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Equity of access to revascularisation in south Wales by socioeconomic deprivation

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Introduction

- Background:
 - Previous findings
 - Cardiac Disease National Service Framework
- Service redesign
- Aim of the study



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Method

- Study population
- Follow-up and outcomes
- Explanatory variables
- Analysis

Results – Incidence rates

Incidence rate per 1,000 person-days post-AMI for six-month revascularisation following first-time acute myocardial infarction for south Wales residents, 2010-13

	2010-11 cohort			2012-13 cohort		
	Person-days post-AMI	Total	Incidence rate (95% CI)	Person-days post-AMI	Total	Incidence rate (95% CI)
Socioeconomic Status						
1 (Least deprived)	65589	328	5.00 (4.49 - 5.57)	41481	318	7.67 (6.87 - 8.56)
2	77583	427	5.50 (5.01 - 6.05)	42792	327	7.64 (6.86 - 8.52)
3	96486	533	5.52 (5.07 - 6.01)	51975	373	7.18 (6.48 - 7.94)
4	103008	514	4.99 (4.58 - 5.44)	54798	418	7.63 (6.93 - 8.40)
5 (Most deprived)	105624	456	4.32 (3.94 - 4.73)	63533	438	6.89 (6.28 - 7.57)

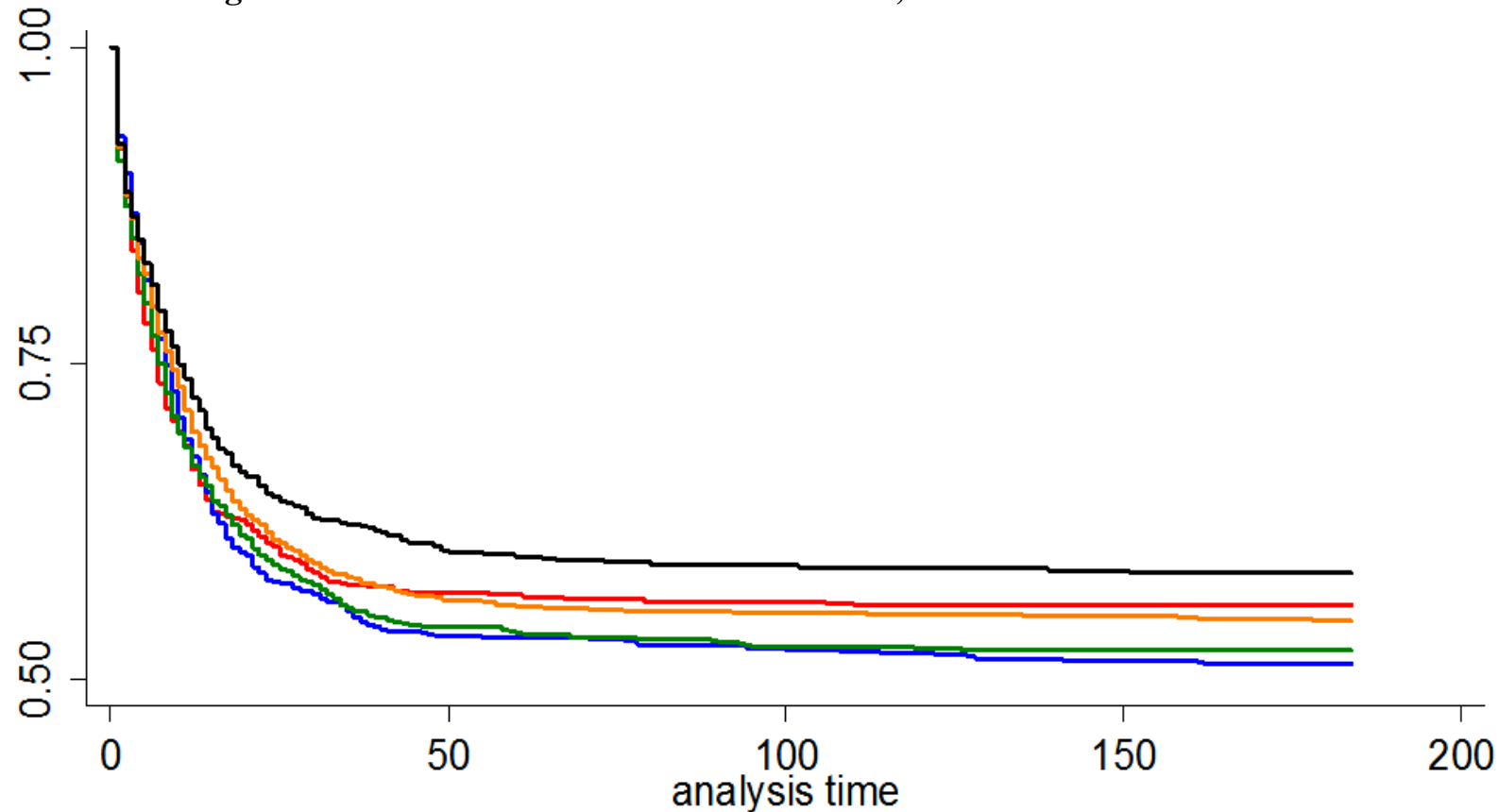


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Results – Kaplan-Meier estimates

Kaplan-Meier estimator of time to 6-month revascularisation by socioeconomic status following first-time AMI for residents of south Wales, 2010-11



— Least deprived = 1 — Next to least deprived = 2
— Middle quintile = 3 — Next to most deprived = 4
— Most deprived = 5

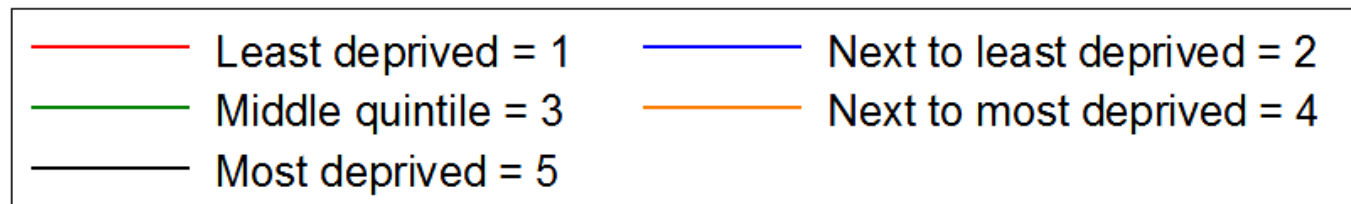
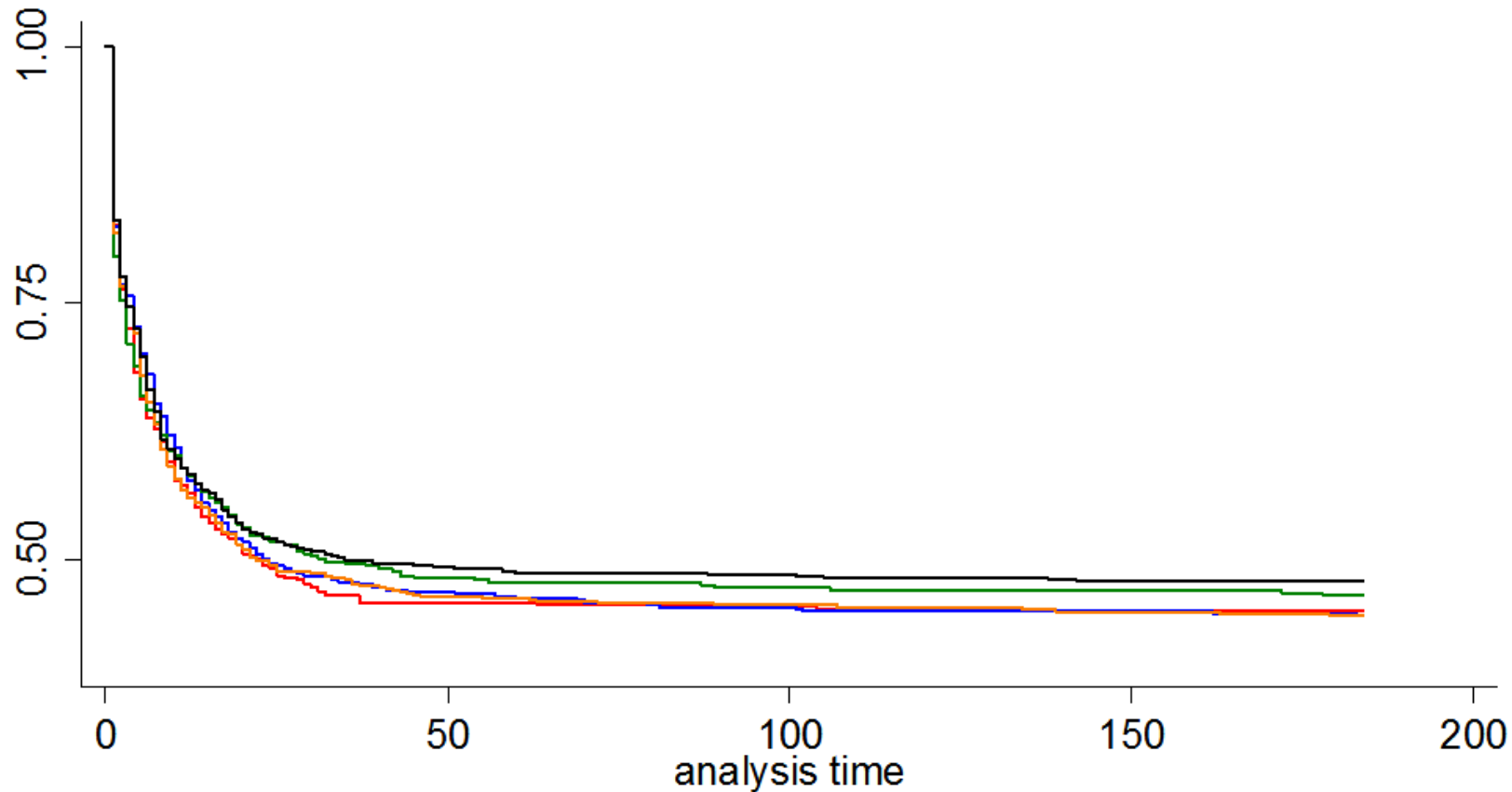


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Results – Kaplan-Meier estimates

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Results – Cox PHM

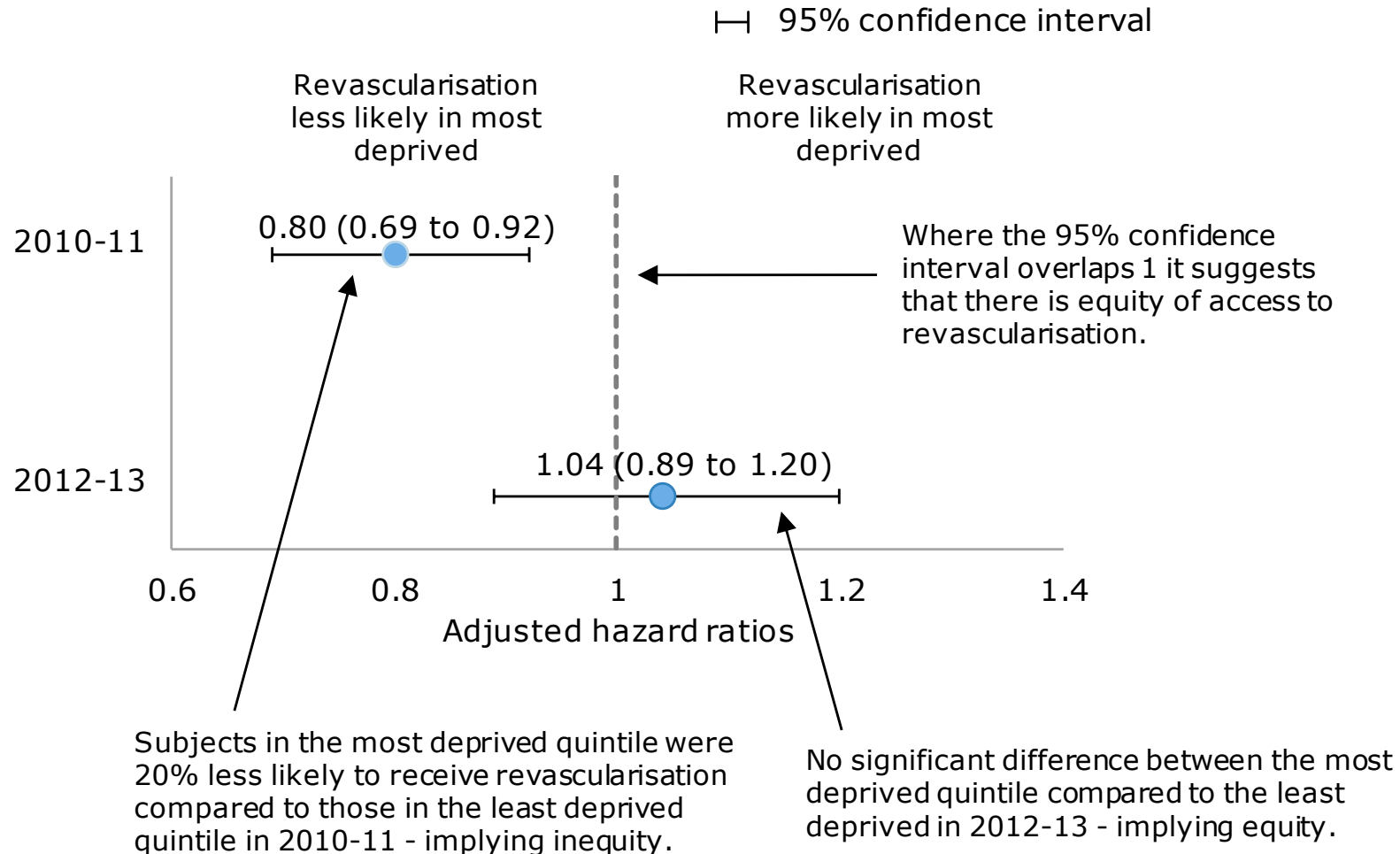
Adjusted hazard ratios with 95% confidence intervals for 6-month revascularisation following hospital admission with first-time AMI, 2010-13

Explanatory variable	2010-11		2012-13	
	Hazard ratio (95% CI)	p-value	Hazard ratio (95% CI)	p-value
Socioeconomic status				
1 (Least deprived)	1		1	
2	1.05 (0.91-1.23)	0.445	1.07 (0.92-1.26)	0.386
3	1.00 (0.87-1.15)	0.987	1.03 (0.89-1.20)	0.699
4	0.93 (0.81-1.07)	0.312	1.09 (0.94-1.26)	0.256
5 (Most deprived)	0.80 (0.69-0.92)	0.002	1.04 (0.89-1.20)	0.649

Adjusted for gender, age, rural-urban classification and comorbidities; stratified by admitting hospital type since this variable did not meet the proportional hazards assumption

Results – Cox PHM

Equity of access to revascularisation for the most deprived quintile (reference: least deprived quintile), south Wales, 2012-13 compared to 2010-11



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Discussion

- Key findings
- Possible explanations for patterns observed
- Impact:
 - Previous findings/Service redesign
 - Inequities in health
 - Heart Conditions Implementation Group

Heart Conditions Implementation Group

- Delivery Plan
 - Highest standards of care
- Delivery themes
 - Preventing Cardiovascular Disease
 - Timely detection, effective & safe care
 - Children & young people
 - Enablers for delivery
 - Targeting research
- Health boards to develop local HDDDP



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