

Additional File 4 Relationship between risk-adjusted mortality and processes of care by several strata – type of correlation, condition and organisation. Bracketed () figures are the most optimistic intuitive count if the three studies from Additional File 2 are included in which the relationship between quality of care and mortality was influenced by one outlier hospital.

Unit of analysis	Type of relationship between risk-adjusted mortality and quality of care		
	Intuitive	No correlation	Paradoxical
(A) Type of measurement			
Direct	15 (18) studies [39, 41, 43, 44, 45, 46, 47, 50, 53, 54, 55, 57, 58, 61, 63 (51, 59, 62)]	15 (12) studies [38, 40, 41, 42, 46, 48, 50, 52, 55, 57, 58, 60, (51, 59, 62)]	5 studies [43, 46, 49, 53, 55]
Indirect	8 studies [64, 65, 66, 68, 69, 70, 71, 73]	4 studies [67, 68, 71, 74]	4 studies [66, 71, 72, 74]
Total	23 (26) studies	19 (16) studies	9 studies
(B) Clinical Condition			
AMI	12 studies [50, 53, 54, 55, 57, 58, 64, 65, 66, 68, 69, 71]	7 studies [41, 48, 50, 55, 67, 68, 71]	4 studies [53, 55, 66, 71]
Stroke	0 (2) studies [(51, 62)]	3 (1) studies [41, (51, 62)]	1 study [49]
Orthopaedics, trauma, ICU and sepsis	2 (3) studies [39, 73, (59)]	4 (3) studies [42, 57, 58, (59)]	2 studies [43, 72]
Dialysis	1 study [47]	1 study [52]	0 studies
HIV/PCP	0 studies	2 studies [40, 60]	0 studies
(C) Organisation			
Co-operative cardiovascular project	5 studies [64, 65, 66, 68, 71]	3 studies [67, 68, 71]	2 studies [66, 71]
Health Care Financing Administration	4 studies [46, 53, 70]	2 studies [46, 50]	2 studies [46, 53]
Veterans Affairs	2 studies [43, 44]	2 studies [38, 60]	1 study [43]
(D) Data source for risk adjustment			
Clinical	17 (20) studies [39, 41, 43, 45, 50, 51, 52, 54, 55, 59, 61, 62, 64, 65, 66, 68, 69, 70, 71, 73 (51, 59, 62)]	12 (15) studies [40, 41, 42, 48, 50, 53, 55, 60, 67, 68, 71, 74 (51, 59, 62)]	8 studies [43, 49, 53, 55, 66, 71, 72, 74]
Administrative	5 studies [44, 46, 47, 58, 63]	3 studies [38, 46, 58]	1 study [46]