

Supporting information

Supplementary Table 1

The CPRD and HES algorithms used to determine the most likely blistering disease diagnosis were run using all entries for the blistering diseases described below. Based on clinical expertise, we determined Read and ICD-10 codes for bullous pemphigoid and pemphigus vulgaris. We also generated a list of “other blistering diseases” which could be confused with or be differential diagnoses for bullous pemphigoid or pemphigus vulgaris.

Supplementary Table 1. Blistering diseases and their associated Read or ICD-10 codes according to their disease category

Read code		ICD-10 code	
Bullous pemphigoid			
<i>Specific codes</i>			
M1450	Bullous pemphigoid	L12.0	Bullous pemphigoid
<i>Broad codes</i>			
M145.	Pemphigoid	L12.9	Pemphigoid, unspecified
M145z	Pemphigoid NOS		
Pemphigus vulgaris			
<i>Specific codes</i>			
M1445	Pemphigus vegetans	L10.1	Pemphigus vegetans
M1446	Pemphigus vulgaris	L10.0	Pemphigus vulgaris
<i>Broad codes</i>			
M144.	Pemphigus	L10.9	Pemphigus, unspecified
M144z	Pemphigus NOS		
Other blistering diseases			
2F6..11	O/E – pompholyx	L10.2	Pemphigus foliaceus
A900.17	Congenital syphilitic pemphigus	L10.3	Brazilian pemphigus
C371400	Porphyria cutanea tarda	L10.4	Pemphigus erythematous
F4Cy100	Ocular pemphigoid	L10.5	Drug-induced pemphigus
M14..00	Bullous dermatoses	L10.8	Other pemphigus
M140.00	Dermatitis herpetiformis	L12.1	Cicatricial pemphigoid
M141.00	Subcorneal pustular dermatosis	L12.2	Chronic bullous disease of childhood

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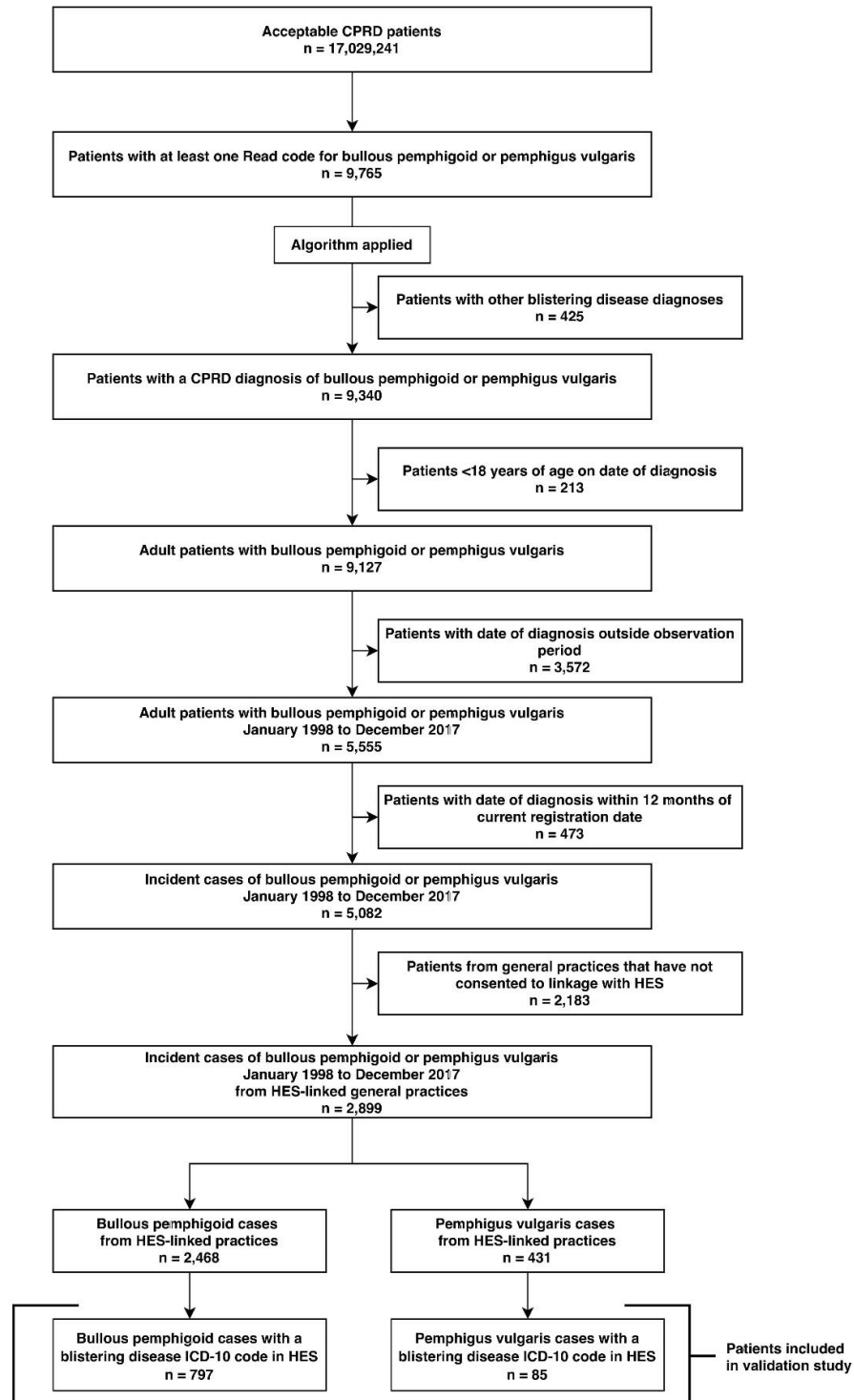
Read code	ICD-10 code
M142.00 Juvenile dermatitis herpetiformis	L12.3 Acquired epidermolysis bullosa
M142.11 Juvenile pemphigoid	L12.8 Other pemphigoid
M144000 Benign pemphigus	L13.0 Dermatitis herpetiformis
M144200 Erythematous pemphigus	L13.1 Subcorneal pustular dermatitis
M144300 Foliaceous pemphigus	L13.8 Other specified bullous disorders
M144700 Wildfire pemphigus	L13.9 Bullous disorder, unspecified
M144800 Drug-induced pemphigus	
M145100 Benign pemphigus NOS	
M145200 Senile dermatitis herpetiformis	
M145300 Acquired epidermolysis bullosa	
M146.00 Benign mucous membrane pemphigoid	
M146000 Benign mucous membrane pemphigoid with no eye involvement	
M146011 Cicatricial pemphigoid	
M146100 Ocular pemphigoid	
M146z00 Benign mucous membrane pemphigoid NOS	
M14y.00 Other specified bullous dermatoses	
M14z.00 Bullous dermatoses NOS	
M151.00 Erythema multiforme	
M151.12 Toxic epidermal necrolysis	
M151700 Stevens-Johnson syndrome	
M151800 Toxic epidermal necrolysis	
M151y00 Other specified erythema multiforme	
M151z00 Erythema multiforme NOS	
M252100 Pompholyx unspecified	
M252200 Cheiropompholyx	
M252300 Podopompholyx	
M2y9000 Bullous cutaneous amyloidosis	
Myu1.00 [X]Bullous disorders	
Myu1000 [X]Other pemphigus	
Myu1200 [X]Other pemphigoid	
Myu1300 [X]Other specified bullous disorders	
Myu4100 [X]Other erythema multiforme	

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Read code	ICD-10 code
PH33111	Benign familial chronic pemphigus
PH3y200	Epidermolysis bullosa
PH3y700	Epidermolysis bullosa simplex
PH3y800	Epidermolysis bullosa letalis
PH3y900	Epidermolysis bullosa dystrophica
Pyu9100	[X]Other epidermolysis bullosa
M2y9000	Bullous cutaneous amyloidosis
Myu1.00	[X]Bullous disorders
Myu1000	[X]Other pemphigus
Myu1200	[X]Other pemphigoid
Myu1300	[X]Other specified bullous disorders
Myu4100	[X]Other erythema multiforme
PH33111	Benign familial chronic pemphigus
PH3y200	Epidermolysis bullosa
PH3y700	Epidermolysis bullosa simplex
PH3y800	Epidermolysis bullosa letalis
PH3y900	Epidermolysis bullosa dystrophica
Pyu9100	[X]Other epidermolysis bullosa

Supplementary Figure 1

Flow diagram showing identification of incident cases of bullous pemphigoid and pemphigus vulgaris for inclusion in the validation study



Supplementary Table 2

Supplementary Table 2. Blistering disease codes recorded as primary or secondary diagnoses in HES for the ten patients where the algorithm generated an uncertain diagnosis

Blistering disease codes in HES

Specific + specific codes

Bullous pemphigoid (L12.0) + pemphigus vulgaris (L10.0)

Bullous pemphigoid (L12.0) + cicatricial pemphigoid (L12.1)

Specific + broad codes

Bullous pemphigoid (L12.0) + pemphigus unspecified (L10.9)

Bullous pemphigoid (L12.0) + bullous disorder, unspecified (L13.9)

Dermatitis herpetiformis (L13.0) + bullous disorder, unspecified (L13.9)

Pemphigus vulgaris (L10.0) + other pemphigoid (L12.8)

Pemphigus vulgaris (L10.0) + pemphigus, unspecified (L10.9) + pemphigoid, unspecified (L12.9)

Broad + broad codes

Pemphigus, unspecified (L10.0) + pemphigoid, unspecified (L12.9)
