

Call to action: Blueprint for change in acute and critical care nursing



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ABSTRACT

Herein, we propose a blueprint for action to completely measure and recognize the care provided by acute and critical care nurses to be incorporated into policy that shapes and supports practice. We address the nature of nurses' work by identifying nine practice domains, hospital practice environment assumptions, and expected outcomes. Nurses' work, as a cross-system process, needs to be included in hospital-based core measures to fully reflect nurses' impact on patient care. We call for a balanced measurement portfolio focused on patient/family-, unit-, and systems-level outcomes. We focus on what nurses do and what patients and their families can expect rather than only on the elimination of select adverse events. We provide a way forward to allow measure development and implementation with incentives for their use. This approach to making nurses' contributions and impact on outcomes visible will enhance acute and critical care nursing practice and benefit patients and their families.

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Introduction

Each year, nearly 34 million people, from premature neonates to frail older adults, receive care from acute and critical care nurses practicing within hospitals (Health Forum, 2024). These nurses were hailed as heroes by both the public and healthcare communities during the coronavirus disease 2019 (COVID-19) pandemic (Reynolds et al., 2023). While the world was homebound, hospital-based nurses returned to work each day, faced the unknown, and cared for

the sick and dying around the clock at times without adequate personal protective equipment to keep them safe. Every day, often exhausted and scared, nurses made difficult decisions about allocating or clustering care to limit their own and their patients' exposures to a lethal virus that ultimately killed millions of people worldwide. These nurse heroes were often the only healthcare providers who physically touched patients and the only person present when the afflicted died.

The work of acute and critical care nurses, almost two-thirds of the nation's nursing workforce (Auerbach et al., 2024), has always been physically and emotionally difficult. But now, patients are presenting to hospitals with increasingly complex problems, multiple comorbidities, and more challenging social situations (Costa et al., 2024). Connecting with patients and their families during what might be the worst-possible period in a person's life is difficult, especially when experienced every working day. Simultaneously, the work of nursing is concurrently brilliant, personally enriching, brings personal joy, and provides the one-to-one human connection that can sustain individual nurses throughout their careers.

While the complexity of inpatient care has increased, hospital-based nurses continue to work with pre-pandemic outdated models of nursing care delivery mired in debates about minimal staffing requirements. The pandemic amplified a fractured nursing workforce. Nurses often find themselves caring for more patients than they can effectively manage, which leads to compromised patient care, personal stress, and burnout (Costa et al., 2024; Martin et al., 2023; Muir et al., 2024; Sheppard et al., 2022). Post-pandemic reductions in the nursing workforce occurred almost exclusively in the hospital setting as experienced acute and critical care nurses left the profession or chose alternative careers outside the hospital setting (Auerbach et al., 2024). Vacant positions were filled with new-to-practice nurses who were assuming responsibilities for care before they were adequately prepared. The nurses who stayed in the hospital setting were often frayed in need of support, as were the new-to-practice nurses who replaced those who left.

While the extreme conditions faced by nurses during the pandemic have faded, acute and critical care nurses continue to face serious long-standing challenges that impact the delivery of high-quality care (Friese et al., 2024). At this crucial time in healthcare, members of the Acute and Critical Care Expert Panel of the American Academy of Nursing feel obligated to give voice to hospital-based nurses by articulating this *Blueprint for Acute and Critical Care Nursing Practice*. With intent, we focus on the practice of bedside nursing with the goal of bringing to light the work and impact of nursing care in acute and critical care settings and, subsequently, influencing healthcare policy decisions that may shape and/or support patient care. This *Blueprint* considers three perspectives: first, the contemporary work of acute and critical care nursing (*What Nurses Do*); second, core elements of the practice environment essential to support nurses' work in caring for patients and their families (*Key Hospital Environment Assumptions*); and third, the outcomes patients, families, and healthcare systems can expect to receive when the work of acute and critical care nurses is aligned within the practice environment (*The Outcomes*). We consider all three perspectives concurrently because they are inextricably linked and cannot be considered separately.

Our goal in articulating this *Blueprint* is to call attention to the outcomes of stellar bedside nursing practice, making it visible to patients and families, bedside nurses, healthcare systems, and policy decision-makers. This *Blueprint* builds upon previous models (Mitchell et al., 1998) and existing evidence, draws attention to gaps, and provides direction for future development and dissemination of outcome measures that acknowledge the contributions of hospital-based nursing to inform healthcare policy. Currently, the contribution of acute and critical care nurses to patient outcomes is inadequately measured in hospital-based core measures. While tied to the Centers

for Medicare and Medicaid (CMS) pay-for-performance criteria, hospital-based measures focus on medical interventions within discrete medical diagnoses that align with optimal patient outcomes (Centers for Medicare & Medicaid, 2024). For most disease states, the targeted outcomes for these medical interventions are not recognized as CMS core measures due in large part to the complexity of severity adjustment across numerous heterogeneous disease states that often coexist with a wide variety of comorbidities that increase the intensity of care.

We argue that acute and critical care nursing, as a cross-system process for all medical conditions of hospitalized patients, is tied closely to optimal patient outcomes, which illustrates the critical nature of nursing's unique contribution. From patient/family perceptions of safety and genuine caring to patient/family attainment of essential disease-specific knowledge and self-care capacity, outcome measures provide an ability to gauge nursing's impact that is currently lacking in the CMS core measures. When such outcomes are required and found to be suboptimal, interventions that strengthen the practice environment could be triggered, making clear the need for improvements that lessen nurse burnout and enrich nursing practice contributions. Therefore, we see this work as having important policy implications impacting the practice environment that have largely been ignored. We absolutely believe that nurses' enchantment with the practice of bedside nursing will thrive when the outcomes of their day-to-day practice are made visible with data that are important to patients and their families.

What Acute and Critical Care Nurses Do

Fundamentally, nurses engage in caring relationships with individual patients and families to facilitate their health, recovery, and healing. Nurse-patient/family relationships bolster the resiliency of patients and families and limit or diminish barriers to patient and family healing. While nursing's initial approach to a patient's care is standardized, unique patient and family differences and preferences require nurses to individualize care and provide precision-based interventions that rely on an individual nurse's clinical judgment situated within a patient's illness trajectory. To accomplish this, nurses come to know their patients and the family's responses while caring for them. Knowing patients and families includes who they are as individuals, what they value, and what they wish to receive from their nurses. As an individual nurse gains experience and carries forward evolving knowledge from previous patients, their expertise grows (Benner et al., 2011). Expert nurses who "know" the care required of patients in their subspecialty, consistently deliver on important population-specific clinical outcomes.

Building from nursing standards of practice and professional performance (American Nurses Association, 2021), Table 1 outlines the professional practice domains of acute and critical care nurses. Nurses are responsible for creating safe, healing environments for hospitalized patients and their families; specifically, nurses create care environments that sustain and support the patient's and

Table 1
Nine Domains of Acute and Critical Care Practice—What Nurses Do

1. Create safe healing environments
2. Build caring relationships with patients and families
3. Assess and manage patient symptoms
4. Administer physical, therapeutic, preventative, and end-of-life care
5. Provide surveillance, vigilant of patient risks, and are ready to intervene
6. Teach patients and families what they need to know to actively participate in their own care and decision-making and manage their own care after hospital discharge
7. Collaborate with, and coordinate care within the interprofessional team
8. Advocate for the patient and family ensuring that their needs and preferences are known and respected within the interprofessional care team
9. Navigate patient transitions in care across and out of the healthcare system

family's capacity to heal. Hospitals are intimidating places to visit, let alone when one is sick in a hospital. Nurses help patients and families feel safe. Articulated from Nightingale (Nightingale, 1860), nurses have a long history of preventing harm in the care environment and are often the last line of defense in preventing negative consequences of acute illness (Krumholz, 2013) and errors and unsafe practices (Benner et al., 2011).

The primary reason that patients are hospitalized is because they need nursing care: care that cannot be provided at home. Acute and critical care nurses take the lead in all aspects of nursing care, collaborating and sharing responsibility with other disciplines for the success of the interprofessional plan of care. Nurses ensure that care is person-centered, evidence-based, appropriate, anticipatory, coordinated, and cost-effective. Nurses manage the patient's physical care that includes their personal hygiene, nutrition, hydration, toileting, sleep, rest, and mobility (American Nurses Association, 2021; Richards et al., 2018). Nurses assess and manage the numerous symptoms experienced by sick patients with the goal of minimizing distress (Guttormson et al., 2023), providing comfort (Benner et al., 2011), and alleviating suffering. Additionally, nurses provide goal-directed therapeutic interventions and manage life-sustaining therapies, both routine and complex, that are individually titrated for each patient based on their needs and responses.

Given their around-the-clock surveillance, nurses are often the first to diagnose and manage life-threatening physiologic dysfunction (Benner et al., 2011). The more expert the nurses, the more skilled they are at detecting an atypical patient response or illness trajectory, managing a patient crisis (Benner et al., 2011), transitioning the patient and family through issues related to criticality/chronicity, and redirecting care. Critical assessments are vigilant, planned, and integrated with a continual re-evaluation of a patient's dynamic response. Nurses work to know each patient, their unique risk profile, and response, enabling them to anticipate and detect subtle changes in patient condition and institute preventative measures to diminish or rescue patients from potential complications or associated problems and prevent iatrogenic injury.

Nurses monitor the patient's and family's response to illness. Nursing's presence, engagement, compassion, and empathy foster patient and family trust, helping them cope or, at the very least, feel supported. Since the goal of hospital care is to return patients back into their communities, nurses continuously teach patients and families what they need to know to understand and actively participate as desired or capable in their own care. The nurse works with families where they are and assumes an inclusive stance when partnering with them in decision-making and care, the level of which changes over time (Curley, 1998). Nursing's core values honor patient autonomy and individual differences, forming the basis for person-based care. Mutuality characterizes the synergistic nurse--patient/family relationship that supports patient and family autonomy and nurses' instrumentality in helping patients and families (re)acquire competency in self-management (Curley, 1997). Patient and family values and preferences are central to the development of informed care decisions made in collaboration with and using the expertise of the interprofessional healthcare team.

Nurses are instrumental in helping patients and families know and understand their illness and for other disciplines to know and understand the patient and family. Nurses bridge communication within the interprofessional team; they negotiate multiple perspectives, monitor quality, and manage breakdowns (Benner et al., 2011). Nurses demonstrate clinical leadership in the coaching and mentoring of other intra-/inter-professional team members (Benner et al., 2011). The larger the team, the more complex and more at risk for communication failure. The nurse initiates and coordinates interprofessional team meetings that include the patient and family at critical decision points.

Acute and critical care nurses are responsible for coordinating the patient's safe transition through and from hospital systems. This

coordination is so essential to reducing complications, readmission, and the costs of hospitalization that Principal Illness Navigation is now reimbursed by CMS across all complex and chronic patient diagnoses. Considered high-risk activities, patient transfer and discharge require skilled nursing communication, care coordination, and system thinking. Nurses help patients and families navigate their transition and assume post-discharge care. They also stand beside patients and families, advocating and providing end-of-life (EOL) care (Benner et al., 2011), orchestrating a process that honors both patient and family. Post transition, patient and family experience with nurses engenders personal feelings of being well-cared-for, allowing them to recommend the hospital to others and when necessary, facilitates their return for further care.

Assumptions of the Practice Environment

Many have long recognized the inseparable links among the quality of the work environment, excellent nursing practice, and patient care outcomes (American Association of Critical-Care Nurses, 2005; Lake et al., 2019; McHugh et al., 2021). The following assumptions, as outlined below, are what we believe to be essential in ensuring that patients and their families receive outstanding care. We summarize the core elements of these assumptions as a checklist in Table 2.

Nurses are Adequately Prepared to Practice in Acute and Critical Care

Preparing nurse graduates for acute and critical care careers is a shared responsibility and requires strong academic--service partnerships as practice continually evolves with new discoveries and innovation. Where academia leads in pedagogy, service leads in content. Successful academic--service partnerships inform curricular revisions and create clinical practice arrangements and apprenticeship preceptor models that better support the transition of new nurse graduates into the practice environment. Nurse faculty who know clinical practice can better situate the evolving clinical judgment of the novice student nurse. Mentorship models matching student nurses with bedside nurses in the clinical setting can impact the professional development of both student and mentor. Recent barriers to this clinical work include bedside nurses who are either too new to mentor or experienced nurses who are overtaxed from working with multiple new-to-practice nurses.

New-to-practice nurses whose clinical learning experiences coincided with the pandemic graduated with little direct patient care contact (Feeg et al., 2022). While simulations provided novel strategies to interact with would-be patients, the learning curve post graduation was steep, with little recognition of the need for, or opportunity to, experience mentorship or debriefing particularly after challenging patient situations. Adopting a long-term perspective by removing credentialing barriers that impede new graduates from moving into practice (Reebals et al., 2022) and investing in programs that strengthen preceptor skills, facilitate transition-to-practice, and post-orientation mentorship can impact a nurse's career trajectory, and provide a return on investment (ROI) to the hiring organization (Dall et al., 2009). While many have called for health system support for practice transitions, including nurse residency programs, less than half of U.S. health systems have adopted them (Sutor & Painter, 2020; Swan et al., 2024).

Matching new-to-practice nurses to areas of interest requires that hospitals refresh their hiring processes. Interviewing potential new hires about what brings them joy and then matching them to a care area that nourishes that joy may help diminish unit-to-unit transfers or outright terminations after orientation is complete. Hiring and matching nurses to clinical units requires disciplinary oversight and should not be delegated to human resource departments alone. Hospitals that provide a menu of open positions

Table 2

Core Elements of the Practice Environment that Support Acute and Critical Care Nurses' Capacity to Care for Patients and Families—Key Hospital Environment Assumptions

Core Element	Characteristic Feature
1. Nurses are adequately prepared to practice in acute and critical care.	<ul style="list-style-type: none"> ✓ Inform curriculum, clinical practice, and other apprenticeship models through academic–service partnerships ✓ Support new graduates with transition-to-practice programs ✓ Place nurses in clinical areas of interest ✓ Match orientation programs to the needs of the learner, focused on nursing clinical judgment ✓ Phase orientation programs
2. There are enough nurses, with requisite expertise, aligned to care for patients.	<ul style="list-style-type: none"> ✓ Incorporate structured mentorship into orientation and beyond ✓ Move beyond numbers to matching nursing expertise to the patient needs in a clinical area ✓ Institute data-informed precision staffing matrices ✓ Update matrices when nurse availability and patient mix changes ✓ Create Nurse Dossiers that inventory nurse expertise
3. Nursing practice is unrestrained by local policies and designed to help nurses use their expertise when caring for patients and their families.	<ul style="list-style-type: none"> ✓ Support nurses practicing at their full scope of expertise ✓ Establish policies that facilitate nurse autonomy in titrating therapies based on patient response ✓ Match the model of care that includes varying delegation models to the needs of patients ✓ Consider requisite continuity in care when rostering nurses ✓ Develop professional advancement programs that recognize, promote, and compensate nursing expertise linked to patient outcomes
4. Systems are designed to support nurses and nursing practice.	<ul style="list-style-type: none"> ✓ Strengthen institutional supports for interprofessional collaboration ✓ Include clinical nurses in all decisions affecting patient care ✓ Strengthen professional governance structures ✓ Ensure that all disciplines practice within their professional scope ✓ Ensure infrastructure to support patient care ✓ Leverage technology, especially artificial intelligence, to decrease nurses' cognitive load ✓ Embed clinical nurse specialists in clinical areas with high patient complexity, limit time spent off the clinical units

describing each clinical unit's patient population and associated nursing workforce team will allow nurse applicants to actively select their future community of practice.

Upon placement in an acute or critical care unit, flexible orientation programs that accommodate the onboarding needs of nurses with a wide range of experience, from none to many years of practice, are needed. Orientation programs should focus on validating and building nurses' clinical reasoning and judgment rather than documenting the accomplishment of a checklist of decontextualized tasks. Phased orientation programs can deliver appropriately timed knowledge and skills necessary to care for the increasingly complex needs of hospitalized patients. Phase 1 competencies are generic to the hospital system. Phase 2 competencies are focused and matched to the nursing care needs of prevalent patient populations cared for on the hiring unit. Phase 3 competencies focus on atypical or more complex patient care needs and the interprofessional role of the nurse as a clinical leader within the care environment. In addition, leaders in post-orientation practice environments have the responsibility to partner with nurses to support their ongoing professional development that bolsters nursing's capacity to provide innovative care within a highly technical environment.

There are Enough Nurses, With Requisite Expertise Aligned to Care for Patients

The most pressing issues experienced by hospital-based nurses are high patient loads of increasingly complex patients and ongoing staffing shortages. Appropriate nurse staffing is a dynamic process that aligns the number of nurses, their workload, expertise, and resources with patient needs to achieve quality patient outcomes within a healthy work environment ([American Association of Critical Care Nurses, 2024](#)). While standard calculations for worked hours per patient day (WHPPD) are helpful in providing estimates of the number of nurses needed to staff an inpatient unit, national norms

are woefully inadequate when applied locally. Individual nurses are not interchangeable and the WHPPD does not account for individual nurse variation.

At any point in time, varying levels and types of nursing expertise are required on an inpatient unit. Hospital investment in centralizing real-time knowledge about its nursing workforce is essential ([Ruppel et al., 2023](#)). This includes creating "Nurse Dossiers" that describe each nurse's qualifications, microcredentials, certifications, expertise, and professional goals. Given our evolving capacity to triangulate patient–nurse–outcome data, we can now institute data-informed precision staffing matrices that are updated as frequently as possible as changes in patient population and/or nursing expertise occur ([Ruppel et al., 2022](#)). Bedside nurses and nurse leaders can use these data to jointly delineate, prospectively monitor, and change the nursing workforce based on patient outcomes ([Buerhaus et al., 2023](#)). Describing and then monitoring each clinical unit's nurse competency–patient outcome relationship would allow hospitals to focus on nursing's value ([Dall et al., 2009](#); [Hickey et al., 2016](#)).

Nursing Practice is Unrestrained by Local Policies and Designed to Help Nurses Use Their Expertise When Caring for Patients and Their Families

To optimize ROI, hospitals should work toward supporting nurses practicing at the full scope of their preparation and expertise ([Institute of Medicine, 2011](#)). Valuing the differences in clinical judgment among acute and critical care nurses requires the profession to institute models of care that differentiate bedside nursing practice. Historically, hospitals have not recognized nor rewarded varying levels of nursing expertise. Rigid hospital policies and procedures under the guise of patient safety have created a low set point and expectations for clinical practice, ignoring evolving levels of nursing clinical judgment. Expecting nurses to function at their lowest capacities will not enhance nurse productivity nor sustain long-term careers at the bedside. Existing professional ladders have consistently fallen short ([Slagle et al., 2023](#)). Currently, most do not

reflect a nurse's evolving expertise, and are not evidence-based or linked to patient outcomes. Instead, most ladders count accomplishments that are divorced from actual patient care. Professional advancement programs recognizing, promoting, and compensating nursing expertise linked to patient outcomes would call attention to nursing's ROI.

Substantive evidence supporting models of care delivery is limited (Costa et al., 2024). One model of care delivery applied across an entire healthcare system is insufficient. What may work brilliantly on one unit, may not work on another. Nurses can advocate for their patients, ensuring their rights are upheld and their needs are met, only when models of care are designed to allow it. Optimal models of care include a consideration of continuity in care and clinical judgment, factors that stabilize care within chaotic environments (Curley, 1998). These include a Team Management Model of Care for patients with a predictable trajectory of illness and short anticipated length of stay (LOS), and a Nurse Attending Model of Care (Watson & Foster, 2003) for patients at high risk for a complicated course of illness, patients involved with multiple services (high variability in practice patterns), or patients at high risk for complications. The Nurse Attending Model of Care clearly seats patient accountability squarely on one expert nurse and provides opportunities for mentoring less-experienced staff.

Minimally, patient needs for continuity in care should inform nurse rostering. Currently, charge nurses work to match available nurses to patients on a shift-by-shift basis. That noted, scheduling nurses in a way that matches consecutive days worked to a care unit's modal length of patient's stay will enhance continuity in care and nurse knowledge of patients and their families. This would augment relationship-building that is essential for both patient and nurse satisfaction (Bridges et al., 2013). The staffing goal is the fewest number of different nurses assigned to the care of a patient over their hospitalization. For example, when the typical LOS on a unit is 2 to 3 days, nurses can schedule themselves with a few sequential days. When the typical LOS on a unit is > 3 days, nurses can schedule themselves with sequential days or form a schedule cluster where four or more nurses schedule themselves together. This scheduling format would also allow nurses with varying levels of expertise to work together, benefiting from nurse-nurse mentoring and ensuring that patients receive care from a team led by an expert nurse.

Systems are Designed to Support Nurses and Nursing Practice

On a hospital systems level, creating practice environments that allow acute and critical care nurses to provide the care that they are capable of, starts with a unified patient-centered organizational mission, shared vision, and core values that guide everyone's work. Collaboration has long been recognized as a critical element of quality patient care. However, nurses and physicians have different perceptions about the nature and role of collaboration. Many nurses continue to face barriers in collaborating with physicians that are exacerbated by staffing constraints (Costa et al., 2024). Disciplinary leadership in nursing practice, from bedside to the board table, is essential. Valuing bedside nurses as committed partners in setting policy, directing and evaluating clinical care, and leading organizational operations is essential. Any decision affecting patient care must include the discipline responsible for executing that care, in hospitals, that includes acute and critical care nurses.

Professional governance structures, designed to oversee the multifaceted dimensions of nursing practice, provide an opportunity for bedside nurses to influence the systems that support patient care. Acute and critical care is constantly evolving, requiring bedside nurses to actively participate and lead clinical innovation and implement new evidence-based treatments, technologies, and best practices. Participating in professional governance, both at the unit

and/or hospital level, is associated with higher Hospital Consumer Assessment of Healthcare Providers and System (HCAHPS) performance ratings and hospital top-box HCAHPS performance (Rosenbaum et al., 2024).

Nurses' work is often overburdened by misaligned systems. Specifically, systems that fail to manage ancillary roles supporting effective around-the-clock patient care. Bedside nurse involvement in supportive activities that do not require a nurse, like answering phones, scheduling procedures, and searching for supplies and equipment, takes nurses away from nurse-essential bedside activities like managing progressive mobility or teaching essential care activities required for patient discharge. Every nurse feels defeated by essential nursing work left undone at the end of one's shift. Periodically, interprofessional unit leaders, using human factors design frameworks, can unpack local processes to improve everyone's productivity ensuring that the right discipline is engaged in the right activities, shifting tasks as appropriate (Buerhaus et al., 2023).

One can expect that technological advances in the hospital environment, especially artificial intelligence (AI), will continue to cognitively unload bedside nurses. Currently, nurses are required to complete extensive documentation for each patient using an electronic health record that has not yet lived up to its promise and expectations. Imagine the hours of nurses' work that can be recouped in the near future when AI-enhanced technology prioritizes and then streamlines nursing documentation.

Access to unit-based advanced practice clinicians, such as clinical nurse specialists (CNS), can support bedside nurses in providing complex care (National Academies of Sciences Engineering, 2021). While we acknowledge that the number of CNSs have steadily declined over the past decade, we believe it is time to reverse this trend. The CNS can help fill the gap in decisional expertise when planning care, especially when there is a high percentage of new-to-practice nurses. CNSs provide essential support for the bedside nurse optimizing nurse-sensitive patient outcomes, driving evidence-based practice changes, and provide the disciplinary leadership necessary to rearticulate models of care delivery that work for patient and families at the local and systems level (Gabbard et al., 2021). In addition, ethical dilemmas surrounding respect for patient autonomy, disclosing medical information, and EOL decisions are endemic in acute and critical care nursing practice, and even the most experienced nurse can suffer moral distress (Rushton et al., 2015) that may benefit from CNS support. The CNS role also provides an advanced practice option for expert nurses who would like to stay at the bedside. Focused academic-service partnerships are needed to provide the leadership necessary to jointly re-envision the CNS role and arm the CNS pool with the national data necessary to help transform the practice environment (Fischer-Carlidge & Short, 2023).

The Outcomes

The patient outcomes derived from acute and critical care nursing should match what the patients themselves identify as important (Curley, 1998). To accomplish this, patient outcomes must reflect the totality of acute and critical care nursing practice. Table 3 compares current and examples of future hospital metrics by the nine domains of acute and critical care practice. Currently, most patient outcome measures aligned with hospital-based nursing are reported as harm metrics, like patient falls, line infections, and pressure injuries. This is true for the major national and regional quality monitoring systems, including the National Database of Nursing Quality Indicators, and the American Nurses Credentialing Center Magnet Recognition Program. This limited perspective not only fails to recognize the number of patients that nurses rescue from untoward events, it clearly misses the mark in calling attention to the broader impact of hospital-based nursing on patients and

Table 3
Outcomes and Patient Experience of Care Measures by Practice Domain: Currently Measured and Examples of Future Measurement

Currently Measured	Examples of Future Measurement
<p>1. <i>Create safe healing environments</i></p> <ul style="list-style-type: none"> Medical-surgical: (HCAHPS Q37): During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it? Question 9: ...How quiet was the area around your room quiet at night?[*] Custom: Your confidence that staff provided care in a safe and secure manner. Skill of the nurses.[†] Patient identification errors[‡] Falls with injury^{*,†,‡,§} 	<ul style="list-style-type: none"> Perception of being well-cared for Perception of feeling safe Safe passage Measures of trust Prevents errors, serious safety events^{*,‡}
<p>2. <i>Build caring relationships with patients and families</i></p> <ul style="list-style-type: none"> Medical-surgical: Nurse communication (HCAHPS Q1): During this hospital stay, how often did nurses treat you with courtesy and respect? Q2. How often did the nurses listen carefully to you?[*] Custom: Staff effort to include you in decisions about your treatment, nurses' attitude toward your requests.[†] Critical care: Sensitivity and responsiveness of critical care nurses.[†] 	<ul style="list-style-type: none"> Perception of nurse "genuinely caring" about patient/family needs Being present, empathetic, engaging, and compassionate Providing family-centered care Help for families^{**} Enlists families in structuring care^{**}
<p>3. <i>Assess and manage patient symptoms</i></p> <ul style="list-style-type: none"> Pediatric Pain Assessment/Intervention/Reassessment Cycle[†] Custom: How well your pain was addressed. How well you were informed of pain control options. Nurses' sensitivity and responsiveness to pain you may have experienced in the hospital/ICU nurses' sensitivity and responsiveness to your pain.[†] 	<ul style="list-style-type: none"> Patient-centered symptom relief Minimize distress Promote comfort Prevents suffering Selected patient-reported outcomes (PROMIS), for example, pain, fatigue, physical functioning, and emotional distress^{††}
<p>4. <i>Administer physical, therapeutic, preventative, and end-of-life care</i></p> <p>4A. Physical care: personal hygiene (including oral/mouth care), toileting, nutrition, hydration, mobility, rest comfort, sleep quality, and emotional well-being</p> <ul style="list-style-type: none"> Global Malnutrition Composite Score[*] Self-harm post admission[*] Custom: Amount of attention paid to your special or personal needs.[†] 	<ul style="list-style-type: none"> Hospital-acquired weakness Level of mobility (from baseline) Functional status (from baseline) Disability scale specific to diagnoses (e.g., NIH Stroke Scale) Musculoskeletal disorders, contractures, and foot/wrist drop Frailty Cognitive dysfunction (from baseline) Mood disorders: depressive symptoms, anxiety, and PTSD Change in developmental milestones Growth metrics for treated patients^{**} Pattern of bowel elimination (from baseline)
<p>4B. Therapeutic care, complication, and harm prevention</p> <ul style="list-style-type: none"> Catheter-associated urinary tract infection (CAUTI) ^{*,†,§} Central line-associated bloodstream infection (CLABSI) ^{*,†,§} Multidrug-resistant organisms including CDiff, MRSA^{†,§} Surgical site infection^{*,§§} Hospital-acquired pressure injury stage 2 and above^{*,†,‡,§} Critical care: Attention paid to your special or personal needs in the ICU?[†] 	<ul style="list-style-type: none"> Time to therapeutic interventions (population-specific) Prevention of physiologic/metabolic derangement Prevention of medical device-related pressure injuries[§] Prevention of infection Prevention of Peripheral IV infiltration and extravasation^{†,§} Prevention of venous thromboembolism Unplanned extubation^{**} Prevention of ventilator-associated events and ventilator-associated pneumonia[†] Prevention of postoperative respiratory failure[*] Prevention of hospital-acquired pneumonia in nonventilated patients Prevention of extremes in neonatal temperature^{**} Enhanced wound healing Prevention of diaper dermatitis Prevention of retinopathy of the preterm infant Prevention of patient burns^{†,§}
<p>4C. End-of-life care</p>	<ul style="list-style-type: none"> Symptom and pain control Achievement of a pain score that allows the patient to function Time to redirection of care (cure to palliative care, DNR) Goals of care discussions
<p>5. <i>Provide surveillance, vigilant of patient risks, and are ready to intervene</i></p>	<ul style="list-style-type: none"> Time to physiologic stability (duration on pressors, length of mechanical ventilation, and ICU days) Time to critical intervention—time to recognize and respond to an evolving clinical situation (population-dependent) Patients rescued (outcome: how many at risk for X but did not develop X, rearticulated for nursing) Fewer unplanned ICU transfers Rapid response activation Fewer cardiopulmonary arrests^{‡‡} Reduced risk for suicide[‡]
<p>6. <i>Teach patients and families what they need to know to actively participate in their own care and decision-making and manage their own care after hospital discharge</i></p> <ul style="list-style-type: none"> Medical-surgical: (HCAHPS Q3): During this hospital stay, how often did the nurses explain things in a way that you could understand?[*] Custom: How well the nurses kept you informed?[†] 	<ul style="list-style-type: none"> Level of involvement in care and decision-making Enhanced coping Family self-care/independence

(continued on next page)

Table 3 (continued)

Currently Measured	Examples of Future Measurement
<ul style="list-style-type: none"> Critical care: How well ICU/CCU nurses helped you understand your treatment, tests, and condition?[†] 	<ul style="list-style-type: none"> Satisfaction with health education information Knowledge attainment (STROKE Perception Report)^{***} Demonstration of health promotion activities (breast feeding on discharge,^{**} smoking cessation) Competence in therapeutic self-care Achievement of appropriate self-care (asthma,^{**} diabetes, family care, and chronic illness)
<p>7. Collaborate with, and coordinate care within the interprofessional team</p> <ul style="list-style-type: none"> Hospital patient experience of care (care coordination)[*] Care planning: Interdisciplinary[†] Custom: How well staff worked together to care for you.[†] 	<ul style="list-style-type: none"> Unified team around shared goals Time to critical intervention (patient population-dependent) DRG-adjusted LOS Observed-to-expected LOS ratio DRG-adjusted mortality (30 day)
<p>8. Advocate for the patient and family ensuring that their needs and preferences are known and respected within the interprofessional care team</p> <ul style="list-style-type: none"> Medical-surgical: (HCAHPS Q20): During this hospital stay, staff took my preferences and those of my family of caregiver into account in deciding what my healthcare needs would be when I left.[*] 	<ul style="list-style-type: none"> Resolution of clinical and ethical problems Perception of dignity and respect Family values and beliefs considered and respected Advanced directives followed[*]
<p>9. Navigate patient transitions in care across and out of the healthcare system</p> <ul style="list-style-type: none"> Medical-surgical: (HCAHPS Q20): During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my healthcare needs would be when I left. (HCAHPS Q21): When I left the hospital, I had a good understanding of the things I was responsible for in managing my health. (HCAHPS Q22): When I left the hospital, I clearly understood the purpose for taking each of my medications. (HCAHPS Q17): During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital? (HCAHPS Q21): When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.[*] Unplanned readmission[*] 30-day risk-standardized death rate among surgical inpatients with complications (failure-to-rescue)[*] 	<ul style="list-style-type: none"> On discharge: knowledge of follow-up appointments, prescribed medications and treatment, ability to recognize signs and symptoms, ability to carry out treatments as prescribed, knowledge of what to do if discharge plan fails, or in case of an emergency Fewer delays in discharge Median postoperative LOS for patients in STAT categories 1–3^{**} Less post-traumatic stress disorder Modulated post-intensive care syndrome (PICS/PICS-p [pediatrics]), anxiety, depression Enhanced health-related quality of life

Note. CCU, critical care unit; Cdiff, clostridioides difficile; CMS, Centers for Medicare and Medicaid; DNR, do-not-resuscitate; DRG, diagnostic-related group; HCAHPS, Hospital Consumer Assessment of Healthcare Providers and Systems; ICU, intensive care unit; LOS, length of stay; MRSA, methicillin-resistant staphylococcus aureus; NDNQI, National Database of Nursing Quality Indicators; NIH, National Institutes of Health; PROMIS, Patient-Reported Outcomes Measurement Information System; PTSD, post traumatic stress disorder; STAT, Society of Thoracic Surgeons-European Association for Cardio-Thoracic Surgery.

HCAHPS survey is under revision with deletions and new questions in the FY 2025 proposed Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals rule (CMS-1808-P). <https://hcahpsonline.org/en/updated-hcahps-survey/>

^{*} CMS: Centers for Medicare & Medicaid Services. Survey of patients' experiences. Data.cms.gov. <https://data.cms.gov/provider-data/topics/hospitals/hcahps#>

[†] PressGaney. NDNQI: Nursing excellence made simple. <https://www.pressganey.com/platform/ndnqi/>

[‡] The Joint Commission. 2024 hospital national patient safety goals. <https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2024/hap-npsg-simple-2024-v2.pdf>

[§] ANCC: American Nurses Credentialing Center. ANCC Magnet Recognition Program. <https://www.nursingworld.org/organizational-programs/magnet/>

^{**} U. S. News and World Report: Olmsted, M. G., Lessem, S., Powell, R., Murphy, J., Bell, D., Blackburn, K., Stanley, M., Sanchez, R. T., & Allen, R. (2023). Methodology: U. S. News & World Report Best Children's Hospitals 2023-24. https://health.usnews.com/media/best-hospitals/BCH_Methodology_2023-2024.pdf

^{††} Health Measures. PROMIS. <https://www.healthmeasures.net/explore-measurement-systems/promis>

^{‡‡} American Heart Association. Get with the guidelines resuscitation. <https://www.heart.org/en/professional/quality-improvement/get-with-the-guidelines/get-with-the-guidelines-resuscitation>

^{§§} Centers for Disease Control and Prevention National Healthcare Safety Network: CMS-Acute Care Hospitals. SSI. https://www.cdc.gov/nhsn/cms/ach.html#anchor_1545422957085

^{***} Stroke Perception Report: Get stroke patient satisfaction on track with the stroke perception report. <https://strokeperceptionreport.org/>

family outcomes. Acute and critical care nursing should be measured by its presence, not by its absence.

Our *Blueprint* calls for a balanced outcome portfolio that includes patient/family-level outcomes, unit-level outcomes, and systems-level outcomes. Given the heterogeneity of patient populations cared for in hospitals, what might be critically important to measure in one patient group may not be relevant in another. Shifting from using generic measures that reflect nursing care across an entire hospital system to population-specific measures will allow precision-based measurement that targets the right outcome measures to the right patient population. Historically, nursing has avoided population-specific measures because they could not be applied across a hospital system. To rectify this, one strategy is to match the metric to the specific needs of the patient population but report them generally so that cross-system comparisons can be made, for example, measuring *pain relief* in a surgical unit and *nausea relief* in the oncology population and reporting both as *unit-based comfort measures* across the hospital system. Moving

beyond process measures (e.g., how often we score pain), to the outcomes we are trying to achieve (e.g., pain relief as measured by a 24-hr modal pain score) enables nursing impact measurement.

Additionally, today's patient satisfaction measures often mirror hospitality measures and are nonspecific to disease states rather than focusing on perceptions of the quality of key elements of diagnostic-specific care deemed important by patients. These measures are also narrow in scope, with items that often reflect care provided by assistive personnel. Working with families to help them identify relevant Patient-Reported Outcomes Measurement Information System (PROMIS) measures would significantly advance precision-based measurement. Targeting outcomes identified as important by the individual patient highlights the value of nursing encounters (Teisberg et al., 2020).

A balanced outcome portfolio spans the independent-interdependent continuum of nursing practice. The nursing sensitivity of outcomes varies widely, and nurse-sensitive metrics are not meant to be

nurse-only metrics. Nursing's outcome portfolio could include metrics not typically attributed to the work of nursing, for example, patient LOS or readmission rates. Without doubt, nurses work to discharge patients in better physical conditions (Krumholz, 2013). Nurses facilitate patient independence, helping families learn how to manage their own care, allowing successful transition back to the community. Targeting several diagnostic-related group-adjusted LOS metrics by unit would improve the specificity of the LOS measure and allow risk adjustment.

Reporting individual patient outcomes using standardized language and measurement (Moorhead et al., 2024) but stated in evaluable terms at a unit level would enhance local actionability and accountability. In addition, patient outcome measures are designed to reflect the results of nursing care rather than whether or not a specific intervention was performed. Presented with a palette of rigorously developed measures, bedside nurses can select metrics that match the needs of their patient population and their local shared governance priorities. They can establish goals to meet and then exceed benchmarks, noting that some metrics may never achieve 100%. Identifying balancing metrics will reveal inherent trade-offs, for example, when monitoring the length of mechanical ventilation in an intensive care unit, self-extubation rates are considered concurrently with the rate of spontaneous awakening trials. Equipped with data, nurses can monitor and implement changes over time. Given the state of hospital-based informatics, in the very near future, all nurses will soon be able to obtain an individual summary of their patient outcomes benchmarked to their peers.

The inclusion of nursing outcomes as CMS core measures would incentivize both nurse leaders and hospitals to jointly improve and innovate their practice environments. Most large acute care hospitals have clinical units of excellence and clinical units that struggle. Pairing unit-level patient outcomes with nursing workforce metrics allows cross-facility learning and targeted interventions that support nurses differently across an organization (Table 4). This requires nurse leaders to know, recognize, and communicate nursing expertise. If nurse leaders do not know nursing expertise, they cannot see it, articulate it, measure it, and certainly cannot honor it.

In addition, systems-level outcomes and core measures will provide nursing and hospital leadership with the opportunity to more fully describe nursing's impact in relation to overall hospital-wide performance, as well as benchmark performance with other similar organizations. Informaticists should be engaged to create one system-wide data repository that auto-extracts data from existing platforms, then presents data back to users who can construct reports that illustrate unit, departmental, and system-wide performance.

Our Call-to-Action

This work gives voice to hospital-based nursing by articulating this *Blueprint for Acute and Critical Care Nursing Practice*. Our intent is that this Blueprint will provide much-needed direction in developing, testing, and adopting outcome measures that reflect the full spectrum of acute and critical care nursing practice. Rooted in the needs of humanity (Henderson, 1966) and consistently ranked as the most trusted healthcare profession in the world (Brenan & Jones, 2024), nursing has a long history of supporting the needs of patients and families. Nurses find ways to meet patient needs, provide comfort, and stand up for those entrusted in our care. Now more than ever in this post-pandemic era, new outcome metrics are needed to fully illuminate nursing's value and ROI.

Our call-to-action impacts health policy (see Figure 1). We call for new patient outcome metrics that are derived from all nine domains of nursing practice. We recognize that metric development is an arduous process, requiring years to develop from measure conceptualization to continued evaluation and maintenance (CMS.gov, 2024). That noted, it is now possible to accomplish this work

Table 4

Structural Measures: Unit- and Systems-Level Outcomes

Unit-level outcomes	
1.	Value, direct, and indirect lowered costs
	a. Costs associated with nurse orientation
	b. Time to fill open positions
	c. Absenteeism
	d. Nurse retention—length of employment
	e. Voluntary nurse turnover
	f. Stay beyond initial intent to leave
	g. CNSs/managers pulled back into direct patient care
	h. Reduction in unnecessary care—deimplementation
	i. Insurance denials
2.	Nurse satisfaction
	a. Perception of consideration from administration/managers
	b. Missed or delayed care or care left undone in any of the nine practice domains
	c. Level of moral distress, burnout
3.	Nurse engagement
	a. Evidence-based activities to support better patient care
	b. Participation in shared governance
	c. Advancing clinical expertise and level of education
	d. Specialty certification
4.	Occupational injuries
	a. Workplace violence
	b. Patient and visitor abuse
	c. Coworker verbal abuse
	d. Manager bullying
	e. Physical injuries
	f. Needle-stick injuries
System-level outcomes	
1.	Summary of all the unit-level variables
2.	Institutional reputation for excellent care
3.	Healthy work environment
4.	Culture of safety
5.	Commitment to equity, diversity, inclusion, and belonging
	a. Nurse demographics — benchmarked to state
	b. Patients population — explore potential disparities in care, access to care, and utilization of services

Note. CNS, clinical nurse specialist.

efficiently through novel funding of concept development, extracting de-identified data from electronic health records, clinical decision support systems, and technologies ubiquitous in the hospital environment, and the establishment of innovative partnerships among consumers, professional organizations, academia, industry, and healthcare networks. We recommend the creation of a federally funded National Nursing Workforce Commission in lieu of the medically focused National Healthcare Workforce Commission authorized by the Affordability Care Act but never operationalized. In addition to nursing leadership organizations focused on the work of acute and critical care nursing, such a commission comprises major stakeholder organizations, including hospitals and patients and families. This Commission could oversee metric dissemination holding hospitals accountable for supporting nursing care. We call on the National Institute of Nursing Research to support knowledge development in this area and large academic-affiliated hospital networks to form centers of excellence and commit to rapid-cycle instrument development from measure conceptualization, specification, testing, implementation, and continued evaluation and maintenance. Once developed, we call on hospital accreditation and credentialing bodies to incentive their use.

In summary, we ask bedside nurses to engage in conversations about nursing practice that makes a difference to patients and families and participate in the measurement process; we ask nurse leaders to use data and analytics, to measure patient–nurse match, and to focus on patient outcomes derived from the full spectrum of nurses' work; we ask clinically based nurse researchers to partner with data scientists and measurement experts to lead the way in

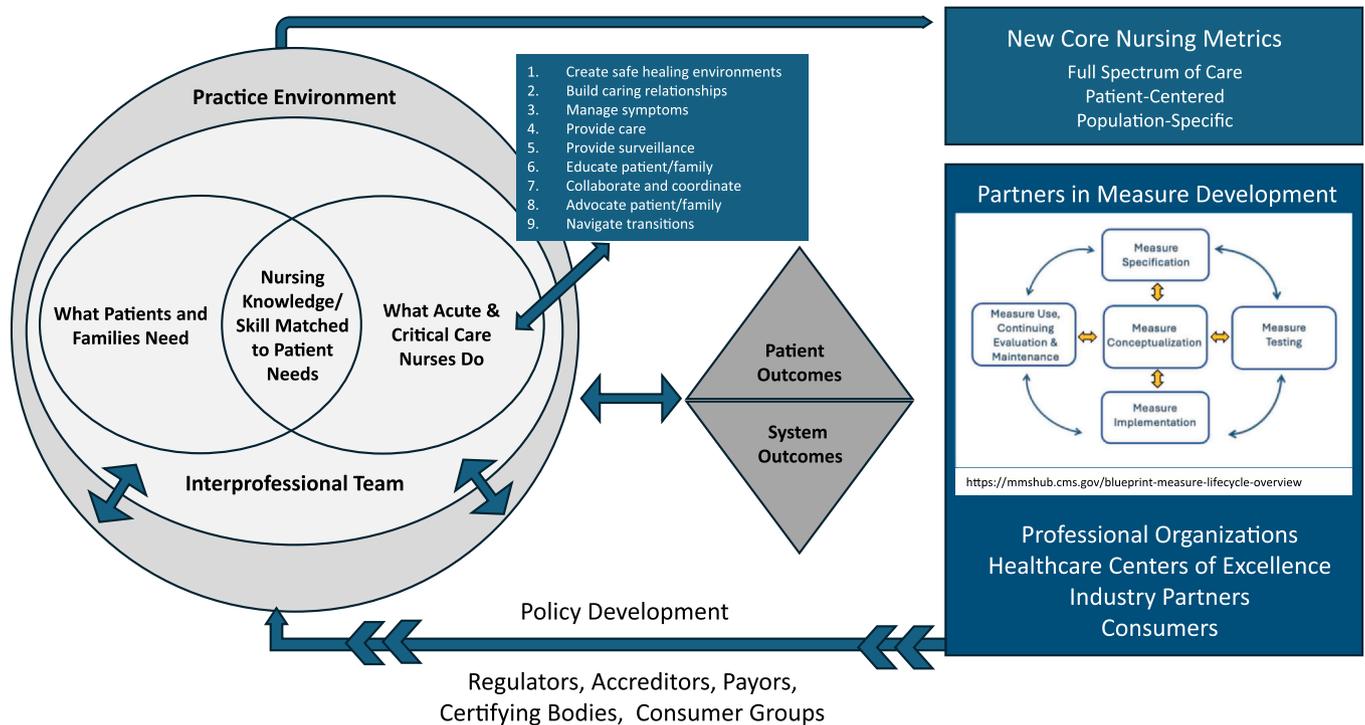


Figure 1. Blueprint for change in acute and critical care outcomes measurement: policy implications.

developing cross-system core metrics and demystifying integrated data and analytics platforms; we ask hospital-based nurse informaticians to build clinical information systems that allow systematic extraction of data that include the nine practice domains; and we ask policy makers and accreditors like CMS, the Joint Commission, and credentialing bodies like Magnet to hold the profession accountable for developing metrics that would allow at least minimal reporting of hospital core metrics that reflect excellence in the nursing care and the value nurses provide to patients and their families. At this time, progress over perfection is necessary as hospital-based nursing excellence is simply not just the absence of harm. We hope that this paper will generate the much-needed dialogue and discourse that is necessary to enact change. We believe the practice of acute and critical care bedside nursing will thrive when the outcomes of their day-to-day practice are made visible to everyone touched by the work of nurses.

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Declaration of Competing Interest

Lauren R. Sorce is an elected member of the Executive Committee and serves as President of the Society of Critical Care Medicine (SCCM) 2024 to 2025. The views presented are those of the author and are not intended to represent the views of SCCM.

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