University of Southampton

# What Nurses Really Want:
# Sustainable Shift Patterns



Policy Brief

# Executive summary

Shift patterns are a controllable lever for improving nurse wellbeing and retention, yet evidence on optimal design has been lacking.

This research fills that gap by quantifying registered nurses' rota preferences and calculating the compensation required to offset unsocial working patterns.

# What is the challenge and policy context?

The UK health system faces critical nursing workforce shortages. Persistent turnover reduces care continuity, increases temporary staffing costs, and places sustained pressure on remaining staff.

While recruitment and retention are influenced by many factors, **shift patterns are both important to nurses and within organisational control**. Current evidence on optimal shift design remains uneven, with many scheduling decisions made pragmatically to meet service targets rather than staff needs.

**The current policy landscape:**

- Agenda for Change provides unsocial hours enhancements for nights, weekends, and bank holidays
- Most staff (Bands 4-9) receive time plus 30% for nights and Saturdays, and time plus 60% for Sundays
- Local policies govern schedule construction and staff input opportunities

**The evidence gap:** Previous research has not quantified the trade-offs nurses would accept between night frequency, weekend working, schedule predictability, shift length, and pay. Without this evidence, policymakers lack benchmarks to design sustainable schedules that align organisational needs with what nurses value most.

# Key findings

Nurses require approximately **29% additional pay** to accept night-only shifts

Losing whole weekends requires **21% additional compensation**

**9–10-hour shifts are preferred** over both 8-hour and 12.5-hour shifts

**Predictable schedules and meaningful opportunities** to request shifts are highly valued



### RECOMMENDATIONS

Limit mandatory night-only patterns, protect whole weekends off, improve schedule predictability and staff input, consider intermediate shift lengths (9-10 hours), and combine fair compensation with genuine rota redesign.

# What does our research say?

We conducted the **first large-scale discrete choice experiment** with UK registered nurses (n=1,449) to quantify preferences for shift pattern characteristics. We collected data between July and August 2025.

**Our approach:**

- Participants chose between pairs of hypothetical shift patterns varying by: shift length, schedule predictability, flexibility to request shifts, weekend working, pay level, and night-shift frequency
- Sample included nurses across all UK nations, predominantly NHS (84.5%), with representation across all pay bands

## KEY RESEARCH FINDINGS

**1. Night work and weekend patterns are the least preferred**

- **Night-only shift**s generated the strongest negative response (requiring 29% additional pay to accept in the primary model; a sensitivity analysis indicated a higher value)
- **No whole weekends off** was the second most disliked feature (requiring 21% additional pay in the primary model)
- **Mixed day/night patterns** were also disliked, but less intensely than night-only

**2. Shift length preferences challenge current practice**

- 9-10 hour shifts were preferred to both 8-hour and 12.5-hour shifts
- 12.5-hour shifts (the norm in NHS) were actively disliked
- Intermediate shift lengths may provide a more acceptable compromise: fewer working days than with short shifts, without the fatigue associated with long shifts

**3. Predictability and flexibility matter significantly**

- Unpredictable rotas required 6% additional compensation
- Being restricted to only swapping shifts with colleagues required 5% additional compensation
- Nurses preferred having at least 3-4 shift choices monthly

**4. Preferences vary by workforce characteristics**

- **Younger staff** (<40 years old) are more pay-sensitive and value whole weekends more strongly than older nurses
- **Senior staff** (Band 8+) show stronger aversion to night-only work
- **Non-shift workers** require larger incentives to transition into shift patterns
- **Longer commutes** intensify dislike of 12.5-hour shifts
- Overall, aversion to night-only work and loss of whole weekends off was shared across the workforce

# What should happen next?

Current unsocial hours enhancements may not fully compensate for the most burdensome shift patterns. Our quantified preferences provide evidence-based benchmarks for rota design and pay policy.

## POLICY RECOMMENDATIONS

**1. Limit exclusive night-shift patterns**

- Avoid mandatory scheduling nurses for night-only duties
- Review whether compensation reflects sustained exposure to night work rather than assuming existing enhancements fully offset the burden of night work
- Avoid presenting mixed rotations as universally preferable: older nurses showed greater aversion to this pattern

**2. Guarantee whole-weekend time off**

- Ensure nurses receive at least one full weekend off per month (two is strongly preferred)
- Pay enhancements should accompany rather than replace efforts to protect guaranteed weekend time off
- This is particularly important for early-career nurses who show strongest preferences for protected weekends

**3. Improve schedule predictability and flexibility**

- Publish rotas as early and as consistently as possible
- Enable nurses to make 3-4 shift requests monthly
- These changes deliver meaningful utility gains and support work-life balance

**4. Pilot 9-10 hour shift patterns**

- Trial intermediate shift lengths as alternatives to 12.5-hour shifts
- This could improve staff satisfaction without reverting to 8-hour shifts that increase working days
- Particularly beneficial for staff with longer commutes

**5. Tailor retention strategies by career stage**

- Younger nurses (under 40) are highly sensitive to pay compensation and loss of weekends off
- Senior staff require additional support around night work: consider exemptions or enhanced compensation
- Non-shift workers need substantial incentives to transition: factor this into recruitment planning

## IMPLEMENTATION CONSIDERATIONS

**For NHS Trusts and employers:**

- Review current rotas against these measures: night-only work; whole weekends off; predictability; and staff input
- Co-design and pilot 9-10 hour shifts
- Examine if access to preferred patterns is equitable across groups

**For NHS England and national policymakers:**

- Consider whether Agenda for Change enhancements adequately reflect sustained exposure to less preferred shift patterns
- Include rota quality in workforce planning and retention strategies

**Cost-benefit:** Rota redesign may deliver larger staff retention gains than pay increases alone. Improvements to predictability, weekend protection, and shift length can meaningfully enhance the work experience with manageable service adjustments.

# References and Further Information

**Full research paper:**

Dall'Ora, C., Barker, H., Emmanuel, T., Ejebu, O-Z., & Hossain, M.J. (2026). Balancing the rota: registered nurses' preferences for shift patterns - a discrete choice experiment. BMJ Open; 16(8):e116968 doi: 10.1136/bmjopen-2026-116968

**Key supporting evidence:**

- Emmanuel, T., et al. (2024) The important factors nurses consider when choosing shift patterns: A cross-sectional study. Journal of Clinical Nursing, 33(3), 998-1011. https://doi.org/10.1111/jocn.16974
- Dall'Ora, C., et al. (2022). Because they're worth it? A discussion paper on the value of 12-h shifts for hospital nursing. Human Resources for Health, 20, 36. https://doi.org/10.1186/s12960-022-00731-2
- Barker, H.R., et al. (2025). "I don't think there's necessarily a one size fits all" negotiating competing priorities in nurse shift scheduling: a qualitative study. BMC Nursing, 24, 1048. https://doi.org/10.1186/s12912-025-03705-6

**Methodology note:**

This study used a discrete choice experiment with 1,449 registered nurses across the UK. Each participant completed 12 paired choice tasks, generating 17,388 choice observations. Multinomial logit models estimated average preferences and willingness-to-accept compensation for different shift features.

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