Supplemental Digital Appendix 3

List of Included Studies (n = 538) for a 2016 Scoping Review of Clinical Reasoning Assessment Methods^a

1.	Aagaard E, Teherani A, Irby DM. Effectiveness of the one-minute preceptor model for diagnosing the patient and the learner: proof of concept. Acad Med. 2004;79(1):42-9.	
2.	Aaraas IJ, Holtedahl K, Anvik T, et al. Examination of final-year medical students in general practice. Scand J Prim Health Care. 2007;25(4):198-201.	
3.	Abboudi H, Ahmed K, Normahani P, et al. Decision making in urological surgery. Int Urol Nephrol. 2012;44(3):701-10.	
4.	Abel WM, Freeze M. Evaluation of concept mapping in an associate degree nursing program. J Nurs Educ. 2006;45(9):356-64.	х
5.	Adams MH, Whitlow JF, Stover LM, Johnson KW. Critical thinking as an educational outcome: an evaluation of current tools of measurement. Nurse Educ. 1996;21(3):23-32.	x
6.	Adamson KA, Gubrud P, Sideras S, Lasater K. Assessing the reliability, validity, and use of the Lasater Clinical Judgment Rubric: three approaches. J Nurs Educ. 2012;51(2):66-73.	х
7.	Adrales GL, Park AE, Chu UB, et al. A valid method of laparoscopic simulation training and competence assessment. J Surg Res. 2003;114(2):156-62.	
8.	Agha H, Arora S, Sevdalis N. Quantitative assessment of expert and novice surgeons' thinking processes: an application to hernia repair. Am J Surg. 2011;202(1):110-15.	
9.	Ahmadi SF, Khoshkish S, Soltani-Arabshahi K, et al. Challenging script concordance test reference standard by evidence: do judgments by emergency medicine consultants agree with likelihood ratios? Int J Emerg Med. 2014;7(34):1-7.	
10.	Ahmed H, Rhydderch M, Matthews P. Can knowledge tests and situational judgement tests predict selection centre performance? Med Educ. 2012;46(8):777-84.	
11.	Ahopelto I, Mikkila-Erdmann M, Olkinuora E, Kaapa P. A follow-up study of medical students' biomedical understanding and clinical reasoning concerning the cardiovascular system. Adv Health Sci Educ. 2011;16(5):655-68.	
12.	Al-Naami MY, El-Tinay OF, Khairy GA, Mofti SS, Anjum MN. Improvement of psychometric properties of the objective structured clinical examination when assessing problem solving skills of surgical clerkship. Saudi Med J. 2011;32(3):300-4.	
13.	Aldekhayel SA, Alselaim NA, Magzoub ME, et al. Constructing a question bank based on script concordance approach as a novel assessment methodology in surgical education. BMC Med Educ. 2012;12:100.	
14.	Anastakis DJ, Cohen R, Reznick RK. The structured oral examination as a method for assessing surgical residents. Am J Surg. 1991;162(1):67-70.	
15.	Andersen DK. How can educators use simulation applications to teach and assess surgical judgment? Acad Med. 2012;87(7):934-41.	

16.	Andersen SM, Harthorn BH. The Diagnostic Knowledge Inventory: a measure of	
17.	knowledge about psychiatric diagnosis. J Clin Psychol. 1989;45(6):999-1013. Anderson JD, Jay SJ, Weng HC, Anderson MM. Studying the effect of clinical	
1/.	uncertainty on physicians' decision-making using ILIAD. Medinfo. 1995;8(Pt	
	2):869-72.	
18.	Anderson K, Peterson R, Tonkin A, Cleary E. The assessment of student reasoning	
	in the context of a clinically oriented PBL program. Med Teach. 2008;30(8):787-94.	
19.	Ansari AA, Ali SK, Donnon T. The construct and criterion validity of the mini-	
	CEX: a meta-analysis of the published research. Acad Med. 2013;88(3):413-20.	
20.	Artino AR. Exploring clinical reasoning in novices: a self-regulated learning	
	microanalytic assessment approach. Med Educ. 2014;48(3):280-91.	
21.	Bader JD, Shugars DA. Variation in dentists' clinical decisions. J Public Health	Х
	Dent. 1995;55(3):181-88.	-
22.	Badger LW, deGruy F, Hartman J, et al. Stability of standardized patients'	
22	performance in a study of clinical decision making. Fam Med. 1995;27(2):126-31.	
23.	Bakalis N. Clinical decision-making in cardiac nursing: a review of the literature. Nurs Stand. 2006;21(12):39-46.	х
24.	Baker EA, Connell KJ, Bordage G, Sinacore J. Can diagnostic semantic competence	
	be assessed from the medical record? Acad Med. 1999;74(10 Suppl):S13-5.	
25.	Baker EA, Ledford CH, Fogg L, Way DP, Park YS. The IDEA Assessment Tool:	
	Assessing the Reporting, Diagnostic Reasoning, and Decision-Making Skills	
	Demonstrated in Medical Students' Hospital Admission Notes. Teach Learn Med.	
	2015;27(2):163-73.	
26.	Balslev T, Jarodzka H, Holmqvist K, et al. Visual expertise in paediatric neurology.	
	Eur J Paediatr Neurol. 2012;16(2):161-66.	
27.	Bartlett DJ, Cox PD. Measuring change in students' critical thinking ability:	Х
28.	implications for health care education. J Allied Health. 2002;31(2):64-9. Ber R. The CIP (comprehensive integrative puzzle) assessment method. Med Teach.	
20.	2003;25(2):171-6.	
29.	Bereby-Meyer Y, Meyer J, Budescu DV. Decision making under internal	Х
	uncertainty: the case of multiple-choice tests with different scoring rules. Acta	
	Psychol (Amst). 2003;112(2):207-20.	
30.	Berger AJ, Gillespie CC, Tewksbury LR, et al. Assessment of medical student	
	clinical reasoning by "lay" vs physician raters: inter-rater reliability using a scoring	
	guide in a multidisciplinary objective structured clinical examination. Am J Surg.	
21	2012;203(1):81-86.	
31.	Bersky AK. The validity of a new test of nursing competence [dissertation]. Chicago: The University of Chicago; 1994.	Х
32.	Beullens J, Damme BV, Jaspaert H, Janssen PJ. Are extended-matching multiple-	
52.	choice items appropriate for a final test in medical education? Med Teach.	
	2002;24(4):390-5.	
33.	Beullens J, Struyf E, Damme BV. Do extended matching multiple-choice questions	
	measure clinical reasoning? Med Educ. 2005;39(4):410-7.	
34.	Beullens J, Struyf E, Damme BV. Diagnostic ability in relation to clinical seminars	
	and extended-matching questions examinations. Med Educ. 2006;40(12):1173-9.	

35.	Bhakta B, Tennant A, Horton M, Lawton G, Andrich D. Using item response theory	
	to explore the psychometric properties of extended matching questions examination	
26	in undergraduate medical education. BMC Med Educ. 2005;5(1):1-13.	
36.	Bland AC, Kreiter CD, Gordon JA. The psychometric properties of five scoring methods applied to the script concordance test. Acad Med. 2005;80(4):395-9.	
37.	Bordage G, Brailovsky C, Carretier H, Page G. Content validation of key features on	
	a national examination of clinical decision-making skills. Acad Med.	
	1995;70(4):276-81.	
38.	Bordage G, Carretier H, Bertrand R, Page G. Comparing times and performances	
	of French- and English-speaking candidates taking a national examination of clinical	
	decision-making skills. Acad Med. 1995;70(5):359-65.	
39.	Bordage G, Connell KJ, Chang RW, Gecht MR, Sinacore JM. Assessing the	
	semantic content of clinical case presentations: studies of reliability and concurrent	
	validity. Acad Med. 1997;72(10 Suppl 1):S37-9.	
40.	Bordage G, Grant J, Marsden P. Quantitative assessment of diagnostic ability. Med	
	Educ. 1990;24(5):413-25.	
41.	Boshuizen HP, Vleuten CPvd, Schmidt HG, Machiels-Bongaerts M. Measuring	
	knowledge and clinical reasoning skills in a problem-based curriculum. Med Educ.	
- 10	1997;31(2):115-21.	
42.	Boulouffe C, Charlin B, Vanpee D. Evaluation of clinical reasoning in basic	
	emergencies using a script concordance test. Am J Pharm Educ. 2010;74(10):1-6.	
43.	Boulouffe C, Doucet B, Muschart X, Charlin B, Vanpee D. Assessing clinical	
	reasoning using a script concordance test with electrocardiogram in an emergency	
4.4	medicine clerkship rotation. Emerg Med J. 2014;31(4):313-6.	
44.	Bowles KS. Effects of critical thinking, grade point average, and college experience on the clinical judgement skills of baccalaureate nursing students [dissertation]. Los	Х
	Angeles: University of Southern California; 1997.	
45.	Bradley P, Humphris G. Assessing the ability of medical students to apply evidence	
т.).	in practice: The potential of the OSCE. Med Educ. 1999;33(11):815-17.	
46.	Brailovsky C, Charlin B, Beausoleil S, Cote S, Van der Vleuten C. Measurement of	
	clinical reflective capacity early in training as a predictor of clinical reasoning	
	performance at the end of residency: an experimental study on the script	
	concordance test. Med Educ. 2001;35(5):430-52.	
47.	Brailovsky CA, Bordage G, Allen T, Dumont H. Writing vs coding diagnostic	
	impressions in an examination: short-answer vs long-menu responses. Research in	
	Medical Education: proceedings of the Association of American Medical Colleges	
	Annual Conference. 1988;27:201-06.	
48.	Branch BJ. The relationship among critical thinking, clinical decision making, and	Х
	clinical practica: A comparative study [dissertation]. Moscow: University of Idaho;	
	2000.	
49.	Brazeau-Lamontagne L, Charlin B, Gagnon R, Samson L, Van der Vleuten C.	
	Measurement of perception and interpretation skills during radiology training: utility	
	of the script concordance approach. Med Teach. 2004;26(4):326-32.	

50.	Brooks KL, Shepherd JM. The relationship between clinical decision-making skills in nursing and general critical thinking abilities of senior nursing students in four	X
	types of nursing programs. J Nurs Educ. 1990;29(9):391-99.	
51.	Brunt BA. Models, measurement, and strategies in developing critical-thinking	X
	skills. J Contin Educ Nurs. 2005;36(6):255-62.	
52.	Brunt BA. Critical thinking in nursing: an integrated review. J Contin Educ Nurs. 2005;36(2):60-67.	X
53.	Bulfone G, Galletti C, Vellone E, Zanini A, Quattrin R. Problem solving abilities of	x
	nursing students: the experience of the bachelor degree course in nursing at the University of Udine. Prof Inferm. 2008;61(3):139-48.	
54.	Burbach B, Barnason S, Thompson SA. Using "think aloud" to capture clinical	x
•	reasoning during patient simulation. Int J Nurs Educ Scholarsh. 2015;12(1):1-7	
55.	Burchard KW, Rowland-Morin PA, Coe NP, Garb JL. A surgery oral examination:	
	Interrater agreement and the influence of rater characteristics. Acad Med.	
	1995;70(11):1044-46.	
56.	Burdick WP, Ben-David MF, Swisher L, et al. Reliability of performance-based	
	clinical skill assessment of emergency medicine residents. Acad Emerg Med.	
	1996;3(12):1119-23.	
57.	Burke MD, Connelly DP. Systematic instruction in laboratory medicine. Effects on	
	the clinical problem solving performance of medical students. Hum Pathol.	
58.	1981;12(2):134-44. Bussard M. Interpretive description of clinical judgment within reflective journals of	N/
58.	nursing students particiapting in high-fidelity simulation [dissertation]. Phoenix:	х
	University of Phoenix; 2013.	
59.	Byrnes M, West S. Registered nurses' clinical reasoning abilities: a study of self	x
	perception. Aust J Adv Nurs. 2000;17(3):18-23.	
60.	Caire F, Sol JC, Moreau JJ, Isidori P, Charlin B. Self-assessment for neurosurgery	
	residents by script concordance test (SCT). The process of test elaboration.	
	Neurochirurgie. 2004;50(1):66-72.	
61.	Cameron CA, Beemsterboer PL, Johnson LA, Mislevy RJ, Steinberg LS, Breyer FJ.	Х
()	A cognitive task analysis for dental hygiene. J Dent Educ. 2000;64(5):333-51.	
62.	Capaldi V, Durning S, Pangaro L, Ber R. The Clinical Integrative Puzzle (CIP) for	
	teaching and assessing clinical reasoning: Preliminary feasibility, reliability and	
63.	validity evidence. Mil Med. 2015;180(suppl):54-60. Carrier A, Leyasseur M, Bedard D, Desrosiers J. Community occupational	x
05.	therapists' clinical reasoning: identifying tacit knowledge. Aust Occup Ther J.	А
	2010;57(6):356-65.	
64.	Carriere B, Gagnon R, Charlin B, Downing S, Bordage G. Assessing clinical	
	reasoning in pediatric emergency medicine: validity evidence for a Script	
	Concordance Test. Ann Emerg Med. 2009;53(5):647-52.	
65.	Case SM. A new examination for the evaluation of diagnostic problem-solving.	
	Annu Conf Res Med Educ. 1981;20:80-85.	
66.	Case SM, Swanson DB, Ripkey DR. Comparison of items in five-option and	
	extended-matching formats for assessment of diagnostic skills. Acad Med.	
	1994;69(10 Suppl):S1-3.	

67.	Case SM, Swanson DB, Stillman PL. Evaluating diagnostic pattern recognition: the	
	psychometric characteristics of a new item format. Research in Medical Education:	
	proceedings of the Association of American Medical Colleges Annual Conference.	
	1988;27:3-8.	
68.	Casey K, Fink R, Jaynes C, Campbell L, Cook P, Wilson V. Readiness for practice:	х
	the senior practicum experience. J Nurs Educ. 2011;50(11):646-52.	
69.	Catolico O, Navas CM, Sommer CK, Collins MA. Quality of decision making by	х
	registered nurses. J Nurs Staff Dev. 1996;12(3):149-54.	
70.	Cavalcanti RB, Sibbald M. Am I right when I am sure? Data consistency influences	
	the relationship between diagnostic accuracy and certainty. Acad Med.	
	2014;89(1):107-13.	
71.	Chan J, Humphrey-Murto S, Pugh DM, Su C, Wood T. The objective structured	
	clinical examination: can physician-examiners participate from a distance? Med	
	Educ. 2014;48(4):441-50.	
72.	Chapman JA, Westmorland MG, Norman GR, Durrell K, Hall A. The structured	Х
	oral self-directed learning evaluation: one method of evaluating the clinical	
	reasoning skills of occupational therapy and physiotherapy students. Med Teach.	
	1993;15(2-3):223-36.	
73.	Charlin B, Desaulniers M, Gagnon R, Blouin D, Van der Vleuten C. Comparison of	
	an aggregate scoring method with a consensus scoring method in a measure of	
	clinical reasoning capacity. Teach Learn Med. 2002;14(3):150-56.	
74.	Charlin B, Gagnon R, Lubarsky S, et al. Assessment in the context of uncertainty	
	using the script concordance test: more meaning for scores. Teach Learn Med.	
	2010;22(3):180-6.	
75.	Charlin B, Gagnon R, Pelletier J, et al. Assessment of clinical reasoning in the	
	context of uncertainty: the effect of variability within the reference panel. Med	
	Educ. 2006;40(9):848-54.	
76.	Charlin B, Gagnon R, Sauve E, Coletti M. Composition of the panel of reference for	
	concordance tests: do teaching functions have an impact on examinees' ranks and	
	absolute scores? Med Teach. 2007;29(1):49-53.	-
77.	Charlin B, Lubarsky S, Millette B, et al. Clinical reasoning processes: unravelling	
-0	complexity through graphical representation. Med Educ. 2012;46(5):454-63.	
78.	Charlin B, Roy L, Brailovsky C, Goulet F, Van der Vleuten C. The Script	
	Concordance test: a tool to assess the reflective clinician. Teach Learn Med.	
70	2000;12(4):189-95.	
79.	Charlin B, Van der Vleuten C. Standardized assessment of reasoning in contexts of	
00	uncertainty: the script concordance approach. Eval Health Prof. 2004;27(3):304-319.	
80.	Chatterjee S, Ng J, Kwan K, Matsumoto ED. Assessing the surgical decision	
0.1	making abilities of novice and proficient urologists. J Urol. 2009;181(5):2251-56.	
81.	Chen S, Epps J, Chen F. An investigation of pupil-based cognitive load	
	measurement with low cost infrared webcam under light reflex interference.	
	Conference Proceedings: Annual International Conference of the IEEE Engineering	
00	in Medicine & Biology Society. 2013;2013:3202-05.	<u> </u>
82.	Childs RA, Dunn JL, Barneveld CV, Jaciw AP, McIlroy JH. Differential weighting	
	of errors on a test of clinical reasoning skills. Acad Med. 2003;78(10 Suppl):S62-4.	

83.	Cholowski KM, Chan LKS. Cognitive factors in student nurses' clinical problem solving. J Eval Clin Pract. 2004;10(1):85-95.	Х
84.	Christie LA. Expertise in nurses' clinical judgments: the role of cognitive variables and experience [dissertation]. Vancouver: University of British Columbia; 1996.	х
85.	Cigelman MS. An assessment of clinical decision-making skills across a physical therapy curriculum [dissertation]. Des Moines: Drake University; 1996.	X
86.	Cise JS, Wilson CS, Thie MJ. A qualitative tool for critical thinking skill	X
07	development. Nurse Educ. 2004;29(4):147-51.	
87.	Clarke JR. The role of decision skills and medical knowledge in the clinical	
00	judgment of surgical residents. Surgery. 1982;92(2):153-58.	
88.	Clauser BE, Harik P, Margolis MJ. A Multivariate Generalizability Analysis of Data	
	from a Performance Assessment of Physicians' Clinical Skills. J Educ Meas.	
0.0	2006;43(3):173-91.	
89.	Clauser BE, Harik P, Margolis MJ, Mee J, Swygert K, Rebbecchi T. The	
	generalizability of documentation scores from the USMLE Step 2 Clinical Skills	
00	examination. Acad Med. 2008;83(10 Suppl):S41-4.	
90.	Cleary TJ, Callan GL, Zimmerman BJ. Assessing self-regulation as a cyclical,	
	context-specific phenomenon: overview and analysis of SRL microanalysis	
01	protocol. Educ Res Int. 2012; 1-19.	
91.	Cleary TJ, Sandars J. Assessing self-regulatory processes during clinical skill	
02	performance: a pilot study. Med Teach. 2011;33(7):e368-74.	
92.	Cobb KA, Brown G, Hammond R, Mossop LH. Students' perceptions of the Script	
	Concordance Test and its impact on their learning behavior: a mixed methods study. J Vet Med Educ. 2015;42(1):45-52.	
93.	Cobourne MT. What's wrong with the traditional viva as a method of assessment in	Х
	orthodontic education? J Orthod. 2010;37(2):128-33.	
94.	Coderre S, Jenkins D, McLaughlin K. Qualitative differences in knowledge structure	
	are associated with diagnostic performance in medical students. Adv Health Sci	
	Educ. 2009;14(5):677-84.	
95.	Coderre S, Mandin H, Harasym PH, Fick GH. Diagnostic reasoning strategies and	
	diagnostic success. Med Educ. 2003;37(8):695-03.	
96.	Coderre SP, Harasym P, Mandin H, Fick G. The impact of two multiple-choice	
	question formats on the problem-solving strategies used by novices and experts.	
	BMC Med Educ. 2004;4:23:1-9.	
97.	Cohen LJ, Fitzgerald SG, Lane S, Boninger ML, Minkel J, McCue M. Validation of	
	the seating and mobility script concordance test. Assist Technol. 2009;21(1):47-56.	
98.	Collard A, Gelaes S, Vanbelle S, et al. Reasoning versus knowledge retention and	
	ascertainment throughout a problem-based learning curriculum. Med Educ.	
	2009;43(9):854-65.	
99.	Collins A. Effect of continuing nursing education on nurses' attitude toward and	Х
	accuracy of nursing diagnosis. Pediatr Obes. 2013;24(3):122-8.	
100.	Colton T, Peterson OL. An assay of medical students' abilities by oral examination.	
	J Med Educ. 1967;42(11):1005-14.	

101.	Compere V, Moriceau J, Gouin A, et al. Residents in tutored practice exchange groups have better medical reasoning as measured by the script concordance test: A pilot study. Anaesth Crit Care Pain Med. 2015;34(1):17-21.	
102.	Cook DA. Scores from riding's cognitive styles analysis have poor test-retest reliability. Teach Learn Med. 2008;20(3):225-9.	
103.	Cook DA, Brydges R, Zendejas B, Hamstra SJ, Hatala R. Technology-enhanced simulation to assess health professionals: a systematic review of validity evidence, research methods, and reporting quality. Acad Med. 2013;88(6):872-83.	
104.	Cook DA, Triola MM. Virtual patients: a critical literature review and proposed next steps. Med Educ. 2009;43(4):303-11.	
105.	Crites GE, Markert RJ, Goggans DS, Richardson WS. Local development of MCQ tests for evidence-based medicine and clinical decision making can be successful. Teach Learn Med. 2012;24(4):341-7.	
106.	Crossingham G, Gale T, Roberts M, Carr A, Langton J, Anderson I. Content validity of a clinical problem solving test for use in recruitment to the acute specialties. Clin Med (Northfield II). 2011;11(1):22-5.	
107.	Crowley RS, Naus GJ, Friedman CP. Development of visual diagnostic expertise in pathology. Proceedings of the AMIA Annual Symposium. 2001:125.	
108.	Crowley RS, Naus GJ, Stewart J, Friedman CP. Development of visual diagnostic expertise in pathology an information-processing study. J Am Med Inform Assoc. 2003;10(1):39-51.	
109.	Cunnington JP, Hanna E, Turnhbull J, Kaigas TB, Norman GR. Defensible assessment of the competency of the practicing physician. Acad Med. 1997;72(1):9-12.	
110.	Daley BJ, Torre DM. Concept maps in medical education: an analytical literature review. Medical education. 2010 May 1;44(5):440-8.	
111.	Davis LE, King MK, Skipper BJ. Education research: Assessment of neurology resident clinical competencies in the neurology clinic. Neurology. 2009;72(1):e1-3.	
112.	Dawson T, Comer L, Kossick MA, Neubrander J. Can script concordance testing be used in nursing education to accurately assess clinical reasoning skills? J Nurs Educ. 2014;53(5):281-86.	x
113.	Dawson-Saunders B, Mast TA, Finch WT, Konrad HR, Folse JR. Content knowledge and problem-solving skill in reviewing medical charts. Med Educ. 1984;18(1):31-35.	
114.	Day S, Norcini J, Diserens D, et al. The validity of an essay test of clinical judgment. Acad Med. 1990;65(9):S39-40.	
115.	De Graaff E. A test of medical problem-solving scored by nurses and doctors: the handicap of expertise. Med Educ. 1989;23(4):381-6.	
116.		
117.		

118.	Delzell JE, Chumley H, Webb R, Chakrabarti S, Relan A. Information-Gathering Patterns Associated with Higher Rates of Diagnostic Error. Adv Health Sci Educ. 2009;14(5):697-711.	
119.	Deschenes MF, Charlin B, Gagnon R, Goudreau J. Use of a script concordance test to assess development of clinical reasoning in nursing students. J Nurs Educ. 2011;50(7):381-7.	X
120.	Desjardins I, Touchie C, Pugh D, Wood TJ, Humphrey-Murto S. The impact of cueing on written examinations of clinical decision making: a case study. Med Educ. 2014;48(3):255-61.	
121.	Dijksterhuis MG, Scheele F, Schuwirth LW, Essed GG, Nijhuis JG, Braat DD. Progress testing in postgraduate medical education. Med Teach. 2009;31(10):e464- 8.	
122.	Dillard N, Sideras S, Ryan M, Carlton KH, Lasater K, Siktberg L. A collaborative project to apply and evaluate the clinical judgment model through simulation. Nurs Educ Perspect. 2009;30(2):99-104.	X
123.	Dincher JR, Stidger SL. Evaluation of a written simulation format for clinical nursing judgment: a pilot study. Nurs Res. 1976;25(4):280-4.	X
124.	Diserens D, Schwartz MW, Guenin M, Taylor LA. Measuring the problem-solving ability of students and residents by microcomputer. J Med Educ. 1986;61(6):461-66.	
125.	Donnelly MB, Sisson JC, Woolliscroft JO. The reliability of a hypothesis generation and testing task. Med Educ. 1990;24(6):507-11.	
126.	Dory V, Charlin B, Vanpee D, Gagnon R. Multifaceted assessment in a family medicine clerkship: a pilot study. Fam Med. 2014;46(10):755-60.	
127.	Dory V, Gagnon R, Vanpee D, Charlin B. How to construct and implement script concordance tests: insights from a systematic review. Med Educ. 2012;46(6):552-63.	
128.	Downs SM, Friedman CP, Marasigan F, Gartner G. A decision analytic method for scoring performance on computer-based patient simulations. Proceedings from the AMIA Annual Fall Symposium. 1997:667.	
129.	Driessen EW, Overeem K, Tartwijk Jv, Van der Vleuten C, Muijtjens AM. Validity of portfolio assessment: which qualities determine ratings? Med Educ. 2006;40(9):862-66.	
130.	Ducos G, Lejus C, Sztark F, et al. The script concordance test in anesthesiology: validation of a new tool for assessing clinical reasoning. Anaesth Crit Care Pain Med. 2015;34(1):11-5.	
131.	Dufour S, Latour S, Chicoine Y, et al. Use of the script concordance approach to evaluate clinical reasoning in food-ruminant practitioners. J Vet Med Educ. 2012;39(3):267-75.	х
132.	Duggan P, Charlin B. Summative assessment of 5th year medical students' clinical reasoning by Script Concordance Test: requirements and challenges. BMC Med Educ. 2012;12(29):1-8.	
133.	Dunn MM, Woolliscroft JO. Assessment of a surgical pattern recognition examination. Am J Surg. 1995;169(3):341-3.	

134.	Dunphy BC, Cantwell R, Bourke S, et al. Cognitive elements in clinical decision-	
	making: toward a cognitive model for medical education and understanding clinical	
	reasoning. Adv Health Sci Educ. 2010;15(2):229-50.	
135.		Х
	on knowledge and skill in nursing students' learning of preoperative and	
	postoperative care management: a randomized controlled study. CIN-Comput	
	Inform Nu. 2012;30(4):196-203.	
136.	Durning SJ, Artino A, Boulet J, et al. The feasibility, reliability, and validity of a	
	post-encounter form for evaluating clinical reasoning. Med Teach. 2012;34(1):30-	
	37.	
137.	Durning SJ, Artino AR, Boulet JR, Dorrance K, Van der Vleuten C, Schuwirth L.	
	The impact of selected contextual factors on experts' clinical reasoning performance	
	(does context impact clinical reasoning performance in experts?). Adv Health Sci	
100	Educ. 2012;17(1):65-79.	
138.		
	imaging to improve how we understand, teach, and assess clinical reasoning. J	
120	Contin Educ Health Prof. 2014;34(1):76-82.	
139.	Durning SJ, Costanzo ME, Artino AR, et al. Neural basis of nonanalytical reasoning	
1.40	expertise during clinical evaluation. Brain Behav. 2015;5(3):e309-19.	
140.	Durning SJ, Ratcliffe T, Artino AR, et al. How is clinical reasoning developed,	
	maintained, and objectively assessed? Views from expert internists and internal	
1.4.1	medicine interns. J Contin Educ Health Prof. 2013;33(4):215-23.	
141.	Dyer JO, Hudon A, Montpetit-Tourangeau K, Charlin B, Mamede S, van Gog T. Example-based learning: comparing the effects of additionally providing three	Х
	different integrative learning activities on physiotherapy intervention knowledge.	
142.	BMC Med Educ. 2015;15(37):1-16. Edelen BG. Measuring and enhancing clinical decision-making ability among	v
142.	students in an Associate Degree Nursing program [dissertation]. Storrs: University	Х
	of Connecticut; 2009.	
1.40		
144		
143.	El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess	
	El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52.	
143. 144.	El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess	
	El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4.	
144.	El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ.	
144.	El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the	
144.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 	
144. 145.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 2013;16(4):231-9. 	
144. 145.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 2013;16(4):231-9. Eta SB. A New Approach to Evaluating Problem-Solving in Medical Students. J 	
144. 145. 146.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 2013;16(4):231-9. Eta SB. A New Approach to Evaluating Problem-Solving in Medical Students. J Med Educ. 1974;49(7):666-72. 	
144. 145. 146.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 2013;16(4):231-9. Eta SB. A New Approach to Evaluating Problem-Solving in Medical Students. J Med Educ. 1974;49(7):666-72. Eva K, Wood T, Riddle J, Touchie C, Bordage G. How clinical features are 	
144. 145. 146. 147.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 2013;16(4):231-9. Eta SB. A New Approach to Evaluating Problem-Solving in Medical Students. J Med Educ. 1974;49(7):666-72. Eva K, Wood T, Riddle J, Touchie C, Bordage G. How clinical features are presented matters to weaker diagnosticians. Med Educ. 2010;44(8):775-85. 	
144. 145. 146. 147.	 El Shallaly G, Mekki AM. Use of computer-based clinical examination to assess medical students in surgery. Educ Health. 2012;25(3):148-52. Elks ML, Sawyer JW. A format for scripted clinical oral examinations. Med Educ. 1993;27(2):160-4. Esteves JE, Bennison M, Thomson OP. Script concordance test: Insights from the literature and early stages of its implementation in osteopathy. Int J Osteopath Med. 2013;16(4):231-9. Eta SB. A New Approach to Evaluating Problem-Solving in Medical Students. J Med Educ. 1974;49(7):666-72. Eva K, Wood T, Riddle J, Touchie C, Bordage G. How clinical features are presented matters to weaker diagnosticians. Med Educ. 2010;44(8):775-85. Evans LR, Evans LR, Ingersoll RW, Smith EJ. The reliability, validity, and 	

150.	Feldman MJ, Barnett GO, Link DA, Coleman MA, Lowe JA, Rourke EJO.	
	Evaluation of the Clinical Assessment project: a computer-based multimedia tool to	
	assess problem-solving ability in medical students. Pediatrics. 2006;118(4):1380-7.	
151.	Feletti GI. Reliability and validity studies on modified essay questions. J Med Educ.	
	1980;55(11):933-41.	
152.	Fenske CL, Harris MA, Aebersold ML, Hartman LS. Perception versus reality: a	х
	comparative study of the clinical judgment skills of nurses during a simulated	
	activity. J Contin Educ Nurs. 2013;44(9):399-405.	
153.	Ferguson KJ. Beyond multiple-choice questions: Using case-based learning patient	
	questions to assess clinical reasoning. Med Educ. 2006;40(11):1143.	
154.	Fero LJ, Donnell JMO, Zullo TG, et al. Critical thinking skills in nursing students:	Х
	comparison of simulation-based performance with metrics. J Adv Nurs.	
	2010;66(10):2182-93.	
155.	Fischer MR, Kopp V, Holzer M, Ruderich F, Junger J. A modified electronic key	
	feature examination for undergraduate medical students: validation threats and	
1.5.6	opportunities. Med Teach. 2005;27(5):450-5.	
156.	Fletcher G, Flin R, McGeorge P, Glavin R, Maran N, Patey R. Anaesthetists' Non-	
	Technical Skills (ANTS): evaluation of a behavioural marker system. Br J Anaesth.	
1.57	2003;90(5):580-88.	
157.	Flinn F, Armstrong C. Junior doctors' extended work hours and the effects on their	
1.50	performance: the Irish case. Int J Qual Health Care. 2011;23(2):210-7.	
158.	Forsberg E, Georg C, Ziegert K, Fors U. Virtual patients for assessment of clinical	Х
150	reasoning in nursing a pilot study. Nurse Educ Today. 2011;31(8):757-62.	
159.	Foster JT, Foster JT, Abrahamson S, Lass S, Girard R. Analysis of an oral	
160	examination used in specialty board certification. Acad Med. 1969;44(10):951-4.	
160.	Franzese C. When to cut? Using an objective structured clinical examination to evaluate surgical decision-making. Laryngoscope. 2007;117(11):1938-42.	
161.	Freiwald T, Salimi M, Khaljani E, Harendza S. Pattern recognition as a concept for	
101.	multiple-choice questions in a national licensing exam. BMC Med Educ.	
	2014;14(232):1-6.	
162.	Friedman M, Prywes M, Benbassat J. Variability in doctors' problem-solving as	
102.	measured by open-ended written patient simulations. Med Educ. 1989;23(3):270-5.	
163.	Gagnon R, Charlin B, Coletti M, Sauve E, Van der Vleuten C. Assessment in the	
105.	context of uncertainty: how many members are needed on the panel of reference of a	
	script concordance test? Med Educ. 2005;39(3):284-91.	
164.	Gagnon R, Charlin B, Lambert C, Carriere B, Van der Vleuten C. Script	
10.11	concordance testing: more cases or more questions? Adv Health Sci Educ.	
	2009;14(3):367-75.	
165.	Gagnon R, Charlin B, Roy L, et al. The cognitive validity of the Script Concordance	
	Test: a processing time study. Teach Learn Med. 2006;18(1):22-7.	
166.	Gagnon R, Lubarsky S, Lambert C, Charlin B. Optimization of answer keys for	
	script concordance testing: should we exclude deviant panelists, deviant responses,	
	or neither? Adv Health Sci Educ. 2011;16(5):601-8.	
167.	Garrett J, Alman M, Gardner S, Born C. Assessing students' metacognitive skills.	Х
	Am J Pharm Educ. 2007;71(1):14.	

168.	Gates GE, Kris-Etherton PM, Greene G. Nutrition care planning: comparison of the skills of dietitians, interns, and students. J Am Diet Assoc. 1990;90(10):1393-7.	Х
169.	Gegenfurtner A, Siewiorek A, Lehtinen E, Säljö R. Assessing the Quality of Expertise Differences in the Comprehension of Medical Visualizations. Vocat Learn. 2013;6(1):37-54.	
170.	Gehlhar K, Klimke-Jung K, Stosch C, Fischer MR. Do different medical curricula influence self-assessed clinical thinking of students? GMS Z Med Ausbild. 2014;31(2):1-20.	
171.	Gerdeman JL, Lux K, Jacko J. Using concept mapping to build clinical judgment skills. Nurse Educ Pract. 2013;13(1):11-7.	Х
172.	Giannini G, Engel JD. On the Meaning of Scores Derived from Patient Management Problems. Eval Health Prof. 1986;9(1):103-20.	
173.	Giddens J, Gloeckner GW. The relationship of critical thinking to performance on the NCLEX-RN. J Nurs Educ. 2005;44(2):85-9.	х
174.	Gilboy N, Kane D. Unfolding case based scenarios: a method of teaching and testing the critical thinking skills of newly licensed nurses. J Emerg Nurs. 2004;30(1):83-5.	X
175.	Gillespie M. Using the Situated Clinical Decision-Making framework to guide analysis of nurses' clinical decision-making. Nurse Educ Pract. 2010;10(6):333-40.	Х
176.	Glavin-Spiehs C. The differences between field dependence/independence and two measurements of clinical judgment ability in senior baccalaureate nursing students [thesis]. Chester: Widener University; 1991.	X
177.	Goetz AA, Peters MJ, Folse R, Beck AD, Finch WT, Wavak P. Chart review skills: a dimension of clinical competence. J Med Educ. 1979;54(10):788-96.	
178.	Gonzalez HL, Palencia AP, Umana LA, Galindo L, Villafrade MLA. Mediated learning experience and concept maps: a pedagogical tool for achieving meaningful learning in medical physiology students. Adv Physiol Educ. 2008;32(4):312-6.	X
179.	Goodstone L, Goodstone MS, Cino K, Glaser CA, Kupferman K, Dember-Neal T. Effect of simulation on the development of critical thinking in associate degree nursing students. Nurs Educ Perspect. 2013;34(3):159-62.	Х
180.	Gorton K. An investigation into the relationship between critical thinking skills and clinical judgment in the nurse practitioner student [dissertation]. Greeley: University of Northern Colorado; 2010.	X
181.	Goulet F, Jacques A, Gagnon R, Charlin B, Shabah A. Poorly performing physicians: does the Script Concordance Test detect bad clinical reasoning? J Contin Educ Health Prof. 2010;30(3):161-66.	
182.	Goulet F, Jacques A, Gagnon R, Racette P, Sieber W. Assessment of family physicians'performance using patient charts: interrater reliability and concordancewi th chart-stimulated recall interview. Eval Health Prof. 2007;30(4):376-92.	
183.	Graafland M, Vollebergh MF, Lagarde SM, van Haperen M, Bemelman WA, Schijven MP. A serious game can be a valid method to train clinical decision-making in surgery. World J Surg. 2014;38(12):3056-62.	
184.	Graham ME. The relationship between critical thinking and how time is structured in the clinical setting for students in a baccalaureate nursing program. ABNF J. 1995;6(6):149-57.	х

185.		
	analytical thinking skills over time as measured with the MATCH test. Med Educ. 2008;42(10):1037-43.	
186.	Groves M, Dick ML, McColl G, Bilszta J. Analysing clinical reasoning	
	characteristics using a combined methods approach. BMC Med Educ.	
	2013;13(144):1-7.	
187.		
	characteristics and the development of clinical reasoning in a graduate-entry, PBL	
100	medical programme. Med Teach. 2003;25(6):626-31.	
188.	Groves M, Scott I, Alexander H. Assessing clinical reasoning: a method to monitor its development in a PBL curriculum. Med Teach. 2002;24(5):507-15.	
189.	Gruppen LD, Grum CM, Fincher RM, et al. Multi-site reliability and validity of a	
	diagnostic pattern-recognition knowledge-assessment instrument. Acad Med.	
	1996;71(10 Suppl):S65-7.	
190.	Guhde J. Clinical decision-making: using online exercises and patient simulation to	Х
101	improve students' clinical decision-making. Nurs Educ Perspect. 2010;31(6):387-9.	
191.	Gunning WT, Fors UG. Virtual patients for assessment of medical student ability to integrate clinical and laboratory data to develop differential diagnoses: comparison	
	of results of exams with/without time constraints. Med Teach. 2012;34(4):e222-8.	
192.	Gupta M, Schriger DL, Tabas JA. The presence of outcome bias in emergency	-
	physician retrospective judgments of the quality of care. Ann Emerg Med.	
	2011;57(4):323-8.	
193.	Haak SW. Development of a computer tool including interactive video simulation	Х
	for eliciting and describing clinical nursing judgment performance [dissertation].	
	Salt Lake City: University of Utah; 1993.	
194.	Harasym P, Baumber J, Bryant H, et al. An evaluation of the clinical problem- solving process using a simulation technique. Med Educ. 1980;14(6):381-86.	
195.	Harper AC, Roy WB, Norman GR, Rand CA, Feightner JW. Difficulties in clinical	
175.	skills evaluation. Med Educ. 1983;17(1):24-7.	
196.	Hartley RC. Development of a cognitive self-report using the ACT* theory of	Х
	cognitive skill acquisition [dissertation]. Lincoln: University of Nebraska; 1992.	
197.	Hasegawa T, Ogasawara C, Katz EC. Measuring diagnostic competency and the	Х
	analysis of factors influencing competency using written case studies. Int J Nurs	
100	Terminol Classif. 2007;18(3):93-102.	-
198.	Hasnain M, Onishi H, Elstein AS. Inter-rater agreement in judging errors in diagnostic reasoning. Med Educ. 2004;38(6):609-16.	
199.		
1777.	clerkship. Med Educ. 2002;36(2):160-65.	
200.	Heemskerk L, Norman G, Chou S, Mintz M, Mandin H, McLaughlin K. The effect	
	of question format and task difficulty on reasoning strategies and diagnostic	
	performance in Internal Medicine residents. Adv Health Sci Educ. 2008;13(4):453-	
.	62.	
201.		Х
	clinical simulations and two written methods of evaluation: cognitive examination	
	and self-evaluation of expertise. Comput Nurs. 1993;11(1):29-34.	

12

202.	Hess BJ, Lipner RS, Thompson V, Holmboe ES, Graber ML. Blink or think: can further reflection improve initial diagnostic impressions? Acad Med. 2015;90(1):112-8.	
203.	Heun L, Brandau DT, Chi X, Wang P, Kangas J. Validation of computer-mediated open-ended standardized patient assessments. Int J Med Inform. 1998;50(1-3):235-41.	
204.	Hicks FD. Critical thinking abilities and clinical decision-making consistency among critical care nurses [dissertation]. Chicago: University of Illinois; 1997.	X
205.	Hinchy J, Farmer EA. Assessing general practice clinical decision making skills: the key features approach. Aust Fam Physician. 2005;34(12):1059-61.	
206.	Hodges B, Regehr G, McNaughton N, Tiberius R, Hanson M. OSCE checklists do not capture increasing levels of expertise. Acad Med. 1999;74(10):1129-34.	
207.	Hofer SH, Schuebel F, Sader R, Landes C. Development and implementation of an objective structured clinical examination (OSCE) in CMF-surgery for dental students. J Craniomaxillofac Surg. 2013;41(5):412-6.	x
208.	Hogan MJ, Sirotkin RA, Gallagher RE. Clinical problem solving: the relationship of cognitive abilities to PMP performance. Annu Conf Res Med Educ. 1977;16:323-28.	
209.	Hoijtink H, Beland S, Vermeulen JA. Cognitive diagnostic assessment via Bayesian evaluation of informative diagnostic hypotheses. Psychol Methods. 2014;19(1):21-38.	
210.	Hornos EH, Pleguezuelos EM, Brailovsky CA, Harillo LD, Dory V, Charlin B. The practicum script concordance test: an online continuing professional development format to foster reflection on clinical practice. J Contin Educ Health Prof. 2013;33(1):59-66.	
211.	Howard BJ. Computer-based versus high-fidelity mannequin simulation in developing clinical judgment in nursing education [dissertation]. Minneapolis: Capella University; 2013.	х
212.	Hrynchak P, Takahashi SG, Nayer M. Key-feature questions for assessment of clinical reasoning: a literature review. Med Educ. 2014;48(9):870-83.	
213.	Hughes KK. Decision-making in clinical nursing practice: consistency with decision analytic outcomes [dissertation]. Chicago: University of Illinois; 1988.	X
214.	Hughes KK, Young WB. The relationship between task complexity and decision- making consistency. Res Nurs Health. 1990;13(3):189-97.	х
215.	Huhn K, Black L, Jensen GM, Deutsch JE. Construct validity of the Health Science Reasoning Test. J Allied Health. 2011;40(4):181-6.	х
216.	Hull AL, Hodder S, Berger B, et al. Validity of three clinical performance assessments of internal medicine clerks. Acad Med. 1995;70(6):517-22.	
217.	Humbert AJ, Besinger B, Miech EJ. Assessing clinical reasoning skills in scenarios of uncertainty: convergent validity for a Script Concordance Test in an emergency medicine clerkship and residency. Acad Emerg Med. 2011;18(6):627-34.	
218.	Humbert AJ, Johnson MT, Miech E, Friedberg F, Grackin JA, Seidman PA. Assessment of clinical reasoning: A Script Concordance test designed for pre- clinical medical students. Med Teach. 2011;33(6):472-7.	

219.		
	students: longitudinal results from a school-wide script concordance test. Acad Med.	
220	2014;89(7):1046-50.	
220.		
	do key features problems measure higher level cognitive processes? Eval Health Prof. 2012;35(4):396-415.	
221.	Ilgen JS, Bowen JL, McIntyre LA, et al. Comparing diagnostic performance and	
221.	the utility of clinical vignette-based assessment under testing conditions designed	
	to encourage either automatic or analytic thought. Acad Med. 2013;88(10):1545-	
	51.	
222.	Ilgen JS, Bowen JL, Yarris LM, Fu R, Lowe RA, Eva K. Adjusting our lens: can	
	developmental differences in diagnostic reasoning be harnessed to improve health	
	professional and trainee assessment? Acad Emerg Med. 2011;18(Suppl 2):S79-86.	
223.	Ilgen JS, Humbert AJ, Kuhn G, et al. Assessing diagnostic reasoning: a consensus	
	statement summarizing theory, practice, and future needs. Acad Emerg Med.	
	2012;19(12):1454-61.	
224.	Ilgen JS, Sherbino J, Cook DA. Technology-enhanced simulation in emergency	
	medicine: a systematic review and meta-analysis. Acad Emerg Med.	
225	2013;20(2):117-27.	
225.	Inda KC. Relationship between clinical reasoning skills and certification exam	Х
	performance in occupational therapy candidates [dissertation]. Ft. Lauderdale: Nova	
226.	Southeastern University; 2007. Ingalls JR. ADN students' and their clinical nursing educators' correlates of	x
220.	perceived clinical decision-making [dissertation]. Fairfax: George Mason	Λ
	University; 1996.	
227.		X
	nurses and student nurses. J Nurs Educ. 1989;28(3):120-6.	
228.	Janing J. Assessment of a scenario-based approach to facilitating critical thinking	х
	among paramedic students. Prehosp Disaster Med. 1997;12(3):42-8.	
229.	Jefferies-Sewell K, Sharma S, Gale TM, Hawley CJ, Georgiou GJ, Laws KR. To	
	admit or not to admit? The effect of framing on risk assessment decision making in	
220	psychiatrists. J Ment Health. 2015;24(1):20-23.	
230.	Jenkins H. Measuring Clinical Decision Making in Nursing. Measuring Nursing	Х
221	Performance Practice, Education and Research. 1988:191-200.	
231.	Jensen R. Clinical reasoning during simulation: comparison of student and faculty ratings. Nurse Educ Pract. 2013;13(1):23-8.	х
232.	Jerant AF, Azari R. Validity of scores generated by a web-based multimedia	
252.	simulated patient case software: a pilot study. Acad Med. 2004;79(8):805-11.	
233.	Johannsson SL, Wertenberger DH. Using simulation to test critical thinking skills of	x
	nursing students. Nurse Educ Today. 1996;16(5):323-7.	
234.	Johnson EA, Lasater K, Hodson-Carlton K, Siktberg L, Sideras S, Dillard N.	х
	Geriatrics in simulation: role modeling and clinical judgment effect. Nurs Educ	
	Perspect. 2012;33(3):176-80.	
235.	Johnson LA. Quantifying the measurement of differential diagnosis. Medinfo.	х
	1995;8(Pt 2):1294-7.	

236.	Jones WS, Kaleida PH, Lopreiato JO. Assessment of pediatric residents' otoscopic interpretive skills by videotaped examinations. Ambul Pediatr. 2004;4(2):162-5.	
237.		
237.	Educ. 1975;9(4):275-80.	
238.	Juul DH, Noe MJ, Nerenberg RL. A factor analytic study of branching patient	
	management problems. Med Educ. 1979;13(3):199-203.	
239.	Kahn MG, Fagan LM, Tu S. Extensions to the time-oriented database model to	
	support temporal reasoning in medical expert systems. Methods Inf Med.	
	1991;30(1):4-14.	
240.	Kameoka J, Okubo T, Koguma E, Takahashi F, Ishii S, Kanatsuka H. Development	
	of a peer review system using patient records for outcome evaluation of medical	
	education: reliability analysis. Tohoku J Exp Med. 2014;233(3):189-95.	
241.	Kania RE, Verillaud B, Tran H, et al. Online script concordance test for clinical	
	reasoning assessment in otorhinolaryngology: the association between performance	
	and clinical experience. Arch Otolaryngol. 2011;137(8):751-5.	
242.	Kanter SL, Brosenitsch TA, Mahoney JF, Staszewski J. Defining the correctness of a	
	diagnosis: differential judgments and expert knowledge. Adv Health Sci Educ.	
	2010;15(1):65-79.	
243.	Kaplan KM, Masters PA, Leong SL, et al. Evaluating students on an	
	interdisciplinary primary care clerkship at the Pennsylvania State University College	
	of Medicine. Acad Med. 1999;74(1 Suppl):S67-9.	
244.	Kantar L. Clinical judgment among new nursing graduates: A multiple-case study	Х
	[dissertation]. Phoenix: University of Phoenix; 2010.	
245.	Katz JD, Mamyrova G, Guzhva O, Furmark L. Random forests classification	
	analysis for the assessment of diagnostic skill. Am J Med Qual. 2010;25(2):149-53.	
246.	Kautz D, Kuiper R, Bartlett R, Buck R, Williams R, Knight-Brown P. Building	Х
	evidence for the development of clinical reasoning using a rating tool with the	
	Outcome-Present State-Test (OPT) Model. South Online J Nurs Res. 2009;9(1):1-8.	
247.	Kautz D, Kuiper R, Pesut D, Knight-Brown P, Daneker D. Promoting clinical	Х
	reasoning in undergraduate nursing students: application and evaluation of the	
	Outcome Present State Test (OPT) model of clinical reasoning. Int J Nurs Educ	
	Scholarsh. 2005;2:Arte.	
248.	Kautz DD, Kuiper R, Pesut DJ, Williams RL. Using NANDA, NIC, and NOC	Х
	(NNN) language for clinical reasoning with the Outcome-Present State-Test (OPT)	
	model. Int J Nurs Terminol Classif. 2006;17(3):1-19.	
249.	Kavanagh K. A study of clinical decision-making by expert physical therapists	Х
	[dissertation]. Milwaukee: Urban Education University of Wisconsin; 1996.	
250.	Keller R. Effects of an instructional program on critical thinking and clinical	Х
	decision-making skills of associate degree nursing students [dissertation]. Tampa:	
	University of South Florida; 1993.	
251.	Kelley PR, Kelley PR, Matthews JH, Schumacher CF. Analysis of the oral	
	examination of the American board of anesthesiology. Acad Med. 1971;46(11):982-	
	8.	

252.	Kelly W, Durning S, Denton G. Comparing a script concordance examination to a multiple-choice examination on a core internal medicine clerkship. Teach Learn Med. 2012;24(3):187-93.	
253.		x
254.	Kiesewetter J, Ebersbach R, Gorlitz A, Holzer M, Fischer MR, Schmidmaier R. Cognitive problem solving patterns of medical students correlate with success in diagnostic case solutions. PloS one [Electronic Resource]. 2013;8(8):e71486.	
255.		x
256.	King M, Shell R. Teaching and evaluating critical thinking with concept maps. Nurse Educ. 2002;27(5):214-6.	x
257.	King PL. A consideration of diagnostic reasoning skills in nurse practitioners- measures and influences [dissertation]. Louisville: University of Louisville; 2006.	x
258.	Kishore TA, Pedro RN, Monga M, Sweet RM. Assessment of validity of an OSATS for cystoscopic and ureteroscopic cognitive and psychomotor skills. J Endourol. 2008;22(12):2707-12.	
259.	Klemenc-Ketis Z, Kersnik J. New virtual case-based assessment method for decision making in undergraduate students: a scale development and validation. BMC Med Educ. 2013;13(160):1-6.	
260.	Kogan JR, Hess BJ, Conforti LN, Holmboe ES. What drives faculty ratings of residents' clinical skills? The impact of faculty's own clinical skills. Acad Med. 2010;85(10 Suppl):S25-8.	
261.	Kogan J, Holmboe E, Hauer K. Tools for direct observation and assessment of clinical skills of medical trainees: a systematic review. JAMA. 2009;302:1316-26.	
262.	Koole S, Dornan T, Aper L, et al. Does reflection have an effect upon case-solving abilities of undergraduate medical students? BMC Med Educ. 2012;12(75):1-5.	
263.	Kow N, Walters MD, Karram MM, Sarsotti CJ, Jelovsek JE. Assessing intraoperative judgment using script concordance testing through the gynecology continuum of practice. Med Teach. 2014;36(8):724-29.	
264.	Kreiter CD, Bergus G. The validity of performance-based measures of clinical reasoning and alternative approaches. Med Educ. 2009;43(4):320-5.	
265.	Kreiter CD, Haugen T, Leaven T, et al. A report on the piloting of a novel computer-based medical case simulation for teaching and formative assessment of diagnostic laboratory testing. Med Educ Online. 2011;16(1):1-7.	
266.	Kunina-Habenicht O, Hautz WE, Knigge M, Spies C, Ahlers O. Assessing clinical reasoning (ASCLIRE): Instrument development and validation. Adv Health Sci Educ. 2015;20(5):1205-24.	
267.	Lafave M, Katz L, Butterwick D. Development of a content-valid standardized orthopedic assessment tool (SOAT). Adv Health Sci Educ. 2008;13(4):397-406.	
268.	Lafleur A, Cote L, Leppink J. Influences of OSCE design on students' diagnostic reasoning. Med Educ. 2015;49(2):203-14.	

269.		
	radiation oncology: validation study of a new tool to assess clinical reasoning.	
270.	Radiat Oncol. 2009;4(7):1-6. Lane JL, Ziv A, Boulet JR. A pediatric clinical skills assessment using children as	
270.	standardized patients. Arch Pediatr Adolesc Med. 1999;153(6):637-44.	
271.	Langdon LO, Lipner RS, Norcini JJ. Sequence-of-ordering-questions: an objective	
	question format designed to test aspects of clinical judgment. Research in Medical Education: proceedings of the Association of American Medical Colleges Annual Conference. 1983;22:47.	
272.	LaRochelle J, Durning SJ, Boulet JR, Vleuten Cvd, Merrienboer Jv, Donkers J.	
	Beyond standard checklist assessment: Question sequence may impact student performance. Perspect Med Educ. 2016;5(2):95-102.	
273.	Lasater K. Clinical judgment: the last frontier for evaluation. Nurse Educ Pract. 2011;11(2):86-92.	х
274.	Lasater K, Tanner C. Clinical judgment development: using simulation to develop an assessment tool. Commun Nurs Res. 2005;38:198.	х
275.	Lauri S, Salantera S. Developing an instrument to measure and describe clinical	х
	decision making in different nursing fields. J Prof Nurs. 2002;18(2):93-100.	
276.		
	uncertain situations. Rev Stomatol Chir Maxillofac. 2006;107(5):327-9.	
277.		Х
	critical thinking in nontraditional students in nursing [dissertation]. Boston: Boston College; 1994.	
278.	Lewin LO, Beraho L, Dolan S, Millstein L, Bowman D. Interrater reliability of an	
	oral case presentation rating tool in a pediatric clerkship. Teach Learn Med. 2013;25(1):31-8.	
279.	Lim EC, Seet RC, Oh VM, et al. Computer-based testing of the modified essay	
	question: the Singapore experience. Med Teach. 2007;29(9):e261-8.	
280.	Lineberry M, Kreiter CD, Bordage G. Threats to validity in the use and interpretation of script concordance test scores. Med Educ. 2013;47(12):1175-83.	
281.	Lipner RS, Messenger JC, Kangilaski R, et al. A technical and cognitive skills	
	evaluation of performance in interventional cardiology procedures using medical	
	simulation. Simul Healthc. 2010;5(2):65-74.	
282.	Liu KM, Tsai TC, Tsai SL. Clinical skills examination as part of the Taiwan	
	National Medical Licensing Examination. Med Teach. 2013;35(2):173.	
283.	Long MC, Redding BA. Evaluating clinical skills of RN students. Nurse Educ.	Х
204	1991;16(3):31-3.	
284.	Loomis J. Evaluating clinical competence of physical therapy students. Part 2:	Х
	assessing the reliability, validity and usability of a new instrument. Physiother Can. 1985;37(2):91-8.	
285.	Lubarsky S, Chalk C, Kazitani D, Gagnon R, Charlin B. The Script Concordance	
	Test: a new tool assessing clinical judgement in neurology. Can J Neurol Sci.	
286.	2009;36(3):326-31. Lubarsky S, Charlin B, Cook DA, Chalk C, Van der Vleuten CP. Script concordance	
200.	testing: a review of published validity evidence. Med Educ. 2011;45(4):329-38.	

0.07		
287.		
200	from theory to practice: AMEE guide no. 75. Med Teach. 2013;35(3):184-93.	
288.	Lukas RV, Blood A, Park YS, Brorson JR. Assessment of neurological clinical management reasoning in medical students. J Clin Neurosci. 2014;21(6):919-22.	
280		
289.	MacRae HM, Cohen R, Regehr G, Reznick R, Burnstein M. A new assessment tool: the patient assessment and management examination. Surgery. 1997;122(2):335-44.	
290.	Maebius NK. Relationships among critical thinking ability, locus-of-control, and	N/
290.	clinical problem-solving performance of registered nurses [dissertation]. Austin:	Х
	University of Texas at Austin; 1990.	
291.	Manogue M, Brown G. Developing and implementing an OSCE in dentistry. Eur J	X
271.	Dent Educ. 1998;2(2):51-7.	Λ
292.	Margolis MJ, Clauser BE, Cuddy MM, et al. Use of the mini-clinical evaluation	
222.	exercise to rate examinee performance on a multiple-station clinical skills	
	examination: a validity study. Acad Med. 2006;81(10 Suppl):S56-60.	
293.	Marie I, Sibert L, Roussel F, Hellot MF, Lechevallier J, Weber J. The script	
	concordance test: a new evaluation method of both clinical reasoning and skills in	
	internal medicine. Rev Med Interne. 2005;26(6):501-7.	
294.	Marsden P. The diagnostic thinking inventory. Br J Hosp Med. 1992;47(5):389.	
295.	Marshall J. Assessment of problem-solving ability. Med Educ. 1977;11(5):329-34.	
296.	Marshall JR, Fleming P, Heffernan M, Kasch S. Pilot study on use of PMPs. Med	
	Educ. 1982;16(6):365-6.	
297.	Mary GMT. The Effect of an Educational Model, Developing Nurses' Thinking	X
	(DNT), on Nursing Students' Accurate Diagnoses of Patients' Responses to Health	
	Problems [dissertation]. New York City: City University of New York; 2011.	
298.	Mathieu S, Couderc M, Glace B, et al. Construction and utilization of a script	
	concordance test as an assessment tool for DCEM3 (5th year) medical students in	
	rheumatology. BMC Med Educ. 2013;13(166):1-7.	
299.	Matsell DG, Wolfish NM, Hsu E. Reliability and validity of the objective structured	
	clinical examination in paediatrics. Med Educ. 1991;25(4):293-9.	
300.	Mavis BE, Wagner DP, Henry RC, et al. Documenting clinical performance	
	problems among medical students: feedback for learner remediation and curriculum	
0.01	enhancement. Med Educ Online. 2013;18(1):1-11.	
301.	McBride ME, Waldrop WB, Fehr JJ, Boulet JR, Murray DJ. Simulation in	
	pediatrics: the reliability and validity of a multiscenario assessment. Pediatrics.	
202	2011;128(2):e1-9.	$\left - \right $
302.	Mccain GA, Molineux JE, Pederson L, Stuart RK. Consultation letters as a method	
	for assessing in-training performance in a department of medicine. Eval Health Prof.	
303.	1988;11(1):21-42. McCarthy WH, Gonnella JS. The simulated Patient Management Problem: a	
303.	technique for evaluating and teaching clinical competence. Br J Med Educ.	
	1967;1(5):348-52.	
304.	McComas MJ, Wright RA, Mann NK, Cooper MD, Jacks ME. M-OSCE as a	v
504.	method to measure dental hygiene students' critical thinking: a pilot study. J Dent	Х
	Educ. 2013;77(4):485-93.	
<u> </u>	1 - 2013, 1 - (7) - 73.	

305.		
	obstetrics and gynaecology in two medical schools by an objective structured	
200	clinical examination. Br J Obstet Gynaecol. 1993;100(9):842-46.	
306.	McGaghie WC. Medical Problem-Solving: A Reanalysis. J Med Educ.	
307.	1980;55(11):912-21. McLaughlin K, Coderre S, Mortis G, Fick G, Mandin H. Can concept sorting	
507.	provide a reliable, valid and sensitive measure of medical knowledge structure? Adv Health Sci Educ. 2007;12(3):265-78.	
308.	McLaughlin K, Coderre S, Mortis G, Mandin H. Expert-type knowledge structure in medical students is associated with increased odds of diagnostic success. Teach Learn Med. 2007;19(1):35-41.	
309.	McNelis AM, Ironside PM, Zvonar SE, Ebright PR. Advancing the science of research in nursing education: contributions of the critical decision method. J Nurs Educ. 2014;53(2):61-4.	Х
310.	Meterissian S, Zabolotny B, Gagnon R, Charlin B. Is the script concordance test a valid instrument for assessment of intraoperative decision-making skills? Am J Surg. 2007;193(2):248-51.	
311.	Meterissian SH. A novel method of assessing clinical reasoning in surgical residents. Surg Innov. 2006;13(2):115-19.	
312.	Mew MM, Fossey E. Client-centred aspects of clinical reasoning during an initial assessment using the Canadian Occupational Performance Measure. Aust Occup Ther J. 1996;43(3):155-66.	Х
313.	Meyerson AT, Wachtel A, Thornton J. Evaluation of a psychiatric clerkship by videotape. Am J Psychiatry. 1977;134(8):883-6.	
314.	Miller PA, Nayer M, Eva KW. Psychometric properties of a peer assessment program to assess continuing competence in physical therapy. Phys Ther. 2010;90(7):1026-38.	X
315.	Mitchell AW, Batorski RE. A study of critical reasoning in online learning: application of the Occupational Performance Process Model. Occup Ther Int. 2009;16(2):134-53.	Х
316.	Monajemi A, Rostami ER, Savaj S, Rikers RM. How does patient management knowledge integrate into an illness script? Educ Health. 2012;25(3):153-9.	
317.	Monajemi A, Schmidt HG, Rikers RM. Assessing patient management plans of doctors and medical students: an illness script perspective. J Contin Educ Health Prof. 2012;32(1):4-9.	
318.	Morris BC. Relationships among academic achievement, clinical decision making, critical thinking, work experience, and NCLEX-RN pass status [dissertation]. Tempe: Arizona State University; 1999.	х
319.	Murphy JI. The use of focused reflection and articulation to promote the development of clinical reasoning [dissertation]. Storrs: University of Connecticut; 2001.	X
320.	Murphy JI. Using focused reflection and articulation to promote clinical reasoning: An evidence-based teaching strategy. Nurs Educ Perspect. 2004;25(5):226-31.	X
321.	Nayer M. An overview of the objective structured clinical examination. Physiother Can. 1993;45(3):171-8.	X

322.	Nendaz MR, Bordage G. Promoting diagnostic problem representation. Med Educ. 2002;36(8):760-6.	
323.	Nendaz MR, Gut AM, Perrier A, et al. Degree of concurrency among experts in data collection and diagnostic hypothesis generation during clinical encounters. Med Educ. 2004;38(1):25-31.	
324.		
325.	Newble DI, Hoare J, Baxter A. Patient management problems. Issues of validity. Med Educ. 1982;16(3):137-42.	
326.	Newble DI, Hoare J, Elmslie RG. The validity and reliability of a new examination of the clinical competence of medical students. Med Educ. 1981;15(1):46-52.	
327.	Newble DI, Swanson DB. Psychometric characteristics of the objective structured clinical examination. Med Educ. 1988;22(4):325-34.	
328.	Newman SH, Howell MA. Do objective professional examinations involve reasoning? Psychol Rep. 1966;18(1):123-9.	
329.	Ney EM, Shea JA, Kogan JR. Predictive validity of the mini-Clinical Evaluation Exercise (mCEX): do medical students' mCEX ratings correlate with future clinical exam performance? Acad Med. 2009;84(10 Suppl):S17-20.	
330.	Noble C, Brien MO, Coombes I, Shaw PN, Nissen L. Concept mapping to evaluate an undergraduate pharmacy curriculum. Am J Pharm Educ. 2011;75(3):1-11.	x
331.	Norcini JJ, Blank LL, Arnold GK, Kimball HR. The mini-CEX (clinical evaluation exercise): a preliminary investigation. Ann Intern Med. 1995;123(10):795-9.	
332.	Norcini JJ, Blank LL, Duffy FD, Fortna GS. The mini-CEX: a method for assessing clinical skills. Ann Intern Med. 2003;138(6):476-81.	
333.	Norcini JJ, Diserens D, Day SC, et al. The scoring and reproducibility of an essay test of clinical judgment. Acad Med. 1990;65(9 Suppl):S41-2.	
334.	Norcini JJ, Swanson DB, Grosso LJ, Shea JA, Webster GD. A comparison of knowledge, synthesis, and clinical judgment. Multiple-choice questions in the assessment of physician competence. Eval Health Prof. 1984;7(4):485-99.	
335.	Norcini JJ, Swanson DB, Grosso LJ, Webster GD. Reliability, validity and efficiency of multiple choice question and patient management problem item formats in assessment of clinical competence. Med Educ. 1985;19(3):238-47.	
336.	Norman G. Methods for the analysis of clinical reasoning. Annu Conf Res Med Educ. 1977;16:352-3.	
337.	Norman G. Objective measurement of clinical performance. Med Educ. 1985;19(1):43-7.	
338.	Norman G. Reliability and construct validity of some cognitive measures of clinical reasoning. Teach Learn Med. 1989;1(4):194-9.	
339.	Norman G, Barrows HS, Feightner JW, Neufeld VR. Measuring the outcome of clinical problem-solving. Annu Conf Res Med Educ. 1977;16:311-6.	
340.	Norman G, Bordage G, Page G, Keane D. How specific is case specificity? Med Educ. 2006;40(7):618-23.	
341.	Norman G, Feightner JW. A comparison of behaviour on simulated patients and patient management problems. Med Educ. 1981;15(1):26-32.	

342.	of measures of clinical problem-solving. Research in Medical Education: proceedings of the Association of American Medical Colleges Annual Conference.	
	1983;22:110.	
343.	Norman G, Sherbino J, Dore K, et al. The etiology of diagnostic errors: a controlled trial of system 1 versus system 2 reasoning. Acad Med. 2014;89(2):277-84.	
344.	Norman G, Tugwell P, Feightner JW, Muzzin LJ, Jacoby LL. Knowledge and	
	clinical problem-solving. Med Educ. 1985;19(5):344-56.	
345.	Nouh T, Boutros M, Gagnon R, et al. The script concordance test as a measure of	
	clinical reasoning: a national validation study. Am J Surg. 2012;203(4):530-4.	
346.	Novack DH, Cohen D, Peitzman SJ, Beadenkopf S, Gracely E, Morris J. A pilot test	
	of WebOSCE: a system for assessing trainees' clinical skills via teleconference. Med	
	Teach. 2002;24(5):483-7.	
347.	O'Brien PG. The relationship of female nurses' expertise to empathic concern,	х
	perspective taking, cognitive complexity, and analytic interactive style	
240	[dissertation]. Garden City: Adelphi University; 1992.	
348.	O'Gorman, Trimble P, Smyth J. The triple jump: assessing problem solving in	
349.	psychiatry. Med Teach. 1998;20(1):46-8. Okubo Y, Nomura K, Saito H, Saito N, Yoshioka T. Reflection and feedback in	
549.	ambulatory education. Clin Teach. 2014;11(5):355-60.	
350.	Oliker A, Cutting CB. Real-time complex cognitive surgical simulator with testing.	
350.	Stud Health Technol Inform. 2009;142:239-43.	
351.	Oliven A, Nave R, Gilad D, Barch A. Implementation of a web-based interactive	
	virtual patient case simulation as a training and assessment tool for medical students.	
	Stud Health Technol Inform. 2011;169:233-7.	
352.	Olson LG. The ability of a long-case assessment in one discipline to predict	
	students' performances on long-case assessments in other disciplines. Acad Med. 1999;74(7):835-9.	
353.	Olson LG, Coughlan J, Rolfe I, Hensley MJ. The effect of a Structured Question	
	Grid on the validity and perceived fairness of a medical long case assessment. Med	
	Educ. 2000;34(1):46-52.	
354.	Orr NA. Non-cognitive correlates of performance on conventional and interactive	
	components of a computerized examination. Research in Medical Education:	
	proceedings of the Association of American Medical Colleges Annual Conference. 1988;27:284-89.	
355.	Orrock P, Grace S, Vaughan B, Coutts R. Developing a viva exam to assess clinical	
	reasoning in pre-registration osteopathy students. BMC Med Educ. 2014;14(193):1-	
	9.	
356.	Ovesen LC, Kragstrup J. Computer simulation of a patient with gastrointestinal	
	symptoms used for evaluation of clinical decision among general practitioners.	
	Ugeskr Laeger. 1993;155(27):2130-2.	
357.	Padrick KP. Clinical decision-making in nursing: a comparison of simulations and	Х
	practice situations [dissertation]. Portland: Oregon Health Sciences University;	
	1990.	

358.	Page G, Bordage G. The Medical Council of Canada's key features project: a more valid written examination of clinical decision-making skills. Acad Med. 1995;70(2):104-10.	
359.	Page G, Bordage G, Allen T. Developing key-feature problems and examinations to assess clinical decision-making skills. Acad Med. 1995;70(3):194-201.	
360.	Painvin C, Neufeld V, Norman G, Walker I. The "triple jump" exercisea structured measure of problem solving and self directed learning. Research in Medical Education: proceedings of the Association of American Medical Colleges Annual Conference. 1979;18:73-7.	
361.	Paisley AM, Baldwin P, Paterson-Brown S. Feasibility, reliability and validity of a new assessment form for use with basic surgical trainees. Am J Surg. 2001;182(1):24-9.	
362.	Palchik NS, Wolf FM, Cassidy JT, Ike RW, Davis WK. Case differences in the problem solving strategies of medical students and physicians. Research in Medical Education: proceedings of the Association of American Medical Colleges Annual Conference. 1988;27:248-53.	
363.	Palchik NS, Wolf FM, Cassidy JT, Ike RW, Davis WK. Comparing Information-Gathering Strategies of Medical Students and Physicians in Diagnosing Simulated Medical Cases. Acad Med. 1990;65(2):107-13.	
364.	Palmer EJ, Devitt PG. Assessment of higher order cognitive skills in undergraduate education: modified essay or multiple choice questions? BMC Med Educ. 2007;7(1):1-7.	
365.	Papa FJ, Meyer S. A computer-assisted learning tool designed to improve clinical problem-solving skills. Ann Emerg Med. 1989;18(3):269-73.	
366.	Papp KK, Williams SD, Goldman MH. Relationship between type of surgical clerkship, order of completion, and achievement on patient management problems. Surgery. 1984;96(1):102-8.	
367.	Pardue SF. Decision-making skills and critical thinking ability among associate degree, diploma, baccalaureate, and master's-prepared nurses. J Nurs Educ. 1987;26(9):354-61.	x
368.	Park AJ, Barber MD, Bent AE, et al. Assessment of intraoperative judgment during gynecologic surgery using the Script Concordance Test. Am J Obstet Gynecol. 2010;203(3):240e1-6.	
369.	Park WB, Kang SH, Lee YS, Myung SJ. Does Objective Structured Clinical Examinations score reflect the clinical reasoning ability of medical students? Am J Med Sci. 2015;350(1):64-7.	
370.	Park YS, Lineberry M, Hyderi A, Bordage G, Riddle J, Yudkowsky R. Validity evidence for a patient note scoring rubric based on the new patient note format of the United States Medical Licensing Examination. Acad Med. 2013;88(10):1552-7.	
371.	Payton OD. Clinical reasoning process in physical therapy. Phys Ther. 1985;65(6):924-8.	X
372.	Peden NR, Cairncross RG, Harden RM, Crooks J. Assessment of clinical competence in therapeutics: the use of the objective structured clinical examination. Med Teach. 1985;7(2):217-23.	

373.		
	judgment using the Script Concordance test: the importance of using specialty-	
274	specific experts to develop the scoring key. Am J Surg. 2013;205(2):137-40.	
374.		Х
	inductive approach [dissertation]. Cleveland: Case Western Reserve University;	
275	1988. Discuste CAM, Cours DAL 1 Mete DDC, Kasite CD, Effector for division language	
375.	Pimenta CAM, Cruz DALd, Mota DDC, Kurita GP. Effects of a clinical reasoning	Х
	course on the accuracy of nursing diagnoses. Proceedings of the Working Together	
276	for Quality Nursing Care: Striving Toward Harmonization Conference. 2004:81.	
376.		х
	reliability and validity of the diagnostic reasoning assessment [dissertation]. Baltimore: University of Maryland; 2006.	
277		
377.	Assessment of undergraduate clinical reasoning in geriatric medicine: application of	
	a script concordance test. J Am Geriatr Soc. 2012;60(10):1946-50.	
378.	Plunkett EJ. A descriptive study of the development of cognitive diagnostic	x
576.	reasoning skills in undergraduate nursing students across a four semester time period	л
	[dissertation]. Boston: Boston College; 1991.	
379.	Pottier P, Dejoie T, Hardouin JB, et al. Effect of stress on clinical reasoning during	
577.	simulated ambulatory consultations. Med Teach. 2013;35(6):472-80.	
380.	Pottier P, Hardouin JB, Hodges BD, et al. Exploring how students think: a new	
500.	method combining think-aloud and concept mapping protocols. Med Educ.	
	2010;44(9):926-35.	
381.	Powell-Laney S, Keen C, Hall K. The use of human patient simulators to enhance	х
	clinical decision-making of nursing students. Educ Health. 2012;25(1):11.	
382.	Powles AC, Powles AC, Wintrip N, Neufeld VR, Wakefield JG. The "triple-jump"	
	exercisefurther studies of an evaluative technique. Research in Medical Education:	
	proceedings of the Association of American Medical Colleges Annual Conference	
	1981;20:74-9.	
383.	Predko JE. Influence of knowledge and clinical experience on clinical decision-	х
	making of registered nurses and nursing students using interactive video simulation	
	[dissertation]. Lansing: Michigan State University; 1992.	
384.	Puskas JC, Fung K, Anderson JD, et al. Comparison of self-instruction methods for	х
	teaching diagnostic testing. J Dent Educ. 1991;55(5):316-21.	
385.	Raidl MA, Wood OB, Lehman JD, Evers WD. Computer-assisted instruction	Х
	improves clinical reasoning skills of dietetics students. J Am Diet Assoc.	
	1995;95(8):868-73.	
386.	Ramnarayan P, Kapoor RR, Coren M, et al. Measuring the impact of diagnostic	
	decision support on the quality of clinical decision making: development of a	
a = -	reliable and valid composite score. J Am Med Inform Assoc. 2003;10(6):563-72.	
387.	Raz E, Cohen S, Benbassat J. Evaluation of diagnostic accuracy in the clinical	
	setting. Isr J Med Sci. 1987;23(12):1177-80.	
388.	Reddy S, Endo J, Gupta S, Tekian A, Park YS. A case for caution: Chart-	
	stimulated recall. J Grad Med Educ. 2015;7:531-535.	

389.	Regan-Kubinski MJ. Clinical judgment in nursing: judgment processes in	Х
	psychiatric mental health nursing [dissertation]. Ann Arbor: University of Michigan;1989.	
390.	Reinert A, Berlin A, Swan-Sein A, Nowygrod R, Fingeret A. Validity and reliability	
	of a novel written examination to assess knowledge and clinical decision making	
	skills of medical students on the surgery clerkship. Am J Surg. 2014;207(2):236-42.	
391.	Reyna VF, Lloyd FJ. Physician decision making and cardiac risk: effects of	
	knowledge, risk perception, risk tolerance, and fuzzy processing. J Exp Psychol Appl. 2006;12(3):179-95.	
392.	Rikers RM, Loyens SM, Schmidt HG. The role of encapsulated knowledge in	
	clinical case representations of medical students and family doctors. Med Educ.	
	2004;38(10):1035-43.	
393.	Rimoldi HJ. Diagnosing the diagnostic process. Med Educ. 1988;22(4):270-8.	
394.	Rimoldi HJA. Problem solving as a process. Educ Psychol Meas. 1960;20:449-60.	
395.	Rivett DA, Higgs J. Hypothesis generation in the clinical reasoning behavior of	Х
	manual therapists. J Phys Ther Educ. 1997;11(1):40-5.	
396.	Roberts C, Sarangi S, Southgate L, Wakeford R, Wass V. Oral examinations—equal opportunities, ethnicity, and fairness in the MRCGP. BMJ. 2000;320(7231):370–5.	
397.	Roberts D. The clinical viva: an assessment of clinical thinking. Nurse Educ Today.	х
	2013;33(4):402-6.	
398.	Roberts JD, While AE, Fitzpatrick JM. Problem solving in nursing practice:	Х
	application, process, skill acquisition and measurement. J Adv Nurs.	
	1993;18(6):886-91.	
399.	Roberts JD, While AE, Fitzpatrick JM. Clinical problem-solving using video	Х
	simulation: an investigation. Med Educ. 1995;29(5):347-54.	
400.	Robertson LJ. Clinical Reasoning, Part 1: the nature of problem solving, a literature	Х
101	review. Br J Occup Ther. 1996;59(4):178-82.	
401.	Robertson LJ. Clinical Reasoning, Part 2: novice/expert differences. Br J Occup	Х
402	Ther. 1996;59(5):212-6.	
402.	Robertson J, Walkom E, Pearson SA, Hains I, Williamsone M, Newby D. The	Х
	impact of pharmacy computerised clinical decision support on prescribing, clinical	
	and patient outcomes: a systematic review of the literature. Int J Pharm Pract. 2010;18(2):69-87.	
403.	Robinson SA, Dinham SM. Reliability and validity of simulated problems as	
	measures of change in problem-solving skills. Annu Conf Res Med Educ.	
	1977;16:305-10.	
404.	Robison E. Influence of learning style and learning flexibility on clinical judgment	Х
	of prelicensure nursing students within a human patient computer simulation	
	environment [dissertation]. Pensacola: University of West Florida; 2012.	
405.	Roex A, Clarebout G, Dory V, Degryse J. Can ill-structured problems reveal beliefs	
	about medical knowledge and knowing? A focus-group approach. BMC Med Educ.	
	2009;9(62):1-9.	
406.	Rogers JC, Swee DE, Ullian JA. Teaching Medical Decision Making and Students'	
	Clinical Problem Solving Skills. Med Teach. 1991;13(2):157-64.	

		<u> </u>
407.	Rogers JC, Swee DE, Vallario R. Role of case studies in evaluating medical	
100	problem solving. J Fam Pract. 1984;18(5):775-8.	
408.	Rogers PL. Simulation in medical students' critical thinking. Crit Care Med.	
40.0	2004;32(2 Suppl):S70-1.	
409.	Rogers PL, Grenvik A, Willenkin RL. Teaching medical students complex cognitive	
410	skills in the intensive care unit. Crit Care Med. 1995;23(3):575-81.	
410.	Rotthoff T, Baehring T, Dicken HD, et al. Comparison between Long-Menu and	
	Open-Ended Questions in computerized medical assessments. A randomized	
411	controlled trial. BMC Med Educ. 2006;6(50):1-9.	
411.	Round AP. Teaching clinical reasoninga preliminary controlled study. Med Educ.	
410	1999;33(7):480-3.	
412.	Rosebraugh CJ, Speer AJ, Solomon DJ, et al. Setting standards and defining quality	
	of performance in the validation of a standardized-patient examination format. Acad	
410	Med. 1997;72(11):1012-4.	
413.	Rowland-Morin PA, Burchard KW, Garb JL, Coe NP. Influence of effective	
	communication by surgery students on their oral examination scores. Acad Med.	
414	1991;66(3):169–71.	
414.		
415	reasoning ability. Med Educ. 2014;48(11):1123.	
415.		
	clinical reasoning skills in geriatric urinary incontinence. J Am Geriatr Soc.	
416.	2010;58(11):2178-84. Rutherford DN, D'Angelo AL, Law KE, Pugh CM. Advanced engineering	
410.		
417.	technology for measuring performance. Surg Clin North Am. 2015;95(4):813-26. Ryding HA, Murphy HJ. Employing oral examinations (viva voce) in assessing	v
41/.	dental students' clinical reasoning skills. J Dent Educ. 1999;63(9):682-7.	Х
418.		
410.	their own diagnostic decisions. Med Educ. 2004;38(10):1028-34.	
419.		x
419.	challenge of assessing clinical competence of occupational therapists within a	Λ
	program management environment. Can J Occup Ther. 2008;75(1):51-60.	
420	Sands HM. Making the diagnosis: factors shaping diagnostic reasoning among entry	x
-120.	level nurse practitioners [dissertation]. Los Angeles: University of California; 2001.	Λ
421.	Satish U, Streufert S, Marshall R, et al. Strategic management simulations is a novel	
141.	way to measure resident competencies. Am J Surg. 2001;181(6):557-61.	
422.	Saunders DJ. Clinical decision-making and clinical judgment outcomes by nursing	x
r <u>~</u> ~ .	students in traditional or nontraditional curricula [dissertation]. Williamsburg:	
	College of William and Mary; 1997.	
423.	Scaffa ME, Smith TM. Effects of Level II fieldwork on clinical reasoning in	X
.20.	occupational therapy. Occup Ther Health Care. 2004;18(1):31-8.	**
424.	Schipper S, Ross S. Structured teaching and assessment A new chart-stimulated	
	recall worksheet for family medicine residents. Can Fam Physician. 2010;56(9):958-	
	9.	

425.	Schlairet MC, Schlairet TJ, Sauls DH, Bellflowers L. Cognitive load, emotion, and performance in high-fidelity simulation among beginning nursing students: a pilot study. J Nurs Educ. 2015;54(3 Suppl):S5-11.	X
426.	Schuwirth L. Is assessment of clinical reasoning still the Holy Grail? Med Educ. 2009;43(4):298-300.	
427.	Schuwirth LW, Verheggen MM, Vleuten CPvd, Boshuizen HP, Dinant GJ. Do short cases elicit different thinking processes than factual knowledge questions do? Med Educ. 2001;35(4):348-56.	
428.	Schwartz W. Documentation of students' clinical reasoning using a computer simulation. Am J Dis Child. 1989;143(5):575-9.	
429.	Schwartz W. Using the Computer-Assisted Medical Problem-Solving (CAMPS) System to Identify Students' Problem-Solving Difficulties. Acad Med. 1992;67(9):568-71.	
430.	See KC, Tan KL, Lim TK. The script concordance test for clinical reasoning: re- examining its utility and potential weakness. Med Educ. 2014;48(11):1069-77.	
431.	Seldomridge EA. The influence of confidence, factual, and experiential knowledge on speed and accuracy of clinical judgment among novice and expert nurses [dissertation]. College Park: University of Maryland at College Park; 1996.	х
432.	Selim AA, Dawood E. Objective structured video examination in psychiatric and mental health nursing: a learning and assessment method. J Nurs Educ. 2015;54(2):87-95.	х
433.	Sharma N. Medical students' perceptions of the situational judgement test: a mixed methods study. Br J Hosp Med. 2015;76(4):234-38.	
434.	Shelledy DC, Gardner DD, Wettstein RB. Development of an instrument for the assessment of students' critical thinking and problem solving ability. Resp Care. 2004;13(15):23-8.	х
435.	Sherbino J, Dore KL, Wood TJ, et al. The relationship between response time and diagnostic accuracy. Acad Med. 2012;87(6):785-91.	
436.	Sherbino J, Yip S, Dore KL, Siu E, Norman GR. The effectiveness of cognitive forcing strategies to decrease diagnostic error: an exploratory study. Teach Learn Med. 2011;23(1):78-84.	
437.	Shimizu T, Matsumoto K, Tokuda Y. Effects of the use of differential diagnosis checklist and general de-biasing checklist on diagnostic performance in comparison to intuitive diagnosis. Med Teach. 2013;35(6):e1218-29.	
438.	Sibbald M, Bruin ABd. Feasibility of self-reflection as a tool to balance clinical reasoning strategies. Adv Health Sciences Educ. 2012;17(3):419-29.	
439.	Sibbald M, Bruin ABd, Merrienboer JJv. Checklists improve experts' diagnostic decisions. Med Educ. 2013;47(3):301-08.	
440.	Sibbald M, Cavalcanti RB. The biasing effect of clinical history on physical examination diagnostic accuracy. Med Educ. 2011;45(8):827-34.	
441.	Sibert L, Charlin B, Corcos J, Gagnon R, Grise P, Van der Vleuten C. Stability of clinical reasoning assessment results with the Script Concordance test across two different linguistic, cultural and learning environments. Med Teach. 2002;24(5):522-7.	

442.	Sibert L, Charlin B, Corcos J, Gagnon R, Lechevallier J, Grise P. Assessment of clinical reasoning competence in urology with the script concordance test: an	
	exploratory study across two sites from different countries. Eur Urol. 2002;41(3):227-33.	
443.	Sibert L, Charlin B, Gagnon R, Corcos J, Khalaf A, Grise P. Evaluation of clinical reasoning in urology: contribution of the Script Concordance Test. Prog Urol. 2001;11(6):1213-19.	
444.	Sibert L, Darmoni SJ, Dahamna B, Hellot MF, Weber J, Charlin B. On line clinical reasoning assessment with Script Concordance test in urology: results of a French pilot study. BMC Med Educ. 2006;6(45):1-9.	
445.	Sibert L, Darmoni SJ, Dahamna B, Weber J, Charlin B. Online clinical reasoning assessment with the Script Concordance test: a feasibility study. BMC Med Inform Decis Mak. 2005;5(18):1-10.	
446.	Sibert L, Giorgi R, Dahamna B, Doucet J, Charlin B, Darmoni SJ. Is a web-based concordance test feasible to assess therapeutic decision-making skills in a French context? Med Teach. 2009;31(4):e162-8.	
447.	Sibbald M, Panisko D, Cavalcanti RB. Role of clinical context in residents' physical examination diagnostic accuracy. Med Educ. 2011;45(4):415-21.	
448.	Sim JH, Abdul Aziz YF, Mansor A, Vijayananthan A, Foong CC, Vadivelu J. Students' performance in the different clinical skills assessed in OSCE: what does it reveal? Med Educ Online. 2015;20(10):1-7.	
449.	Simmons B. Clinical reasoning in experienced nurses. Western J Nurs Res. 2002:25(6):701-19.	х
450.	Simpson RG, Ballard KD. What is being assessed in the MRCGP oral examination? A qualitative study. Br J Gen Pract. 2005;55(515):430-6.	
451.	Smith CA, Varkey AB, Evans AT, Reilly BM. Evaluating the performance of inpatient attending physicians: a new instrument for today's teaching hospitals. J Gen Intern Med. 2004;19(7):766-71.	
452.	Smith RM. The triple-jump examination as an assessment tool in the problem-based medical curriculum at the University of Hawaii. Acad Med. 1993;68(5):366-72.	
453.	Sobral DT. Medical students' mindset for reflective learning: a revalidation study of the reflection-in-learning scale. Adv Health Sciences Educ. 2005;10(4):303-14.	
454.	Solomon DJ, Speer AJ, Perkowski LC, DiPette DJ. Evaluating problem solving based on the use of history findings in a standardized-patient examination. Acad Med. 1994;69(9):754-7.	
455.	Spake EF. Clinical reasoning and decision making of experienced clinicians and entry-level physical therapist students [dissertation]. Lawrence: University of Kansas; 2003.	x
456.	Stein GH, Tokunaga H, Ando H, et al. Preliminary report of a Web-based instrument to assess and teach knowledge and clinical thinking to medical student. Int J Med Educ. 2014;5:1-6.	
457.	Steinemann SK, Berg BW, Turban JW, Hara KM, Alfrey LR. Student-written simulation scenarios: a novel cognitive assessment method in a trauma curriculum. Hawaii Med J. 2011;70(8):172-5.	

458.	Stevens RH, McCoy JM, Kwak AR. Solving the problem of how medical students solve problems. MD Comput. 1991;8(1):13-20.	
459.	Stevens SM, Goldsmith TE, Summers KL et al. Virtual reality training improves students' knowledge structures of medical concepts. Stud Health Technol Inform. 2005;111:519-25.	
460.	Stillman PL, Regan MB, Haley HL, et al. A Comparison of Free-response and Cued-response Diagnosis Scores in an Evaluation of Clinical Competence Utilizing Standardized Patients. Acad Med. 1990;65(9):S27-8.	
461.	Stirling K, Hogg G, Ker J, Anderson F, Hanslip J, Byrne D. Using simulation to support doctors in difficulty. Clin Teach. 2012;9(5):285-9.	
462.	Stover Gingerich B. Resource review: expertise in nursing practice: caring, clinical judgment, and ethics. Home Health Care Manag Pract. 2010;22(7):545-6.	Х
463.	Stowe C, Pardey D, Bright A, Leung E, Littler K. Differences in clinical reasoning of expert and novice physiotherapists: the subjective examination of a knee pathology. Defining Practice: proceedings of the Chartered Society of Physiotherapy Annual Congress and Exhibition: 2003:37.	x
464.	Stratford P, Pierce-Fenn H. Modified essay question. Phys Ther. 1985;65(7):1075-9.	Х
465.	Stevens R, Palacio-Cayetano J. Design and Performance Frameworks for	
166	Constructing Problem-Solving Simulations. Cell Biol Educ. 2003;2(3):162-79.	
466.	Sulaiman ND, Hamdy H. Assessment of clinical competencies using clinical images and videos "CIVA". BMC Med Educ. 2013;13(78):1-6.	
467.	Swanson DB, Stillman PL. Use of standardized patients for teaching and assessing clinical skills. Eval Health Prof. 1990;13(1):79-103.	
468.	Swanson DB, Van der Vleuten CP. Assessment of clinical skills with standardized patients: state of the art revisited. Teach Learn Med. 2013;25:S17-25.	
469.	Sylvia BM. Measurement of clinical decision-making by the Nurs.Comps, the twelve point postpartal check microcomputer simulation [dissertation]. Baltimore: University of Maryland; 1989.	x
470.	Szatmary P, Arora S, Sevdalis N. To operate or not to operate? A multi-method analysis of decision-making in emergency surgery. Am J Surg. 2010;200(2):298-304.	
471.	Szulewski A, Roth N, Howes D. The Use of Task-Evoked Pupillary Response as an Objective Measure of Cognitive Load in Novices and Trained Physicians: A New Tool for the Assessment of Expertise. Acad Med. 2015;90(7):981-7.	
472.	Talvard M, Olives JP, Mas E. Assessment of medical students using a script concordance test at the end of their internship in pediatric gastroenterology. Arch Pediatr. 2014;21(4):372-36.	
473.	Tamara P. Using an educational electronic documentation system to help nursing students accurately identify nursing diagnoses [dissertation]. Plattsburg: State University of New York at Plattsburg; 2013.	х
474.	Tamblyn R, Abrahamowicz M, Dauphinee D, et al. Influence of physicians' management and communication ability on patients' persistence with antihypertensive medication. Arch Intern Med. 2010;170(12):1064-72.	

475.	Tan K, Tan NC, Kandiah N, Samarasekera D, Ponnamperuma G. Validating a script concordance test for assessing neurological localization and emergencies. Eur J	
	Neurol. 2014;21(11):1419-22.	
476.	Taylor S. Clinical decision-making from the perspective of self-care deficit nursing	Х
	theory. Int Orem Society News. 1998;6(1):2.	
477.	Taylor TR, Skakun EN, Taylor WC. The assessment of competence in clinical	
	decision-making: a computer approach based on decision theory. Acad Med.	
	1976;51(8):687.	
478.	Ten Eyck R, Tews M, Ballester JM, Hamilton GC. Improved fourth-year medical	
	student clinical decision-making performance as a resuscitation team leader after a	
	simulation-based curriculum. Simul Healthc. 2010;5(3):139-45.	
479.	Terry R, Hiester E, James GD. The use of standardized patients to evaluate family	
	medicine resident decision making. Fam Med. 2007;39(4):261-5.	
480.	Teunissen PW, Stapel DA, Scheele F, et al. The influence of context on residents'	
	evaluations: effects of priming on clinical judgment and affect. Adv Health Sciences	
401	Educ. 2009;14(1):23-41.	
481.	Thiele JE, Holloway J, Murphy D, Pendarvis J, Stucky M. Perceived and actual	Х
	decision making by novice baccalaureate students. West J Nurs Res.	
400	1991;13(5):616-26.	
482.	Thomas CS, Mellsop G, Callender K, et al. The oral examination: a study of	
102	academic and non-academic factors. Med Educ. 1993;27(5):433-9.	
483.	Thomas M. Setting Standards for Multiple-Choice Items in Clinical Reasoning. Eval Health Prof. 1992;15(4):434-52.	
484.	Thompson C, Dalgleish L, Bucknall T, et al. The effects of time pressure and	Х
	experience on nurses' risk assessment decisions: a signal detection analysis. Nurs	
	Res. 2008;57(5):302-11.	
485.	Thompson C, Foster A, Cole I, Dowding DW. Using social judgement theory to	Х
	model nurses' use of clinical information in critical care education. Nurse Educ	
	Today. 2005;25(1):68-77.	
486.	Thompson C, Stapley S. Do educational interventions improve nurses' clinical	Х
	decision making and judgement? A systematic review. Int J Nurs Stud.	
407	2011;48(7):881-93.	
487.	Tierney NA. The use of clinical judgment by critical care nurses in the care of a	х
400	patient with angina [dissertation]. Austin: university of Texas at Austin; 1992.	
488.	Tomlin JL, Pead MJ, May SA. Veterinary students' attitudes toward the assessment	Х
	of clinical reasoning using extended matching questions. J Vet Med Educ. 2008;35(4):612-21.	
489.	Tomlin JL, Pead MJ, May SA. Attitudes of veterinary faculty to the assessment of	v
409.	clinical reasoning using extended matching questions. J Vet Med Educ.	х
	2008;35(4):622-30.	
490.	Tona JT. Variations in clinical reasoning among occupational therapy practitioners	Х
	[dissertation]. Buffalo: State University of New York at Buffalo; 2003.	
491.	Trudel JL, Bordage G, Downing SM. Reliability and Validity of Key Feature Cases	
	for the Self-Assessment of Colon and Rectal Surgeons. Ann Surg. 2008;248(2):252-	
	8.	

29

492.	Tsai TC, Harasym PH, Coderre S, McLaughlin K, Donnon T. Assessing ethical problem solving by reasoning rather than decision making. Med Educ. 2009;43(12):1188-97.	
493.	Tschikota S. The clinical decision-making processes of student nurses. J Nurs Educ. 1993;32(9):389-98.	X
494.	Tweed M, Thompson-Fawcett M, Schwartz P, Wilkinson TJ. Determining measures of insight and foresight from responses to multiple choice questions. Med Teach. 2013;35(2):127-33.	
495.	Vadali M, Ramachandran G, Banerjee S. Effect of training, education, professional experience, and need for cognition on accuracy of exposure assessment decision-making. Ann Occup Hyg. 2012;56(3):292-304.	х
496.	Van der Vleuten C, Newble DI. How can we test clinical reasoning? Lancet. 1995;345(8956):1032-4.	
497.	Vandeweerd JM, Vandeweerd S, Gustin C, et al. Understanding veterinary practitioners. J Vet Med Educ. 2012;39(2):142-51.	х
498.	Van Eerden K. Using critical thinking vignettes to evaluate student learning. Nurs Health Care Perspect. 2001;22(5):231-4.	х
499.	Van Susteren TJ, Cohen EB, Simpson DE. Alternate-choice test items: Implications for measuring clinical judgment. Teach Learn Med. 1991;3(1):33-7.	
500.	Vaytovich A. Diagnostic Reasoning in the Multiproblem Patient: An Interactive, Microcomputer-Based Audit. Eval Health Prof. 1986;9(1):90-102.	
501.	Victor-Chmil J, Larew C. Psychometric Properties of the Lasater Clinical Judgment Rubric. Int J Nurs Educ Scholarsh. 2013;10(1):45-52.	х
502.	Vink SC, Van Tartwijk J, Bolk J, Verloop N. Integration of clinical and basic sciences in concept maps: a mixed-method study on teacher learning. BMC medical education. 2015;15(1):20.	
503.	Violato C, Donnon T. Does the medical college admission test predict clinical reasoning skills? A longitudinal study employing the Medical Council of Canada clinical reasoning examination. Acad Med. 2005;80(10 Suppl):S14-6.	
504.	Viollet P. Utilization of problems with sequential solutions and in the formation of a nursing diagnosis. Soins. Formation, pedagogie, encadrement: avec la participation du CEEIEC. 1995;(15):41-8.	х
505.	Vollebregt JA, Metz JC, Haan Md, Richir MC, Hugtenburg JG, Vries TPd. Curriculum development in pharmacotherapy: testing the ability of preclinical medical students to learn therapeutic problem solving in a randomized controlled trial. Br J Clin Pharmacol. 2006;61(3):345-51.	x
506.	Vorstenbosch MA, Bouter ST, van den Hurk MM, Kooloos JG, Bolhuis SM, Laan RF. Exploring the validity of assessment in anatomy: do images influence cognitive processes used in answering extended matching questions? Anat. 2014;7(2):107-16.	
507.	Voytko DC. A comparison of the cognitive processes used by the novice and the expert nurse in making clinical decisions [dissertation]. Pittsburgh: University of Pittsburgh; 1989.	x
508.	Voytovich AE, Rippey RM, Suffredini A. Premature Conclusions in Diagnostic Reasoning. J Med Educ. 1985;60(4):302-7.	

509.	Voytovich AE, Rippey RM. Audit of the structured problem list as a measure of	
510	clinical judgment: reliability and validity. Ir Med J. 1978;71(10):346-9.	
510.	Vu NV. Medical Problem-Solving Assessment: A Review of Methods and Instruments. Eval Health Prof. 1979;2(3):281-307.	
511.	Vu NV, Paiva RE, Dawson-Saunders BK, Marcy ML, Barrows HS. Incremental	
	validity of the Medical Reasoning Aptitude Test (MRAT)a new admission test of	
	clinical problem solving ability. Research in Medical Education: proceedings of the	
510	Association of American Medical Colleges Annual Conference. 1983;22:61-6.	
512.	Wallsten TS. Physician and medical student bias in evaluating diagnostic	
512	information. Med Decis Making. 1981;1(2):145-64.	
513.	Wang JJ, Lo CH, Ku YL. Problem solving strategies integrated into nursing process to promote clinical problem solving abilities of RN-BSN students. Nurse Educ	Х
	Today. 2004;24(8):589-95.	
514.	Wang JJ, Lo CHK, Chen KM, Hsieh JL, Ku YL. The efficacy of problem solving	x
517.	strategies utilized in professional nursing concepts course to improve problem	Λ
	solving abilities in students enrolled in a two-year baccalaureate nursing program. J	
	Nurs Res. 2002;10(2):113-20.	
515.	Wass V, Wakeford R, Neighbour R, Van der Vleuten C. Achieving acceptable	
	reliability in oral examinations: an analysis of the Royal College of General	
	Practitioners membership examination's oral component. Med Educ.	
	2003;37(2):126-31.	
516.	Webb EA, Davis L, Muir G, Lissauer T, Nanduri V, Newell SJ. Improving	
	postgraduate clinical assessment tools: the introduction of video recordings to assess	
	decision making. Med Teach. 2012;34(5):404-10.	
517.	Weber JR. The effectiveness of a gaming-simulation strategy for teaching nursing	Х
710	diagnosis skills [dissertation]. Memphis: Memphis State University; 1992.	
518.	Weingarten P, Tabenkin K. Variations among examiners in family medicine	
510	residency board oral examinations. Med Educ. 2000;34(1):13-7.	
519.	Weiss MJ, Bhanji F, Fontela PS, Razack SI. A preliminary study of the impact of a	
	handover cognitive aid on clinical reasoning and information transfer. Med Educ. 2013;47(8):832-41.	
520.	Wendling A, Baty P. A step aheadevaluating the clinical judgment skills of	
	incoming interns. Fam Med. 2009;41(2):111-15.	
521.	Wessel J, Williams R, Cole B. Physical therapy students' application of a clinical	X
	decision-making model. Internet J Allied Health Sci Pract. 2006;4(3):1-11.	
522.	Wetmore AO, Boyd LD, Bowen DM, Pattillo RE. Reflective blogs in clinical	Х
	education to promote critical thinking in dental hygiene students. J Dent Educ.	
	2010;74(12):1337-50.	
523.	Wilkinson TJ, Campbell PJ, Judd SJ. Reliability of the long case. Med Educ. 2008;42(9):887-93.	
524.	Williams RG, Klamen DL. Examining the diagnostic justification abilities of fourth-	
	year medical students. Acad Med. 2012;87(8):1008-14.	
525.	Williams RG, Klamen DL, Markwell SJ, Cianciolo AT, Colliver JA, Verhulst SJ.	
	Variations in Senior Medical Student Diagnostic Justification Ability. Acad Med.	
	2014; 89(5):790-8.	

526.		
	reasoning ability across five medical schools using a progress test. Acad Med.	
	2011;86(9):1148-54.	
527.	Wilson AB, Pike GR, Humbert AJ. Analyzing script concordance test scoring	
	methods and items by difficulty and type. Teach Learn Med. 2014;26(2):135-45.	
528.	Wilson AB, Pike GR, Humbert AJ. Preliminary Factor Analyses Raise Concerns	
	about Script Concordance Test Utility. Med Sci Educ. 2014; 24(1):51-8.	
529.	Wimmers PF, Schmidt HG, Verkoeijen PP, Wiel MWvd. Inducing expertise effects	
	in clinical case recall. Med Educ. 2005;39(9):949-57.	
530.	Wolpaw T, Papp KK, Bordage G. Using SNAPPS to facilitate the expression of	
	clinical reasoning and uncertainties: a randomized comparison group trial. Acad	
	Med. 2009;84(4):517-24.	
531.	Wong TK, Chung JW. Diagnostic reasoning processes using patient simulation in	Х
	different learning environments. J Clin Nurs. 2002;11(1):65-72.	
532.	Wood TJ, Cunnington JP, Norman GR. Assessing the measurement properties of a	
	clinical reasoning exercise. Teach Learn Med. 2000;12(4):196-200.	
533.	Wunderlich A, Abbey CK. Utility as a rationale for choosing observer performance	
	assessment paradigms for detection tasks in medical imaging. Med Phys.	
	2013;40(11):111903.	
534.	Yang H, Thompson C. Nurses' risk assessment judgements: a confidence calibration	X
	study. J Adv Nurs. 2010;66(12):2751-60.	
535.	Yang H, Thompson C, Hamm RM, Bland M, Foster A. The effect of improving task	Х
	representativeness on capturing nurses' risk assessment judgements: a comparison of	
	written case simulations and physical simulations. BMC Med Inform Decis Mak.	
	2013;13(62):1-11.	
536.	Yeates P, Moreau M, Eva K. Are Examiners' Judgments in OSCE-Style	
	Assessments Influenced by Contrast Effects? Acad Med. 2015;90(7):975-80.	
537.		
	information on the diagnostic decisions of novices. Med Educ. 2011;45(4):407-14.	
538.		
	obstetric, and psychiatric clerkships. Arch Gen Psychiatry. 1967;16(4):399-406.	
a .	that the reference indicates that it was not such from final synthesis as it forward on a health	

^aAn x after the reference indicates that it was removed from final synthesis as it focused on a health profession that was not medical student, resident, or practicing physician.