

Reimagine Health Care Leadership, Challenges and Opportunities in the 21st Century

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Purpose: *This paper spotlights human capital management, digital technology, and costs control as issues that healthcare leaders will face in redesigning the health care ecosystem in the 21st century.*

Design: *The paper was designed to highlight the attributes that make effective leaders. It addresses how nursing leadership can take a lead to redesign the 21st Century health care system, supported by case examples.*

Methods: *An expansive literature review was done using MEDLINE, SAGE, Google Scholar, and University of California San Diego Library Catalogs. The selections criteria include recent publications in English within and outside the healthcare industry.*

Findings: *Health leadership is viewed as paramount to productivity, capacity and meeting new challenges.*

Conclusions: *Effective nursing leadership in a healthcare organization correlates with staff job satisfaction, retention, turnover and quality of care. Nursing leadership development must be supported by appropriate level of educational preparedness, and requisite set of competencies and skills.*

Keywords: *health care leadership, digital technology, mHealth, human capital management, financial management.*

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OBJECTIVES—1. DESCRIBE LEADERSHIP styles commonly used by 21st century nursing leaders; 2. Discuss the economic and organizational challenges faced by nursing leaders in 21st century health care; 3. Describe two strategies health systems can use to redesign practice models

to offset declining reimbursement and increased operating expenses.

Changing demographics, global and regional health care human resource shortages,¹⁻³ digital technologies, limited job-related resources, and economic pressure have impacted health care delivery. These factors affect the relationship among health providers, payers, and health consumers. Meeting these challenges requires health care leaders to reimagine and innovate new service models that may deliver the best affordable care efficiently, reliably, and cost-effectively. Digital technologies⁴⁻⁶ promise to mitigate some of the challenges in affordable care delivery, giving more control and power to patients for self-care but they are countered by risks such as privacy and how to best collect, process, and understand the vast amount of health data generated by digital technologies.⁷ Health leaders in many developed

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economies with a multicultural population also face the challenges of harnessing the best in their human capital resources to their competitive advantages.^{8,9} Many developed economies are facing a demographic trend characterized by a growing aging population accompanied by increasing prevalence of chronic diseases.⁷ With rising health care costs, the major challenge to the health care leadership is to deliver the best and affordable care collaboratively while addressing the escalating costs of care. This article addresses some of the economic, human resource, and technological challenges facing health care leaders in many provider organizations.

Leadership

Stroh et al¹⁰ explain that the roles of managers and leaders are radically different. In addition to being able to achieve the organization's goals, leadership is defined by two characteristics: the situation and the followers resulting in a reciprocal interdependent relationship.^{10,11}

Essential attributes of a leader have been described as knowing oneself, being able to communicate one's vision, building trust among colleagues, and taking action to realize one's potential.^{12,13} Bennis and Thomas¹³ argue that extraordinary leaders are the ones with the ability to overcome adversity, learn from the most challenging circumstances, and emerge stronger and more committed to what matters to them the most. They contend that great leaders are defined by four distinct characteristics: "the ability to engage others in shared meaning, a distinctive and compelling voice, a sense of integrity and a strong set of values, an adaptive capacity as defined by the skills to grasp context and hardiness."¹³

Transformational and Transactional Leaders

Two commonly popular types of leadership are transformational and transactional leaders. Aarons¹⁴ contends that a leader may find it necessary to combine both transformational and transactional leadership styles to be effective. A transformational leader functions well in a close supervisory relationship and is more concerned with ideas and vision than processes. This leadership style inspires fol-

lowers to strive for excellence, awakens their latent potential through expression of values and beliefs and the leader's goals. In contrast, a transactional leader motivates followers with rewards for their self-interests in exchange for their effort and services.¹⁰ This leadership style fits into many settings but may not inspire innovation.^{14,15}

Health Care Leadership

Alloubani et al¹⁶ indicate that international interest in leadership is evident in both private and public health care organizations, which view leadership as central to organizational productivity, capacity, and meeting new challenges.

Numerous studies and systematic reviews of the literature have identified transformational leadership as crucial in fostering employee creativity, successful conflict resolution, improved staff satisfaction, lower medication errors, decreased patient fall rates, lower infection rates, and lower mortality rates.¹⁷⁻²⁰ The Magnet Recognition Program, the gold standard of nursing care excellence administered by the American Nurses Credentialing Center of the American Nurses Association, has identified transformational leadership as one of five essential attributes in its Magnet Model.^{21,22}

A survey of 116 hospital Chief Executive Officers in Iowa shows that transformational leadership correlates highly with performance, effectiveness, and satisfaction.¹⁸ The best performing hospitals have widely distributed leadership, empowerment, and broad staff engagement in decision-making processes. Job satisfaction and opportunities to participate in the decision making have been shown to associate with high levels of job performance and strong identification with the organization.²³ Effective nurse leaders bring cohesion to the team; are flexible and empowering; and possess a high degree of emotional intelligence, ethical standards, and promote high quality performance. Gilmartin and D'Aunno²⁴ state a strong association of effective nurse managers with job satisfaction, retention, and turnover of staff. Wong et al²⁵ have discovered a link of staff well-being and job satisfaction with quality of care as measured by mortality rate and medical errors.

In our own experience, the lead author's perianesthesia division is guided by the shared governance model. Staff are empowered with a high degree of autonomy within an operating framework and serve on numerous unit-based and hospital-wide committees. The nursing team is exemplified by cohesion and teamwork. Staff participate in team building with off-site meetings and social outings. They share knowledge, provide mutual support and assistance as circumstances require. They celebrate success for their achievements by having employee of the quarter awards in which winners are selected by staff rather than managers. Staff turnover rate has been maintained consistently at 2%. In addition to staff satisfaction, Wong et al²⁵ identified staff satisfaction is linked to quality care and patient satisfaction. In our institution, we have found patient satisfaction survey results at discharge averages 95% of high satisfaction year after year. Exit survey response may be summed up as "extremely satisfied and will recommend the health system to others."

Leading Change—Nursing Education and Skills

The Institute of Medicine states that to play a critical role in transforming the health care system, "the nursing profession must produce leaders throughout the system, from bedside to the boardroom."^{26, p07} Nurses must be equipped with the appropriate set of competencies and education to be full partners with physicians and other health care professionals to meet the challenges of a dynamic, rapid changing, and sometimes chaotic health care environment of the 21st century.^{26,27} The report, the Future of Nursing, Leading Change, Advancing Health,²⁶ advocates nurses need to develop two sets of competencies to be full partners and effective leaders. These competencies include a common set that serves as the foundation to position oneself for any leadership opportunities and another set tailored to a specific context, time, and place. Huston²⁷ corroborates that nurse leaders in the 21st century health care environment must be equipped with the appropriate set of competencies and education to be effective. These attributes include a global mindset regarding health care and professional nursing issues; a working knowledge of technology that facilitates portability, mobility, inoperability,

and interactions; expert decision-making skills anchored by empirical science; prioritizing quality and safety; being politically astute and understand the intervening influence of the political processes; a highly developed collaborative and team building skills; an ability to balance authenticity and performance expectations; and being forward looking and proactive to cope effectively with rapid changes.

Slavkin¹¹ maintains that "achieving health and well-being require leadership at all levels of an organization." Leadership training, development, and support are essential to the present and future success of diverse health care organizations. The authors' organization provides leadership training at the organizational and divisional level. Frontline employees are provided with leadership and customer service training. In a 1-day off-site experience, the Chief Executive Officer and other senior directors lead the educational sessions in this educational and team building program. This direct connection with senior leadership engenders a positive impact on employee engagement. Leaders in the Perianesthesia division regularly conduct leadership training sessions to groom upcoming leaders and to augment managers and educators in their clinical leadership. Training sessions include case studies of exemplary leadership and best practices within and outside the health care industry. Leadership candidates are also trained to be reflective and to reference key success factors as benchmarks to their own practices and continuous improvement.

Challenges and Opportunities to Health Care Leaders of the 21st Century

Changing Demographics and Nursing Shortages

Critical factors affecting health care in the 21st century in the developed countries are aging demographics and increased health care consumptions because of the rise in chronic, debilitating, and long-term health conditions. This "Silver Tsunami"²⁸ of aging health care consumers is accompanied by an aging health care workforce that mirrors the aging demographics. The World Health Organization informs that the demand for nursing care increases as the world population

ages. About 57 countries will experience shortage in such a magnitude as to threaten the delivery of essential nursing care.^{19,20,29} All Western countries are predicted to experience nursing workforce shortages and shortages are attributed to an aging workforce³⁰: decreasing enrollment in the nursing programs, nursing burn-out, an increase in chronic diseases, and competition from other industries.²⁶ In the United States, the average age of a registered nurse (RN) is 47 years with more than a third between the ages of 50 and 64 years.^{30,31} A large percentage of RNs in the health care workforce, including about 75% of health care leaders, are projected to retire by 2020.²⁶ Foreign recruitment is no longer able to fill the gap of the shortfall and the “brain drain” (loss of nursing talent) from the source countries adversely impacts equity, access, quality, and cost of health services on a global level.

Human Capital Management—Succession Planning

Although the human resource issues are not addressed in details in this article, the effect on costs must be noted. With health care being a knowledge intensive industry, the exit of the baby boomer generation from the nursing profession will exact a toll of higher burden of costs in health systems. The imminent loss of a repository of knowledge, skills, and expertise may not be immediately replaced and fulfilled by younger and less experienced RNs, threatening the smooth transition and care delivery. The exodus may result in the deterioration of care, higher negative outcomes, and poor health services.^{30,32} The application of technology and nursing education reforms to equip nurses with a modern set of knowledge and skills are viewed as strategic to the health care systems, today and the future.¹⁵

A study by Titzer and Shirey³³ indicated 70% of hospitals do not have a succession plan and 38% of health care succession planning tends to focus on the senior management tier. Key success factors point to the fact that strategic succession planning needs to consider current and future leadership requirements at all levels: identify and groom future leadership talent, retain, promote, and train talent from within and allocate sufficient resources for

leadership development to ensure continued organization leadership.³⁴

Knowledge Management

Health care organizations are moving away from a physician-patient model to a company-customer model with quality of care being measured by technical and interpersonal care in meeting a patient’s need and expectation.^{34,35} Organizational performance is measured across functional lines such as finance, organization learning, and human capital management.³⁴ Knowledge is considered a critical resource that provides an organization with its competitive advantage. Knowledge sharing and transfer has demonstrated lower cost of operation, reduced medical errors, improved quality, improved innovation, enhanced team, and organization performance.³⁶ Therefore, it is critical for an organization to capture the tacit and explicit knowledge of older and experienced managerial and staff leadership cohorts to create a repository of knowledge database, transforming individual knowledge into organization intellectual asset.³⁶ Wong and Noe³⁷ estimated that an annual loss of about \$31.5 billion among the Fortune 500 companies is related to failure to share knowledge.

DIGITAL TECHNOLOGY. According to a report by Deloitte Center for Health Solution,³⁸ the health care sector remains a laggard comparing to other industries in using technology with service users. However, with declining cost for evolving digital technology, connected health, also known as technology enabled care is increasingly viewed as an integral part of a solution to the challenges that health care sectors face to deliver effective and integrated care. Available patient data from information generated by the vast computational power associated with digitization of electronic medical record and other information technology (IT) systems should be embedded into operations for informed and actionable decision making and predictive forecasting using integration technology.⁷

The role of mobile health technology or mHealth includes the use of smartphones, various mobile technologies such as patient monitoring devices, and gaming applications (apps) to support public health and patient care. Currently there are about

100,000 mHealth apps available on the Apple and Android platforms.³⁹ Health care providers and patients now have mobile apps to manage chronic disease challenges such as dementia, Parkinson's disease, congestive heart failure, and diabetes.⁴⁰⁻⁴²

CASE EXAMPLES. Vidant Health⁴² started a program in 2002 to remotely monitor 600 to 700 patients with congestive heart failure, diabetes, and high blood pressure. Each patient was provided with a transmission-capable mobile device to measure blood pressure and other vital signs and to send the data via cellular service to Vidant. After the implementation of this care plan, hospital admissions for these patients fell 74% in 2013. At the Boston Children Hospital, patients and families are provided with a tablet to navigate through the path of care. The tablets enable users to access test results of the laboratory, the care plans devised by clinicians and therapists, and inform of discharge criteria. Patients and families can also access the care team to send care-related questions to the providers.⁴¹ Avera Health in South Dakota provides telemedicine service (eCare) to 86 hospitals and more than 100 facilities across 600,000 square miles. Its offerings comprise electronic intensive care unit (eICU), eEmergency, ePharmacy, eConsult, and eLong-term care. For example, eICU monitors multiple ICUs at once and helps staffing shortage by identifying staff gaps. Outcomes include improved patient experience, lowered mortality rate, and decreased length of stay. Using telehealth and a remote clinical expert team, eAcute offers 24/7 patient monitoring services to augment in hospital medical and surgical expertise. Annual savings in health care cost attributable to telemedicine are estimated at \$143 million.³⁸

IMPLEMENTATION BARRIERS. Many health care providers remain aloof about using mobile devices and apps owing to insufficient understanding of the risks and benefits.⁵ A major concern is data security and potential Health Information Technology for Economic and Clinical Health Act and Health Insurance Portability and Accountability Act violations. Many security breaches occur because of employee negligence, theft, or loss of unencrypted devices. Increasingly thieves see health data as more valuable than financial data. There is an increase in ransomware

attack of IT systems with potentially damaging outcomes. The cybersecurity industry estimates that the costs to a health care system and its stakeholders of a data breach will amount to about \$2.2 million.⁴³ Other barriers include concerns about lack of evidence on cost effectiveness and absence of supporting data; lack of common interoperability standards; and most mHealth apps are too consumer-oriented with limited integration into the medical system.^{38,41} Reimbursement for telehealth poses another challenge. A comprehensive reimbursement architecture is absent. Not all private payers have systems in place to reimburse telehealth and may deny payment for such service.⁴⁴ Payment for telehealth varies; Centers for Medicare and Medicaid Services and a few payers only reimburse some telehealth services, including areas related to wellness and behavioral health. Some states permit online clinical visit and ePrescribe, whereas other prohibits the latter practice. Similarly, some states require a face-to-face physician visit before telehealth can be offered.⁴¹

Mobile health has the potential to lower cost; improve access, efficiency and health outcomes; empower patient for self-care; enhance patient and provider relationship; and fulfill the promise of health care reform. Vithanwattana et al⁴⁵ recommend the following strategy to protect privacy and confidentiality of health information as represented by this acronym "CIA": "C" for confidentiality—restricts data access only to authorized users; "I" for integrity—assure data have not been altered without authorization; "A" for availability—data will be available on demand, anytime, and anywhere. These authors recommend that organizations establish policies and security framework to govern the use of mobile devices and mHealth data. These policies include the following: (1) restrict access, monitor, detect, and report of security breach; (2) require strong encryption for data communication and storage; (3) require user and device authentication for access to device data; and (4) limit the types of application allowed on the device.⁴⁵ The Office of National Coordinator for Health IT asserts that "cybersecurity can only be achieved in a culture where privacy and security are valued."⁴⁶

Economics and Cost Control

The best possible care is measured by quality, safety, efficacy and effectiveness, collaboration and teamwork, compassion, and patient experience. Sustainability of best care practices over time is measured by an appropriate level of workforce, staff well-being and work-life balance, accountability, alignment of knowledge, skills, and the abilities of staff with the intended services, and attention to finance and costs.^{17,47} However, Stobo et al⁴⁸ argue that in many organizations, the reality and the promise of reducing operating costs by increasing volume in services to create discounts in purchasing and standardize operations (known as economies of scale) cannot be realized without acknowledging the cultural differences that exist among the many entities within an organization.

Most industry observers concur that the health care industry in the United States is in crisis.¹⁵ This crisis is closely associated with costs of care, which is significantly higher in the United States than other industrialized economies. In 2008, health care represented 15% of the gross domestic product. At this trajectory, health care cost will rise to 22% and 50% of the gross domestic product by 2020 and 2050, respectively. This growth trend will adversely impact on the US economy.¹⁵

Generally, costs are associated with the following: (1) rising chronic conditions such as diabetes, hypertension, arthritis, mental conditions, and cardiovascular diseases that affect one in every two Americans.²⁶ The direct medical costs of care for these chronic conditions are projected to exceed \$1 trillion by 2020.⁴⁹ (2) Growth of an aging population that will require more health care services. Parker et al⁴⁹ inform that by 2020 an estimated 157 million Americans will have at least one chronic condition and 60 million will have two of more. (3) A more racially, ethnically, culturally, and linguistically diverse population, as well as diverse socioeconomic status within groups has precipitated health disparity. The cause is attributable to limited English proficiency among the underserved and diverse population, socioeconomic and environmental conditions, behavioral risks, and health practices.^{26,50}

Much is written about rising chronic conditions and aging population. On this third point, there is an association of high health care costs with

poor health literacy,⁵¹ which is considered an independent factor for hospital admission among elderly patients after adjustment for demographics, socioeconomic, health behaviors, and other physical and mental health status.⁴⁹ Many health policies pertaining to programs that service the health care needs of the underserved and the elderly population are built on the assumption of adequate health literacy. In reality, to function effectively as a health consumer in the 21st century requires high health literacy to navigate the complex modern health care environment and to make appropriate health decisions.^{49,51}

Our health system is committed to inclusive and culturally competent care with provisions of translation services to patients with low proficiency in English. The preoperative care center, preoperative admission unit, and postanesthesia care units are staffed with bilingual nurses and mobile interactive translation service monitors are installed to enable simultaneous communication among medical staff, patient, and family. Both written and nonreading tools such as graphic materials, pictograms, and purpose-designed videos are used for patient education to improve the patient hospital visit experience.

LESSONS LEARNED—REDESIGNING PRACTICE MODELS. The enactment of the Affordable Care Act in 2010 has impacted health care financing. The Centers for Medicare and Medicaid Services have introduced an incentive payment system for quality of care that includes performance measures for quality of care, use of best practices, and enhancing the patient experience.^{52,53} This mandate for value-based purchasing⁵⁴ has also shaped the landscape of health care in the 21st century.

Two case studies are presented to demonstrate how effective leaders lead changes to meet the challenges of a new health care environment that demands quality, accountability, and affordable care. They innovate and redesign new models that transform departments and organizations to offer the best care possible and to ensure the long-term survivability of their organizations.

Case Study 1—University of California Health⁴⁸. The University of California Health (UCH) comprises five complex academic medical

centers in diverse regions of the state with varying organizational structures, business goals, cultures, populations, and payer mixes. The UCH faced many of the challenges in a health care market of deteriorating commercial payments, flat government payments, and a projected increase in year-on-year operating expenses with a projected deficit of \$1 billion by year 2020.⁴⁸

An initiative known as “Leveraging Scale for Value” was established with the aim to mitigate this projected shortfall.⁴⁸ In 2014, a directive from the president of the University of California declared that the whole enterprise needed to act like an integrated system to survive in a competitive health care market. Achieving efficiency necessitated the system leverage the economies of scale while acknowledging the unique differences of individual campuses. The goal was to achieve \$150 million cost saving through the application of IT, efficiencies in supply chain, revenue cycle, and clinical laboratories.

Three key foci drive this strategy: (1) *System governance and stakeholder engagement*—the system governance team functioned as a decision-making authority represented by all five medical centers. (2) *Change management support*—a team was formed to provide detailed support and change management. (3) *Transparency and standardization of metrics*—common measures and benchmarking objectives served as a measurable baseline. Standardization of workflow and staffing management ensured consistency in all functional areas across regions. Several unifying principles were established to preserve the mission of each medical center; identify opportunities for financial return, risks to operations, readiness, and timing for implementation; promote changes across the system by leveraging on local strengths and best consistency practices; and create an environment that facilitates collaboration and integration. The use of a common electronic medical health system connected across all medical centers and other IT solutions provide a common platform served to unify all UCHs into a cohesive health community.⁴⁸

The initial projection identified \$150 to \$200 million as potential savings or revenue growth.

By January 2016, the overall cash flow gained by \$270 million, system wide. By October 2016, the revenue improvement across the system rose to \$341 million. UCH plans to explore other areas to find savings by duplicating the success of revenue cycle change management practice.

Case Study 2—An Integrated Administrative Model, Nurse Lead Change. This case study demonstrates how transformational and transactional leaderships working in tandem effect system changes for the betterment of all stakeholders. At the departmental level of the University of California, San Diego Health, the Senior Director of Surgery, Anesthesia, Musculoskeletal, Neuro and Imaging Service, recognized value-based purchasing growth could only be achieved by unifying clinical expertise with finance, IT, purchasing, and materials management with the last three entities under one directorate. Leveraging his experience in perianesthesia nursing and perioperative management, training in business administration and IT, he championed and formulated a change management strategy that promotes more interactions across teams, shares expertise, and mutual learning. The result of embedding the support teams into clinical role and management for perioperative, radiology, and imaging fosters more dynamic exchanges and consultation among team members.

Under a hospital-wide centralized IT and finance model, the support teams for Senior Director of Surgery, Anesthesia, Musculoskeletal, Neuro and Imaging Service worked in silos. In this old silos model, support staff and clinical managers took several days to communicate manager needs, complete database searches or financial reports, and notify requestor of results. In the integrated model, similar processes take only about 6 hours to 1 day depending on the complexity of request. The integration of clinical and support operations working in proximity to each other promotes mutual learning, comradery and trust, and shortens response time to clinicians requesting for IT and finance for supports. The volumes of unnecessary emails and frequency of phone calls have been greatly reduced. Close collaboration among finance, IT, material management, logistics personnel, and clinical operations removes the “silo trap.” This model has improved the turn-

around time in decision making and action. Rapid response and improved communication facilitate prompt decision making, increase efficiency, and costs saving. Before this model was implemented, the operating room (OR) had a budget overrun of \$500,000 in the first half of 2016. After the integration of clinical and support, the OR operating expenses in 2017 begin to align with the budget projection.

A second example is physician costs tracking. Before the introduction of the integrated revenue model, surgeons were unsure of OR costs, types of data to request, and data accuracy was questionable. With this new model, a database called "Surgical Receipt" was deployed to track the costs of surgical cases. This database informed surgical providers about product cost, usage, and wastage. Booked OR room minutes for procedures were also added to the database to compare actual case time with estimated duration. This tool enhanced quality assurance, communication, and results in the development of in-house cost benchmarks. Outcomes of the Surgical Receipt report included improvement in on time case-start and accuracy of scheduled room minutes and reduction in costs. The institution can now accurately calculate the total costs of each surgical case. This transparency and feedback also encouraged surgeons to be more discerning in selecting a surgical product and be more sensitive to value for cost in situations in which a cheaper alternative is available yet yields similar quality outcome. Meanwhile, surgeons were alerted to product wastage caused by opening of surgical items prematurely in OR. This led to improved communication with OR team members to reduce wastage. This project has brought greater group cohesion. Surgeons can now validate the costs on a case-by-case basis. Comparative data of surgical costs per surgeon are made available to requesting surgeon for reviews and benchmarking. They begin to share data with others at perioperative meetings for improving utilization costs. OR equipment tracking and dissemination of utilization costs promote cost control and cost savings. In the 4 months after the introduction of the surgical receipt, the average costs per case of 18 of 34 procedures dropped by 53%.⁵⁵

Conclusions

Health care systems in many economies are under pressure to provide affordable and accessible care. Demographic changes, chronic health human resource shortages, limited resources, and digital technologies have impacted health care delivery. The US health care systems experience many similar challenges such as the demographic trend of an increasing aging population, growing prevalence of chronic diseases, health care labor shortages, rising costs of care, and the demand for more affordable and accessible care. The practice environment has become more complex and health care professionals will require a balance of skills and perspectives to practice effectively to meet these challenges. Effective health care leaders will be required to reimagine, innovate, and invent new models that deliver affordable, efficacious, and quality care.

Leadership is a favored topic and crucial variable in studies of organizational behaviors. Transformational and transactional leaderships are considered relevant to health care and nursing leadership. The Magnet Recognition program, which awards hospitals for excellence in nursing care, highlights transformational leadership as one of the essential attributes in a nursing leader. We recommend the Magnet Model as a framework for nursing services in complex health systems.

Health leadership is viewed as paramount to productivity, capacity, and meeting new challenges. Effective nursing leadership in a health care organization correlates with staff job satisfaction, retention, turnover, and quality of care. Furthermore, nurses need to attain the appropriate level of educational preparedness and acquire the requisite set of competencies and skills to be effective leaders either through continuing education or graduate education.

The case studies offered in this article demonstrate redesigned practice models to illustrate innovations and achievements of select health care systems. This article highlights cost control, health labor shortages, and digital technology as issues that health care leaders will face in the redesign and remodel of the health care ecosystem.

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Test ID #W010320a – Expiration Date March 31, 2020**REIMAGINE HEALTH CARE LEADERSHIP, CHALLENGES AND OPPORTUNITIES IN THE 21ST CENTURY****Article Objectives**

1. Describe leadership styles commonly used by 21st century nursing leaders
2. Discuss the economic and organizational challenges faced by nursing leaders in the 21st century health care
3. Describe two strategies health systems can use to redesign practice models to offset declining reimbursement and increased operating expenses

Outcome of this CNE Activity

To enable the nurse to increase knowledge on leadership challenges and opportunities.

Target Audience

All perianesthesia nurses.

Accreditation

American Society of Perianesthesia Nurses is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Additional provider numbers: Alabama #ABNP0074, California #CEP5197

Contact hours: Registered nurse participants can receive 2.0 contact hours for this activity.

Disclosure

All planners and authors of continuing nursing education activities are required to disclose any significant financial relationships with the manufacturer(s) of any commercial products, goods or services. Any conflicts of interest must be resolved prior to the development of the educational activity. Such disclosures are included below.

Planners and Author Disclosures

The members of the planning committee for this continuing nursing education activity do not have any financial arrangements, interests or affiliations related to the subject matter of this continuing education activity to disclose.

The authors for this continuing nursing education activity do not have any financial arrangements, interests or affiliations related to the subject matter of this continuing nursing education activity to disclose.

Verification of Participation: Verification of your participation in this educational activity is done by having you go to the ASPAN website: (1) select the article, (2) complete the registration form and payment.

Requirements for Successful Completion: To receive contact hours for this continuing nursing education activity you must complete the registration form and payment, read the article, complete the online posttest and achieve a minimum grade of 80%, and complete the online evaluation.

Commercial Support/Unrestricted Educational Grant: No commercial support or unrestricted educational grant has been received for this educational activity.

Directions

A multiple-choice examination, designed to test your understanding of **Reimagine Health Care Leadership, Challenges and Opportunities in the 21st Century** according to the objectives listed, is available on the ASPAN Website: <https://www.aspan.org/Education/CE-Articles-Online/>

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