SDC #2: Data extraction of included articles.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Reference** | **Year** | **Type of Publication a** | **Type of Nurse** | **Setting** | **Described or Proposed Metric b** | **Name of Metric** | **Description of Metric** | **Proposed Use(s)** |
| Schiks I, Schoonhoven L, Verheugt F, Aengevaeren W, van Achterberg T. Performance evaluation of arterial femoral sheath removal by registered nurses after PCI. *Eur J Cardiovasc Nurs*. 2007;6:172-177. | 2007 | Empirical Report | Cardiovascular staff nurses | Cardiac catherization laboratory | Described | Sheath removal performance | Individual nurse compliance with a cardiac catheter sheath removal protocol was assessed as a sensitivity measure in a study reporting aggregate nurse compliance with a protocol | Individual nurse metric uses not described; focused education proposed for aggregate data |
| Kapu AN, Kleinpell R. Developing nurse practitioner associated metrics for outcomes assessment. *J Am Assoc Nurse Pract*. 2013;25:289-296. | 2013 | Commentary | Nurse Practitioners (NPs) | Intensive care units (ICUs) | Described | Multiple; "NP-associated metrics for outcomes assessment" | Development of data dashboards that capture multiple NP-associated performance metrics in the ICU with the ability to view individual NP performance | Inclusion as part of the NP ongoing professional practice evaluation (OPPE) |
| Yakusheva O, Lindrooth R, Weiss M. Nurse value-added and patient outcomes in acute care. *Health Serv Res*. 2014;49(6):1767-1786. | 2014 | Empirical Report | Staff nurse | Inpatient, Medical-Surgical | Described | Nurse Valued-Added (NVA) | Individual NVA was calculated using nurse-linked data to patient outcomes using a composite score called the Rothman Index (RI) that measured changes in the patient's clinical condition. Additionally, patient length of stay, re-admission, and hospital costs were also linked to individual nurses. | Individual nurse performance evaluation and compensation models |
| Welton JM, Harper EM. Measuring nursing care value. *Nurs Econ*. 2016;34:7-14. | 2016 | Commentary | Staff nurse | Multiple | Proposed | Nurse Value Data Model | Multiple description of individual-level metrics for nurse productivity | New model for staffing that accounts for nurse performance and individual patient-level factors. |
| Welton JM. Nurses and the ethics of big data. *Nurs Econ*. 2016;34:257-259. | 2016 | Commentary | Staff nurse | Not specified | Proposed | Multiple | Individual nurse performance, efficiency, clinical effectiveness, and/productivity | Identify best practices as well as potential mismatches of workload and patient care needs |
| Dexter F, Ledolter J, Hindman BJ. Validity of using a work habits scale for the daily evaluation of nurse anesthetists’ clinical performance while controlling for the leniencies of the rating anesthesiologists. *J Clin Anesth*. 2017;42:63-68. | 2017 | Quality Improvement | Certified registered nurse anesthetists (CRNAs) | Perioperative department | Described | CRNA work habits | Daily peer evaluation of CRNA work habits by their anesthesiologist co-workers | Inclusion as part of the CRNA OPPE |
| Chang AM, Cohen DJ, Lin A, et al. Hospital strategies for reducing emergency department crowding: A mixed-methods study. *Ann Emerg Med*. 2018;71:497-505.e4. | 2018 | Empirical Report | Staff nurse | Emergency Department | Proposed | Multiple | Time-related metrics are described with feedback reported to given at the individual nurse level | Individual nurse accountability in multidisciplinary efforts to improve Emergency Department crowding |
| Chambers M, McAndrew S, Nolan F, et al. The Therapeutic Engagement Questionnaire (TEQ): A service user-focused mental health nursing outcome metric. *BMC Psychiatry*. 2019;19:1-7. | 2019 | Empirical Report | Registered mental health nurses | Acute in-patient mental health | Described | Therapeutic Engagement | Level of therapeutic engagement of an individual nurse is measured with a questionnaire completed by both the nurse and their patients | Monitoring individual nurse activity and add to an organization's performance indicators and outcome measures |
| Bliss K, Chambers M, Rambur B. Building a culture of safety and quality: The paradox of measurement. *Nurs Econ*. 2020;38:178-184. | 2020 | Empirical Report | Staff nurse | Multiple | Proposed | Multiple | Multiple metrics are described, including time-to-treatment metrics, that could be used in the evaluation of individual nurse performance | Individual nurse metric uses not explicitly described; however, preparation and education of nursing staff for the potential of individual metrics is proposed |
| Yakusheva O, Needleman J, Bettencourt AP, Buerhaus PI. Is it time to peek under the hood of system-level approaches to quality and safety? *Nurs Outlook*. 2020;68:141-144 | 2020 | Commentary | Staff nurse | Inpatient | Described | Individual/Clinician-level Performance Variability | Calculation based on the outcome of the patient acuity score at discharge and the individual nurse assigned | To be the basis of further efforts to improve quality and outcomes through qualitative inquiry |
| Castille K, Robinson J. Balancing quality with productivity. *Nurs Manage*. 2011;18(2):14-20. | 2021 | Quality Improvement | Senior nurses and midwives | Multiple | Described | Senior nurse activity | Description of how the time of senior nurses and midwives is spent on both clinical and non-clinical activities to understand productivity in this cohort | Disaggregated data were shared with leadership to adjust the clinical and non-clinical responsibilities of senior nurses to increase the value to patient care |
| Burnie J, Vining S. Clinical nurse specialist practice: Impact on emergency department blood culture contamination. *Clin Nurse Spec*. 2021;35:314-317. | 2021 | Quality Improvement | Staff nurse | Emergency Department | Described | Blood culture contamination | Incidence of contaminated blood cultures associated with individual emergency nurses | Targeted education by clinical nurse specialist to emergency nurses to increase compliance with blood culture policy |

a *Empirical Report:* inclusive of quantitative or qualitative research studies; *Quality Improvement*: inclusive of performance or quality improvement initiatives that include quantitative data; *Commentary*: inclusive of non-research data reports and opinion articles

b *Described*: the metric has been created and is used in the study; *Proposed*: the metric is explained, but is not calculated.