Table C-2. Overview of systematic reviews for pressure ulcers

| **Title, Author, Year of publication****ROBIS score** | **Population, Setting, Search Dates, Included study type/counts** | **Interventions Included** | **Outcomes Assessed** | **Conclusions Reported in the Review** |
| --- | --- | --- | --- | --- |
| Repositioning for pressure ulcer prevention in adults (Gillespie et al. 2014)15)ROBIS: Low | Population: Older patientsSetting: Acute & long-term careSearch dates: 1948 to September 2013Included study type/ counts: 1 RCT; 2 cluster RCTs | 1. 30 degree vs. 90 degree tilt positions2. Two-hourly and 3-hourly repositioning on standard hospital mattresses and 4 hourly and 6 hourly repositioning on viscoelastic foam mattresses | Proportion of participants with a new pressure ulcer of any stage, grade, or category; HRQoL; Procedural pain; Patient satisfaction; Cost of ulcer prevention and cost per event avoided | No benefits associated with mattress titltilt angles or increased repositioning frequency. Limited and low quality evidence. |
| Pressure Ulcer Risk Assessment and Prevention: Comparative Effectiveness (Chou et al. 2013)16ROBIS: Low | Population: AdultsSetting: AnySearch Dates: Up to 2012Included study type/counts: 120 studies | Risk assessment scales to identify high risk and prevention interventions (including support surfaces and overlays, bed systems, cushions, nutritional supplementation, repositioning, and cleansers) to decrease incidence or severity | Pressure ulcers | Some evidence supports the use of risk assessment scales to identify individuals at risk for ulcers but effects on incidence of ulcers are not clear. Advanced static support surfaces were more effective in ulcer prevention compared to standard mattresses in higher risk populations. Evidence was unclear for other prevention interventions. |
| Pressure Ulcer Treatment Strategies: Comparative Effectiveness(Saha et al. 2013)17ROBIS: Low | Population: Adults 18 and older treated for existing pressure ulcersSetting: AnySearch Dates: 1985 to 2012Included study type/counts: 143 trials, 31 observational studies including cohort studies, case-control, case series, and cross-sectional studies | Surface supports, nutrition supplementation, wound dressings, topical therapies, biologic agents, surgical repair | Effectiveness and safety of pressure ulcer treatment strategies | Moderate strength evidence that air-fluidized beds, protein containing nutritional supplements, radiant heat dressings, and electrical stimulation associated with wound improvement. Limited evidence regarding best treatment for pressure ulcers. |
| Preventing in-facility pressure ulcers as a patient safety strategy: a systematic review (Sullivan et al. 2013)18ROBIS: High | Population: Hospital patients (acute & long-term care)Setting: Hospital (acute and long-term)Search dates: 2000 to 2012Included study type/ counts: 26 studies (including 3 RCTs) | Multicomponent initiatives including education, documentation, audit and feedback, protocols, use of risk assessment tools, support surfaces, repositioning, moisture management, nutrition and hydration  | Improvementin pressure ulcer rates; Process of care quality measures | Multicomponent interventions improved care and reduced rates of pressure ulcers. Few studies addressed effectiveness of individual components of prevention programs but most included elements of risk assessment, skin examination, support surfaces, moisture control, repositioning/mobility, nutrition, and hydration. |
| Comprehensive programs for preventing pressure ulcers: a review of the literature (Niederhauser et al. 2012)19ROBIS: High | Population: Patients in acute care and long-term careSetting: Acute care and long-term careSearch dates: January 1995 to December 2010Included study type/ counts: 24 case series (1 longitudinal group pretest-posttest design) | Multifaceted, multidisciplinary interventions (Pressure Ulcer prevention best practices, staff education,clinical monitoring and evaluation, skin care champions,other campaign elements, and strategies to ensure sustainability) | Pressure Ulcer prevalence or incidence rates; Care process measures | Multi-disciplinary, bundled approaches can reduce pressure ulcer prevalence or incidence rates.  |
| Pressure ulcer prevention: an evidence-based analysis(Ontario, 2009)20ROBIS: High | Population: 60 to 80 year oldsSetting: Long-term care homesSearch dates: Up to 2003Included study type/ counts: 2 RCTs; 3 Non-RCTs | Risk assessmentDistribution devicesNutritional supplements Repositioning Incontinence management | Incidence of pressure ulcers | Moderate evidence of effectiveness of alternative foam mattress compared to standard hospital foam mattress for preventing PU. Lack of evidence to support most other preventive interventions. |
| Pressure ulcers(Cullum et al. 2008)21ROBIS: High | Population: NRSetting: NRSearch Dates: Up to 2007Included study type/counts: 60 studies including systematic reviews, RCTs and observational studies | Interventions including alternative mattresses, low-air-loss beds, overlays, alternating pressure surfaces, cushions, heel supports, nutritional supplements, repositioning, skin conditioning | Incidence and severity of pressure ulcers; Time to heal; Adverse effects of treatment | Alternative foam mattresses reduce incidence of pressure ulcers.Air-fluidized supports and hydrocolloid dressings may improve healing  |
| Treatment of pressure ulcers: a systematic review(Reddy et al. 2008)22ROBIS: High | Population: AdultsSetting: AnySearch Dates: Up to 2008Included study type/counts: 103 RCTs | Treatments for pressure ulcers including support surfaces, nutritional supplements, wound dressings, biological agents, and adjunctive therapies such as ultrasound and light therapy | Pressure ulcers | No evidence favored one support system over another. One study found protein supplementation improved healing. No benefits shown in 21 RCTS evaluating adjunctive therapies |

ROBIS=Risk of Bias in Systematic Reviews; RCT=Randomized controlled trial; NR=Not reported