

Micro-costing Resources:

Direct measures of healthcare costs

Smith, M. W., & Barnett, P. G. (2003). Direct measurement of health care costs. *Medical care research and review*, 60(3_suppl), 74S-91S.

Coberly, S. (2015). Relative Value Units (RVUs).

The application of healthcare system process improvement, a system application of valued-based care

Lee, V. S., Kawamoto, K., Hess, R., Park, C., Young, J., Hunter, C., & Graves, K. K. (2016). Implementation of a value-driven outcomes program to identify high variability in clinical costs and outcomes and association with reduced cost and improved quality. *Jama*, 316(10), 1061-1072.

A general overview to help researchers and administrators better understand TDABC

Kaplan, R. S., Witkowski, M., Abbott, M., Guzman, A. B., Higgins, L. D., Meara, J. G., & Wertheimer, S. (2014). Using Time-Driven Activity-Based Costing to Identify Value Improvement Opportunities in Healthcare. *Journal of Healthcare Management*, 59(6), 399-413.

Kaplan, Robert S. "Improving value with TDABC." *Healthcare Financial Management*, June 2014, p. 76+. *Academic OneFile*, Accessed 7 Nov. 2017.

A TDABC systematic literature review that explores why and how TDABC has been applied in healthcare settings

Keel, G., Savage, C., Rafiq, M., & Mazzocato, P. (2017). Time-driven activity-based costing in health care: A systematic review of the literature. *Health Policy*.

Examples of TDABC in practice:

An example of estimating the cost of two treatment options with time estimated from interviews not direct measurement. The paper provides a good depiction of the treatment process map.

Schutzer, M. E., Arthur, D. W., & Anscher, M. S. (2016). Time-driven activity-based costing: a comparative cost analysis of whole-breast radiotherapy versus balloon-based brachytherapy in the management of early-stage breast cancer. *Journal of oncology practice*, 12(5), e584-e593.

An example of application of TDABC in an outpatient radiology department with detailed process maps that illustrate personnel time for each step in the course of care

Anzai, Y., Heilbrun, M. E., Haas, D., Boi, L., Moshre, K., Minoshima, S., & Lee, V. S. (2017). Dissecting Costs of CT Study: Application of TDABC (Time-driven Activity-based Costing) in a Tertiary Academic Center. *Academic radiology*, 24(2), 200-208.

An example of the application of TDABC in an emergency department setting. The paper includes a comparison the total costs for an episode of care by ratio costs to charges (RCC), a relative value unit (RVU) model, and TDABC.

Yun, B. J., Prabhakar, A. M., Warsh, J., Kaplan, R., Brennan, J., Dempsey, K. E., & Raja, A. S. (2016). Time-driven activity-based costing in emergency medicine. *Annals of emergency medicine*, 67(6), 765-772.

Gross-costing Resources:

Healthcare Provider Cost Reporting Information System (HCRIS) Hospital Cost Data can be found @: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/Cost-Reports/>

CMS maintained Medicare-certified institutional providers annual cost report. Information includes facility characteristics, utilization data, cost and charges by cost center (in total and for Medicare), Medicare settlement data, and financial data. Cost report data is also available for Skilled Nursing Facility, Home Health Agency, Renal Facility, Health Clinic, Hospice Cost Federally Qualified Health Clinic Cost Report, and Community Mental Health Center Cost Report.

Medicare MEDPAR files can be found @: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareFeeforSvcPartsAB/MEDPAR.html>

MEDPAR files contain information on 100% of Medicare beneficiaries using inpatient hospital services. Data is available by state and then by Diagnosis Related Groups (DRGs). A hospital inpatient discharge is assigned to a DRG based upon diagnosis, surgery, patient age, discharge destination, and sex. Information includes total charges, covered charges, Medicare reimbursement, total days, number of discharges and average total days.

Schousboe, J. T., Paudel, M. L., Taylor, B. C., Mau, L.-W., Virnig, B. A., Ensrud, K. E., & Dowd, B. E. (2014). Estimation of Standardized Hospital Costs from Medicare Claims That Reflect Resource Requirements for Care: Impact for Cohort Studies Linked to Medicare Claims. *Health Services Research, 49*(3), 929–949. <http://doi.org/10.1111/1475-6773.12151>