BACKGROUND AND RATIONALE

The concept of subtle energy and methods of its use for healing has been described by numerous cultures for thousands of years.\textsuperscript{13} These vital energy concepts all refer to subtle or nonphysical energies that permeate existence and have specific effects on the body-mind of all conscious beings.\textsuperscript{13} Although many of these practices have been used over millennia in various cultural communities for the purpose of healing physical and mental disorders, they have only recently been examined by current Western empirical methods.\textsuperscript{13} These modalities, collectively termed by the National Center for Complementary and Alternative Medicine as biofield therapies\textsuperscript{19}, began to be more widely taught and used by U.S. providers in many clinical and hospital settings starting in the 1970s.\textsuperscript{13} Biofield therapies in clinical practice use both hands-on and hands-off (nonphysical contact) procedures.\textsuperscript{17, 29} Biofield therapies have previously been used for reducing pain and discomfort in patients with cancer, chronic pain, and fatigue and anxiety, as well as for improving general health.\textsuperscript{23} Additionally, biofield therapies have shown positive effects on biological factors, such as hemoglobin and hematocrit levels, immunological factors, vital signs, healing rate of wounds, and arterial blood flow in the lower extremities.\textsuperscript{23} Patient demand and utilization of these modalities outside of conventional medicine settings have prompted scientists and clinicians to examine more closely these healing techniques and their claimed effects. However, such studies are still in their beginning phase, in part due to the availability of research funding in this area to conduct large-scale randomized controlled trials (RCTs) of biofield therapies.\textsuperscript{13} This evidence brief aims to determine from the available studies if biofield therapies of Reiki, Healing Touch and Therapeutic Touch improve patient outcomes when integrated into clinical services.

ASK THE QUESTION

Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

SEARCH FOR EVIDENCE

Databases included Ovid Medline
Search strategy included:

1. exp Therapeutic Touch/ (871)
2. (Reiki or ((heal* or therap*) adj2 touch*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (1338)
3. 1 or 2 (1338)
4. exp "Outcome and Process Assessment (Health Care)"/ (942749)
5. exp "Quality of Life"/ (157872)
6. exp Attitude to Health/ (364255)
7. exp Hospitalization/ (203372)
8. exp Affect/ (29927)
9. exp Mood Disorders/ (109331)
10. exp PAIN/ (353922)
11. exp Pain Measurement/ (75512)
12. exp NARCOTICS/ (111202)
13. exp Emotions/ (209480)
14. exp Anxiety Disorders/ (73313)
15. 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 (2180391)
16. 3 and 15 (471)
17. ((Reiki or ((heal* or therap*) adj2 touch*)) adj7 (outcome* or assess* or predict* or effectiv* or ineffectiv*)).mp. (180)
18. ((Reiki or ((heal* or therap*) adj2 touch*)) adj7 ((qualit* adj2 (life or living)) or qol or qaly or satisf* or pleas* or happy or happiness or emotion* or mood* or depress* or sad or sadness or fear* or anxii*)).mp. (88)
19. ((Reiki or ((heal* or therap*) adj2 touch*)) adj7 (hospitaliz* or readmi* or discharg* or transfer* or ((length or long*) adj2 stay*)).mp. (9)
20. ((Reiki or ((heal* or therap*) adj2 touch*)) adj7 (pain* or analges* or discomfort* or uncomfortab*).mp. (101)
21. ((Reiki or ((heal* or therap*) adj2 touch*)) adj7 (opioid* or narcotic* or oxycodone or hydrocodone or morphine or heroin or oxymorphine or hydromorphone).mp. (5)
22. 17 or 18 or 19 or 20 or 21 (283)
23. 16 or 22 (528)
24. limit 23 to English language (484)
25. limit 24 to (comparative study or controlled clinical trial or evaluation studies or guideline or meta-analysis or randomized controlled trial or systematic reviews) (195)
26. exp Epidemiologic Studies/ (2119661)
27. 25 and 26 (25)
28. 25 or 27 (195)
29. 24 not 28 (289)
Filters/limits included comparative study, controlled clinical trials, evaluation studies, guidelines, meta-analysis, RCTs, or systematic reviews in English language

CRITICALLY ANALYZE THE EVIDENCE

The literature search resulted in numerous studies reporting on the different modalities of Reiki, Healing Touch, and Therapeutic Touch’s effects on patient outcomes. In order to simplify the process, the evidence appraisal tables have been grouped based on the different modalities and outcomes reported in the literature.

Reiki appraisal tables include: (1) Reiki – Outcome of Depression; (2) Reiki – Outcome of Anxiety; (3) Reiki – Outcome of Pain; (4) Reiki – Outcome of Healing Effect; (5) Reiki – Outcome of Blood Pressure; (6) Reiki – Outcome of Respiration Rate; (7) Reiki – Outcome of Medication Usage; (8) Reiki – Outcome of Hospital Stay; and (9) Reiki – Outcome of Functional Recovery.

Healing Touch appraisal tables include: (1) Healing Touch – Outcome of Quality of Life; (2) Healing Touch – Outcome of Pain; (3) Healing Touch – Outcome of Anxiety; (4) Healing Touch – Outcome of Nausea; (5) Healing Touch – Outcome of Fatigue; (6) Healing Touch – Outcome of Healing Effect; (7) Healing Touch – Outcome of Joint Function; (8) Healing Touch – Outcome of Depression.

Therapeutic Touch appraisal tables include: (1) Therapeutic Touch – Outcome of Pain; (2) Therapeutic Touch – Outcome of Anxiety; (3) Therapeutic Touch – Outcome of Headache; (4) Therapeutic Touch – Outcome of Medication Usage; (5) Therapeutic Touch – Outcome of Withdrawal Symptoms; (6) Therapeutic Touch – Outcome of Vital Signs.

REIKI:

- Reiki – Outcome of Depression: Two systematic reviews reported Reiki’s effect on treatment of depression. One systematic review (Joyce 2015) aimed to assess the effectiveness of Reiki for treating anxiety and depression in people aged 16 and over. Three studies were included in systematic review, and the study found insufficient evidence from randomized trials to draw any conclusions on whether Reiki is effective for the treatment of depression. The second systematic review (Lee 2008) included two RCTs that suggested beneficial effects of Reiki compared with sham control on depression, while another RCT did not report any effect differences between intervention arms for depression.

Quality of Evidence: Low
Reiki – Outcome of Anxiety: Three systematic reviews and one RCT investigated Reiki’s effect on anxiety. One systematic review (Joyce 2015) aimed to assess the effectiveness of Reiki for treating anxiety and depression in people aged 16 and over. Three studies were included in the systematic review, and the study determined there was insufficient evidence from randomized trials to draw any conclusions on whether Reiki is effective for the treatment of anxiety. Another systematic review (Thrane 2014) calculated the effect of Reiki therapy for pain and anxiety in randomized clinical trials. The study found that when calculating effect between interventions, the Reiki therapy group reported less anxiety in comparison to the control group using Cohen’s d statistic with an effect of -4.5. The last systematic review (Lee 2008) included one RCT that showed a difference for Reiki intervention compared with sham control on the outcome of anxiety. Finally, one RCT (Baldwin 2017) investigated the effects of Reiki on patients undergoing knee replacement surgery. The study included 46 participants and was a 3-armed randomized study, testing Reiki versus other healing modalities or no treatment. Only the Reiki group demonstrated significantly reduced anxiety scores at discharge compared with intake (39.1 +/- 3.3 vs 32.1 +/- 2.7 [n = 14], P = .004, power = 0.88).

Quality of Evidence: Low

Reiki – Outcome of Pain: Two systematic reviews and three RCTs were found evaluating Reiki’s effect on pain. A systematic review (Thrane 2014) calculated the effect of Reiki therapy for pain and anxiety in randomized clinical trials. The review found that when calculating effect between interventions, the Reiki therapy group reported less pain in comparison to the control group using Cohen’s d statistic with an effect of 4.5. Another systematic review (Lee 2008) summarized and critically evaluated the evidence for the effectiveness of Reiki. Nine RCTS met inclusion criteria, with one trial reporting Reiki led to a reduction in pain compared with sham. One RCT (Baldwin 2017) investigated the effects of Reiki on patients undergoing knee replacement surgery. The study included 46 participants and was a 3-armed randomized study, testing Reiki versus other healing modalities or no treatment. There was a trend of pain reduction in the Reiki group (4.25 +/- 0.62 [SEM] vs. 2.62 +/- 0.42 [n=18]) that was not seen in the Sham Reiki (3.21 +/- 0.61 [SEM] vs 3.54 +/- 0.58 [n=12]) or the SOC groups (5.85 +/- 1.09 [SEM] vs 5.70 +/- 0.75 [n=10]. Another RCT (Sagkal Midilli 2016) was conducted to determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery. Forty-five patients were randomly assigned to the Reiki, sham Reiki, and control groups. Mean visual analog scale measurement values were significantly different from each other according to groups and times (P < .05). A reduction in pain of 76.06% was determined in the Reiki group patients between day 1 pre-treatment and after application on the second day (day 2 post-treatment) measurements. The last RCT (Notte 2016) evaluated the impact of Reiki therapy on the pain perception of patients undergoing total knee arthroplasty (TKA) following Reiki sessions. Patients received twenty-minute Reiki treatment at admission and 30-minute Reiki treatment after admission and initial assessment. Additionally, patients received Reiki at bedside for 20 minutes.
while listening to relaxing music via headphones for three days after the operation. All Reiki therapy sessions resulted in statistically significant reductions in pain, except those sessions in the PACU.

*Quality of Evidence: Low*

**Reiki – Outcome of Healing Effect:** Three systematic reviews looked at Reiki’s overall healing effect. This was done by including all outcome measures in the systematic reviews’ analyses to determine Reiki’s effect. One systematic review (Baldwin 2010) utilized the Touchstone Process as an ongoing process to systematically analyze published peer-reviewed studies of Reiki. The study found only 12 articles to be based on a robust experimental design and utilize well-established outcome parameters. Of these articles, two provided no support, five provided some support, and five demonstrated strong evidence for use of Reiki as a healing modality. Another systematic review (vanderVaart 2009) evaluated whether Reiki produces a significant treatment effect in 12 trials that met inclusion criteria. The study determined there were few studies available to evaluate the efficacy of Reiki. The few studies that were available are of poor quality. The last systematic review (Hammerschlag 2014) assessed the quality and reviewed the outcomes of RCTs of biofield therapies that report using only nonphysical forms of treatment. One trial on Reiki reported at least one primary outcome with statistically significant beneficial treatment outcomes.

*Quality of Evidence: Low*

**Reiki – Outcome of Blood Pressure:** Two RCTs looked at Reiki’s effect on patients’ blood pressure. The first RCT (Baldwin 2017) included was a pilot study investigating the effects of Reiki on patients undergoing knee replacement surgery. The study included 46 participants and was a 3-armed randomized study, testing Reiki versus other healing modalities or no treatment. Blood pressure levels were significantly reduced when comparing pretreatment, before surgery versus posttreatment, after surgery (systolic: 141.4 +/- 3.7 [SEM] mm Hg vs 116.2 +/- 3.6 [n=18], P < .001, power = 0.99; diastolic: 73.6 +/- 1.9 [SEM] mm Hg vs 59.3 +/- 2.4, P < .001, power = 1.0). The last RCT (Sagkal Midilli 2016) sought to determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery. Forty-five patients were randomly assigned to the Reiki, sham Reiki, and control groups. The study found that mean systolic blood pressure measurement values were significantly different from each other according to groups (P < .05).

*Quality of Evidence: Low*

**Reiki – Outcome of Respiration Rate:** Two RCTs looked at Reiki’s effect on patients’ respiration rate. The first RCT (Baldwin 2017) included was a pilot study investigating the effects of Reiki on patients undergoing knee replacement surgery. The study included 46 participants and was a three-armed randomized study, testing Reiki versus other healing modalities or no treatment. For the Reiki group, there was a trend toward reduced relative risk when comparing pretreatment, before surgery versus posttreatment, and 24
hours after surgery. This trend became statistically significantly when data obtained from the Reiki group pretreatment, before surgery were compared with those taken posttreatment, and 48 hours after surgery (20.1 +/- 0.5 [SEM] breath/min vs 17.7 +/- 0.5, P = .008). The last RCT (Sagkal Midilli 2016) sought to determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery. Forty-five patients were randomly assigned to the Reiki, sham Reiki, and control groups. Mean breathing rate pressure measurement values were significantly different from each other according to groups (P < .05).

Quality of Evidence: Low

- **Reiki – Outcome of Medication Usage:** Three RCTs and one retrospective study looked at Reiki’s effect on medication usage. The first RCT (Baldwin 2017) included was a pilot study investigating the effects of Reiki on patients undergoing knee replacement surgery. The study included 46 participants and was a three-armed randomized study, testing Reiki versus other healing modalities or no treatment. The Reiki group used the lowest number of doses of as-needed pain medication (22 doses or 2.4 doses per patient) compared with Sham Reiki group (36 doses or six doses per patient) and the SOC group (29 doses or 5.5 doses per patient). The second RCT (Sagkal Midilli 2016) sought to determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery. Forty-five patients were randomly assigned to the Reiki, sham Reiki, and control groups. The Reiki group used fewer analgesics throughout the study and did not need them as early as the sham Reiki and control groups (P < .05). The third RCT (Notte 2016) evaluated the impact of Reiki therapy on the pain perception of patients undergoing total knee arthroplasty (TKA) following Reiki sessions. No statistically significant differences were found in pain medication use (P = 0.92). One retrospective chart review (Bourgue 2012) sought to determine whether the use of Reiki decreases the amount of meperidine administered to patients undergoing screening colonoscopy. In the Reiki group, four of 25 patients (16%) received less than 50 mg of meperidine. Of these four patients, three received 25 mg and one patient received 37.5 mg. In comparison, there were no patients in the chart review group of the placebo Reiki group that received less than 50 mg of meperidine.

Quality of Evidence: Low

- **Reiki – Outcome of Hospital Stay:** One RCT (Baldwin 2017) reported on Reiki’s effect on length of hospital stay. The pilot study investigated the effects of Reiki on patients undergoing knee replacement surgery. The study included 46 participants and was a three-armed randomized study, testing Reiki versus other healing modalities or no treatment. The Reiki group had the highest percentage of discharges at 48 hours rather than at 72 hours.

Quality of Evidence: Very Low
• **Reiki – Outcome of Functional Recovery:** One systematic review (Lee 2008) reported on Reiki’s effect on functional recovery. The review found that after ischemic stroke, there were no differences in effect on functional recovery with Reiki intervention compared with sham.

  *Quality of Evidence: Low*

**HEALING TOUCH:**

• **Healing Touch – Outcome of Quality of Life:** Two systematic reviews and one RCT reported on Healing Touch’s effect on quality of life. One systematic review (Anderson and Taylor 2011) critically evaluated the data from randomized clinical trials examining the clinical efficacy of Healing Touch as a supportive case modality for any medical condition. The systematic review included 5 studies that met inclusion criteria and found that although studies support the potential clinical effectiveness of Healing Touch in improving health-related quality of life in chronic disease management, more studies are required given that even the studies included with high-quality scores had limitations. The second systematic review (Hersch 2009) summarized the evidence of the effectiveness of psychosocial interventions in women with gynecological cancers on their quality of life outcomes. The study concluded there was limited evidence in support of Healing Touch for improving quality of life in women with gynecological cancers. The last RCT (FitzHenry 2014) investigated the effect of Healing Touch (HT) on fatigue in breast cancer patients undergoing radiation therapy (RT). There was no statistically significant differences between the groups in terms of global quality of life or breast cancer-specific quality of life, nor were there statistically significant differences in the patterns of change in those measures between the 2 groups over the course of the study.

  *Quality of Evidence: Low*

• **Healing Touch – Outcome of Pain:** One quasi-experimental study and one RCT reported Healing Touch’s effect on pain. The quasi-experimental study (Anderson 2015) sought to determine the feasibility of a Healing Touch intervention for reducing pain, nausea, and anxiety in patients undergoing laparoscopic bariatric surgery. Following surgery and admission to the surgical unit, a nurse on the unit trained in Healing Touch and familiar with the study protocol delivered the Healing Touch intervention. Individuals in the Healing Touch group had clinically (>20% reduction) and statistically significant differences in post-intervention pain, on post-operative day one (P = .003) two (P = .001); and three (P = .034). One RCT (Lu 2013) investigated the effects of Healing Touch (HT) on the pain level, joint function, mobility, and depression in persons with osteoarthritis (OA) of the knee joint(s). The follow-up t-test for the between group comparison of scores indicated that the Healing Touch group’s perception of OA pain interference with life improved significantly more (t = 2.47, p = 0.02) than that of the comparison group. While the Healing Touch group had a significant
improvement (t = -2.26, p = 0.04) in their perception of pain intensity (as measured by BPI), the two groups did not significantly differ (t = 0.92, p = 0.37) on this measure at six weeks.

Quality of Evidence: Low

- Healing Touch – Outcome of Anxiety: One quasi-experimental study (Anderson 2015) aimed to determine the feasibility of a Healing Touch intervention for reducing anxiety in patients undergoing laparoscopic bariatric surgery. Individuals in the Healing Touch group had clinically (>20% reduction) and statistically significant differences in anxiety on post-operative day one (P < .001), two (P = .001), and three (P = .041). Additionally, participants in the Healing Touch group demonstrated significant decreases in pre-intervention anxiety on days two and three compared with the previous day (P < .05).

  Quality of Evidence: Very Low

- Healing Touch – Outcome of Nausea: One quasi-experimental study (Anderson 2015) aimed to determine the feasibility of a Healing Touch intervention for nausea in patients undergoing laparoscopic bariatric surgery. Differences in post-intervention nausea on post-operative day three were clinically significant but not statistically significant (P = .066). Additionally, participants in the Healing Touch group demonstrated significant decreases in pre-intervention nausea on days two and three compared with the previous day (P < .05).

  Quality of Evidence: Very Low

- Healing Touch – Outcome of Fatigue: One RCT (FitzHenry 2014) investigated the effect of Healing Touch (HT) on fatigue in breast cancer patients undergoing radiation therapy (RT). The Healing Touch participants tended to report higher levels of fatigue throughout the study than the control participants. Those differences were statistically significant for interference (P = .010) and usual fatigue (P = .024).

  Quality of Evidence: Very Low

- Healing Touch – Outcome of Healing Effect: One systematic review reported on the overall healing effect of Healing Touch. The study (Hammerschlag 2014) assessed the quality and reviewed twenty-eight trials RCTs of biofield therapies that report using only nonphysical forms of treatment. Out of the twenty-eight trials included in systematic review, one trial on Healing Touch reported at least one primary outcome with statistically significant beneficial treatment outcomes.

  Quality of Evidence: Very Low
• **Healing Touch – Outcome of Joint Function:** One RCT (Lu 2013) investigated the effects of Healing Touch (HT) on the joint function in persons with osteoarthritis (OA) of the knee joint(s). Two measures of joint function (extension and extensor lag of the “better” knee) exhibited significant group by time interactions (F (1, 12) = 5.85, p = 0.03; and F (1,12) = 5.89, p = 0.03 respectively). Two significant interactions occurred, and the follow up within group comparisons found that the Healing Touch group after 6 weeks, experienced significant improvement from baseline in 9 or 12 joint functions. None of the joint functions showed significant change over time in the comparison group.

*Quality of Evidence: Very Low*

• **Healing Touch – Outcome of Depression:** One RCT (Lu 2013) investigated the effects of Healing Touch on depression in participants with osteoarthritis (OA) of the knee joint(s). Levels of depression in both groups, as measured by the PHQ-9, decreased over the course of the intervention. The scores of both groups indicated mild depression at baseline. Although the Healing Touch group’s score moved to a level commensurate with no depression (6.4-2.3) and changes in the comparison group's score remained at the mild depression level (8.3-6), the interaction effect was not significant.

*Quality of Evidence: Low*

**THERAPEUTIC TOUCH:**

• **Therapeutic Touch – Outcome of Pain:** One systemic review and three RCTs were found evaluating the effects of Therapeutic Touch on pain. One systematic review (Monroe 2009) aimed to better understand how Therapeutic Touch can be used in today’s health care arena. Four of the five studies included found that pain was reduced after Therapeutic Touch intervention. The fifth study had too many limitations to support the use of Therapeutic Touch. An RCT (Busch 2012) included in the appraisal evaluated Therapeutic Touch (TT) in the nursing of burn patients. Patients received Therapeutic Touch or nursing presence (NP) for 10 consecutive days after being given medication and before dressing changes. No significant differences were found between the intervention groups. The second RCT (Frank 2007) included sought to determine whether a Therapeutic Touch administered at the time of stereotactic core biopsy of suspicious breast lesions results in a reduction in anxiety and pain. No significant differences between the arms were seen regarding post-biopsy pain (P = 0.95). The final RCT (McCormack 2009) investigated the effects of non-contact Therapeutic Touch on post-surgical pain in an elderly population receiving occupational therapy in an acute care hospital unit in the United States. Participants were randomly assigned to three groups (experimental, control and placebo). The experimental group received the non-contact touch intervention, the control group received routine care and the placebo group received the sound of a metronome set at a steady slow pace. Objective measures included the Memorial Pain Scale, the Tellegen Absorption Scale, the
Health Attribution Scale and measures of pulse rate and pupil size, which were performed as repeated measures. In the experimental group, 22 out of 30 (73%) demonstrated a statistically significant decrease in pain intensity scores from pre-test ($M = 44.57$) to post-test ($M = 30.97$) ($t[7] = 7.24$, $p < 0.01$) and were better able to participate in occupations. In contrast, the pain intensity scores for both the control and placebo groups remained the same or increased slightly from pre-test to post-test, but not significantly. The sham group showed a slight increase in pain intensity from pre-test ($M = 22.70$) to post-test ($M = 25.23$). Furthermore, the control group showed only a slight increase from pre-test ($M = 45.23$) to post-test ($M = 45.30$).

**Quality of Evidence:** Low

- **Therapeutic Touch – Outcome of Anxiety:** One systematic review and 3 RCTs were found reporting on the effects of Therapeutic Touch on anxiety. The systematic review (Robinson 2007) examined the efficacy and adverse effects of Therapeutic Touch (TT) for anxiety disorders. No randomized or quasi-randomized controlled trials of Therapeutic Touch for anxiety disorders were identified. One RCT (Busch 2012) evaluated Therapeutic Touch (TT) in the nursing of burn patients. Patients daily received Therapeutic Touch or nursing presence (NP) for 10 consecutive days after being given medication and before dressing changes. No statistically significant differences were found between the intervention groups for mean anxiety scores. The second RCT (Frank 2007) sought to determine whether Therapeutic Touch administered at the time of stereotactic core biopsy of suspicious breast lesions results in a reduction in anxiety and pain. No significant differences between the arms were seen regarding post biopsy anxiety ($P = 0.66$). The last RCT (Larden 2004) included was conducted to determine if women hospitalized for treatment of their chemical dependency who were randomly assigned to daily Therapeutic Touch (TT) would have less withdrawal symptoms than those randomly assigned to receive daily companionship by nurses or standard ward care. Anxiety score were significantly less on Days 1, 2, and 3 ($P < .05$) for the group receiving Therapeutic Touch.

  **Quality of Evidence:** Low

- **Therapeutic Touch – Outcome of Headache:** One systematic review (Bronfort 2004) was found quantifying and comparing the magnitude of short- and long-term effects of non-invasive physical treatments for chronic/recurrent headaches. The study determined there was moderate evidence that Therapeutic Touch is superior to placebo for pain reduction for headaches within a few hours of a single treatment.

  **Quality of Evidence:** Very Low

- **Therapeutic Touch – Outcome of Medication Usage:** One RCT (Busch 2012) evaluated the effect of Therapeutic Touch (TT) on medication usage. Patients in this study received Therapeutic Touch or nursing presence (NP) daily for 10 consecutive days after
being given medication and before dressing changes. Analysis found that there was no significant difference when considering all pain medications (morphine, tramal, paracetamol and diclofenac) on all measurements days.

*Quality of Evidence: Very Low*

- **Therapeutic Touch – Outcome of Withdrawal Symptoms:** One RCT (Larden 2004) evaluated the effect of Therapeutic Touch (TT) on withdrawal symptoms. The study aimed to determine if women hospitalized for treatment of their chemical dependency who were randomly assigned to daily Therapeutic Touch (TT) would have less withdrawal symptoms than those randomly assigned to receive daily companionship by nurses or standard ward care. There were no statistically significant differences in total symptom scores between groups over the 7 days of the study.

*Quality of Evidence: Very Low*

- **Therapeutic Touch – Outcome of Vital Signs:** One RCT (Madrid 2010) evaluated the effect of Therapeutic Touch on vital signs. The study was conducted to determine whether Therapeutic Touch (TT) can be effectively used in the operative setting and whether it could produce positive outcomes in the period from cerebral angiography to discharge. The research data were collected in the normal course of the angiogram procedure and recovery room. The blood pressure, pulse, and respirations were routinely noted before, during, and after the procedure. The efficacy of TT on the blood pressure, respirations, and pulse of the experimental group was not statistically significant.

*Quality of Evidence: Very Low*

In conclusion, there is low to very low quality evidence to support the integration of: (1) Reiki to improve outcomes of pain, blood pressure, respiration rate, medication usage and hospital stay; (2) Healing Touch to improve the outcomes of pain, anxiety, and joint function; and (3) Therapeutic Touch to improve outcome of pain from headaches.

Additionally, there is low to very low quality evidence showing no effect and/or inconclusive results for the integration of (1) Reiki on the outcomes of depression, anxiety, healing effect and functional recovery; (2) Healing Touch on the outcomes of quality of life, nausea, fatigue, depression, and healing effect; and (3) Therapeutic Touch on the outcomes of pain, medication usage, withdrawal symptoms and anxiety.

The majority of the modalities were rated low to very low due to inconsistency between study results and variation in treatment, and due to imprecision when studies included few patients and/or events. Additionally, a summary is provided below on the variation in outcomes reported for the different modalities:
- The evidence on Reiki showed effect for the outcomes of pain (Low Quality Evidence), blood pressure (Low Quality Evidence), respiration rate (Low Quality Evidence) and hospital stay (Very Low Quality Evidence). Also, the evidence on medication usage (Low Quality Evidence) showed a reduction in medication usage in 3 of 4 studies. The outcomes of depression (Low Quality Evidence), anxiety (Low Quality Evidence), healing effect (Low Quality Evidence), and functional recovery (Low Quality Evidence) were inconclusive due to inconsistency in outcomes or because no statistically significant effect was reported in the studies.
- The evidence for Healing Touch showed effect for the outcomes of pain (Low Quality Evidence), anxiety (Very Low Quality Evidence), and joint function (Very Low Quality Evidence). The outcome of nausea (Very Low Quality Evidence) was inconclusive because the outcomes were determined to be clinically significant but not statistically significant. The appraisal on fatigue (Very Low Quality Evidence) showed a statistically significant increase in fatigue for participants receiving Healing Touch. Finally, depression (Low Quality Evidence) and quality of life (Low Quality Evidence) were not statistically significant and healing effect (Very Low Quality Evidence) outcomes were inconclusive due to few studies found reporting positive effect.
- The evidence for Therapeutic Touch showed effect on headache pain (Very Low Quality Evidence). The appraisal for the outcome of pain (Low Quality Evidence) and anxiety were inconclusive with studies showing both no effect and positive effect. Additionally, the outcomes of medication usage (Very Low Quality Evidence) and withdrawal symptoms (Very Low Quality Evidence) showed no significant effect.

Overall, Reiki and Healing Touch showed some effect on pain level based on low quality evidence. While Therapeutic Touch showed effect on headache pain based on very low quality evidence.

Reiki Appraisal Tables:

| PICO Question: Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)? | Low Quality Rating If: ☒ Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied) ☐ Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome) ☐ Studies are imprecise (when studies include few

| Modality: Reiki; Outcome: Depression |  |

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal: Cochrane Database of Systematic Reviews; Author: Joyce, J. and G.P. Herbison; Year Published: 2015; Location: Dunedin, New Zealand</td>
<td>Aim: To assess the effectiveness of Reiki for treating anxiety and depression in people aged 16 and over; Study Type: Systematic Review</td>
<td>Inclusion Criteria: Randomised trials in adults with anxiety or depression or both, with at least one arm treated with Reiki delivered by a trained Reiki practitioner.</td>
<td>Intervention: Any type of Reiki</td>
<td>Results: Researchers could only include a few participants (45 anxious/depressed out of 124 randomised) from subgroups of the three studies meeting the inclusion criteria; this evidence was of</td>
<td>None</td>
</tr>
<tr>
<td>Systematic Review</td>
<td>Review did not address focused clinical question</td>
<td>Search was not detailed or exhaustive</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

April 2018
### PICO Question:
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

### Study Limitations:
- None

### Low Quality Rating if:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

### Quality (certainty) of evidence for studies as a whole:
- High
- Moderate
- Low
- Very Low

### References:
| Journal: Pain Management Nursing  
Author: Thrane S. and S.M. Cohen  
Year Published: 2014  
Location: University of Pittsburg |
|---|
| **Aim:** To calculate the effect of Reiki therapy for pain and anxiety in randomized clinical trials  
**Study Type:** Systematic Review  
**Size:** Seven studies met the inclusion criteria: four articles studied cancer patients; one examined post-surgical patients; and two analyzed community dwelling older adults. Total sample sizes for seven studies = 328 participants.  
**Inclusion Criteria:** Studies that used randomization and a control or usual care group, used Reiki therapy in one arm of the study, published in 2000 or later in peer-reviewed journals in English, and measured pain or anxiety were included.  
**Intervention:** Reiki Therapy  
Data were extracted from each study including: (a) sample population (disease process, gender, mean age, and race if available), (b) study design, (c) outcome measures for anxiety or pain or both and (d) statistical significance for within group and between group differences including p values, means, standard deviations, and z values for calculating Cohen’s d statistic for effect sizes.  
**Results:** Researchers found there were very few high quality studies that explore the use of Reiki therapy for anxiety. The majority of studies that were included in the review did report statistical significance or near significant differences on anxiety. When calculating effect between interventions, Reiki therapy group reported less anxiety in comparison to the control group (d = −4.5).  
**Study Limitations:** None  
Systematic Review  
Review did not address focused clinical question  
Search was not detailed or exhaustive  
Quality of the studies was not appraised or studies were of low quality  
Methods and/or results were inconsistent across studies  
Methods and/or results were inconsistent across studies  
thus have wide confidence intervals, and the results are uncertain  
Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
Increase Quality Rating if:  
Large effect  
Dose-response gradient  
Plausible confounders or other biases increase certainty of effect  
Quality (certainty) of evidence for studies as a whole:  
High  
Moderate  
Low  
Very Low |
| Journal: International Journal of Clinical Practice  
Author: Lee, M.S., et al.  
Year Published: 2008  
Location: Universities of Exeter & Plymouth, UK |
|---|
| **Aim:** To summarise and critically evaluate the evidence for the effectiveness of Reiki  
**Study Type:** Systematic Review  
**Size:** 9 RCTs  
**Inclusion Criteria:** RCTs were included if they assessed human subjects who received Reiki alone or adjunctive to conventional treatment.  
**Intervention:** Reiki  
Results: One RCT showed intergroup differences compared with sham control.  
There was also no difference for anxiety between groups of pregnant women undergoing amniocentesis.  
A further RCT failed to show the effects of Reiki for anxiety and depression in women undergoing breast biopsy compared with conventional care.  
**Study Limitations:** None  
Systematic Review  
Review did not address focused clinical question  
Search was not detailed or exhaustive  
Quality of the studies was not appraised or studies were of low quality  
Methods and/or results were inconsistent across studies  
Methods and/or results were inconsistent across studies |
### Journal: Holistic Nursing Practice
**Author:** Baldwin, A. L., et al.
**Year Published:** 2017
**Location:** University of Arizona

<table>
<thead>
<tr>
<th><strong>Aim:</strong> Pilot study that investigated the effects of Reiki on patients undergoing knee replacement surgery</th>
<th><strong>Inclusion Criteria:</strong> Male and female patients between 50 and 85 years who were admitted to an acute care hospital for a scheduled knee replacement.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study Type:</strong> RCT – Pilot Study</td>
<td><strong>Study Design:</strong> 3-armed randomized study, testing Reiki versus other healing modalities or no treatment.</td>
</tr>
<tr>
<td><strong>Size:</strong> 46 patients</td>
<td><strong>Results:</strong> Only the Reiki group demonstrated significantly reduced State Anxiety scores at discharge compared with intake (39.1 +/- 3.3 vs 32.1 +/- 2.7 [n = 14], P = .004, power = 0.88).</td>
</tr>
<tr>
<td><strong>Exclusion Criteria:</strong> (a) joint replacement surgery on an urgent basis and/or previous joint replacement revision, (b) patients who could not reach or understand English, (c) patients with a history of emotional/psychological or anxiety-related diagnosis, (d) patients who received antianxiety or psychotropic medication within 2 weeks of the scheduled surgery, and (e) patients whose surgery would be performed using anesthetic agents other than standard general anesthesia.</td>
<td><strong>Study Limitations:</strong> None</td>
</tr>
</tbody>
</table>

**Study Interventions:**
- Reiki intervention group received three or four 30-minute treatments plus standard of care (SOC) throughout their history stay; second arm received three or four 30-minute Sham Reiki sessions (placebo) plus SOC; and a third group received 3 or 4 sessions of “quiet time” plus SOC.
- For all groups, the first treatment/session was 1 hour prior to surgery, with subsequent treatments/sessions 24, 48, and 72 hours after surgery. All treatments/sessions were performed in the patient’s room on the postsurgical floor, except for the preoperative session that was carried out in a private patient room in the preoperative area.

**References:**

**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

**Low Quality Rating If:**
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
| Journal: Pain Management Nursing  
Author: Thrane S. and S.M. Cohen  
Year Published: 2014  
Location: University of Pittsburg | Aim: To calculate the effect of Reiki therapy for pain and anxiety in randomized clinical trials  
Study Type: Systematic Review  
Size: Seven studies met the inclusion criteria: four articles studied cancer patients; one examined post-surgical patients; and two analyzed community dwelling older adults. Total sample sizes for seven studies = 328 participants. | Inclusion Criteria: Studies that used randomization and a control or usual care group, used Reiki therapy in one arm of the study, published in 2000 or later in peer-reviewed journals in English, and measured pain or anxiety were included. | Intervention: Reiki Therapy  
Data were extracted from each study including: (a) sample population (disease process, gender, mean age, and race if available), (b) study design, (c) outcome measures for anxiety or pain or both and (d) statistical significance for within group and between group differences including p values, means, standard deviations, and z values for calculating Cohen’s d statistic for effect sizes. | Results: Researchers found there were very few high quality studies that explore the use of Reiki therapy for anxiety. The majority of studies that were included in the review did report statistical significance or near significant on pain.  
The calculated effect size for the between group difference was very large (d = 4.5). | Study Limitations:  
None  
Systematic Review  
Review did not address focused clinical question  
Search was not detailed or exhaustive  
Quality of the studies was not appraised or studies were of low quality  
Methods and/or results were inconsistent across studies  
Methods and/or results were inconsistent across studies | 
Increase Quality Rating If:  
Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)  
Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)  
Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
Large effect  
Dose-response gradient  
Plausible confounders or other biases increase certainty of effect  
Quality (certainty of evidence for studies as a whole):  
High  
Moderate  
Low  
Very Low |
| Journal: International Journal of Clinical Practice  
Author: Lee, M.S., et al.  
Year Published: 2008  
Location: Universities of Exeter & Plymouth, UK | Aim: To summarize and critically evaluate the evidence for the effectiveness of Reiki Therapy  
Study Type: Systematic Review  
Size: 9 RCTs | Inclusion Criteria: RCTs were included if they assessed human subjects who received Reiki alone or adjunctive to conventional treatment. | Intervention: Reiki  
Results: One RCT showed group effect compared with sham control.  
For diabetic neuropathy there was no effects of Reiki on pain. | Study Limitations:  
None  
Systematic Review  
Review did not address focused clinical question  
Search was not detailed or exhaustive  
Quality of the studies was not appraised or studies were of low quality  
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Increase Quality Rating If:  
Methods and/or results were inconsistent across studies  
Methods and/or results were inconsistent across studies  
Quality (certainty of evidence for studies as a whole):  
High  
Moderate  
Low  
Very Low |
| Journal: Holistic Nursing Practice  
Year Published: 2017  
Location: University of Arizona | Aim: Pilot study that investigated the effects of Reiki on patients undergoing knee replacement surgery  
Study Type: RCT – Pilot Study  
Size: 46 patients | Inclusion Criteria: Male and female patients between 50 and 85 years who were admitted to an acute care hospital for a scheduled knee replacement.  
Exclusion Criteria: (a) joint replacement | Study Design: 3-armed randomized study, testing Reiki versus other healing modalities or no treatment.  
Reiki intervention group received three or four 30-minute treatments plus standard of care (SOC) throughout their history stay; second arm received | Results: There was a trend of pain reduction in the Reiki group (4.25 +/- 0.62 [SEM] vs. 2.62 +/- 0.42 [n=18]) that was not seen in the Sham Reiki (3.21 +/- 0.61 [SEM] vs 3.54 +/- 0.58 [n=12]) or the SOC groups (5.85 +/- 1.09 [SEM] vs 5.70 +/- 0.75 [n=10]). | Study Limitations:  
None  
RCTs  
Lack of blinding  
Lack of allocation concealment  
Stopped early for benefit  
Incorrect analysis of ITT |
surgery on an urgent basis and/or previous joint replacement revision, (b) patients who could not reach or understand English, (c) patients with a history of emotional/psychological or anxiety-related diagnosis, (d) patients who received antianxiety or psychotropic medication within 2 weeks of the scheduled surgery, and (e) patients whose surgery would be performed using anesthetic agents other than standard general anesthetics.

For all groups, the first treatment/session was 1 hour prior to surgery, with subsequent treatments/sessions 24, 48, and 72 hours after surgery. All treatments/sessions were performed in the patient’s room on the postsurgical floor, except for the preoperative session that was carried out in a private patient room in the preoperative area.

### Inclusion Criteria:
- Planned or unplanned cesarean section
- Turkish nationality
- The ability to speak Turkish
- Age between 18 and 45 years
- A stay of at least 2 days in the unit
- Orientation in place and time
- Operative with general anesthesia
- Using only the non-opioid analgesic drug diclofenac 75 mg/3 mL, intramuscular, prescribed by doctor

### Exclusion Criteria:
- Operation with spinal or epidural anesthesia
- Any psychiatric disease, or an allergy to analgesic drugs
- Any visual or

### Study Design:
Patients, equalized by age and number of births, were randomly assigned to the Reiki, sham Reiki, and control groups. The treatment, which was applied to the patients in these 3 groups, was applied for 15 minutes to the incision area of body in the first 24 and 48 hours after the operation within 4 to 8 hours of the application of standard analgesics. The study data were collected using a patient follow-up form and a visual analog scale.

### Results:
Mean visual analog scale measurement values were significantly different from each other according to groups and times (P < .05). A reduction in pain of 76.06% was determined in the Reiki group patients between day 1 pre-tx and after application on the second day (day 2 post-tx) measurements.

### Study Limitations:
- None
- RCTs
- Lack of blinding
- Lack of allocation concealment
- Stopped early for benefit
- Incorrect analysis of ITT
- Selective reporting of measures (e.g., no effect outcome)
- Large losses to F/U
- Difference in important prognostic factors at baseline
### Journal: Nursing  
Author: Notte, B.B., et al.  
Year Published: 2016  
Location: Bryn Mawr Hospital, PA

| **Aim:** To determine the impact of Reiki therapy on the pain perception of patients undergoing total knee arthroplasty (TKA) following Reiki sessions. | **Inclusion Criteria:** Aged 18 to 80, English-speaking, able to read and understand the subject pamphlet, and consent form, and competent to give informed consent. | **Intervention:** 20-minute Reiki treatment at admission and 30-minute Reiki treatment after admission and initial assessment. On each of the 3 postoperative days, the subjects received Reiki at bedside for 20 minutes while listening to relaxing music via headphones. Pain was assessed before and after Reiki therapy using numeric rating scale in the preoperative area, post anesthesia care unit (PACU), and on each of 3 postoperative days (POD). | **Results:** All Reiki therapy sessions resulted in statistically significant reductions in pain, except those sessions in the PACU. Preoperative treatment, N = 16, P = 0.031; postoperative (PACU) treatment, N = 17, P = 0.529, POD1, N = 21; POD2, N = 22; POD3, N = 17; P = 0.000. | **Study Limitations:** None |
| **Study Type:** RCT | **Exclusion Criteria:** Patients were excluded from the study if they had chronic pain disorders such as fibromyalgia, migraine headaches, rheumatoid arthritis, or neurologic impairment that precluded full participation in the study. Patients with a history of or current substance abuse and those recovering from recent surgery were also excluded. | **Comparator:** non-Reiki |
| **Size:** 43 patients; Reiki group = 23 and non-Reiki group = 20 | | |

**References:**

### PICO Question: Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates; P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal: Holistic Nursing Practice Author: Baldwin, A.L., et al. Year Published: 2010 Location: University of Arizona</td>
<td>Aim: To utilize the Touchstone Process as an ongoing process to systematically analyze published peer-reviewed studies of Reiki Study Type: Systematic Review with critical evaluation of literature Size: 26 articles</td>
<td>Inclusion Criteria: Articles from peer-reviewed journals.</td>
<td>Intervention: Evaluate Reiki interventions using the Touchstone Process. The Touchstone Process encompasses a specialized team of research experts, who collectively conduct a comprehensive and ongoing critique of all published, peer-reviewed, Reiki research, using a rigorous, project-managed team approach. Team scores each article with impact section. Team scores are compared and averaged.</td>
<td>Results: Only 12 articles were based on robust experimental design and utilized well-established outcome parameters. Of these articles, 2 provided no support, 5 provided some support, and 5 demonstrated strong evidence for use of Reiki as a healing modality.</td>
<td>Study Limitations: None Systematic Review Review did not address focused clinical question Search was not detailed or exhaustive Quality of the studies was not appraised or studies were of low quality Methods and/or results were inconsistent across studies</td>
</tr>
<tr>
<td>Journal: Journal of Alternative &amp; Complementary Medicine Author: vanderVaart, S., et al. Year Published: 2009 Location: University of Toronto, Canada</td>
<td>Aim: To evaluate whether Reiki produces a significant treatment effect Study Type: Systematic Review Size: 12 trials</td>
<td>Inclusion Criteria: RCTs with Reiki intervention</td>
<td>Intervention: Reiki</td>
<td>Results: 9 studies stated significant positive findings on at least one outcome measure (not necessarily the primary outcome, as it was often not stated), while the other 3 studies showed no significant outcomes. Study determined there were few studies available to evaluate the efficacy of Reiki. The few studies that were available are of poor quality.</td>
<td>Study Limitations: None Systematic Review Review did not address focused clinical question Search was not detailed or exhaustive Quality of the studies was not appraised or studies were of low quality Methods and/or results were inconsistent across studies</td>
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<tr>
<td>Journal: Journal of Alternative &amp; Complementary Medicine</td>
<td>Aim: To assess the quality and review the outcomes of</td>
<td>Inclusion Criteria: RCTs that used only nontouch</td>
<td>Intervention: Biofield therapies (external qigong, Healing Touch, Johrei)</td>
<td>Results: The research designs of the 28 trials revealed marked</td>
<td>Study Limitations: None Systematic Review</td>
</tr>
</tbody>
</table>

### Low Quality Rating if:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

- Increase Quality Rating if:
  - Large effect
  - Dose-response gradient
  - Plausible confounders or other biases increase certainty of effect

Quality (certainty) of evidence for studies as a whole:
- High
- Moderate
- Low
- Very Low
### References:

### PICO Question:
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

### Table

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<th>Study Acronym; Author; Year Published; Location</th>
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<th>Study Type: RCT – Pilot Study</th>
<th>Size: 46 patients</th>
<th>Inclusion Criteria: Male and female patients between 50 and 85 years who were admitted to an acute care hospital for a scheduled knee replacement.</th>
<th>Exclusion Criteria: (a) joint replacement surgery on an urgent basis and/or previous</th>
<th>Study Design: 3-armed randomized study, testing Reiki versus other healing modalities or no treatment.</th>
<th>Results: Only the Reiki group showed a significant difference among the 4 BP readings taken pre- and postintervention before and 24 hours after surgery. Both systolic and diastolic BP levels were significantly reduced when comparing pretreatment, before surgery versus</th>
<th>Study Limitations: □ Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)</th>
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<td>Journal: Holistic Nursing Practice</td>
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<tr>
<td>Location: University of Arizona</td>
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</table>

## Office of Clinical Integration and EBP Evidence Brief

April 2018
| Journal: Holistic Nursing Practice  
Author: Sagkal Midilli, T. and N. Ciray Gunduzoglu  
Year Published: 2016  
Location: Health School of Celal Bayar University, Manisa, Turkey | Aim: To determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery  
Study Type: RCT  
Size: 45 patients | Inclusion Criteria: (1) planned or unplanned cesarean section; (2) Turkey nationality; (3) the ability to speak Turkish; (4) age between 18 and 45 years; (5) a stay of at least 2 days in the unit; (6) orientation in place and time; (7) operative with general anesthesia; and (8) using only the non-opioid analgesic drug diclofenac 75 mg/3 mL, intramuscular, prescribed by doctor  
Exclusion Criteria: (1) operation with spinal or epidural anesthesia; (2) any psychiatric disease, or an allergy to analgesic drugs; (3) any visual or hearing impairment; (4) previous experience | Study Design: Patients, equalized by age and number of births, were randomly assigned to the Reiki, sham Reiki, and control groups. The treatment, which was applied to the patients in these 3 groups, was applied for 15 minutes to the incision area of the body in the first 24 and 48 hours after the operation within 4 to 8 hours of the application of standard analgesics. The study data were collected using a patient follow-up form and a visual analog scale.  
Results: Mean systolic blood pressure measurement values were significantly different from each other according to groups (P < .05).  
posttreatment, after surgery (systolic: 141.4 +/- 3.7 [SEM] mm Hg vs 116.2 +/- 3.6 [n=18], P < .001, power = 0.99; diastolic: 73.6 +/- 1.9 [SEM] mm Hg vs 59.3 +/- 2.4, P < .001, power = 1.0).  
| Study Limitations:  
None  
RCTs  
Lack of blinding  
Lack of allocation concealment  
Stopped early for benefit  
Incorrect analysis of ITT  
Selective reporting of measures (e.g., no effect outcome)  
Large losses to F/U  
Difference in important prognostic factors at baseline  
Difference in important prognostic factors at baseline | □ Difference in important prognostic factors at baseline  
□ Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
Increase Quality Rating if:  
Large effect  
Dose-response gradient  
Plausible confounders or other biases increase certainty of effect  
Quality (certainty) of evidence for studies as a whole:  
□ High  
□ Moderate  
□ Low  
□ Very Low |

joint replacement revision, (b) patients who could not reach or understand English, (c) patients with a history of emotional/psychological or anxiety-related diagnosis, (d) patients who received antianxiety or psychotropic medication within 2 weeks of the scheduled surgery, and (e) patients whose surgery would be performed using anesthetic agents other than standard general anesthesia. (placebo) plus SOC; and a third group received 3 or 4 sessions of "quiet time" plus SOC. For all groups, the first treatment/session was 1 hour prior to surgery, with subsequent treatments/sessions 24, 48, and 72 hours after surgery. All treatments/sessions were performed in the patient’s room on the postsurgical floor, except for the preoperative session that was carried out in a private patient room in the preoperative area.
### PICO Question:
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

<table>
<thead>
<tr>
<th>Modality: Reiki</th>
<th>Outcome: Respiration Rate</th>
</tr>
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<tr>
<td><strong>Study Acronym:</strong> Holistic Nursing Practice</td>
<td><strong>Study Type:</strong> RCT – Pilot Study</td>
</tr>
<tr>
<td><strong>Author:</strong> Baldwin, A.L., et al.</td>
<td><strong>Study Size (N):</strong> 46 patients</td>
</tr>
<tr>
<td><strong>Year Published:</strong> 2017</td>
<td><strong>Location:</strong> University of Arizona</td>
</tr>
<tr>
<td><strong>Aim:</strong> Pilot study that investigated the effects of Reiki on patients undergoing knee replacement surgery</td>
<td><strong>Inclusion Criteria:</strong> Male and female patients between 50 and 85 years who were admitted to an acute care hospital for a scheduled knee replacement.</td>
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<td><strong>Exclusion Criteria:</strong> (a) joint replacement surgery on an urgent basis and/or previous joint replacement revision, (b) patients who could not reach or understand English, (c) patients with a history of emotional/psychological or anxiety-related diagnosis, (d) patients who received antianxiety or psychotropic medication</td>
<td><strong>Study Design:</strong> 3-armed randomized study, testing Reiki versus other healing modalities or no treatment. Reiki intervention group received three or four 30-minute treatments plus standard of care (SOC) throughout their history stay; second arm received three or four 30-minute Sham Reiki sessions (placebo) plus SOC; and a third group received 3 or 4 sessions of “quiet time” plus SOC.</td>
</tr>
<tr>
<td><strong>Study Intervention (# patients) / Study Comparator:</strong></td>
<td>Results: The 4 RRs (pre- and posttreatment, before and 24 hours after surgery) were significantly different from each other within the Reiki group but not within the other 2 groups. For the Reiki group, there was a trend toward reduced RR when comparing pretreatment, before surgery versus posttreatment, 24 hours after surgery. This trend became statistically significantly when data obtained from the Reiki group pretreatment, before surgery were compared with those taken posttreatment, 48 hours after surgery (20.1 +/- 0.5 [SEM] breath/min vs 17.7 +/- 0.5, P = .008).</td>
</tr>
<tr>
<td><strong>Endpoint Results / Outcome (Absolute Event Rates, OR or RR; &amp; 95% CI):</strong></td>
<td><strong>Design Limitations:</strong></td>
</tr>
<tr>
<td><strong>Low Quality Rating if:</strong></td>
<td><strong>None</strong></td>
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<td></td>
<td><strong>Incorrect analysis of ITT outcome</strong></td>
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<tr>
<td></td>
<td><strong>Difference in important prognostic factors at baseline</strong></td>
</tr>
</tbody>
</table>

**Increase Quality Rating if:**
- Large effect
- Dose-response gradient

---

### References:

| Journal: Holistic Nursing Practice  
Author: Sagkal Midilli, T. and N. Ciray Gunduzoglu  
Year Published: 2016  
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<td><strong>Aim:</strong> To determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery</td>
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<td><strong>Study Type:</strong> RCT</td>
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<tr>
<td><strong>Size:</strong> 45 patients</td>
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</table>

**Inclusion Criteria:**  
1. Planned or unplanned cesarean section;  
2. Turkey nationality;  
3. The ability to speak Turkish;  
4. Age between 18 and 45 years;  
5. Stay of at least 2 days in the unit;  
6. Orientation in place and time;  
7. Operative with general anesthesia; and  
8. Using only the non-opioid analgesic drug diclofenac 75 mg/3 mL, intramuscular, prescribed by doctor.

**Exclusion Criteria:**  
1. Operation with spinal or epidural anesthesia;  
2. Any psychiatric disease, or an allergy to analgesic drugs;  
3. Any visual or hearing impairment;  
4. Previous experience with Reiki;  
5. Serious complications during or after the cesarean section operation in the patient or the infant(s); and  

**Study Design:** Patients, equalized by age and number of births, were randomly assigned to the Reiki, sham Reiki, and control groups. The treatment, which was applied to the patients in these 3 groups, was applied for 15 minutes to the incision area of body in the first 24 and 48 hours after the operation within 4 to 8 hours of the application of standard analgesics. The study data were collected using a patient follow-up form and a visual analog scale.

**Results:** Mean breathing rate pressure measurement values were significantly different from each other according to groups ($P < .05$).

**Study Limitations:** None

**Quality (certainty) of evidence for studies as a whole:**

- High
- Moderate
- Low
- Very Low

References:


<table>
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<tr>
<th>PICO Question: Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?</th>
<th>Low Quality Rating if:</th>
</tr>
</thead>
</table>

| Modality: Reiki; Outcome: Medication Usage |  
| --- | --- |
| **Study Acronym; Author; Year Published; Location** | **Aim of Study; Study Type; Study Size (N)** | **Patient Population** | **Study Intervention (# patients) / Study Comparator** | **Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; & 95% CI)** | **Design Limitations** |
| **Journal: Holistic Nursing Practice Author: Baldwin, A.L., et al. Year Published: 2017 Location: University of Arizona** | **Aim: Pilot study that investigated the effects of Reiki on patients undergoing knee replacement surgery** | **Inclusion Criteria: Male and female patients between 50 and 85 years who were admitted to an acute care hospital for a scheduled knee replacement.** | **Study Design: 3-armed randomized study, testing Reiki versus other healing modalities or no treatment.** | **Results: The Reiki group used the lowest number of doses of as-needed pain medication (22 doses or 2.4 doses per patient) compared with Sham Reiki group (36 doses or 6 doses per patient) and the SOC group (29 doses or 5.5 doses per patient).** | **Study Limitations:** |
|  | **Exclusion Criteria:** (a) joint replacement surgery on an urgent basis and/or previous joint replacement revision, (b) patients who could not reach or understand English, (c) patients with a history of emotional/psychological or anxiety-related diagnosis, (d) patients who received antianxiety or psychotropic medication within 2 weeks of the scheduled surgery, and (e) patients whose surgery would be performed using anesthetic agents other than standard general anesthesia. | **Reiki intervention group received three or four 30-minute treatments plus standard of care (SOC) throughout their history stay; second arm received three or four 30-minute Sham Reiki sessions (placebo) plus SOC; and a third group received 3 or 4 sessions of “quiet time” plus SOC.** | **For all groups, the first treatment/session was 1 hour prior to surgery, with subsequent treatments/sessions 24, 48, and 72 hours after surgery. All treatments/sessions were performed in the patient’s room on the postsurgical floor, except for the preoperative session that was carried out in a private patient room in the preoperative area.** | **Study Limitations:** |
|  |  | **Study Intervention (# patients) / Study Comparator** | **Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; & 95% CI)** | **Study Limitations:** | **Low Quality Rating if:** |
| **Journal: Gastroenterology Nursing** | **Aim: To determine whether the use of** | **Inclusion Criteria:** English-speaking | **Intervention:** Patients who received Reiki | **Results:** In the Reiki group, four of 25 patients | **Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)** |

- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)
| Author: Bourque, A.L., et al. | Reiki decrease the amount of meperidine administered to patients undergoing screening colonoscopy. Study Type: Retrospective chart review. Size: 30 patients, 25 of the study arm patients received Reiki in conjunction with meperidine. Five randomly chosen study arm patients received placebo Reiki in conjunction with meperidine. Exclusion Criteria: Patients between the ages of 50 and 60 years undergoing screening colonoscopy. Comparator: Placebo Reiki and (16%) received less than 50 mg of meperidine. Of these four patients, three received 25 mg and one patient received 37.5 mg. In comparison, there were no patients in the chart review group of the placebo Reiki group that received less than 50 mg of meperidine. |

| Journal: Holistic Nursing Practice | Aim: To determine the effects of Reiki on pain and vital signs when applied for 15 minutes to the incision area of the body after cesarean section surgery. Study Type: RCT. Size: 45 patients. Inclusion Criteria: (1) planned or unplanned cesarean section; (2) Turkey nationality; (3) the ability to speak Turkish; (4) age between 18 and 45 years; (5) a stay of at least 2 days in the unit; (6) orientation in place and time; (7) operative with general anesthesia; and (8) using only the non-opioid analgesic drug diclofenac 75 mg/3 mL, intramuscular, prescribed by doctor. Exclusion Criteria: (1) operation with spinal or epidural anesthesia; (2) any psychiatric disease, or an allergy to analgesic drugs; (3) any visual or hearing impairment; (4) previous experience. Study Design: Patients, equalized by age and number of births, were randomly assigned to the Reiki, sham Reiki, and control groups. The treatment, which was applied to the patients in these 3 groups, was applied for 15 minutes to the incision area of body in the first 24 and 48 hours after the operation within 4 to 8 hours of the application of standard analgesics. The study data were collected using a patient follow-up form and a visual analog scale. Results: The Reiki group was observed to use fewer analgesics throughout the study and to need them after a longer time than the sham Reiki and control groups (P < .05). |

<table>
<thead>
<tr>
<th>Non-Randomized Studies</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Failure to develop and apply appropriate eligibility criteria</td>
<td>Flawed measurement of both exposure and outcome</td>
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<td>Failure to adequately control confounding</td>
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<td>Incomplete or inadequately short follow-up</td>
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<tr>
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<td>Differences in important prognostic factors at baseline</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Limitations:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>RCTs</td>
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</tr>
<tr>
<td>Lack of blinding</td>
<td>Lack of blinding</td>
</tr>
<tr>
<td>Lack of allocation concealment</td>
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</tr>
<tr>
<td>Stopped early for benefit</td>
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</tr>
<tr>
<td>Incorrect analysis of ITT</td>
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</tr>
<tr>
<td>Selective reporting of measures (e.g., no effect outcome)</td>
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</tr>
<tr>
<td>Large losses to F/U</td>
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</tr>
<tr>
<td>Difference in important prognostic factors at baseline</td>
<td>Difference in important prognostic factors at baseline</td>
</tr>
</tbody>
</table>
### Journal: Nursing  
Author: Notte, B.B., et al.  
Year Published: 2016  
Location: Bryn Mawr Hospital, PA

<table>
<thead>
<tr>
<th>Aim:</th>
<th>To determine the impact of Reiki therapy on the pain perception of patients undergoing total knee arthroplasty (TKA) following Reiki sessions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Type:</td>
<td>RCT</td>
</tr>
<tr>
<td>Size:</td>
<td>43 patients; Reiki group = 23 and non-Reiki group = 20</td>
</tr>
</tbody>
</table>

#### Inclusion Criteria:  
Aged 18 to 80, English-speaking, able to read and understand the subject pamphlet, and consent form, and competent to give informed consent.

#### Exclusion Criteria:  
Patients were excluded from the study if they had chronic pain disorders such as fibromyalgia, migraine headaches, rheumatoid arthritis, or neurologic impairment that precluded full participation in the study. Patients with a history of or current substance abuse and those recovering from recent surgery were also excluded.

#### Intervention:  
20-minute Reiki treatment at admission and 30-minute Reiki treatment after admission and initial assessment. On each of the 3 postoperative days, the subjects received Reiki at bedside for 20 minutes while listening to relaxing music via headphones.

#### Comparator:  
non-Reiki

#### Results:  
No statistically significant differences were found in pain medication use \( P = 0.92 \)

#### Study Limitations:  
- None  
- Lack of blinding  
- Lack of allocation concealment  
- Stopped early for benefit  
- Incorrect analysis of ITT  
- Selective reporting of measures (e.g., no effect outcome)  
- Large losses to F/U  
- Difference in important prognostic factors at baseline

### PICO Question:  
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e., reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

### Low Quality Rating if:  
- Studies inconsistent (wide variation of treatment effect)

### Modality:  
Reiki  
Outcome: Hospital Stay
<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal: Holistic Nursing Practice Author: Baldwin, A.L., et al. Year Published: 2017 Location: University of Arizona</td>
<td>Aim: Pilot study that investigated the effects of Reiki on patients undergoing knee replacement surgery Study Type: RCT - Pilot Study Size: 46 patients</td>
<td>Inclusion Criteria: Male and female patients between 50 and 85 years who were admitted to an acute care hospital for a scheduled knee replacement. Exclusion Criteria: (a) joint replacement surgery on an urgent basis and/or previous joint replacement revision, (b) patients who could not reach or understand English, (c) patients with a history of emotional/psychological or anxiety-related diagnosis, (d) patients who received antianxiety or psychotropic medication within 2 weeks of the scheduled surgery, and (e) patients whose surgery would be performed using anesthetic agents other than standard general anesthesia.</td>
<td>Study Design: 3-armed randomized study, testing Reiki versus other healing modalities or no treatment. Reiki intervention group received three or four 30-minute treatments plus standard of care (SOC) throughout their history stay; second arm received three or four 30-minute Sham Reiki sessions (placebo) plus SOC; and a third group received 3 or 4 sessions of &quot;quiet time&quot; plus SOC. For all groups, the first treatment/session was 1 hour prior to surgery, with subsequent treatments/sessions 24, 48, and 72 hours after surgery. All treatments/sessions were performed in the patient's room on the postsurgical floor, except for the preoperative session that was carried out in a private patient room in the preoperative area.</td>
<td>Results: The Reiki group had the highest percentage of discharges at 48 hours rather than at 72 hours. Study Limitations: None RCTs Lack of blinding Lack of allocation concealment Stopped early for benefit Incorrect analysis of ITT Selective reporting of measures (e.g., no effect outcome) Large losses to F/U Difference in important prognostic factors at baseline</td>
<td>Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome) Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain) Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found) Increase Quality Rating if: Large effect Dose-response gradient Plausible confounders or other biases increase certainty of effect Quality (certainty) of evidence for studies as a whole: High Moderate Low Very Low</td>
</tr>
</tbody>
</table>

References:

**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

**Modality:** Reiki; **Outcome:** Functional Recovery

**Low Quality Rating if:** Studies inconsistent (wide variation of treatment effect)
### Study Acronym: Author; Year Published; Location

<table>
<thead>
<tr>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
</table>
| Journal: International Journal of Clinical Practice
  Author: Lee, M.S., et al.
  Year Published: 2008
  Location: Universities of Exeter & Plymouth, UK | Aim: To summarise and critically evaluate the evidence for the effectiveness of Reiki | Inclusion Criteria: RCTs were included if they assessed human subjects who received Reiki alone or adjunctive to conventional treatment. | Intervention: Reiki | Results: After ischemic stroke, there was no intergroup differences compared with sham. |

#### Study Limitations:
- None
- Systematic Review
- Review did not address focused clinical question
- Search was not detailed or exhaustive
- Quality of the studies was not appraised or studies were of low quality
- Methods and/or results were inconsistent across studies

#### Design Limitations:
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

**Increase Quality Rating if:**
- Large effect
- Dose-response gradient
- Plausible confounders or other biases increase certainty of effect

**Quality (certainty) of evidence for studies as a whole:**
- High
- Moderate
- Low
- Very Low

### References:

### Healing Touch Appraisal Tables:

**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

**Low Quality Rating if:**
<table>
<thead>
<tr>
<th>Modality: Healing Touch</th>
<th>Outcome: Quality of Life</th>
</tr>
</thead>
</table>
| **Study Acronym:** Journal of Holistic Nursing  
**Author:** Anderson, J.G. and A.G. Taylor  
**Year Published:** 2011  
**Location:** University of Virginia |  
**Aim:** To critically evaluate the data from randomized clinical trials examining the clinical efficacy of Healing Touch as a supportive care modality for any medical condition  
**Study Type:** Systematic Review  
**Size:** 5 studies |  
**Inclusion Criteria:** RCTs with assessment of Healing Touch |  
**Intervention:** Healing Touch |  
**Results:** Very few RCTs were identified in the process of conducting the review. Though the studies support the potential clinical effectiveness of Healing Touch in improving health-related quality of life in chronic disease management, more studies are required given that even the studies included with high-quality scores had limitations.  
**Study Limitations:** None  
**Systematic Review:** Review did not address focused clinical question  
**Search was not detailed or exhaustive**  
**Quality of the studies was not appraised or studies were of low quality**  
**Methods and/or results were inconsistent across studies** |  
**Design Limitations:** Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)  
**Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)**  
**Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)**  
**Publication Bias:** (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
**Increase Quality Rating if:**  
Large effect  
Dose-response gradient  
Plausible confounders or other biases increase certainty of effect  
**Quality (certainty) of evidence for studies as a whole:**  
High  
Moderate  
Low  
Very Low |
| **Study Acronym:** Journal of Psychosocial Oncology  
**Author:** Hersch, J., et al.  
**Year Published:** 2009  
**Location:** University of York, UK |  
**Aim:** To summarize the evidence of the effectiveness of psychosocial interventions in women with gynecological cancers on their quality of life outcomes.  
**Study Type:** Systematic Review  
**Size:** 1 RCT |  
**Inclusion Criteria:** Comparative studies with concurrent controls were eligible for inclusion if they evaluated quality of life outcomes after psychosocial interventions in women diagnosed with gynecological cancer of the cervix, uterus, ovaries, vulva, or vagina. Studies of patients with breast cancer were also included if at least one third of the patient sample had gynecological cancer. |  
**Intervention:** Psychosocial interventions including Healing Touch |  
**Results:** Study concluded there was limited evidence in support of Healing Touch for improving quality of life in women with gynecological cancers.  
**Study Limitations:** None  
**Systematic Review:** Review did not address focused clinical question  
**Search was not detailed or exhaustive**  
**Quality of the studies was not appraised or studies were of low quality**  
**Methods and/or results were inconsistent across studies** |  
**Design Limitations:** Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)  
**Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)**  
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**Publication Bias:** (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
**Increase Quality Rating if:**  
Large effect  
Dose-response gradient  
Plausible confounders or other biases increase certainty of effect  
**Quality (certainty) of evidence for studies as a whole:**  
High  
Moderate  
Low  
Very Low |
| **Study Acronym:** Journal of Integrative Cancer Therapies  
**Author:** FitzHenry, F., et al.  
**Year Published:** 2014  
**Location:** Vanderbilt University, Nashville, TN |  
**Aim:** To investigate the effect of Healing Touch (HT) on fatigue in breast cancer patients undergoing radiation therapy (RT)  
**Study Type:** RCT |  
**Inclusion Criteria:** Histogramically proven breast cancer surgically treated with lumpectomy or mastectomy. Patients were limited to English-speaking adults aged 21 to 75 years old. |  
**Intervention:** 45-minute session of Healing Touch once a week during RT.  
**Comparator:** 45-minute Sham therapy with placebo. |  
**Results:** There was no statistically significant differences between the groups in terms of global Quality of Life (QOL) or breast cancer-specific QOL, nor were there statistically significant differences in the |  
**Study Limitations:** None  
**RCTs**  
Lack of blinding  
Lack of allocation concealment  
Stopped early for benefit |  
**Design Limitations:** Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)  
**Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)**  
**Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)**  
**Publication Bias:** (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
**Increase Quality Rating if:**  
Large effect  
Dose-response gradient  
Plausible confounders or other biases increase certainty of effect  
**Quality (certainty) of evidence for studies as a whole:**  
High  
Moderate  
Low  
Very Low |
### PICO Question

**Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?**

<table>
<thead>
<tr>
<th>Modality: Healing Touch</th>
<th>Outcome: Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study Acronym:</strong></td>
<td><strong>Author:</strong> Anderson, J.G., et al.</td>
</tr>
<tr>
<td><strong>Journal:</strong> Explore: The Journal of Science &amp; Healing</td>
<td><strong>Year Published:</strong> 2015</td>
</tr>
<tr>
<td><strong>Location:</strong> University of Virginia</td>
<td><strong>Size:</strong> 46 participants; 21 in Healing Touch intervention and 25 in the control comparison group</td>
</tr>
<tr>
<td><strong>Aim:</strong> To determine the feasibility of a Healing Touch intervention for reducing pain, nausea, and anxiety in patients undergoing laparoscopic bariatric surgery</td>
<td><strong>Inclusion Criteria:</strong> (1) prior regular use of Healing Touch (&gt;one session/month) within three months of enrolling in the study and (2) concurrent Healing Touch or other mind-body/biofield therapy outside of the study protocol</td>
</tr>
<tr>
<td><strong>Study Type:</strong> Quasi-experimental study</td>
<td><strong>Intervention:</strong> Following surgery and admission to the surgical unit, a nurse on the unit trained in Healing Touch and familiar with the study protocol delivered the Healing Touch intervention.</td>
</tr>
<tr>
<td><strong>Patient Population</strong></td>
<td><strong>Comparator:</strong> Data from matched controls were obtained from the electronic medical record.</td>
</tr>
<tr>
<td><strong>Study Intervention (# patients) / Study Comparator</strong></td>
<td><strong>Results:</strong> Individuals in the Healing Touch group had clinically (&gt;20% reduction) and statistically significant differences in post-intervention pain (P = .003) on post-operative day and day two (P = .001; and for pain (P = .034) on post-operative day three.</td>
</tr>
<tr>
<td><strong>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</strong></td>
<td>**Reductions in symptom scores following the Healing Touch intervention using the numeric rating scale ranged from two to eight points. There was no significant difference in post-operative average daily pain ratings or LOS (Healing Touch 1.95 +/-)</td>
</tr>
</tbody>
</table>

**Design Limitations**

- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

**Low Quality Rating If:**

- Studies are inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
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- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

**Increase Quality Rating If:**

- Large effect
- Dose-response gradient
| **Journal:** Geriatric Nursing  
**Author:** Lu, D.F., et al.  
**Year Published:** 2013  
**Location:** The University of Iowa, Iowa City, IA |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim:</strong> To investigate the effects of Healing Touch (HT) on the pain level, joint function, mobility, and depression in persons with osteoarthritis (OA) of the knee joint(s).</td>
</tr>
<tr>
<td><strong>Study Type:</strong> RCT</td>
</tr>
<tr>
<td><strong>Size:</strong> 19; Healing Touch = 12 and Friendly Visits = 7</td>
</tr>
<tr>
<td><strong>Inclusion Criteria:</strong> (a) age greater than or equal to 65 years old, (b) had received a diagnosis of OA from their doctor and were experiencing OA-related discomfort of the knee(s), (c) able to stand and walk unaided, (d) pain experienced is primarily related to OA, (e) able to speak English, and (f) cognitively intact</td>
</tr>
<tr>
<td><strong>Intervention:</strong> HT sessions delivered by a team of two nurses three times per week for 6 weeks</td>
</tr>
<tr>
<td><strong>Comparator:</strong> Friendly visits (FV) delivered by nurse for 20 min weekly for 6 weeks. Visits included talking about topics that the subject selected.</td>
</tr>
<tr>
<td><strong>Outcome variables were measured at baseline and at the end of the treatment period in the sixth week. Assessment at 9 weeks was used to determine maintenance of changes without additional intervention.</strong></td>
</tr>
<tr>
<td><strong>Results:</strong> The follow up t-test for the between group comparison of BPI change scores indicated that the HT group’s perception of OA pain interference with life improved significantly more (t = 2.47, p = 0.02) than that of the FV group. While the HT group had a significant improvement (t = -2.26, p = 0.04) in their perception of pain intensity (as measured by BPI [SF]) the two groups did not significantly differ (t = 0.92, p = 0.37) on this measure at 6 weeks. The lessening of pain severity (according to the WOMAC) was significantly greater (t = 2.47, p = 0.02) in the HT group than in the FV group. In summary, significant interactions occurred with the survey (BPI and WOMAC) measures of pain. In addition, the follow up analysis of between group comparisons indicated that as compared to the FV group, the HT group showed significantly greater decreases in two</td>
</tr>
<tr>
<td><strong>Study Limitations:</strong></td>
</tr>
<tr>
<td><strong>Quality (certainty) of evidence for studies as a whole:</strong></td>
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</tbody>
</table>

|☐ Plausible confounders or other biases increase certainty of effect |

|☐ High  
☐ Moderate  
☐ Low  
☐ Very Low |
PICO Question: Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

Modality: Healing Touch; Outcome: Anxiety

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
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</table>
| Journal: Explore: The Journal of Science & Healing  
Year Published: 2015  
Location: University of Virginia | Aim: To determine the feasibility of a Healing Touch intervention for reducing pain, nausea, and anxiety in patients undergoing laparoscopic bariatric surgery  
Study Type: Quasi-experimental study  
Size: 46 participants; 21 in Healing Touch intervention and 25 in the control comparison group | Inclusion Criteria: (1) scheduled for laparoscopic bariatric surgery (gastric bypass/Roux-en-Y or gastric sleeve), (2) the ability to ensure informed consent and completion of assessments, and (3) the ability to speak and understand English.  
Exclusion Criteria: (1) prior regular use of Healing Touch (>one session/month) within three months of enrolling in the study and (2) concurrent Healing Touch or other mind-body/biofield therapy outside of the study protocol. | Intervention: Following surgery and admission to the surgical unit, a nurse on the unit trained in Healing Touch and familiar with the study protocol delivered the Healing Touch intervention.  
Comparator: Data from matched controls were obtained from the electronic medical record. | Results: Individuals in the Healing Touch group had clinically (>20% reduction) and statistically significant differences in post-intervention and anxiety (P < .001) on post-operative day and day two (P = .001), and for anxiety (P = .041) on post-operative day three. Additionally, participants in the Healing Touch group demonstrated significant decreases in pre-intervention anxiety on days two and three compared with the previous day (P < .05). | Study Limitations: None  
Non-Randomized Studies  
Failure to develop and apply appropriate eligibility criteria  
Flawed measurement of both exposure and outcome  
Failure to adequately control confounding  
Incomplete or inadequately short follow-up  
Differences in important prognostic factors at baseline |

References:
### Office of Clinical Integration and EBP Evidence Brief

#### References:

#### PICO Question:
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

#### Quality (certainty) of evidence for studies as a whole:
- High
- Moderate
- Low
- Very Low

#### Low Quality Rating if:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
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#### Increase Quality Rating if:
- Large effect
- Dose-response gradient

### Study Acronym; Author; Year Published; Location
**Aim of Study; Study Type; Study Size (N)**

| Journal: *Explore: The Journal of Science & Healing*  
| Year Published: 2015  
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<th>Location: University of Virginia</th>
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<td><strong>Size:</strong> 46 participants; 21 in Healing Touch intervention and 25 in the control comparison group</td>
</tr>
</tbody>
</table>

### Inclusion Criteria:
- (1) scheduled for laparoscopic bariatric surgery (gastric bypass/Roux-en-Y or gastric sleeve), (2) the ability to ensure informed consent and completion of assessments, and (3) the ability to speak and understand English.

### Exclusion Criteria:
- (1) prior regular use of Healing Touch (> one session/month) within three months of enrolling in the study and (2) concurrent Healing Touch or other mind-body/biofield therapy outside of the study protocol.

### Intervention:
- Following surgery and admission to the surgical unit, a nurse on the unit trained in Healing Touch and familiar with the study protocol delivered the Healing Touch intervention.

### Comparator:
- Data from matched controls were obtained from the electronic medical record.

### Results:
- Differences in post-intervention nausea on post-operative day three were clinically significant but not statistically significant (P = .066). Additionally, participants in the Healing Touch group demonstrated significant decreases in pre-intervention nausea on days two and three compared with the previous day (P < .05).

### Study Limitations:
- None

### Non-Randomized Studies
- Failure to develop and apply appropriate eligibility criteria
- Flawed measurement of both exposure and outcome
- Failure to adequately control confounding
- Incomplete or inadequately short follow-up
- Differences in important prognostic factors at baseline

### Design Limitations
- Failure to develop and apply appropriate eligibility criteria
- Flawed measurement of both exposure and outcome
- Failure to adequately control confounding
- Incomplete or inadequately short follow-up
- Differences in important prognostic factors at baseline
## PICO Question
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

### Low Quality Rating If:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

### Increase Quality Rating If:
- Large effect
- Dose-response gradient

### References:
## References:


### PICO Question:

**Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?**

### Low Quality Rating If:

- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
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- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only, small, positive studies found)

### Increase Quality Rating If:

- Large effect
- Dose-response gradient
### References:

### PICO Question:
**Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?**

### Modality: Healing Touch; Outcome: Joint Function

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal: Geriatric Nursing; Author: Lu, D.F., et al. Year Published: 2013 Location: The University of Iowa, Iowa City, IA</td>
<td>Aim: To investigate the effects of Healing Touch (HT) on the pain level, joint function, mobility, and depression in person with osteoarthritis (OA) of the knee joint(s). <strong>Study Type:</strong> RCT <strong>Size:</strong> 19: Healing Touch = 12 and Friendly Visits = 7</td>
<td><strong>Inclusion Criteria:</strong> (a) age greater than or equal to 65 years old, (b) had received a diagnosis of OA from their doctor and were experiencing OA-related discomfort of the knee(s), (c) able to stand and walk unaided, (d) pain experienced is primarily related to OA, (e) able to speak English, and (f) cognitively intact</td>
<td><strong>Intervention:</strong> HT sessions delivered by a team of two nurses three times per week for 6 weeks <strong>Comparator:</strong> Friendly visits (FV) delivered by nurse for 20 min weekly for 6 weeks. Visits included talking about topics that the subject selected.</td>
<td><strong>Results:</strong> Two measures of joint function (extension and extensor lag of the &quot;better&quot; knee) exhibited significant group by time interactions (F (1, 12) = 5.85, p = 0.03; and F (1,12) = 5.89, p = 0.03 respectively). Follow up within group t-tests for extensor lag in both knees indicated that significant changes (&quot;worse knee&quot; t = -3.68, p = 0.002; &quot;better knee&quot; t = -3.63, p = 0.004) in knee strength in each knee occurred over the 6 weeks of HT sessions. The follow up within group t-test regarding extension found that only</td>
<td><strong>Study Limitations:</strong> None RCTs Lack of blinding Lack of allocation concealment Stopped early for benefit Incorrect analysis of ITT Selective reporting of measures (e.g., no effect outcome) Large losses to F/U Difference in important prognostic factors at baseline</td>
</tr>
</tbody>
</table>

### Quality (certainty) of evidence for studies as a whole:
- High
- Moderate
- Low
- Very Low

- Plausible confounders or other biases increase certainty of effect
### PICO Question
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

### Low Quality Rating if:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)

### References:
Office of Clinical Integration and EBP Evidence Brief

References:

**Therapeutic Touch Appraisal Tables:**

<table>
<thead>
<tr>
<th>Modality: Therapeutic Touch</th>
<th>Outcome: Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Acronym; Author; Year Published; Location</td>
<td>Aim: To better understand how Therapeutic Touch can be used in today's health care arena</td>
</tr>
<tr>
<td>Journal: <em>Journal of Holistic Nursing</em> Author: Monroe, C.M. Year Published: 2009</td>
<td>Study Type: Systematic Review</td>
</tr>
<tr>
<td>Size: 5 studies</td>
<td>Inclusion Criteria: Therapeutic Touch in literature from 1997 to 2007</td>
</tr>
<tr>
<td></td>
<td>Intervention: Therapeutic Touch</td>
</tr>
<tr>
<td></td>
<td>Results: 4 of the 5 studies included found that pain was reduced after Therapeutic Touch intervention. The 5th study had too many limitations to support the use of Therapeutic Touch.</td>
</tr>
<tr>
<td></td>
<td>Study Limitations: None</td>
</tr>
<tr>
<td></td>
<td>Study Type: Systematic Review</td>
</tr>
<tr>
<td></td>
<td>Design Limitations</td>
</tr>
<tr>
<td></td>
<td>Low Quality Rating: Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)</td>
</tr>
</tbody>
</table>

**Size: 19: Healing Touch = 12 and Friendly Visits = 7**  
- speak English, and (f) cognitively intact  
- Exclusion Criteria: (a) history of stroke or other CNS disease, (b) diagnosis of rheumatoid arthritis, or (c) having received a cortisol injection during the 3 months pre-study.  
- Outcome variables were measured at baseline and at the end of the treatment period in the sixth week. Assessment at 9 weeks was used to determine maintenance of changes without additional intervention.  
- group’s score remained at the mild depression level (8.3-6), the interaction effect was not significant  
- Difference in important prognostic factors at baseline  
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
- Increase Quality Rating if: Large effect  
- Dose-response gradient  
- Plausible confounders or other biases increase certainty of effect  
- Quality (certainty) of evidence for studies as a whole: High  
- Moderate  
- Low  
- Very Low
<table>
<thead>
<tr>
<th>Journal: Patient Education &amp; Counseling</th>
<th>Aim: To evaluate the Therapeutic Touch (TT) in the nursing of burn patients</th>
<th>Inclusion Criteria: Patients were responsive and comprehended Dutch, and that the number of days of hospitalization would be 10 days or more.</th>
<th>Design: Patients daily received TT or nursing presence (NP) for 10 consecutive days after being given medication and before dressing changes.</th>
<th>Results: No significant differences were found between the intervention groups.</th>
<th>Study Limitations: None RCTs</th>
<th>Methods and/or results were inconsistent across studies, thus have wide confidence intervals, and the results are uncertain</th>
<th>Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author: Busch, M., et al.</td>
<td>Study Type: RCT</td>
<td>Exclusion Criteria: Present of psychiatric disorders, developmental disability, and a history of endocrine or neurological health problems</td>
<td></td>
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<td></td>
<td>Increase Quality Rating if: Large effect Dose-response gradient Plausible confounders or other biases increase certainty of effect</td>
</tr>
<tr>
<td>Year Published: 2012</td>
<td>Size: 38 patients; TT = 17 and NP = 22</td>
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<td></td>
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<td>Quality (certainty) of evidence for studies as a whole: High Moderate Low Very Low</td>
<td></td>
</tr>
<tr>
<td>Location: Van Praag Institute, Utrecht, The Netherlands</td>
<td>Intention: TT Comparator: Sham</td>
<td>Results: No significant differences between the arms were seen regarding post biopsy pain (P = 0.95).</td>
<td>Study Limitations: None RCTs Lack of blinding Lack of allocation concealment Stopped early for benefit Incorrect analysis of ITT Selective reporting of measures (e.g., no effect outcome) Large losses to F/U Difference in important prognostic factors at baseline</td>
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<tr>
<td>Journal: Pain Medicine</td>
<td>Aim: To determine whether a Therapeutic Touch administered at the time of stereotactic core biopsy of suspicious breast lesions results in a reduction in anxiety and pain</td>
<td>Inclusion Criteria: Recommended for stereotactic core biopsy (SCB) Exclusion Criteria: None mentioned</td>
<td>Intervention: TT Comparator: Sham</td>
<td>Results: No significant differences between the intervention groups.</td>
<td>Study Limitations: None RCTs Lack of blinding Lack of allocation concealment Stopped early for benefit Incorrect analysis of ITT Selective reporting of measures (e.g., no effect outcome) Large losses to F/U Difference in important prognostic factors at baseline</td>
<td></td>
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</tr>
<tr>
<td>Author: Frank, L.S., et al.</td>
<td>Study Type: RCT</td>
<td>Size: 82; TT = 42 and Sham = 40</td>
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<tr>
<td>Year Published: 2007</td>
<td>Inclusion Criteria: Recommended for stereotactic core biopsy (SCB) Exclusion Criteria: None mentioned</td>
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<td>Increase Quality Rating if: Large effect Dose-response gradient Plausible confounders or other biases increase certainty of effect</td>
</tr>
<tr>
<td>Location: Regional Cancer Program, Springfield, MA</td>
<td>Intention: TT Comparator: Sham</td>
<td>Results: No significant differences between the intervention groups.</td>
<td>Study Limitations: None RCTs Lack of blinding Lack of allocation concealment Stopped early for benefit Incorrect analysis of ITT Selective reporting of measures (e.g., no effect outcome) Large losses to F/U Difference in important prognostic factors at baseline</td>
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<tr>
<td>Journal: Occupational Therapy International</td>
<td>Aim: To investigate the effects of non-contact Therapeutic Touch on post-surgical pain in an elderly population receiving occupational therapy in an acute care hospital unit in the United States</td>
<td>Inclusion Criteria: Patients who were medically stable, cognitively intact and willing to volunteer Exclusion Criteria: None included in article</td>
<td>Intervention: Therapeutic Touch Comparator: Control and placebo Design: Participants were randomly assigned to three groups (experimental, control and placebo). The</td>
<td>Results: In the experimental group, 22 out of 30 (73%) demonstrated a statistically significant decrease in pain intensity scores from pre-test to post-test (t[7] = 7.24, p &lt; 0.01) and were better</td>
<td>Study Limitations: None RCTs Lack of blinding Lack of allocation concealment Stopped early for benefit Incorrect analysis of ITT</td>
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<tr>
<td>Author: McCormack, G.L.</td>
<td>Study Type: RCT</td>
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<tr>
<td>Year Published: 2009</td>
<td>Size: 30 patients, TT = 17 and NP = 13</td>
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<tr>
<td>Location: University of Missouri-Columbia, Columbia, MO</td>
<td>Intention: Therapeutic Touch Comparator: Control and placebo Design: Participants were randomly assigned to three groups (experimental, control and placebo). The</td>
<td>Results: In the experimental group, 22 out of 30 (73%) demonstrated a statistically significant decrease in pain intensity scores from pre-test to post-test (t[7] = 7.24, p &lt; 0.01) and were better</td>
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<tr>
<td>Year Published: 2009</td>
<td>Inclusion Criteria: Patients who were medically stable, cognitively intact and willing to volunteer Exclusion Criteria: None included in article</td>
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</tbody>
</table>
### References:

### Study Details
**Study Type:** RCT  
**Size:** 90

The experimental group received the non-contact touch intervention, the control group received routine care and the placebo group received the sound of a metronome set at a steady slow pace. Objective measures included the Memorial Pain Scale, the Tellegen Absorption Scale, the Health Attribution Scale and measures of pulse rate and pupil size, which were performed as repeated measures.

### PICO Question:
**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

### Low Quality Rating If:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
| Journal: Patient Education & Counseling  
Author: Busch, M., et al.  
Year Published: 2012  
Location: Van Praag Instituut, Utrecht, The Netherlands | **Aim:** To evaluate the Therapeutic Touch (TT) in the nursing of burn patients  
**Study Type:** RCT  
**Size:** 38 patients; TT = 17 and NP = 22 | **Inclusion Criteria:** Patients were responsive and comprehended Dutch, and that the number of days of hospitalization would be 10 days or more.  
**Exclusion Criteria:** Present of psychiatric disorders, developmental disability, and a history of endocrine or neurological health problems | **Design:** Patients daily received TT or nursing presence (NP) for 10 consecutive days after being given medication and before dressing changes.  
**Results:** No statistically significant differences were found between the intervention groups for mean anxiety scores. Compared on item level a statistically significant effect was found in the TT group vs. the NP group on day 10 with regard to post procedural anxiety for pain 19.0 vs. 38.7 for NP (p < = 0.05). However, after Bonferroni correction this difference turned out to be not statistically significant.  
**Study Limitations:** None  
**RCTs**  
- Lack of blinding  
- Lack of allocation concealment  
- Stopped early for benefit  
- Incorrect analysis of ITT  
- Selective reporting of measures (e.g., no effect outcome)  
- Large losses to F/U  
- Difference in important prognostic factors at baseline |  
--- |  
**Aim:** To determine if women hospitalized for treatment of their chemical dependency who were randomly assigned to daily Therapeutic Touch (TT) would have less withdrawal symptoms than those randomly assigned to receive daily companionship by | **Intervention:** TT  
**Comparator:** Sham | **Results:** No significant differences between the arms were seen regarding post biopsy anxiety (P = 0.66).  
**Study Limitations:** None  
**RCTs**  
- Lack of blinding  
- Lack of allocation concealment  
- Stopped early for benefit  
- Incorrect analysis of ITT  
- Selective reporting of measures (e.g., no effect outcome)  
- Large losses to F/U  
- Difference in important prognostic factors at baseline |  
--- |  
**Aim:** To determine if women hospitalized for treatment of their chemical dependency who were randomly assigned to daily Therapeutic Touch (TT) would have less withdrawal symptoms than those randomly assigned to receive daily companionship by | **Inclusion Criteria:** English-speaking pregnant women admitted to dependency treatment ward  
**Exclusion Criteria:** Shared activity with a registered nurse for 20 minutes over a 7-day period or standard of care | **Intervention:** Daily Therapeutic Touch over a 7-day period for 20 minutes each day  
**Comparator:** Shared activity with a registered nurse for 20 minutes over a 7-day period or standard of care | **Results:** Anxiety score were significantly less on Days 1, 2, and 3 (P < .05) for the group receiving TT.  
**Study Limitations:** None  
**RCTs**  
- Lack of blinding  
- Lack of allocation concealment  
- Stopped early for benefit  
- Incorrect analysis of ITT  
- Selective reporting of measures (e.g., no effect outcome)  
--- |
nurses or standard ward care

**Study Type:** RCT

**Size:** 54

- ☑️ Large losses to F/U
- ☐ Difference in important prognostic factors at baseline

**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

**Modality:** Therapeutic Touch; **Outcome:** Headache

**Study Acronym; Author; Year Published; Location**

**Aim of Study; Study Type; Study Size (N)**

**Patient Population**

**Study Intervention (# patients) / Study Comparator**

**Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; & 95% CI)**

**Design Limitations**

**Inclusion Criteria:** Randomized and quasi-randomized controlled trials comparing non-invasive physical treatments for chronic/recurrent headaches

**Intervention:** Non-invasive physical treatments

**Results:** Study determined there was moderate evidence that Therapeutic Touch is superior to placebo for pain reduction for headaches within a few hours of a single treatment

**Study Limitations:**

- ☐ None
- ☐ Systematic Review
- ☐ Review did not address focused clinical question
- ☐ Search was not detailed or exhaustive
- ☐ Quality of the studies was not appraised or studies were of low quality
- ☐ Methods and/or results were inconsistent across studies

- ☐ Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

- ☑️ Increase Quality Rating if:
  - ☐ Large effect
  - ☐ Dose-response gradient
  - ☐ Plausible confounders or other biases increase certainty of effect

- ✗ Low Quality Rating if:
  - ☑️ Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
  - ☐ Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
  - ☑️ Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)

**References:**


**Journal:** Cochrane Database of Systematic Review

**Author:** Bronfort, G., et al.

**Year Published:** 2004

**Location:** Northwestern Health Sciences University, Bloomington, MN
**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

**Modality:** Therapeutic Touch; **Outcome:** Medication Usage

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
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<tr>
<td>Journal: Patient Education &amp; Counseling Author: Busch, M., et al. Year Published: 2012 Location: Van Praag Institute, Utrecht, The Netherlands</td>
<td>To evaluate the Therapeutic Touch (TT) in the nursing of burn patients</td>
<td>Study Type: RCT</td>
<td>Design: Patients daily received TT or nursing presence (NP) for 10 consecutive days after being given medication and before dressing changes.</td>
<td>Results: On measurement days 1 and 2 significantly more patients in the NP-group received morphine than in the TT group ($p = 0.05$). Furthermore, more morphine was prescribed on day 1 to the patients in the NP-group than in the TT-group ($p = 0.05$). Taking all pain medication (morphine, tramal, paracetamol and diclofenac) on all measurements days together in sum score, no significant differences were found.</td>
<td>Study Limitations:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Size: 38 patients; TT = 17 and NP = 22</td>
<td>Inclusion Criteria: Patients were responsive and comprehended Dutch, and that the number of days of hospitalization would be 10 days or more.</td>
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<tr>
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<td></td>
<td>Exclusion Criteria: Present of psychiatric disorders, developmental disability, and a history of endocrine or neurological health problems</td>
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</tr>
</tbody>
</table>

**Quality (certainty) of evidence for studies as a whole:**
- High
- Moderate
- Low
- Very Low

**Low Quality Rating if:**
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

**Increase Quality Rating if:**
- Large effect
- Dose-response gradient
- Plausible confounders or other biases increase certainty of effect
**PICO Question:** Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

**Modality:** Therapeutic Touch; **Outcome:** Withdrawal Symptoms

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
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</thead>
<tbody>
<tr>
<td>Journal: <em>Journal of Holistic Nursing</em>   Author: Larden, C.N., et al. Year Published: 2004 Location: Vancouver, British Columbia</td>
<td>Aim: To determine if women hospitalized for treatment of their chemical dependency who were randomly assigned to daily Therapeutic Touch (TT) would have less withdrawal symptoms than those randomly assigned to receive daily companionship by nurses or standard ward care  <strong>Study Type:</strong> RCT  <strong>Size:</strong> 54</td>
<td>Inclusion Criteria: English-speaking pregnant women admitted to dependency treatment ward  <strong>Exclusion Criteria:</strong></td>
<td>Intervention: Daily Therapeutic Touch over a 7-day period for 20 minutes each day  <strong>Comparator:</strong> Shared activity with a registered nurse for 20 minutes over a 7-day period or standard of care</td>
<td>Results: There were no statistically significant differences in total symptom scores between groups over the 7 days of the study.</td>
<td>Study Limitations:  □ None  □ Lack of allocation concealment  □ Stopped early for benefit  □ Incorrect analysis of ITT  □ Selective reporting of measures (e.g., no effect outcome)  □ Large losses to F/U  □ Difference in important prognostic factors at baseline</td>
</tr>
</tbody>
</table>

**Quality (certainty) of evidence for studies as a whole:**

- High
- Moderate
- Low
- Very Low

**Low Quality Rating if:**

- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)

**Increase Quality Rating if:**

- Large effect
- Dose-response gradient
- Plausible confounders or other biases increase certainty of effect

**References:**

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</thead>
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### PICO Question:
Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

<table>
<thead>
<tr>
<th>Modality: Therapeutic Touch; Outcome: Vital Signs</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
</table>
| Journal: *Journal of Holistic Nursing*  
Year Published: 2010  
Location: Roosevelt Hospital, New York, New York | To determine whether Therapeutic Touch (TT) can be effectively used in the operative setting and whether it could produce positive outcomes in the period from cerebral angiography to discharge.  
**Study Type:** RCT  
**Size:** 40 participants, 20 per group | Inclusion Criteria:  
Patients who were referred to the for the purpose of having cerebral angiography with a diagnosis of cerebral angiogram with no prior history of having none. Patients had to be able to read and speak English, give consent, and be between 18 – 80 years old, and not have a psychiatric diagnosis.  
**Exclusion Criteria:** None included in article | Intervention: TT  
**Comparator:** Control  
**Design:** The research data were collected in the normal course of the angiogram procedure and recovery room. The blood pressure, pulse, and respirations were routinely noted before, during, and after the procedure. | Results: The efficacy of TT on the blood pressure, respirations, and pulse of the experimental group was not statistically significant.  
**Study Limitations:**  
None  
RCTs  
- Lack of blinding  
- Lack of allocation concealment  
- Stopped early for benefit  
- Incorrect analysis of ITT  
- Selective reporting of measures (e.g., no effect outcome)  
- Large losses to F/U  
- Difference in important prognostic factors at baseline | Low Quality Rating If:  
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)  
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)  
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)  
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)  
Increase Quality Rating If:  
- Large effect  
- Dose-response gradient  
- Plausible confounders or other biases increase certainty of effect |
PICO Question: Does integrating Reiki, Healing Touch and/or Therapeutic Touch into clinical services improve patient outcomes (i.e. reduction in length of stay; reduction of pain, anxiety, stress, or depression; improvement in quality of life; reduction in use of opioids)?

<table>
<thead>
<tr>
<th>Study Acronym; Author; Year Published; Location</th>
<th>Aim of Study; Study Type; Study Size (N)</th>
<th>Patient Population</th>
<th>Study Intervention (# patients) / Study Comparator</th>
<th>Endpoint Results / Outcome (Absolute Event Rates, P values; OR or RR; &amp; 95% CI)</th>
<th>Design Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal: Journal of Alternative &amp; Complementary Medicine; Author: Hammerschlag, R., et al. Year Published: 2014 Location: The Institute for Integrative Health, Baltimore, MD</td>
<td>To assess the quality and review the outcomes of randomized controlled trials of biofield therapies that report using only nonphysical though form of treatment.</td>
<td>RCTs that used only nontouch forms of Biofield therapies</td>
<td>Biofield therapies (external qi gong, Healing Touch, Johrei, Reiki, and Therapeutic Touch)</td>
<td>The research designs of the 28 trials revealed marked heterogeneity in regard to condition treated, number and duration of treatments, nature of the control/comparison group, and outcome measures. 10 trials were excluded on the basis of low quality assessment scores. Twelve of the remaining 18 trials (7 Therapeutic Touch, 3 external qi gong, 1 Reiki, and 1 Healing Touch) reported at least one primary outcome with statistically significant beneficial treatment outcomes.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Size: 28 trials involving 1774 participants for all biofield therapies</td>
<td></td>
<td></td>
<td></td>
<td>Systematic Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Review did not address focused clinical question</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Search was not detailed or exhaustive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Quality of the studies was not appraised or studies were of low quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Methods and/or results were inconsistent across studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)</td>
</tr>
</tbody>
</table>

Increase Quality Rating If: Large effect

Dose-response gradient

Plausible confounders or other biases increase certainty of effect

Low Quality Rating If:
- Studies inconsistent (wide variation of treatment effect across studies, population, interventions, or outcomes varied)
- Studies are indirect (PICO question is quite different from the available evidence in regard to population, intervention, comparison, or outcome)
- Studies are imprecise (when studies include few patients and few events, and thus have wide confidence intervals, and the results are uncertain)
- Publication Bias (e.g. pharmaceutical company sponsors study on effectiveness of drug only small, positive studies found)
The GRADE criteria were used to evaluate the quality of evidence presented in research articles reviewed during the development of this guideline. For more detailed information, see Appendix A.

**Guideline Recommendations:**

In 2017, the **Oncology Nursing Society** stated in their guideline on nonpharmacological pain interventions for reducing chronic cancer pain that there was insufficient or conflicting data for energy-based interventions such as Reiki and Therapeutic Touch.

The **American Society of Clinical Oncology** Clinical Practice Guideline in 2014 on screening, assessment, and management of fatigue in adult survivors of cancer stated:

- Biofield therapies such as touch therapy, massage, music therapy, relaxation, Reiki, and qigong, may also offer some benefit; however, additional research, particularly in the post-treatment period is needed.

In 2011 the **American Academy of Neurology, the American Association of Neuromuscular and Electrodiagnostic Medicine, and the American Academy of Physical Medicine and Rehabilitation** recommended the following for treatment of painful diabetic neuropathy (PDN).

- Electromagnetic field treatment, low-intensity laser treatment, and Reiki therapy should probably not be considered for the treatment of PDN. (Level B).

<table>
<thead>
<tr>
<th>Guideline Issuer and Date</th>
<th>ONS 2017</th>
<th>ASCO 2014</th>
<th>AAN 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transparency</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>2. Conflict of interest</td>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Development group</td>
<td>A</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>4. Systematic Review</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>5. Supporting evidence</td>
<td>B</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>6. Recommendations</td>
<td>B</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>7. External Review</td>
<td>B</td>
<td>A</td>
<td>NR</td>
</tr>
<tr>
<td>8. Currency and updates</td>
<td>A</td>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>

See appendix B for full description of the Trustworthy Guideline grading system.
REFERENCES:

Appendix A. GRADE criteria for rating a body of evidence on an intervention
Developed by the GRADE Working Group

Grades and interpretations:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Further research is very unlikely to change our confidence in the estimate of effect.</td>
</tr>
<tr>
<td>Moderate</td>
<td>Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.</td>
</tr>
<tr>
<td>Low</td>
<td>Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.</td>
</tr>
<tr>
<td>Very low</td>
<td>Any estimate of effect is very uncertain.</td>
</tr>
</tbody>
</table>

Type of evidence and starting level

<table>
<thead>
<tr>
<th>Type of Evidence</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomized trial</td>
<td>high</td>
</tr>
<tr>
<td>Observational study</td>
<td>low</td>
</tr>
<tr>
<td>Any other evidence</td>
<td>very low</td>
</tr>
</tbody>
</table>

Criteria for increasing or decreasing level

**Reductions**
- Study quality has serious (−1) or very serious (−2) problems
- Important inconsistency in evidence (−1)
- Directness is somewhat (−1) or seriously (−2) uncertain
- Sparse or imprecise data (−1)
- Reporting bias highly probable (−1)

**Increases**
- Evidence of association† strong (+1) or very strong (+2)
  †Strong association defined as significant relative risk (factor of 2) based on consistent evidence from two or more studies with no plausible confounders. Very strong association defined as significant relative risk (factor of 5) based on direct evidence with no threats to validity.
Appendix B. Trustworthy Guideline rating scale

The University of Pennsylvania’s Center for Evidence-Based Practice Trustworthy Guideline rating scale is based on the Institute of Medicine’s “Standards for Developing Trustworthy Clinical Practice Guidelines” (IOM), as well as a review of the AGREE Enterprise and Guidelines International Network domains.

The purpose of this scale is to focus on the weaknesses of a guideline that may reduce the trust a clinical user can have in the guideline, and distinguish weaknesses in documentation (e.g. guideline does not have a documented updating process) from weaknesses in the guidance itself (e.g. recommendations are outdated). Current quality scales like AGREE emphasize documentation. They are important checklists for developers of new guidelines, but are less useful for grading existing guidelines. These scales also are harder for clinicians and other persons who are not methodology experts to apply, and their length discourages their use outside formal technology assessment reports. This new scale is brief, balanced, and easy and consistent to apply.

We do not attempt to convert the results of this assessment into a numeric score. Instead we present a table listing the guidelines and how they are rated on each standard. This facilitates qualitative understanding by the reader, who can see for what areas the guideline base as a whole is weak or strong as well as which guidelines are weaker or stronger.

1. Transparency

<table>
<thead>
<tr>
<th></th>
<th>Guideline development methods are fully disclosed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Guideline development methods are partially disclosed.</td>
</tr>
<tr>
<td>B</td>
<td>Guideline development methods are not disclosed.</td>
</tr>
</tbody>
</table>

The grader must refer to any cited methods supplements or other supporting material when evaluating the guideline. Methods should include:

- Who wrote the initial draft
- How the committee voted on or otherwise approved recommendations
- Evidence review, external review and methods used for updating are not addressed in this standard.

2. Conflict of interest

<table>
<thead>
<tr>
<th></th>
<th>Funding of the guideline project is disclosed, disclosures are made for each individual panelist, and financial or other conflicts do not apply to key authors of the guideline or to more than 1 in 10 panel members).</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Guideline states that there were no conflicts (or fewer than 1 in 10 panel members), but does not disclose funding source.</td>
</tr>
<tr>
<td>B</td>
<td>Guideline states that there were no conflicts (or fewer than 1 in 10 panel members), but does not disclose funding source.</td>
</tr>
</tbody>
</table>
C Lead author, senior author, or guideline panel members (at least 1 in 10) have conflict of interest, or guideline project was funded by industry sponsor with no assurance of independence.

NR Guideline does not report on potential conflict of interests.

For purposes of this checklist, conflicts of interest include employment by, consulting for, or holding stock in companies doing business in fields affected by the guideline, as well as related financial conflicts. This definition should not be considered exclusive. As much as anything, this is a surrogate marker for thorough reporting, since it may be assumed that guideline projects are funded by the sponsoring organization and many authors think it unnecessary to report a non-conflict.

3. Guideline development group

<table>
<thead>
<tr>
<th></th>
<th>Guideline development group includes 1) methodological experts and clinicians and 2) representatives of multiple specialties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Guideline development group includes one of the above, but not both.</td>
</tr>
<tr>
<td>B</td>
<td>Guideline developers all from one specialty or organization, and no methodologists.</td>
</tr>
<tr>
<td>C</td>
<td>Affiliations of guideline developers not reported</td>
</tr>
</tbody>
</table>

The purpose of this standard is to ensure that supporters of competing procedures, or clinicians with no vested interest in utilization of one procedure or another, are involved in development of the guideline. Both AGREE II and IOM call for patient or public involvement: very few guideline panels have done so to date, so this is not necessary for guidelines to be rated A. Involvement of methodologists or HTA specialists in the systematic review is sufficient involvement in the guideline development group for our purposes. In the absence of any description of the guideline group, assume the named authors are the guideline group.

4. Systematic review

<table>
<thead>
<tr>
<th></th>
<th>Guideline includes a systematic review of the evidence or links to a current review.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Guideline is based on a review which may or may not meet systematic review criteria.</td>
</tr>
<tr>
<td>B</td>
<td>Guideline is not based on a review of the evidence.</td>
</tr>
</tbody>
</table>

In order to qualify as a systematic review, the review must do all of the following:

- Describe itself as systematic or report search strategies using multiple databases
- Define the scope of the review (including key questions and the applicable population)
- Either include quantitative or qualitative synthesis of the data or explain why it is not indicated
Note: this element does not address the quality of the systematic review: simply whether or not it exists. Concerns about quality or bias of the review will be discussed in text, where the analyst will explain whether the weaknesses of the review weaken the validity or reliability of the guideline.

Note: a guideline may be rated B on this domain even if the review on which it is based is not available to us. This potential weakness of the guideline should be discussed in text of the report.

### 5. Grading the supporting evidence

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Specific supporting evidence (or lack thereof) for each recommendation is cited and graded.</td>
</tr>
<tr>
<td>B</td>
<td>Specific supporting evidence (or lack thereof) for each recommendation is cited but the recommendation is not graded.</td>
</tr>
<tr>
<td>C</td>
<td>Recommendations are not supported by specific evidence.</td>
</tr>
</tbody>
</table>

To score a B on this domain there should be specific citations to evidence tables or individual references for each relevant recommendation in the guideline, or an indication that no evidence was available. Any standardized grading system is acceptable for purposes of this rating. If a guideline reports that there is no evidence available despite a thorough literature search, it may be scored B on this domain, or even A if evidence for other recommendations is cited and graded.

### 6. Recommendations

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Considerations for each recommendation are documented (i.e. benefits and harms of a particular action, and/or strength of the evidence); and recommendations are presented in an actionable form.</td>
</tr>
<tr>
<td>B</td>
<td>Either one or the other of the above criteria is met.</td>
</tr>
<tr>
<td>C</td>
<td>Neither of the above criteria are met.</td>
</tr>
</tbody>
</table>

In order to be actionable, the guideline should specify the specific population to which the guideline applies, the specific intervention in question, and the circumstances under which it should be carried out (or not carried out). The language used in the recommendations should also be consistent with the strength of the recommendation (e.g. directive and active language like “should” or “should not” for strong recommendations, and passive language like “consider” for weak recommendations). A figure or algorithm is considered actionable as long as it is complete enough to incorporate all the applicable patients and interventions. Please see the forthcoming NICE manual (24) for a good discussion of actionability in guidelines.
7. External review

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Guideline was made available to external groups for review.</td>
</tr>
<tr>
<td>B</td>
<td>Guideline was reviewed by members of the sponsoring body only.</td>
</tr>
<tr>
<td>C</td>
<td>Guideline was not externally reviewed.</td>
</tr>
<tr>
<td>NR</td>
<td>No external review process is described.</td>
</tr>
</tbody>
</table>

8. Updating and currency of guideline

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Guideline is current and an expiration date or update process is specified.</td>
</tr>
<tr>
<td>B</td>
<td>Guideline is current but no expiration date or update process is specified.</td>
</tr>
<tr>
<td>C</td>
<td>Guideline is outdated.</td>
</tr>
</tbody>
</table>

A guideline is considered current if it is within the developers’ stated validity period, or if no period or expiration data is stated, the guideline was published in the past three years (NOTE: the specific period may be changed at the analyst’s discretion, based on whether the technology is mature and whether there is a significant amount of recent evidence). A guideline must address new evidence when it is updated. A guideline which is simply re-endorsed by the panel without searching for new evidence must be considered outdated.