# Real-world data: Evaluating a 15-year NADA ear acupuncture service for breast cancer treatment-related hot flushes





# Introduction

The NICE Real-World Evidence Framework (2022) recognises the role of such data to improve understanding of healthcare interventions. We report real-world outcomes of a 15-year service offering breast cancer survivors NADA (National Acupuncture Detoxification Association) ear acupuncture to manage hot flushes and night sweats (HFNS) associated with adjuvant hormonal treatments tamoxifen and aromatase inhibitors (de Valois 2022).

# **Key Questions**

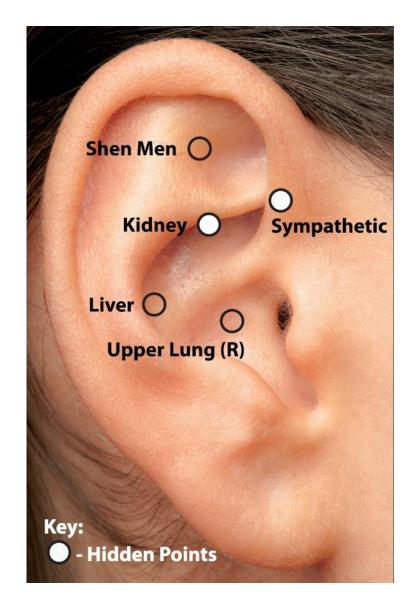
- 1. Does usual practice alleviate symptoms in a clinically meaningful way?
- 2. How do clinical results compare to published scientific evidence?

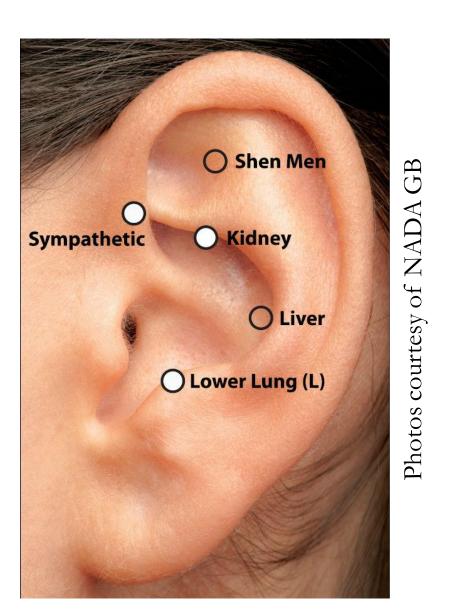
#### Methods

The NADA service was implemented following our initial research project (n=50, de Valois 2012). Early breast cancer survivors attended for 8 sessions of NADA acupuncture, delivered weekly in groups of 4 women, who were:  $\square \ge 6$  months post active treatment (surgery, chemotherapy, radiotherapy)

- $\square$  Taking adjuvant hormonal therapy  $\ge 6$  months
- $\square$  Self-reporting an average  $\ge 4$  HF&NS per 24-hour period for  $\ge 3$  months.

Treatments were administered by NADA GB trained non -acupuncturists: 1 nurse, 1 shiatsu practitioner, 2 complementary therapists.





#### Selected outcome measures

- ☐ Hot Flush Diaries record HFNS frequency and severity over 14 days
- ☐ Hot Flush Rating Scale (HFRS) measures bothersomeness of HFNS
- ☐ Measures were administered at:
  - $\square$  Baseline 2 weeks prior to treatment
  - □ EOT end of 8 treatments
  - $\Box$  Post tx 4 4 weeks after EOT
  - $\Box$  Post tx 18 18 weeks after EOT

## **Results: Key Question 1**

#### Service use, questionnaire return, and safety

- ☐ Paperwork available for 415 referrals from Dec 2005 to March 2020
- ☐ Not all referrals met eligibility criteria and some declined to participate
- □ 300 sets of evaluable data at baseline; other data missing at random
- □ 300 women received at least 1 NADA treatment
- □ 275 (92%) completed all 8 NADA treatments
- □ 2285 treatments were recorded
- ☐ 2 adverse events were formally reported; neither were serious.

# Discussion

- ☐ This is the first evaluation of real-world long-running NADA service
- □ NADA is acceptable to women: 92% completed all 8 treatments
- ☐ Data indicate NADA is safe: 2 adverse events in 2285 treatments
- ☐ Missing data is a limitation.

### Conclusion

Fifteen years of NADA service data indicate that results compare favourably with other published research findings for acupuncture for HFNS. NADA proved to be sustainable in the long-term for funders, management, therapists, and patients.

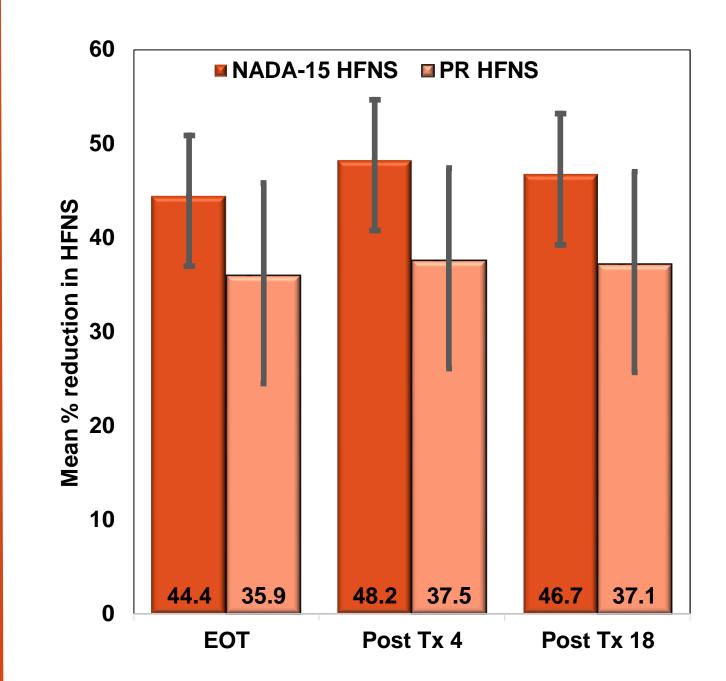
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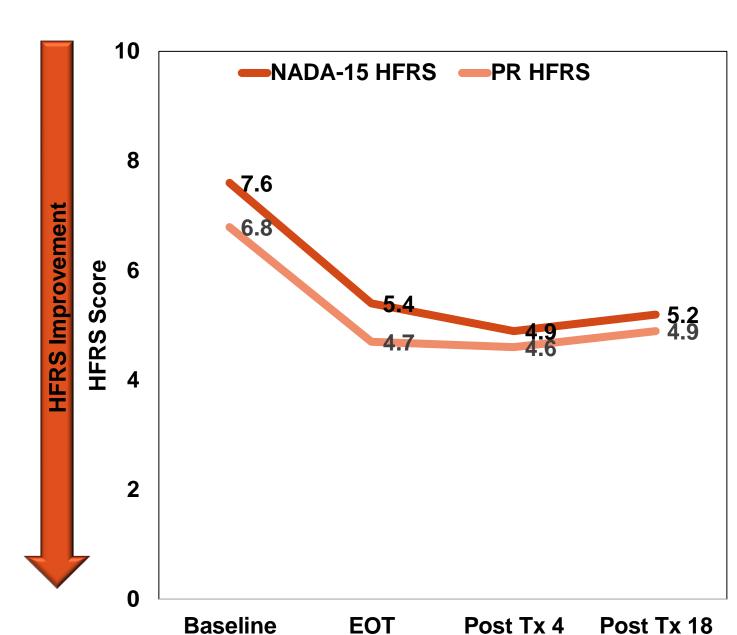
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# Results: Key Question 2

#### Comparing NADA-15 with our previous research (PR)

- ☐ Mean HFNS/day (SD) at Baseline and EOT:
  - □ NADA-15: 10.9 (8.1) reducing to 6.9 (5.0)
  - ☐ PR: 10.7 (4.8) reducing to 7.7 (4.7)
- ☐ Mean % reduction from baseline is an alternative metric (see below) ☐ HFRS: ≥2 point change is clinically meaningful: positive meaningful change was achieved at all measurement points over baseline.





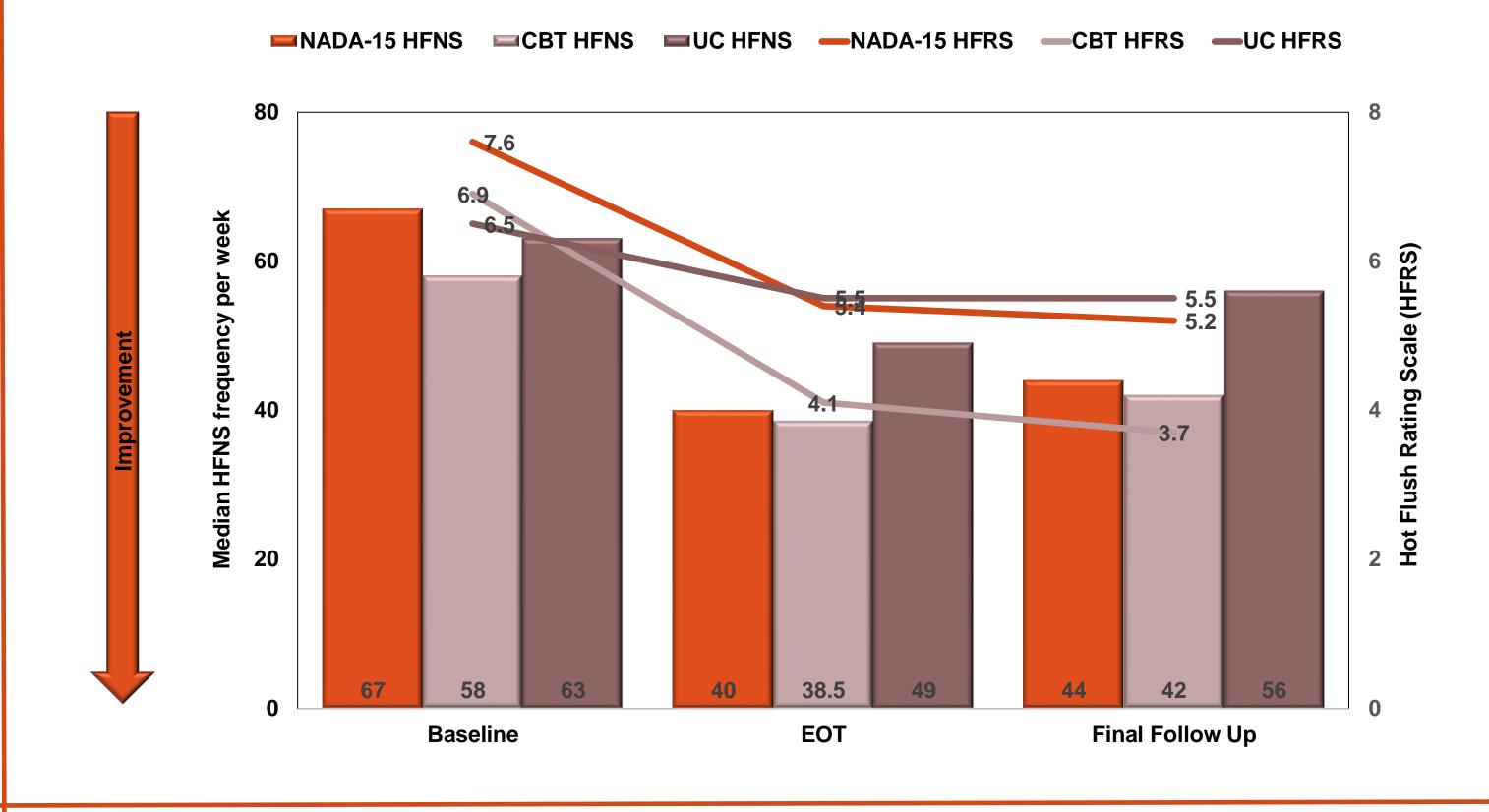
#### Comparing NADA-15 with other published research

This shows comparable outcomes between service and RCT results.

Criteria	NADA-15	Other published research
Baseline inclusion HFNS/day	≥ 4/day	≥ 2/day
HFNS reduction: Baseline to EOT	44% after 8 Tx	<ul> <li>50% after 16 Tx (Walker 2010)</li> <li>43.2% after 5-12 Tx (Frisk 2014)</li> </ul>
HFNS reduction: Baseline to final follow up	46.7% (18 weeks)	45.6% (Frisk) (Mean 6 months, range 3-9 months)

#### Comparing NADA-15 with a CBT vs Usual Care RCT

Comparison with an RCT of Cognitive Behaviour Therapy (CBT) vs usual care (UC) (Fenlon 2020) suggests NADA-15 has a similar performance to CBT in reducing HFNS frequency and is more effective than usual care.



#### References

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