- **FACT SHEET No. 4**

Incorporating Pain Competencies and IASP Curriculum Outlines into Professional Education

The IASP Curricula Outlines provide recommended curricula for pharmacy, psychology, physical therapy, occupational therapy, nursing, medicine, dentistry, social work, and interprofessional education. The outlines are helpful for establishing teaching courses on acute, chronic, and cancer pain at both the undergraduate and graduate levels. The curricula outlines were all updated in 2017 for the Global Year on Excellence in Pain Education.

The European Pain Federation Core Curriculum for the European Diploma in Pain Medicine (2016) articulates the learning outcomes for trainees to achieve through self-directed learning, clinical experience in the workplace, and other educational experiences delivered during their training and helped by the EFIC® Pain Schools and educational initiatives.

The North American Core Pain Competencies by Fishman et al (2013) address the fundamental concepts and complexity of pain; how pain is observed and assessed; collaborative approaches to treatment options; and application of competencies across the life span in the context of various settings, populations, and care-team models. A set of values and guiding principles are embedded within each domain. These competencies can serve as a foundation for developing, defining, and revising curricula and as a resource for the creation of learning activities across health professions designed to advance care that effectively responds to pain.

How to integrate

- Map the content outlines and competencies with existing curricula to help identify gaps or areas for improvement.
- Encourage curriculum developers across the health sciences to evaluate their current educational content and adopt and test the content outlines and competencies.

- Incorporate into learning opportunities and activities throughout the formative stages of health-care education and training for students and for future professional development.
- Urge local and national licensure, accreditation, certification, education, and policy governing bodies to consider incorporating pain competencies when establishing standards.

Teaching Methods	Related Pain Education Example Reference
Case-Based Learning Use of real or simulated stories that include patient problems/symptoms. Students analyze these and may work individually or in small groups to arrive at a solution using course concepts and clinical literature.	Schwartz LR, Fernandez R, Kouyoumjian SR, Jones KA, Compton S. A randomized comparison trial of case-based learning versus human patient simulation in medical student education. Acad Emerg Med 2007;14(2):130-7
Didactic A slide presentation or lecture that may include brief question-and-answer sessions.	McFadden P, Crim A. Comparison of the effectiveness of interactive didactic lecture versus online simulation-based CME programs directed at improving the diagnostic capabilities of primary care practitioners. J Contin Educ Health Prof 2016;36(1):32-7.
Problem-Based Learning Focused experiential learning that is organized around the investigation of clinical problems. Learner groups are presented with a case and set their own learning objectives, often dividing the work, teaching each other, guided discussions, etc.	**Telehealth** Shelley BM, Katzman JG, Comerci GD Jr, Duhigg DJ, Olivas C, Kalishman S, Monette R, Britt M, Flatow-Trujllo L, Arora S. ECHO pain curriculum: balancing mandated continuing education with the needs of rural health care practitioners. J Contin Educ Health Prof 2017; Aug 16. doi: 10.1097/CEH.0000000000000165. [Epub ahead of print]
Simulation-Based Learning Simulations (low tech--e.g., role playing--or high tech) duplicate clinical scenarios and allow learners to engage in activities that approximate realistic situations.	Hecimovich M, Volet S. Simulated learning in musculoskeletal assessment and rehabilitation education: comparing the effect of a simulation-based learning activity with a peer-based learning activity. BMC Med Educ 2014;14:253 http://www.biomedcentral.com/1472-6920/14/253 McGillion M, Dubrowski A, Stremler R, Watt-Watson J, CAmpbellF, McCartney C, Victor C, Wiseman J, Snell J, Robb A, Nelson S, Stinson J, Hunter J, Dao T, Promislow S, McNaughton N,

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	White S, Shobbrook C, Jeffs L, Mauch K, Leegaard M, Beattie W, Schreiber M, Silver I. The Postoperative Pain Assessment Skills pilot trial. Pain Res Manag 2011;16(6):433-9.
Team-Based Learning ("flipped classroom") Teacher-directed method for incorporating small-group active participation in large-group educational setting. Learners must actively participate in and out of class (preparation and discussion). Shift away from facts to application.	Della Ratta CB. Flipping the classroom with team-based learning in undergraduate nursing education. Nurse Educ 2015;40(2):71-4. Martinelli SM, Chen F, DiLorenzo AN, Mayer DC, Fairbanks S, Moran K, Ku C, Mitchell JD, Bowe EA, Royal KD, Hendrickse A, VanDyke K, Trawicki MC, Rankin D, Guldan GJ, Hand W, Gallagher C, Jacob Z, Zvara DA, McEvoy MD, Schell RM. Results of a Flipped Classroom Teaching Approach in Anesthesiology Residents. J Grad Med Educ. 2017; 9(4):485-490.
Interprofessional Learning Activities Combinations of aforementioned learning activities can be incorporated into interprofessional group problem solving and learning.	Carr E, Watt-Watson J. Interprofessional pain education: definitions, exemplars and future directions. Br J Pain 2012;6(20:59-65.
Clinical Experiences Observation of and practice in inpatient and/or outpatient health-care settings.	Goldberg GR, Filatto P, Karani R. Effect of 1-week clinical rotation in palliative medicine on medical school graduates' knowledge of and preparedness in caring for seriously ill patients. J Am Geriatr Soc 2011;59(9):1724-9.
Other: **Literature Review** Critical review of evidence-based literature to inform best practices in pain management.	**Literature Review** Guerriero F, Bolier R, Van Cleave JH, Reid MC. Pharmacological approaches for the management of persistent pain in older adults: what nurses need to know. J Gerontol Nurs 2016;42(12):49-57.

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Video Education Video-based training modules for learning clinical information and/or skills.	**Video Education** Bjorn A, Pudas-Tahka SM, Salantera S, Axelin A. Video education for critical care nurses to assess pain with a behavioral pain assessment tool: a descriptive comparative study. Intensive Crit Care Nurs 2017; Apr 18. pii: S0964-3397(17)30070-8. doi: 10.1016/j.iccn.2017.02.010. [Epub ahead of print]
Online Modules Learning modules including mixed learning methods (videos, case-based material, slide presentations, evidence-based discussions, etc.)	**Online Training** Richmond H, Hall AM, Hansen Z, Williamson E, Davies D, Lamb SE. Using mixed methods evaluation to assess the feasibility of online clinical training in evidence based interventions: a case study of cognitive behavioral treatment for low back pain. BMC Med Educ 2016;16(163): DOI 10.1186/s12909-016-0683-4 Weiner DK, Morone NE, Spallek H, Karp JF, Schneider M, Washburn C, Dziabiak MP, Hennon JG, Elnicki DM. E-learning module on chronic low back pain in older adults: evidence of effect on medical student objective structured clinical examination performance. J Am Geriatr Soc. 2014; 62(6):1161-7.
Participating in Pain Group Therapy: Participating in already-established therapeutic groups to hear patients' and staff experiences and then discuss specific topics with staff.	Huestis SE, Kao G, Dunn A, Hilliard AT, Yoon IA, Golianu B, Bhandari RP. Multi-Family Pediatric Pain Group Therapy: Capturing Acceptance and Cultivating Change. Children (Basel). 2017; 7;4(12): E106

RESOURCES

IASP Curricula Outlines

European Federation of International Chapters (EFIC) Curriculum for Pain Medicine

U.S. National Institute of Health (NIH) Centers of Excellence in Pain Education Case-Based Modules

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