

Supplementary Table 2: Descriptions of included studies / sources of evidence

Study details	Diagnosis period; data source	Population (total cases)	Number of emergency presenters (%)	Cancer studied
Abel <i>et al</i> , Br J Cancer 2015, UK ⁽²⁷⁾	2006 – 2010; Routes to Diagnosis dataset*	England (age 25+, 749 645)	232 281 (31%)	27 non-gender-specific cancers
Barrett, Fam Pract 2006, UK ⁽³³⁾	2002; 5 cases from each participating GP practice	Exeter, Oxford and Sheffield (151)	39 (26%)	Colorectal
Barrett, BMC Fam Pract 2008, UK ⁽³²⁾	1998-2002; primary care records	Exeter Primary Care Trust (246)	71	Lung
Barrett, Br J Obs & Gynae 2010, UK ⁽³⁴⁾	2000-2007; primary care records	Exeter, East and Mid-Devon (women>40yr, 212)	39	Ovarian
Beckett, Lung Cancer 2014, UK ⁽¹¹⁾	2006-2011; National Lung Cancer Audit in England	England (133,530)	25 675 (19%)	Non-small cell lung cancer
Bottle, Br J Cancer 2012, UK ⁽¹⁾	2007 – 2010; Hospital Episodes Statistics	England, (639064) *likely partially nested within Abel/Elliss-Brookes	139 351 (22%)	22 cancers
Cleary, Fam Pract 2007, UK ⁽⁴⁰⁾	1998-2002; primary care records	Exeter PCT (349)	62	Colorectal
Comber, Int J Cancer, 2016, Ireland ⁽¹⁰⁾	2004-2008; Irish National Cancer registry linked to Hospital in-patient episode and Central Statistics office data	Republic of Ireland (3050)	342 (11%)	Rectal
Dejardin, Br J Cancer 2005, France ⁽⁶⁹⁾	1995; Cancer registry data	Nationwide (1413)	192	Colorectal
Elliss-Brookes, Br J Cancer 2012, UK ⁽⁵⁾	2006-2008; Routes to diagnosis dataset*	England (739 667) *fully nested within Abel except for breast, prostate, cervix, endometrial,	(24%)	15 cancers
Gunnarsson, Eu J Surg Onc 2013, Sweden ⁽⁴⁹⁾	1997-2006; Cancer registry	Uppsala-Orebro and Stockholm regions (12293)	2856 (23%)	Colon
Gunnarsson, World J Surg 2014, Sweden ⁽¹²⁾	2006-2008; Cancer registry, review of primary and secondary care records`	Regional Oncology Centre in Uppsala-Orebro (case control - 854)	263	Colon
McArdle, Br J Surg 2004, UK ⁽⁶⁾	1991-1994; Linked secondary care data with cancer registry.	Scotland (3200)	986	Colorectal
McPhail, Br J Cancer 2013, UK ⁽¹⁵⁾	2006-2008; Routes to diagnosis dataset*	England (colorectal and cervical); East of England (prostate, breast, lung) (131,754) *fully nested within Elliss-Brookes	Percentages for individual cancers given	5 cancers including cervical, colorectal, breast, lung and prostate

Nouraei, Laryngoscope 2014, UK ⁽¹³⁾	1996-2011; Hospital Episodes Statistics	England (874)	353 (40%)	primary tracheal
Palser, BMJ Open 2013, UK ⁽⁸⁾	2007-2009; National Oesophago-gastric cancer audit	England (14102)	(16%)	Oesophageal, Gastric
Pruitt, BMC Cancer 2014, USA ⁽³⁾	1992-2005; Linked SEER-Medicare data	Nationwide, aged 66+ (138,376)	21313 (28%)	Colorectal
Rabeneck, Am J Gastroenterol 2006, Canada ⁽³⁹⁾	1996-2001; Linked Canadian Institute for Health Information, Ontario Health Insurance Plan, Registered Persons Database	Ontario (age 20+, 41356)	7739 (19%)	Colorectal
Raine, BMJ 2010, UK ⁽⁵⁰⁾	1999-2006; Hospital Episodes Statistics	England (age 50+, 564821)	182 449 (32%)	Colorectal Breast Lung
Renzi, BJC 2016, UK ⁽²¹⁾	2005-2006; Linked cancer registration data, routes to diagnosis and primary care records	England (age 25+, 1606)	448 (28%)	Colon Rectal
Shawihdi, Gut 2014, UK ⁽⁴²⁾	2006-2008; Linked Hospital Episodes Statistics and Death registry	England (22488) *likely partially nested within Abel/Elliss-Brookes	(28%)	Oesophagogastric
Sheringham, Br J Cancer 2014, UK ⁽³⁶⁾	2009-2011; Linked cancer registry, primary and secondary care records	North East London (943) *likely partially nested within Abel/Elliss-Brookes	228 (24%)	Colorectal
Sikka, Am J Emerg Med 2012, USA ⁽⁴⁾	1996-2000; Linked cancer registry, Medicaid eligibility file and Census Summary File	Michigan (age 65+, 20311)	4278 (21%)	Colorectal Lung
Tataru, Cancer Epidem 2015, UK ⁽⁹⁾	2006-2008; Linked Cancer registry, Hospital Episodes Statistics, National Lung Cancer Audit and Routes to Diagnosis dataset*	England (93 783)	35042 (37%)	Non-small cell lung cancer
Tsang, BMC Health Serv Res 2013, UK ⁽⁴¹⁾	1999-2008; Linked primary care records, Hospital Episodes Statistics and Office for National Statistics mortality data	England (5870)	817 (13.9%)	22 cancers
Wallace, Br J Cancer 2014, UK ⁽²⁾	2007-2011; Linked Hospital Episodes Statistics and National Bowel Cancer Audit	England (82777)	17889 (21%)	Colorectal
Grey Literature				
NCIN Routes to Diagnosis 2006-2013 ^(26, 29)	2006-2013; Routes to diagnosis dataset	England (2,152,704)	(22%)	56 cancer sites
NCIN Teenagers & Young Adults ⁽⁵¹⁾	2004-2008; Routes to Diagnosis	England, 0-49 year olds (131353)	0-14yr – (54%) 15-49yr – (13%)	10 cancer groups
NCIN Major Resections ⁽⁷⁾	2006-2010; Linked cancer registry and Hospital Episodes Statistics	England, excluding 0-14 year olds (971329)	199466 (20.5%)	20 cancer sites
NCIN Cancer by Stage ⁽²⁸⁾	2012-2013; Routes to Diagnosis	England (574487)	118113 (20.6%)	10 cancer sites

Jones (2013) ⁽¹⁸⁾	2010-2012: Retrospective audit of primary care records	Thames Valley Cancer Network, 73 GP Practices (1579)	142 (9%)	13 cancer groups and sites
Newsom-Davies (2015) ⁽⁵⁷⁾	2006-2008: Hospital case series	European Thoracic Oncology members - 8 sites in Europe: (2315)	534 (23.1%)	Lung
* Routes to Diagnosis dataset consists of linked data from National Cancer Data Repository, Hospital Episodes Statistics, National Cancer Waiting Times, NHS screening programmes data in England				