S2 Table: List of excluded studies along with reasons for exclusion

Full-text articles excluded, with reasons (n=85)

Qualitative study (n= 6) Ecological study (n= 7) Not a primary study (n= 11) No association of interest (n=6) No control group of interest (n= 8) No exposure of interest (n= 12) No outcome of interest (n= 8) Not industry related (n= 3) Measures attitude towards physician-industry interaction (n= 9) Focuses on medical student/residents/trainees (n= 4) Non-English study (n=4) Econometric study (n=1) Intervention studies (n=6)

| Study | Reason for Exclusion |
|-------------------|---|
| Ahmadi 2015(1) | Not a primary study |
| Al-Areefi | No exposure of interest |
| 2013(2) | (study examines whether relationship between perception of PRS by |
| | physician and their prescribing behaviors were associated) |
| Alsageer | No outcome of interest |
| 2012(3) | (study examined the extent of doctors' involvements in PCRs' |
| | activities and the factors associated with such engagement, without |
| | linking such interactions to changes in knowledge, attitude or behavior |
| | of physicians) |
| Andaleeb | Measures attitude towards physician-industry interaction |
| 1996(4) | |
| Anderson | Intervention study |
| 2015(5) | |
| Anonymous | Intervention study |
| 2015(6) | |
| Babu 2012(7) | No exposure of interest |
| Backer 2000(8) | Qualitative study |
| Berings and | Not industry related |
| Habraken, | (Industry-independent drug information interventions) |
| 1994(9) | |
| Bogenmann | No exposure of interest (surrogate exposure) |
| 2015 (10) | |
| Boltri, 2002 (11) | Intervention study |
| | |
| Burashnikova | Measures attitude towards physician-industry interaction |
| 2008(12) | |

| Caudill | No association of interest |
|-------------------|--|
| 1996(13) | (Study only measured the association between attitudes towards |
| | pharmaceutical representative and frequency of use of information |
| | provided by pharmaceutical representative) |
| Chew 2000(14) | Study focused on medical students |
| Chimonas | Qualitative study |
| 2007(15) | |
| Chressanthis 2014 | Ecological study |
| (16) | (study looked at the association between organizational characteristics |
| | and actual adoption and not at the level of physician) |
| Christensen | No association of interest |
| 1979(17) | |
| Darmon | Non-English study |
| 2015(18) | |
| De Angelis(19) | Not a primary study |
| De Ferrari | No outcome of interest |
| 2014(20) | (study did not relate exposure to outcome) |
| De la Cauvas | No control group of interest |
| 2002(21) | |
| Donohue | Ecological study |
| 2004(22) | (measure of exposure was ecological) |
| Doval 2015(23) | Measures attitude towards physician-industry interaction |
| Fleischman | Ecological study |
| 2016(24) | |
| Ferguson | No outcome of interest |
| 1999(25) | |
| Freeman | No exposure of interest |
| 1993(26) | |
| Freemantle et al, | Intervention study |
| 2000 (27) | |
| Fretheim | Ecological study |
| 2005(28) | |
| Gonul 2001(29) | No control group of interest |
| Gönül 2010(30) | No control group of interest |
| | (compared E-detailing to traditional detailing) |
| Gunnarsdottir | No exposure of interest |
| 2005(31) | |
| Halperin, | Measures attitude towards physician-industry interaction |
| 2004(32) | Final and a final standar |
| Hansen $2010(22)$ | Ecological study (study unable to conture person level variation in promotional |
| 2010(33) | (study unable to capture person-rever variation in promotional sponding) |
| Homminki | No exposure of interest |
| 2004(34) | No exposure of interest |
| Henry $2007(35)$ | No outcome of interest |
| Herrera | Non-English study |
| 2004(36) | Non-English study |
| Hartung | Intervention study |
| 2010(37) | |

| Hossain | No association of interest |
|--------------------------|---|
| 2013(38) | |
| Ichikawa | Not a primary study |
| 2016(39) | (commentary) |
| lizuka 2007(40) | No exposure of interest |
| Indhumathi 2015(41) | No outcome of interest |
| Joyce 2011(42) | No outcome of interest (study focused more on whether broad or |
| | narrow prescribing is associated with patient-level outcomes) |
| Kamal 2015(43) | Measures attitude towards physician-industry interaction |
| Kannan 2015(44) | Measures attitude towards physician-industry interaction |
| Khajuria | No control group of interest |
| 2013(45) | (study involved rating various pharmaceutical communication |
| | strategies by physicians using five point Likert scale ranging from |
| | "Not At All Important effective" (score =1) to "Very Important" |
| | (score =5)) |
| Kinoshita | Focus on medical student/residents/trainees |
| 2015(46) | |
| Klemenc-Ketis $2013(47)$ | No exposure of interest |
| Knudsen | Ecological study |
| 2014(48) | (study looked at the association between organizational characteristics |
| 2014(40) | and actual adoption and not at the level of physician) |
| Lee 2016(49) | No outcome of interest |
| Lee 2010(1) | Non-English study |
| 2016(50) | |
| Lenzer | Not a primary study |
| 2015(51) | |
| Lurk 2004(52) | No outcome of interest |
| Lussier | Non-English study |
| 2015(53) | |
| Mackowiak | Ecological study |
| 1985(54) | |
| Maeda 2015 | Not industry-related |
| (55) | |
| Mansfield | Not a primary study |
| 2005(56) | |
| Mansfield | Not a primary study |
| 2008(57) | |
| 2015(58) | Not a primary study |
| McGavock 1993(59) | No exposure of interest |
| Miao-Sheng | No exposure of interest |
| 2008(60) | (study focused on sales discount as a marketing strategy) |
| Narendran | No control group of interest |
| 2013(61) | (Study involved rating the effectiveness of different marketing |
| | strategies (on a scale of 1-7) by physicians and sales personnel) |

| Newton-Syms | Not industry-related |
|-----------------|---|
| 1992(62) | (industry-independent drug information interventions) |
| O'Dowd | Not a primary study |
| 2015(63) | |
| Peah, 1984(64) | Measures attitude towards physician-industry interaction |
| Prosser | Qualitative study |
| 2003(65) | |
| Prosser | Qualitative study |
| 2003(66) | |
| Rahman | Qualitative study |
| 2015(67) | |
| Ridley 2015(68) | No exposure of interest |
| Riese 2015(69) | Focuses on medical students/residents/trainees |
| Sarpatwari | No association of interest |
| 2015(70) | |
| Sharma | Not a primary study |
| 2016(71) | (presented only as abstract) |
| Skipper | No association of interest |
| 2015(72) | |
| Spurling | Intervention study |
| 2007(73) | |
| Spurling | Not a primary study |
| 2010(74) | (systematic review) |
| Stark 2016 (75) | Measures attitude towards physician-industry interaction |
| Steinman | No control group of interest |
| 2007(76) | |
| Stelfox | Focuses on medical students/residents/trainees |
| 1998(77) | (results of interest not restricted to practicing physicians) |
| Stoddard | No association of interest |
| 2003(78) | |
| Tahmasebi 2015 | Econometric study (no targeted interaction) |
| (79) | |
| Turner 1986(80) | Not a primary study (narrative study) |
| Tahmasebi | No exposure of interest |
| 2015(81) | |
| Taylor 1991(82) | No control group of interest |
| Tengilimoglu | No association of interest |
| 2005(83) | |
| Tobin 2008(84) | Qualitative study |
| Wilson | No control group of interest |
| 1963(85) | |

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