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ASSESSING THE VALUE OF A FEMALE EXTERNAL CATHETER FOR THE MANAGEMENT OF FEMALE PATIENTS WITH URINARY INCONTINENCE IN THE NON-ACUTE SETTING: PRELIMINARY COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES

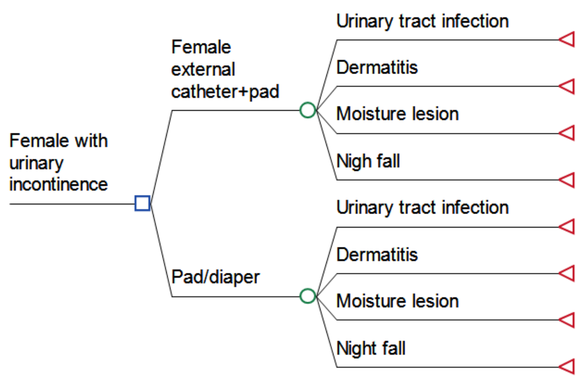
- **Urinary incontinence (UI)** costs Europe €69.1 billion annually, with 43.8% prevalence in women.
- UI is managed based on severity and care setting. The **Female External Catheter (FEC)** is a new non-invasive device that uses low-pressure suction and an absorbent wick to collect urine into a sealed canister.
- This study evaluated the **cost-effectiveness** of **FEC** compared to standard care (**pads/diapers**) for managing female UI in the **United Kingdom** (UK) in **non-acute settings** (**nursing home or home care**) from the **payer perspective** (NHS/Personal Social Services).

External female catheters

Pads/diapers

METHODS

- A cost-effectiveness analysis model was developed over a **one-year horizon** for a hypothetical female cohort with UI.
- A systematic literature review was conducted to retrieve model parameters related to **complication rates** (urinary tract infections, dermatitis/moisture lesions, night falls) [1-5], **nursing time, environmental impact** and **quality of life**.
- **Healthcare resource utilization and costs** were derived from published UK-specific data, including device acquisition costs, nursing time costs, and costs of managing complications.
- It was assumed that FEC strategy (1.50/day) is combined with the use of pads (1/day), while 5 pads/diapers per day are considered for standard of care.
- **Probabilistic sensitivity analyses (PSAs)** have been performed to test the robustness of the model results considering a willingness-to-pay threshold of £30,000.



Summary of main cost inputs	£
Pad/diaper	0.10
Urinary tract infection	1,066
Dermatitis/moisture lesion	144
Night fall	3,317
Nurse cost per minute (nursing home)	0.24
Nurse cost per minute (home)	0.45
Ordinary wastage (Kg)	1.14
Invasive wastage (Kg)	3.93

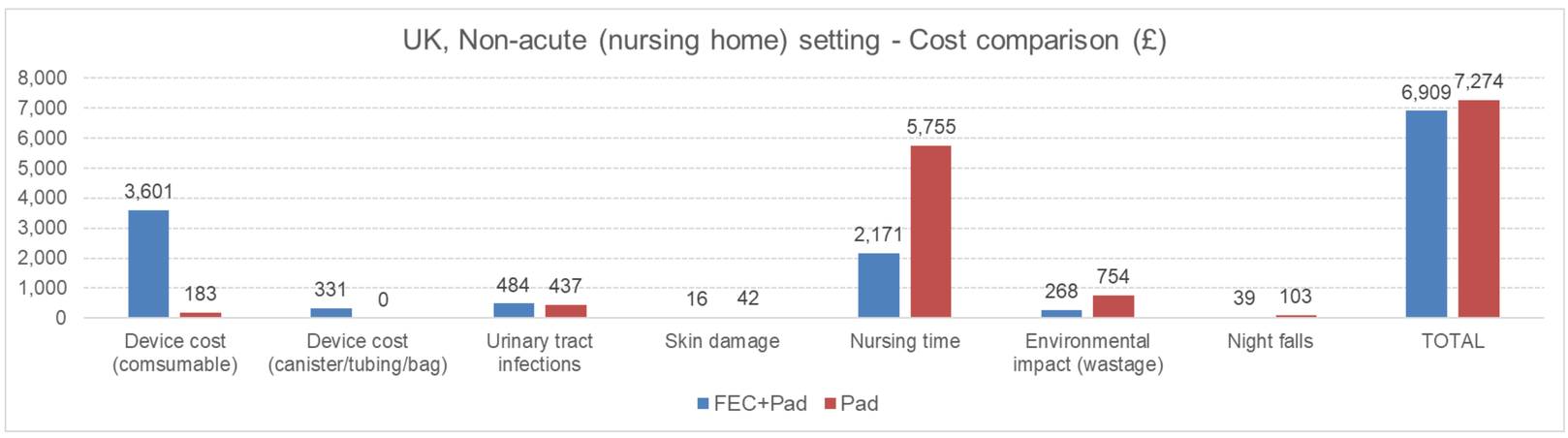
RESULTS

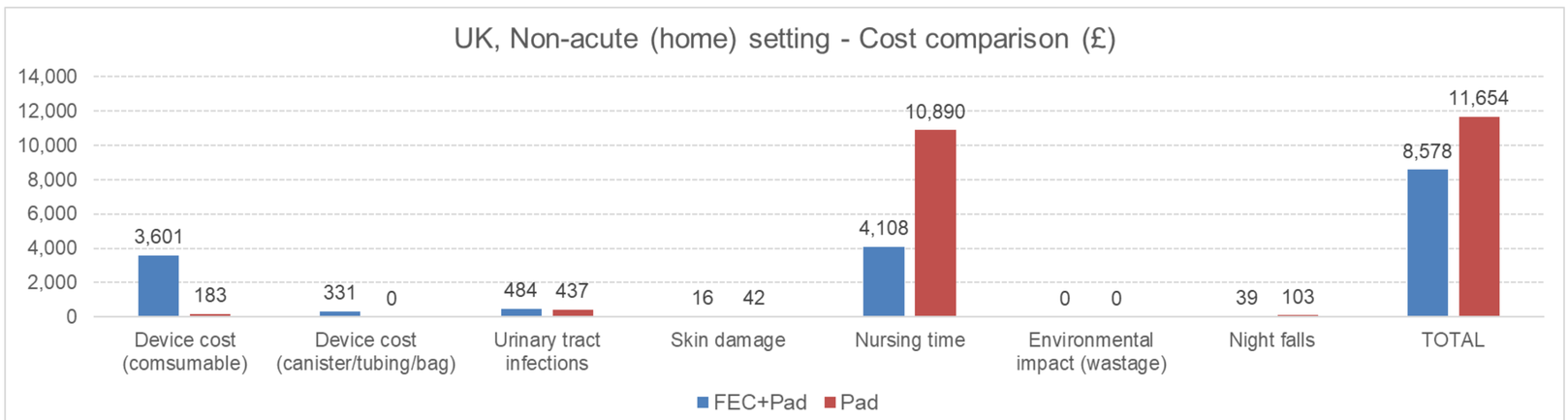
NURSING HOME SETTING:

- **FEC** is **dominant** compared to pads/diapers with a mean annual cost per patient of £6,909 versus £7,274 and 0.7792 QALYs versus 0.7790 QALYs.
- The main **cost drivers** are **consumables** (52%) for FEC, and **nursing activities** (79%) for pads/diapers.
- The PSA showed the cost–effectiveness of FEC in 54.20% of simulations.

HOME CARE SETTING:

- **FEC** is confirmed as **dominant** with a mean annual cost per patient of £8,578 versus £11,654 (same QALYs of the nursing home setting).
- **Nursing activities** represent the **largest cost component** for both strategies (48% for FEC and 93% for pads/diapers).
- The PSA showed the cost–effectiveness of FEC in 81.40% of simulations.





CONCLUSIONS

- The choice of incontinence devices should be guided by clinical needs, balancing mobility, infection risk, and skin integrity.
- While pads/diapers remain common, **external female catheters offer an innovative cost-saving alternative in select contexts**.
- A multidisciplinary approach is key to ensuring safe, effective, and dignified care.

MAIN REFERENCES

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DISCLOSURE

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