

RESEARCH IN A SNAP

OVERVIEW

We're keeping you updated on citations added to The Center's Knowledge Repository.



Knowledge Repository News

This edition of Research in a Snap features new heading topics to streamline your understanding of the latest evidence. We've organized citations as broad portfolios related to the Experience, Safety, and a Care Lifespan. Within each, we've organized collections of citations, such as perceived quality of care, infections prevention and control, or design for aging/elders. We'll continue to refine this classification, and while here's not always a one-to-one relationship, we're working to help you find what you need – easier, better, faster!

(Papers published ahead of print "in press" will be updated as volume and page information becomes available.)

July-August 2018

Experience

Perceived Quality of Care (Noise, Communication, Waiting)

- Adkins, E., Foran, M., Gill, M., Delatore, L., Moseley, M., Terndrup, T. E., & Walsh, J. (2017). Aligning Facility Changes to Modernize and Improve Emergency Department Care. *Emergency Medicine Investigations*, 2017(05), 9.
- Beck, M. S., & Doscher, M. (2018). Effects of Patient Care Unit Design and Technology on Nurse and Patient Care Technician Communication. *Journal* of Gerontological Nursing, 44(4), 17–22. https://doi.org/10.3928/00989134-20180212-01
- 3. Burdick, K. J., Chowdhury, A. R., Greer, J. M., & Schlesinger, J. J. (2018). Dynamic Alarm Systems for Hospitals (D.A.S.H.). *Ergonomics in Design*, in press. https://doi.org/10.1177/1064804618769186
- Burm, S., Boese, K., Faden, L., DeLuca, S., Huda, N., Hibbert, K., & Goldszmidt, M. (2018). Recognising the importance of informal communication events in improving collaborative care. *BMJ Quality & Safety*, in press. https://doi.org/10.1136/bmjqs-2017-007441
- Ekstrand, M., & Damman, S. (2016). Front and backstage in the workplace: An explorative case study on activity based working and employee perceptions of control over work-related demands. *Journal of Facilities Management*, 14(2), 188–202. https://doi.org/10.1108/JFM-10-2015-0029



- 6. Ellingson, L. L. (2003). Interdisciplinary Health Care Teamwork in the Clinic Backstage. *Journal of Applied Communication Research*, *31*(2), 93–117. https://doi.org/10.1080/0090988032000064579
- 7. Krupic, F., Sköldenberg, O., Samuelsson, K., & Eisler, T. (2018). Nurses' Experience of Patient Care in Multibed Hospital Rooms: Results From In-Depth Interviews With Nurses After Further Education in Anesthesia. *Journal of PeriAnesthesia Nursing*, 33(1), 78–86. https://doi.org/10.1016/j.jopan.2016.09.003
- 8. Liu, L., & Jiang, C. (2018). Noise Reduction for ICU by Using Feedforward Active Noise Control System. In *2018 IEEE International Conference on Communications (ICC)* (pp. 1–6). https://doi.org/10.1109/ICC.2018.8422882
- 9. O'Hara, J. K., Reynolds, C., Moore, S., Armitage, G., Sheard, L., Marsh, C., ... Lawton, R. (2018). What can patients tell us about the quality and safety of hospital care? Findings from a UK multicentre survey study. *BMJ Quality & Safety*, 27(9), 673–682.
- Sa, M. M., Azevedo, R., Neves, J., Machado, O., & Tavares, J. (2018). Noise in an Intensive Care Nursery/Newborn Unit. *Journal of Health Education Research & Development*, *6*(2), 1–6. https://doi.org/10.4172/2380-5439.1000265
- 11. Tan, X., van Egmond, L., Partinen, M., Lange, T., & Benedict, C. (2018). A narrative review of interventions for improving sleep and reducing circadian disruption in medical inpatients. *Sleep Medicine*, in press. https://doi.org/10.1016/j.sleep.2018.08.007
- 12. Waring, J. J., & Bishop, S. (2010). "Water cooler" learning: knowledge sharing at the clinical "backstage" and its contribution to patient safety. *Journal of Health Organization and Management*, *24*(4), 325–342. https://doi.org/10.1108/14777261011064968
- 13. Xuan, X., Li, Z., & Chen, X. (2018). An Empirical Examination of Nursing Units in China Based on Nurse Experience. *HERD: Health Environments Research & Design Journal*, in press. https://doi.org/10.1177/1937586718786126
- 14. Yarar, O., Temizsoy, E., & Günay, O. (2018). Noise pollution level in a pediatric hospital. *International Journal of Environmental Science and Technology*, 1–6. https://doi.org/10.1007/s13762-018-1831-7
- 15. Zhang, Y., Tzortzopoulos, P., & Kagioglou, M. (2018). Healing built-environment effects on health outcomes: environment–occupant–health framework. *Building Research & Information*, (in press), 1–20. https://doi.org/10.1080/09613218.2017.1411130
- 16. Zadeh, R. S., Shepley, M. M., Owora, A. H., Dannenbaum, M. C., Waggener, L. T., & Chung, S. S. E. (2018). The Importance of Specific Workplace Environment Characteristics for Maximum Health and Performance:



Healthcare Workers' Perspective. *Journal of Occupational and Environmental Medicine*, *60*(5), e245. https://doi.org/10.1097/JOM.000000000001248

Supportive Design (e.g., Social Support, Positive Distractions)

- Arenson, B. G., MacDonald, L. A., Grocott, H. P., Hiebert, B. M., & Arora, R. C. (2013). Effect of intensive care unit environment on in-hospital delirium after cardiac surgery. *The Journal of Thoracic and Cardiovascular Surgery*, *146*(1), 172–178. https://doi.org/10.1016/j.jtcvs.2012.12.042
- 18. Bates, V. (2018). Sensing space and making place: The hospital and therapeutic landscapes in two cancer narratives. *Medical Humanities*, in press. https://doi.org/10.1136/medhum-2017-011347
- Biagioli, V., Piredda, M., Mauroni, M. R., Alvaro, R., & De Marinis, M. G. (2016). The lived experience of patients in protective isolation during their hospital stay for allogeneic haematopoietic stem cell transplantation. *European Journal of Oncology Nursing*, 24, 79–86. https://doi.org/10.1016/j.ejon.2016.09.001
- Blaschke, S., O'Callaghan, C. C., Schofield, P., & Salander, P. (2017). Cancer patients' experiences with nature: Normalizing dichotomous realities. *Social Science & Medicine*, 172, 107–114. https://doi.org/10.1016/j.socscimed.2016.10.024
- 21. Cifter, A. S., & Cifter, M. (2017). A Review on Future Directions in Hospital Spatial Designs with a Focus on Patient Experience. *The Design Journal*, 20(sup1), S1998–S2009. https://doi.org/10.1080/14606925.2017.1352719
- 22. Ergan, S., Shi, Z., & Yu, X. (2018). Towards Quantifying Human Experience in the Built Environment: A Crowdsourcing Based Experiment to Identify Influential Architectural Design Features. *Journal of Building Engineering*, in press. https://doi.org/10.1016/j.jobe.2018.07.004
- 23. Hitter, T., Cantor, M., & Buta, E. (2017). Specific horticulture therapy guidelines in the landscaping of Cluj-Napoca hospital facilities improving mental and behavioural healthcare. *Acta Universitatis Sapientiae, Agriculture and Environment, 9*(1), 55–62. https://doi.org/10.1515/ausae-2017-0005
- 24. Ivarsson, C. T., & Grahn, P. (2012). Differently Designed Parts of a Garden Support Different Types of Recreational Walks: Evaluating a Healing Garden by Participatory Observation. *Landscape Research*, *37*(5), 519–537. https://doi.org/10.1080/01426397.2011.641948
- 25. Khan, M. A., Amin, N., Khan, A., Imtiaz, M., Khan, F., Ahmad, I., ... Islam, B. (2016). Plant Therapy: a Nonpharmacological and Noninvasive Treatment Approach Medically Beneficial to the Wellbeing of Hospital Patients.



- *Gesunde Pflanzen*, *68*(4), 191–200. https://doi.org/10.1007/s10343-016-0377-1
- MacAllister, L., Zimring, C., & Ryherd, E. (2018). Exploring the Relationships Between Patient Room Layout and Patient Satisfaction. *HERD: Health Environments Research & Design Journal*, in press. https://doi.org/10.1177/1937586718782163
- Milliron, B.-J., Vitolins, M. Z., Gamble, E., Jones, R., Chenault, M. C., & Tooze, J. A. (2017). Process Evaluation of a Community Garden at an Urban Outpatient Clinic. *Journal of Community Health*, 42(4), 639–648. https://doi.org/10.1007/s10900-016-0299-y
- Mirza, I., AbdelWareth, L. O., Liaqat, M., Anderson, P., Palmer, B., Turner, A., ...
 Kottke-Marchant, K. (2018). Establishing a Clinical Laboratory in a
 Tertiary/Quaternary Care Greenfield Hospital in the Middle East: Recounting
 the Cleveland Clinic Abu Dhabi Experience. *Archives of Pathology &
 Laboratory Medicine*, 142(9), 1023–1035.
 https://doi.org/10.5858/arpa.2017-0518-RA
- 29. Nielsen, E., Wåhlin, I., & Frisman, G. H. (2018). Evaluating Pictures of Nature and Soft Music on Anxiety and Well-Being During Elective Surgery. *The Open Nursing Journal*, *12*, 58–66. https://doi.org/10.2174/1874434601812010058
- Patterson, E. S., Sanders, E. B.-N., Lavender, S. A., Sommerich, C. M., Park, S., Li, J., & Evans, K. D. (2018). A Grounded Theoretical Analysis of Room Elements Desired by Family Members and Visitors of Hospitalized Patients: Implications for Medical/Surgical Hospital Patient Room Design. HERD: Health Environments Research & Design Journal, in press. https://doi.org/10.1177/1937586718792885
- 31. Pérez-Urrestarazu, L., Blasco-Romero, A., & Fernández-Cañero, R. (2017). Media and social impact valuation of a living wall: The case study of the Sagrado Corazon hospital in Seville (Spain). *Urban Forestry & Urban Greening*, 24, 141–148. https://doi.org/10.1016/j.ufug.2017.04.002
- 32. Pouyesh, V., Amaniyan, S., Hoseini, M. H. M., Bashiri, Y., Sieloff, C., Griffiths, P., & Vaismoradi, M. (2018). The effects of environmental factors in waiting rooms on anxiety among patients undergoing coronary angiography: A randomized controlled trial. *International Journal of Nursing Practice*, in press. https://doi.org/10.1111/ijn.12682
- 33. Rivasseau-Jonveaux, T., Pop, A., Fescharek, R., Chuzeville, S. B., Jacob, C., Demarche, L., ... Malerba, G. (2012). Healing gardens: Recommendations and criteria for design. *Gériatrie et Psychologie Neuropsychiatrie Du Viellissement*, (3), 245–253. https://doi.org/10.1684/pnv.2012.0360



- 34. Tao, Y., Gou, Z., Lau, S. S.-Y., Lu, Y., & Fu, J. (2018). Legibility of floor plans and wayfinding satisfaction of residents in Care and Attention homes in Hong Kong. *Australasian Journal on Ageing*, in press. https://doi.org/10.1111/ajag.12574
- 35. Weerasuriya, R., Henderson-Wilson, C., & Townsend, M. (2018). A systematic review of access to green spaces in healthcare facilities. *Urban Forestry & Urban Greening*, in press. https://doi.org/10.1016/j.ufug.2018.06.019

Indoor Environmental Quality (e.g., Temperature, Air, Light)

- 36. Al Horr, Y., Arif, M., Katafygiotou, M., Mazroei, A., Kaushik, A., & Elsarrag, E. (2016). Impact of indoor environmental quality on occupant well-being and comfort: A review of the literature. *International Journal of Sustainable Built Environment*, *5*(1), 1–11. https://doi.org/10.1016/j.ijsbe.2016.03.006
- 37. Berlanga, F. A., Olmedo, I., de Adana, M. R., Villafruela, J. M., San José, J. F., & Castro, F. (2018). Experimental assessment of different mixing air ventilation systems on ventilation performance and exposure to exhaled contaminants in hospital rooms. *Energy and Buildings*, in press. https://doi.org/10.1016/j.enbuild.2018.07.053
- 38. Chiu, W.-C., Chang, P.-S., Hsieh, C.-F., Chao, C.-M., & Lai, C.-C. (2018). The impact of windows on the outcomes of medical intensive care unit patients. *International Journal of Gerontology*, *12*(1), 67–70. https://doi.org/10.1016/j.ijge.2017.06.002
- Eckelman, M. J., Sherman, J. D., & MacNeill, A. J. (2018). Life cycle environmental emissions and health damages from the Canadian healthcare system: An economic-environmental-epidemiological analysis. *PLOS Medicine*, 15(7), 1–16. https://doi.org/10.1371/journal.pmed.1002623
- 40. Mardaljevic, J., Waskett, R. K., & Painter, B. (2016). Neutral daylight illumination with variable transmission glass: Theory and validation. *Lighting Research & Technology*, *48*(3), 267–285. https://doi.org/10.1177/1477153515620339
- 41. Perdahci, C. (2018). LED Lighting for Healthcare Facilities. In *The Role of Exergy in Energy and the Environment* (pp. 863–875). Springer, Cham. https://doi.org/10.1007/978-3-319-89845-2 62
- 42. Pop, O. G., Abrudan, A. C., Dogeanu, A. M., Pocola, A. G., Tutunaru, L. F., & Balan, M. C. (2018). Dynamic thermal modeling of buildings and application to a hospital. In *2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)* (pp. 1–6). Cluj-Napoca, Romania. https://doi.org/10.1109/AQTR.2018.8402769



Design & Evaluation (e.g., Process, Methods)

- 43. Alves, T. C. L., Lichtig, W., & Rybkowski, Z. K. (2017). Implementing Target Value Design: Tools and Techniques to Manage the Process. *HERD: Health Environments Research & Design Journal*, *10*(3), 18–29. https://doi.org/10.1177/1937586717690865
- Carthey, J. (2006). Post Occupancy Evaluation: Development of a Standardised Methodology for Australian Health Projects. *International Journal of Construction Management*, 6(1), 57–74. https://doi.org/10.1080/15623599.2006.10773082
- 45. Elf, M., Lindahl, G., & Anåker, A. (2018). A study of relationships between content in documents from the health service operational plan and documents from the planning of new healthcare environments, in press.
- 46. Lee, J., & Shepley, M. M. (2018). Analysis of human factors in a building environmental assessment system in Korea: Resident perception and the G-SEED for MF scores. *Building and Environment*, 142, 388–397. https://doi.org/10.1016/j.buildenv.2018.06.044
- 47. Mustafa, F. A. (2017). Performance assessment of buildings via post-occupancy evaluation: A case study of the building of the architecture and software engineering departments in Salahaddin University-Erbil, Iraq. Frontiers of Architectural Research, δ(3), 412–429. https://doi.org/10.1016/j.foar.2017.06.004
- 48. Neylon, S., Bulsara, C., & Hill, A.-M. (2017). The effectiveness of environment assessment tools to guide refurbishment of Australian residential aged care facilities: A systematic review. *Australasian Journal on Ageing*, *36*(2), 135–143. https://doi.org/10.1111/ajag.12367
- Ottosen, M. J., Engebretson, J. C., & Etchegaray, J. M. (2017). Steps in Developing a Patient-Centered Measure of Hospital Design Factors. HERD: Health Environments Research & Design Journal, 10(4), 10–16. https://doi.org/10.1177/1937586716685290
- 50. Silveira, S., & Alves, T. (2018). Target Value Design Inspired Practices to Deliver Sustainable Buildings. *Buildings*, 8(116), 1–20. https://doi.org/10.3390/buildings8090116

Safety

Infection Prevention/Control

51. Best, E., Parnell, P., Couturier, J., Barbut, F., Bozec, A. L., Arnoldo, L., ... M. H. Wilcox. (2018). Multicentre study to examine the extent of environmental contamination by potential bacterial pathogens, including antibiotic resistant



- bacteria, in hospital washrooms according to hand-drying method. *Journal of Hospital Infection*. https://doi.org/10.1016/j.jhin.2018.07.002
- 52. Chowdhary, D., Tahir, S., Legge, M., Hu, H., Prvan, T., Johani, K., ... Vickery, K. (2018). Transfer of dry surface biofilm in healthcare environment: the role of healthcare worker's hands as vehicles. *Journal of Hospital Infection*, in press. https://doi.org/10.1016/j.jhin.2018.06.021
- Exner, M., Kramer, A., Lajoie, L., Gebel, J., Engelhart, S., & Hartemann, P. (2005). Prevention and control of health care-associated waterborne infections in health care facilities. *American Journal of Infection Control*, 33(5 Suppl 1), S26-40. https://doi.org/10.1016/j.ajic.2005.04.002
- 54. Kortepeter, M. G., Kwon, E. H., & Cieslak, T. J. (2018). Designing Medical Facilities to Care for Patients with Highly Hazardous Communicable Diseases. In *Bioemergency Planning* (pp. 21–34). Springer, Cham. https://doi.org/10.1007/978-3-319-77032-1 2
- 55. Liu, Z., Ma, S., Cao, G., Meng, C., & He, B.-J. (2018). Distribution characteristics, growth, reproduction and transmission modes and control strategies for microbial contamination in HVAC systems: A literature review. *Energy and Buildings*, in press. https://doi.org/10.1016/j.enbuild.2018.07.050
- 56. Loftus, R. W., Dexter, F., Robinson, A. D. M., & Horswill, A. R. (2018). Desiccation Tolerance is Associated with Staphylococcus aureus Hyper Transmissibility, Resistance, and Infection Development in the Operating Room. *Journal of Hospital Infection*, in press. https://doi.org/10.1016/j.jhin.2018.06.020
- 57. O'Neill, L., Park, S.-H., & Rosinia, F. (2018). The role of the built environment and private rooms for reducing central line-associated bloodstream infections. *PLOS ONE*, *13*(7), e0201002. https://doi.org/10.1371/journal.pone.0201002
- 58. Parkes, L. O., & Hota, S. S. (2018). Sink-Related Outbreaks and Mitigation Strategies in Healthcare Facilities. *Current Infectious Disease Reports*, 20(10), 42. https://doi.org/10.1007/s11908-018-0648-3
- 59. Peddinti, B. S. T., Scholle, F., Ghiladi, R. A., & Spontak, R. J. (2018). Photodynamic Polymers as Comprehensive Anti-Infective Materials: Staying Ahead of a Growing Global Threat. *ACS Applied Materials & Interfaces*, 10(31), 25955–25959. https://doi.org/10.1021/acsami.8b09139
- 60. Pitt, S. J., Crockett, S. L., & Andreou, G. M. (2018). The contribution of hand drying in prevention of transmission of microorganisms: Comparison of the efficacy of three hand drying methods in the removal and distribution of microorganisms. *Journal of Infection Prevention*, in press. https://doi.org/10.1177/1757177418789485



- Srivastava, S., Colville, A., Odgers, M., Laskey, L., & Mann, T. (2011).
 Controlling legionella risk in a newly commissioned hospital building. *Journal of Infection Prevention*, 12(1), 11–16.
 https://doi.org/10.1177/1757177410376984
- 62. Vaisman, A., Jula, M., Wagner, J., & Winston, L. G. (2018). Examining the association between hospital-onset Clostridium difficile infection and multiple-bed room exposure: a case-control study. *Infection Control & Hospital Epidemiology*, in press. https://doi.org/10.1017/ice.2018.163

Patient Handling

 Rawal, P. (2018). Spatial Optimization of Bedroom Area for Effective Elderly Patient Handling. In *Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018)* (pp. 213–222). Florence, Italy: Springer, Cham. https://doi.org/10.1007/978-3-319-96065-4_24

Falls

- 64. Ali, U. M., Judge, A., Foster, C., Brooke, A., James, K., Marriott, T., & Lamb, S. E. (2018). Do portable nursing stations within bays of hospital wards reduce the rate of inpatient falls? An interrupted time-series analysis. *Age and Ageing*, in press. https://doi.org/10.1093/ageing/afy097
- 65. Brewer, B. B., Carley, K. M., Benham-Hutchins, M., Effken, J. A., & Reminga, J. (2018). Nursing Unit Design, Nursing Staff Communication Networks, and Patient Falls: Are They Related? *HERD: Health Environments Research & Design Journal*, in press. https://doi.org/10.1177/1937586718779223

Medication Safety

 Ching, J. M., Long, C., Williams, B. L., & Blackmore, C. C. (2013). Using Lean to Improve Medication Administration Safety: In Search of the "Perfect Dose." The Joint Commission Journal on Quality and Patient Safety, 39(5), 195–204, AP1–AP6. https://doi.org/10.1016/S1553-7250(13)39026-6

Security

67. Gooch, P. (2018). Hospital Workplace Violence Prevention in California: New Regulations. *Workplace Health & Safety*, *66*(3), 115–119. https://doi.org/10.1177/2165079917731791

Injury of Behavioral Health

68. Balfour, M. E., Tanner, K., Jurica, P. J., Llewellyn, D., Williamson, R. G., & Carson, C. A. (2017). Using Lean to Rapidly and Sustainably Transform a Behavioral Health Crisis Program: Impact on Throughput and Safety. *The*



- *Joint Commission Journal on Quality and Patient Safety, 43*(6), 275–283. https://doi.org/10.1016/j.jcjq.2017.03.008
- 69. Cole, R. (2014). Reducing Restraint Use in a Trauma Center Emergency Room. *Nursing Clinics*, *49*(3), 371–381. https://doi.org/10.1016/j.cnur.2014.05.010
- 70. Kelly, E. L., Fenwick, K., Brekke, J. S., & Novaco, R. W. (2016). Well-Being and Safety among Inpatient Psychiatric Staff: The Impact of Conflict, Assault, and Stress Reactivity. *Administration and Policy in Mental Health*, *43*(5), 703–716. https://doi.org/10.1007/s10488-015-0683-4
- 71. Slemon, A., Jenkins, E., & Bungay, V. (2017). Safety in psychiatric inpatient care: The impact of risk management culture on mental health nursing practice. *Nursing Inquiry*, *24*(4), e12199. https://doi.org/10.1111/nin.12199
- 72. Ulrich, R. S., Bogren, L., Gardiner, S. K., & Lundin, S. (2018). Psychiatric ward design can reduce aggressive behavior. *Journal of Environmental Psychology*, *57*, 53–66. https://doi.org/10.1016/j.jenvp.2018.05.002

Resilience

73. Cosenza, E., Sarno, L. D., Maddaloni, G., Magliulo, G., Petrone, C., & Prota, A. (2015). Shake table tests for the seismic fragility evaluation of hospital rooms. *Earthquake Engineering & Structural Dynamics*, *44*(1), 23–40. https://doi.org/10.1002/eqe.2456

A Care Lifespan

Mother-Baby/Neonates

- 74. Broom, M., Kecskes, Z., Kildea, S., & Gardner, A. (2018). Exploring the Impact of a Dual Occupancy Neonatal Intensive Care Unit on Staff Workflow, Activity, and Their Perceptions. *HERD: Health Environments Research & Design Journal*, in press. https://doi.org/10.1177/1937586718779360
- 75. Carvalhais, C., Silva, M. V., Silva, J., Xavier, A., & Santos, J. (2018). Noise in neonatal intensive care units: a short review. In *Euronoise 2018 Conference Proceedings* (p. 6). Crete.
- 76. Liao, J.-H., Hu, R.-F., Su, L.-J., Wang, S., Xu, Q., Qian, X.-F., & He, H.-G. (2018). Nonpharmacological Interventions for Sleep Promotion on Preterm Infants in Neonatal Intensive Care Unit: A Systematic Review. *Worldviews on Evidence-Based Nursing*, in press. https://doi.org/10.1111/wvn.12315
- 77. Schrauwen, L., Kommers, D. R., & Oetomo, S. B. (2017). Viewpoints of Parents and Nurses on How to Design Products to Enhance Parent–Infant Bonding at Neonatal Intensive Care Units: A Qualitative Study Based on Existing



- Designs. *HERD: Health Environments Research & Design Journal*, *11*(2), 20–31. https://doi.org/10.1177/1937586717728483
- 78. Smith, S. W., Ortmann, A. J., & Clark, W. W. (2018). Noise in the neonatal intensive care unit: a new approach to examining acoustic events. *Noise and Health*, *20*(95), 121. https://doi.org/10.4103/nah.NAH 53 17

Pediatrics

- 79. Cartland, J., Ruch-Ross, H. S., Carr, L., Hall, A., Olsen, R., Rosendale, E., & Ruohonen, S. (2018). The Role of Hospital Design in Reducing Anxiety for Pediatric Patients. *HERD: Health Environments Research & Design Journal*, 11(3), 66–79. https://doi.org/10.1177/1937586718779219
- Ferrer, N., & Villarouco, V. (2018). Cognitive Ergonomics in Architecture: Creativity and Ambience in Children's Healthcare Spaces. In *Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018)* (pp. 516–522). Florence, Italy: Springer, Cham. https://doi.org/10.1007/978-3-319-96071-5-55

Elders/Aging

- 81. Cutler, L. J. (2007). Physical Environments of Assisted Living: Research Needs and Challenges. *The Gerontologist*, 47(suppl_1), 68–82. https://doi.org/10.1093/geront/47.Supplement_1.68
- 82. Cutler, L. J., Kane, R. A., Degenholtz, H. B., Miller, M. J., & Grant, L. (2006). Assessing and comparing physical environments for nursing home residents: using new tools for greater research specificity. *The Gerontologist*, *46*(1), 42–51.
- 83. Engineer, A., Sternberg, E. M., & Najafi, B. (2018). Designing Interiors to Mitigate Physical and Cognitive Deficits Related to Aging and to Promote Longevity in Older Adults: A Review. *Gerontology*, in press. https://doi.org/10.1159/000491488
- 84. Fleming, A., & Kydd, A. (2018). What makes a nursing home homely? A Scottish based study, using Q methodology of the perceptions of staff, residents and significant others. *Journal of Research in Nursing*, *23*(2–3), 141–158. https://doi.org/10.1177/1744987118757837
- 85. Giesbrecht, M., Stajduhar, K. I., Mollison, A., Pauly, B., Reimer-Kirkham, S., McNeil, R., ... Rose, C. (2018). Hospitals, clinics, and palliative care units: Place-based experiences of formal healthcare settings by people experiencing structural vulnerability at the end-of-life. *Health & Place*, *53*, 43–51. https://doi.org/10.1016/j.healthplace.2018.06.005



- 86. Hwang, E., Cummings, L., Sixsmith, A., & Sixsmith, J. (2011). Impacts of Home Modifications on Aging-in-Place. *Journal of Housing For the Elderly, 25*(3), 246–257. https://doi.org/10.1080/02763893.2011.595611
- 87. Liou, C.-L., & Jarrott, S. (2018). In Their Voices: Client and Staff Perceptions of the Physical and Social Environments of Adult Day Services Centers in Taiwan. *Current Gerontology and Geriatrics Research*, 2018, 1–9. https://doi.org/10.1155/2018/5130472
- 88. Marcheschi, E., von Koch, L., Pessah-Rasmussen, H., & Elf, M. (2018). Home setting after stroke, facilitators and barriers: A systematic literature review. *Health & Social Care in the Community*, *26*(4), e451–e459. https://doi.org/10.1111/hsc.12518
- 89. Rigby, J., Payne, S., & Froggatt, K. (2010). Review: What evidence is there about the specific environmental needs of older people who are near the end of life and are cared for in hospices or similar institutions? A literature review. *Palliative Medicine*, *24*(3), 268–285. https://doi.org/10.1177/0269216309350253
- 90. Roberts, E. (2016). Negotiated risk and resident autonomy: Frontline care staff perspectives on culture change in long term care in Nova Scotia, Canada. *Work*, *54*(4), 837–851. https://doi.org/10.3233/WOR-162373
- 91. Wood-Nartker, J., Beuschel, E., & Guerin, D. A. (2017). A Checklist Instrument: Sensory Cues Within Assisted Living Facilities. *Journal of Preventive Medicine and Care*, 1(4), 17. https://doi.org/10.14302/issn.2474-3585.jpmc-16-1213

Therapeutic Environments: Behavioral/Mental Health

Dementia / Alzheimer's

- 92. Barrett, P., Sharma, M., & Zeisel, J. (2018). Optimal spaces for those living with dementia: principles and evidence. *Building Research & Information*, in press. https://doi.org/10.1080/09613218.2018.1489473
- 93. Calkins, M. P. (1987). Designing Special Care Units: A Systematic Approach. *American Journal of Alzheimer's Care and Research*, *2*(2), 16–22. https://doi.org/10.1177/153331758700200203
- 94. Dreyfus, S., Phillipson, L., & Fleming, R. (2018). Staff and family attitudes to fences as a means of detaining people with dementia in residential aged care settings: The tension between physical and emotional safety. *Australian Journal of Social Issues*, *53*(2), 107–122. https://doi.org/10.1002/ajs4.34
- 95. Gonzalez, M. T., & Kirkevold, M. (2013). Benefits of sensory garden and horticultural activities in dementia care: A modified scoping review. *Journal*



- of Clinical Nursing, 23(19–20), 2698–2715. https://doi.org/10.1111/jocn.12388
- P6. Ilem, A. A., & Feliciano, L. (2018). Finding your way home: A systematic investigation of shadowboxes on room recognition in memory care. *Behavior Analysis: Research and Practice*, 18(1), 41.
- 97. Jonveaux, T. R., Batt, M., Fescharek, R., Benetos, A., Trognon, A., Bah Chuzeville, S., ... Bouvel, B. (2013). Healing Gardens and Cognitive Behavioral Units in the Management of Alzheimer's Disease Patients: The Nancy Experience. *Journal of Alzheimer's Disease*, *34*(1), 325–338. https://doi.org/10.3233/JAD-121657
- 98. Jonveaux, T. R., Yzoard, M., Fescharek, R., Pop, A., Jacob, C., Batt, M., ... Trognon, A. (2011). Evaluation of benefits of a healing garden for Alzheimer patients: New methodology to evaluate a design concept integrating artistic and neuropsychological approaches. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 7(4), S442–S443. https://doi.org/10.1016/j.jalz.2011.05.1283
- Spring, J. A. (2016). Design of evidence-based gardens and garden therapy for neurodisability in Scandinavia: Data from 14 sites. *Neurodegenerative Disease Management*, 6(2), 87–98. https://doi.org/10.2217/nmt.16.2
- 100. Zuanon, R., & Faria, B. A. C. (2018). Landscape Design and Neuroscience Cooperation: Contributions to the Non-pharmacological Treatment of Alzheimer's Disease. In *Digital Human Modeling. Applications in Health, Safety, Ergonomics, and Risk Management* (pp. 353–374). Las Vegas: Springer, Cham. https://doi.org/10.1007/978-3-319-91397-1 29

Psychiatric Facilities

- 101. Urbanoski, K. A., Mulsant, B. H., Novotna, G., Ehtesham, S., & Rush, B. R. (2013). Does the Redesign of a Psychiatric Inpatient Unit Change the Treatment Process and Outcomes? *Psychiatric Services*, *64*(8), 804–807. https://doi.org/10.1176/appi.ps.004532012
- 102. Whitehead, C. C., Polsky, R. H., Crookshank, C., & Fik, E. (1984). Objective and subjective evaluation of psychiatric ward redesign. *The American Journal of Psychiatry*, *141*(5), 639–644. https://doi.org/10.1176/ajp.141.5.639

Population Health

103. Kurowski-Burt, A., & Haddox, J. C. (2018). Barriers to Healthcare Participation in Persons With Disabilities in Appalachia: A Qualitative Pilot Study. *HERD: Health Environments Research & Design Journal*, in press. https://doi.org/10.1177/1937586718786127



Technology

- 104. Fager, S. K., & Burnfield, J. M. (2014). Patients' experiences with technology during inpatient rehabilitation: opportunities to support independence and therapeutic engagement. *Disability and Rehabilitation: Assistive Technology*, 9(2), 121–127. https://doi.org/10.3109/17483107.2013.787124
- 105. Rizal, A., Lin, Y. C., & Lin, Y. H. (2018). Contactless vital signs measurement for self-service healthcare kiosk in intelligent building. In 3rd International Conference on Intelligent Green Building and Smart Grid (IGBSG) (pp. 1–4). Yilan, Taiwan. https://doi.org/10.1109/IGBSG.2018.8393548

HERD Journal (2008-2016): We Had Missed These...

- 106. Ahmed, T. M. F., Rajagopalan, P., & Fuller, R. (2015). A Classification of Healthcare Facilities: Toward the Development of Energy Performance Benchmarks for Day Surgery Centers in Australia. *HERD: Health Environments Research & Design Journal*, 8(4), 139–157. https://doi.org/10.1177/1937586715575910
- 107. Anåker, A., Heylighen, A., Nordin, S., & Elf, M. (2016). Design Quality in the Context of Healthcare Environments: A Scoping Review. HERD: Health Environments Research & Design Journal, 10(4), 136–150. https://doi.org/10.1177/1937586716679404
- 108. Bardenhagen, E., & Rodiek, S. (2016). Affordance-Based Evaluations that Focus on Supporting the Needs of Users. *HERD: Health Environments Research & Design Journal*, *9*(2), 147–155. https://doi.org/10.1177/1937586715599760
- 109. Brooks, J. O., Smolentzov, L., DeArment, A., Logan, W., Green, K., Walker, I., ... Yanik, P. (2011). Toward a "Smart" Nightstand Prototype: An Examination of Nightstand Table Contents and Preferences. *HERD: Health Environments Research & Design Journal*, 4(2), 91–108. https://doi.org/10.1177/193758671100400208
- 110. Carthey, J. (2008). Reinterpreting the Hospital Corridor: "Wasted Space" or Essential for Quality Multidisciplinary Clinical Care? *HERD: Health Environments Research & Design Journal*, 2(1), 17–29. https://doi.org/10.1177/193758670800200103
- 111. Clark, E. (2014). Bedside to Blueprints: The Role of Nurses in Hospital Design. HERD: Health Environments Research & Design Journal, 7(4), 100–107. https://doi.org/10.1177/193758671400700409
- 112. Colorafi, K. J., & Evans, B. (2016). Qualitative Descriptive Methods in Health Science Research. *HERD: Health Environments Research & Design Journal*, 9(4), 16–25. https://doi.org/10.1177/1937586715614171



- 113. Cuddeback, K. T., & Redden, P. (2009). Building Connections: A Clinical Operations View of Activation Planning. *HERD: Health Environments Research & Design Journal*, 2(4), 113–126. https://doi.org/10.1177/193758670900200409
- 114. Davidson, J. E. (2016). Organizing the Evidence for Healthcare Design Projects. *HERD: Health Environments Research & Design Journal*, *10*(2), 13–22. https://doi.org/10.1177/1937586716673803
- 115. Edelstein, E. A. (2008). Searching for Evidence. *HERD: Health Environments Research & Design Journal*, *1*(4), 95–110. https://doi.org/10.1177/193758670800100411
- 116. Durmisevic, S., & Ciftcioglu, Ö. (2010). Knowledge Modeling Tool for Evidence-Based Design. *HERD: Health Environments Research & Design Journal*, *3*(3), 101–123. https://doi.org/10.1177/193758671000300310
- 117. Etchegaray, J. M., & Fischer, W. G. (2010). Understanding Evidence-Based Research Methods: Developing and Conducting Effective Surveys. *HERD: Health Environments Research & Design Journal*, *3*(4), 8–13. https://doi.org/10.1177/193758671000300402
- Gray, W. A., Kesten, K. S., Hurst, S., & Anderko, L. (2012). Using Clinical Simulation Centers to Test Design Interventions: A Pilot Study of Lighting and Color Modifications. *HERD: Health Environments Research & Design Journal*, 5(3), 46–65. https://doi.org/10.1177/193758671200500306
- 119. Kleiss, J. A. (2016). Preliminary Development of a Multidimensional Semantic Patient Experience Measurement Questionnaire. *HERD: Health Environments Research & Design Journal*, *10*(1), 52–64. https://doi.org/10.1177/1937586716636841
- 120. Knezevic, I., Mount, P., & Clement, C. (2016). Shared Opportunities on Institutional Lands: On-Site Food Production, Its Benefits, Barriers, and Opportunities. *HERD: Health Environments Research & Design Journal*, 10(1), 144–154. https://doi.org/10.1177/1937586716638101
- 121. Kobayashi, L., Gosbee, J. W., & Merck, D. L. (2016). Development and Application of a Clinical Microsystem Simulation Methodology for Human Factors-Based Research of Alarm Fatigue. *HERD: Health Environments Research & Design Journal*, *10*(4), 91–104. https://doi.org/10.1177/1937586716673829
- 122. Kopec, D., & Han, L. (2008). Islam and the Healthcare Environment: Designing Patient Rooms. *HERD: Health Environments Research & Design Journal*, *1*(4), 111–121. https://doi.org/10.1177/193758670800100412
- 123. Kwan, M. A. (2011). Acuity-Adaptable Nursing Care: Exploring Its Place in Designing the Future Patient Room. *HERD: Health Environments Research & Design Journal*, *5*(1), 77–93. https://doi.org/10.1177/193758671100500108



- 124. Largo-Wight, E., O'Hara, B. K., & Chen, W. W. (2016). The Efficacy of a Brief Nature Sound Intervention on Muscle Tension, Pulse Rate, and Self-Reported Stress: Nature Contact Micro-Break in an Office or Waiting Room. *HERD:*Health Environments Research & Design Journal, 10(1), 45–51.

 https://doi.org/10.1177/1937586715619741
- 125. Mohammadpour, A., Anumba, C. J., & Messner, J. I. (2016). Integrated Framework for Patient Safety and Energy Efficiency in Healthcare Facilities Retrofit Projects. *HERD: Health Environments Research & Design Journal*, 9(4), 68–85. https://doi.org/10.1177/1937586716639903
- 126. Mulva, S. P., & Dai, J. (2009). Healthcare Facility Benchmarking. *HERD:*Health Environments Research & Design Journal, 3(1), 28–37.

 https://doi.org/10.1177/193758670900300104
- 127. Pati, D., & Pati, S. (2013). Methodological Issues in Conducting Post-Occupancy Evaluations to Support Design Decisions. *HERD: Health Environments Research & Design Journal*, *6*(3), 157–163. https://doi.org/10.1177/193758671300600312
- 128. Peavey, E. K., Zoss, J., & Watkins, N. (2012). Simulation and Mock-Up Research Methods to Enhance Design Decision Making. *HERD: Health Environments Research & Design Journal*, *5*(3), 133–144. https://doi.org/10.1177/193758671200500313
- 129. Pradinuk, R. (2009). Incentivizing the Daylit Hospital: The Green Guide for Health Care Approach. *HERD: Health Environments Research & Design Journal*, *2*(4), 92–112. https://doi.org/10.1177/193758670900200408
- Ritchey, T., & Pati, D. (2008). Establishing an Acute Care Nursing Bed Unit Size: Employing a Decision Matrix Framework. HERD: Health Environments Research & Design Journal, 1(4), 122–132. https://doi.org/10.1177/193758670800100413
- 131. Schreuder, E., Lebesque, L., & Bottenheft, C. (2016). Healing Environments: What Design Factors Really Matter According to Patients? An Exploratory Analysis. HERD: Health Environments Research & Design Journal, 10(1), 87– 105. https://doi.org/10.1177/1937586716643951
- 132. Sharpe, P. A., & Schmidt, M. G. (2011). Control and Mitigation of Healthcare-Acquired Infections: Designing Clinical Trials to Evaluate New Materials and Technologies. *HERD: Health Environments Research & Design Journal, 5*(1), 94–115. https://doi.org/10.1177/193758671100500109
- 133. Tam, D. A., Chessum, T., & Leopold, J. (2012). The Challenge of Innovation and the High-Performance Team. *HERD: Health Environments Research & Design Journal*, *5*(3), 66–73. https://doi.org/10.1177/193758671200500307



- 134. Valipoor, S., & Pati, D. (2015). Making Your Instruments Work for You. *HERD: Health Environments Research & Design Journal*, *9*(3), 236–243. https://doi.org/10.1177/1937586715601423
- 135. van der Zwart, J., van der Voordt, T., & de Jonge, H. (2010). Private Investment in Hospitals: A Comparison of Three Healthcare Systems and Possible Implications for Real Estate Strategies. *HERD: Health Environments Research & Design Journal*, *3*(3), 70–86. https://doi.org/10.1177/193758671000300308
- 136. Van Rompay, T. J. L., & Tanja-Dijkstra, K. (2010). Directions in Healthcare Research: Pointers from Retailing and Services Marketing. *HERD: Health Environments Research & Design Journal*, *3*(3), 87–100. https://doi.org/10.1177/193758671000300309
- 137. Vieira, E. R., & Miller, L. (2008). Facing the Challenge of Patient Transfers: Using Ceiling Lifts in Healthcare Facilities. *HERD: Health Environments Research & Design Journal*, *2*(1), 6–16. https://doi.org/10.1177/193758670800200102
- 138. Zborowsky, T., & Bunker-Hellmich, L. (2010). Integrating Healthcare Design Research into Practice: Setting a New Standard of Practice. *HERD: Health Environments Research & Design Journal, 4*(1), 115–130. https://doi.org/10.1177/193758671000400108
- 139. Zimring, C., Augenbroe, G. L., Malone, E. B., & Sadler, B. L. (2008). Implementing Healthcare Excellence: The Vital Role of the CEO in Evidence-Based Design. *HERD: Health Environments Research & Design Journal*, *1*(3), 7–21. https://doi.org/10.1177/193758670800100303