Appendix 1

Formulas for outcomes reported in the manuscript:

$Hospitalizations\ averted$
$$= Population * CAR * \%\ RG * \%\ Care\ seeking_{RG}$$
$$* \%\ Care\ Seeking\ prescribed\ NAI * NAI\ Compliance * CHR_{RG}$$
$$* (1 - NAI\ effectiveness)$$

$Total\ NAIs\ dispensed$
$$= Population * CAR * \%\ RG * \%\ Care\ seeking_{RG}$$
$$* \%\ Care\ Seeking\ prescribed\ NAI$$
$$* (1 + multiplier\ for\ non-influenza\ prescriptions)$$

$Total\ Costs = (No.\ outpatient\ consultations * cost\ per\ consultation)$
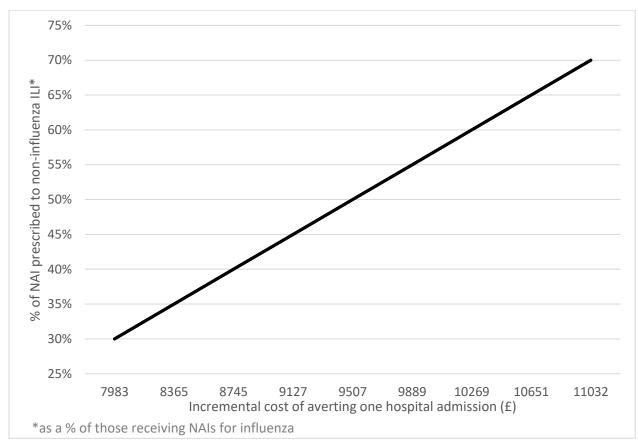$$+ (No.\ NAI\ regimens\ dispensed * cost\ per\ NAI\ regimen)$$
$$+ (No.\ Hospital\ admissions * cost\ per\ hospital\ admission)$$

$$Incremental\ cost\ per\ averted\ hospitalization =$$
$$\frac{Total\ cost\ of\ NAI\ stockpile\ scenario - Total\ cost\ of\ no\ stockpile\ scenario}{Hospitalizations\ averted\ by\ NAI\ stockpiling}$$

CAR- Clinical Attack Rate; RG- Risk Group; CHR- Case Hospitalization Risk; NAI-
Neuraminidase inhibitors

Supplemental Figure 1

Impact of NAI prescriptions to non-influenza influenza-like Illness (ILI) on the resulting cost-effectiveness

Supplemental Table 1: Impact of promptness of care-seeking on hospitalizations averted in a 2009-like pandemic scenario

	Total outpatient consultations			Hospitalizations averted (%)		
	75% seek care within 48 hours	50% seek care within 48 hours	25% seek care within 48 hours	75% seek care within 48 hours	50% seek care within 48 hours	25% seek care within 48 hours
High-risk patients	502,226	334,817	167,409	2,217 (11.3)	1,478 (7.5)	739 (3.8)
Non-high-risk patients	91,5516	610,344	305,172	808 (8.8)	539 (5.9)	269 (2.9)
Total population	1,417,742	945,161	472,581	3,026 (10.5)	2,017 (7.0)	1,009 (3.5)

Promptness is presented here as the percentage of patients who seek care within 48 hours of symptom onset out of all care-seeking patients

Supplemental Table 2: Results from probabilistic sensitivity analysis

	Hospitalizations averted (%) (95% Confidence Interval)	Incremental cost per hospitalization averted (£) (95% Confidence Interval)
2009 A(H1N1) pandemic		
High-risk patients		
NAI Treatment	2,266 (12.2) (1,075 to 3,500)	3,998 (1,698 to 9,171)
Non-high-risk patients		
NAI Treatment	876 (9.4) (410 to 1,370)	28,182 (16,417 to 53,780)
Total population		
NAI Treatment	3,142 (11.2) (1,500 to 4,750)	10,730 (5,944 to 21,229)
20% CAR- Low severity		
High-risk patients		
NAI Treatment	33,169 (17.8) (16,068 to 49,864)	CS (CS to 1,415)
Non-high-risk patients		
NAI Treatment	14,026 (15.0) (6,764 to 21,076)	7,727 (4,579 to 15,027)
Total population		
NAI Treatment	47,195 (16.9) (22,891 to 70,713)	2,233 (787 to 5,454)
20% CAR- High Severity		
High-risk patients		
NAI Treatment	144,027 (20.3) (70,162 to 217,547)	CS*
Non-high-risk patients		
NAI Treatment	62,306 (17.5) (30,372 to 93,491)	1,720 (872 to 3,637)
Total population		
NAI Treatment	206,334 (19.4) (100,419 to 310,061)	CS (CS to 519)
30% CAR- Low Severity		
High-risk patients		
NAI Treatment	49,727 (17.8) (24,116 to 74,453)	CS (CS to 1,433)
Non-high-risk patients		
NAI Treatment	21,026 (15.0) (10,174 to 31,439)	7,731 (4,558 to 14,967)
Total population		
NAI Treatment	70,754 (16.9) (34,238 to 105,421)	2,234 (751 to 5,428)
30% CAR- High severity		
High-risk patients		
NAI Treatment	216,012 (20.3) (104,165 to 321,420)	CS*
Non-high-risk patients		
NAI Treatment	93,423 (17.5) (45,072 to 139,015)	1,507 (879 to 3,598)
Total population		
NAI Treatment	309,434 (19.4)	CS

	(150,794 to 457,639)	(CS to 508)

CS: Cost Saving

*95% confidence intervals are cost saving as well