
BIBLIOGRAPHY

- [1] Rongshou Zheng, Shaoming Wang, Siwei Zhang, Hongmei Zeng, Ru Chen, Kexin Sun, Li Li, Freddie Bray, and Wenqiang Wei. Global, regional, and national lifetime probabilities of developing cancer in 2020. *Science Bulletin*, 2023.
- [2] The Global Cancer Observatory. 360 Indonesia Fact Sheets. <https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-fact-sheets.pdf>, 2021. Online; accessed January 31, 2023.
- [3] Sumadi Lukman Anwar, Widya Surya Avanti, Andreas Cahyo Nugroho, Lina Chori-dah, Ery Kus Dwianingsih, Wirisma Arif Harahap, Teguh Aryandono, and Wahyu Wulaningsih. Risk factors of distant metastasis after surgery among different breast cancer subtypes: a hospital-based study in indonesia. *World Journal of Surgical On-cology*, 18:1–16, 2020.
- [4] The National Institute for Clinical Excellence. Improving Outcomes in Breast Cancer. <https://www.nice.org.uk/guidance/csg1/resources/improving-outcomes-in-breast-cancer-update-pdf-773371117>, 2002. On-line; accessed May 30, 2023.
- [5] Javed Iqbal, Banzeer Ahsan Abbasi, Riaz Ahmad, Tariq Mahmood, Sobia Kanwal, Barkat Ali, Ali Talha Khalil, Sayed Afzal Shah, Muhammad Maqsood Alam, and Hussain Badshah. Ursolic acid a promising candidate in the therapeutics of breast cancer: Current status and future implications. *Biomedicine & Pharmacotherapy*, 108:752–756, 2018.
- [6] Shuyue Zheng, Lun Li, Ming Chen, Benlong Yang, Jiajian Chen, Guangyu Liu, Zhimin Shao, and Jiong Wu. Benefits of neoadjuvant therapy compared with ad-juvant chemotherapy for the survival of patients with her2-positive breast cancer: A retrospective cohort study at fuscc. *The Breast*, 63:177–186, 2022.
- [7] BPK RI. Peraturan Presiden (PERPRES) Nomor 28 Tahun 2016 ten-tang Perubahan Ketiga Atas Peraturan Presiden Nomor 12 Tahun 2013 Ten-tang Jaminan Kesehatan. <https://peraturan.bpk.go.id/Home/Details/40124/perpres-no-28-tahun-2016>, 2016. Online; accessed February 10, 2023.
- [8] Putu Wuri Handayani, Ave Adriana Pinem, Fatimah Azzahro, Achmad Nizar Hi-dayanto, and Dumilah Ayuningtyas. The information system/information technology (is/it) practices in the indonesia health referral system. *Informatics in Medicine Un-locked*, 17:100263, 2019.
- [9] Guntur Prabawa Kusuma, Angelina Prima Kurniati, Firdaus Hafidz, and Owen Ashby Johnson. Implementing process mining in indonesia health care: Challenges and

- potentials. *IJAIT (International Journal of Applied Information Technology)*, pages 62–78, 2023.
- [10] Ika Widiastuti. Pelayanan badan penyelenggara jaminan sosial (bpjs) kesehatan di jawa barat. *Public Inspiration: Jurnal Administrasi Publik*, 2(2):91–101, 2017.
- [11] C Saleh and S Umiyati. Quality of public services in healthcare sector: A study of bpjs inpatient poly facility in regional public hospital surabaya. *International Journal of Innovation, Creativity and Change*, 13(4):979–988, 2020.
- [12] Brigid E Hickey, Daniel P Francis, and Margot Lehman. Sequencing of chemotherapy and radiotherapy for early breast cancer. *Cochrane Database of Systematic Reviews*, (4), 2013.
- [13] Jorge Munoz-Gama, Niels Martin, Carlos Fernandez-Llatas, Owen A Johnson, Marcos Sepúlveda, Emmanuel Helm, Victor Galvez-Yanjari, Eric Rojas, Antonio Martinez-Millana, Davide Aloini, et al. Process mining for healthcare: Characteristics and challenges. *Journal of Biomedical Informatics*, 127:103994, 2022.
- [14] L Elliss-Brookes, S McPhail, A Ives, M Greenslade, J Shelton, S Hiom, and M Richards. Routes to diagnosis for cancer—determining the patient journey using multiple routine data sets. *British journal of cancer*, 107(8):1220–1226, 2012.
- [15] National Health Service. Delivering cancer waiting times: A good practice guide. pages 0–67, 2015.
- [16] Angelina Prima Kurniati, Gede Agung Ary Wisudiawan, and Guntur Prabawa Kusuma. Potentials of clinical pathway analysis using process mining on the indonesia national health insurance data samples: an exploratory data analysis. In *2022 International Conference on Data Science and Its Applications (ICoDSA)*, pages 294–299. IEEE, 2022.
- [17] Cleiton dos Santos Garcia, Alex Meincheim, Elio Ribeiro Faria Junior, Marcelo Rosano Dallagassa, Denise Maria Vecino Sato, Deborah Ribeiro Carvalho, Eduardo Alves Portela Santos, and Edson Emilio Scalabrin. Process mining techniques and applications—a systematic mapping study. *Expert Systems with Applications*, 133:260–295, 2019.
- [18] Ronny S Mans, Wil MP Van der Aalst, and Rob JB Vanwersch. *Process mining in healthcare: evaluating and exploiting operational healthcare processes*. Springer, 2015.
- [19] Wil Van der Aalst, Arya Adriansyah, and Boudewijn Van Dongen. Replaying history on process models for conformance checking and performance analysis. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 2(2):182–192, 2012.

- [20] Sander JJ Leemans, Dirk Fahland, and Wil MP Van Der Aalst. Discovering block-structured process models from event logs containing infrequent behaviour. In *Business Process Management Workshops: BPM 2013 International Workshops, Beijing, China, August 26, 2013, Revised Papers 11*, pages 66–78. Springer, 2014.
- [21] Mochammad Ivan Adhyaksa Pradana, Angelina Prima Kurniati, and Gede Agung Ary Wisudiawan. Inductive miner implementation to improve healthcare efficiency on indonesia national health insurance data. In *2022 International Conference on Data Science and Its Applications (ICoDSA)*, pages 239–244. IEEE, 2022.
- [22] Wil MP Van der Aalst, Boudewijn F van Dongen, Christian W Günther, Anne Rozinat, HMW Verbeek, and AJMM Weijters. Prom: The process mining toolkit. In *Proceedings of the BPM 2009 Demonstration Track (BPM Demos 2009, Ulm, Germany, September 8, 2009)*, pages 1–4. CEUR-WS. org, 2009.
- [23] Angelina Prima Kurniati, Guntur Prabawa Kusuma, and Gede Agung Ary Wisudiawan. Process mining for disease trajectory analysis on the indonesia health insurance data. *JURIKOM (Jurnal Riset Komputer)*, 9(5):1322–1328, 2022.
- [24] Harold J Burstein, Kornelia Polyak, Julia S Wong, Susan C Lester, and Carolyn M Kaelin. Ductal carcinoma in situ of the breast. *New England Journal of Medicine*, 350(14):1430–1441, 2004.
- [25] Eric Ka Ho Shea, Valerie Cui Yun Koh, and Puay Hoon Tan. Invasive breast cancer: Current perspectives and emerging views. *Pathology international*, 70(5):242–252, 2020.
- [26] Miriam Mutebi, Benjamin O Anderson, Catherine Duggan, Clement Adebamowo, Gaurav Agarwal, Zipporah Ali, Peter Bird, Jean-Marc Bourque, Rebecca DeBoer, Luiz Henrique Gebrim, et al. Breast cancer treatment: A phased approach to implementation. *Cancer*, 126:2365–2378, 2020.
- [27] Giorgio Macellari and Alfonso M Pluchinotta. The breast clinic. *The Outpatient Breast Clinic: Aiming at Best Practice*, pages 1–29, 2015.
- [28] Sarah A McLaughlin. Surgical management of the breast: breast conservation therapy and mastectomy. *Surgical Clinics*, 93(2):411–428, 2013.
- [29] Michael J Flatley and David J Dodwell. Adjuvant treatment for breast cancer. *Surgery (Oxford)*, 34(1):43–46, 2016.
- [30] AM Thompson and SL Moulder-Thompson. Neoadjuvant treatment of breast cancer. *Annals of oncology*, 23:x231–x236, 2012.

- [31] Lars E Rutqvist, Björn Cedermark, Ulla Glas, Hemming Johansson, Sam Rotstein, Lambert Skoog, Anders Somell, Tolle Theve, Jutta Askergrén, Sten Friberg, et al. Radiotherapy, chemotherapy, and tamoxifen as adjuncts to surgery in early breast cancer: a summary of three randomized trials. *International Journal of Radiation Oncology* Biology* Physics*, 16(3):629–639, 1989.
- [32] Emmanuel Barranger, Julie Antomarchi, Emmanuel Chamorey, Constance Cavrot, Bernard Flipo, Philippe Follana, Isabelle Peyrottes, Claire Chapellier, Jean Marc Ferrero, and Tarik Ihrai. Effect of neoadjuvant chemotherapy on the surgical treatment of patients with locally advanced breast cancer requiring initial mastectomy. *Clinical breast cancer*, 15(5):e231–e235, 2015.
- [33] Stephen V Liu, Laleh Melstrom, Kathy Yao, Christy A Russell, and Stephen F Sener. Neoadjuvant therapy for breast cancer. *Journal of Surgical Oncology*, 101(4):283–291, 2010.
- [34] Olive Peart. Metastatic breast cancer. *Radiologic technology*, 88(5):519M–539M, 2017.
- [35] Karen L Maughan, Mark A Lutterbie, and Peter S Ham. Treatment of breast cancer. *American family physician*, 81(11):1339–1346, 2010.
- [36] Wil Van Der Aalst and Wil van der Aalst. *Data science in action*. Springer, 2016.
- [37] Will M.P. Van Der Aalst. *Process mining: Discovery, Conformance and Enhancement of Business Processes*. Springer, 2011.
- [38] Maikel L Van Eck, Xixi Lu, Sander JJ Leemans, and Wil MP Van Der Aalst. Pm: a process mining project methodology. In *International conference on advanced information systems engineering*, pages 297–313. Springer, 2015.
- [39] Filip Caron, Jan Vanthienen, Kris Vanhaecht, Erik Van Limbergen, Jochen Deweerdt, and Bart Baesens. A process mining-based investigation of adverse events in care processes. *Health Information Management Journal*, 43(1):16–25, 2014.
- [40] Ronny S Mans, Wil MP van der Aalst, Rob JB Vanwersch, Ronny S Mans, Wil MP van der Aalst, and Rob JB Vanwersch. Process mining. *Process Mining in Healthcare: Evaluating and Exploiting Operational Healthcare Processes*, pages 17–26, 2015.
- [41] Wil Van Der Aalst. Process mining: Overview and opportunities. *ACM Transactions on Management Information Systems (TMIS)*, 3(2):1–17, 2012.
- [42] Emmelien De Roock and Niels Martin. Process mining in healthcare—an updated perspective on the state of the art. *Journal of biomedical informatics*, 127:103995, 2022.

-
- [43] Antonella Guzzo, Antonino Rullo, and Eugenio Vocaturo. Process mining applications in the healthcare domain: A comprehensive review. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 12(2):e1442, 2022.
- [44] Alireza Bakhshi, Erfan Hassannayebi, and Amir Hossein Sadeghi. Optimizing sepsis care through heuristics methods in process mining: A trajectory analysis. *Healthcare Analytics*, 3:100187, 2023.
- [45] Zhichao Zhou, Yong Wang, and Lin Li. Process mining based modeling and analysis of workflows in clinical care—a case study in a Chicago outpatient clinic. In *Proceedings of the 11th IEEE international conference on networking, sensing and control*, pages 590–595. IEEE, 2014.
- [46] Farhood Rismanchian, Sara Hosseinzadeh Kassani, Seyed Mahdi Shavarani, and Young Hoon Lee. A data-driven approach to support the understanding and improvement of patients’ journeys: A case study using electronic health records of an emergency department. *Value in Health*, 26(1):18–27, 2023.
- [47] Bernis Tibeme, Hossain Shahriar, and Chi Zhang. Process mining algorithms for clinical workflow analysis. In *SoutheastCon 2018*, pages 1–6. IEEE, 2018.
- [48] Sawitree Weerapong, Parham Porouhan, and Wichian Premchaiswadi. Process mining using α -algorithm as a tool (a case study of student registration). In *2012 tenth international conference on ICT and knowledge engineering*, pages 213–220. IEEE, 2012.
- [49] Esmita P Gupta. Process mining a comparative study. *International Journal of Advanced Research in Computer and Communications Engineering*, 3(11):5, 2014.
- [50] ABDEL-HAMED MOHAMED RASHED, NOHA E EL-ATTAR, DIAA SALAMA, and MOHAMED ABDEL FATAH. Process mining approach for discovering and analyzing the healthcare processes in python. *Journal of Theoretical and Applied Information Technology*, 101(16), 2023.
- [51] Joos CAM Buijs, Boudewijn F van Dongen, and Wil MP van der Aalst. Quality dimensions in process discovery: The importance of fitness, precision, generalization and simplicity. *International Journal of Cooperative Information Systems*, 23(01):1440001, 2014.
- [52] Wil Van Der Aalst, Arya Adriansyah, Ana Karla Alves De Medeiros, Franco Arcieri, Thomas Baier, Tobias Blickle, Jagadeesh Chandra Bose, Peter Van Den Brand, Ronald Brandtjen, Joos Buijs, et al. Process mining manifesto. In *Business Process Management Workshops: BPM 2011 International Workshops, Clermont-Ferrand, France, August 29, 2011, Revised Selected Papers, Part I 9*, pages 169–194. Springer, 2012.
-

-
- [53] Sander JJ Leemans, Dirk Fahland, and Wil MP Van der Aalst. Scalable process discovery and conformance checking. *Software & Systems Modeling*, 17:599–631, 2018.
- [54] Phyllalintang Nafasa, Indra Waspada, Nurdin Bahtiar, and Adi Wibowo. Implementation of alpha miner algorithm in process mining application development for online learning activities based on moodle event log data. In *2019 3rd International Conference on Informatics and Computational Sciences (ICICoS)*, pages 1–6. IEEE, 2019.
- [55] Van der Aalst and WMP Process Mining. Discovery, conformance and enhancement of business processes. *Media; Springer: Berlin/Heidelberg, Germany*, 136, 2011.
- [56] Anton JMM Weijters, Wil MP van Der Aalst, and AK Alves De Medeiros. Process mining with the heuristicsminer algorithm. 2006.
- [57] Wil MP Van Der Aalst and Boudewijn F Van Dongen. Discovering petri nets from event logs. In *Transactions on Petri nets and other models of concurrency vii*, pages 372–422. Springer, 2013.
- [58] Stefanie Rinderle-Ma, Florian Stertz, Juergen Mangler, and Florian Pauker. Process mining—discovery, conformance, and enhancement of manufacturing processes. In *Digital Transformation: Core Technologies and Emerging Topics from a Computer Science Perspective*, pages 363–383. Springer, 2023.
- [59] SANDER. LEEMANS. *ROBUST PROCESS MINING WITH GUARANTEES: Process Discovery, Conformance Checking and Enhancement*. SPRINGER, 2022.
- [60] Wil Van der Aalst, Ton Weijters, and Laura Maruster. Workflow mining: Discovering process models from event logs. *IEEE transactions on knowledge and data engineering*, 16(9):1128–1142, 2004.
- [61] André Filipe Domingos Gomes, Ana Cristina Wanzeller Guedes de Lacerda, and Joana Rita da Silva Fialho. Comparative analysis of process mining algorithms in process discover. In *New Trends in Disruptive Technologies, Tech Ethics and Artificial Intelligence: The DITTET Collection 1*, pages 258–270. Springer, 2022.
- [62] Henricus MW Verbeek, Twan Basten, and Wil MP van der Aalst. Diagnosing workflow processes using woflan. *The computer journal*, 44(4):246–279, 2001.
- [63] Felix Mannhardt, Massimiliano De Leoni, and Hajo A Reijers. The multi-perspective process explorer. In *13th International Workshops on Business Process Management Workshops (BPM 2015)*, pages 130–134, 2015.
- [64] Alessandro Berti, Sebastiaan J Van Zelst, and Wil van der Aalst. Process mining for python (pm4py): bridging the gap between process-and data science. *arXiv preprint arXiv:1905.06169*, 2019.
-

- [65] Sander JJ Leemans, Dirk Fahland, and Wil MP van der Aalst. Scalable process discovery with guarantees. In *Enterprise, Business-Process and Information Systems Modeling: 16th International Conference, BPMDS 2015, 20th International Conference, EMMSAD 2015, Held at CAiSE 2015, Stockholm, Sweden, June 8-9, 2015, Proceedings*, pages 85–101. Springer, 2015.
- [66] Arya Adriansyah, Natalia Sidorova, and Boudewijn F van Dongen. Cost-based fitness in conformance checking. In *2011 eleventh international conference on application of concurrency to system design*, pages 57–66. IEEE, 2011.
- [67] James L Peterson. Petri nets. *ACM Computing Surveys (CSUR)*, 9(3):223–252, 1977.
- [68] Marc Thill. Marginprobe®: intraoperative margin assessment during breast conserving surgery by using radiofrequency spectroscopy. *Expert review of medical devices*, 10(3):301–315, 2013.
- [69] Robert T Osteen. Selection of patients for breast conserving surgery. *Cancer*, 74(S1):366–371, 1994.
- [70] MSU Hassan, J Ansari, David Spooner, and SA Hussain. Chemotherapy for breast cancer. *Oncology reports*, 24(5):1121–1131, 2010.
- [71] Suyanto Angelina Prima Kurniati, Guntur Prabawa Kusuma. *Process mining: sains data berorientasi proses*. Informatika, 2023.
- [72] Eric Rojas, Jorge Munoz-Gama, Marcos Sepúlveda, and Daniel Capurro. Process mining in healthcare: A literature review. *Journal of biomedical informatics*, 61:224–236, 2016.
- [73] Angelina Prima Kurniati, Eric Rojas, Kieran Zucker, Geoff Hall, David Hogg, and Owen Johnson. Process mining to explore variations in endometrial cancer pathways from gp referral to first treatment. 2021.
- [74] Angelina Prima Kurniati, Ciarán McInerney, Kieran Zucker, Geoff Hall, David Hogg, and Owen Johnson. A multi-level approach for identifying process change in cancer pathways. In *International Conference on Business Process Management*, pages 595–607. Springer, 2019.
- [75] Krisztina Tóth, Károly Machalik, György Fogarassy, and Ágnes Vathy-Fogarassy. Applicability of process mining in the exploration of healthcare sequences. In *2017 IEEE 30th Neumann Colloquium (NC)*, pages 000151–000156. IEEE, 2017.
- [76] Angelina Prima Kurniati, Guntur Kusuma, and Gede Wisudhiawan. Implementing heuristic miner for different types of event logs. *International Journal of Applied Engineering Research*, 11(8):5523–5529, 2016.

- [77] BPJS Kesehatan. Data BPJS Kesehatan Tahun 2015-2018. <https://data.bpjs-kesehatan.go.id/bpjs-portal/action/blog-detail.cbi?id=da1c3acd-42bc-11eb-a0ed-3134c80c87ab>, 2020. Online; accessed October 31 2022.
- [78] Wiji Wahyuningsih Syafrudin Imam Negara Jusran Mawardi Citra Jaya Fatah Abdella Sutara Nanda Satria Nugraha Paul Donald Panggabean Tria Sofa Purnama Iwan Ariawan, Bagus Sartono. *Makalah Data Sampel BPJS Kesehatan Tahun 2015-2018*. BPJS Kesehatan, Jakarta, 2020.
- [79] BPK RI. Peraturan Menteri Kesehatan Nomor 27 Tahun 2014 tentang Petunjuk Teknis Sistem Indonesian Case Base Groups (INA-CBGs. <https://peraturan.bpk.go.id/Home/Details/117564/permenkes-no-27-tahun-2014>, 2014. Online; accessed February 15, 2023.
- [80] Yang Lu, Qifan Chen, and Simon Poon. A novel approach to discover switch behaviours in process mining. In *International Conference on Process Mining*, pages 57–68. Springer, 2020.
- [81] Amirah Alharbi, Andy Bulpitt, and Owen Johnson. Improving pattern detection in healthcare process mining using an interval-based event selection method. In *Business Process Management Forum: BPM Forum 2017, Barcelona, Spain, September 10-15, 2017, Proceedings 15*, pages 88–105. Springer, 2017.
- [82] Wil MP van der Aalst and Wil MP van der Aalst. Analyzing “spaghetti processes”. *Process Mining: Discovery, Conformance and Enhancement of Business Processes*, pages 301–317, 2011.
- [83] Wei Yang and Qiang Su. Process mining for clinical pathway: Literature review and future directions. In *2014 11th international conference on service systems and service management (ICSSSM)*, pages 1–5. IEEE, 2014.
- [84] Esmita Gupta. Process mining algorithms. *International Journal of Advance Research In Science And Engineering*, 3(11):401–412, 2014.
- [85] Joos CAM Buijs, Boudewijn F Van Dongen, and Wil MP van Der Aalst. On the role of fitness, precision, generalization and simplicity in process discovery. In *On the Move to Meaningful Internet Systems: OTM 2012: Confederated International Conferences: CoopIS, DOA-SVI, and ODBASE 2012, Rome, Italy, September 10-14, 2012. Proceedings, Part I*, pages 305–322. Springer, 2012.
- [86] Tsung-Hao Huang and Wil MP van der Aalst. Unblocking inductive miner: While preserving desirable properties. In *International Conference on Business Process Modeling, Development and Support*, pages 327–342. Springer, 2023.

-
- [87] Kristian Bisgaard Lassen and Wil MP van der Aalst. Complexity metrics for workflow nets. *Information and Software Technology*, 51(3):610–626, 2009.