|  |  |  |
| --- | --- | --- |
|  | Items in the original Bluebelle WHQ | Item included in the modified WHQ  |
| 1 | Was there redness spreading away from the wound? (erythema/cellulitis) | Yes |
| 2 | Was the area around the wound warmer than the surrounding skin? | Yes |
| 3 | Has any part of the wound leaked clear fluid? (serous exudate) | Yes |
| 4 | Has any part of the wound leaked blood-stained fluid? (haemoserous exudate) | Yes |
| 5 | Has any part of the wound leaked thick and yellow/green fluid? (pus/purulent exudate) | Yes |
| 6a | Have the edges of any part of the wound separated/gaped open on their own accord? (spontaneous dehiscence) | No |
| 6b | Did the deeper tissue also separate? | No |
| 7 | Has the area around the wound become swollen? | Yes |
| 8 | Has the wound been smelly? | Yes |
| 9 | Has the wound been painful to touch? | Yes |
| 10 | Have you had, or felt like you have had, a raised temperature or fever? (fever >38oC) | Yes |
| 11 | Have you sought advice because of a problem with your wound, other than at a planned follow-up appointment? | Yes |
| 12 | Has anything been put on the skin to cover the wound? (dressing) | No |
| 13 | Have you been back into hospital for treatment of a problem with your wound? | Yes |
| 14 | Have you been given antibiotics for a problem with your wound? | Yes |
| 15 | Have the edges of your wound been deliberately separated by a doctor or nurse? | No |
| 16 | Has your wound been scraped or cut to remove any unwanted tissue? (debridement of wound) | Yes |
| 17 | Has your wound been drained? (drainage of pus/abscess) | Yes |
| 18 | Have you had an operation under general anaesthetic for treatment of a problem with your wound? | Yes |

 Supplementary Table 1. Items in the original Bluebelle Wound Healing Questionnaire (WHQ) and the modified version for wounds healing by secondary intention.

Supplementary Table 2. Bluebelle WHQ recall period at different assessment timepoints in the SWHSI-2 trial

|  |  |  |
| --- | --- | --- |
| Assessment | Verbatim text | Rationale for recall period |
| Original WHQ | “Since you left hospital after having surgery…” | To capture any event since leaving hospital after surgery |
| Baseline/pre-randomisation  | “Since you have had an open wound…” | Intentionally broad to accommodate the inclusion criteria for the SWHSI-2 participants (i.e., presence of an acute wound of up to 6 weeks before invitation to the trial). Some participants therefore may have had a wound for less than 24 hours whereas for others this may have been 5.5 weeks |
| 3, 6, 12 months post-randomisation | “In the last three months…” | To accommodate repeated assessments |
| Post-healing assessment | “Since you have had an open wound…” | To capture any event from the time of first having the open wound to the time of wound healing |

Supplementary Box 1. List of Centers for Disease Control and Prevention (CDC) infection criteria[17]

|  |
| --- |
| * Abscess or other evidence of infection detected on gross anatomical or histopathologic exam or imaging test
 |
| * Aspirated fluid/swab of surgical site yields organisms and pus cells are present
 |
| * Clinician’s diagnosis
 |
| * Fever (temperature 38°C or more)
 |
| * Heat
 |
| * Incision spontaneously dehisced or was opened by healthcare professional
 |
| * Localised pain and tenderness
 |
| * Localised swelling
 |
| * Purulent drainage
 |
| * Redness
 |

Supplementary Table 3. Comparison of responders\* and non-responders to the Bluebelle WHQ at different timepoints

|  |  |  |  |
| --- | --- | --- | --- |
|  | 3-month follow-up (n=615) | 6-month follow-up (n=416) | 12-month follow-up (n=296) |
|  | Non-Responder (n=193) | Responder (n=422) | p value | Non-responder (n=147) | Responder (n=269) | p value | Non-responder (n=120) | Responder (n=176) | p value |
| **Age** |  |  | < 0.001 |  |  | < 0.001 |  |  | < 0.001 |
|  Mean (SD) | 59.11 (12.60) | 62.94 (12.25) |  | 58.12 (12.40) | 62.99 (12.12) |  | 57.20 (12.54) | 62.17 (12.58) |  |
|  Median (Q1, Q3) | 60.00(52.00, 66.00) | 64.00(56.00, 72.00) |  | 60.00(51.00, 66.00) | 64.00(56.00, 72.00) |  | 58.00(50.75, 67.00) | 63.00(55.00, 72.00) |  |
|  Min - Max | 21.00 - 91.00 | 26.00 - 90.00 |  | 28.00 - 87.00 | 21.00 - 90.00 |  | 21.00 - 79.00 | 26.00 - 88.00 |  |
|  Not reported | 0 | 1 |  | 0 | 1 |  | 0 | 1 |  |
| **Sex** |  |  | 0.235 |  |  | 0.902 |  |  | 0.207 |
|  Male | 139 (72%) | 322 (76%) |  | 110 (75%) | 202 (75%) |  | 87 (72%) | 138 (79%) |  |
|  Female | 54 (28%) | 99 (24%) |  | 37 (25%) | 66 (25%) |  | 33 (28%) | 37 (21%) |  |
|  Not reported | 0 | 1 |  | 0 | 1 |  | 0 | 1 |  |
| **Ethnicity** |  |  | 0.007 |  |  | 0.046 |  |  | 0.072 |
|  White | 167 (88%) | 399 (95%) |  | 129 (88%) | 253 (95%) |  | 105 (88%) | 166 (95%) |  |
|  Asian/Asian British | 15 (8%) | 11 (3%) |  | 10 (7%) | 10 (4%) |  | 10 (8%) | 6 (3%) |  |
|  Black/Black British | 7 (4%) | 11 (3%) |  | 7 (5%) | 4 (1%) |  | 4 (3%) | 2 (1%) |  |
|  Other  | 1 (1%) | 0 (0%) |  | 0 (0%) | 0 (0%) |  | 0 (0%) | 0 (0%) |  |
|  Not reported | 3 | 1 |  | 1 | 2 |  | 1 | 2 |  |
| **Index of Multiple Deprivation Decile** |  |  | 0.008 |  |  | 0.006 |  |  | < 0.001 |
| 1 | 49 (26%) | 76 (18%) |  | 39 (27%) | 49 (18%) |  | 31 (26%) | 35 (20%) |  |
| 2 | 30 (16%) | 46 (11%) |  | 22 (15%) | 25 (9%) |  | 21 (18%) | 16 (9%) |  |
| 3 | 19 (10%) | 54 (13%) |  | 17 (12%) | 32 (12%) |  | 18 (15%) | 19 (11%) |  |
| 4 | 25 (13%) | 50 (12%) |  | 13 (9%) | 36 (13%) |  | 16 (13%) | 19 (11%) |  |
| 5 | 15 (8%) | 41 (10%) |  | 13 (9%) | 24 (9%) |  | 9 (8%) | 17 (10%) |  |
| 6 | 14 (7%) | 44 (10%) |  | 14 (10%) | 27 (10%) |  | 11 (9%) | 19 (11%) |  |
| 7 | 12 (6%) | 40 (10%) |  | 6 (4%) | 24 (9%) |  | 1 (1%) | 15 (9%) |  |
| 8 | 9 (5%) | 27 (6%) |  | 8 (6%) | 20 (7%) |  | 5 (4%) | 13 (7%) |  |
| 9 | 11 (6%) | 19 (5%) |  | 11 (8%) | 14 (5%) |  | 6 (5%) | 14 (8%) |  |
| 10 | 6 (3%) | 24 (6%) |  | 2 (1%) | 17 (6%) |  | 1 (1%) | 9 (5%) |  |
| Missing | 3 | 1 |  | 2 | 1 |  | 1 | 0 |  |
| **Diabetes** |  |  | 0.011 |  |  | 0.741 |  |  | 0.238 |
|  Yes | 16 (9%) | 66 (17%) |  | 18 (13%) | 35 (14%) |  | 11 (10%) | 24 (15%) |  |
|  No | 167 (91%) | 329 (83%) |  | 122 (87%) | 214 (86%) |  | 101 (90%) | 140 (85%) |  |
|  Not reported | 10 | 27 |  | 18 (13%) | 20 |  | 11 (10%) | 12 |  |
| **Number of Comorbidities** |  |  | 0.325 |  |  | 0.289 |  |  | 0.682 |
| 0 | 18 (9%) | 33 (8%) |  | 13 (9%) | 26 (10%) |  | 13 (11%) | 15 (9%) |  |
| 1 | 32 (17%) | 91 (22%) |  | 34 (23%) | 52 (19%) |  | 25 (21%) | 41 (23%) |  |
| 2 | 58 (30%) | 129 (31%) |  | 47 (32%) | 69 (26%) |  | 35 (29%) | 44 (25%) |  |
| 3 | 58 (30%) | 128 (30%) |  | 39 (27%) | 90 (33%) |  | 33 (28%) | 54 (31%) |  |
| 4 | 24 (12%) | 33 (8%) |  | 10 (7%) | 27 (10%) |  | 10 (8%) | 18 (10%) |  |
| 5 | 3 (2%) | 8 (2%) |  | 4 (3%) | 5 (2%) |  | 4 (3%) | 4 (2%) |  |
| **Location of SWHSI** |  |  | 0.033 |  |  | 0.049 |  |  | 0.717 |
|  Foot | 165 (85%) | 330 (78%) |  | 122 (83%) | 209 (78%) |  | 95 (79%) | 139 (79%) |  |
|  Leg | 10 (5%) | 50 (12%) |  | 14 (10%) | 30 (11%) |  | 11 (9%) | 21 (12%) |  |
|  Abdomen | 4 (2%) | 17 (4%) |  | 0 (0%) | 13 (5%) |  | 3 (2%) | 5 (3%) |  |
|  Other | 14 (7%) | 25 (6%) |  | 11 (7%) | 17 (6%) |  | 11 (9%) | 11 (6%) |  |
| Not reported | 0 | 0 |  | 0 | 0 |  | 0 | 0 |  |

\*Responders defined as completing at least one WHQ item

Supplementary Table 4. Reported problems/difficulties with completing the Bluebelle WHQ/items, collected at the post-healing assessment (n=312)

|  |  |  |
| --- | --- | --- |
| **Reported problem/difficulty** | **Number of participants reporting problem**  | **Problematic item(s)** |
| Difficulty understanding item  | 6 | Has any part of the wound leaked blood-stained fluid? (haemoserous exudate)Has any part of the wound leaked thick and yellow/green fluid? (pus/purulent exudate) Have you sought advice because of a problem with your wound, other than at a planned follow-up appointment?Have you had an operation under general anaesthetic for treatment of a problem with your wound? |
| Unable to recall events | 16 | n/a |
| Insufficient item response | 1 | Not reported |
| Other  |  |  |
| Format (text too small) | 1 | n/a |
| Did not want to look at wound | 1 | n/a |
| Did not routinely look at wound | 2 | n/a |
| Did not touch wound | 1 | Was the area around the wound warmer than the surrounding skin? |
| Recall timeframe too long (symptoms differed at different stages across 3-month period) | 2 | Has any part of the wound leaked blood-stained fluid? (haemoserous exudate)Has the wound been painful to touch? |
| Unable to answer (reduced sensation in foot) | 1 | Has the wound been painful to touch? |