	Source	Used in base case	Country ; year	Population, background	Outcome [estimation for variation, 95% CI when applicable]	Translation to (estimated) patient numbers, NL 2013 [estimation for variation, 95% CI when applicable]
a] Population in the Netherlands	CBS, 2014a-d	'international data' and 'NL and B'	NL ; 2013	All inhabitants of the Netherlands	Total population: N = 16,779,575 Population aged 20-79: N = 12,205,982	N = 16,779,575 N = 12,205,982
b] Number of annual GP consultations	CBS, 2014a-d	'international data' and 'NL and B'	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	N = 12,015,601 N = 68,488,928
c] Incidence of chest pain as RfE GP	Dutch cohort study[*]	'NL and B'	NL, B ; 2015-2016	Registration of 22,294 consultations in primary care	Percentage of GP consultations where chest pain is RfE: 1.26%	N = 862,960
	Pooled data international studies[**]	'international data'	NL, UK, SW, D, Ch, Ic, US, Can ; 1989-2008	Pooled data: 61,039 cases of chest pain in 3,964,274 consultations	Percentage of GP consultations where chest pain is RfE: 1.54% [1.53-1.55]	N = 1,054,729 [1,047,881-1,061,578]
	Combination Dutch data and selected international data[***]	'combined data'	NL, UK, SW, D, Ch, Ic, US, Can ; 1989-2008	Pooled data: 60,052 cases of chest pain in 3,892,749 consultations,	Percentage of GP consultations where chest pain is RfE: 1.54% [1.53-1.56]	N = 1,054,729 [1,047,881-1,068,427]
d] Number of patients with ACS in primary care	Dutch cohort study[*]	'NL and B'	NL, B ; 2015-2016	281 patients with chest pain in primary care	Incidence ACS among patients presenting with chest pain in primary care: 6.45%	N = 55,654
	Pooled data international studies[**]	'international data'	SW, D, Ch, US ; 1994-2011	Pooled data: 84 cases of ACS among 3,012 cases of chest pain	Incidence of ACS among patients presenting with chest pain in primary care: 2.79% [2.24-3.46]	N = 29,427 [23,473-36,731]
	Combination Dutch data and selected international	'combined data'	NL, UK, SW, D, Ch, Ic, US, Can ; 1989-2008	Pooled data: 84 cases of ACS among 3,012 cases of chest pain	Incidence of ACS among patients presenting with chest pain in primary care: 2.79% [2.24-3.46]	N = 29,427 [23,473-36,731]

	data[***]					
e] Absolute and relative number of referrals among all patients presenting chest pain to a GP.	Dutch cohort study[*]	'NL and B'	NL, B ; 2015-2016	281 patients with chest pain in primary care	Relative number of patients that are immediately referred by the GP: 14.2%	N = 122,540
	Pooled data international studies[**]	'international data'	NL, SW, CH, US, CAN ; 1985-2008	Pooled data: 15,266 referrals among 107,284 cases of chest pain	Relative number of patients that are immediately referred by the GP: 14.2% [14.0-14.4]	N = 149,772 [146,703-152,867]
	Combination Dutch data and selected international data[***]	'combined data'	NL, UK, SW, D, Ch, Ic, US, Can ; 1989-2008	Pooled data: 10,259 referrals among 35,759 cases of chest pain,	Relative number of patients that are immediately referred by the GP: 28.7% [28.2-29.2]	N = 302,707 [295,502-311,981]
g] Absolute and relative number of patients presenting with chest pain in primary care where ACS / severe disease is considered	Dutch cohort study[*]	'NL and B'	NL, B ; 2015-2016	281 patients with chest pain in primary care	Percentage of patients with new presentation of chest pain suspected of ACS: 38.1%	N = 328,788
	Pooled data international studies[**]	'international data'	NL, SW, CH, US, CAN ; 1985-2008		Percentage where ACS / severe disease is considered among patients presenting with chest pain, primary care: 20%	N = 210,946 [209,576-212,316]
	Combination Dutch data and selected international data[***]	'combined data'	NL, UK, SW, D, Ch, Ic, US, Can ; 1989-2008		Percentage where ACS / severe disease is considered among patients presenting with chest pain, primary care: 20%	N = 210,946 [209,576-213,685]
h] Absolute and relative number of ACS among referred patients	Dutch cohort study[*]	'NL and B'	NL, B ; 2015-2016	281 patients with chest pain in primary care	Percentage of ACS among patients with chest complaints that are referred by a GP ('true referrals'): 43% (outcome set at least 30 days after presentation)	'True referrals' (ref+, ACS+): N = 52,692 'False referrals' (ref+, ACS-): N = 69,848
	Pooled data international studies[**]	'international data'	NL, SW ; 1998-2008	Pooled data: 67 cases of ACS among 283 referred patients	Percentage of ACS among patients with chest complaints that are referred by a GP ('true referrals'): 23.7% [18.9-29.1]	'True referrals' (ref+, ACS+): N = 35,496 [27,727-44,484] 'False referrals' (ref+, ACS-):

						N = 114,276 [105,288-122,045]
	Combination Dutch data and selected international data[***]	'combined data'	NL, UK, SW, D, Ch, Ic, US, Can ; 1989-2008	Pooled data: 67 cases of ACS among 283 referred patients	Percentage of ACS among patients with chest complaints that are referred by a GP ('true referrals'): 23.7% [18.9-29.1]	'True referrals' (ref+, ACS+): N = 71,742 [55,850 - 90,786] 'False referrals' (ref+, ACS-): N = 230,965 [211,921-246,857]
i] Absolute and relative number of ACS among patients initially not referred	Dutch cohort study[*]	'NL and B'	NL, B ; 2015-2016	281 patients with chest pain in primary care	Percentage of ACS among patients with chest complaints that were initially not suspected of ACS by a GP ('false non-referrals'): 0.4% (outcome set at least 30 days after presentation)	'False non-referrals' (ref-, ACS+): N = 2,962 'True non-referrals' (ref-, ACS-): N = 737,458
	Pooled data international studies[**]	'international data'	NL, SW ; 1998-2008	Pooled data: 9 cases of ACS among 361 not referred patients	Percentage of ACS among patients with chest complaints that were initially not suspected of ACS by a GP ('false non-referrals'): 1.8% [0.7-4.3]	'False non-referrals' (ref-, ACS+): N = 16,289 [6,279-39,257] 'True non-referrals' (ref-, ACS-): N = 888,668 [865,700-898,678]
	Combination Dutch data and selected international data[***]	'combined data'	NL, B ; 2015-2016	281 patients with chest pain in primary care	Percentage of ACS among patients with chest complaints that were initially not suspected of ACS by a GP ('false non-referrals'): 0.4% (outcome set at least 30 days after presentation)	'False non-referrals' (ref-, ACS+): N = 3,008 [2,971 - 3,037] 'True non-referrals' (ref-, ACS-): N = 749,014 [748,985-749,051]

Supplementary Table S2 (online only). Overview of three base cases based on various estimations of incidence of chest pain, referral rates and 'true and false (non-) referrals'.

The first base case ('NL and B') is based on the results of a Dutch cohort study.[23] The second base case ('international data') is based on a pooled analysis of international studies on incidence of chest pain, incidence of ACS and referral rates in primary care. The third base case ('combined data') is based on a combination of base cases 'NL and B' and 'international data', using the international data set after exclusion of one reference because of a non comparable health care system in the study.[50] Moreover, in this third base case ('combined data'), the incidence of ACS positive non-referrals ('false non-referrals') was based on the Dutch and Belgian cohort study since it was considered more representative on this issue.[23] All three base cases were analysed separately in our model for cost efficiency (see remainder of article). All numbers and rates are converted into absolute numbers in the Netherlands in the year 2013. .

* Reference: Hoorweg, 2017

** References: Rosser, 1990; Klinkman, 1994; Svavarsdottir, 1996; Carroll, 2003; Nilsson, 2003; Bakx, 2005; Ruigomez, 2006; Koek, 2007;   Verdon, 2008; Bosner, 2009; Yeh, 2010; Haasenritter, 2012; Soler, 2012b; Bruins Slot, 2013; Andersson, 2015; Frese, 2016

*** References: Klinkman, 1994; Svavarsdottir, 1996; Carroll, 2003; Nilsson, 2003; Bakx, 2005; Ruigomez, 2006; Koek, 2007; Verdon, 2008; Bosner, 2009; Yeh, 2010; Haasenritter, 2012; Soler, 2012b; Bruins Slot, 2013; Andersson, 2015; Frese, 2016; Hoorweg, 2017.

Abbreviations: 95%CI = 95% confidence interval ; ACS = Acute coronary syndrome ; B = Belgium ; CAN = Canada ; CH = Switzerland ; CMR = continuous registration of morbidity ; D = Germany ; GP = general practitioner ; Ic = Iceland ; N = number ; NL = the Netherlands ; Ref = referral ; RfE = reason for encounter ; SW = Sweden ; UK = United Kingdom ; US = United States of America