
# RWD & De-escalation

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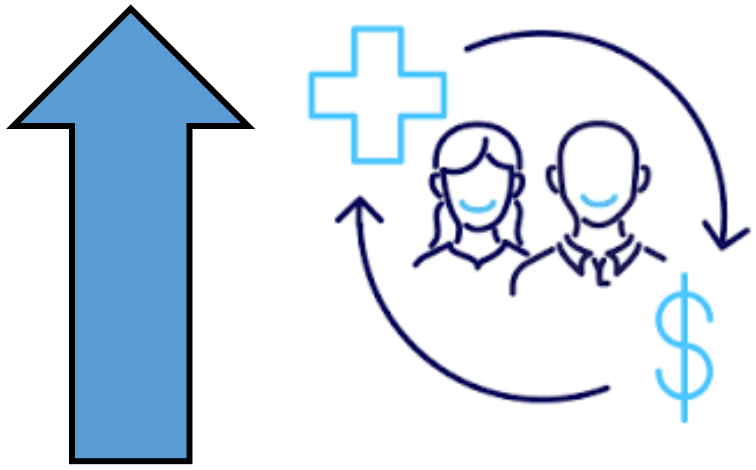
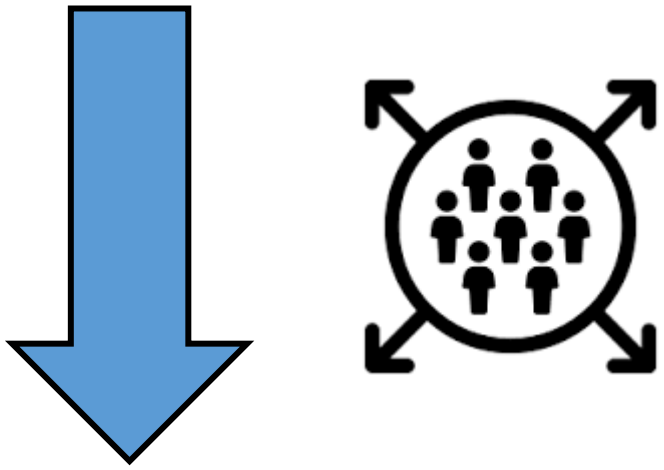
# Healthcare system under pressure

**Increasing demand and expenditures**



**Decreasing capacity**



# De-escalation in oncology

- Personalized medicine has opened door for (de-)escalation
- Reduce overdiagnosis and overtreatment

- Why de-escalation?
  - Improve patient outcomes (QoL)
  - Improve resource use (costs + capacity)

# Types of de-escalation

Omission of treatment or care

Reduction of treatment or care (dose, nr. cylces)

Response-adapted/ biomarker guided de-escalation

Substitution of (invasive) treatment for less invasive

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**Surgery → active surveillance**
*DIRECT-DCIS trial*

Response-adapted/ biomarker guided de-escalation

Reduction of treatment or care (dose, nr. cylces)

**↓ Less fractions radiotherapy**
*SCOPES trials*

Substitution of (invasive) treatment for less invasive

**Staging laparoscopic surgery → MRI**
*DISCO trial*

**Neoadjuvant IT→ omit major surgery**
*IMCISION trial*

# Types of de-escalation

**Omission** of treatment or care

**↓ Imaging**
*Real-world (hospital) data*

**Surgery → active surveillance**
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# Increasing demand for imaging

- More patients, more diagnostics per patient

**Routine Surveillance for Cancer Metastases — Does It Help or Harm Patients?**

**Authors**: H. Gilbert Welch, M.D., M.P.H. , and Lesly A. Dossett, M.D., M.P.H. Author Info & Affiliations

Published April 26, 2025 | N Engl J Med 2025;392:1667-1670 | DOI: 10.1056/NEJMp2414159 | VOL. 392 NO. 17

- Capacity issues at the radiology department. Taken measures were not sufficient.

- Aim: data-driven de-escalation of imaging
  - Focus on “low-value” imaging
  - Real-world data

## Low-value care

- Definition:
  - Healthcare practices (services and technologies)
  - that have been demonstrated
  - to provide little to no benefit overall
  - or that even cause harm
  - to certain patient groups



# Study: Guideline-discordant use of MRI in BC surveillance

- Breast MRI in clinical guidelines

| Screening for breast cancer | During diagnosis/treatment: | Surveillance after breast cancer |
|---|---|---|
| Currently: not in population-based screening program (only in women with (genetic) high-risk)<br>• From 2030: women with breast density D will receive MRI | Only in a subgroup (e.g. younger patients / with high breast density (C/D)) | Women < 40 years:<br>• <3 years after diagnosis: annual MRI<br>• >3 years after diagnosis: in women with breast density C/D until the age of 40<br>**Women > 40 years:**<br>• **No MRI, only XMG (mammography)** |

**Maandrapportage Capaciteit beeldvormende diagnostiek**

*Periode: nov 2025 t/m jan 2026*

| Modaliteit | Mei | Juni | Juli | Aug | Sept | Okt | Nov | Dec | Jan | Feb | Maart | April |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CT | | | | | | | | | | | | |
| MRI | | | | | | | | | | | | |
| PET-CT | | | | | | | | | | | | |

- Aim: to investigate the guideline-discordant use of breast-MRI in the surveillance after breast cancer (based on **hospital data**)

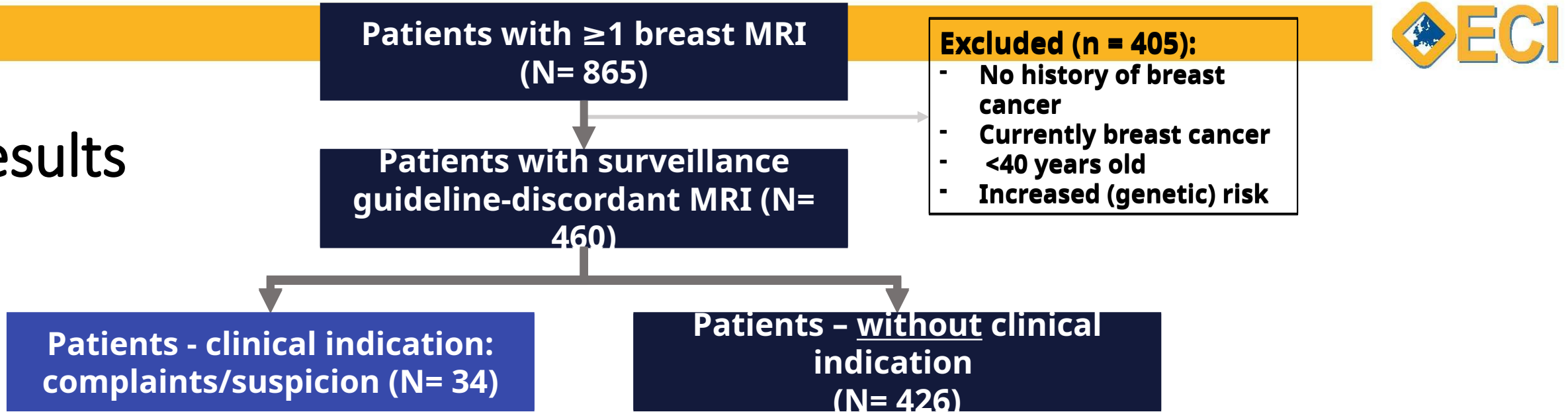
# Study: Guideline-discordant use of MRI in BC surveillance

- Requested dataset:
  - Women with surveillance breast-MRI between July 2024 and June 2025 at this institute
  - Inclusion: women > 40 year with a history of breast cancer, no increased (genetic) risk
  - Exclusion: MRI  requested for trial

- Data on patient and tumor characteristics, treatment history, imaging and pathology reports
  - Structured data
  - Unstructured data: reports = open text field.

| **MRI reports** | **Pathology reports** |
|---|---|
| Breast density | Tumor characteristics |
| Reason for MRI request<br>• Suspicion/complaints, preference, regular FU. | Pathology result<br>• Malignant/not malignant<br>• BC recurrence/metastasis, BC second primary, other |
| MRI result (BIRADS classification)<br>• Positive: BIRADS 3, 4, 5 | |

# Results


Patients with ≥1 breast MRI (N= 865)
Excluded (n = 405):
- No history of breast cancer
- Currently breast cancer
- <40 years old
- Increased (genetic) risk
Patients with surveillance guideline-discordant MRI (N= 460)
Patients - clinical indication: complaints/suspicion (N= 34)
Patients – without clinical indication (N= 426)

# Results

**Patients with ≥1 breast MRI (N= 865)**

**Excluded (n = 405):**
- No history of breast cancer
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**Patients with surveillance guideline-discordant MRI (N= 460)**

**Patients - clinical indication: complaints/suspicion (N= 34)**

**Positive MRI (n = 8, 23.5%)**

**Patients – without clinical indication (N= 426)**

**Positive MRI (n = 30, 7.1%)**

**Positive MRI = BIRADS 3/4/5**

**Patients 40-50 (n=189)**

**Positive MRI (n= 20, 10.6%)**

**Patients 50-60 (n=170)**

**Positive MRI (n = 9, 5.3%)**

**Patients 60+ (n=71)**

**Positive MRI (n = 3, 4.2%)**

# Results

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**Patients - clinical indication: complaints/suspicion (N= 34)**

**Positive MRI (n = 8, 23.5%)**

**Malignancies (n = 4, 11.8%)**

*Malignancies (other) (n = 2)*

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**Patients 40-50 (n=189)**

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**Patients 60+ (n=71)**

**Positive MRI (n = 3, 4.2%)**

**Malignancies (n = 0, 0%)**



# Next: De-implementation

- Generate awareness
  - Involve clinicians and share results
- Provide support
  - Clear advise/communication
  - Provide alternative
- Discuss implications of de-implementation
  - ↓ production?, ↑ time & FTE savings?

# Discussion – what can we do in our hospitals?

- Join forces for **high quality** RWD collection
  - Investigator-initiated studies
  - Larger sample sizes

- Guideline vs Clinical practice

- De-escalation → De-implementation
  - Clinicians: change in behavior?
  - Institute: ↓production, ↑time & FTE savings?

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