## Appendix 5 (as supplied by the authors):

Supplementary Table S4 – Weekly number of diagnostic scans, total diagnostic scan time, and LOS days diverted with an assumption that of all patients presenting to the emergency room department, 60% may be avoidable. The estimate of 60% avoidable is based on a prior literature that  $^{\sim}50\%$  of all transfers are not admitted (18), and results from Table 2 that 10% of all transfers (20% of those admitted) are admitted for  $\leq$ 72 hours. 95% prediction intervals in parentheses. Each site represents one acute care hospital in GEMINI.

LOS – Length of Stay.

	US		СТ		X-ray		LOS
	scans/week	hrs/week	scans/week	hrs/week	scans/week	hrs/week	days/week
Site A	1.5 [1, 2.1]	1.4 [0.9, 1.9]	11 [8.6, 13.3]	5.5 [4.3, 6.7]	26.3 [23.2, 29.3]	13.1 [11.6, 14.6]	5.9 [5.4, 6.5]
Site B	1.9 [1.2, 2.6]	1.7 [1.1, 2.3]	16.2 [12.7, 19.7]	8.1 [6.3, 9.9]	30.3 [26.8, 33.8]	15.2 [13.4, 16.9]	7.1 [6.5, 7.8]
Site C	0.9 [0.6, 1.3]	0.8 [0.5, 1.1]	6.2 [4.8, 7.5]	3.1 [2.4, 3.8]	13.3 [11.8, 14.8]	6.7 [5.9 <i>,</i> 7.4]	3.4 [3.0, 3.7]
Site D	2.7 [1.7, 3.7]	2.4 [1.5, 3.3]	8.7 [6.8, 10.6]	4.4 [3.4, 5.3]	21.3 [18.8, 23.8]	10.7 [9.4, 11.9]	4.6 [4.2, 5.0]
Site E	3.4 [2.2, 4.6]	3.1 [1.9, 4.2]	12.8 [10, 15.6]	6.4 [5, 7.8]	23.5 [20.8, 26.3]	11.8 [10.4, 13.1]	6.3 [5.7, 6.9]
Site F	2.3 [1.5, 3.2]	2.1 [1.3, 2.8]	8.3 [6.5, 10.2]	4.2 [3.3, 5.1]	16.2 [14.4, 18.1]	8.1 [7.2, 9.1]	3.8 [3.5, 4.2]
Site G	3.2 [2, 4.4]	2.9 [1.8, 3.9]	13.5 [10.6, 16.4]	6.7 [5.3, 8.2]	26.8 [23.7, 29.9]	13.4 [11.8, 14.9]	6.2 [5.7, 6.8]
Average	2.6 [1.7, 3.5]	2.3 [1.5, 3.2]	11.9 [9.3, 14.5]	5.9 [4.6, 7.2]	23.9 [21.2, 26.7]	12 [10.6, 13.3]	5.7 [5.1, 6.2]