks each.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Each participant involved in completion of the e-checklist was a senior medical officer (intensive care physician, senior registrar or registrar). Recipients of the checklist were all applicable adult ICU patients (16 years and over) admitted to the ICU during the study periods.
Exclusion criteria	Checklist was completed for each patient once per day during morning rounds; patients not present at the time of morning rounds (for example, for procedure) were excluded for that day.
Recruitment/selection of patients	Each participant involved in completion of the e-checklist was a senior medical officer (intensive care physician, senior registrar or registrar). Recipients of the checklist were all applicable adult ICU patients (16 years and over) admitted to the ICU during the study periods. Checklist was completed for each patient once per day during morning rounds;

Study	Electronic checklist trial: Conroy 2015[19]
	patients not present at the time of morning rounds (for example, for procedure) were excluded for that day.
Age, gender and ethnicity	Age - Mean (SD): 57 (20) years. Gender (M:F): 1/1. Ethnicity: n/a.
Further population details	1. Critical care patients: (intensive care unit and high dependency unit). 2. Frail elderly: no frail elderly 3. Speciality/profession: profession-specific handover (ward round team consisted of 1 consultant physician and/or senior registrar, a registrar and 1 or 2 junior medical officers.).
Indirectness of population	No indirectness.
Interventions	(n=152) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Electronic process-of-care checklist: the unit was separated into 2 physical pods, both with central nursing stations. During morning ward rounds, medical staff were divided into 2 groups, each commencing in a different pod. Ward round team consisted of 1 consultant physician and/or senior registrar, a registrar and 1 or 2 junior medical officers. The e-checklist was designed as a practice delivery tool with a series of prompts (via a Palm personal digital assistant (PDA)). The e-checklist contained 9 core 'process of care' statements for the medical team to explore for each individual patient (that is, the checklist was not designed to replace clinical decision-making). The checklist was used during medical morning ward rounds to document either the delivery or clinical reasons for non-delivery of cares. It was completed by senior medical staff members at the end of each patient assessment as a 'challenge-and-answer' tool. Duration: 6 weeks. Concurrent medication/care: n/a. (n=141) Intervention 2: No round checklists or daily goal charts - no ward rounds. Usual ward rounds: no information given as to the procedure of the ward rounds before implementation of checklist. Assuming the same staff did the ward round but without checklist. Duration 6 weeks. Concurrent medication/care: n/a.
Funding	Other.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: WARD ROUND CHECKLISTS (GENERIC CHECKLISTS, NOT CONDITION SPECIFIC) versus NO CHECKLIST. Protocol outcome 1: Missed of delayed treatments. - Actual outcome: Pain management at 6 weeks before and 6 weeks after; OR 22.85 (95%CI 13.69 to 38.16); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Glucose management at 6 weeks before and 6 weeks after; OR 13.82 (95%CI 7.01 to 27.27); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Sedation management at 6 weeks before and 6 weeks after; OR 3.89 (95%CI 1.8 to 8.42); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Head-of-bed elevation at 6 weeks before and 6 weeks after; OR 10.98 (95%CI 5.39 to 22.35); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual	

Study	Electronic checklist trial: Conroy 2015[19]
outcome: Nutrition assessment at 6 weeks before and 6 weeks after; OR 4.36 (95%CI 2.4 to 7.92); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Mechanical ventilation weaning at 6 weeks before and 6 weeks after; OR 1.92 (95%CI 1.03 to 3.59); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Stress ulcer prophylaxis at 6 weeks before and 6 weeks after; OR 3.73 (95%CI 1.68 to 8.28); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: DVT prophylaxis at 6 weeks before and 6 weeks after; OR 2.24 (95%CI 1.06 to 4.7); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Medication review at 6 weeks before and 6 weeks after; OR 9.86 (95%CI 1.31 to 74.33); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Length of stay; Staff satisfaction; Missed of delayed investigations.

Study	Explicit approach to rounds trial: Dodek 2003[26]
Study type	Before and after study.
Number of studies (number of participants)	1 (n=380).
Countries and setting	Conducted in Canada; setting: before-and-after staff satisfaction survey on explicit rounding in a 15-bed medical/surgical ICU in a 440-bed tertiary care teaching hospital in Vancouver, Canada. 'Before' data collected on 12 days in July 1997 and 'after' data on 19 days in January and February 1999.
Line of therapy	1st line.
Duration of study	-
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Not mentioned but assuming used for all patients on the ICU.
Exclusion criteria	Not mentioned.
Recruitment/selection of patients	Not mentioned.
Age, gender and ethnicity	Age - --: information not provided. Gender (M:F): information not provided. Ethnicity: n/a.

Study	Explicit approach to rounds trial: Dodek 2003[26]
Further population details	1. Critical care patients: critical care patients (ICU). 2. Frail elderly: not stated. 3. Speciality/profession: inter-professional handover (Interdisciplinary rounding).
Indirectness of population	No indirectness.
Interventions	(n=1566) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Explicit approach to bedside rounds: flow-chart of the ideal ICU rounds process designed, including shorter and earlier handover rounds in the mornings; drug reorders, transfer notes and orders, and discussions with consultants to be carried out before attending rounds; bedside presentations during attending rounds consisting of summary of major events in the last 24 hours and system-oriented synthesis of active issues and plans by the responsible resident; development and maintenance of a common problem and plan list kept at bedside. Duration: 19 days. Concurrent medication/care: n/a. Comments: 1566 surveys of staff from 225 separate bedside rounds. (n=1088) Intervention 2: No round checklists or daily goal charts - no ward rounds. Before intervention: no clear allocation of time for handover of information between residents; no clear expectations about the content of the bedside presentations. Duration: 12 days. Concurrent medication/care: n/a. Comments: 1088 surveys from 155 separate bedside rounds.
Funding	-
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: EXPLICIT APPROACH TO BEDSIDE ROUNDS versus NO EXPLICIT APPROACH TO BEDSIDE ROUNDS. Protocol outcome 1: Staff satisfaction. - Actual outcome: Satisfied with process and outcome of rounds at 12 (before) and 19 (after) days; Group 1: 1467/1544, Group 2: 790/915; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Very high, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: No patient details provided. No details on staff completing the survey provided either.; Group 1 Number missing: 22, Reason: surveys returned without bed identifier and/or no profession; Group 2 Number missing: 173, Reason: surveys returned without bed identifier and/or no profession	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events ; Quality of life; Patient/family and/or carer satisfaction; Length of stay; Missed of delayed treatments; Missed of delayed investigations.

Study	Structured nursing communication trial: Gausvik 2015[29]
Study type	Prospective cohort study.

Study	Structured nursing communication trial: Gausvik 2015[29]
Number of studies (number of participants)	1 (n=n/a).
Countries and setting	Conducted in USA; setting: acute care for the elderly (ACE) unit in a 555-bed metropolitan community hospital awarded Magnet certification in 2011 for excellence in nursing innovation and practice in Cincinnati, Ohio, USA. The ACE unit provides acute care to geriatric patients in the hospital where the goal is to prevent functional decline and reduce rates of hospital-related adverse events. The Christ hospital opened a 10-bed ACE unit in September 2013 with a focus on interdisciplinary care and team-based bedside rounds.
Line of therapy	1st line.
Duration of study	n/a.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis: acute care unit for the elderly.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	The ACE unit accepts patients over 70 years of age admitted from home and requiring acute hospitalisation.
Exclusion criteria	n/a.
Recruitment/selection of patients	The ACE unit accepts patients over 70 years of age admitted from home and requiring acute hospitalisation. Since ACE is newly created it has structured interdisciplinary bedside rounds (SIBR) in place from the outset. The survey on staff satisfaction with SIBR was given to volunteer subjects on this unit as well as control units that do not use SIBR (staff included nurses, social workers, physical and occupational therapists, and PCAs).
Age, gender and ethnicity	Age: 70 and above (no specific details provided). Gender (M:F): information not provided. Ethnicity: n/a.
Further population details	1. Critical care patients: critical care patients (acute care for the elderly unit). 2. Frail elderly: frail elderly (70 years and above). 3. Speciality/profession: inter-professional handover (interdisciplinary bedside rounds).
Indirectness of population	No indirectness.
Interventions	(n=24) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Structured interdisciplinary bedside rounds (SIBR): provide validated structure that operationalises interdisciplinary communication while bringing together many care providers involved in the patient's care at the bedside, including an emphasis on including the patient and family. The interaction with the health care team provides an opportunity for anyone to raise questions and concerns in a level-playing field. The interdisciplinary team includes a nurse practitioner, geriatrician, social worker, nurses, physical and occupational therapists and patient care assistants. Dietary, speech and language therapists are consulted on an as needed basis. Duration: n/a. Concurrent medication/care: n/a. Comments: 24 is the number of staff completing the survey. The paper does not give information regarding the number of patients seen.

Study	Structured nursing communication trial: Gausvik 2015[29]
	(n=38) Intervention 2: No round checklists or daily goal charts - no ward rounds. Standard physician-centred rounds, in which the attending physician examines computerised laboratory and vital sign information, examines and talks to the patient and enters a note in the electronic health record, which may or may not involve the physician discussing issues with nursing staff. In contrast to SIBR, there is no operationalised method for physicians to draw information in a multidirectional manner of communication from nursing staff. Duration: n/a. Concurrent medication/care: n/a. Comments: the number of patients was not mentioned in the paper. 38 is the number of staff who completed the survey on staff satisfaction. The volunteers were staff from 4 non-intensive care hospital units (medical/surgery and telemetry units) to be used as control groups.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STRUCTURED INTERDISCIPLINARY WARD ROUND versus STANDARD PHYSICIAN-CENTRED ROUND. Protocol outcome 1: Staff satisfaction. - Actual outcome: Job satisfaction (unadjusted) at n/a; Group 1: mean 3.625 (SD 0.4945); n=24, Group 2: mean 2.868 (SD 0.5776); n=38; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Low, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: Very serious indirectness, Comments: Interdisciplinary ward round that is structured compared to standard physician-centred rounding which may not involve nurses. So very different intervention that differs not only due to the structure but also composition of the team.; Baseline details: no patient information given; Key confounders: unadjusted analysis	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Length of stay; Missed of delayed treatments; Missed of delayed investigations.

Study	ICU daily goals sheet trial: Narasimhan 2006[57]
Study type	Before and after study.
Number of studies (number of participants)	1 (n=n/a).
Countries and setting	Conducted in USA; setting: before-and-after study of patients admitted to the medical ICU of a 697-bed teaching hospital in New York, USA, during 9 month after implementation of daily goals chart compared to 9 month period a year before. 16-bed closed unit with a full-time nurse manager and a medical director, staffed by full-time attending physicians trained in pulmonary and critical care medicine, fellows in training in the same areas and residents training in internal medicine. Nurse to patient ratio is 1:2. No computerised order entry or data system was in place at the time of the study.

Study	ICU daily goals sheet trial: Narasimhan 2006[57]
Line of therapy	1st line.
Duration of study	Intervention time: 9 months after intervention introduction, plus 9 months in the same period of previous year.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Not specifically mentioned but assuming patients on the unit during the time period of data collection.
Exclusion criteria	Not mentioned.
Recruitment/selection of patients	Not mentioned.
Age, gender and ethnicity	Age - Other: not provided. Gender (M:F): not provided. Ethnicity: n/a.
Further population details	1. Critical care patients: critical care patients (Medical ICU). 2. Frail elderly: not stated. 3. Speciality/profession: (ICU).
Indirectness of population	No indirectness.
Interventions	(n=1) Intervention 1: Structured ward round models - daily goal chards. Daily goals worksheet: designed with input from ICU nurses, fellows and attending. Each worksheet was discarded the day after use and was not included in the permanent medical record. The worksheet covered: test/procedures, medications, sedation/analgesia, catheters, consults, nutrition, mobilisation, family discussion/consents, transfer and other. Duration: 9 months. Concurrent medication/care: for each patient, daily bedside ward rounds are conducted with attending, fellow and house staff assigned to the ICU, together with the nurse assigned to the patient. During teaching rounds a mean of 30 minutes is spent with the patient and the patient's condition, intercurrent events, pathophysiology, differential diagnosis and plan of care for the day are reviewed. Each patient is also seen by a full-time nutritionist, a social worker and physiotherapist and a respiratory therapist as needed. Comments: Patient numbers not provided by authors. (n=1) Intervention 2: No round checklists or daily goal charts - no ward rounds. Before the introduction of the daily goals chart. Duration: 9 months. Concurrent medication/care: for each patient daily bedside ward rounds are conducted with attending, fellow, and house staff assigned to the ICU, together with the nurse assigned to the patient. During teaching rounds a mean of 30 minutes is spent with the patient and the patient's condition, intercurrent events, pathophysiology, differential diagnosis and plan of care for the day are reviewed. Each patient is also seen by a full-time nutritionist, a social worker and physiotherapist and a respiratory therapist as needed. Comments: No patient information (including numbers) provided by the paper.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: DAILY GOAL CHART versus NO DAILY GOALS CHART.	

Study	ICU daily goals sheet trial: Narasimhan 2006[57]
Protocol outcome 1: Length of stay. - Actual outcome: Length of stay in ICU at 9 months; before- 6.4 days (SD not reported); after -4.3 days (SD not reported); Risk of bias: All domain - Very high, Selection - Very high, Blinding - high, Incomplete outcome data - Low, Outcome reporting - low, Measurement - Low, Crossover - Low; Indirectness of outcome: no indirectness,	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	SIDR on a medical teaching unit trial: O'Leary 2010[62]
Study type	Non-randomised comparative study.
Number of studies (number of participants)	1 (n=1812).
Countries and setting	Conducted in USA; setting: the study was conducted at an 897-bed tertiary care teaching hospital in Chicago, USA. One of 2 similar teaching service units was randomly selected for the intervention, while the other served as a control unit. The intervention was implemented in August 2008 and data were collected over a 6-month study period. Each teaching service consisted of 30 beds and was equipped with continuous cardiac telemetry monitoring. Teaching service physician teams consisted of 1 attending, 1 resident, 1 or 2 interns, and 1 or 2 third year medical students.
Line of therapy	1st line.
Duration of study	Intervention time: 6 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	The structured communication tool was used in structured interdisciplinary rounds (SIDR) for all patients newly admitted to the unit (in previous 24 hours).
Exclusion criteria	The daily plan of care for all other patients (not newly admitted) was also discussed at SIDR, but without the aid of a structured communication tool.
Recruitment/selection of patients	Providers working on the intervention and control units during the study period were administered a survey to assess ratings of collaboration and teamwork. Resident physicians received the survey at the completion of each 4 week clinical rotation. Nurses were surveyed 16-20 weeks after implementation of SIDR.
Age, gender and ethnicity	Age - Mean (SD): intervention unit: 59.8 (19.4); control unit: 59.9 (19.0). Gender (M:F): 1/1. Ethnicity: 48% White, 38%

Study	SIDR on a medical teaching unit trial: O'Leary 2010[62]
	Black, 7% Hispanic, 1% Asian, Other 6%.
Further population details	1. Critical care patients: critical care patients 2. Frail elderly: not stated 3. Speciality/profession: inter-professional handover.
Indirectness of population	-
Interventions	(n=81) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Structured inter-disciplinary rounds (SIDR): SIDR combined a structured format for communication and a forum for regular interdisciplinary meetings. A working group, consisting of nurses resident physicians, pharmacists, and the unit social worker and case manager met weekly for 12 weeks prior to implementation. The working group determined the optimal timing, frequency and location for SIDR and finalised a structured communication tool used during SIDR. SIDR took place every weekday at 11am in the unit nursing report room and lasted 30-40 minutes. The nurse manager and a unit medical director co-led rounds each day. SIDR were attended by all nurses and resident physicians caring for patients in the unit, as well as the pharmacist, social worker and case manager assigned to the unit. The structured communication tool was used in SIDR for all patients newly admitted to the unit (previous 24 hours). The daily care plan for all other patients was also discussed but without the aid of a structured communication tool. Duration 6 months. Concurrent medication/care: n/a. Comments: n=81 refers to the health care providers taking care in the survey. This corresponds to assessment of n=843 patients. (n=66) Intervention 2: No round checklists or daily goal charts - no ward rounds. Control: unclear what it entails (very serious indirectness). It is likely to be ward rounds that are both unstructured and not attended by a multi-disciplinary team. Duration: 6 months. Concurrent medication/care: n/a. Comments: n=66 refers to the health care providers taking care in the survey. This corresponds to assessment of n=969 patients.
Funding	Academic or government funding (North western Memorial hospital).
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STRUCTURED INTERDISCIPLINARY ROUNDING PLUS THE USE OF A STRUCTURED COMMUNICATION TOOL versus UNCLEAR: NO STRUCTURE AND/OR NO INTERDISCIPLINARY ROUNDING. Protocol outcome 1: Length of stay. - Actual outcome: Length of stay (patients) at 6 months; Group 1: mean 4.3 days (SD 3.7); n=843, Group 2: mean 4.1 days (SD 3.5); n=969; Comments: The total numbers randomised correspond to the health care providers not the patients. Because the study reports two different parts a study there was no other way to enter the data. No analysed equals no randomised for this outcome. Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: no indirectness; Baseline details: Intervention unit contained slightly more patients with heart failure and renal failure	

Study	SIDR on a medical teaching unit trial: O'Leary 2010[62]
Protocol outcome 2: Staff satisfaction. - Actual outcome: Teamwork climate score (staff) at 6 months; Group 1: mean 82.4 (SD 11.7); n=81, Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: no indirectness ; Baseline details: details of health care providers not reported other than % of nurses and physicians - Actual outcome: Safety climate score (staff) at 6 months; Group 1: mean 76.5 (SD 13); n=81, Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: -- ; Baseline details: details of health care providers not reported otehr than % of nurses and physicians	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse event ; Quality of life; Patient/family and/or carer satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Structured interdisciplinary rounds: Improving patient safety trial: O'Leary 2011[64]
Study type	Non-randomised comparative study.
Number of studies (number of participants)	1 (n=370).
Countries and setting	Conducted in USA; setting: retrospective medical record review of patients (n=370) admitted to 2 units at a 897-bed tertiary care teaching hospital in Chicago, USA, from 28th July 2008 to 11th January 2009. One of 2 similar teaching service units was randomly selected for the intervention, while the other served as a control unit. Each teaching service consisted of 30 beds and was equipped with continuous cardiac telemetry monitoring. Teaching service physician teams consisted of 1 attending, 1 resident, 1 or 2 interns, and 1 or 2 third year medical students.
Line of therapy	1st line.
Duration of study	Intervention time: 5.5 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Medical record review of randomly selected patients (n=370) admitted to the intervention and control teaching service units. The structured communication tool was used in structured interdisciplinary rounds (SIDR) for all patients newly admitted to the unit (in previous 24 hours).
Exclusion criteria	The daily plan of care for all other patients (not newly admitted) was also discussed at SIDR, but without the aid of a structured communication tool.
Recruitment/selection of patients	A medical record abstraction was done on 370 randomly selected patients admitted to the intervention and control

Study	Structured interdisciplinary rounds: Improving patient safety trial: O'Leary 2011[64]
	teaching units.
Age, gender and ethnicity	Age - Mean (SD): intervention: 59.5 (19.2); control: 58.0 (19.1). Gender (M:F): 1/1. Ethnicity: White 51%, Other 49%.
Further population details	1. Critical care patients: 2. Frail elderly: 3. Speciality/profession:
Indirectness of population	-
Interventions	(n=185) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Structured inter-disciplinary rounds (SIDR): SIDR combined a structured format for communication and a forum for regular interdisciplinary meetings. A working group, consisting of nurses resident physicians, pharmacists and the unit social worker and case manager met weekly for 12 weeks prior to implementation. The working group determined the optimal timing, frequency and location for SIDR and finalised a structured communication tool used during SIDR. SIDR took place every weekday at 11am in the unit nursing report room and lasted 30-40 minutes. The nurse manager and a unit medical director co-led rounds each day. SIDR were attended by all nurses and resident physicians caring for patients in the unit, as well as the pharmacist, social worker and case manager assigned to the unit. The structured communication tool was used in SIDR for all patients newly admitted to the unit (previous 24 hours). The daily care plan for all other patients was also discussed but without the aid of a structured communication tool. Duration: 5.5 months. Concurrent medication/care: n/a. (n=185) Intervention 2: No round checklists or daily goal charts - no ward rounds. Control: unclear what it entails. It is likely to be ward rounds that are both unstructured and not attended by a multi-disciplinary team. Duration: 5.5 months. Concurrent medication/care: n/a.
Funding	Academic or government funding (funding from the hospital).
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STRUCTURED INTERDISCIPLINARY ROUNDING PLUS THE USE OF A STRUCTURED COMMUNICATION TOOL versus UNCLEAR: NO STRUCTURE AND/OR NO INTERDISCIPLINARY ROUNDING. Protocol outcome 1: Avoidable adverse events. - Actual outcome: Any adverse events at 5.5 months; RR 0.54 (95%CI 0.36 to 0.83);(Comments: incidence rate ratio); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: mostly similar characteristics but slightly different case mix - Actual outcome: Preventable adverse events at 5.5 months; RR 0.27 (95%CI 0.12 to 0.62); (Comments: Incidence rate ratio) Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: mostly similar characteristics but slightly different case mix;	
Protocol outcomes not reported by the study	Mortality; Quality of life; Patient/family and/or carer satisfaction; Length of stay; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Structured interdisciplinary rounds in a hospitalist unit trial: O'Leary 2011[66]
Study type	Controlled before and after study.
Number of studies (number of participants)	1 (n=1499).
Countries and setting	Conducted in USA; setting: this controlled before-and-after study was conducted at an 897-bed tertiary care teaching hospital in Chicago, USA over a 24 week study period beginning in August 2008. One of 2 similar medicine units was randomly selected for the intervention, while the other served as a control unit. Each unit consisted of 30 beds and was equipped with continuous cardiac telemetry monitoring. Units were also identical in physical structure and staffing of non-physician personnel. The intervention unit included a heart failure-hospitalist co-management service. Patients followed at the centre for heart failure were preferentially admitted to this service. All other patients were admitted to units based on bed availability in a quasi-randomised fashion. Hospitalists worked 7 consecutive days while on service and cared for patients primarily on the units involved in this study. Therefore, hospitalists cared for patients on both the intervention and control units during their weeks of service.
Line of therapy	1st line.
Duration of study	Intervention time: 24 weeks.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Patients followed at the centre for heart failure were preferentially admitted to this service. All other patients were admitted to units based on bed availability in a quasi-randomised fashion.
Exclusion criteria	n/a.
Recruitment/selection of patients	Patients followed at the centre for heart failure were preferentially admitted to this service. All other patients were admitted to units based on bed availability in a quasi-randomised fashion.
Age, gender and ethnicity	Age - Mean (SD): intervention post-SIDR: 64.1 (17.2); control: 63.8 (16.0). Gender (M:F): 1/1. Ethnicity: White 50%; Black 36%; Hispanic 6%, Asian 1%, Other 7%.
Further population details	1. Critical care patients: critical care patients 2. Frail elderly: not applicable 3. Speciality/profession: inter-professional handover.
Extra comments	A survey was also given to the hospitalists and nurses working on the units to assess teamwork climate.
Indirectness of population	No indirectness.
Interventions	(n=684) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Structured inter-disciplinary rounds (SIDR): combined a structured format for communication with a forum

Study	Structured interdisciplinary rounds in a hospitalist unit trial: O'Leary 2011[66]
	for regular interdisciplinary meetings. Unit medical directors were selected with nursing leadership input to partner with established unit nurse managers to improve quality and safety for their units. The unit co-leaders received specific training over a 12 week period. Working groups, consisting of nurses, resident physicians, pharmacists and the unit social worker and case manager met weekly for 12 weeks prior to implementation. The working group determined the optimal timing, frequency and location for SIDR and finalised a structured communication tool used during SIDR. SIDR took place every weekday at 11am in the unit conference room and lasted about 30 minutes. The nurse manager and a unit medical director co-led rounds each day. SIDR were attended by all nurses and resident physicians caring for patients in the unit, as well as the pharmacist, social worker and case manager assigned to the unit. The structured communication tool was used in SIDR for all patients newly admitted to the unit (previous 24 hours). The daily care plan for all other patients was also discussed but without the aid of a structured communication tool. Duration: 24 weeks. Concurrent medication/care: n/a. Comments: n=684 is the number of patients in the post-intervention group. (n=815) Intervention 2: No round checklists or daily goal charts - no ward rounds. Unclear: no structure and/or no interdisciplinary rounding. Duration: 24 weeks. Concurrent medication/care: n/a. Comments: n=815 is the number of patients in the control unit.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STRUCTURED INTERDISCIPLINARY ROUNDING PLUS THE USE OF A STRUCTURED COMMUNICATION TOOL versus UNCLEAR: NO STRUCTURE AND/OR NO INTERDISCIPLINARY ROUNDING. Protocol outcome 1: Length of stay. - Actual outcome: length of stay (unadjusted) at 24 weeks; Group 1: mean 4 days (SD 3.4); n=684, Group 2: mean 3.7 days (SD 3.3); n=815; Risk of bias: All domain - Very high, Selection - Very high, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events ; Quality of life; Patient/family and/or carer satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Improve teamwork and patient safety on a medical service trial: O'Leary 2015[65]
Study type	Before and after study.
Number of studies (number of participants)	1 (n=1380).

Study	Improve teamwork and patient safety on a medical service trial: O'Leary 2015[65]
Countries and setting	Conducted in USA; setting: this pre-versus post-intervention study compared results from patients and professionals on 5 general medical units at an 854-bed tertiary care teaching hospital in Chicago, USA. Four of the 5 units consisted of 30 beds and 1 had 23 beds. Two units were staffed by teaching service physician teams composed of 1 attending, 1 resident, 1 or 2 interns, and 0 to 3 medical students. Two units were staffed by hospitalist physicians who worked independently without the assistance of resident physicians. One unit was staffed by a combination of teaching service physician teams and hospitalists working independently without the assistance of resident physicians. As a result of a prior intervention, physicians worked on specific units in an effort to improve communication practices.[62,64,66]
Line of therapy	1st line.
Duration of study	Intervention time: 2 years.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	The research group randomly selected 1380 patients admitted to the study units between 1st March 2009, and 28th February 2011 for identification of adverse events.
Exclusion criteria	n/a.
Recruitment/selection of patients	SIDR was implemented on 1st March 2010. The research group randomly selected 1380 patients admitted to the study units between 1st March 2009, and 28th February 2011 for identification of adverse events. An adapted version of a traditional 2-stage medical record review was done. For each patient with 1 or more potential AEs identified, 1 of 3 clinical research nurses abstracted the medical record and created a narrative summary for each potential AE, which was evaluated by 2 physician-researchers to determine occurrence of, preventability and severity of AEs.
Age, gender and ethnicity	Age - Mean (SD): Gender (M:F): 1/1. Ethnicity: white 53.5%; other 46.5%.
Further population details	1. Critical care patients: critical care patients 2. Frail elderly: not frail elderly 3. Speciality/profession: inter-professional handover.
Extra comments	A survey, to assess teamwork, was also administered to providers working on study units (n=387) during a 3 month period before implementation of the interventions and a similar 3 month period 1year after implementation.
Indirectness of population	No indirectness.
Interventions	(n=222) Intervention 1: Structured ward round models - ward round checklists (generic checklists, not condition specific). The INTERACT intervention had 2 components: structured inter-disciplinary rounds (SIDR) and prepared nurse-physician co-leadership. Unit medical directors were selected with nursing leadership input to partner with established unit nurse managers to improve quality and safety for their units. The unit co-leaders received specific

Study	Improve teamwork and patient safety on a medical service trial: O'Leary 2015[65]
	training over a 12 week period. SIDR combined a structured format for communication and a forum for regular interdisciplinary meetings. Unit co-leaders led working groups, with representatives from each professional type to determine the optimal timing, frequency and location for SIDR and finalised a structured communication tool used during SIDR. SIDR took place every weekday at 11am in unit conference rooms and lasted 30-40 minutes. The nurse manager and unit medical director co-led rounds each day. SIDR were attended by all nurses and resident physicians caring for patients in the unit, as well as the pharmacist, social worker and case manager assigned to the unit. The structured communication tool was used in SIDR for all patients newly admitted to the unit (previous 24 hours). The daily care plan for all other patients was also discussed but without the aid of a structured communication tool. Duration 2 years. Concurrent medication/care: n/a. Comments: n=222 refers to the number of health care providers taking part in the survey. This corresponds to assessment of n=690 patients. (n=165) Intervention 2: No round checklists or daily goal charts - no ward rounds. Control: unclear what it entails. It is likely to be ward rounds that are both unstructured and not attended by a multi-disciplinary team. Duration: 2 years. Concurrent medication/care: n/a. Comments: n=165 refers to the number of health care providers taking part in the survey. This corresponds to assessment of n=689 patients.
Funding	Academic or government funding (Agency for Healthcare Research and Quality).
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STRUCTURED INTERDISCIPLINARY ROUNDING USING STRUCTURED FORMAT FOR COMMUNICATION versus UNCLEAR: NO STRUCTURE AND/OR NO INTERDISCIPLINARY ROUNDING. Protocol outcome 1: Avoidable adverse events. - Actual outcome: Any adverse events (adjusted incidence rate ratio) at 2 years; RR 1.08 (95%CI 0.82 to 1.43); Risk of bias: All domain - Very high, Selection - High, Blinding - Very high, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: some difference in age and payment method (private vs medicare) - Actual outcome: Preventable adverse events (adjusted incidence rate ratio) at 2 years; RR 1.02 (95%CI 0.65 to 1.6); Risk of bias: All domain - Very high, Selection - High, Blinding - Very high, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: some difference in age and payment method (private vs medicare) - Actual outcome: Serious adverse events (adjusted incidence rate ratio) at 2 years; RR 0.86 (95%CI 0.39 to 1.92); Risk of bias: All domain - Very high, Selection - High, Blinding - Very high, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: some difference in age and payment method (private vs medicare) Protocol outcome 2: Staff satisfaction. - Actual outcome: Teamwork climate score at 2 years; Group 1: mean 78.3 (SD 14.2); n=222, Group 2: mean 76.2 SD 14.2); n=165; Risk of bias: All domain - Very high, Selection - High, Blinding - Very high, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: some difference in age and payment method (private vs medicare)	

Study	Improve teamwork and patient safety on a medical service trial: O'Leary 2015[65]
Protocol outcomes not reported by the study	Mortality; Quality of life; Patient/family and/or carer satisfaction; Length of stay; Missed of delayed treatments; Missed of delayed investigations.

Study	Prompted checklist trial: Weiss 2011[84]
Study type	Non-randomised comparative study.
Number of studies (number of participants)	1 (n=265).
Countries and setting	Conducted in USA; setting: prospective concurrently controlled cohort study at medical intensive care unit (MICU) at a tertiary care urban university-affiliated hospital, Chicago, USA. The MICU is a closed-unit staffed by 2 separate teams, each with an independent patient census. The teams admit patients on alternating days. Each team consists of 1 pulmonary/critical care attending physician, 1 fellow, 1 pharmacist and several residents and interns.
Line of therapy	1st line.
Duration of study	Intervention time: 3 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	All patients admitted to the MICU service on or after 25th June 2009 and discharged on or before 15th September 2009 were eligible for inclusion. Only the first MICU admission was included for patients admitted more than once without intervening hospital discharge.
Exclusion criteria	Exclusion criteria included the following: patients physically located in a different ICU for more than the first 72 hours of their ICU stay, patients transferred from a different ICU service and patients transferred to another ICU service within 12 hours of MICU admission.
Age, gender and ethnicity	Age - Mean (SD): prompted 58.5 (17.8); control 57.3 (17.8). Gender (M:F): prompted 1/1; control 2/3. Ethnicity: White (52%), African American (34%), Hispanic/other (14%).
Further population details	1. Critical care patients: 2. Frail elderly: 3. Speciality/profession: Not stated.
Indirectness of population	No indirectness.
Interventions	(n=140) Intervention 1: Structured ward round models - Ward round checklists (generic checklists; not condition specific). Prompted checklist: a non-care providing resident physician (the prompter) initiated discussion with 1 of the MICU teams (prompted team) using scripted questions if any of 6 parameters under investigation were overlooked on

Study	Prompted checklist trial: Weiss 2011[84]
	daily work rounds. A verbal prompting script had been developed before commencing of the study. For example, if the team failed to discuss the presence or management of a central venous catheter, the prompter would ask 'the CVC has been in place for x days. Do you want to continue it?' Verbal prompting was directed at the attending and fellow. Any patient admitted to the prompted team was included regardless of whether the prompter was present during their ICU stay (for example, patients admitted and discharged over the weekend). Prompting began during the first rounds after a patient's MICU admission, occurred after a care-providing resident's presentation but before the MICU team entered the patient's room and continued daily (whenever the prompter was present) until MICU discharge. Duration: 3 months. Concurrent medication/care: n/a. Comments: a prompter was present on 67.9% of prompted group daily rounds during the 82 day intervention period. Unclear if the round was still considered prompted or not. (n=125) Intervention 2: Structured ward round models - ward round checklists (generic checklists; not condition specific). Unprompted checklist use: The unprompted MICU team, with availability of the identical checklist, served as control. Duration: 3 months. Concurrent medication/care: n/a.
Funding	Academic or government funding.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: PROMPTED WARD ROUND CHECKLISTS (GENERIC CHECKLISTS; NOT CONDITION SPECIFIC) versus UN-PROMPTED WARD ROUND CHECKLISTS (GENERIC CHECKLISTS; NOT CONDITION SPECIFIC). Protocol outcome 1: Mortality. - Actual outcome: ICU mortality - adjusted OR at n/a; OR 0.36 (95%CI 0.13 to 0.96); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: unclear if unprompted patients in prompted group were analysed as 'prompted'; Key confounders: APACHE IV predicted hospital mortality - Actual outcome: Hospital mortality - adjusted OR at n/a; OR 0.34 (95%CI 0.15 to 0.76); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: unclear if unprompted patients in prompted group were analysed as 'prompted'; Key confounders: APACHE IV predicted hospital mortality Protocol outcome 2: Length of stay. - Actual outcome: ICU length of stay at n/a; Group 1: mean 3.5 (SD 4.3); n=140, Group 2: mean 4.9 (SD 7); n=125; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: unclear if unprompted patients in prompted group were analysed as 'prompted'; Key confounders: APACHE IV predicted hospital mortality	
Protocol outcomes not reported by the study	Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Prompted ward round trial: Weiss 2013[83]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	(n=296).
Countries and setting	Conducted in USA; setting: medical intensive care unit (MICU) with high-intensity intensivist coverage at a tertiary care urban medical centre, North western Memorial Hospital (NMH).
Line of therapy	1st line.
Duration of study	Intervention time: 4 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	All patients admitted to MICU on or after June 27, 2011, discharged on or prior to October 7, 2011, and who received at least 1 day of empirical antibiotics were included.
Exclusion criteria	Patients transferred to and from a different ICU service and any MICU re-admissions without an intervening hospital discharge (first MICU admissions were included).
Age, gender and ethnicity	Age - Mean (range): 60.0-62.6 years. Gender (M:F): 77%/23%. Ethnicity: 45.1% White, 27.9% African American, Hispanic 9.6%.
Further population details	1. Critical care patients: critically ill patients 2. Frail elderly: not applicable 3. Speciality/profession: not applicable.
Indirectness of population	No indirectness.
Interventions	(n=125) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). One of the MICU teams used a checklist embedded within the electronic health record (EHR). Checklist was developed to provide a centralised source of information on antibiotic utilisation in addition to 6 other parameters. They were encouraged to use the checklist daily. No daily electronic prompt to complete the checklist was generated. Simplified paper checklist was also available to this team. Duration: 6 months. Concurrent medication/care: none given. (n=171) Intervention 2: No round checklists or daily goal charts - no ward rounds. A non-care providing resident physician joined daily bedside rounds of 1 of the MICU teams. If a patient was being treated with an antimicrobial agent and the team had not addressed this topic during the course of rounds, the prompter initiated discussion with the team using scripted questions. Team had a simplified paper checklist which included 6 other parameters in addition to empirical antibiotics. Duration: 6 months. Concurrent medication/care: prompters had no patient care

Study	Prompted ward round trial: Weiss 2013[83]
	responsibilities and there was no contact between prompters and patients. Prompting was directed at the attending and fellow and occurred after a care-providing resident's presentation but before the MICU team entered the patient's room. Prompting continued for each patient on a daily basis (whenever the prompter was present) until MICU discharge.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: ELECTRONIC CHECKLIST versus PHYSICIAN PROMPTING. Protocol outcome 1: Mortality - Actual outcome: Hospital mortality at 6 months; Group 1: 30/125, Group 2: 30/171; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 2: Length of stay. - Actual outcome: ICU length of stay at 6 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Hospital length of stay at 6 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Avoidable adverse events ; Quality of life; Patient/family and/or carer satisfaction; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Interdisciplinary rounds trial: Wild 2004A[86]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=84).
Countries and setting	Conducted in USA; setting: Griffin Hospital in Derby, Connecticut, a community hospital with 160 beds.
Line of therapy	1st line.
Duration of study	Intervention time: 1 month.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.

Study	Interdisciplinary rounds trial: Wild 2004A[86]
Subgroup analysis within study	Not applicable.
Inclusion criteria	Patients were included if they were admitted to the telemetry floor with the most common diagnoses (for example, chest pain, atrial fibrillation/flutter, stroke/TIA, congestive heart failure, and syncope).
Exclusion criteria	Patients who were at any point in the IR stay transferred to the intensive care unit or to the general medical ward due to other conditions were excluded, as were patients who died during the interdisciplinary rounds (IR) stay. Patients who were readmitted within the study period and who had already been randomised on a previous visit were also excluded.
Recruitment/selection of patients	Based on patients admitted to the telemetry floor (they were 102 eligible patients, 18 patients were removed from the analysis: 9 - randomisation error, 7 - transfer to ICU, general floor or surgery, 2 - discharged from ER).
Age, gender and ethnicity	Age - Mean (range): 69.8-71.3 years. Gender (M:F): 43/41. Ethnicity: 99% White, 1% Non-White.
Further population details	1. Critical care patients: not stated 2. Frail elderly: not applicable 3. Speciality/profession: inter-professional handover (daily ward rounds: resident physicians, nurses, a case manager, pharmacist, dietician and physical therapist met).
Indirectness of population	No indirectness.
Interventions	(n=42) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Interdisciplinary (IR) ward rounds - daily ward rounds, in which resident physicians, nurses, a case manager, pharmacist, dietician or physical therapist met to discuss patients on the team and to identify and address possible discharge problems. IRS were held for 30-45 minutes, with 2 to 5 minutes per patient. Duration: 1 month. Concurrent medication/care: none given. (n=42) Intervention 2: No round checklists or daily goal charts - no ward rounds. No details given. Duration: 1 month. Concurrent medication/care: n/a.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: INTERDISCIPLINARY WARD ROUNDS versus STANDARD CARE. Protocol outcome 1: Length of stay. - Actual outcome: Length of stay (days) at Baseline; Group 1: mean 3.04 days (SD 1.8); n=42, Group 2: mean 2.7 days (SD 1.8); n=42; Risk of bias: All domain - high, Selection - High, Blinding - low, Incomplete outcome data - Low, Outcome reporting - low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.

Study	Post-take ward round proforma trial: Wright 2009[88]
Study type	Before and after study.
Number of studies (number of participants)	1 (n=170).
Countries and setting	Conducted in United Kingdom; setting: 170 sets of notes were audited for key items of information; 100 without use of the proforma and 70 with the new structured proforma. No information provided regarding location of hospital, ward type, date of data collection or patient information.
Line of therapy	1st line.
Duration of study	Not clear.
Method of assessment of guideline condition	Unclear method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	No information provided regarding location of hospital, ward type, date of data collection or patient information.
Exclusion criteria	n/a.
Recruitment/selection of patients	No information provided regarding location of hospital, ward type, date of data collection, patient information or selection of notes for audit.
Age, gender and ethnicity	Age - --: n/a. Gender (M:F): n/a. Ethnicity: n/a.
Further population details	1. Critical care patients: not stated 2. Frail elderly: not stated. 3. Speciality/profession: not stated.
Extra comments	It can only be inferred that the setting may be a medical assessment unit or a general ward as 1 of the questionnaire items assessing the form reads as 'the transfer of information from the medical assessment unit to the main ward'.
Indirectness of population	No indirectness.
Interventions	(n=70) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Post take ward round proforma was developed and introduced to improve completeness of documentation and efficiency of information management. Duration: not stated. Concurrent medication/care: not stated. (n=100) Intervention 2: No round checklists or daily goal charts - no ward rounds. No proforma used for the daily post take ward round. Duration: not stated. Concurrent medication/care: not stated.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: WARD ROUND PROFORMA versus NO WARD ROUND PROFORMA.	

Study	Post-take ward round proforma trial: Wright 2009[88]
Protocol outcome 1: Missed of delayed investigations. - Actual outcome: Investigations (recorded on notes) at not stated; Group 1: 66/70, Group 2: 57/100; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Very high, Outcome reporting - High, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: no patient information given, no setting and no time given of data collection - Actual outcome: Diagnosis (recorded on notes) at not stated; Group 1: 69/70, Group 2: 40/100; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Very high, Outcome reporting - High, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: no patient information given, no setting and no time given of data collection - Actual outcome: Further tests (recorded on notes) at not stated; Group 1: 55/70, Group 2: 52/100; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Very high, Outcome reporting - High, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: no patient information given, no setting and no time given of data collection Protocol outcome 2: Missed of delayed treatments. - Actual outcome: Management plan (recorded on notes) at not stated; Group 1: 70/70, Group 2: 81/100; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Very high, Outcome reporting - High, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: no patient information given, no setting and no time given of data collection - Actual outcome: DVT prophylaxis (recorded on notes) at not stated; Group 1: 37/70, Group 2: 6/100; Risk of bias: All domain - Very high, Selection - Very high, Blinding - Very high, Incomplete outcome data - Very high, Outcome reporting - High, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: no patient information given, no setting and no time given of data collection	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Length of stay; Staff satisfaction.

Study	Structured interdisciplinary rounds trial: Young 1998[90]
Study type	Prospective cohort study.
Number of studies (number of participants)	(n=469)
Countries and setting	Conducted in USA; setting: the study was conducted in a 12-bed, mixed medical and surgical ICU at McKay-Dee Hospital, a 380-bed non-teaching tertiary referral hospital in Ogden, Utah.
Line of therapy	1st line.
Duration of study	Intervention time: 54 months.

Study	Structured interdisciplinary rounds trial: Young 1998[90]
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall.
Subgroup analysis within study	Not applicable.
Inclusion criteria	ICU patients on mechanical ventilation for longer than 72 hours who did not meet the exclusion criteria.
Exclusion criteria	Patients less than 14 years of age, acutely terminally ill patients (primarily patients' institutional brain-death criteria) and patients whose attending physician declined participation.
Recruitment/selection of patients	Patients treated from 1992 through May 1995 were identified and evaluated patients prospectively.
Age, gender and ethnicity	Age - Mean (range): 61.2-58.4 years. Gender (M:F): not stated. Ethnicity: not stated.
Further population details	1. Critical care patients: not stated 2. Frail elderly: not stated 3. Speciality/profession: not stated.
Indirectness of population	No indirectness.
Interventions	(n=469) Intervention 1: Structured ward round models - ward round checklists (generic checklists; not condition specific). Daily formal bedside rounds, personnel who routinely attended the daily rounds included the critical care physician, clinical dietician, respiratory therapist, pharmacist, and bedside nurse. They held a comprehensive review of all organ systems, laboratory findings and psychosocial issues. Less detailed evening rounds were also held. A social worker completed an initial evaluation within 24 hours of initiation of the protocol. Family conferences were held at least weekly. Duration: 3 years. Concurrent medication/care: the team coordinated areas of care by establishing interdisciplinary guidelines and standardised order sheets. (n=469) Intervention 2: No round checklists or daily goal charts - no ward rounds. In 1991, a multidisciplinary team was formed that included the principal care givers for patients who required prolonged mechanical ventilation. Team members included a critical care physician, a respiratory therapy, a physical therapist and a cardiac rehabilitation specialist. Duration: 1 year. Concurrent medication/care: n/a.
Funding	Funding not stated.

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: MULTIDISCIPLINARY WARD ROUNDS versus BEFORE STRUCTURED WARD ROUNDS.

Protocol outcome 1: Length of stay.
- Actual outcome: Days in ICU at January 1991 - June 1995; Group 1: mean 15 days (SD 9.9); n=469, Group 2: mean 19.2 days (SD 14.7); n=469; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Days in hospital at January 1991 - June 1995; Group 1: mean 32.7 days (SD 21.8); n=469, Group 2: mean 24.8 days (SD 16.6); n=469; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low,

Study	Structured interdisciplinary rounds trial: Young 1998[90]
Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Mortality; Avoidable adverse events; Quality of life; Patient/family and/or carer satisfaction; Staff satisfaction; Missed of delayed treatments; Missed of delayed investigations.