**Evidence Table H-1b. Support observational studies**

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| **Author, year Country Overall Quality Rating** | **Population:  Eligibility Criteria** | **Population:  Exclusion Criteria** | **Population Data: Number Screened/ Eligible/ Enrolled/ Analyzed** | **Age**  **Sex**  **Race** | **Intervention: Type** | **Intervention Ulcer Type/Severity at Baseline (Intervention Onset)** |
| Ochs, 200524 US Fair | Enrolled in National Pressure Ulcer Long-Term Care Study (NPULS)  18 years old or older Length of stay of 14 days or longer One or more documented PUs in medical record; Treated with one of the three groups of support surfaces | Treated on support surface for less than 5 days | 2,486/664/664/664 | Age (Mean): 78  Female: 63%  Race (available for 28% of sample):  Caucasian: 66.5%  African American: 28.6%  Other: 4.9% | Support Surface | Stage:  Treatment A:  Not Staged: 2% (10)  Stage I:10% (47)  Stage II: 62% (288)  Stage III: 13% (59)  Stage IV: 7% (32)  Eschar: 6% (27)  Treatment B:  Not Staged: 3% (3)  Stage I: 8% (9)  Stage II: 38% (45)  Stage III:19% (23)  Stage IV: 24% (29)  Eschar: 8% (10)  Treatment C:  Not Staged: 0  Stage I: 4% (3)  Stage II: 18% (15)  Stage III: 17% (14)  Stage IV: 54% (44)  Eschar: 7% (6) |
| Valente, 201225  US  Poor | All patients admitted to a geriatric center between 7/1/2001 and 6/30/2002  A Brandon score of 16 or higher (high risk)  Existing PU requiring institution of pressure reduction product | Length of stay less than 10 days  Development of a stage III or IV PU and moved to a low-air loss bed | NR/122/122/122 | Age (Mean): 68 years  Female: 65%  Race: Caucasian 77% African American 23% | Support: Improved Gel and AP | Stage I and II only |
| Warner, 199226  US  Poor | 21 years or older Presence of a PU less than 12 cm in diameter  Use of LAL or Foam mattress | Lesions due to peripheral vascular disease  Multiple system failure  Septicemia  Planned graft or flap surgery of PU  Restrictive immobility | NR/NR/20/20 | Age (Mean): 64 years  Female: 45%  Race:  White 80%  Black: 10%  Hispanic 10% | Support: LAL beds | Treatment A:  Stage 1: 6% (1)  Stage II: 29% (5)  Stage III: 41% (7)  Stage IV: 0  Eschar/Slough: 24% (4)  Treatment B:  Stage 1: 7% (1)  Stage II: 29% (4)  Stage III: 19% (4)  Stage IV: 0  Eschar/Slough: 35% (5) |

| **Evidence Table  H-1b: Support Observational Studies, continued** |  |  |  |  |  |  |  |  |  |
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| **Author, year Country Overall Quality Rating** | **Treatment A** | **Treatment B** | **Treatment C** | **Outcomes: Complete Wound Healing** | **Outcomes: Wound Surface Area** | **Outcomes: Healing Time** | **Outcomes: Pain** | **Outcomes: Infection Rate** | **Outcomes: Osteomyelitis** |
| Ochs, 200524 US Fair | Static overlays and replacement mattresses  Air fluidized beds | Static overlays and replacement mattresses | LAL beds, powered, and non-powered overlays and mattresses. | NR | Mean change in cm2/per week All ulcers Treatment A: 5.2  Treatment B: 1.5  Treatment C: 1.8  p=0.0071   Stage I/II: Treatment A: 8.8  Treatment B: 1.6  Treatment C: 2.4 p=0.0229  Stage III/IV/eschar: Treatment A: 4.1 Treatment B: 1.1 Treatment C: 1.4 ANOVA p=0.0259  Group 3 statistically significantly better  Subset stage III/IV with baseline size 20-75 cm2  Group 1: 2.5 Group 2: -2.1 (Group 3: 2.3  Groups 1 and 3 significantly better than 2 (p=0.0399) | NR | NR | NR | NR |
| Valente, 201225  US  Poor | AP overlay | Gel Overlay | NA | Complete Wound Healing for PUs Present on Admission  Treatment A: 27% (13/48)  Treatment B: 17% (5/30)  Complete Wound Healing PU Developed During Stay  Treatment A: 22% (15/67)Treatment B: 11% (6/55)  Not significantly different  p<0.05 | Treatment A: 31.3 cm2 per week  Treatment B: 31.9 cm2 per week  p=NS | NR | NR | NR | NR |
| Warner, 199226  US  Poor | LAL Bed | Foam Mattress with loose-fitting cover | NA | NR | Mean Progress Toward Wound Closure:  Treatment A: 0.16 cm  Treatment B: 0.27 cm  p>0.05 | NR | NR | NR | NR |

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| **Evidence Table  H-1b: Support Observational Studies, continued** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Author, year Country Overall Quality Rating** | **Outcomes: Recurrence Rate** | **Other Outcomes: Specify** | **Timing: Duration of Followup** | **Setting** | **Setting Comment** | **Harms: Pain** | **Harms: Dermatologic Complication** | **Harms: Bleeding** | **Harms: Infection** | **Severe Adverse Events** | **Withdrawal Due to Adverse Events** | **Overall Adverse Events Rate** | **Funding Source** |
| Ochs, 200524 US Fair | Hospitalizations and ER visits  Number (%) of patients with 1 or more Treatment A: 7% (47)  Treatment B: 10% (23)  Treatment C: 19% ( 6)  Probability of difference B vs. C p=0.0080 A vs. C p=0.0195 A vs. B p=0.4184 | NR | 3 months | Hospital - Nursing home/Long-term care | NR | NR | NR | NR | NR | NR | NR | Analyses were done on person level and episode level, where episode is each ulcer for a 7-10 day period. As conclusion are the same, person level is included here. | Hill-Rom |
| Valente, 201225  US  Poor | NR | NR | Mean Length of Stay  Treatment A: 133 days  Treatment B: 83 days | Chronic Care Beds/Long-term care | NR | NR | NR | NR | NR | NR | NR | NR | John A. Hartford Foundation/ American Federation for Aging and Research |
| Warner, 199226  US  Poor | NR | NR | 4 weeks | Hospital | NR | NR | NR | NR | NR | NR | NR | NR | Sigma Theta Tau International |