

The influence of MDT care on survival from Breast Cancer

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Objective

- Does the **Multi Disciplinary Team (MDT)** model of care contribute to improved **survival** of women with breast cancer?

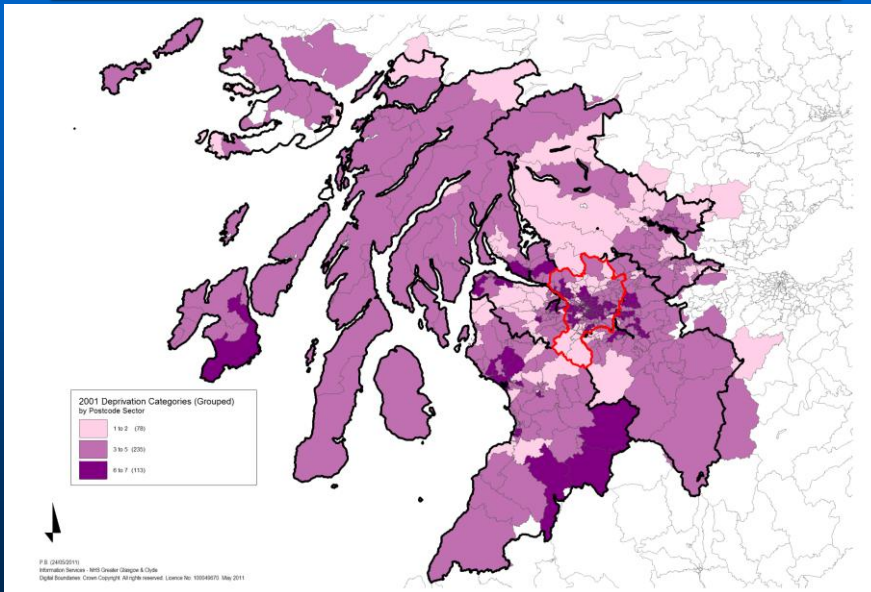
Definition of MDT

- A specialist breast surgeon operating on > 50 breast cancers per year.
- Plus a pathologist, oncologist, radiologist, specialist nurse.
- Evidence based guidelines.
- Formal weekly MDT meeting.
- Audit of clinical activity.

Study design - Intervention

1990	5 West of Scotland health boards (population)	
	4 health boards (1.6 million)	1 health board (900,000)
Mid 1995	Without intervention	Intervention MDT
2000	<u>Comparison</u> 4 health boards	<u>Intervention</u> 1 health board

Socioeconomic circumstances



Patient selection

Scottish Cancer Registry linked to GRO death data

West of Scotland Health Board residents

Female breast cancer (ICD 10, C50)

Invasive and Symptomatic 14,358

Exclusions 636

Study Population
13,722

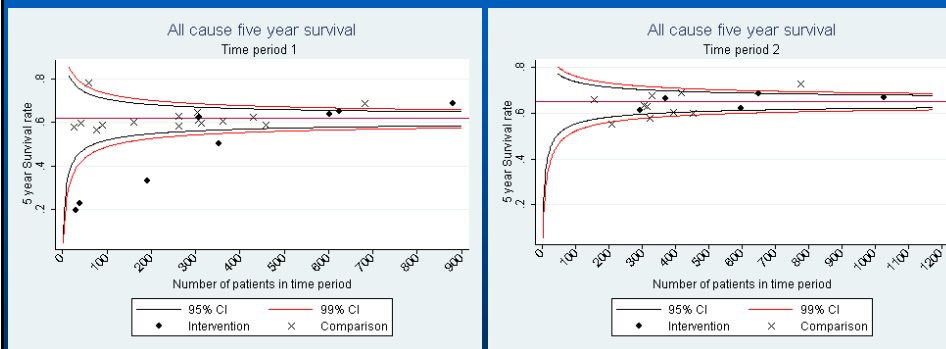
Pre MDT (1990-mid1995)

	Comparison (%)	Intervention (%)	p-value
Age (years)			
<=49	853 (21.8)	735 (23.8)	0.262
50-64	1,299 (33.2)	996 (32.2)	
65-79	1,236 (31.6)	948 (30.7)	
80+	525 (13.4)	409 (13.2)	
Deprivation			
Most affluent	448 (11.4)	548 (17.7)	< 0.001
Intermediate	2,745 (70.1)	1,298 (42.0)	
Most deprived	720 (18.4)	1,242 (40.2)	

Post MDT (mid 1995-2000)

	Comparison (%)	Intervention (%)	p-value
Age (years)			
<=49	823 (21.9)	739 (25.0)	< 0.001
50-64	1,131 (30.1)	751 (25.3)	
65-79	1,220 (32.5)	1,032 (34.8)	
80+	585 (15.5)	440 (14.9)	
Deprivation			
Most affluent	449 (11.9)	533 (18.0)	< 0.001
Intermediate	2,684 (71.4)	1,255 (42.4)	
Most deprived	626 (16.7)	1,174 (39.6)	

5 year survival in 2 time periods



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Survival – all cause

	Comparison Hazard ratio	Intervention Hazard ratio
1990-1995	1	1.07 (0.99,1.16)
Post MDT 1995-2000	1	0.89 (0.82,0.98)

p= 0.002
interaction

Adjusted for age & deprivation

Survival – breast cancer specific

	Comparison Hazard ratio	Intervention Hazard ratio
1990-1995	1	1.11 (1.01,1.27)
Post MDT 1995-2000	1	0.83 (0.74,0.92)

p= 0.002
interaction

Adjusted for age & deprivation

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Key findings

1. Introduction of MDTs was associated with:
 - 11% lower all-cause mortality
 - 17% lower breast cancer specific mortality
2. And there was a reduction in survival variations between hospitals.

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