



RESEARCH IN A SNAP

OVERVIEW

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

Knowledge Repository News

We've added 17 new citations in the past two months, including several research reports funded by the Academy of Architecture for Health Foundation (AAHF) annual research grant. The AAHF citations included links to the full papers, which are often more detailed versions of research that has been reported in a peer-reviewed journal. These peer-reviewed citations are also provided as reference.

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

You may have noticed in our bimonthly updates that you can click on a DOI (digital object identifier) link to the publishers website. From there you can determine whether the paper is open access or is subject to a fee. We have recently added this functionality to the Knowledge Repository, as well. Under each citation that is registered with a DOI, you will see "Click here to access this resource online." Just click and you will be directed to the original source!

March-April 2017

Academy of Architecture for Health Foundation Reports

1. Clark, T., & Combs, S. (2009). A Study of Hospital Inpatient Unit Design Factors Impacting Direct Patient Care Time, Documentation Time, and Patient Safety. Research Study. Retrieved from <http://aahfoundation.org/pdfs/Clark2C%20Combs-FY2008-09-A%20Study%20of%20Hospital%20Inpatient%20Unit%20Design%20Factors%20Impacting%20Direct.pdf>
2. Devlin, A. S., & Andrade, C. (2013). Hospital Rooms and Patients' Well-being: Exploring Modeling Variables. Research Study. Retrieved from http://aahfoundation.org/wp-content/uploads/2016/02/2012_Report_DevlinAndradeLima.pdf
(This was reported in the following peer-reviewed journal: Andrade, C. C., & Devlin, A. S. (2015). Stress Reduction in the Hospital Room: Applying Ulrich's Theory of Supportive Design. *Journal of Environmental Psychology*, 41, 125–134. <https://doi.org/10.1016/j.jenvp.2014.12.001>)
3. DuBose, J., Lim, L., & Westlake, R. (2015). Designing Team Rooms for Collaboration In The Outpatient Clinics. Research Study. Retrieved from http://aahfoundation.org/wp-content/uploads/2016/02/2013_Report_DuboseLimWestlake.pdf

The Knowledge Repository is provided with the funding support of:






Additional key point summaries provided by:






4. Nanda, U., Rybkowski, Z., Pati, S., Ai, D., Kalyanaraman, N., & Nejati, A. (2014). The Value Analysis of Lean Processes in Target Value Design and Integrated Project Delivery. Research Study. Retrieved from http://aahfoundation.org/wp-content/uploads/2016/02/2013_Report_NandaPati.pdf

(This was reported in the following peer-reviewed journal, also listed below as a new citation: Nanda, U., Rybkowski, Z. K., Pati, S., & Nejati, A. (2017). A Value Analysis of Lean Processes in Target Value Design and Integrated Project Delivery: Stakeholder Perception. *HERD: Health Environments Research & Design Journal*, 10(3), 99–115.

<https://doi.org/10.1177/1937586716670148>)

5. Shepley, M. M., Watson, A., Pitts, F., Garrity, A., Spelman, E., Fronsman, A., & Kelkar, J. (2016). Mental and Behavioral Health Environments: Measurement of Building Performance. Research Study. Retrieved from http://aahfoundation.org/wp-content/uploads/2017/02/MBH_Paper.pdf

(This was reported in the following peer-reviewed journals: Shepley, M. M., Watson, A., Pitts, F., Garrity, A., Spelman, E., Fronsman, A., & Kelkar, J. (2017). Mental and behavioral health settings: Importance & effectiveness of environmental qualities & features as perceived by staff. *Journal of Environmental Psychology*, 50(June), 37–50.

<https://doi.org/10.1016/j.jenvp.2017.01.005> and Shepley, M. M., Watson,

A., Pitts, F., Garrity, A., Spelman, E., Kelkar, J., & Fronsman, A. (2016). Mental and Behavioral Health Environments: Critical Considerations for Facility Design. *General Hospital Psychiatry*, 42, 15–21.

<https://doi.org/10.1016/j.genhosppsy.2016.06.003>

Infection Prevention

6. Copeland, A., & Sharag-Eldin, A. (2017). The impact of patient room design on airborne hospital-acquired infections. In *Architectural Research Addressing Societal Challenges* (Vol. 1, pp. 323–328). CRC Press. <https://doi.org/10.1201/9781315226255-51>
7. de Jong, B., Meeder, A. M., Koekkoek, K. W. A. C., Schouten, M. A., Westers, P., & van Zanten, A. R. H. (2017). Pre-post evaluation of effects of a Titanium Dioxide coating on environmental contamination of an Intensive Care Unit: the TITANIC study. *Journal of Hospital Infection*, in press. <https://doi.org/10.1016/j.jhin.2017.04.008>
8. Deshpande, A., Cadnum, J. L., Fertelli, D., Sitzlar, B., Thota, P., Mana, T. S., ... Donskey, C. J. (2017). Are hospital floors an underappreciated reservoir for transmission of health care-associated pathogens? *American Journal of Infection Control*, 45(3), 336–338. <https://doi.org/10.1016/j.ajic.2016.11.005>



9. Gupta, M., Bisesi, M., & Lee, J. (2017). Comparison of survivability of Staphylococcus aureus and spores of Aspergillus niger on commonly used floor materials. *American Journal of Infection Control*, (in press). <https://doi.org/10.1016/j.ajic.2017.02.014>
10. Ji, P., Rhoads, W. J., Edwards, M. A., & Pruden, A. (2017). Impact of water heater temperature setting and water use frequency on the building plumbing microbiome. *The ISME Journal*, (in press), 1–13. <https://doi.org/10.1038/ismej.2017.14>

Acoustics

11. Pope, D. S., & Miller-Klein, E. T. (2016). Acoustic assessment of speech privacy curtains in two nursing units. *Noise & Health*, 18(80), 26–35. <https://doi.org/10.4103/1463-1741.174377>
12. Farrehi, P. M., Nallamotheu, B. K., & Navvab, M. (2016). Reducing hospital noise with sound acoustic panels and diffusion: a controlled study. *BMJ Quality & Safety*, 25(8), 644. <https://doi.org/10.1136/bmjqs-2015-004205>

Lighting (natural and artificial)

13. Bernhofer, E. I., Higgins, P. A., Daly, B. J., Burant, C. J., & Hornick, T. R. (2014). Hospital lighting and its association with sleep, mood and pain in medical inpatients. *Journal of Advanced Nursing*, 70(5), 1164–1173. <https://doi.org/10.1111/jan.12282>
14. Giménez, M. C., Geerdinck, L. M., Versteyleen, M., Leffers, P., Meekes, G. J. B. M., Herremans, H., ... Schlangen, L. J. M. (2017). Patient room lighting influences on sleep, appraisal and mood in hospitalized people. *Journal of Sleep Research*, 26(2), 236–246. <https://doi.org/10.1111/jsr.12470>
15. Wagdy, A., Sherif, A., Sabry, H., Arafa, R., & Mashaly, I. (2017). Daylighting simulation for the configuration of external sun-breakers on south oriented windows of hospital patient rooms under a clear desert sky. *Solar Energy*, 149, 164–175. <https://doi.org/10.1016/j.solener.2017.04.009>.

Other

16. Nanda, U., Rybkowski, Z. K., Pati, S., & Nejati, A. (2017). A Value Analysis of Lean Processes in Target Value Design and Integrated Project Delivery: Stakeholder Perception. *HERD: Health Environments Research & Design Journal*, 10(3), 99–115. <https://doi.org/10.1177/1937586716670148>
17. Patterson, E. S., Sanders, E. B.-N., Sommerich, C. M., Lavender, S. A., Li, J., & Evans, K. D. (2017). Meeting Patient Expectations During Hospitalization: A Grounded Theoretical Analysis of Patient-Centered Room Elements. *HERD: Health Environments Research & Design Journal*, (in press). <https://doi.org/10.1177/1937586717696700>