

Introduction

Tobacco smoking is the largest avoidable cause of premature death and disability in the UK¹, and is more prevalent in the European region than in any other region of the world.²⁻⁴ Smoking kills predominantly by causing lung cancer, chronic obstructive pulmonary disease and myocardial infarction, but also by causing, or contributing to the development of, a wide range of communicable and other non-communicable disorders^{5, 6} This burden of disease, which in the UK alone accounts for nearly half a million hospital admissions, 16% of all deaths each year⁷ and a substantial societal economic burden,⁸⁻¹¹ can be prevented by helping smokers to quit. However, since quitting smoking also generates substantial improvements in disease progression for many of the conditions caused by smoking,⁵ treating smoking dependence should be a key component of the management of all diseases caused by smoking.

Clinical management guidelines for diseases caused by smoking should therefore include, or refer to, guidance on smoking cessation. In 2014 we conducted a review of clinical disease guidelines for a sample of diseases more common among smokers, published between 2000 and 2013, to determine the extent to which smoking cessation was addressed.¹² Our review found that only 60% of guidelines reported smoking as a risk factor for the development of the selected diseases, 40% recommended smoking cessation in disease management, and 19% provided detailed information on smoking cessation support.¹² We have now updated this investigation by exploring the extent to which smoking cessation measures have been incorporated into UK or European clinical management guidelines for a range of diseases recently demonstrated to be at least twice as common among smokers⁵ and published since January 2014.

Methods

We used the same methods described previously¹² to identify guidelines and recommendations published between January 2014 to 2019 relating to any of the sixteen diseases established in an extensive review by the Royal College of Physicians to be at least twice as common among smokers⁵ and produced or endorsed by a relevant UK national or European transnational medical speciality association, international professional society or government agency. Seven of the diseases (cancer of the pharynx and oral cavity, larynx and lung; ischaemic heart disease (IHD), abdominal aortic

aneurysm (AAA), chronic obstructive pulmonary disease (COPD) and pneumonia) were included in our previous study¹² (other diseases previously included did not meet the criteria for being twice as common among smokers); the additional nine being bulimia, hearing loss, hernia, laboratory-confirmed influenza (LCI), peripheral artery disease (PAD), psychosis, rheumatoid arthritis (RA), schizophrenia and sleep apnoea. We performed comprehensive searches of five electronic databases (Medline and EMBASE, National Institute for Health and Care Excellence [NICE] evidence, Guideline International Network [GIN], and Turning Research Into Practice [TRIP]) to October 2019. We also hand-searched all relevant UK and EU authorised organization websites, such as the websites of European Associations or Societies for Cardio-Thoracic Surgery (EACTS), Cardiology (ESC), Hernia (EHS), Rheumatism (EULAR), Medical Oncology (ESMO), Respiratory (ERS), and Clinical Microbiology and Infectious Diseases. We excluded guidelines produced by and for individual European countries outside the UK (non-UK EU country specific guidelines), quality indicator and social care guidance documents. For updated guidelines, only those published from 2014 were considered. The search strategy for Medline is presented in **Supplementary Table 1**.

Titles, abstracts, and full texts were screened to select eligible guidelines and data extracted using previously piloted checklist forms. Disagreements were resolved by discussion among the authors. The three outcomes of interest were inclusion in the guidance of (i) identification of smoking as a risk factor or major cause of disease; (ii) recommending smoking cessation intervention and (iii) provision of or reference to smoking cessation guidelines or recommendations of evidence-based treatments for smoking cessation. Simple descriptive summary statistics were used to report the findings.

Results

Our searches identified 114,038 hits representing 75,222 separate titles, 389 of which were assessed for eligibility from full text; while those excluded were mostly research studies or non-EU publications (**Supplementary Figure 1**). Of these, 230 were excluded because they did not report on the conditions of interest (199 papers), were English versions of guidelines produced by non-UK EU countries (22 papers) or were guidelines published for the first time before 2014 (9 papers). Thus, there were 159 disease management guidelines eligible for inclusion in the review. For some of the conditions of interest, guidelines were found where multiple conditions were included together in the same guidelines (pharynx/oral cavity and larynx cancers; ischaemic heart disease and peripheral artery disease; and psychosis and schizophrenia), in such cases these conditions were reported together. A full list of eligible guidelines is provided in **Supplementary Table 2**.

Just under half (78 (49%)) of the 159 included guidelines, comprising 37 UK¹³⁻⁴⁹ and 41 European speciality association, international professional society or government agency publications⁵⁰⁻⁹⁰ mentioned smoking. Of the 81 that made no reference to smoking, 48% were from the UK⁹⁰⁻¹⁷⁰ (**Table 1**). Smoking was mentioned as a risk factor for the development of the disease by 69 (43%) guidelines, a statement recommending smoking cessation was included in 50 (31%) and reference to specific treatments for smoking cessation or to a smoking cessation guideline in 30 (19%). The numbers of guidelines including smoking guidance, and the nature of the guidance included, are summarised in relation to the study disease groups in **Table 1**.

Comparison with previous review findings

Although different smoking related diseases were considered, the proportions of guidelines reporting smoking as a risk factor, offering cessation advice or referring to specific cessation guidance in this present review of guidelines published from 2014 to 2019 are very similar to those published between 2000 and 2013 in our previous report (50%, 40% and 19% respectively).¹² Direct comparisons for guidelines on diseases included in both our earlier and current review are presented in Table 2.

Discussion

This study demonstrates that acknowledgement of the role of smoking in disease aetiology and management remains widely ignored in clinical guidelines for diseases strongly related to smoking. Since the clinical management of smoking-related diseases should include ascertainment of smoking status and delivery of effective smoking cessation support this represents a significant and sustained neglect of a major reversible cause of disease.

Quitting smoking reduces the progression of COPD,¹⁷¹ the incidence of acute lung infections and asthma exacerbations,¹⁷² improves lung cancer survival,¹⁷³ and reduces the risk of recurrence of myocardial infarction and stroke.¹⁷⁴⁻¹⁷⁸ Smoking cessation also improves the outcome of head and neck cancer¹⁷⁹⁻¹⁸⁴ peripheral artery disease¹⁸⁵ rheumatoid arthritis,¹⁸⁶ and a range of other conditions.⁵ Encouraging patients with diseases caused by smoking should therefore be a routine component of disease management, and systematic intervention to treat smoking is a fundamental component of evidence-based smoking cessation guidance.^{187, 188} For nearly half of the guidelines on managing diseases caused by smoking included in this study to fail even to mention smoking cessation, is clearly a neglect of the overriding duty of care in medical practice.

Although the identified guidelines for smoking cessation are available, there are people who find it difficult to quit in one-step, and a group who unwilling. Recommendations for those who would like quit but cannot overcome the barriers or are unable to do so using a single intervention; is to provide a combination of options. For instance, pharmacological treatment and electronic interventions in combination with psychosocial interventions, intensive counselling, interactive and tailored advice and support.^{61, 189-191 192} Several Cochrane reviews have supported the effectiveness of these options and have showed enhanced behavioural support focusing on adherence to smoking cessation medications can improve adherence, and therefore recommends that interventions to increase adherence should address the practicalities and perception changes about taking medication.¹⁹¹⁻¹⁹⁵ As such, counselling interventions given outside routine clinical care, by smoking cessation counsellors including health educators and psychologists, could assist smokers to quit.¹⁹⁵

In respect to unwillingness to quit, in the UK about 40% of smokers do not want to quit,¹ and despite the reduction in smoking rates across Europe since 2000, this rates are less pronounced compared to Australia and North America.^{196, 197} Reasons for this are influenced by the poor smoke-free legislation and enforcement.^{196, 197} Intention and willingness to quit smoking is associated with a variety of different characteristics, especially socio-demographic factors,¹ and includes a combination of low awareness of smoking-associated health risks and lack of previous quit attempts.¹⁹⁸ Hence, for those unwilling to quit, evidence have shown provision of incentives improve smoking cessation rates and the effectiveness that could be sustained even after the withdrawal of incentives.^{198, 199} In addition, use of comprehensive tobacco control programmes which include mass media campaigns, can be effective in changing smoking behaviour; and this may be combined with other components of a comprehensive tobacco control policy.²⁰⁰ This approach would help address environments where there are other non-personal influences on smoking.^{200, 201} Hence, health impact and promotion information, and improving awareness about quit options and combinations might increase willingness to use smoking cessation.

Our study has one main limitation related to the use of only documents published in English language. However, we used robust search strategies and screening methods to identify and assess the eligibility of the clinical guidelines included in the review. It is therefore unlikely that any guidelines we did not identify would have a significant impact on our findings. Since the indexing of clinical guidelines is still being developed we ensured that our search strategies were sensitive and hence identified many publications that were not relevant. Some of the included guidelines were in the form of a very short consensus document or a shortened updated guideline; therefore, due to the restrictions on the length of the documents it is likely that smoking or smoking cessation practice could not be included, but in many cases these documents made no reference to smoking.

The consequence of the omission of smoking cessation management from clinical guidance is likely to be that smoking is not addressed by practitioners delivering care for people with these conditions. We conclude that the role of smoking as a cause of disease, and of smoking cessation in disease management, remains substantially overlooked and neglected in clinical practice, even in relation to the diseases most strongly related to smoking.

References

1. Office for National Statistics. *Adult smoking habits in the UK: 2018*. London, ONS.2019; Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2018> (Accessed 30 April 2020)
2. World Health Organization. *WHO Global report on trends in prevalence of tobacco smoking 2000-2025*. World Health Organization 2018.
3. World Health Organization. *WHO Report on the global tobacco epidemic. 2019*. Available from: https://www.who.int/tobacco/global_report/en/ (Accessed 19 February 2020)
4. World Health Organization. *Tobacco: Data and statistics*. Available from: <http://www.euro.who.int/en/health-topics/disease-prevention/tobacco/data-and-statistics>. (Accessed 30 April 2020)
5. Royal College of Physicians. *Hiding in plain sight: Treating Tobacco dependency in the NHS*. London: RCP, 2018.
6. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*. Atlanta, GA. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. 2014.
7. NHS Digital. *Statistics on Smoking, England – 2019*. National Health Service. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-smoking/statistics-on-smoking-england-2019> (Accessed 19 February 2020)
8. Aune D, Schlesinger S, Norat T, Riboli E. Tobacco smoking and the risk of abdominal aortic aneurysm: a systematic review and meta-analysis of prospective studies. *Sci Rep*. **2018**; 8:14786. doi: 10.1038/s41598-018-32100-2
9. Baskaran V, Murray RL, Hunter A, Lim WS, McKeever TM. Effect of tobacco smoking on the risk of developing community acquired pneumonia: A systematic review and meta-analysis. *PLoS One*. **2019**; 14:e0220204. doi: 10.1371/journal.pone.0220204
10. Joseph RM, Movahedi M, Dixon WG, Symmons DPM. Smoking-Related Mortality in Patients With Early Rheumatoid Arthritis: A Retrospective Cohort Study Using the Clinical Practice Research Datalink. *Arthritis Care and Research*. **2016**; 68:1598-606. doi: 10.1002/acr.22882
11. Braeken DCW, Rohde GGU, Franssen FME, Driessen JHM, van Staa TP, Souverein PC, et al. Risk of community-acquired pneumonia in chronic obstructive pulmonary disease stratified by smoking status: A population-based cohort study in the United Kingdom. *Int J. COPD*. **2017**; 12:2425-32. doi: 10.2147/COPD.S138435

12. Bogdanovica I, Agrawal AS, Gregory BB, Britton CJ, Leonardi-Bee J. What is the quality of smoking cessation advice in guidelines of tobacco-related diseases? *Clinical Medicine*. **2015**; 15:546–9. doi: 10.7861/clinmedicine.15-6-546
13. Public Health England. *Abdominal Aortic Aneurysm Screening Programme Nurse Specialist Best Practice Guidelines*. London: PHE, 2016.
14. Public Health England. *NHS Abdominal Aortic Aneurysm (AAA) Screening Programme: Essential elements in providing an AAA screening and surveillance programme*. London: PHE, 2017.
15. Earnshaw JJ, Lees T. Update on Screening for Abdominal Aortic Aneurysm. *Eur J Vascular and Endovascular Surgery*. **2017**; 54:1-2. doi: 10.1016/j.ejvs.2017.04.002
16. Hill AT, Sullivan AL, Chalmers JD, De Soyza A, Stuart Elborn J, Andres Floto R, et al. British thoracic society guideline for bronchiectasis in adults. *Thorax*. 2019; 74(Suppl 1):1-69. doi: 10.1136/thoraxjnl-2018-212463.
17. National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease (acute exacerbation): antimicrobial prescribing*. London: NICE. 2018.
18. National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease in over 16s: diagnosis and management*. London: NICE, 2018.
19. North J, Osborne W. ASCN UK Guideline: Parastomal hernias. *British Journal of Nursing*. **2017**; 26:S6-S13. doi: 10.12968/bjon.2017.26.22.S6
20. Scottish Intercollegiate Guidelines Network. *Acute coronary syndrome*. Edinburgh: SIGN, 2016.
21. Scottish Intercollegiate Guidelines Network. *Cardiac arrhythmias in coronary heart disease*. Edinburgh: SIGN, 2018.
22. National Institute for Health and Care Excellence. *Cardio Cardiovascular vascular disease: Risk assessment and reduction, including lipid modification*. London: NICE. 2018.
23. Scottish Intercollegiate Guidelines Network. *Management of chronic heart failure*. Edinburgh: SIGN, 2016.
24. Scottish Intercollegiate Guidelines Network. *Management of stable angina*. Edinburgh: SIGN, 2018.
25. National Institute for Health and Care Excellence. *Peripheral arterial disease: diagnosis and management*. London: NICE, 2018.
26. Scottish Intercollegiate Guidelines Network. *Risk estimation and the prevention of cardiovascular disease*. Edinburgh: SIGN, 2017.
27. National Institute for Health and Care Excellence. *Stroke and transient ischaemic attack in over 16s: diagnosis and management*. London: NICE, 2019.
28. National Institute for Health and Care Excellence. *Psychosis and schizophrenia in adults: Prevention and management*. London: NICE, 2019.

29. National Collaborating Centre for Chronic Conditions. *Rheumatoid Arthritis- National clinical guideline for management and treatment in adults*. London; RCP. 2018.
30. Scottish Intercollegiate Guidelines Network. *Management of osteoporosis and the prevention of fragility fractures*. Edinburgh: SIGN, 2015.
31. Paleri V, Roland N. Head and Neck Cancer: United Kingdom National Multidisciplinary Guidelines. *J. Laryngology & Otology*. **2016**; 130. doi: 10.1017/S002221511600013X
32. Mehanna H, Kong A, Ahmed S. Recurrent head and neck cancer: United Kingdom National Multidisciplinary Guidelines. *Journal of Laryngology & Otology*. **2016**; 130:S181-S90. doi: 10.1017/S002221511600061X
33. Kerawala C, Roques T, Jeannon J-P, Bisase B. Oral cavity and lip cancer: United Kingdom National Multidisciplinary Guidelines. *J. Laryngology & Otology*. **2016**; 130:S83-S9. doi: 10.1017/S0022215116000499
34. Mcallister-Williams RH, Baldwin DS, Cantwell R, Easter A, Gilvarry E, Glover V, et al. British Association for Psychopharmacology consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum 2017. *J. Psychopharmacology*. **2017**; 31:519-552. doi: 10.1177/0269881117699361
35. National Institute for Health and Care Excellence. *Lung cancer: Diagnosis and management*. London: NICE, 2008.
36. Scottish Intercollegiate Guidelines Network. *Management of lung cancer*. Edinburgh: SIGN, 2014.
37. National Institute for Health and Clinical Excellence. *Cancer of the upper aerodigestive tract: Assessment and management in people aged 16 and over*. London: NICE, 2019.
38. National Institute for Health and Clinical Excellence. *Suspected Cancer: Recognition and Referral*. London: NICE, 2015.
39. BTS. *British Thoracic Society guidelines for the management of community acquired pneumonia in adults: Update 2009*. 2015.
40. National Institute for Health and Care Excellence. *Coexisting existing severe mental illness and substance misuse: Community health and social care services*. London: NICE, 2019.
41. Royal College of Psychiatrists. *Consensus statement on high-dose antipsychotic medication*. RCPsych, 2014.
42. Cooper SJ, Reynolds GP, Barnes TRE, England E, Haddad PM, Heald A, et al. BAP guidelines on the management of weight gain, metabolic disturbances and cardiovascular risk associated with psychosis and antipsychotic drug treatment. *J. Psychopharmacology* **2016**; 30:717-48. doi: 10.1177/0269881116645254
43. Kuipers E, Yesufu-Udechuku A, Taylor C, Kendall T, E. K, A. Y-U, et al. Management of psychosis and schizophrenia in adults: summary of updated NICE guidance. *BMJ* **2014**; 348:g1173.
44. Davies S, Bowen C. Guidelines for the management of foot health for people with rheumatoid arthritis. 2014. North West NHS Podiatry Services Clinical Effectiveness Group - Rheumatology

45. Javed A, Arthur H, Curtis L, Hansen L, Pappa S. Practical Guidance on the Use of Lurasidone for the Treatment of Adults with Schizophrenia. *Neurology and Therapy*. **2019**; 8:215-30. doi: 10.1007/s40120-019-0138-z
46. ACPGBI Parastomal Hernia Group. *Prevention and treatment of parastomal hernia: a position statement on behalf of the Association of Coloproctology of Great Britain and Ireland*. United Kingdom: Blackwell Publishing Ltd. 2018.
47. BHS. *Commissioning guide: Groin Hernia Commissioning guide* British Hernia Society, Royal College of Surgeons of England 2016.
48. O'Driscoll BR, Howard LS, Earis J, Mak V, Bajwah S, Beasley R, et al. BTS guideline for oxygen use in adults in healthcare and emergency settings. *Thorax*. **2017**; 72:i1-i90. doi: 10.1136/thoraxjnl-2016-209729
49. Hardinge M, Annandale J, Bourne S, Cooper B, Evans A, Freeman D, et al. British Thoracic Society guidelines for Home Oxygen use in adults. *Thorax*. **2015**; 70:i1-i43. doi: 10.1136/thoraxjnl-2015-206865.
50. Erbel R, Aboyans V, Boileau C, Bossone E, Di Bartolomeo R, Eggebrecht H, et al. 2014 ESC guidelines on the diagnosis and treatment of aortic diseases. *European Heart Journal*. 2014; 35:2873-926. doi:10.1093/eurheartj/ehu281
51. Cosentino F, Grant PJ, Aboyans V, Bailey CJ, Ceriello A, Delgado V, et al. 2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD. *European Heart Journal*. **2020**; 41:255-323. doi:10.1093/eurheartj/ehz486
52. Wanhainen A, Verzini F, Van Herzele I, Allaire E, Bown M, Cohnert T, et al. Editor's Choice - European Society for Vascular Surgery (ESVS) 2019 Clinical Practice Guidelines on the Management of Abdominal Aorto-iliac Artery Aneurysms. *European Journal of Vascular and Endovascular Surgery*. **2019**; 57:8-93. doi: 10.1016/j.ejvs.2018.09.020.
53. Rimbau V, Böckler D, Brunkwall J, Cao P, Chiesa R, Coppi G, et al. Editor's Choice – Management of Descending Thoracic Aorta Diseases: Clinical Practice Guidelines of the European Society for Vascular Surgery (ESVS). *European Journal of Vascular and Endovascular Surgery*. **2017**; 53:4-52. doi: 10.1016/j.ejvs.2016.06.005.
54. Rochester CL, Vogiatzis I, Holland AE, Lareau SC, Marciniuk DD, Puhan MA, et al. An official American Thoracic Society/European Respiratory Society policy statement: Enhancing implementation, use, and delivery of pulmonary rehabilitation. *American Journal of Respiratory and Critical Care Medicine*. **2015**; 192:1373-86.
55. Maltais F, Decramer M, Casaburi R, Barreiro E, Burelle Y, Debiga e R, et al. An official American thoracic society/european respiratory society statement: Update on limb muscle dysfunction in chronic obstructive pulmonary disease. *American Journal of Respiratory and Critical Care Medicine*. **2014**; 189:15-62. doi: 10.1164/rccm.201402-0373ST.

56. Watz H, Pitta F, Rochester CL, Garcia-Aymerich J, ZuWallack R, Troosters T, et al. An official European respiratory society statement on physical activity in COPD. *European Respiratory Journal*. **2014**; *44*:1521-37. doi: 10.1183/09031936.00046814.
57. Canepa M, Straburzynska-Migaj E, Drozd J, Fernandez-Vivancos C, Pinilla JMG, Nyolczas N, et al. Characteristics, treatments and 1-year prognosis of hospitalized and ambulatory heart failure patients with chronic obstructive pulmonary disease in the European Society of Cardiology Heart Failure Long-Term Registry. *Eur J. Heart Failure*. **2018**; *20*:100-10. doi: 10.1002/ejhf.964.
58. Grünig E, Eichstaedt C, Barberà J-A, Benjamin N, Blanco I, Bossone E, et al. ERS statement on exercise training and rehabilitation in patients with severe chronic pulmonary hypertension. *Eur Resp Journal*. **2019**; *53*. doi: 10.1183/13993003.00332-2018
59. GOLD. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease - 2020 Report. 2020.
60. Wedzicha JA, Calverley PMA, Albert RK, Anzueto A, Criner GJ, Hurst JR, et al. Prevention of COPD exacerbations: A European Respiratory Society/ American Thoracic Society guideline. *Eur Resp Journal*. **2017**; *50*:2265. doi: 10.1183/13993003.02265-2016.
61. Jiménez-Ruiz CA, Andreas S, Lewis KE, Tonnesen P, Van Schayck CP, Hajek P, et al. Statement on smoking cessation in COPD and other pulmonary diseases and in smokers with comorbidities who find it difficult to quit. *Eur Resp Journal*. **2015**; *46*:61-79. doi: 10.1183/09031936.00092614.
62. World Health Organization. *Environmental noise guidelines for the European region*. Proceedings of the Institute of Acoustics. Denmark, WHO, 2019.
63. De Simone B, Birindelli A, Ansaloni L, Sartelli M, Coccolini F, Di Saverio S, et al. Emergency repair of complicated abdominal wall hernias: WSES guidelines. *Hernia*. **2020**; *24*(2):359-368. doi: 10.1007/s10029-019-02021-8.
64. Simons MP, Smietanski M, Bonjer HJ, Bittner R, Miserez M, Aufenacker TJ, et al. International guidelines for groin hernia management. *Hernia*. **2018**; *22*:1-165. doi: 10.1007/s10029-017-1668-x.
65. Bittner R, Bain K, Bansal VK, Berrevoet F, Bingener-Casey J, Chen D, et al. Update of Guidelines for laparoscopic treatment of ventral and incisional abdominal wall hernias (International Endohernia Society (IEHS)): Part A. *Surgical Endoscopy*. **2019**; *33*:3069-139. doi: 10.1007/s00464-019-06907-7.
66. Bittner R, Bain K, Bansal VK, Berrevoet F, Bingener-Casey J, Chen D, et al. Update of Guidelines for laparoscopic treatment of ventral and incisional abdominal wall hernias (International Endohernia Society (IEHS)): Part B. *Surgical Endoscopy*. **2019**; *33*:3511-49.
67. Kristensen SD, Knuuti J, Saraste A, Anker S, Bøtker HE, De Hert S, et al. 2014 ESC/ESA Guidelines on non-cardiac surgery: Cardiovascular assessment and management: The Joint Task Force on non-cardiac

surgery: Cardiovascular assessment and management of the European Society of Cardiology (ESC) and the European Society of Anaesth. *European Heart Journal*. **2014**; 35:2383-431. doi:10.1093/eurheartj/ehu282

68. Zamorano JL, Lancellotti P, Rodriguez Muñoz D, Aboyans V, Asteggiano R, Galderisi M, et al. 2016 ESC Position Paper on cancer treatments and cardiovascular toxicity developed under the auspices of the ESC Committee for Practice Guidelines. *Eur Heart Journal*. **2016**; 37:2768-801. doi: 10.1093/eurheartj/ehw211.

69. Piepoli MF, Hoes AW, Agewall S, Albus C, Brotons C, Catapano AL, et al. 2016 European Guidelines on cardiovascular disease prevention in clinical practice. *Eur Heart Journal*. **2016**; 37:2315-81.

doi:10.1093/eurheartj/ehw106

70. Ibanez B, James S, Agewall S, Antunes MJ, Bucciarelli-Ducci C, Bueno H, et al. 2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. *Eur Heart Journal*. **2018**; 39:119-77. doi: 10.1093/eurheartj/ehx393

71. Regitz-Zagrosek V, Roos-Hesselink JW, Bauersachs J, Blomström-Lundqvist C, Cifková R, De Bonis M, et al. 2018 ESC Guidelines for the management of cardiovascular diseases during pregnancy. *Eur Heart Journal*. **2018**; 39:3165-241. doi: 10.1093/eurheartj/ehy340

72. Knuuti J, Wijns W, Saraste A, Capodanno D, Barbato E, Funck-Brentano C, et al. 2019 ESC Guidelines for the diagnosis and management of chronic coronary syndromes. *Euro Heart Journal*. **2019**; 41:407-77. doi: 10.1093/eurheartj/ehz425

73. Czerny M, Schmidli J, Adler S, van den Berg JC, Bertoglio L, Carrel T, et al. Editor's Choice – Current Options and Recommendations for the Treatment of Thoracic Aortic Pathologies Involving the Aortic Arch: An Expert Consensus Document of the European Association for Cardio-Thoracic Surgery (EACTS) & the European Society for Vascul. *Eur J. Vascular and Endovascular Surgery*. **2019**; 57:165-98. doi: 10.1093/ejcts/ezy313.

74. Adlam D, Alfonso F, Maas A, Vrints C. European Society of Cardiology, acute cardiovascular care association, SCAD study group: a position paper on spontaneous coronary artery dissection. *European Society of Cardiology*. **2018**; 39:3353-68. doi: 10.1093/eurheartj/ehy080.

75. Simo R, Bradley P, Chevalier D, Dikkers F, Eckel H, Matar N, et al. European Laryngological Society: ELS recommendations for the follow-up of patients treated for laryngeal cancer. *European Archives of Oto-Rhino-Laryngology*. **2014**; 271:2469-79. doi: 10.1007/s00405-014-2966-x.

76. Eberhardt WEE, De Ruyscher D, Weder W, Le Péchoux C, De Leyn P, Hoffmann H, et al. 2nd ESMO Consensus Conference in Lung Cancer: Locally advanced stage III non-small-cell lung cancer. *Annals of Oncology*. **2015**; 26:1573-88. doi: 10.1093/annonc/mdv187.

77. Vansteenkiste J, Crinò L, Doooms C, Douillard JY, Faivre-Finn C, Lim E, et al. 2nd ESMO consensus conference on lung cancer: Early-stage non-small-cell lung cancer consensus on diagnosis, treatment and follow-up. *Annals of Oncology*. **2014**; 25:1462-74. doi: 10.1093/annonc/mdu089.

78. Besse B, Adjei A, Baas P, Meldgaard P, Nicolson M, Paz-Ares L, et al. 2nd ESMO Consensus Conference on Lung Cancer: Non-small-cell lung cancer first-line/second and further lines in advanced disease. *Annals of Oncology*. **2014**; 25:1475-84. doi: 10.1093/annonc/mdu123.
79. Kauczor HU, Bonomo L, Gaga M, Nackaerts K, Peled N, Prokop M, et al. ESR/ERS white paper on lung cancer screening. *European Radiology*. **2015**; 25:2519-31. doi: 10.1183/09031936.00033015
80. Planchard D, Popat S, Kerr K, Novello S, Smit EF, Faivre-Finn C, et al. Metastatic non-small cell lung cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*. **2018**; 29:iv192-iv237. doi: 10.1093/annonc/mdy275.
81. Aboyans V, Ricco JB, Bartelink MLEL, Björck M, Brodmann M, Cohnert T, et al. 2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases, in collaboration with the European Society for Vascular Surgery (ESVS). *European Heart Journal*. **2018**; 39:763-816. doi: 10.1093/eurheartj/ehx095.
82. Williams B, Mancia G, Spiering W, Rosei EA, Azizi M, Burnier M, et al. 2018 practice guidelines for the management of arterial hypertension of the European society of cardiology and the European society of hypertension ESC/ESH task force for the management of arterial hypertension. *Journal of Hypertension*. **2018**; 36:2284-309.
83. Venermo M, Sprynger M, Desormais I, Björck M, Brodmann M, Cohnert T, et al. Follow-up of patients after revascularisation for peripheral arterial diseases: a consensus document from the European Society of Cardiology Working Group on Aorta and Peripheral Vascular Diseases and the European Society for Vascular Surgery. *European Journal of Preventive Cardiology*. **2019**; 26:1971-84. doi: 10.1177/2047487319846999.
84. Hinchliffe RJ, Brownrigg JRW, Apelqvist J, Boyko EJ, Fitridge R, Mills L, et al. IWGDF guidance on the diagnosis, prognosis and management of peripheral artery disease in patients with foot ulcers in diabetes. *Diabetes/Metabolism Research and Reviews*. **2014**; 32:13-23. doi: 10.1002/dmrr.2698.
85. Rütther T, Bobes J, De Hert M, Svensson TH, Mann K, Batra A, et al. EPA Guidance on tobacco dependence and strategies for smoking cessation in people with mental illness. *European Psychiatry*. **2014**; 29:65-82. doi: 10.1016/j.eurpsy.2013.11.002.
86. Hasan A, Falkai P, Wobrock T, Lieberman J, Glenthøj B, Gattaz WF, et al. World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Schizophrenia Part 3: Update 2015 Management of special circumstances: Depression, Suicidality, substance use disorders and pregnancy and lactation. *World Journal of Biological Psychiatry*. **2015**; 16:142-70. doi: 10.3109/15622975.2015.1009163.
87. Combe B, Landewe R, Daien CI, Hua C, Aletaha D, Álvaro-Gracia JM, et al. 2016 update of the EULAR recommendations for the management of early arthritis. *Annals of the Rheumatic Diseases*. **2017**; 76:948-59. doi: 10.1136/annrheumdis-2016-210602.
88. Agca R, Heslinga SC, Rollefstad S, Heslinga M, McInnes IB, Peters MJL, et al. EULAR recommendations for cardiovascular disease risk management in patients with rheumatoid arthritis and other

forms of inflammatory joint disorders: 2015/2016 update. *Annals of the Rheumatic Diseases*. **2016**; 76:17-28. doi: 10.1136/annrheumdis-2016-209775.

89. Ouayoun MC, Chabolle F, De Vito A, Heiser C, Paramasivan VK, Rabelo FAW, et al. International consensus (ICON) on the ENT role in diagnosis of obstructive sleep apnea syndrome. *European Annals of Otorhinolaryngology, Head and Neck Diseases*. **2018**; 135:S3-S6. doi: 10.1016/j.anorl.2017.12.012.
90. Rich AL, Baldwin DR, Beckett P, Berghmans T, Boyd J, Faivre-Finn C, et al. ERS statement on harmonised standards for lung cancer registration and lung cancer services in Europe. *European Respiratory Journal*. **2018**; 52:1800610. doi: 10.1183/13993003.00610-2018.
91. Denton CP, Hughes M, Gak N, Vila J, Buch MH, Chakravarty K, et al. BSR and BHPR guideline for the treatment of systemic sclerosis. *Rheumatology*. **2016**; 55:1906-10. doi: 10.1093/rheumatology/kew224
92. Hatemi G, Christensen R, Bang D, Bodaghi B, Celik AF, Fortune F, et al. 2018 Update of the EULAR recommendations for the management of Behcet's syndrome. *Annals of the Rheumatic Diseases*. **2018**; 77(6):808-18. doi: 10.1136/annrheumdis-2018-213225
93. Paraskevas K, Eckstein H, ML S. Guideline Recommendations for the Management of Abdominal Aortic Aneurysms. *Angiology*. **2019**; 70:688-9.
94. Public Health England. *NHS Abdominal Aortic Aneurysm Screening Programme: Clinical guidance and scope of practice for professionals involved in the provision of the ultrasound scan within AAA screening*. PHE, 2016.
95. Dalman RL. The 2019 update of the European abdominal aortic aneurysm guidelines. *J Vasc Surg*. **2019**; 69:633-4. doi: 10.1016/j.jvs.2018.12.008
96. NHS England, NICE and National Collaborating Centre for Mental Health. *Adult Eating Disorders: Community, Inpatient and Intensive Day Patient Care*. NHS, NICE, NCCMH, 2019.
97. NHS England, NICE and National Collaborating Centre for Mental Health. *Appendices and Helpful Resources for Adult Eating Disorders: Community, Inpatient and Intensive Day Patient Care*. NHS, NICE, NCCMH, 2019.
98. National Institute for Health and Care Excellence. *Eating disorders: recognition and treatment*. London: NICE, 2017.
99. RCP, RCP, RCPSYCH. *MARSIPAN: Management of Really Sick Patients with Anorexia Nervosa: The Royal Colleges of Psychiatrists, Physicians and Pathologists*. 2018
100. Robinson P, Rhys Jones W. MARSIPAN: management of really sick patients with anorexia nervosa. *BJPsych Advances*. **2018**; 24:20-32. doi: 10.1192/bja.2017.2
101. Begum E, Simon O, Bram R, Annalisa C, Michelle C, Enrico C, et al. Guideline on Longterm Home Non-Invasive Ventilation for Management of Chronic Obstructive Pulmonary Disease. *Eur Respir J*. **2019**; 54:1901003In press DOI: 10.1183/13993003.01003-2019

102. Vogiatzis I, Rochester CL, Spruit MA, Troosters T, Clini EM, American Thoracic Society/European Respiratory Society Task Force on Policy in Pulmonary R. Increasing implementation and delivery of pulmonary rehabilitation: key messages from the new ATS/ERS policy statement. *Eur Respir J.* **2016**; *47*:1336-41.
103. Wedzicha JAEC-C, Miravittles M, Hurst JR, Calverley PM, Albert RK, Anzueto A, et al. Management of COPD exacerbations: a European Respiratory Society/American Thoracic Society guideline. *Eur Respir J.* **2017**; *49*(3):1600791. doi: 10.1183/13993003.00791-2016.
104. Lopez-Escamez JA, Carey J, Chung WH, Goebel JA, Magnusson M, Mandala M, et al. Diagnostic criteria for Meniere's disease. *J Vestib Res.* **2015**; *25*:1-7.
105. Magnan J, Ozgirgin ON, Trabalzini F, Lacour M, Escamez AL, Magnusson M, et al. European Position Statement on Diagnosis, and Treatment of Meniere's Disease. *J Int Adv Otol.* **2018**; *14*:317-21. doi: 10.5152/iao.2018.140818
106. British Academy of Audiology. *Guidance for primary care: Direct referral of adults with hearing difficulty to audiology services.* BAA, 2016.
107. Ftouh S, Harrop-Griffiths K, Harker M, Munro KJ, Leverton T, Guideline C. Hearing loss in adults, assessment and management: summary of NICE guidance. *BMJ.* **2018**; *361*:k2219. doi: 10.1136/bmj.k2219.
108. National Institute for Health and Care Excellence. Hearing loss in adults: assessment and management. London: NICE, 2018.
109. Nevoux J, Barbara M, Dornhoffer J, Gibson W, Kitahara T, Darrouzet V. International consensus (ICON) on treatment of Meniere's disease. *Eur Ann Otorhinolaryngol Head Neck Dis.* **2018**; *135*:S29-S32. doi: 10.1016/j.anorl.2017.12.006.
110. Marx M, Younes E, Chandrasekhar SS, Ito J, Plontke S, O'Leary S, et al. International consensus (ICON) on treatment of sudden sensorineural hearing loss. *Eur Ann Otorhinolaryngol Head Neck Dis.* **2018**; *135*:S23-S8. doi: 10.1016/j.anorl.2017.12.011
111. Sheen AJ, Stephenson BM, Lloyd DM, Robinson P, Fevre D, Paaanen H, et al. 'Treatment of the sportsman's groin': British Hernia Society's 2014 position statement based on the Manchester Consensus Conference. *Br J Sports Med.* **2014**; *48*:1079-87. doi:10.1136/bjsports-2013-092872.
112. Campanelli G. Endorsement of the Herniasurge guidelines by the European Hernia Society. *Hernia.* **2018**; *22*:169. doi: 10.1007/s10029-017-1678-8
113. Antoniou SA, Agresta F, Garcia Alamino JM, Berger D, Berrevoet F, Brandsma HT, et al. European Hernia Society guidelines on prevention and treatment of parastomal hernias. *Hernia.* **2018**; *22*:183-98. doi: 10.1007/s10029-017-1717-5
114. National Institute for Health and Care Excellence. Reinforcement of a permanent stoma with a synthetic or biological mesh to prevent a parastomal hernia. London: NICE, 2019.

115. Bittner R, Montgomery MA, Arregui E, Bansal V, Bingener J, Bisgaard T, et al. Update of guidelines on laparoscopic (TAPP) and endoscopic (TEP) treatment of inguinal hernia (International Endohernia Society). *Surg Endosc.* **2015**; 29:289-321. doi: 10.1007/s00464-014-3917-8
116. Miserez M, Conze J, Peeters E, Aufenacker T, Fortelny R, Heikkinen T, et al. Update with level 1 studies of the European Hernia Society guidelines on the treatment of inguinal hernia in adult patients. *Hernia.* **2014**; 18 151–63. doi: 10.1007/s10029-014-1236-6.
117. Galie N, Humbert M, Vachiery JL, Gibbs S, Lang I, Torbicki A, et al. 2015 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. *European Heart Journal.* **2016**; 37:67-119. doi: doi.org/10.1093/eurheartj/ehv317
118. Sousa-Uva M, Neumann FJ, Ahlsson A, Alfonso F, Banning AP, Benedetto U, et al. 2018 ESC/EACTS Guidelines on myocardial revascularization. *Eur J Cardio-thoracic Surgery.* **2019**; 55:4-90. doi: 10.1093/ejcts/ezy289
119. National Institute for Health and Care Excellence. Atrial fibrillation: management. London: NICE, 2014.
120. Ntaios G, Dziedzic T, Michel P, Papavasileiou V, Petersson J, Staykov D, et al. European Stroke Organisation (ESO) guidelines for the management of temperature in patients with acute ischemic stroke. *Int J Stroke.* **2015**; 10:941-9. doi: 10.1111/ijvs.12579
121. Joseph J, Velasco A, Hage FG, Reyes E. Guidelines in review: Comparison of ESC and ACC/AHA guidelines for the diagnosis and management of patients with stable coronary artery disease. *J Nucl Cardiol.* **2018**; 25:509-15. doi:10.1007/s12350-017-1055-0.
122. Steeds RP, Wheeler R, Bhattacharyya S, Reiken J, Nihoyannopoulos P, Senior R, et al. Stress echocardiography in coronary artery disease: a practical guideline from the British Society of Echocardiography. *Echo Res Pract.* **2019**; 6:G17-G33. doi: 10.1530/ERP-18-0068
123. Lancellotti P, Pellikka PA, Budts W, Chaudhry FA, Donal E, Dulgheru R, et al. The clinical use of stress echocardiography in non-ischaemic heart disease: recommendations from the European Association of Cardiovascular Imaging and the American Society of Echocardiography. *Eur Heart J Cardiovasc Imaging.* **2016**; 17:1191-229. doi:10.1093/ehjci/jew190
124. Public Health England. Guidelines on the management of outbreaks of influenza-like illness in care homes. London; PHE, 2018.
125. Public Health England. *PHE guidance on use of antiviral agents for the treatment and prophylaxis of seasonal influenza.* London; PHE, 2019.
126. PHE. Influenza: the green book, chapter 19. 2019.
127. PHE. Management of infection guidance for primary care for consultation and local adaption2014. Report No.: 1204186170.

128. Dignan FL, Clark A, Aitken C, Gilleece M, Jayakar V, Krishnamurthy P, et al. BCSH/BSBMT/UK clinical virology network guideline: diagnosis and management of common respiratory viral infections in patients undergoing treatment for haematological malignancies or stem cell transplantation. *British Journal of Haematology*. **2016**; 173:380-93. doi: 10.1111/bjh.14027
129. Pracy P, Loughran S, Good J, Parmar S, Goranova R. Hypopharyngeal cancer: United Kingdom National Multidisciplinary Guidelines. *J Laryngol Otol*. **2016**; 130:S104-S110. doi:10.1017/S0022215116000529
130. Jones TM, De M, Foran B, Harrington K, Mortimore S. Laryngeal cancer: United Kingdom National Multidisciplinary guidelines. *J Laryngol Otol*. **2016**; 130:S75-S82. doi:10.1017/S0022215116000487
131. Giammarile F, Schilling C, Gnanasegaran G, Bal C, Oyen WJG, Rubello D, et al. The EANM practical guidelines for sentinel lymph node localisation in oral cavity squamous cell carcinoma. *Eur J Nucl Med Mol Imaging*. **2019**; 46:623-37. doi: 10.1007/s00259-018-4235-5.
132. Howard L, Barden S, Condliffe R, Connolly V, Davies CWH, Donaldson J, et al. British Thoracic Society Guideline for the initial outpatient management of pulmonary embolism (PE). *Thorax*. **2018**; 73:ii1-ii29. doi:10.1136/thoraxjnl-2018-211539
133. Vilmann P, Clementsen PF, Colella S, Siemsen M, De Leyn P, Dumonceau JM, et al. Combined endobronchial and esophageal endosonography for the diagnosis and staging of lung cancer: European Society of Gastrointestinal Endoscopy (ESGE) Guideline, in cooperation with the European Respiratory Society (ERS) and the European Society of Thoracic Surgeons (ESTS). *Endoscopy*. **2015**; 47:545-59. doi: 10.1055/s-0034-1392040.
134. Bibby AC, Dorn P, Psallidas I, Porcel JM, Janssen J, Froudarakis M, et al. ERS/EACTS statement on the management of malignant pleural effusions. *Eur Respir J*. **2018**; 52. doi: 10.1183/13993003.00349-2018
135. De Ruyscher D, Faivre-Finn C, Moeller D, Nestle U, Hurkmans CW, Le Pechoux C, et al. European Organization for Research and Treatment of Cancer (EORTC) recommendations for planning and delivery of high-dose, high precision radiotherapy for lung cancer. *Radiother Oncol*. **2017**; 124:1-10. doi: 10.1016/j.radonc.2017.06.003.
136. Baas P, Fennell D, Kerr KM, Van Schil PE, Haas RL, Peters S, et al. Malignant pleural mesothelioma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Ann Oncol*. **2015**; 26(Suppl 5):v31-9. doi:10.1093/annonc/mdv199
137. De Leyn P, Dooms C, Kuzdzal J, Lardinois D, Passlick B, Rami-Porta R, et al. Revised ESTS guidelines for preoperative mediastinal lymph node staging for non-small-cell lung cancer. *Eur J Cardiothorac Surg*. **2014**; 45:787-98. doi: 10.1093/ejcts/ezu028.
138. Kerr KM, Bubendorf L, Edelman MJ, Marchetti A, Mok T, Novello S, et al. Second ESMO consensus conference on lung cancer: pathology and molecular biomarkers for non-small-cell lung cancer. *Ann Oncol*. **2014**; 25:1681-90. doi: 10.1093/annonc/mdu145.

139. National Institute for Health and Care Excellence. *Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism*. London: NICE, 2018.
140. Fischer A, Antoniou KM, Brown KK, Cadranel J, Corte TJ, du Bois RM, et al. An official European Respiratory Society/American Thoracic Society research statement: interstitial pneumonia with autoimmune features. *Eur Respir J*. **2015**; *46*:976-87. doi: 10.1183/13993003.00150-2015.
141. Torres A, Niederman MS, Chastre J, Ewig S, Fernandez-Vandellos P, Hanberger H, et al. International ERS/ESICM/ESCMID/ALAT guidelines for the management of hospital-acquired pneumonia and ventilator-associated pneumonia: Guidelines for the management of hospital-acquired pneumonia (HAP)/ventilator-associated pneumonia (VAP) of the European Respiratory Society (ERS), European Society of Intensive Care Medicine (ESICM), European Society of Clinical Microbiology and Infectious Diseases (ESCMID) and Asociacion Latinoamericana del Torax (ALAT). *Eur Respir J*. **2017**; *50*. doi: 10.1183/13993003.00582-2017.
142. Public Health England. *Pneumococcal: the green book, chapter 25*. London: PHE, 2020.
143. National Institute for Health and Care Excellence. *Pneumonia (community-acquired): antimicrobial prescribing*. London: NICE, 2019.
144. National Institute for Health and Care Excellence. *Pneumonia (hospital-acquired): antimicrobial prescribing*. London: NICE, 2019.
145. National Institute for Health and Care Excellence. *Pneumonia in adults: diagnosis and management*. London: NICE, 2014.
146. Pollak TA, Lennox BR, Müller S, Benros ME, Prüss H, Tebartz van Elst L, et al. Autoimmune psychosis: an international consensus on an approach to the diagnosis and management of psychosis of suspected autoimmune origin. *The Lancet Psychiatry*. **2020**; *7*:93-108. doi: 10.1016/S2215-0366(19)30290-1.
147. Gupta S, Cahill JD, Miller R. Deprescribing antipsychotics: a guide for clinicians. *BJPsych Advances*. **2018**; *24*:295-302. doi: 10.1192/bja.2018.2
148. Schultze-Lutter F, Michel C, Schmidt SJ, Schimmelmann BG, Maric NP, Salokangas RK, et al. EPA guidance on the early detection of clinical high risk states of psychoses. *Eur Psychiatry*. **2015**; *30*:405-16. doi: 10.1016/j.eurpsy.2015.01.010.
149. Vollm BA, Clarke M, Herrando VT, Seppanen AO, Gosek P, Heitzman J, et al. European Psychiatric Association (EPA) guidance on forensic psychiatry: Evidence based assessment and treatment of mentally disordered offenders. *Eur Psychiatry*. **2018**; *51*:58-73. doi: 10.1016/j.eurpsy.2017.12.007
150. Gaebel W, Grossimlinghaus I, Kerst A, Cohen Y, Hinsche-Bockenholt A, Johnson B, et al. European Psychiatric Association (EPA) guidance on the quality of eMental health interventions in the treatment of psychotic disorders. *Eur Arch Psychiatry Clin Neurosci*. **2016**; *266*:125-37. doi: 10.1007/s00406-016-0677-6

151. Patel MX, Sethi FN, Barnes TR, Dix R, Dratcu L, Fox B, et al. Joint BAP NAPICU evidence-based consensus guidelines for the clinical management of acute disturbance: De-escalation and rapid tranquillisation. *J Psychopharmacol.* **2018**; 32:601-40. doi: 10.1177/0269881118776738
152. National Institute for Health and Care Excellence. *Mental health of adults in contact with the criminal justice system.* London: NICE, 2017.
153. National Institute for Health and Care Excellence. *Mental health problems in people with learning disabilities: prevention, assessment and management.* London: NICE, 2016.
154. Hasan A, Falkai P, Wobrock T, Lieberman J, Glenthøj B, Gattaz WF, et al. World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for biological treatment of schizophrenia - a short version for primary care. *Int J Psychiatry Clin Pract.* **2017**; 21:82-90. doi: 10.1080/13651501.2017.1291839
155. DeJaco C, Singh YP, Perel P, Hutchings A, Camellino D, Mackie S, et al. 2015 recommendations for the management of polymyalgia rheumatica: a European League Against Rheumatism/American College of Rheumatology collaborative initiative. *Arthritis Rheumatology.* **2015**; 67:2569-80. doi: 10.1002/art.39333.
156. Furer V, Rondaan C, Heijstek MW, Agmon-Levin N, Van Assen S, Bijl M, et al. 2019 update of EULAR recommendations for vaccination in adult patients with autoimmune inflammatory rheumatic diseases. *Ann Rheum Dis.*; 79:39-52. doi: 10.1136/annrheumdis-2019-215882
157. Ledingham J, Snowden N, Ide Z. Diagnosis and early management of inflammatory arthritis. *BMJ.* **2017**; 358:j3248. doi: 10.1136/bmj.j3248
158. Smolen JS, Landewe R, Breedveld FC, Buch M, Burmester G, Dougados M, et al. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2013 update. *Ann Rheum Dis.* **2014**; 73:492-509. doi: 10.1136/annrheumdis-2013-204573
159. Smolen JS, Landewe R, Bijlsma J, Burmester G, Chatzidionysiou K, Dougados M, et al. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2016 update. *Ann Rheum Dis.* **2017**; 76:960-77. doi: 10.1136/annrheumdis-2016-210715
160. Ramos-Casals M, Brito-Zerón P, Bombardieri S, Bootsma H, DeVita S, Dörner T, et al. EULAR recommendations for the management of Sjögren's syndrome with topical and systemic therapies. *Ann Rheum Dis* **2020**;79:3-18. doi: 10.1136/annrheumdis-2019-216114
161. Rangan A, Falworth M, Watts AC, Scarborough M, Thomas M, Kulkarni R, et al. Investigation and Management of Periprosthetic Joint Infection in the Shoulder and Elbow: Evidence and consensus based guidelines of the British Elbow and Shoulder Society. *Shoulder Elbow.* **2018**; 10:S5-S19. doi: 10.1177/1758573218772976.
162. National Institute for Health and Care Excellence. *Rheumatoid arthritis in adults: management.* London: NICE, 2018.

163. Holroyd CR, Seth R, Bukhari M, Malaviya A, Holmes C, Curtis E, et al. The British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis. *Rheumatology*. **2019**; 58:e3-e42. doi: 10.1093/rheumatology/key208
164. Price EJ, Rauz S, Tappuni AR, Sutcliffe N, Hackett KL, Barone F, et al. The British Society for Rheumatology guideline for the management of adults with primary Sjogren's Syndrome. *Rheumatology*. **2017**; 56:e24-e48. doi: 10.1093/rheumatology/kex375.
165. Malaviya AP, Ledingham J, Bloxham J, Bosworth A, Buch M, Choy E, et al. The 2013 BSR and BHRP guideline for the use of intravenous tocilizumab in the treatment of adult patients with rheumatoid arthritis. *Rheumatology*. **2014**; 53:1344-6. doi:10.1093/rheumatology/keu168
166. Randerath W, Verbraecken J, Andreas S, Arzt M, Bloch KE, Brack T, et al. Definition, discrimination, diagnosis and treatment of central breathing disturbances during sleep. *Eur Respir J*. **2017**; 49:1600959. doi: 10.1183/13993003.00959-2016
167. National Institute for Health and Care Excellence. *Hypoglossal nerve stimulation for moderate to severe obstructive sleep apnoea*. London: NICE, 2017.
168. de Raaff CAL, Gorter-Stam MAW, de Vries N, Sinha AC, Jaap Bonjer H, Chung F, et al. Perioperative management of obstructive sleep apnea in bariatric surgery: a consensus guideline. *Surg Obes Relat Dis*. **2017**; 13:1095-109. doi: 10.1016/j.soard.2017.03.022.
169. Netzer NCC, Ancoli-Israel SC-C, Bliwise DL, Fulda S, Roffe C, Almeida F, et al. Principles of practice parameters for the treatment of sleep disordered breathing in the elderly and frail elderly: the consensus of the International Geriatric Sleep Medicine Task Force. *Eur Respir J*. **2016**; 48:992-1018. doi: 10.1183/13993003.01975-2015.
170. TASC Steering Committee, Jaff MR, White CJ, Hiatt WR, Fowkes GR, Dormandy J, et al. An Update on Methods for Revascularization and Expansion of the TASC Lesion Classification to Include Below-the-Knee Arteries: A Supplement to the Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II). *Vasc Med*. **2015**; 20:465-78. doi: 10.1177/1358863X15597877.
171. Anthonisen NR, Connett JE, Murray RP. Smoking and lung function of Lung Health Study participants after 11 years. *American Journal of Respiratory and Critical Care Medicine*. 2002; 166:675-9. doi: 10.1164/rccm.2112096
172. Wu J, Sin D D. Improved patient outcome with smoking cessation: When is it too late? *Int J Chron Obstruct Pulmon Dis*. **2011**; 6: 259–267. doi: 10.2147/COPD.S10771
173. Parsons A, Daley A, Begh R, Aveyard P. Influence of smoking cessation after diagnosis of early stage lung cancer on prognosis: Systematic review of observational studies with meta-analysis. *BMJ*. **2010**; 340:b5569 doi:10.1136/bmj.b5569

174. Woodward M, Lam TH, Barzi F, Patel A, Gu D, Rodgers A, et al. Smoking, quitting, and the risk of cardiovascular disease among women and men in the Asia-Pacific region. *Int J Epi*. **2005**; *34*:1036-45. doi: 10.1093/ije/dyi104
175. Naidoo B, Stevens W, McPherson K. Modelling the short term consequences of smoking cessation in England on the hospitalisation rates for acute myocardial infarction and stroke. *Tobacco Control*. **2000**; *9*:397-400. doi: 10.1136/tc.9.4.397
176. Honjo K, Iso H, Tsugane S, Tamakoshi A, Satoh H, Tajima K, et al. The effects of smoking and smoking cessation on mortality from cardiovascular disease among Japanese: Pooled analysis of three large-scale cohort studies in Japan. *Tobacco Control*. **2010**; *19*:50-7. doi: 10.1136/tc.2009.029751
177. He Y, Jiang B, Li LS, Li LS, Sun DL, Wu L, et al. Changes in smoking behavior and subsequent mortality risk during a 35-year follow-up of a cohort in Xi'an, China. *American Journal of Epidemiology*. **2014**; *179*:1060-70. doi: 10.1093/aje/kwu011
178. Bjartveit K, Tverdal A. Health consequences of sustained smoking cessation. *Tobacco Control*. 2009; *18*:197-205. doi:10.1136/tc.2008.026898
179. Amato KAD, Hyland A, Reed R, Mahoney MC, Marshall J, Giovino G, et al. Tobacco cessation may improve lung cancer patient survival. *J Thoracic Oncology*. 2015; *10*:1014-9. doi: 10.1097/JTO.0000000000000578.
180. Barrera R, Shi W, Amar D, Thaler HT, Gabovich N, Bains MS, et al. Smoking and timing of cessation: Impact on pulmonary complications after thoracotomy. *Chest*. **2005**; *127*:1977-83. Doi: 10.1378/chest.127.6.1977
181. Lugg ST, Tikka T, Agostini PJ, Kerr A, Adams K, Kalkat MS, et al. Smoking and timing of cessation on postoperative pulmonary complications after curative-intent lung cancer surgery. *J Cardio Surg*. **2017**; *12*. doi: 10.1186/s13019-017-0614-4
182. Choi SH, Terrell JE, Bradford CR, Ghanem T, Spector ME, Wolf GT, et al. Does Quitting Smoking Make a Difference Among Newly Diagnosed Head and Neck Cancer Patients? *Nicotine & Tobacco Res*. **2016**; *18*:2216-24. doi: 10.1093/ntr/ntw189.
183. Jerjes W, Upile T, Radhi H, Petrie A, Abiola J, Adams A, et al. The effect of tobacco and alcohol and their reduction/cessation on mortality in oral cancer patients: Short communication. *Head & Neck Oncology*. **2012**; *4*. doi: 10.1186/1758-3284-4-6
184. Koshiaris C, Aveyard P, Oke J, Ryan R, Szatkowski L, Stevens R, et al. *Smoking cessation and survival in lung, upper aero-digestive tract and bladder cancer: Cohort study*: Nature Publishing Group; 2017.
185. Armstrong EJ, Wu J, Singh GD, Dawson DL, Pevec WC, Amsterdam EA, et al. Smoking cessation is associated with decreased mortality and improved amputation-free survival among patients with symptomatic peripheral artery disease. *J Vas Surg*. **2014**; *60*:1565-71. doi: 10.1016/j.jvs.2014.08.064

186. Di Giuseppe D, Discacciati A, Orsini N, Wolk A. Cigarette smoking and risk of rheumatoid arthritis: A dose-response meta-analysis. *Arthritis Research & Therapy*. **2014**; 16. doi: 10.1186/ar4498
187. National Institute for Health and Care Excellence. *Smoking: acute, maternity and mental health services: guidance (PH48)*. London: NICE, 2013.
188. National Institute for Health and Care Excellence. *Stop smoking interventions and services: guidance (NG92)*. London: NICE, 2018
189. Chen YF, Madan J, Welton N, Yahaya I, Aveyard P, Bauld L, et al. *Effectiveness and cost-effectiveness of computer and other electronic aids for smoking cessation: a systematic review and network meta-analysis*: NIHR HTA, 2012
190. Robinson JA-O, McEwen A, Heah R, Papadakis S. A 'Cut-Down-To-Stop' intervention for smokers who find it hard to quit: a qualitative evaluation. *BMC Public Health*. **2019**; 19:403.
191. Taylor GMJ, Dalili MN, Semwal M, Civljak M, Sheikh A, Car J. Internet-based interventions for smoking cessation. *Cochrane Database of Systematic Reviews*. **2017**; 9:CD007078.
192. Matkin W, Ordonez-Mena JM, Hartmann-Boyce J. Telephone counselling for smoking cessation. *Cochrane Database of Systematic Reviews*. **2019**; 5:CD002850.
193. Hollands GJ, Naughton F, Farley A, Lindson N, Aveyard P. Interventions to increase adherence to medications for tobacco dependence. *Cochrane Database of Systematic Reviews*. **2019**; 8:CD009164.
194. van Eerd EAM, van der Meer RM, van Schayck OCP, Kotz D. Smoking cessation for people with chronic obstructive pulmonary disease. *Cochrane Database of Systematic Reviews*. **2016**; 8:CD010744.
195. Lancaster T, Stead LF. Individual behavioural counselling for smoking cessation. *Cochrane Database of Systematic Reviews*. **2017**; 3:CD001292.
196. Neuberger M. Tobacco control: prevention and cessation in Europe. *memo - Magazine of European Medical Oncology*. **2019**; 12:156-61.
197. Joossens L, Raw M. *The tobacco control scale 2016 in Europe*: Association of European Cancer Leagues, 2017.
198. Treskova M, Aumann I, Hagemann N, Graf von der Schulenburg JM. Analysis of driving factors of willingness to use and willingness to pay for existing pharmacological smoking cessation aids among young and middle-aged adults in Germany. *European Respiratory Journal*. **2016**; 48:PA1534.
199. Notley C, Gentry S, Livingstone-Banks J, Bauld L, Perera R, Hartmann-Boyce J. Incentives for smoking cessation. *Cochrane Database of Systematic Reviews*. **2019**; 17:7.
200. Bala MM, Strzeszynski L, Topor-Madry R. Mass media interventions for smoking cessation in adults. *Cochrane Database of Systematic Reviews*. **2017**; 11:CD004704.

201. Milcarz K, Makowiec-Dąbrowska T, Bak-Romaniszyn L, Kaleta D. Smoking Patterns and Smoking Cessation Willingness-A Study among Beneficiaries of Government Welfare Assistance in Poland. *Int J Environ Res Public Health*. **2017**; 14:131