# Supplementary materials

### Table S1 ICD10 code list for ACSC conditions adopted from Bardsley et al. (2013)

#### Acute ACS conditions

Cellulitis L03, L04, L08, L88, L980, L983

Dehydration E86

Dental conditions A690, K02-K06, K08, K098, K099, K12, K13

Ear, nose and throat infections H66, H67, J02, J03, J06, J312

Gangrene R02

Gastroentereritis K522, K528, K529

Nutritional deficiencies E40-E43, E55, E643

Pelvic inflammatory disease N70, N73, N74

 $Perforated/bleeding\ ulcer\ K250-K252,\ K254-K256,\ K260-K262,\ K264-K266,\ K270-K272,\ K274-K276,\ K280-K282,\ 284-K286,\ K280-K282,\ K$ 

Urinary tract infection/Pyelonephritis N10, N11, N12, N136, N390

#### Chronic ACS conditions

Angina I20, I240, I248, I249

Asthma J45, J46

Chronic obstructive pulmonary disease J20, J41-J44, J47

Congestive heart failure I110, I50, J81

Convulsions and epilepsy G40, G41, O15, R56

Diabetes complications E100-E108, E110-E118, E120-E128, E130-E138, E140-E148

Hypertension I10, I119

Iron deficiency anaemia D501, D508, D509

## Vaccine preventable ACS conditions

Influenza J10, J11

Pneumonia J13, J14, J153, J154, J157, J159, J168, J181, J188

Tuberculosis A15, A16, A19

Other vaccine preventable A35-A37, A80, B05, B06, B161, B169, B180, B181, B26, G000, M014

Table S2 Age-, sex-, and deprivation adjusted odds ratios (OR 95% CI) for the combined ACSC outcome. Ethnicity group as recorded by NHS.

Ethnic group	Age-sex adj. OR (95% CI)	р	Age-sex-deprivation adj. OR (95% CI)	р
White British	Ref	-	Ref	-
Asian Other	1.04 (1.02-1.07)	<.001	1.00 (0.98-1.03)	.777
Bangladeshi	1.11 (1.08-1.15)	<.001	0.97 (0.94-1.00)	.027
Chinese	0.49 (0.47-0.52)	<.001	0.47 (0.45-0.49)	<.001
Indian	1.02 (1.00-1.04)	.022	0.96 (0.94-0.98)	<.001
Pakistani	1.70 (1.67-1.72)	<.001	1.50 (1.47-1.52)	<.001
Black African	0.91 (0.89-0.93)	<.001	0.89 (0.87-0.92)	<.001
Black Caribbean	1.01 (0.98-1.03)	.549	0.89 (0.87-0.92)	<.001
Other	1.98 (1.95-2.01)	<.001	1.81 (1.78-1.84)	<.001
White Other	1.15 (1.14-1.17)	<.001	1.12 (1.10-1.13)	<.001
White Irish	0.71 (0.69-0.65)	<.001	0.68 (0.66-0.70)	<.001
Mixed	0.63 (0.62-0.65)	<.001	0.60 (0.59-0.62)	<.001

Figure S1 Incidence odds ratios (OR) of ACSC admission by ethnic group (as recorded by NHS) relative to White British adjusted for age, sex, and area deprivation. Top: Acute ACSC. Middle: Chronic ACSC. Bottom: Vaccine-preventable diseases. Open circles: risk adjusted for age group and sex. Filled circles: adjusted for age group, sex, and area deprivation.

