	Source	Country	Year	Population	Outcome	Weighted average of estimated patient numbers and percentages, with 95%CI between [ ] when appropriate and estimations of variation (multiplication of more than one 95% CI) between [[ ]]	Estimated patient number for the Netherlands 2013, as used in figure 2, with 95%CI between [ ] when appropriate and estimations of variation (multiplication of more than one 95% CI) between [[ ]]
a] Population in the Netherlands	CBS, 2014a-d	NL	2013	All inhabitants of the Netherlands	Total population: N = 16,779,575 Population aged 20-79: N = 12,205,982	-	-
b] Number of annual GP consultations	CBS, 2014a-d	NL	2013	All inhabitants of the Netherlands	Population visiting GP at least once: N = 12,015,601 Total number of GP consultations: N = 68,488,928	-	-
c] Incidence of chest pain as RfE GP	Okkes, 2005	NL	1995-2008	All 35,000 registered patients of selected GPs	Incidence of chest pain or pressure as reason for encountering a GP: 10.9/1000/yr	pooled data: 61,039 cases of chest pain in 3,964,274 consultations, **weighted average** of incidence of chest pain **1.54% [1.53-1.55]** (after exclusion of Rosser, 1990: 60,052 cases among 3,892,749 consultations, **weighted average** of incidence of chest pain **1.54% [1.53-1.56]**	**annual number of consultations for chest pain,** NL 2013**:** 1.54% of 68,488,928 consultations = **1,054,729 [1,047,881-1,061,578]** (value C) (after exclusion of Rosser, 1990: **1,054,729 [1,047,881-1,068,427]** (value C')
	Soler, 2012b	NL	1995-2005	All 15,318 registered patients of selected GPs	Incidence of chest pain or pressure as reason for encountering a GP: 30.6/1000/yr		
	Ruigómez, 2006	UK	1996	All 3,000,000 registered patients of appr. 1500 GPs	Incidence of new-onset chest pain as reason for encountering a GP: 15.5/1000/yr		
	Nilsson, 2003	SW	1998-2000	All 16,152 registered patients of selected GPs, aged 20-79	Incidence new onset chest pain 19.6/1000 patients aged 20-79/yr		
	Bösner, 2009	D	2005-2006	All 190,000 consultations done by 74 participating GP's	Prevalence chest pain in patients aged ≥ 35 among all patients visiting GP: 0.7%		
	Verdon, 2008	CH	2001	24,620 patients seen by 59 GPs	Prevalence new-onset chest pain among patients aged ≥ 16 among all patients visiting a GP: 1.8%		

	Svavarsdottir, 1996	IC	1989-1990	5470 patients registered in one GP practice, making 28,050 consultations in 2 years	Percentage of GP consultations where chest pain is RfE: 0.68%		
	Frese, 2016	D	1999-2000	8877 consultations in primary care	Percentage of GP consultations where chest pain is RfE: 3.0%		
	Frese, 2016	NL	1985-2003	597,312 consultations in primary care	Percentage of GP consultations where chest pain is RfE: 1.7%		
	Rosser, 1990	US/CAN	1985	registration of 71,525 consultations in primary care	Percentage of GP consultations where chest pain is RfE: 1.38%		
d] Number of patients with ACS in primary care	Verdon, 2008	CH	2001	442 patients presenting new-onset chest pain	Incidence ACS among patients presenting with chest pain in primary care 1.5% (diagnosis set after 1 year follow up)	pooled data: 84 cases of ACS among 3,012 cases of chest pain **weighted average** of incidence of ACS among cases of chest pain in primary care: **2.79% [2.24-3.46]** (value D)	**number of patients with ACS in primary care**, NL 2013: 2.79% of 1,054,729 chest pain consultations (value C x value D) = **29,427 [[23,473-36,731]]** (after exclusion of Rosser, 1990: (value C' x value D) **29,427 [[23,473-36,968]]**
	Bösner, 2009	D	2005-2006	1,212 patients ≥ 35, presenting with chest pain in primary care	Incidence ACS among patients presenting with chest pain in primary care: 3.6% (diagnosis set after 6 months follow up)		
	Klinkman, 1994	US	1994	399 episodes for chest pain in primary care	Incidence ACS among patients presenting with chest pain in primary care: 1.5%		
	Haasenritter, 2012	D	2009-2010	844 patients with chest pain in primary care	Incidence ACS among patients presenting with chest pain in primary care: 2.5% (diagnosis set after 6 months follow up)		
	Andersson, 2015	SW	2009-2011	115 patients with chest pain in primary care	Incidence ACS among patients presenting with chest pain in primary care: 5.2% (diagnosis set after 1 month follow up)		

e] Absolute and relative number of referrals among all patients presenting chest pain to a GP.	Okkes, 2005	NL & SW	1995-2008	All 35,000 patients presenting with chest complaints to a GP.	Relative number of patients that are immediately referred by the GP: 29%	pooled data: 15,266 referrals among 107,284 cases of chest pain **weighted average** of referral rate among cases of chest pain in primary care: **14.2% [14.0-14.4]** (value E) (after exclusion of Rosser, 1990: 10,259 referrals among 35,759 cases, **weighted average** of referral rate among cases of chest pain in primary care: **28.7% [28.2-29.2]**) (value E')	**number of patients with chest pain in primary care directly referred to secondary care**, NL 2013: 14.2% of 1,054,729 chest pain consultations (value C x value E) = **149,772 [[146,703-152,867]]** (value E'') (after exclusion of Rosser, 1990: (value C' x value E') 302,707 [[295,502-311,981]] (value E''')
	Nilsson, 2003	SW	1998-2000	Patients presenting with new-onset chest pain (exclusion of those suspected of stable coronary disease), N = 317	Relative number of patients that are immediately referred by the GP: 12%		
	Verdon, 2008	CH	2001	442 patients presenting new-onset chest pain	Percentage of patients presenting with chest complaints to a GP, that are immediately referred by the GP: 16%. (Percentage suspected of severe acute disease: 20%)		
	Rosser, 1990	US/CAN	1985	registration of 71,525 consultations in primary care	Percentage of patients presenting with chest complaints to a GP, that are immediately referred by the GP: 7%		
f] Referral rate among patients presenting with chest pain to a GP who are suspected of ACS	Bruins Slot, 2013	NL	2006-2008	Selection of patients presenting with chest complaints to a GP *that are suspected for ACS by the GP*. N = 298.	Relative number of patients that are immediately referred by the GP: 73%	referral rate among cases of chest pain in primary care where ACS is suspected: **73.2% [67.7-78.0]**	
g] Absolute and relative number of patients presenting with chest pain in primary care where ACS / severe disease is considered	based on e] and f] in this table				In the total population presenting with chest pain to a GP, mean referral rate is 14.2% (see row e] in this table). Referral rate in the population of patients presenting chest pain to a GP who are suspected of ACS is 73% (see row f] in this table). Since the group of patients suspected of ACS in both populations is the same, the population of patients with chest pain suspected of ACS is assumed to be 14.2/73 = 19.5% of the total population of patients with any chest pain, either suspected or unsuspected of ACS.	percentage of patients where ACS / severe disease is considered among patients presenting with chest pain in primary care: **20%** (value G)	**number of patients presenting with chest pain in primary care where ACS / severe disease is considered**, NL 2013 (value C x value G)**:** **210,946 [209,576-212,316]** (after exclusion of Rosser,

	Verdon, 2008	CH	2001	442 patients presenting new-onset chest pain	Percentage of patients with new presentation of chest pain suspected of severe acute disease: 20%		1990: (value C' x value G)**: 210,946 [209,576-213,685]**
h] Absolute and relative number of ACS among referred patients	Nilsson, 2003	SW	1998-2000	65 patients immediately referred by GP after presenting with new-onset chest pain	Percentage of ACS, resp AMI among patients with chest complaints that are referred by a GP, 29% resp 11% (outcome set 3 months after presentation)	pooled data: 67 cases of ACS among 283 referred patients **weighted average** of true referrals among referred patients with chest pain in primary care: **23.7% [18.9-29.1]** (value H)	**number of ACS among referred patients presenting with chest pain in primary care ('true referrals')**, NL 2013 (value E'' x value H)**:** **35,496 [[27,727-44,484]]** (after exclusion of Rosser, 1990: (value E''' x value H) **71,742 [[55,850 - 90,786]]**)
	Bruins Slot, 2013	NL	2006-2008	Selection of study population that was referred by GP, N = 218	Percentage of ACS, resp AMI: 22% resp 17%,		
i] Absolute and relative number of ACS among patients initially not referred	Nilsson, 2003	SW	1998-2000	281 patient with new onset chest pain where ACS was not suspected by GP	Percentage of ACS among patients with chest complaints that were initially not suspected of ACS by a GP: 1.8% (outcome set 3 months after presentation)	ACS rate among non-referred patients with chest pain in primary care: **1.8% [0.7-4.3]** (value I)	**number of ACS among not referred patients presenting with chest pain in primary care ('false non referrals')**, NL 2013 (value I x (value C - value E''))**:** **16,289 [[6,279-39,257]]** (after exclusion of Rosser, 1990: (value I x (value C' - value E'''))**:** **13,536 [[5,151 - 33,236]]**
j] Number of patients with chest pain at ER	Academic Hospital Maastricht, 2013	NL	2013	199,411 inhabitants of a region in the South-East of the Netherlands	incidence of visiting cardiologic emergency department with chest pain (either referred by GP, brought by ambulance or self- referred): 12,54/1000 pts/year	Incidence of chest pain presentation at ER: **1.25 [1.21-1.30]**	**Number of patients with chest pain at ER**, NL 2013: **209,745 [203,033-218,134]**

Supplementary Table S1 (online only). Webtable on literature search results. *Data on numbers and referral rates of patients presenting with chest*

complaints in primary care are presented. Sources are presented and all numbers and rates are converted into absolute numbers in The Netherlands in the year 2013.These converted numbers are used in Figure 2, means are used in Figure 2 when more than 1 source is available.
Abbreviations: *95%CI = 95% confidence interval ; ACS = Acute coronary syndrome ; AMI = Acute myocardial infarction ; B = Belgium ; CAN = Canada ; CH = Switzerland ; CMR = continuous registration of morbidity ; D = Germany ; ER = emergency room ; GP = general practitioner ; IC = Iceland ; MI = myocardial infarction ; N = number ; NL = the Netherlands ; RfE = reason for encounter ; SW = Sweden ; UK = United Kingdom ; US = United States of America*