

CHECKLIST

Phase 1: Exploration Checklist

Identifying Human Factors and Environmental Context

BOTTOM LINE

Assess internal needs, select an intervention, assemble the team, gauge staff and patient attitudes, confirm readiness (CARI \geq 80), and secure funding. Skipping exploration is the most common reason implementations stall.

1. Internal Needs Assessment

- Review hospital guidelines for current PONV prevention and management.
- Verify PONV incidence is charted in Recovery, ward, and pre-discharge charts.
- Audit current PONV incidence rate (baseline: 30–50% of surgical patients).
- Track rescue antiemetic usage separately – not equivalent to PONV. (Gan, 2014)
- Confirm PONV risk is formally assessed pre-operatively.

Risk Factors Each factor adds 20% risk (Apfel, 1999): female · non-smoker · previous PONV/motion sickness · post-op opioids.

2. Intervention Selection

- Review all six modalities (see Intervention Comparison Card).
- Assess fit with local resources, staff skills, and patient population.
- First-time / nurse-led: default to **acupressure wristbands** (\$5, strongest evidence).
- Credentialed acupuncturist available? Consider body or auricular acupuncture.

Pooled PC6 Evidence Nausea: 47% → 31% (RR 0.68) **HIGH** Vomiting: 33% → 19% (RR 0.60) **HIGH** Rescue: 33% → 20% (RR 0.64) **MODERATE** Lee 2015; Cheong 2013.

3. Team Composition

- Identify **Opinion Leaders** – those with formal/informal influence on attitudes.
- Recruit **Champions** – who will drive implementation past resistance.
- Engage **External Change Agents** – external experts who facilitate decisions.

- Ensure early adopters share professional/cultural backgrounds with target staff.

4. Staff Assessment

- Survey anaesthetists, nurses, midwives, surgeons, and administrative staff.
- Assess baseline knowledge of acupuncture/acupressure for PONV.
- Gauge willingness to use and to pursue further education.
- Identify perceived barriers (evidence, credentialing, equipment, time).

Benchmarks USA: 54% willing; 74% would pursue education; barriers: evidence 79%, providers 71%, equipment 49%. (Faircloth, 2014)
Aus: 42% believed effective; 81% would encourage post-education; 88% wanted training.

5. Organisational Readiness (CARI)

- Complete the Modified CARI assessment. (Barwick, 2011)
- Score 5 categories: system readiness, leadership, staff capability, plan maturity, training.
- Confirm total $\geq 80/100$ (min 15 per category). Address weakest area first if below.

6. Cost and Funding

- Estimate device costs (wristbands \$5; needles \$0.05; e-stim \$40–200; EA \$200–800).
- Calculate staff time for delivery/monitoring.
- Document current antiemetic costs. (Myle, 2016)
- Build cost-effectiveness comparison.
- Identify funding source.

7. Patient Perspectives

- Survey patient willingness to use acupuncture/acupressure.
- Provide education – willingness: 65% → 87%. (Weeks, 2017)
- Only 15% know acupuncture treats nausea at baseline.
- Incorporate patient preferences per guidelines.