

Appendix 1 (Read Codes to Define Outcome)

Asthma exacerbation

Xa1hD","Xafdy","Xafdz","Xafdj","XE0YW","XM0s2","X101y","X1022","H333","H3301","H3311","H33z0","H33z1

Asthma hospitalization or Accident & Emergency visit

"663d","8H2P","663m."

Oral corticosteroids

"fe6..","fe3..","fe31.,"fe32.,"fe33.,"fe36.,"fe37.,"fe3A.,"fe3B.,"fe3C.,"fe3r.,"fe3s.,"fe3u.,"fe e4..","fe41.,"fe42.,"fe43.,"fe44.,"fe45.,"fe4e.,"fe4f.,"fe4g.,"fe4h.,"fe5..","fe51.,"fe52.,"fe5 3.,"fe5f.,"fe5m.,"fe5n.,"fe5o.,"fe5p.,"fe61.,"fe62.,"fe64.,"fe65.,"fe66.,"fe67.,"fe68.,"fe6 9.,"fe6a.,"fe6c.,"fe6d.,"fe6e.,"fe6f.,"fe6g.,"fe6h.,"fe6i.,"fe6j.,"fe6k.,"fe6l.,"fe6m.,"fe6n., "fe6o.,"fe6p.,"fe6q.,"fe6r.,"fe6s.,"fe6t.,"fe6v.,"fe6w.,"fe6z.,"fe7..","fe71.,"fe72.,"fe73.,"f e74.,"fe75.,"fe76.,"fe77.,"fe78.,"fe79.,"fe7x.,"fe7y.,"fe7z.,"x00yP","x01Mh","x01Na","x01N b","fe11.,"fe12.,"fe1x.,"fe1y.,"fe21.,"fe22.,"fe23.,"fe24.,"fe25.,"fe26.,"x01MW"

Evidence of lower respiratory review

"XE1P1","XE2Nb","XE2b5","XM0rv","XM0s2","XM1Bs","XM1QV","XM1QX","XSCET","Xa0Y7","Xa0IY ", "Xa0Iz","Xa1hD","Xa35I","Xa7nL","Xa7nM","Xa7nN","Xa7nP","Xa7nT","Xa7nU","Xa8Hn","Xa9Z7"," Xa9zF","XaBE9","XaBM8","XaBfJ","XaDcD","XaDcV","XaDsa","XaDtB","XaDtP","XaDth","XaDtI","XaD vK","XaDvL","XaEFy","XaEFz","XaEIV","XaEIW","XaEIV","XaF6d","XaF6e","XaFrU","XaFrV","XaFrW"," XaFrX","XaIW","XaIX","XaIY","XaIZ","XaIND","XaINZ","XaINa","XaINb","XaINc","XaINd","XaINf","X aINg","XaINh","XaIQ2","XaIQ3","XaIQ4","XaIQD","XaIQE","XaIQg","XaIR3","XaIU","XaIU","XaIUm", "XaIUn","XaIUo","XaIeq","Xaler","Xalet","XalfK","XaloE","Xalu5","Xalu6","XaluG","Xalww","XalxQ", "XalxR","XalxU","XalxV","XaJ3K","XaJ9B","XaJ9C","XaJ9D","XaJ9E","XaJEl","XaJfG","XaKdk","XaLIm", "XaLIn","XaLlR","XaLJO","XaLJS","XaLJT","XaLJU","XaLPE","XaMeu","XaN4a","XaNKw","XaObi","XaO bj","XaObk","XaObI","XaObm","XaPpl","XaQHq","XaQig","XaQih","XaQmR","XaQmS","XaQmT","Xa QmU","XaREU","XaRFi","XaRFj","XaRFk","XaRFI","XaVx3","XaX3n","XaXCa","XaXCb","XaXZm","XaXZ p","XaXZs","XaXZu","XaXZx","XaXa0","XaXeg","XaY2V","XaYYt","XaYYu","XaYZB","XaYZh","XaYb8", "XaYby","XaYja","XaYmL","XaYpC","XaYpF","XaZ1k","XaZ1l","XaZd1","XaZyl","XaZyt","XaZyu","XaZz1 ", "Xaa7B","Xaa7C","Xaa7Q","Xaafd","XaahD","Xab2f","Xab4X","ZV19L","ZV725","ZV74B","ZV7B3", "c74.."

Additional non-asthma specific codes for hospitalisation

"8HJJ.00","9b8D.00","8HX..00","8HX2.00","8Hd..00","8H16.00","8H2R.00","8H29.00","8H2D.00","8 H2J.00","8H24.00","8H26.00","8H2H.00","8H2Z.00","8H21.00","8H2E.00","8H2N.00","8H27.00","8 H2B.00","8H2K.00","8H28.00","8H25.00","8H2I.00","8H23.00","8H2L.00","8H2G.00","8H2M.00","8 H2C.00","8H22.00","8H1..11","8H15.00","8H1Z.00","8H1..00","8H14.00","8H13.00","8H12.00","8H 2A.00","8H2F.00","SP31100","663m.00","66Yd.00","9b8B.00","9498","8HG..11","9451","L398400", "8HG..00","ZLD2G11","ZLD2100","ZLD2H11","ZLD2H00","ZLD2111","ZLD2G00","ZLD2I11","ZLD2I00 ", "ZLE1.00","ZLE5111","ZLE5100","ZLE1.11","ZLF2.00","ZLE5.00","ZLE5200","ZLG6.00","ZLG6100","Z LG6400","ZLG6500","8HE8.00","8HE..00","8HE2.00","8HN..00","7A10000","7A15000","7A12000","7 A41400","7A47800","7A47200","7A47000","7A47600","7A47400","7A47C00","7A41000","7A41200 ", "7A15300","7A41600","7A47B00","7A47300","7A47700","7A47100","7A47D00","8H23000","7A11 000","7A11200","7A45300","7A13400","7A13000","7A45200","7A45000","7A40000","7A13300","7 A45700","7A45D00","7A13100","66Ye.00","8H2P.00","7700.11","7700300","663d.00","7F13300", "7700100","7700000","7700","7700z00","7700200","7A41211","8H2..00","8712","7M30000","7A13.

11", "7A45.15", "7A45.00", "7A45.14", "7A13.00", "7A13z00", "7A13y00", "8H2T.00", "7700400", "9239", "9b0K.00", "945Z.00", "945..00", "13F8.11", "9b0L.00", "13F8.00", "9R6..00", "7936500", "8HN1.00", "8HNA.00", "8HNB.00", "8HNC.00", "8HND.00", "8HNE.00", "8HN2.00", "8HN3.00", "8HN4.00", "8HN5.00", "8HN6.00", "8HN7.00", "8HN8.00", "8HN9.00", "8HN0.00", "8HNZ.00", "8CO..00", "Z177800", "8A8..00", "8Hb..00", "8HM4.00", "8HMB.00", "8HM3.00", "8HME.00", "8HMJ.00", "8HM8.00", "8HM1.00", "8HMG.00", "8HM7.00", "8HMO.00", "8HM5.00", "8HM6.00", "8HML.00", "8HMN.00", "8HMD.00", "8HMH.00", "8HMQ.00", "8HMK.00", "8HMM.00", "8HM2.00", "8HMP.00", "8HM9.00", "8HMC.00", "8HMA.00", "8HMR.00", "8HM..00", "8HMZ.00", "8HMF.00", "13F8100", "13FS.00", "66Yi.00", "8H32.00", "7701.11", "8H3E.00", "8H3V.00", "8H3T.00", "8H3I.00", "8H3O.00", "8H39.00", "8H3B.00", "8H3M.00", "8H31.00", "8H3..00", "8H36.00", "8H3J.00", "8H3S.00", "8H3C.00", "8H3G.00", "8H3U.00", "8H3D.00", "8H3A.00", "8H3N.00", "8H38.00", "8H3Q.00", "8H3L.00", "8H3R.00", "8H3P.00", "8H3H.00", "8H37.00", "8H3F.00", "8H3K.00", "7A47.11", "7A47.12", "7A47.13", "7A47.16", "7A47.00", "7A47z00", "7A47y00", "7A47.14", "7A15.00", "7A47.15", "8H3Z.00", "7700y00", "7259y00", "7B07y00", "7513y00", "9b8C.00", "949B.00", "9495", "9144", "9N19.11", "7B07.00", "7B07z00", "T772.00", "9b8A.00", "8HLP.00", "8HKP.00", "8HJI.00", "8HC1.00", "8H63.00", "ZL51.11", "8HC3.00", "8H7a.00", "8HD..00", "8HC..00", "8HCZ.00", "ZL56.11", "ZL51.00", "ZL56100", "ZL51.13", "8HTF.00", "ZL56.00", "ZL56211", "ZL56200", "8HX1.00", "9H4..00", "9H5..00", "ZL96.11", "ZL91.00", "ZL96111", "ZL96100", "ZL91.12", "ZL96211", "ZL96200", "ZL9GQ00", "9N04.00", "9N1y300", "9N19.00", "9N1B.00", "8HJ..00", "8HJZ.00", "8HF..12", "7A13411", "ZL16.11", "ZL11.00", "ZL16111", "ZL16100", "ZL11.12", "ZL16.00", "ZL16211", "ZL16200", "8HX0.00", "8Ha..00", "7A11211", "ZV29300", "ZV29211", "ZV29200"

Specific asthma codes previously validated to identify asthma patients in primary care

"H33..", "663..", "H333.", "H33z1", "H33z0", "H33..", "H330.", "663V1", "663V3", "663V0", "H331.", "H33z.", "H33zz", "H33z0", "H331.", "H3300", "H3120", "173A.", "H3301", "8H2P.", "H330.", "663P.", "663U.", "663N.", "H330.", "H33z1", "9OJA.", "663y.", "66Y5.", "66Y9.", "66YJ.", "8B3j.", "663j.", "1O2..", "H33z2", "663V.", "663V2", "663N2", "66YK.", "H3300", "H330.", "H33zz", "8795", "8794", "66YA.", "8796", "H3311", "66YQ.", "663p.", "663n.", "9OJA.", "8798", "8797", "H33zz", "173c.", "663d.", "8791", "663u.", "663e.", "8CR0.", "663s.", "663v.", "663f.", "663e1", "663e0", "H3301", "H3310", "66YR.", "663N0", "66YP.", "663t.", "66300", "663w.", "663x.", "663N1", "H35y7", "663r.", "H334.", "1780", "66YC.", "663q.", "H3312", "H330z", "9OJ1.", "663m.", "H47y0", "H3311", "173d.", "H35y6", "388t.", "38DL.", "8CMA0", "679J0", "38DT.", "9NNX.", "679J1", "66Yp.", "38DV.", "1787", "1781", "66Yr.", "66Yq.", "1789", "663P0", "178B.", "663P1", "1783", "679J2", "1786", "66Ys.", "388t0", "1788", "178A.", "1785", "1784", "1782", "663P2", "661N1", "661M1", "H335.", "66Yu."