

# Diagnosing Endometrial Cancer: Can 1.0 mm make a difference?

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## BACKGROUND:

In NHS Lothian, women presenting to the GP with postmenopausal bleeding (PMB) are referred through the PMB pathway. NHS Lothian increased the endometrial thickness (ET) threshold for referral from 4.0mm to 5.0mm on 11<sup>th</sup> May 2023.



GP presentation with PMB



USS ET  $\geq$  threshold



Gynae clinic for biopsy



Biopsy = Endometrial Cancer



Gynaecology Oncology MDM

## OBJECTIVES:

To identify how this change affected endometrial cancer diagnosis via the ‘PMB pathway’ and the clinical workload generated.

## METHODS:

Patients with a new diagnosis of endometrial cancer were selected from gynae-oncology MDMs 6 months preceding and following the 11<sup>th</sup> May (with a 3-month washout period). Caldicott approval was granted by NHS Lothian, and the data was stored on a restricted excel spreadsheet in line with confidentiality regulations.

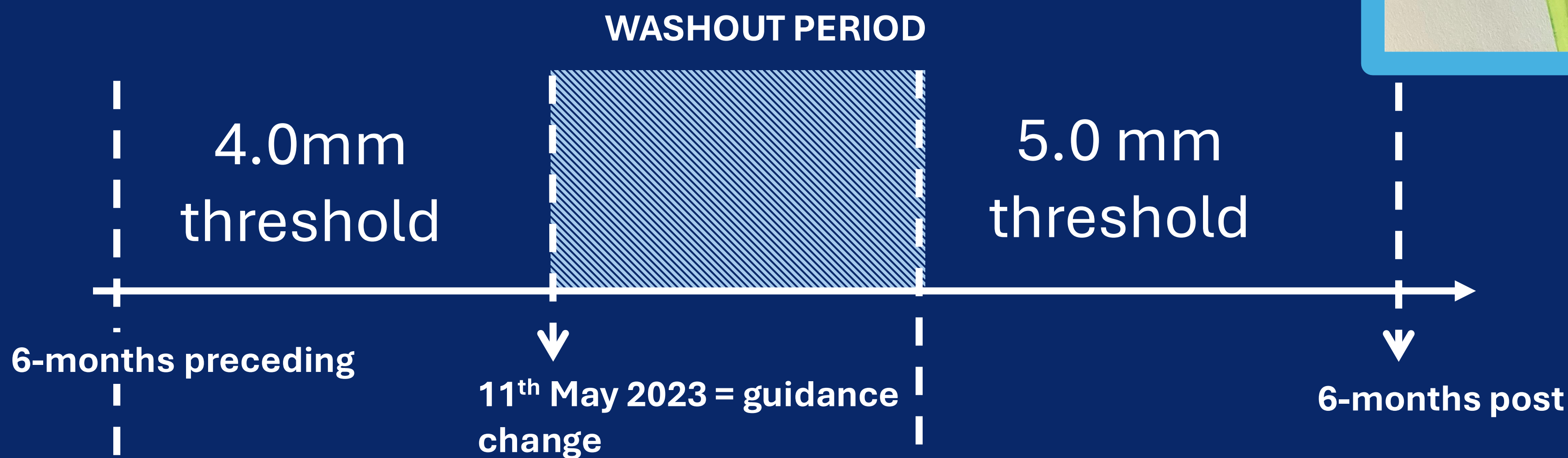
### Patient data

- Demographics
- Scan findings
- Time to diagnosis
- Final treatment
- Clinical + pathological outcomes

### Pathway data

- Number of ultrasound scans
- Number of PMB clinic appointments

Statistical analysis was completed utilising SPSS, version 28. A Mann Whitney U test and Chi-Squared test were used. A p-value of <0.05 was considered statistically significant



New cases: **39**  
Ultrasound scans:  
**1192**

Appointments:  
**764**

Grade 1:  
**70%**

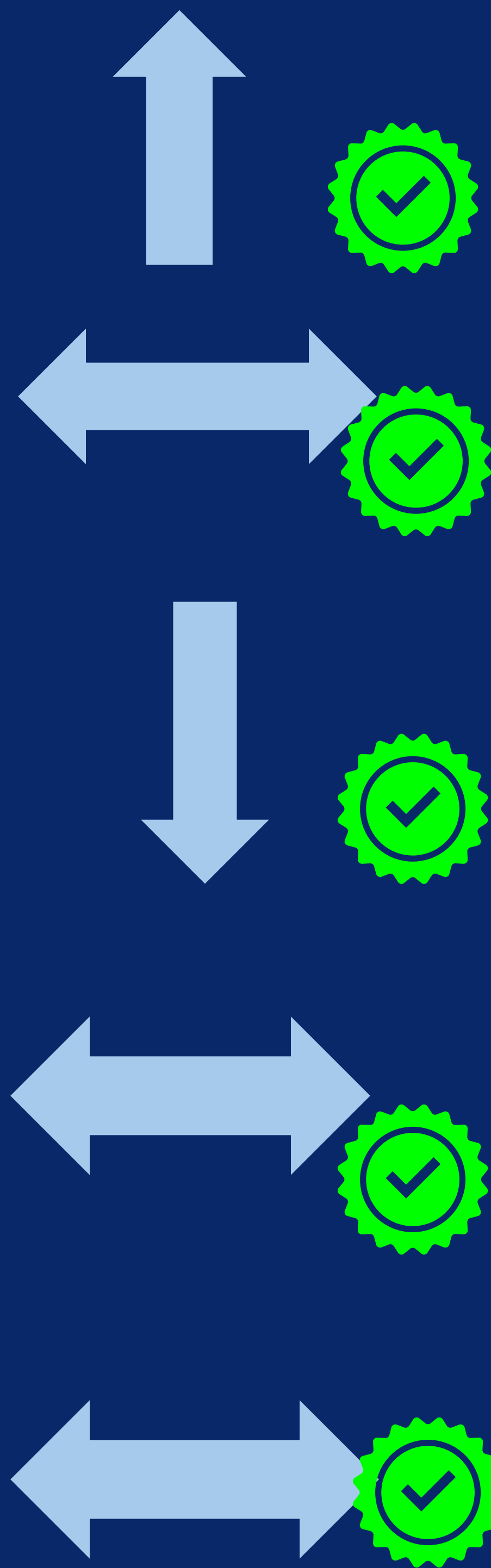
Stage 1:  
**69%**

New cases: **58 (up 19)**  
Ultrasound scans:  
**1283 (up 91, 8%)**

Appointments:  
**543 (down 221, 29%)**

Grade 1:  
**65% (p=0.589)**

Stage 1:  
**68% (p=0.993)**



## Comparable Demographics

\*Mean (+/- SD)

| Demographic              | 4mm*        | 5mm*       | % change             | P value |
|--------------------------|-------------|------------|----------------------|---------|
| Cancer cases diagnosed   | 39          | 58         | 48.7 (19 more cases) | N/a     |
| Age (years)              | 66.6 (9.4)  | 68.1 (9.6) | 2.3                  | 0.387   |
| BMI (kg/m <sup>2</sup> ) | 34.1 (10.0) | 33.0 (9.3) | -3.2                 | 0.630   |
| ET                       | 15.5 (10.0) | 15.0 (8.1) | -3.0                 | 0.853   |
| Use of HRT               | 1/39 (2.6)  | 1/58 (1.7) | -0.8                 | 0.775   |

## Time from diagnosis to treatment

|                                                    | 4mm*         | 5mm*         | % Change | P value |
|----------------------------------------------------|--------------|--------------|----------|---------|
| Days from PMB US scan to final treatment           | 149.0 (80.4) | 144.3 (60.6) | -3.1     | 0.663   |
| Days from inclusion MDM to date of final treatment | 63.0 (78.3)  | 49.6 (29.2)  | -21.3    | 0.900   |

\* Number of days (+/- SD)

## CONCLUSION: **Yes 1.0mm DOES make a difference.**

These results indicate that increasing the ET threshold has:

- Lead to **more cancers diagnosed** over 6 months.
- **Not** significantly effected the number/grade/stage at which endometrial cancer is diagnosed.
- Significantly **reduced** the number of gynae clinic appointments being generated per PMB scan.

We are confident in keeping the 5.0mm threshold for invasive investigations at present. We have created an opportunity to divert significant resources (almost 450 appointments) annually to gynaecology long waiting patients.

## FUTURE DEVELOPMENTS:

### • Patients on HRT

Only 1 patient in each group was taking HRT. These patients may be better served with a dedicated pathway aiming to optimise bleeding symptoms and address concurrent menopause symptoms.

### • Patient age

Average age at diagnosis was 66/68 years (4mm/5mm). NICE 2015 guidelines recommend urgent referral for those aged >55 (with only consideration of referral <55 years).