

Delphi method

The Delphi method is a forecasting process framework based on the results of multiple rounds of [questionnaires](#) sent to a panel of [experts](#). Several rounds of [questionnaires](#) are sent out to the group of [experts](#), and the anonymous responses are aggregated and shared with the group after each round.

Despite notable scientific and medical advances, broader political, socioeconomic, and behavioral factors continue to undercut the response to the COVID-19 pandemic. Lazarus et al. convened, as part of this Delphi study, a diverse, multidisciplinary panel of 386 academic, health, non-governmental organizations, [government](#), and other experts in COVID-19 response from 112 countries and territories to recommend specific actions to end this persistent global threat to public health. The panel developed a set of 41 consensus statements and 57 recommendations to governments, health systems, industry, and other key stakeholders across six domains: communication; health systems; vaccination; prevention; treatment and care; and inequities. In the wake of nearly three years of fragmented global and national responses, it is instructive to note that three of the highest-ranked recommendations call for the adoption of whole-of-society and whole-of-government approaches while maintaining proven prevention measures using a vaccines-plus approach² that employs a range of public health and financial support measures to complement vaccination. Other recommendations with at least 99% combined agreement advise governments and other stakeholders to improve communication, rebuild public trust and engage communities³ in the management of pandemic responses. The findings of the study, which have been further endorsed by 184 organizations globally, include points of unanimous agreement, as well as six recommendations with >5% disagreement, that provide health and social policy actions to address inadequacies in the pandemic response and help to bring this public health threat to an end ¹.

1: Davies BM, Khan DZ, Mowforth OD, McNair AGK, Gronlund T, Kolas AG, Tetreault L, Starkey ML, Sadler I, Sarewitz E, Houlton D, Carter J, Kalsi-Ryan S, Aarabi B, Kwon BK, Kurpad SN, Harrop J, Wilson JR, Grossman R, Curt A, Fehlings MG, Kotter MRN. RE-CODE DCM (REsearch Objectives and Common Data Elements for Degenerative Cervical Myelopathy): A Consensus Process to Improve Research Efficiency in DCM, Through Establishment of a Standardized Dataset for Clinical Research and the Definition of the Research Priorities. *Global Spine J.* 2019 May;9(1 Suppl):65S-76S. doi: 10.1177/2192568219832855. Epub 2019 May 8. PubMed PMID: 31157148; PubMed Central PMCID: PMC6512197.

2: Akyol MU, Alden TD, Amartino H, Ashworth J, Belani K, Berger KI, Borgo A, Braunlin E, Eto Y, Gold JJ, Jester A, Jones SA, Karsli C, Mackenzie W, Marinho DR, McFadyen A, McGill J, Mitchell JJ, Muenzer J, Okuyama T, Orchard PJ, Stevens B, Thomas S, Walker R, Wynn R, Giugliani R, Harmatz P, Hendriksz C, Scarpa M; MPS Consensus Programme Steering Committee; MPS Consensus Programme Co-Chairs. Recommendations for the management of MPS VI: systematic evidence- and consensus-based guidance. *Orphanet J Rare Dis.* 2019 May 29;14(1):118. doi: 10.1186/s13023-019-1080-y. PubMed PMID: 31142378.

3: Avella ED, Fazzolari B, Schiariti M, Delitala A, Ferroli P, Cappabianca P, Servadei F. The common practice in the management of dural closure: an Italian questionnaire. *World Neurosurg.* 2019 May 22.

pii: S1878-8750(19)31402-0. doi: 10.1016/j.wneu.2019.05.125. [Epub ahead of print] PubMed PMID: 31128310.

4: Srikantharajah N, Noble AJ, Wilby M, Clark S, Williamson PR, Marson AG. Protocol for the development of a core outcome set for cauda equina syndrome: systematic literature review, qualitative interviews, Delphi survey and consensus meeting. *BMJ Open*. 2019 May 1;9(4):e024002. doi: 10.1136/bmjopen-2018-024002. PubMed PMID: 31048424; PubMed Central PMCID: PMC6502054.

5: Davis GA, Makdissi M, Bloomfield P, Clifton P, Echemendia RJ, Falvey EC, Fuller GW, Green G, Harcourt P, Hill T, McGuirk N, Meeuwisse W, Orchard J, Raftery M, Sills AK, Solomon GS, Valadka A, McCrory P. International consensus definitions of video signs of concussion in professional sports. *Br J Sports Med*. 2019 Apr 6. pii: bjsports-2019-100628. doi: 10.1136/bjsports-2019-100628. [Epub ahead of print] PubMed PMID: 30954947.

6: Huijben JA, Wiegers EJA, de Keizer NF, Maas AIR, Menon D, Ercole A, Citerio G, Lecky F, Wilson L, Cnossen MC, Polinder S, Steyerberg EW, van der Jagt M, Lingsma HF; Delphi panel. Development of a quality indicator set to measure and improve quality of ICU care for patients with traumatic brain injury. *Crit Care*. 2019 Mar 22;23(1):95. doi: 10.1186/s13054-019-2377-x. PubMed PMID: 30902117; PubMed Central PMCID: PMC6431034.

7: van den Berg LH, Sorenson E, Gronseth G, Macklin EA, Andrews J, Baloh RH, Benatar M, Berry JD, Chio A, Corcia P, Genge A, Gubitz AK, Lomen-Hoerth C, McDermott CJ, Pioro EP, Rosenfeld J, Silani V, Turner MR, Weber M, Brooks BR, Miller RG, Mitsumoto H; Airlie House ALS Clinical Trials Guidelines Group. Revised Airlie House consensus guidelines for design and implementation of ALS clinical trials. *Neurology*. 2019 Apr 2;92(14):e1610-e1623. doi: 10.1212/WNL.0000000000007242. Epub 2019 Mar 8. PubMed PMID: 30850440; PubMed Central PMCID: PMC6448453.

8: El Rassi E, Adappa ND, Battaglia P, Castelnuovo P, Dallan I, Freitag SK, Gardner PA, Lenzi R, Lubbe D, Metson R, Moe KS, Muscatello L, Mustak H, Nogueira JF, Palmer JN, Prepageran N, Ramakirshnan VR, Sacks R, Snyderman CH, Stefko ST, Turri-Zanoni M, Wang EW, Zhou B, Bleier BS. Development of the international orbital Cavernous Hemangioma Exclusively Endonasal Resection (CHEER) staging system. *Int Forum Allergy Rhinol*. 2019 Feb 27. doi: 10.1002/alr.22316. [Epub ahead of print] PubMed PMID: 30809970.

9: Tang B, Wang XT, Chen WJ, Zhu SH, Chao YG, Zhu B, He W, Wang B, Cao FF, Liu YJ, Fan XJ, Yang H, Xu QH, Zhang H, Gong RC, Chai WZ, Zhang HM, Shi GZ, Li LH, Huang QB, Zhang LN, Yin MG, Shang XL, Wang XM, Tian F, Liu LX, Zhu R, Wu J, Wu YQ, Li CL, Zong Y, Hu JT, Liu J, Zhai Q, Deng LJ, Deng YY, Liu DW; Chinese Critical Hypothermia-Sedation Therapy Study Group. [Experts consensus on the management of delirium in critically ill patients]. *Zhonghua Nei Ke Za Zhi*. 2019 Feb 1;58(2):108-118. doi: 10.3760/cma.j.issn.0578-1426.2019.02.007. Chinese. PubMed PMID: 30704197.

10: Saeed K, McLaren AC, Schwarz EM, Antoci V, Arnold WV, Chen AF, Clauss M, Esteban J, Gant V, Hendershot E, Hickok N, Higuera CA, Coraça-Huber DC, Choe H, Jennings JA, Joshi M, Li WT, Noble PC, Phillips KS, Pottinger PS, Restrepo C, Rohde H, Schaer TP, Shen H, Smeltzer M, Stoodley P, Webb JCJ, Witsø E. 2018 international consensus meeting on musculoskeletal infection: Summary from the biofilm workgroup and consensus on biofilm related musculoskeletal infections. *J Orthop Res*. 2019 May;37(5):1007-1017. doi: 10.1002/jor.24229. Epub 2019 Feb 12. PubMed PMID: 30667567.

11: Côté C, Gagnon C, Youssof S, sKurtz N, Brais B. The requirement for a disease-specific patient-reported outcome measure of dysphagia in oculopharyngeal muscular dystrophy. *Muscle Nerve*. 2019 Apr;59(4):445-450. doi: 10.1002/mus.26405. Epub 2019 Jan 11. PubMed PMID: 30575974.

- 12: Vaughan-Graham J, Cott C, Holland A, Michielsen M, Magri A, Suzuki M, Brooks D. Developing a revised definition of the Bobath concept. *Physiother Res Int*. 2019 Apr;24(2):e1762. doi: 10.1002/pri.1762. Epub 2018 Dec 16. PubMed PMID: 30556333.
- 13: Hobart J, Bowen A, Pepper G, Crofts H, Eberhard L, Berger T, Boyko A, Boz C, Butzkueven H, Celius EG, Drulovic J, Flores J, Horáková D, Lebrun-Frény C, Marrie RA, Overell J, Piehl F, Rasmussen PV, Sá MJ, Sîrbu CA, Skromne E, Torkildsen Ø, van Pesch V, Vollmer T, Zakaria M, Ziemssen T, Giovannoni G. International consensus on quality standards for brain health-focused care in multiple sclerosis. *Mult Scler*. 2018 Nov 1:1352458518809326. doi: 10.1177/1352458518809326. [Epub ahead of print] PubMed PMID: 30381987.
- 14: Wolfe DL, Hsieh JTC, Kras-Dupuis A, Riopelle RJ, Walia S, Guy S, Gillis K. An inclusive, online Delphi process for setting targets for best practice implementation for spinal cord injury. *J Eval Clin Pract*. 2019 Apr;25(2):290-299. doi: 10.1111/jep.13040. Epub 2018 Oct 2. PubMed PMID: 30280449.
- 15: Andrews PJD, Verma V, Healy M, Lavinio A, Curtis C, Reddy U, Andrzejowski J, Foulkes A, Canestrini S. Targeted temperature management in patients with intracerebral haemorrhage, subarachnoid haemorrhage, or acute ischaemic stroke: consensus recommendations. *Br J Anaesth*. 2018 Oct;121(4):768-775. doi: 10.1016/j.bja.2018.06.018. Epub 2018 Jul 25. PubMed PMID: 30236239.
- 16: Alexiades NG, Ahn ES, Blount JP, Brockmeyer DL, Browd SR, Grant GA, Heuer GG, Hankinson TC, Iskandar BJ, Jea A, Krieger MD, Leonard JR, Limbrick DD, Maher CO, Proctor MR, Sandberg DI, Wellons JC, Shao B, Feldstein NA, Anderson RCE. Development of best practices to minimize wound complications after complex tethered spinal cord surgery: a modified Delphi study. *J Neurosurg Pediatr*. 2018 Dec 1;22(6):701-709. doi: 10.3171/2018.6.PEDS18243. PubMed PMID: 30215584.
- 17: Akrami F, Zali A, Abbasi M, Majdzadeh R, Karimi A, Fadavi M, Mehrabi Bahar A. An ethical framework for evaluation of public health plans: a systematic process for legitimate and fair decision-making. *Public Health*. 2018 Nov;164:30-38. doi: 10.1016/j.puhe.2018.07.018. Epub 2018 Aug 28. PubMed PMID: 30170266.
- 18: Johnson CD, Haldeman S, Chou R, Nordin M, Green BN, Côté P, Hurwitz EL, Kopansky-Giles D, Acaroğlu E, Cedraschi C, Ameis A, Randhawa K, Aartun E, Adjei-Kwayisi A, Ayhan S, Aziz A, Bas T, Blyth F, Borenstein D, Brady O, Brooks P, Camilleri C, Castellote JM, Clay MB, Davatchi F, Dudler J, Dunn R, Eberspaecher S, Emmerich J, Farcy JP, Fisher-Jeffes N, Goertz C, Grevitt M, Griffith EA, Hajjaj-Hassouni N, Hartvigsen J, Hondras M, Kane EJ, Laplante J, Lemeunier N, Mayer J, Mior S, Mmopelwa T, Modic M, Moss J, Mullerpatan R, Muteti E, Mwaniki L, Ngandeu-Singwe M, Outerbridge G, Rajasekaran S, Shearer H, Smuck M, Sönmez E, Tavares P, Taylor-Vaisey A, Torres C, Torres P, van der Horst A, Verville L, Vialle E, Kumar GV, Vlok A, Watters W 3rd, Wong CC, Wong JJ, Yu H, Yüksel S. The Global Spine Care Initiative: model of care and implementation. *Eur Spine J*. 2018 Sep;27(Suppl 6):925-945. doi: 10.1007/s00586-018-5720-z. Epub 2018 Aug 27. PubMed PMID: 30151805.
- 19: Hirst A, Philippou Y, Blazeby J, Campbell B, Campbell M, Feinberg J, Rovers M, Blencowe N, Pennell C, Quinn T, Rogers W, Cook J, Koliass AG, Agha R, Dahm P, Sedrakyan A, McCulloch P. No Surgical Innovation Without Evaluation: Evolution and Further Development of the IDEAL Framework and Recommendations. *Ann Surg*. 2019 Feb;269(2):211-220. doi: 10.1097/SLA.0000000000002794. PubMed PMID: 29697448.
- 20: Dhillon RS, King JA, Goldschlager T, Wang YY. Synoptic reporting of pituitary magnetic resonance imaging. *ANZ J Surg*. 2018 May;88(5):460-463. doi: 10.1111/ans.14489. Epub 2018 Apr 19. PubMed PMID: 29671958.

21: Hyun SJ, Han S, Kim KJ, Jahng TA, Kim HJ. Assessment of T1 Slope Minus Cervical Lordosis and C2-7 Sagittal Vertical Axis Criteria of a Cervical Spine Deformity Classification System Using Long-Term Follow-up Data After Multilevel Posterior Cervical Fusion Surgery. *Oper Neurosurg (Hagerstown)*. 2019 Jan 1;16(1):20-26. doi: 10.1093/ons/opy055. PubMed PMID: 29617850.

22: Pondaag W, Malessy MJA. Outcome assessment for Brachial Plexus birth injury. Results from the iPluto world-wide consensus survey. *J Orthop Res*. 2018 Sep;36(9):2533-2541. doi: 10.1002/jor.23901. Epub 2018 Apr 24. PubMed PMID: 29566312; PubMed Central PMCID: PMC6175006.

23: Oddo M, Poole D, Helbok R, Meyfroidt G, Stocchetti N, Bouzat P, Cecconi M, Geeraerts T, Martin-Loeches I, Quintard H, Taccone FS, Geocadin RG, Hemphill C, Ichai C, Menon D, Payen JF, Perner A, Smith M, Suarez J, Videtta W, Zanier ER, Citerio G. Fluid therapy in neurointensive care patients: ESICM consensus and clinical practice recommendations. *Intensive Care Med*. 2018 Apr;44(4):449-463. doi: 10.1007/s00134-018-5086-z. Epub 2018 Mar 2. Review. PubMed PMID: 29500701.

24: Nguyen TK, Senan S, Bradley JD, Franks K, Giuliani M, Guckenberger M, Landis M, Loo BW Jr, Louie AV, Onishi H, Schmidt H, Timmerman R, Videtic GMM, Palma DA. Optimal imaging surveillance after stereotactic ablative radiation therapy for early-stage non-small cell lung cancer: Findings of an International Delphi Consensus Study. *Pract Radiat Oncol*. 2018 Mar - Apr;8(2):e71-e78. doi: 10.1016/j.prro.2017.10.008. Epub 2017 Dec 30. PubMed PMID: 29291965.

25: Geeraerts T, Velly L, Abdenmour L, Asehnoune K, Audibert G, Bouzat P, Bruder N, Carrillon R, Cottenceau V, Cotton F, Courtil-Teyssedre S, Dahyot-Fizelier C, Dailler F, David JS, Engrand N, Fletcher D, Francony G, Gergel   L, Ichai C, Javouhey   , Leblanc PE, Lieutaud T, Meyer P, Mirek S, Orliaguet G, Proust F, Quintard H, Ract C, Srairi M, Tazarourte K, Vigu   B, Payen JF; French Society of Anaesthesia; Intensive Care Medicine; in partnership with Association de neuro-anesth  sie-r  animation de langue fran  aise (Anarlf); French Society of Emergency Medicine (Soci  t   Fran  aise de M  decine d'urgence (SFMU)); Soci  t   fran  aise de neurochirurgie (SFN); Groupe francophone de r  animation et d'urgences p  diatriques (GFRUP); Association des anesth  sistes-r  animateurs p  diatriques d'expression fran  aise (Adarpef). Management of severe traumatic brain injury (first 24hours). *Anaesth Crit Care Pain Med*. 2018 Apr;37(2):171-186. doi: 10.1016/j.accpm.2017.12.001. Epub 2017 Dec 27. Review. PubMed PMID: 29288841.

26: Chiarotto A, Boers M, Deyo RA, Buchbinder R, Corbin TP, Costa LOP, Foster NE, Grotle M, Koes BW, Kovacs FM, Lin CC, Maher CG, Pearson AM, Peul WC, Schoene ML, Turk DC, van Tulder MW, Terwee CB, Ostelo RW. Core outcome measurement instruments for clinical trials in nonspecific low back pain. *Pain*. 2018 Mar;159(3):481-495. doi: 10.1097/j.pain.0000000000001117. PubMed PMID: 29194127; PubMed Central PMCID: PMC5828378.

27: Blumenthal S, Buttermann G, Garcia R, Gornet M, Grunch B, Guyer R, Janssen M, Kimball B, Lewis A, Mesiwala A, Miller L, Morreale J, Reed W, Sandhu F, Shackelford I, Yue J, Zigler J, OConnell B, Ferko N, Hollmann S. Foreword: Proceedings From the First Annual Lumbar Total Disc Replacement Summit. *Spine (Phila Pa 1976)*. 2017 Dec 15;42 Suppl 24:S99-S100. doi: 10.1097/BRS.0000000000002451. Review. PubMed PMID: 29176483.

28: Whitehouse KJ, Moore AJ, Cooper N. How do national specialty groups develop undergraduate guidelines for medical schools, and which are successful? A systematic review. *Med Teach*. 2017 Nov;39(11):1138-1144. doi: 10.1080/0142159X.2017.1364357. Epub 2017 Aug 30. Review. PubMed PMID: 28854838.

29: Berven SH, Kamper SJ, G  rmscheid NM, Dahl B, Shaffrey CI, Lenke LG, Lewis SJ, Cheung KM,

- Alanay A, Ito M, Polly DW, Qiu Y, de Kleuver M; AOSpine Knowledge Forum Deformity. An international consensus on the appropriate evaluation and treatment for adults with spinal deformity. *Eur Spine J*. 2018 Mar;27(3):585-596. doi: 10.1007/s00586-017-5241-1. Epub 2017 Aug 5. PubMed PMID: 28780621.
- 30: Mateen BA, Doogan C, Hayward K, Hourihan S, Hurford J, Playford ED. The sink or SWIM hypothesis; a roadmap from pathology to work instability. *Disabil Rehabil*. 2018 May;40(9):1092-1098. doi: 10.1080/09638288.2017.1280695. Epub 2017 Mar 3. PubMed PMID: 28637156.
- 31: Rollnik JD, Adolphsen J, Bauer J, Bertram M, Brocke J, Dohmen C, Donauer E, Hartwich M, Heidler MD, Hüge V, Klarmann S, Lorenzl S, Lück M, Mertl-Rötzer M, Mokrusch T, Nowak DA, Platz T, Riechmann L, Schlachetzki F, von Helden A, Wallesch CW, Zergiebel D, Pohl M. [Prolonged weaning during early neurological and neurosurgical rehabilitation : S2k guideline published by the Weaning Committee of the German Neurorehabilitation Society (DGNR)]. *Nervenarzt*. 2017 Jun;88(6):652-674. doi: 10.1007/s00115-017-0332-0. Review. German. PubMed PMID: 28484823.
- 32: Harrop JS, Rymarczuk GN, Vaccaro AR, Steinmetz MP, Tetreault LA, Fehlings MG. Controversies in Spinal Trauma and Evolution of Care. *Neurosurgery*. 2017 Mar 1;80(3S):S23-S32. doi: 10.1093/neuros/nyw076. Review. PubMed PMID: 28350943.
- 33: McIvor WR, Banerjee A, Boulet JR, Bekhuis T, Tseytlin E, Torsher L, DeMaria S Jr, Rask JP, Shotwell MS, Burden A, Cooper JB, Gaba DM, Levine A, Park C, Sinz E, Steadman RH, Weinger MB. A Taxonomy of Delivery and Documentation Deviations During Delivery of High-Fidelity Simulations. *Simul Healthc*. 2017 Feb;12(1):1-8. doi: 10.1097/SIH.0000000000000184. PubMed PMID: 28146449.
- 34: Charidimou A, Schmitt A, Wilson D, Yakushiji Y, Gregoire SM, Fox Z, Jäger HR, Werring DJ. The Cerebral Haemorrhage Anatomical RaTing inStrument (CHARTS): Development and assessment of reliability. *J Neurol Sci*. 2017 Jan 15;372:178-183. doi: 10.1016/j.jns.2016.11.021. Epub 2016 Nov 12. PubMed PMID: 28017207.
- 35: Linkov F, Valappil B, McAfee J, Goughnour SL, Hildrew DM, McCall AA, Linkov I, Hirsch B, Snyderman C. Development of an evidence-based decision pathway for vestibular schwannoma treatment options. *Am J Otolaryngol*. 2017 Jan - Feb;38(1):57-64. doi: 10.1016/j.amjoto.2016.09.019. Epub 2016 Sep 30. Review. PubMed PMID: 27780583.
- 36: Mohandas A, Summa C, Worthington WB, Lerner J, Foley KT, Bohinski RJ, Lanford GB, Holden C, Wohns RNW. Best Practices for Outpatient Anterior Cervical Surgery: Results From a Delphi Panel. *Spine (Phila Pa 1976)*. 2017 Jun 1;42(11):E648-E659. doi: 10.1097/BRS.0000000000001925. PubMed PMID: 27753787.
- 37: Lee MJ, Bhangu A, Blencowe NS, Nepogodiev D, Gokani VJ, Harries RL; Association of Surgeons in Training/National Research Collaborative Consensus group, Akinfala M, Ali O, Allum W, Bosanquet DC, Boyce K, Bradburn M, Chapman SJ, Christopher E, Coulter I, Dean BJ, Dickfos M, El Boghdady M, Elmasry M, Fleming S, Glasbey J, Healy C, Kasivisvanathan V, Khan KS, Kolias AG, Lee SM, Morton D, O'Beirne J, Sinclair P, Sutton PA. Academic requirements for Certificate of Completion of Training in surgical training: Consensus recommendations from the Association of Surgeons in Training/National Research Collaborative Consensus Group. *Int J Surg*. 2016 Nov;36 Suppl 1:S24-S30. doi: 10.1016/j.ijsu.2016.08.236. Epub 2016 Aug 23. PubMed PMID: 27565245.
- 38: Slade SC, Dionne CE, Underwood M, Buchbinder R, Beck B, Bennell K, Brosseau L, Costa L, Cramp F, Cup E, Feehan L, Ferreira M, Forbes S, Glasziou P, Habets B, Harris S, Hay-Smith J, Hillier S, Hinman R, Holland A, Hondras M, Kelly G, Kent P, Lauret GJ, Long A, Maher C, Morso L, Osteras N, Peterson T,

Quinlivan R, Rees K, Regnaud JP, Rietberg M, Saunders D, Skoetz N, Sogaard K, Takken T, van Tulder M, Voet N, Ward L, White C. Consensus on Exercise Reporting Template (CERT): Modified Delphi Study. *Phys Ther*. 2016 Oct;96(10):1514-1524. Epub 2016 May 5. PubMed PMID: 27149962.

39: Gudrunardottir T, Morgan AT, Lux AL, Walker DA, Walsh KS, Wells EM, Wisoff JH, Juhler M, Schmahmann JD, Keating RF, Catsman-Berrevoets C; Iceland Delphi Group. Consensus paper on post-operative pediatric cerebellar mutism syndrome: the Iceland Delphi results. *Childs Nerv Syst*. 2016 Jul;32(7):1195-203. doi: 10.1007/s00381-016-3093-3. Epub 2016 May 3. Review. PubMed PMID: 27142103.

40: Astrand R, Rosenlund C, Undén J; Scandinavian Neurotrauma Committee (SNC). Scandinavian guidelines for initial management of minor and moderate head trauma in children. *BMC Med*. 2016 Feb 18;14:33. doi: 10.1186/s12916-016-0574-x. PubMed PMID: 26888597; PubMed Central PMCID: PMC4758024.

41: Gerritsen JK, Vincent AJ. Exercise improves quality of life in patients with cancer: a systematic review and meta-analysis of randomised controlled trials. *Br J Sports Med*. 2016 Jul;50(13):796-803. doi: 10.1136/bjsports-2015-094787. Epub 2015 Dec 30. Review. PubMed PMID: 26719503.

42: Chuan A, Graham PL, Wong DM, Barrington MJ, Auyong DB, Cameron AJ, Lim YC, Pope L, Germanoska B, Forrest K, Royse CF. Design and validation of the Regional Anaesthesia Procedural Skills Assessment Tool. *Anaesthesia*. 2015 Dec;70(12):1401-11. doi: 10.1111/anae.13266. PubMed PMID: 26558857.

43: van Hecke O, Kamerman PR, Attal N, Baron R, Bjornsdottir G, Bennett DL, Bennett MI, Bouhassira D, Diatchenko L, Freeman R, Freynhagen R, Haanpää M, Jensen TS, Raja SN, Rice AS, Seltzer Z, Thorgeirsson TE, Yarnitsky D, Smith BH. Neuropathic pain phenotyping by international consensus (NeuroPPIC) for genetic studies: a NeuPSIG systematic review, Delphi survey, and expert panel recommendations. *Pain*. 2015 Nov;156(11):2337-53. doi: 10.1097/j.pain.0000000000000335. Review. Erratum in: *Pain*. 2017 Jun;158(6):1180. PubMed PMID: 26469320; PubMed Central PMCID: PMC4747983.

44: White KK, Bompadre V, Goldberg MJ, Bober MB, Campbell JW, Cho TJ, Hoover-Fong J, Mackenzie W, Parnell SE, Raggio C, Rapoport DM, Spencer SA, Savarirayan R. Best practices in the evaluation and treatment of foramen magnum stenosis in achondroplasia during infancy. *Am J Med Genet A*. 2016 Jan;170A(1):42-51. doi: 10.1002/ajmg.a.37394. Epub 2015 Sep 23. PubMed PMID: 26394886.

45: Etminan N, Brown RD Jr, Beseoglu K, Juvela S, Raymond J, Morita A, Torner JC, Derdeyn CP, Raabe A, Mocco J, Korja M, Abdulazim A, Amin-Hanjani S, Al-Shahi Salman R, Barrow DL, Bederson J, Bonafe A, Dumont AS, Fiorella DJ, Gruber A, Hankey GJ, Hasan DM, Hoh BL, Jabbour P, Kasuya H, Kelly ME, Kirkpatrick PJ, Knuckey N, Koivisto T, Krings T, Lawton MT, Marotta TR, Mayer SA, Mee E, Pereira VM, Molyneux A, Morgan MK, Mori K, Murayama Y, Nagahiro S, Nakayama N, Niemelä M, Ogilvy CS, Pierot L, Rabinstein AA, Roos YB, Rinne J, Rosenwasser RH, Ronkainen A, Schaller K, Seifert V, Solomon RA, Spears J, Steiger HJ, Vergouwen MD, Wanke I, Wermer MJ, Wong GK, Wong JH, Zipfel GJ, Connolly ES Jr, Steinmetz H, Lanzino G, Pasqualin A, Rüfenacht D, Vajkoczy P, McDougall C, Hänggi D, LeRoux P, Rinkel GJ, Macdonald RL. The unruptured intracranial aneurysm treatment score: a multidisciplinary consensus. *Neurology*. 2015 Sep 8;85(10):881-9. doi: 10.1212/WNL.0000000000001891. Epub 2015 Aug 14. PubMed PMID: 26276380; PubMed Central PMCID: PMC4560059.

46: Ames CP, Smith JS, Eastlack R, Blaskiewicz DJ, Shaffrey CI, Schwab F, Bess S, Kim HJ, Mundis GM Jr, Klineberg E, Gupta M, O'Brien M, Hostin R, Scheer JK, Protopsaltis TS, Fu KM, Hart R, Albert TJ, Riew KD, Fehlings MG, Deviren V, Lafage V; International Spine Study Group. Reliability assessment of a

novel cervical spine deformity classification system. *J Neurosurg Spine*. 2015 Dec;23(6):673-83. doi: 10.3171/2014.12.SPINE14780. Epub 2015 Aug 14. PubMed PMID: 26273762.

47: Bennett DA, Brayne C, Feigin VL, Barker-Collo S, Brainin M, Davis D, Gallo V, Jetté N, Karch A, Kurtzke JF, Lavados PM, Logroscino G, Nagel G, Preux PM, Rothwell PM, Svenson LW. Development of the Standards of Reporting of Neurological Disorders (STROND) checklist: A guideline for the reporting of incidence and prevalence studies in neuroepidemiology. *Neurology*. 2015 Sep 1;85(9):821-8. doi: 10.1212/WNL.0000000000001866. Epub 2015 Jul 10. PubMed PMID: 26163431.

48: Chesnut RM, Bleck TP, Citerio G, Classen J, Cooper DJ, Coplin WM, Diringner MN, Grande PO, Hemphill JC 3rd, Hutchinson PJ, Le Roux P, Mayer SA, Menon DK, Myburgh JA, Okonkwo DO, Robertson CS, Sahuquillo J, Stocchetti N, Sung G, Temkin N, Vespa PM, Videtta W, Yonas H. A Consensus-Based Interpretation of the Benchmark Evidence from South American Trials: Treatment of Intracranial Pressure Trial. *J Neurotrauma*. 2015 Nov 15;32(22):1722-4. doi: 10.1089/neu.2015.3976. Epub 2015 Aug 31. PubMed PMID: 26061135.

49: Breimer GE, Haji FA, Hoving EW, Drake JM. Development and content validation of performance assessments for endoscopic third ventriculostomy. *Childs Nerv Syst*. 2015 Aug;31(8):1247-59. doi: 10.1007/s00381-015-2716-4. Epub 2015 May 1. Review. PubMed PMID: 25930722.

50: Rhee JM, Chapman JR, Norvell DC, Smith J, Sherry NA, Riew KD. Radiological Determination of Postoperative Cervical Fusion: A Systematic Review. *Spine (Phila Pa 1976)*. 2015 Jul 1;40(13):974-91. doi: 10.1097/BRS.0000000000000940. Review. PubMed PMID: 25893344.

51: Clement RC, Welandar A, Stowell C, Cha TD, Chen JL, Davies M, Fairbank JC, Foley KT, Gehrchen M, Hagg O, Jacobs WC, Kahler R, Khan SN, Lieberman IH, Morisson B, Ohnmeiss DD, Peul WC, Shonnard NH, Smuck MW, Solberg TK, Stromqvist BH, Hooff ML, Wasan AD, Willems PC, Yeo W, Fritzell P. A proposed set of metrics for standardized outcome reporting in the management of low back pain. *Acta Orthop*. 2015;86(5):523-33. doi: 10.3109/17453674.2015.1036696. PubMed PMID: 25828191; PubMed Central PMCID: PMC4564773.

52: Frisoni GB, Jack CR Jr, Bocchetta M, Bauer C, Frederiksen KS, Liu Y, Preboske G, Swihart T, Blair M, Cavado E, Grothe MJ, Lanfredi M, Martinez O, Nishikawa M, Portegies M, Stoub T, Ward C, Apostolova LG, Ganzola R, Wolf D, Barkhof F, Bartzokis G, DeCarli C, Csernansky JG, deToledo-Morrell L, Geerlings MI, Kaye J, Killiany RJ, Lehericy S, Matsuda H, O'Brien J, Silbert LC, Scheltens P, Soininen H, Teipel S, Waldemar G, Fellgiebel A, Barnes J, Firbank M, Gerritsen L, Henneman W, Malykhin N, Pruessner JC, Wang L, Watson C, Wolf H, deLeon M, Pantel J, Ferrari C, Bosco P, Pasqualetti P, Duchesne S, Duvernoy H, Boccardi M; EADC-ADNI Working Group on The Harmonized Protocol for Manual Hippocampal Volumetry and for the Alzheimer's Disease Neuroimaging Initiative. The EADC-ADNI Harmonized Protocol for manual hippocampal segmentation on magnetic resonance: evidence of validity. *Alzheimers Dement*. 2015 Feb;11(2):111-25. doi: 10.1016/j.jalz.2014.05.1756. Epub 2014 Sep 27. PubMed PMID: 25267715; PubMed Central PMCID: PMC4422168.

53: Nguyen PL, Aizer A, Assimos DG, D'Amico AV, Frank SJ, Gottschalk AR, Gustafson GS, Hsu IC, McLaughlin PW, Merrick G, Rosenthal SA, Showalter TN, Taira AV, Vapiwala N, Yamada Y, Davis BJ; American College of Radiology, Expert Panel on Radiation OncologyProstate. ACR Appropriateness Criteria® Definitive External-Beam Irradiation in stage T1 and T2 prostate cancer. *Am J Clin Oncol*. 2014 Jun;37(3):278-88. doi: 10.1097/COC.000000000000049. Review. PubMed PMID: 25180754.

54: Videtic GM, Chang JY, Chetty IJ, Ginsburg ME, Kestin LL, Kong FM, Lally BE, Loo BW Jr, Movsas B, Stinchcombe TE, Willers H, Rosenzweig KE; Expert Panel on Radiation OncologyLung. ACR appropriateness Criteria® early-stage non-small-cell lung cancer. *Am J Clin Oncol*. 2014

Apr;37(2):201-7. doi: 10.1097/COC.000000000000013. Review. PubMed PMID: 25180631.

55: Vitale MG, Skaggs DL, Pace GI, Wright ML, Matsumoto H, Anderson RC, Brockmeyer DL, Dormans JP, Emans JB, Erickson MA, Flynn JM, Glotzbecker MP, Ibrahim KN, Lewis SJ, Luhmann SJ, Mendiratta A, Richards BS 3rd, Sanders JO, Shah SA, Smith JT, Song KM, Sponseller PD, Sucato DJ, Roye DP, Lenke LG. Best Practices in Intraoperative Neuromonitoring in Spine Deformity Surgery: Development of an Intraoperative Checklist to Optimize Response. *Spine Deform*. 2014 Sep;2(5):333-339. doi: 10.1016/j.jspd.2014.05.003. Epub 2014 Aug 27. PubMed PMID: 27927330.

56: Ramakrishna N, Temin S, Chandarlapaty S, Crews JR, Davidson NE, Esteva FJ, Giordano SH, Gonzalez-Angulo AM, Kirshner JJ, Krop I, Levinson J, Modi S, Patt DA, Perez EA, Perlmutter J, Winer EP, Lin NU. Recommendations on disease management for patients with advanced human epidermal growth factor receptor 2-positive breast cancer and brain metastases: American Society of Clinical Oncology clinical practice guideline. *J Clin Oncol*. 2014 Jul 1;32(19):2100-8. doi: 10.1200/JCO.2013.54.0955. Epub 2014 May 5. Review. PubMed PMID: 24799487; PubMed Central PMCID: PMC6366342.

57: Etminan N, Beseoglu K, Barrow DL, Bederson J, Brown RD Jr, Connolly ES Jr, Derdeyn CP, Hänggi D, Hasan D, Juvela S, Kasuya H, Kirkpatrick PJ, Knuckey N, Koivisto T, Lanzino G, Lawton MT, LeRoux P, McDougall CG, Mee E, Mocco J, Molyneux A, Morgan MK, Mori K, Morita A, Murayama Y, Nagahiro S, Pasqualin A, Raabe A, Raymond J, Rinkel GJ, Rüfenacht D, Seifert V, Spears J, Steiger HJ, Steinmetz H, Torner JC, Vajkoczy P, Wanke I, Wong GK, Wong JH, Macdonald RL. Multidisciplinary consensus on assessment of unruptured intracranial aneurysms: proposal of an international research group. *Stroke*. 2014 May;45(5):1523-30. doi: 10.1161/STROKEAHA.114.004519. Epub 2014 Mar 25. PubMed PMID: 24668202.

58: Tubbs RS, Sorenson EP, Sharma A, Benninger B, Norton N, Loukas M, Moxham BJ. The development of a core syllabus for the teaching of head and neck anatomy to medical students. *Clin Anat*. 2014 Apr;27(3):321-30. doi: 10.1002/ca.22353. Epub 2014 Jan 22. PubMed PMID: 24453104.

59: Skelly AC, Hashimoto RE, Norvell DC, Dettori JR, Fischer DJ, Wilson JR, Tetreault LA, Fehlings MG. Cervical spondylotic myelopathy: methodological approaches to evaluate the literature and establish best evidence. *Spine (Phila Pa 1976)*. 2013 Oct 15;38(22 Suppl 1):S9-18. doi: 10.1097/BRS.0b013e3182a7ebbf. PubMed PMID: 24026148.

60: Yoon ST, Hashimoto RE, Raich A, Shaffrey CI, Rhee JM, Riew KD. Outcomes after laminoplasty compared with laminectomy and fusion in patients with cervical myelopathy: a systematic review. *Spine (Phila Pa 1976)*. 2013 Oct 15;38(22 Suppl 1):S183-94. doi: 10.1097/BRS.0b013e3182a7eb7c. Review. PubMed PMID: 23963000.

61: Yoon ST, Raich A, Hashimoto RE, Riew KD, Shaffrey CI, Rhee JM, Tetreault LA, Skelly AC, Fehlings MG. Predictive factors affecting outcome after cervical laminoplasty. *Spine (Phila Pa 1976)*. 2013 Oct 15;38(22 Suppl 1):S232-52. doi: 10.1097/BRS.0b013e3182a7eb55. Review. PubMed PMID: 23962999.

62: Walker DA, Liu J, Kieran M, Jabado N, Picton S, Packer R, St Rose C; CPN Paris 2011 Conference Consensus Group. A multi-disciplinary consensus statement concerning surgical approaches to low-grade, high-grade astrocytomas and diffuse intrinsic pontine gliomas in childhood (CPN Paris 2011) using the Delphi method. *Neuro Oncol*. 2013 Apr;15(4):462-8. doi: 10.1093/neuonc/nos330. Epub 2013 Mar 15. Review. PubMed PMID: 23502427; PubMed Central PMCID: PMC3607269.

63: Papagrigorakis MJ, Toulas P, Tsilivakos MG, Kousoulis AA, Skorda D, Orfanidis G, Synodinos PN. Neurosurgery during the Bronze Age: a skull trepanation in 1900 BC Greece. *World Neurosurg*. 2014

Feb;81(2):431-5. doi: 10.1016/j.wneu.2013.01.044. Epub 2013 Jan 12. PubMed PMID: 23321381.

64: Parker SL, Adogwa O, Mendenhall SK, Shau DN, Anderson WN, Cheng JS, Devin CJ, McGirt MJ. Determination of minimum clinically important difference (MCID) in pain, disability, and quality of life after revision fusion for symptomatic pseudoarthrosis. *Spine J.* 2012 Dec;12(12):1122-8. doi: 10.1016/j.spinee.2012.10.006. Epub 2012 Nov 14. PubMed PMID: 23158968.

65: Jette N, Quan H, Tellez-Zenteno JF, Macrodimitris S, Hader WJ, Sherman EM, Hamiwka LD, Wirrell EC, Burneo JG, Metcalfe A, Faris PD, Hernandez-Ronquillo L, Kwon CS, Kirk A, Wiebe S; CASES Expert Panelists. Development of an online tool to determine appropriateness for an epilepsy surgery evaluation. *Neurology.* 2012 Sep 11;79(11):1084-93. Epub 2012 Aug 15. PubMed PMID: 22895589.

66: Rigby H, Schofield S, Mann K, Benstead T. Education Research: An exploration of case-based learning in neuroscience grand rounds using the Delphi technique. *Neurology.* 2012 Jul 17;79(3):e19-26. doi: 10.1212/WNL.0b013e31825fdfa2. PubMed PMID: 22802597.

67: Tee JW, Chan CH, Gruen RL, Fitzgerald MC, Liew SM, Cameron PA, Rosenfeld JV. Inception of an Australian spine trauma registry: the minimum dataset. *Global Spine J.* 2012 Jun;2(2):71-8. doi: 10.1055/s-0032-1319772. PubMed PMID: 24353950; PubMed Central PMCID: PMC3864422.

68: Oner FC, Wood KB, Smith JS, Shaffrey CI. Therapeutic decision making in thoracolumbar spine trauma. *Spine (Phila Pa 1976).* 2010 Oct 1;35(21 Suppl):S235-44. doi: 10.1097/BRS.0b013e3181f32734. Review. PubMed PMID: 20881467.

69: Fisher CG, DiPaola CP, Ryken TC, Bilsky MH, Shaffrey CI, Berven SH, Harrop JS, Fehlings MG, Boriani S, Chou D, Schmidt MH, Polly DW, Biagini R, Burch S, Dekutoski MB, Ganju A, Gerszten PC, Gokaslan ZL, Groff MW, Liebsch NJ, Mendel E, Okuno SH, Patel S, Rhines LD, Rose PS, Sciubba DM, Sundaresan N, Tomita K, Varga PP, Vialle LR, Vrionis FD, Yamada Y, Fournay DR. A novel classification system for spinal instability in neoplastic disease: an evidence-based approach and expert consensus from the Spine Oncology Study Group. *Spine (Phila Pa 1976).* 2010 Oct 15;35(22):E1221-9. doi: 10.1097/BRS.0b013e3181e16ae2. Review. PubMed PMID: 20562730.

70: Dettori JR, Norvell DC, Dekutoski M, Fisher C, Chapman JR. Methods for the systematic reviews on patient safety during spine surgery. *Spine (Phila Pa 1976).* 2010 Apr 20;35(9 Suppl):S22-7. doi: 10.1097/BRS.0b013e3181d70494. Review. PubMed PMID: 20407348.

71: Volk T, Engelhardt L, Spies C, Steinfeldt T, Gruenewald D, Kutter B, Heller A, Werner C, Heid F, Bürkle H, Gastmeier P, Wernecke KD, Koch T, Vicent O, Geiger P, Wulf H. [Incidence of infection from catheter procedures for regional anesthesia: first results from the network of DGAI and BDA]. *Anaesthesist.* 2009 Nov;58(11):1107-12. doi: 10.1007/s00101-009-1636-7. German. PubMed PMID: 19890612.

72: Chang CH, Yang SH, Hsieh BS, Chan KA. Evidence-based consensus development and reduction of rate of endoscopic thoracic sympathectomy: a national study. *Dermatol Surg.* 2009 Dec;35(12):1970-7. doi: 10.1111/j.1524-4725.2009.01310.x. PubMed PMID: 19708877.

73: Assmus H, Schwerdtfeger K, Wüstner-Hofmann M, Selbmann HK. [Development and implementation of the guideline "Diagnosis of and Therapy for Carpal Tunnel Syndrome"]. *Handchir Mikrochir Plast Chir.* 2007 Aug;39(4):289-92. German. PubMed PMID: 17724651.

74: Assmus H, Antoniadis G, Bischoff C, Haussmann P, Martini AK, Mascharka Z, Scheglmann K, Schwerdtfeger K, Selbmann HK, Towfigh H, Vogt T, Wessels KD, Wüstner-Hofmann M. [Diagnosis and therapy of carpal tunnel syndrome—guideline of the German Societies of Handsurgery, Neurosurgery,

Neurology, Orthopaedics, Clinical Neurophysiology and Functional Imaging, Plastic, Reconstructive and Aesthetic Surgery, and Surgery for Traumatology]. *Handchir Mikrochir Plast Chir*. 2007 Aug;39(4):276-88. Review. German. PubMed PMID: 17724650.

75: Wolfs JF, Peul WC, Boers M, van Tulder MW, Brand R, van Houwelingen HJ, Thomeer RT. Rationale and design of The Delphi Trial-I(RCT)2: international randomized clinical trial of rheumatoid craniocervical treatment, an intervention-prognostic trial comparing 'early' surgery with conservative treatment [ISRCTN65076841]. *BMC Musculoskelet Disord*. 2006 Feb 16;7:14. PubMed PMID: 16483360; PubMed Central PMCID: PMC1420300.

76: Land NE, Odding E, Duivenvoorden HJ, Bergen MP, Stam HJ. Tetraplegia Hand Activity Questionnaire (THAQ): the development, assessment of arm-hand function-related activities in tetraplegic patients with a spinal cord injury. *Spinal Cord*. 2004 May;42(5):294-301. PubMed PMID: 14993892.

77: Teijeiro-Amador J, Guerra-Figueredo E, Morales JM, Alvarez-González L, Maragoto-Rizo C, Macías-González R. [Database application for information on post-surgical evolution after functional neurosurgery]. *Rev Neurol*. 2002 Sep 1-15;35(5):420-4. Spanish. PubMed PMID: 12373672.

78: Eftekhari B, Ghodsi M, Ketabchi E, Rasaee S. Surgical simulation software for insertion of pedicle screws. *Neurosurgery*. 2002 Jan;50(1):222-3; discussion 223-4. PubMed PMID: 11844256.

1)

Lazarus JV, Romero D, Kopka CJ, Karim SA, Abu-Raddad LJ, Almeida G, Baptista-Leite R, Barocas JA, Barreto ML, Bar-Yam Y, Bassat Q, Batista C, Bazilian M, Chiou ST, Del Rio C, Dore GJ, Gao GF, Gostin LO, Hellard M, Jimenez JL, Kang G, Lee N, Matičič M, McKee M, Nsanzimana S, Oliu-Barton M, Pradelski B, Pyzik O, Rabin K, Raina S, Rashid SF, Rathe M, Saenz R, Singh S, Trock-Hempler M, Villapol S, Yap P, Binagwaho A, Kamarulzaman A, El-Mohandes A; COVID-19 Consensus Statement Panel. A multinational Delphi consensus to end the COVID-19 public health threat. *Nature*. 2022 Nov 3. doi: 10.1038/s41586-022-05398-2. Epub ahead of print. PMID: 36329272.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=delphi_method

Last update: **2024/06/07 02:55**

