

BIBLIOGRAPHY

- [1] Samina Abidi, Jafna Cox, S. Sibte Raza Abidi, and Michael Shepherd. "Using OWL ontologies for clinical guidelines based comorbid decision support." In: *Proceedings of the Annual Hawaii International Conference on System Sciences*. 2011, pp. 3030–3038. ISBN: 9780769545257. DOI: [10.1109/HICSS.2012.629](https://doi.org/10.1109/HICSS.2012.629).
- [2] James F. Allen. "Maintaining knowledge about temporal intervals." In: *Communications of the ACM* 26.11 (1983), pp. 832–843. ISSN: 00010782. DOI: [10.1145/182.358434](https://doi.org/10.1145/182.358434).
- [3] Elske Ammenwerth, Petra Schnell-Inderst, Christof Machan, and Uwe Siebert. "The effect of electronic prescribing on medication errors and adverse drug events: a systematic review." In: *Journal of the American Medical Informatics Association* 15.5 (2008), pp. 585–600.
- [4] Peter Lucas Annette ten Teije Silvia Miksch, ed. *Computer-based Medical Guidelines and Protocols: A Primer and Current Trends*. Vol. 139. Technology and Informatics. 2008.
- [5] Luca Anselma, Luca Piovesan, and Paolo Terenziani. "Temporal detection and analysis of guideline interactions." In: *Artificial Intelligence in Medicine* (2017). ISSN: 09333657. DOI: [10.1016/j.artmed.2017.01.001](https://doi.org/10.1016/j.artmed.2017.01.001).
- [6] Lodovico Balducci. "Evidence-based or evidence-biased medicine?" In: *Journal of Medicine and the Person* 11.3 (2013), pp. 99–100. ISSN: 2035-9411. DOI: [10.1007/s12682-013-0161-2](https://doi.org/10.1007/s12682-013-0161-2).
- [7] Juan M. Banda, Tobias Kuhn, Nigam H. Shah, and Michel Dumontier. "Provenance-Centered Dataset of Drug-Drug Interactions." In: *14th International Semantic Web Conference (ISWC)*. Springer International Publishing, 2015, pp. 293–300. DOI: [10.1007/978-3-319-25010-6_18](https://doi.org/10.1007/978-3-319-25010-6_18).
- [8] K Barnett, SW Mercer, M Norbury, and G Watt. "Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study." In: *The Lancet* (2012).

- [9] Colin Batchelor et al. "Scientific Lenses to Support Multiple Views over Linked Chemistry Data." In: Springer International Publishing, 2014, pp. 98–113. DOI: [10.1007/978-3-319-11964-9_7](https://doi.org/10.1007/978-3-319-11964-9_7).
- [10] Monika Becker, Edmund A.M. Neugebauer, and Michaela Eikermann. "Partial updating of clinical practice guidelines often makes more sense than full updating: a systematic review on methods and the development of an updating procedure." In: *Journal of Clinical Epidemiology* 67.1 (2014), pp. 33–45. ISSN: 08954356. DOI: [10.1016/j.jclinepi.2013.06.021](https://doi.org/10.1016/j.jclinepi.2013.06.021).
- [11] M W Beckmann, H Schlieter, P Richter, and S Wesselmann. "Considerations on the Improved Integration of Medical Guidelines into Routine Clinical Practice - a Review and Concept Proposal." In: *Geburtshilfe und Frauenheilkunde* 76.4 (2016), pp. 369–376. ISSN: 0016-5751. DOI: [10.1055/s-0042-102056](https://doi.org/10.1055/s-0042-102056).
- [12] Wouter Beek, Stefan Schlobach, and Frank van Harmelen. "A Contextualised Semantics for owl:sameAs." In: *Proceedings of the 13th International Conference on The Semantic Web. Latest Advances and New Domains - Volume 9678*. Springer-Verlag New York, Inc., 2016, pp. 405–419. ISBN: 978-3-319-34128-6. DOI: [10.1007/978-3-319-34129-3_25](https://doi.org/10.1007/978-3-319-34129-3_25).
- [13] Rodrigo Bonacin, Cédric Pruski, and Marcos Da Silveira. "Architecture and services for formalising and evaluating care actions from computer-interpretable guidelines." In: *IJMEI International Journal of Medical Engineering and Informatics* 5 (2013), pp. 253–268. DOI: <http://dx.doi.org/10.1504/IJMEI.2013.055716>.
- [14] Alessio Bottrighi, Federico Chesani, Paola Mello, Marco Montali, Stefania Montani, and Paolo Terenziani. "Conformance Checking of Executed Clinical Guidelines in Presence of Basic Medical Knowledge." In: *Business Process Management Workshops* (2). 2011, pp. 200–211. DOI: http://dx.doi.org/10.1007/978-3-642-28115-0_20.
- [15] Florian Boudin, Jian-Yun Nie, and Martin Dawes. "Clinical Information Retrieval using Document and PICO Structure." In: *Proceedings of the 21st International Conference on Computational Linguistics and 44th Annual Meeting of the Association for Computational Linguistics*. Association for Computational Linguistics, 2006, pp. 822–830. ISBN: 1932432655.

- [16] Aziz A Boxwala, Mor Peleg, Samson W Tu, Omolola Ogunyemi, Qing T Zeng, Dongwen Wang, Vimla L Patel, Robert A Greenes, and Edward H Shortliffe. "GLIF₃: a representation format for sharable computer-interpretable clinical practice guidelines." In: *Journal of Biomedical Informatics* 37.3 (2004), pp. 147–161. DOI: <http://dx.doi.org/10.1016/j.jbi.2004.04.002>.
- [17] Richard Boyce, Carol Collins, John Horn, and Ira Kalet. "Computing with evidence Part I: A drug-mechanism evidence taxonomy oriented toward confidence assignment." In: *Journal of biomedical informatics* 42.6 (2009), pp. 979–89. ISSN: 1532-0480. DOI: [10.1016/j.jbi.2009.05.001](https://doi.org/10.1016/j.jbi.2009.05.001).
- [18] Evellin C.S. Cardoso, Joao Paulo A. Almeida, and Renata S.S. Guizzardi. "Analysing the relations between strategic and operational aspects of an enterprise: towards an ontology-based approach." In: *International Journal of Organisational Design and Engineering* 2.3 (2012), p. 271. ISSN: 1758-9797. DOI: [10.1504/IJODE.2012.049696](https://doi.org/10.1504/IJODE.2012.049696).
- [19] Mary L Chavez, Melanie A Jordan, and Pedro I Chavez. "Evidence-based drug–herbal interactions." In: *Life sciences* 78.18 (2006), pp. 2146–2157.
- [20] Kei-Hoi Cheung, Eric Prud'hommeaux, Yimin Wang, and Susie Stephens. "Semantic Web for Health Care and Life Sciences: a review of the state of the art." In: *Briefings in bioinformatics* 10 (2009), pp. 111–3. ISSN: 1477-4054. DOI: [10.1093/bib/bbp015](https://doi.org/10.1093/bib/bbp015).
- [21] Joost Dekker, Mariëtte de Rooij, and Marike van der Leeden. "Exercise and comorbidity: the i3-S strategy for developing comorbidity-related adaptations to exercise therapy." In: *Disability and Rehabilitation* (2015), pp. 1–5. ISSN: 0963-8288. DOI: [10.3109/09638288.2015.1066451](https://doi.org/10.3109/09638288.2015.1066451).
- [22] Kathrin Dentler. "Computing Healthcare Quality Indicators Automatically: Secondary Use of Patient Data and Semantic Interoperability." PhD thesis. Amsterdam: VU University Amsterdam, 2014.
- [23] J. Grimley Evans. "Evidence-based and Evidence-biased Medicine." In: *Age and Ageing* 24.6 (1995), pp. 461–463. ISSN: 0002-0729. DOI: [10.1093/ageing/24.6.461](https://doi.org/10.1093/ageing/24.6.461).

- [24] Kenneth D Forbus. "Qualitative modeling." In: *Foundations of Artificial Intelligence* 3 (2008), pp. 361–393.
- [25] John Fox, Alyssa Alabassi, Vivek Patkar, Tony Rose, and Elizabeth Black. "An ontological approach to modelling tasks and goals." In: *Computers in Biology and Medicine* 36.7-8 (2006), pp. 837–856. ISSN: 00104825. DOI: [10.1016/j.combiomed.2005.04.011](https://doi.org/10.1016/j.combiomed.2005.04.011).
- [26] Rick Goud, Arie Hasman, Anne-Margreet Strijbis, and Niels Peek. "A parallel guideline development and formalization strategy to improve the quality of clinical practice guidelines." In: *International journal of medical informatics* 78.8 (2009), pp. 513–520. ISSN: 13865056. DOI: [10.1016/j.ijmedinf.2009.02.010](https://doi.org/10.1016/j.ijmedinf.2009.02.010).
- [27] Audrey Grace, Carolanne Mahony, John O'Donoghue, Tony Heffernan, David Molony, and Thomas Carroll. "A vision for enhancing multimorbid care using clinical decision support systems." In: *Studies in health technology and informatics* 192 (2013), p. 1117. ISSN: 0926-9630.
- [28] J Grosjean, T Merabti, and N Griffon. "Multiterminology cross-lingual model to create the European Health Terminology/Ontology Portal." In: *Proceedings of the 9th International Conference on Terminology and Artificial Intelligence*. France, 2011, pp. 119–122.
- [29] Giancarlo Guizzardi. "Ontological foundations for structural conceptual models." PhD thesis. Enschede: CTIT, Centre for Telematics and Information Technology, 2005. URL: <http://doc.utwente.nl/50826/>.
- [30] Giancarlo Guizzardi and Veruska Zamborlini. "Using a trope-based foundational ontology for bridging different areas of concern in ontology-driven conceptual modeling." In: *Science of Computer Programming* 96 (2014), pp. 417–443. ISSN: 01676423. DOI: [10.1016/j.scico.2014.02.022](https://doi.org/10.1016/j.scico.2014.02.022).
- [31] Giancarlo Guizzardi, Gerd Wagner, Ricardo de Almeida Falbo, Renata S. S. Guizzardi, and João Paulo A. Almeida. "Towards Ontological Foundations for the Conceptual Modeling of Events." In: *Conceptual Modeling, 32th International Conference, ER 2013*. Hong-Kong: Springer Berlin Heidelberg, 2013, pp. 327–341. DOI: [10.1007/978-3-642-41924-9_{_}27](https://doi.org/10.1007/978-3-642-41924-9_{_}27).

- [32] Bruce Guthrie, Boikanyo Makubate, Virginia Hernandez-Santiago, and Tobias Dreischulte. "The rising tide of polypharmacy and drug-drug interactions: population database analysis 1995–2010." En. In: *BMC Medicine* 13.1 (2015), p. 74. ISSN: 1741-7015. DOI: [10.1186/s12916-015-0322-7](https://doi.org/10.1186/s12916-015-0322-7).
- [33] Margaret B Harrison, Ian D Graham, Joan van den Hoek, Elizabeth J Dogherty, Meg E Carley, and Valerie Angus. "Guideline adaptation and implementation planning: a prospective observational study." In: *Implementation science : IS* 8 (2013), p. 49. ISSN: 1748-5908. DOI: [10.1186/1748-5908-8-49](https://doi.org/10.1186/1748-5908-8-49).
- [34] Oktie Hassanzadeh and Renée J. Miller. "Automatic Curation of Clinical Trials Data in LinkedCT." In: Springer International Publishing, 2015, pp. 270–278. DOI: [10.1007/978-3-319-25010-6_16](https://doi.org/10.1007/978-3-319-25010-6_16).
- [35] Rinke Hoekstra. "Ontology representation: Design patterns and ontologies that make sense." PhD. University of Amsterdam, 2009, pp. 1–236. ISBN: 9781607500131. DOI: [10.3233/978-1-60750-013-1-i](https://doi.org/10.3233/978-1-60750-013-1-i).
- [36] Rinke Hoekstra and Joost Breuker. "Polishing diamonds in OWL 2." In: *Lecture Notes in Computer Science (including sub-series Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*. Vol. 5268 LNAI. 2008, pp. 64–73. ISBN: 3540876952. DOI: [10.1007/978-3-540-87696-0-8](https://doi.org/10.1007/978-3-540-87696-0-8).
- [37] Rinke Hoekstra, Anita de Waard, and Richard Vdovjak. "Annotating Evidence Based Clinical Guidelines - A Lightweight Ontology." In: *Proceedings of the 5th International Workshop on Semantic Web Applications and Tools for Life Sciences, Paris, France, November 28-30, 2012*. Vol. 952. CEUR Workshop Proceedings. CEUR-WS.org, 2012.
- [38] Rinke Hoekstra, Sara Magliacane, Laurens Rietveld, Gerben De Vries, Adianto Wibisono, and Stefan Schlobach. "Hubble: Linked data hub for clinical decision support." In: *The Semantic Web: ESWC 2012 Satellite Events*. Springer, 2012, pp. 458–462.
- [39] Ian Horrocks, Oliver Kutz, and Ulrike Sattler. "The Even More Irresistible SROIQ." In: AAAI Press, 2006, pp. 57–67.

- [40] Qing Hu, Zhisheng Huang, Annette ten Teije, and Frank van Harmelen. "Detecting New Evidence for Evidence-based Guidelines Using a Semantic Distance Method." In: *Proceedings of the 15th Conference on Artificial Intelligence in Medicine (AIME 2015)*. 2015.
- [41] Qing Hu, Zhisheng Huang, Annette ten Teije, Frank van Harmelen, M. Scott Marshall, and Andre Dekker. "A Topic-centric Approach to Detecting New Evidences for Evidence-based Medical Guidelines." In: *Proceedings of HEALTHINF2016*. Rome, 2016.
- [42] Zhisheng Huang, Annette ten Teije, and Frank van Harmelen. "SemanticCT: A Semantically-Enabled System for Clinical Trials." In: Springer International Publishing, 2013, pp. 11–25. DOI: [10.1007/978-3-319-03916-9_2](https://doi.org/10.1007/978-3-319-03916-9_2).
- [43] Zhisheng Huang, Annette ten Teije, Frank van Harmelen, and Salah Ait-Mokhtar. "Semantic Representation of Evidence-based Clinical Guidelines." In: *6th International Workshop on Knowledge Representation for Health Care (KR4HC2014)*. Vol. 8903. LNCS. 2014.
- [44] Zhisheng Huang, Qing Hu, Annette Teije, and Frank Van Harmelen. "Identifying Evidence Quality for Updating Evidence-based Medical Guidelines." In: *Knowledge Representation for Health Care, AIME 2015 International Joint Workshop, KR4HC/ProHealth 2015, Lecture Notes 9485*. Ed. by D. Riaño, R. Lenz, S. Miksch, M. Peleg, M. Reichert, and A. (Eds.) ten Teije. Springer, 2015, pp. 51–64. DOI: [ISBN978-3-319-26585-8](https://doi.org/ISBN978-3-319-26585-8).
- [45] A. Iruetaguena, J.J. Garcia Adeva, J.M. Pikatza, U. Segundo, D. Buenestado, and R. Barrena. "Automatic retrieval of current evidence to support update of bibliography in clinical guidelines." In: *Expert System with Applications* 40 (2013), pp. 2081–2091.
- [46] David Isern and Antonio Moreno. "Computer-based execution of clinical guidelines: a review." In: *International journal of medical informatics* 77.12 (2008), pp. 787–808. ISSN: 1872-8243. DOI: [10.1016/j.ijmedinf.2008.05.010](https://doi.org/10.1016/j.ijmedinf.2008.05.010).
- [47] David Isern, David Sánchez, and Antonio Moreno. "Ontology-driven execution of clinical guidelines." In: *Computer Methods and Programs in Biomedicine* 107.2 (2012), pp. 122–139. ISSN: 01692607. DOI: [10.1016/j.cmpb.2011.06.006](https://doi.org/10.1016/j.cmpb.2011.06.006).

- [48] B Jafarpour. "Ontology Merging using Semantically-defined Merge Criteria and OWL Reasoning Services: Towards Execution-time Merging of Multiple Clinical Workflows to Handle Comorbidity." PhD thesis. Ph.D. thesis, Dalhousie University, 2013.
- [49] Borna Jafarpour and Syed Sibte Raza Abidi. "Merging Disease-Specific Clinical Guidelines to Handle Comorbidities in a Clinical Decision Support Setting." In: *Artificial Intelligence in Medicine*. Ed. by Niels Peek, Roque Marín Morales, and Mor Peleg. Vol. 7885. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2013, pp. 28–32. ISBN: 978-3-642-38325-0. DOI: [10.1007/978-3-642-38326-7_5](https://doi.org/10.1007/978-3-642-38326-7_5).
- [50] Anja Jentzsch, Bo Andersson, Oktie Hassanzadeh, Susie Stephens, and Christian Bizer. "Enabling tailored therapeutics with linked data." In: *Workshop on Linked Data on the Web (LDOW)*. Spain, 2009. DOI: [10.1111/j.1468-005X.2008.00217.x](https://doi.org/10.1111/j.1468-005X.2008.00217.x).
- [51] Simon Jupp et al. "The EBI RDF platform: Linked open data for the life sciences." In: *Bioinformatics* 30.9 (2014), pp. 1338–1339. ISSN: 14602059. DOI: [10.1093/bioinformatics/btt765](https://doi.org/10.1093/bioinformatics/btt765).
- [52] AS Kesselheim, K Cresswell, and S Phansalkar. "Clinical decision support systems could be modified to reduce 'alert fatigue' while still minimizing the risk of litigation." In: *Health Affairs* (2011). URL: <http://content.healthaffairs.org/content/30/12/2310.short>.
- [53] Michael Kuhn, Ivica Letunic, Lars Juhl Jensen, and Peer Bork. "The SIDER database of drugs and side effects." In: *Nucleic acids research* 44.D1 (2016), pp. D1075–9. ISSN: 1362-4962. DOI: [10.1093/nar/gkv1075](https://doi.org/10.1093/nar/gkv1075).
- [54] Torbjörn Lager and Jan Wielemaker. "Penguins: Web Logic Programming Made Easy." In: *TPLP* 14.4-5 (2014), pp. 539–552. DOI: [10.1017/S1471068414000192](https://doi.org/10.1017/S1471068414000192).
- [55] Agnieszka Latoszek-Berendsen, Jan Talmon, Paul de Clercq, and Arie Hasman. "With good intentions." In: *International Journal of Medical Informatics* 76 (2007). ISSN: 13865056. DOI: [10.1016/j.ijmedinf.2007.05.012](https://doi.org/10.1016/j.ijmedinf.2007.05.012).
- [56] Vivian Law et al. "DrugBank 4.0: Shedding new light on drug metabolism." In: *Nucleic Acids Research* 42.D1 (2014). D1091–7, PubMed ID: 24203711, pp. 1091–1097. ISSN: 03051048. DOI: [10.1093/nar/gkt1068](https://doi.org/10.1093/nar/gkt1068).

- [57] Kathleen N. Lohr. "Rating the strength of scientific evidence: relevance for quality improvement programs." In: *International Journal for Quality in Health Care* 16.1 (2003), pp. 9–18. DOI: [10.1093/intqhc/mzh005](https://doi.org/10.1093/intqhc/mzh005).
- [58] Joan Albert López-Vallverdú, David Riaño, and Antoni Collado. "Rule-based combination of comorbid treatments for chronic diseases applied to hypertension, diabetes mellitus and heart failure." In: *LNCS*. Vol. 7738 LNAI. 2013, pp. 30–41. ISBN: 9783642364372. DOI: [10.1007/978-3-642-36438-9_2](https://doi.org/10.1007/978-3-642-36438-9_2).
- [59] Jill P. Mesirov. "Accessible Reproducible Research." In: *Science* 327.5964 (2010), pp. 415–416. ISSN: 0036-8075. DOI: [10.1126/science.1179653](https://doi.org/10.1126/science.1179653).
- [60] Silvia Miksch, Yuval Shahar, and Peter Johnson. "Asbru: a task-specific, intention-based, and time-oriented language for representing skeletal plans." In: *7th Workshop on Knowledge Engineering: Methods & Languages*. 1997, pp. 1–25.
- [61] Barend Mons et al. "The value of data." In: *Nature Genetics* 43.4 (Feb. 2011), pp. 281–283. DOI: [10.1038/ng0411-281](https://doi.org/10.1038/ng0411-281).
- [62] Christiane Muth, Hanna Kirchner, Marjan van den Akker, Martin Scherer, and Paul Glasziou. "Current guidelines poorly address multimorbidity: pilot of the interaction matrix method." In: *Journal of clinical epidemiology* 67.11 (2014), pp. 1242–1250. ISSN: 1878-5921. DOI: [10.1016/j.jclinepi.2014.07.004](https://doi.org/10.1016/j.jclinepi.2014.07.004).
- [63] NABON. *Guideline for the Treatment of Breast Carcinoma 2004*. Tech. rep. Nationaal Borstkanker Overleg Nederland (NABON), 2004.
- [64] NABON. *Breast Cancer, Dutch Guideline, version 2.0*. Tech. rep. Integraal kankercentrum Netherland, Nationaal Borstkanker Overleg Nederland, 2012.
- [65] Maria Elisa Cabanelas Pazos and Airton Stein. "Guidelines Adaptation and Implementation in Developing Countries." In: *Newsletter of the International Society for Evidence-Based Health Care*. 2014, p. 14.
- [66] Mor Peleg. "Computer-interpretable clinical guidelines: a methodological review." In: *Journal of biomedical informatics* 46.4 (Aug. 2013), pp. 744–63. ISSN: 1532-0480. DOI: [10.1016/j.jbi.2013.06.009](https://doi.org/10.1016/j.jbi.2013.06.009).

- [67] Mor Peleg, Samson W. Tu, Giorgio Leonardi, Silvana Quaglini, Paola Russo, Giovanni Palladini, and Giampaolo Merlini. "Reasoning with effects of clinical guideline actions using OWL: AL amyloidosis as a case study." In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*. Vol. 6924 LNAI. 2012, pp. 65–79. ISBN: 9783642276965. DOI: [10.1007/978-3-642-27697-2_5](https://doi.org/10.1007/978-3-642-27697-2_5).
- [68] Héctor Pérez-Urbina, Boris Motik, and Ian Horrocks. "Tractable query answering and rewriting under description logic constraints." In: *Journal of Applied Logic* 8.2 (2010), pp. 186–209. ISSN: 15708683. DOI: [10.1016/j.jal.2009.09.004](https://doi.org/10.1016/j.jal.2009.09.004).
- [69] Héctor Pérez-urbina, Héctor Pérez-urbina, Edgar Rodríguez-díaz, Michael Grove, George Konstantinidis, and Evren Sirin. "Evaluation of query rewriting approaches for OWL 2." In: *in Proc. of the Joint Workshop on Scalable and High-Performance Semantic Web Systems (SSWS+HPCSW 2012), Vol. 943 CEUR-WS*. 2012, pp. 32–44.
- [70] Luca Piovesan, Luca Anselma, and Paolo Terenziani. "Temporal Detection of Guideline Interactions." In: *Proceedings of the 8th International Conference on Health Informatics (HEALTH-INF2015)*. Lisbon, Portugal, 2015.
- [71] Luca Piovesan, Gianpaolo Molino, and Paolo Terenziani. "An ontological knowledge and multiple abstraction level decision support system in healthcare." In: *Decision Analytics* 1.1 (May 2014), p. 8. ISSN: 2193-8636. DOI: [10.1186/2193-8636-1-8](https://doi.org/10.1186/2193-8636-1-8).
- [72] Cédric Pruski, Rodrigo Bonacin, and Marcos Da Silveira. "Towards the formalization of guidelines care actions using patterns and semantic web technologies." In: *Conf. Artificial Intelligence in Medicine*. Springer. 2011, pp. 302–306.
- [73] Roelof Reinders, Annette ten Teije, and Zhisheng Huang. "Finding Evidence for Updates in Medical Guideline." In: *Proceedings of HEALTHINF2015*. Lisbon, 2015.
- [74] David Riaño. "The SDA Model: A Set Theory Approach." In: *Twentieth IEEE International Symposium on Computer-Based Medical Systems (CBMS'07)*. IEEE, 2007, pp. 563–568. ISBN: 0-7695-2905-4. DOI: [10.1109/CBMS.2007.110](https://doi.org/10.1109/CBMS.2007.110).

- [75] David Riaño and Antoni Collado. "Model-Based Combination of Treatments for the Management of Chronic Comorbid Patients." In: *Artificial Intelligence in Medicine*. Ed. by Niels Peek, Roque Marín Morales, and Mor Peleg. Vol. 7885. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2013, pp. 11–16. ISBN: 978-3-642-38325-0. DOI: [10.1007/978-3-642-38326-7_2](https://doi.org/10.1007/978-3-642-38326-7_2).
- [76] Kitty Rosenbrand, Joyce van Croonenborg, and Jolanda Wittenberg. "Guideline Development." In: *Computerbased Medical Guidelines and Protocols A Primer and Current Trends volume 139 of Studies in Health Technology and Informatics*. Ed. by A Ten Teije, S Miksch, and P J F Lucas. IOS Press, 2008, pp. 3–22. DOI: [10.3233/978-1-58603-873-1-3](https://doi.org/10.3233/978-1-58603-873-1-3).
- [77] Alan Ruttenberg et al. "Advancing translational research with the Semantic Web." In: *BMC bioinformatics* 8 Suppl 3 (2007), S2. ISSN: 14712105. DOI: [10.1186/1471-2105-8-S3-S2](https://doi.org/10.1186/1471-2105-8-S3-S2).
- [78] Scottish Intercollegiate Guidelines Network (SIGN). In: *British guideline on the management of asthma. A clinical national guideline*. Ed. by Scottish Intercollegiate Guidelines Network (SIGN). British Thoracic Society, 2005.
- [79] Inmaculada Sánchez-Garzón, Juan Fdez-Olivares, Eva Onaindía, Gonzalo Milla, Jaume Jordán, and Pablo Castejón. "A Multi-agent Planning Approach for the Generation of Personalized Treatment Plans of Comorbid Patients." In: *Artificial Intelligence in Medicine*. Ed. by Niels Peek, Roque Marín Morales, and Mor Peleg. Vol. 7885. Lecture Notes in Computer Science. Springer Berlin Heidelberg, 2013, pp. 23–27. ISBN: 978-3-642-38325-0. DOI: [10.1007/978-3-642-38326-7_4](https://doi.org/10.1007/978-3-642-38326-7_4).
- [80] Mohammad Shafahi, Hayo Bart, and Hamideh Afsarmanesh. "BioMed Xplorer - Exploring (Bio)Medical Knowledge using Linked Data." In: *Proceedings of the 9th International Joint Conference on Biomedical Engineering Systems and Technologies*. SCITEPRESS - Science, and Technology Publications, 2016, pp. 51–62. ISBN: 978-989-758-170-0. DOI: [10.5220/0005700300510062](https://doi.org/10.5220/0005700300510062).
- [81] Paul Shekelle, Steven Woolf, Jeremy M Grimshaw, Holger J Schunemann, and Martin P Eccles. "Developing clinical practice guidelines: reviewing, reporting, and publishing guidelines; updating guidelines; and the emerging issues of enhancing guideline implementability and accounting for comorbid

- conditions in guideline development." In: *Implementation science : IS* 7.1 (2012), p. 62. ISSN: 1748-5908. DOI: [10.1186/1748-5908-7-62](https://doi.org/10.1186/1748-5908-7-62).
- [82] Richard N Shiffman, George Michel, Richard M Rosenfeld, and Caryn Davidson. "Building better guidelines with BRIDGE-Wiz: development and evaluation of a software assistant to promote clarity, transparency, and implementability." In: *Journal of the American Medical Informatics Association* 19.1 (2012), pp. 94-101. ISSN: 1067-5027. DOI: [10.1136/amiajnl-2011-000172](https://doi.org/10.1136/amiajnl-2011-000172).
- [83] Dean F. Sittig, Adam Wright, Jerome A. Osheroff, Blackford Middleton, Jonathan M. Teich, Joan S. Ash, Emily Campbell, and David W. Bates. "Grand challenges in clinical decision support." In: *Journal of Biomedical Informatics* 41.2 (2008), pp. 387-392. ISSN: 15320464. DOI: [10.1016/j.jbi.2007.09.003](https://doi.org/10.1016/j.jbi.2007.09.003).
- [84] Airton Stein, Helena Cramer, Maria-Elisa Pazos, Pedro Chrispim, Suzana Alves da Silva, and Eddy Lang. "The Guideline Development Tool for Guideline Adaptation." In: *Newsletter of the International Society for Evidence-Based Health Care*. 2014, p. 13.
- [85] David R. Sutton and John Fox. "The Syntax and Semantics of the PROforma Guideline Modeling Language." In: *Journal of the American Medical Informatics Association* 10 (2003), pp. 433-443. ISSN: 1067-5027. DOI: [10.1197/jamia.M1264](https://doi.org/10.1197/jamia.M1264).
- [86] Annette ten Teije et al. "Improving medical protocols by formal methods." In: *AI in Medicine* 36.3 (2006), pp. 193-209.
- [87] Mark Textor. "States of Affairs." In: *The Stanford Encyclopedia of Philosophy*. Ed. by Edward Zalta. Summer 2011. 2012. URL: <http://plato.stanford.edu/archives/sum2012/entries/states-of-affairs/>.
- [88] Noémie Travier and et. al. "Effects of an 18-week exercise programme started early during breast cancer treatment: a randomised controlled trial." In: *BMC Medicine* 13.1 (2015), p. 121. ISSN: 1741-7015. DOI: [10.1186/s12916-015-0362-z](https://doi.org/10.1186/s12916-015-0362-z).
- [89] Katrin Uhlig et al. *Recommendations for kidney disease guideline updating: A report by the KDIGO Methods Committee*. 2016. DOI: [10.1016/j.kint.2015.11.030](https://doi.org/10.1016/j.kint.2015.11.030).

- [90] A A Uijen and E H van de Lisdonk. *Multimorbidity in primary care: prevalence and trend over the last 20 years*. 2008. DOI: [10.1080/13814780802436093](https://doi.org/10.1080/13814780802436093).
- [91] Per Olav Vandvik, Linn Brandt, Pablo Alonso-Coello, Shaun Treweek, Elie A. Akl, Annette Kristiansen, Anja Fog-Heen, Thomas Agoritsas, Victor M. Montori, and Gordon Guyatt. *Creating clinical practice guidelines we can trust, use, and share a new era is imminent*. 2013. DOI: [10.1378/chest.13-0746](https://doi.org/10.1378/chest.13-0746).
- [92] Robin W M Vernooij, Andrea Juliana Sanabria, Ivan Sola, Pablo Alonso-Coello, and Laura Martinez Garcia. "Guidance for updating clinical practice guidelines: a systematic review of methodological handbooks." In: *Implementation science : IS* 9.1 (2014), p. 3. ISSN: 1748-5908. DOI: [10.1186/1748-5908-9-3](https://doi.org/10.1186/1748-5908-9-3).
- [93] A. de Waard, S. Buckingham Shum, A. Carusi, J. Park, M. Samwald, and Á. Sándor. "Hypotheses, evidence and relationships: The HypER approach for representing scientific knowledge claims." In: *Proceedings of the 8th ISWC, Workshop on Semantic Web Applications in Scientific Discourse*. Berlin: Springer, 2009.
- [94] Hanna van Waart et al. "Effect of Low-Intensity Physical Activity and Moderate- to High-Intensity Physical Exercise During Adjuvant Chemotherapy on Physical Fitness, Fatigue, and Chemotherapy Completion Rates: Results of the PACES Randomized Clinical Trial." In: *Journal of clinical oncology : official journal of the American Society of Clinical Oncology* 33.17 (2015), pp. 1918–27. ISSN: 1527-7755. DOI: [10.1200/JCO.2014.59.1081](https://doi.org/10.1200/JCO.2014.59.1081).
- [95] Webpage. URL: <http://bioportal.bioontology.org> (visited on 10/2014).
- [96] Webpage. URL: <http://clinicaltrials.gov> (visited on 10/2014).
- [97] Webpage. URL: <http://download.bio2rdf.org/release/3/release.html> (visited on 10/2014).
- [98] Webpage. URL: <https://github.com/bio2rdf/bio2rdf-scripts/wiki> (visited on 10/2014).
- [99] Webpage. URL: <http://www.drugbank.ca> (visited on 10/2014).
- [100] Webpage. URL: <http://sideeffects.embl.de> (visited on 10/2014).
- [101] Webpage. URL: <http://linkedct.org> (visited on 10/2014).

- [102] Webpage. URL: <http://wifo5-03.informatik.uni-mannheim.de/diseasome> (visited on 10/2014).
- [103] Jan Wielemaker, Torbjörn Lager, and Fabrizio Riguzzi. "SWISH: SWI-Prolog for Sharing." In: *CoRR abs/1511.00915* (2015). URL: <http://arxiv.org/abs/1511.00915>.
- [104] Jan Wielemaker, Wouter Beek, Michiel Hildebrand, and Jacco van Ossenbruggen. "ClioPatria: A SWI-Prolog infrastructure for the Semantic Web." In: *Semantic Web 7.5* (2015), pp. 529–541. DOI: [10.3233/SW-150191](https://doi.org/10.3233/SW-150191).
- [105] Szymon Wilk and Martin Michalowski. "Using First-Order Logic to Represent Clinical Practice Guidelines and to Mitigate Adverse Interactions." In: *Knowledge Representation for Health-Care (KR4HC). LNCS, vol. 8903*. Berlin Heidelberg: Springer, 2014.
- [106] Szymon Wilk, Martin Michalowski, Wojtek Michalowski, Marisela Mainegra Hing, and Ken Farion. "Reconciling pairs of concurrently used clinical practice guidelines using Constraint Logic Programming." In: *AMIA ... Annual Symposium proceedings / AMIA Symposium. AMIA Symposium*. Vol. 2011. 2011, pp. 944–53.
- [107] Szymon Wilk, Wojtek Michalowski, Martin Michalowski, Ken Farion, Marisela Mainegra Hing, and Subhra Mohapatra. "Mitigation of adverse interactions in pairs of clinical practice guidelines using constraint logic programming." In: *Journal of biomedical informatics* 46.2 (2013), pp. 341–53. ISSN: 1532-0480. DOI: [10.1016/j.jbi.2013.01.002](https://doi.org/10.1016/j.jbi.2013.01.002).
- [108] D. S. Wishart, C. Knox, A.C. Guo, S. Shrivastava, M. Hassanali, P. Stothard, Z. Chang, and J. Woolsey. "DrugBank: a comprehensive resource for in silico drug discovery and exploration." In: *Nucleic Acids Research* 34.90001 (2006), pp. D668–D672. ISSN: 0305-1048. DOI: [10.1093/nar/gkj067](https://doi.org/10.1093/nar/gkj067).
- [109] Wen Yao and Akhil Kumar. "CONFlexFlow: Integrating Flexible clinical pathways into clinical decision support systems using context and rules." In: *Decision Support Systems* 55.2 (2013), pp. 499–515. ISSN: 01679236. DOI: [10.1016/j.dss.2012.10.008](https://doi.org/10.1016/j.dss.2012.10.008).

- [110] Veruska Zamborlini, Rinke Hoekstra, Marcos da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. "A Conceptual Model for Detecting Interactions among Medical Recommendations in Clinical Guidelines." In: *Knowledge Engineering and Knowledge Management (EKAW)*. LNCS, vol. 8876. Lecture Notes in Computer Science. Springer, 2014, pp. 591–606. DOI: [10.1007/978-3-319-13704-9_44](https://doi.org/10.1007/978-3-319-13704-9_44).
- [111] Veruska Zamborlini, Marcos da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. "Towards a Conceptual Model for Enhancing Reasoning about Clinical Guidelines: A case-study on Comorbidity." In: *Knowledge Representation for Health-Care (KR4HC)*. LNCS, vol. 8903. Lecture Notes in Computer Science. Vienna, Austria: Springer International Publishing, 2014, pp. 29–44. ISBN: ISBN 978-3-319-13280-8. DOI: [10.1007/978-3-319-13281-5_3](https://doi.org/10.1007/978-3-319-13281-5_3).
- [112] Veruska Zamborlini, Marcos da Silveira, Cedric Pruski, Annette ten Teije, and Frank van Harmelen. "Analyzing Recommendations Interactions in Clinical Guidelines: Impact of action type hierarchies and causation beliefs." In: *AI in Medicine {AIME}*. 2015, pp. 317–326. DOI: [10.1007/978-3-319-19551-3_{_}40](https://doi.org/10.1007/978-3-319-19551-3_{_}40).
- [113] Veruska Zamborlini, Rinke Hoekstra, Marcos da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. "Generalizing the Detection of Internal and External Interactions in Clinical Guidelines." In: *Proc. of the 9th International Conference on Health Informatics (HEALTHINF)*. Vol. 5. Rome, Italy, 2016, pp. 105–116. ISBN: 978-989-758-170-0. DOI: [10.5220/0005704101050116](https://doi.org/10.5220/0005704101050116).
- [114] Veruska Zamborlini, Rinke Hoekstra, Marcos da Silveira, Cedric Pruski, Annette ten Teije, and Frank van Harmelen. "Inferring recommendation interactions in clinical guidelines." In: *Semantic Web 7.4* (2016), pp. 421–446. ISSN: 22104968. DOI: [10.3233/SW-150212](https://doi.org/10.3233/SW-150212).
- [115] Veruska Zamborlini, Qing Hu, Zhisheng Huang, Marcos da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. "Knowledge-driven Paper Retrieval to support updating of Clinical Guidelines: A use case on PubMed." In: *Knowledge Representation for Health-Care (KR4HC)*. Munich, Germany, 2016, pp. 57–70.

- [116] Veruska Zamborlini, Jan Wielemaker, Marcos Da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. “SWISH for Prototyping Clinical Guideline Interactions Theory.” In: *Proceedings of the 9th International Conference Semantic Web Applications and Tools for Life Sciences*. Amsterdam, The Netherlands, 2016. URL: <http://ceur-ws.org/Vol-1795/paper13.pdf>.
- [117] Veruska Zamborlini, Marcos da Silveira, Cedric Pruski, Annette ten Teije, Edwin Geleijn, Marike van der Leeden, Martijn Stuiver, and Frank van Harmelen. “Analyzing Interactions on Combining Multiple Clinical Guidelines.” In: *Artificial Intelligence in Medicine* (2017). DOI: [doi:10.1016/j.artmed.2017.03.012](https://doi.org/10.1016/j.artmed.2017.03.012).
- [118] Veruska Zamborlini, Rinke Hoekstra, Marcos da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. “Generalizing the Detection of Clinical Guideline Interactions enhanced with LOD.” In: *Communications in Computer and Information Science (Print)*. Springer, 2017. DOI: [10.1007/978-3-319-54717-6_20](https://doi.org/10.1007/978-3-319-54717-6_20).
- [119] Veruska Zamborlini, Qing Hu, Zhisheng Huang, Marcos da Silveira, Cédric Pruski, Annette ten Teije, and Frank van Harmelen. “Knowledge-driven Paper Retrieval to support updating of Clinical Guidelines: A use case on PubMed.” In: *Knowledge Representation for Health-Care (KR4HC)*. LNAI, vol. 10096. Lecture Notes in Artificial Intelligence. Springer International Publishing, 2017, pp. 71–89. DOI: [10.1007/978-3-319-55014-5_5](https://doi.org/10.1007/978-3-319-55014-5_5).
- [120] Xi-E Zhen and et. al. “Preparation and Characterization of a Novel Aspirin Derivative with Anti-Thrombotic and Gastric Mucosal Protection Properties.” In: *PLoS ONE* 9.6 (2014). Ed. by Kamyar Afarinkia, e98513. ISSN: 1932-6203. DOI: [10.1371/journal.pone.0098513](https://doi.org/10.1371/journal.pone.0098513).
- [121] Eya Znaidi, Lynda Tamine, and Chiraz Latiri. “Answering PICO clinical questions: A semantic graph-based approach.” In: *Lecture Notes in Computer Science*. Vol. 9105. Springer International Publishing, 2015, pp. 232–237. ISBN: 9783319195506. DOI: [10.1007/978-3-319-19551-3_30](https://doi.org/10.1007/978-3-319-19551-3_30).

SUMMARY

Enormous efforts are being invested in producing clinical knowledge and making it available in practice via the clinical guidelines (CG). However, the increasing amount of knowledge and its complexity make it difficult to efficiently apply it to the benefit of the patient. The research question that arises is: which clinical knowledge is needed to support clinical guideline (CG) tasks while fostering knowledge reuse across them?

We propose a model called TMR (Transition-based Medical Recommendation) that has as core elements actions and transitions, where the actions can be both believed to cause a transition with some frequency and be recommended to be pursued or avoided for that reason. The applicability of the TMR is assessed for two GC-tasks: multimorbidity analysis and literature search. The multimorbidity analysis is necessary to support the treatment of patients that suffer from more than one disease at the same time. In this case, the medical best-practices, mostly established for addressing a single disease at a time, can interact in several ways, e.g. contradicting or repeating treatments. The more diseases involved, the more difficult it gets to identify all possible interactions. As a secondary task, literature search is necessary to gather the publications that serve as scientific evidence for the recommended actions to be performed or avoided. As new evidence is produced daily on a large scale, literature search is often necessary to keep the clinical guidelines up-to-date. Those tasks as well as other CG-tasks are called knowledge intensive tasks as they require large amounts of information to be processed.

By relying on the TMR model we provide (i) a fixed number of generic rules for detecting several types of interactions among several recommendations; (ii) generic reuse of medical data from heterogeneous medical datasets; and (iii) a flexible method to compose a search-query for medical literature that takes into account the semantic role of the medical terms and possible alternative descriptions. We have successfully applied this approach to case studies taken from the medical informatics literature as well as a case study developed in cooperation with healthcare-professionals. The case studies are (i) combining three (parts of) guidelines for Osteoarthritis, Diabetes and Hypertension; (ii) combining (parts of) guidelines for exercise ther-

apy for Breast Cancer Patients combined with Osteoarthritis, Hypertension and Congestive Heart Failure; and finally (iii) searching for literature to update the Dutch Breast Cancer Guideline of 2004.

This work is a step in the direction of investigating the knowledge underlying CGs that is necessary to address several tasks. The proposed approach is designed to be both task- and technology-independent, though the evaluation is performed through specific CG-tasks and technology. The Semantic Web provide a suitable environment for the implementation by allowing the reuse of large datasets as Linked Open Data, besides the provision of reusable knowledge. The evaluation for multimorbidity analysis and literature search show relevant contributions with respect to the state of the art.

SAMENVATTING

Enorme inspanningen worden geïnvesteerd in het produceren van klinische kennis en het beschikbaar stellen in de klinische praktijk. Echter, de uitbreiding van kennis en de groei in complexiteit maken het moeilijk om efficiënt toe te passen ten goede van de patiënt. De onderzoeksvraag die daaruit voortvloeit is: welke klinische kennis is nodig om taken betreffende klinische richtlijnen (CG - Clinical Guideline) te steunen en tegelijkertijd het bevorderen van hergebruik van kennis tussen deze taken?

We stellen voor een model te gebruiken die we TMR noemen (Transition-based Medical Recommendation). De kernelementen van dit model zijn acties en overgangen, waarvan wordt vermoed dat de acties een overgang veroorzaken met een bepaalde frequentie. Deze taken kunnen afhankelijk van het vermoeden vervolgens worden nagestreefd of vermeden om die reden. De toepasbaarheid van het TMR model wordt beoordeeld voor twee CG-taken: multimorbiditeit analyse en literatuur zoekopdrachten. De multimorbiditeit analyse is noodzakelijk om te helpen bij de behandeling van patiënten die lijden aan meerdere ziektes. Hierdoor kan gekeken worden naar de interactie tussen de medische best practices, die voornamelijk bestaan voor maar een ziekte. De interactie kan bijvoorbeeld behandelingen tegenspreken of behandelingen herhalen. Hoe meer ziektes betrokken, hoe meer het wordt moeilijk om alle mogelijke interacties te identificeren. Verder is het noodzakelijk om literatuur zoekopdrachten te kunnen doen voor het verzamelen van de publicaties die dienen als wetenschappelijk bewijs voor de aanbevolen acties om deze uit te voeren of te vermijden. Aangezien er dagelijks op grote schaal nieuw bewijs geleverd wordt, zijn literatuur zoekopdrachten vaak noodzakelijk om de klinische richtlijnen up-to-date te houden. Dit soort CG-taken worden kennis-intensieve taken genoemd omdat ze veel informatie nodig hebben om grote hoeveelheden informatie te verwerken.

Door te vertrouwen op het TMR model bieden we (i) een vast aantal algemene regels voor het opsporen van verschillende soorten interacties tussen meerdere aanbevelingen; (ii) algemeen hergebruik van medische gegevens uit heterogene medische datasets; en (iii) een flexibele methode om een query te maken voor medische literatuur die

rekening houdt met de semantische rol van medische termen en mogelijk alternatieve beschrijvingen. We hebben deze benadering met succes toegepast op case studies uit de literatuur van Medische Informatiekunde en op een case study ontwikkeld in samenwerking met de gezondheidszorg professionals: (i) het combineren van drie (delen van) richtlijnen voor artrose, diabetes en hypertensie; (ii) (delen van) richtlijnen voor oefentherapie bij borstkankerpatiënten met artrose, hypertensie en chronisch hartfalen; en tot slot (iii) het zoeken naar literatuur voor het bijwerken van de Nederlandse borstkanker richtlijn van 2004.

We concluderen dat dit onderzoek een stap in de richting van het onderzoek naar de onderliggende CG's die nodig zijn om verschillende taken aan te pakken. De voorgestelde aanpak is ontworpen om zowel taak- als technologie-onafhankelijk te zijn, hoewel de evaluatie wordt uitgevoerd door middel van specifieke CG-taken en technologie. Het Semantisc Web verschaft een geschikte omgeving voor de implementatie door het toestaan van hergebruik van grote datasets zoals Linked Open Data, naast het verstrekken van herbruikbare kennis. De evaluatie van multimorbiditeit analyse en literatuur zoekopdrachten verschaffen relevante bijdragen aan de huidige kennis in dit onderzoeksveld.

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- 43 Marc Bron (UVA), Exploration and Contextualization through Interaction and Concepts

2014

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- 02 Fiona Tulyano (RUN), Combining System Dynamics with a Domain Modeling Method
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- 04 Hanna Jochmann-Mannak (UT), Websites for children: search strategies and interface design - Three studies on children's search performance and evaluation
- 05 Jurriaan van Reijssen (UU), Knowledge Perspectives on Advancing Dynamic Capability
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- 07 Arya Adriansyah (TUE), Aligning Observed and Modeled Behavior
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- 09 Philip Jackson (UvT), Toward Human-Level Artificial Intelligence: Representation and Computation of Meaning in Natural Language
- 10 Ivan Salvador Razo Zapata (VU), Service Value Networks
- 11 Janneke van der Zwaan (TUD), An Empathic Virtual Buddy for Social Support
- 12 Willem van Willigen (VU), Look Ma, No Hands: Aspects of Autonomous Vehicle Control
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- 15 Natalya Mogles (VU), Agent-Based Analysis and Support of Human Functioning in Complex Socio-Technical Systems: Applications in Safety and Healthcare
- 16 Krystyna Milian (VU), Supporting trial recruitment and design by automatically interpreting eligibility criteria
- 17 Kathrin Dentler (VU), Computing healthcare quality indicators automatically: Secondary Use of Patient Data and Semantic Interoperability
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- 24 Davide Ceolin (VU), Trusting Semi-structured Web Data
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36 Joos Buijs (TUE), Flexible Evolutionary Algorithms for Mining
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37 Maral Dadvar (UT), Experts and Machines United Against Cyber-
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40 Walter Omona (RUN), A Framework for Knowledge Management
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41 Frederic Hogenboom (EUR), Automated Detection of Financial
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44 Paulien Meesters (UvT), Intelligent Blauw. Met als ondertitel:
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47 Shangsong Liang (UVA), Fusion and Diversification in Information
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2015

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- 50 Yan Wang (UVT), The Bridge of Dreams: Towards a Method for Operational Performance Alignment in IT-enabled Service Supply Chains

2017

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- 17 Daniel Dimov (UL), Crowdsourced Online Dispute Resolution
- 18 Ridho Reinanda (UVA), Entity Associations for Search
- 19 Jeroen Vuurens (UT), Proximity of Terms, Texts and Semantic Vectors in Information Retrieval
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