

# Caring Science: Transforming the Ethic of Caring-Healing Practice, Environment, and Culture within an Integrated Care Delivery System

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## ABSTRACT

In early 2010, leaders within Kaiser Permanente (KP) Northern California's Patient Care Services division embarked on a journey to embrace and embed core tenets of *Caring Science* into the practice, environment, and culture of the organization. *Caring Science* is based on the philosophy of Human Caring, a theory articulated by Jean Watson, PhD, RN, AHN-BC, FAAN, as a foundational covenant to guide nursing as a discipline and a profession. Since 2010, *Caring Science* has enabled KP Northern California to demonstrate its commitment to being an authentic person- and family-centric organization that promotes and advocates for total health. This commitment empowers KP caregivers to balance the art and science of clinical judgment by considering the needs of the whole person, honoring the unique perception of health and healing that each member or patient holds, and engaging with them to make decisions that nurture their well-being. The intent of this article is two-fold: 1) to provide context and background on how a professional practice framework was used to transform the ethic of caring-healing practice, environment, and culture across multiple hospitals within an integrated delivery system; and 2) to provide evidence on how integration of *Caring Science* across administrative, operational, and clinical areas appears to contribute to meaningful patient quality and health outcomes.

## INTRODUCTION

In early 2010, leaders within Kaiser Permanente (KP) Northern California (KPNC) Patient Care Services division agreed to adopt *Caring Science* as a common shared framework to guide professional nursing practice across the Region (21 Medical Centers). *Caring Science* is based on the philosophy of Human Caring,<sup>1-5</sup> a theory first articulated by Jean Watson, PhD, RN, AHC-BC, FAAN, in 1979, as a foundational covenant to guide nursing as a discipline and a profession. The theory seeks to deepen understanding of the universal, ethical, and person-centered roots of caring and healing for self, system, and others. In her more recent writings, Dr Watson reinforces the core concepts of *Caring Science* through the definition of "10 Caritas Processes"<sup>3</sup> that explore

themes of loving-kindness, compassion, authentic presence, transpersonal relationships, unity of being, healing environments, and caring-healing modalities.

Over the past few decades, *Caring Science* has become widely known and integrated into nursing education curricula<sup>6,7</sup> and has been adopted as a model of professional nursing practice<sup>8-10</sup> by organizations around the world. With this as context, *Caring Science* was one of several theories evaluated by KPNC leaders as the decision was made to adopt a common shared framework to guide professional nursing practice within the Northern California Region. *Caring Science* was selected, in part, for its strategic and philosophical alignment with the overarching mission of the organization *to provide affordable,*

*high-quality health care services and to improve the health of our members and the communities we serve.* In addition, it was believed that *Caring Science* was relevant and applicable to caregivers across disciplines and professions, and thus facilitative of KPNC's commitment to promote and to advocate for total health. Thus, efforts to embrace and embed core tenets of *Caring Science* have intentionally evolved beyond nursing, taking root among social workers, physical therapists, spiritual care professionals, patient quality and safety professionals, physicians, environmental service workers, and ombudsmen.

Although *Caring Science* defines a broad and universal construct for caring consciousness and action, the education, outreach, and resources developed at the regional level of the organization have sought to consistently reinforce three core guiding principles for KP caregivers:

- **Cocreate Caring-Healing-Nurturing Environments**—This includes attentiveness to the design and sensory impact of physical spaces,<sup>12</sup> and the use of caring-healing-energy modalities,<sup>13-16</sup> such as healing art programs, aromatherapy, healing touch/massage, guided imagery, pet therapy, and music, as well as the interpersonal dynamics that nurture authentic connection between a patient and his/her caregiver team.
- **Foster Helping-Trusting-Collaborative Relationships**—This includes attentiveness to practices that convey loving-kindness, compassion, and empathy,<sup>17,18</sup> and that generate

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collaborative inquiry and insight across four distinct relationships<sup>19-22</sup>: the relationship we hold with our self, the relationships we hold with our caregiver teams, the relationship we hold with our patients and their families, and the global relationship we hold with the communities we serve.

- **Honor Health, Healing, and Wholeness**—This includes attentiveness to the psychosocial, emotional, and spiritual needs that influence and affect the clinical/medical/physical diagnosis, with the intent to integrate subjective and objective data and to cocreate solutions and plans of care that nurture total health and well-being.<sup>1,22,23</sup>

These principles were promoted and supported at a philosophical level and intentionally not linked to any specific tactic or initiative. This approach reflected the belief that Caring Science has the potential to serve as a foundational ethic at both an individual and a collective level and was consistent with a broader organizational commitment to create a “culture of accountability”<sup>24</sup> and to foster “appreciative inquiry.”<sup>25</sup> In addition, prior and ongoing experience with the Institute for Healthcare Improvement’s frameworks for Transforming Care at the Bedside<sup>26-28</sup> and efforts to establish systems and processes for identifying and implementing rapid cycle innovation<sup>29</sup> validated the perspective that transformational change is best achieved when opportunities for experiential learning and direct engagement of frontline managers and staff are facilitated.<sup>30-31</sup> Accordingly, regional efforts to spur Caring Science integration (CSI) focused on building an infrastructure for education, awareness, and spread that encouraged an organic, creative process for local teams to adopt, adapt, and frame Caring Science within their daily practice and at their Medical Centers. In this article, we outline some of these practices, provide an overview of our regional Caring Science strategy, and begin to provide evidence on how integration of Caring Science across administrative, operational, and clinical areas within a Medical Center appears to contribute to meaningful patient quality and health outcomes.

## METHODS

### Our Journey

In this section, our goal is to provide an overview of the specific activities that defined our Caring Science strategy over time, because we believe that the degree of adoption, spread, and integration we have observed is related to the intentionality, scope, and sequence of what was developed and orchestrated at a regional level. Accordingly, once the decision to adopt Caring Science as the framework to guide professional nursing practice was made in the spring of 2010, a small regional team dedicated to CSI was formed with the initial objective to organize a series of educational forums to provide senior hospital operations leaders, chief nursing officers, nursing managers and educators, and frontline nursing staff from across the KPNC Region the opportunity to learn about the philosophy and theory of human caring directly from Dr Watson. These forums were structured to allow time for interactive dialogue and idea generation on how nursing practice within KPNC could be informed and inspired by Caring Science. Participant feedback was extremely positive and indicated a sense that adopting Caring Science would revitalize the identity of our nurses and rekindle their passion as caregivers. The nature of this sentiment is beautifully articulated by operating room staff nurse Carole Weller, RN: “I always believed in caring science; I just didn’t know how to define it by name.

But I always believed in it in principle. The way in which Caring Science has changed my practice here now is that I’ve been able to recall everything I’ve always hoped to do and wanted to do, and now I have support for it. I actually have a framework, and I have a support from leadership to practice this.”

In 2011, the focus of the regional CSI team was 2-fold: 1) to create a leadership infrastructure for the transformational change desired in professional practice, and 2) to facilitate spread of concrete activities and projects undertaken locally that demonstrated core concepts of the theory. Toward the first aim, the CSI team developed 4 teaching-learning modules for frontline nursing managers and educators on how to “Lead with Care.” The modules identified core concepts of Caring Science as context and perspective for concrete leadership and interpersonal practices that sought to foster helping-trusting-collaborative relationships. Each module was dedicated to 1 of 4 key relationships: self, caregiver team, patients and family, or communities we serve. Reflective, mindfulness-based practices were interwoven into the modules, and participants were given time to individually and collectively practice how to engage in and to encourage caring-healing conversations, actions, and interactions. To facilitate rapid spread and to deepen Caring Science leadership advocacy across the Region, the modules were taught using a “train the trainer” model, resulting in the responsibility for the delivery of these

### “Caritas in Action” Awareness Campaign Installment: SCIENCE

As Kaiser Permanente caregivers, we are committed to keeping our patients:

**Safe:** we take precautions and we are reliable in our adherence to safety standards, including those that protect ourselves

**Comfortable:** we create caring-healing environments and proactively manage our patient’s comfort

**Informed:** we engage in respectful dialogue and take the time to check for understanding

**Engaged:** we involve our patients in the course of their care

**Nurtured:** we demonstrate the capacity for understanding and kindness

**Connected:** we connect to our patients as individuals and serve as their voice when they are unable to speak for themselves

**Empowered:** we encourage our patients to make decisions throughout their care journey that strengthen their mind, body, and spirit

modules to be owned by local leaders within each of the 21 Medical Centers.

Driven by the second aim, the CSI team organized a Caritas Consortium in May 2011 (titled *Nurturing Hearts, Transforming Care*) to bring together caregivers from across the Northern California Region to recognize and to explore the transformative practices that demonstrate KP's commitment to being an authentic person- and family-centric organization that promotes and advocates for total health. Subsequent consortia were organized in

June 2012 (*Caring Connections, Catalyst for Change*), July 2013 (*Holding Space for Human Flourishing*), June 2014 (*Honoring Health, Healing and Wholeness*), and July 2015 (*Journey to Shared Wisdom: Co-Creating Understanding*). Over the course of 3 to 4 days, each consortium provided the opportunity for approximately 1200 caregivers—including acute care, home health and hospice nurses, inpatient physicians, physical therapists, respiratory care practitioners, patient care coordinators, quality coordinators, social workers,

ombudspersons, and professionals from within spiritual care and community benefit—to hear directly from respected internal and external leaders on themes and research aligned with Caring Science and to learn about specific projects and activities undertaken by frontline staff and managers that held the greatest potential for spread and innovation across the Region (see examples outlined in the “Evidence of Transformation” section).

In late 2012, the regional CSI team launched a *Caritas in Action* campaign

### Evidence in Practice

**Caring Science as a lens to reframe and revitalize the HAPU Prevention Program**<sup>1</sup>—To integrate three constructs of Caring Science theory into the design of the HAPU (hospital-acquired pressure ulcers) Prevention Program: 1) teaching and learning, 2) holistic care, and 3) creating a healing environment.

**Integration of Caring Science into new hospital construction**<sup>2</sup>—To apply Caring Science principles of caring-healing, compassion, and love into the overall “Total Health Environment” branding concept guiding the new San Leandro Hospital design and construction.

**Caring-centric implementation of sleep and pain initiatives**<sup>3</sup>—To translate elements of the Quiet at Night (sleep) and Pain Management initiatives from a Caring Science perspective, increasing attentiveness on how to cocreate a caring-healing-nurturing environment and to foster helping-trusting-collaborative relationships.

**Donate Life Flag Program: spiritual and emotional support for donor families**<sup>4</sup>—To transform the routine actions associated with organ donation into a meaningful honoring and healing ritual guided by the principles of Caring Science.

**Leaving a legacy to their children from young parents with life-limiting illness**<sup>5</sup>—To reflect Caring Science constructs into a research study designed to assist young parents with an oncology diagnosis to meet the end of their lives with dignity. To assess 1) whether creating a “Living Legacy” video has a relationship to improving parents’ quality of their life as measured by the Chan and Pang<sup>6</sup> instrument on quality at end of life, 2) whether creating the video influences the parent’s willingness to accept hospice/comfort care, and 3) whether the parent will accept dying at home.

**Holding sacred space: Schwartz Center Rounds**<sup>7</sup>—To explore the Schwartz Center Rounds practice developed by the Schwartz Center for Compassionate Healthcare from a Caring Science perspective. Within this context, the practice seeks to create a safe and sacred space for caregivers across all disciplines to share the psychological, emotional, and spiritual dimensions of particularly challenging cases, encouraging grief, gratitude, and grace to rise to the surface.

**A bouquet of wisdom: staff perspectives on Caring Science**<sup>8</sup>—To assess whether use of video that relies upon the power of

storytelling and observed behaviors of staff to capture caring-healing at the bedside is perceived as an effective teaching and learning method of Caring Science theory. Specifically, the videos explored three constructs of Caring Science: 1) intentionality, 2) the transpersonal-caring relationship, and 3) human dignity.

- Ricossa K. Caring science as a lens to reframe and revitalize HAPU prevention [Internet]. Caritas Consortium 2013: Proceedings of the 3rd annual Kaiser Permanente Northern California Caritas Consortium; 2013 Jul; San Ramon, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2013 [cited 2015 Jun 11]. Available from: [www.slideshare.net/KPcaringscience/caring-science-as-a-lens-to-reframe-and-revitalize-hapu-prevention-program](http://www.slideshare.net/KPcaringscience/caring-science-as-a-lens-to-reframe-and-revitalize-hapu-prevention-program).
- Daniel L, Hobbs Y, Tesorero G. Integration of caring science into San Leandro hospital build [Internet]. Caritas Consortium 2013: Proceedings of the 3rd annual Kaiser Permanente Northern California Caritas Consortium; 2013 Jul; San Ramon, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2013 [cited 2015 Jun 11]. Available from: [www.slideshare.net/KPcaringscience/integration-of-caring-science-into-san-leandro-hospital-build](http://www.slideshare.net/KPcaringscience/integration-of-caring-science-into-san-leandro-hospital-build).
- Hills K, Timothy K. Caring-centric implementation of sleep & pain initiatives [Internet]. Caritas Consortium 2013: Proceedings of the 3rd annual Kaiser Permanente Northern California Caritas Consortium; 2013 Jul; San Ramon, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2013 [cited 2015 Jun 11]. Available from: [www.slideshare.net/KPcaringscience/caring-centric-implementation-of-sleep-pain-initiatives-2013podium](http://www.slideshare.net/KPcaringscience/caring-centric-implementation-of-sleep-pain-initiatives-2013podium).
- Parker C, Tam N, Cellini L. Donate Life flag program: spiritual and emotional support for donor families [Internet]. Caritas Consortium 2014: Proceedings of the 4th annual Kaiser Permanente Northern California Caritas Consortium; 2014 Jun; San Mateo, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2014 [cited 2015 Jun 11]. Available from: [www.slideshare.net/KPcaringscience/donate-life-flag-program-spiritual-and-emotional-support-for-donor-families](http://www.slideshare.net/KPcaringscience/donate-life-flag-program-spiritual-and-emotional-support-for-donor-families).
- Catlin A, Girvin C. Leaving a legacy to their children from young parents with life-limiting illness. Caritas Consortium 2014: Proceedings of the 4th annual Kaiser Permanente Northern California Caritas Consortium; 2014 Jun; San Mateo, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2014.
- Chan HYL, Pang SMC. Applicability of the modified quality-of-life concerns in the end of life questionnaire (mQOLC-E) for frail older people. *Asian Journal of Gerontology and Geriatrics* 2008 Apr;3(1):17-36.
- Bendixen B, Carlile A, Gunthermaher M, et al. Holding sacred space: Schwartz Center Rounds. Caritas Consortium 2014: Panel discussion at the 4th annual Kaiser Permanente Northern California Caritas Consortium; 2014 Jun; San Mateo, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2014.
- Laws D, Lamke D, Smith E. A bouquet of wisdom: bundling caring actions [Internet]. Caritas Consortium 2013: Proceedings of the 3rd annual Kaiser Permanente Northern California Caritas Consortium; 2013 Jul; San Ramon, CA. Oakland, CA: Kaiser Permanente Caritas Consortium; 2013 [cited 2015 Jun 11]. Available from: [www.slideshare.net/KPcaringscience/a-bouquet-of-wisdom-bundling-caring-actions-2013podium](http://www.slideshare.net/KPcaringscience/a-bouquet-of-wisdom-bundling-caring-actions-2013podium).

to bring the theoretical concepts of Caring Science into language that would appeal to frontline managers and staff with the intent to transform their approach to caring-healing at the bedside and as a foundational ethic. There have been 7 campaign “installments” released to date through wide internal e-mail distribution and through posting on an internal Caring Science Web site ([http://kpnursing.org/\\_NCAL/practice/caritas/action/index.html](http://kpnursing.org/_NCAL/practice/caritas/action/index.html)). Local leaders are encouraged to share the content during regularly scheduled forums, including staff “huddles,” department meetings, and governance councils. Accordingly, each installment has a set of resource tools designed to encourage dynamic dialogue around the concepts and themes being explored. A core component is inclusion of both a facilitator guide and a participant handout to promote a 10- to 20-minute reflective exercise. In addition, most installments include short video segments featuring frontline KP caregivers and leaders sharing the meaning that Caring Science has had for them in their personal and professional lives.

#### Installments to Date:

- **CARING**—focus on how, as KP caregivers, we are committed to being *Caring, Authentic, Responsible, Intentional, Nurturing, and Growth-oriented*
- **SCIENCE**—focus on how, as KP caregivers, we are committed to keeping our patients *Safe, Comfortable, Informed, Engaged, Nurtured, Connected, and Empowered* (see Sidebar: “Caritas in Action” Awareness Campaign Installment: SCIENCE)
- **Nursing process**—focus on how Caring Science informs and inspires the nursing process for our KP nursing professionals
- **Caring Science integration**—focus on how Caring Science serves as a “lens” by which we, as KP caregivers, exhibit the values, behaviors, and beliefs that enable the organization to be known as a quality leader, deliver an exceptional care experience, ensure care without delay, and foster a highly skilled and motivated workforce,

which are four tenets upheld by hospital leadership

- **Team collaboration**—focus on open communication, clinical competence, and shared intentionality as key elements of fostering helping-trusting-collaborative relationships within and across interprofessional teams
- **Human flourishing**—focus on the concept of “holding space for human flourishing” and how acting with heart-centered intentionality cultivates resilience, creativity, and regenerative practices
- **Health, healing and wholeness**—focus on the concept of “honoring health, healing, and wholeness” and the power and possibilities of awakening to healing, seeing the whole person, and fostering a culture of care.

## RESULTS

### Evidence of Transformation

There are two primary means by which we have evaluated the spread and impact of Caring Science on KPNC practice, environment, and culture.

#### 1. Annual Caritas Consortium

Five annual Caritas Consortia have been held to date (2011 to 2015). Although the prevalence of projects in the first two years were focused on Self, such as the creation of caring-healing staff lounges or Caring Science educational content, we have seen increasingly more depth and breadth in projects and intentionality year after year. Each of the exemplars below were presented at one of the consortia and were selected for their deep level of creativity and collaboration across teams (several of these main stage presentations included or represented team members from professions other than nursing), alignment and integration with hospital quality and care experience efforts, and active engagement of patients and their family members as well as the broader communities in which we serve. All of these have since resulted in some level of adoption or adaptation across disciplines and Medical Centers, demonstrating tangible evidence of spread and integration (see Sidebar: Evidence in Practice).

The value, meaning, and influence of the consortia are perhaps best captured

by feedback shared by participants as well as one of our keynote speakers:

“One of the things I will take away from this experience is how important it is to connect, listen, and care. With gratitude comes joy and joy impacts positively. I am encouraged and honored to be a part of the change.”

—Consortium participant

“I have participated in all four of [KPNC’s] Caritas conferences as a keynote speaker and performer. I have been deeply moved by the depth of commitment [KP] has made to the work of Jean Watson’s brilliant Caring Science theory, as well as by the authentic way the various teams and facilities have integrated the principles and practices in their work routines and protocols. The Caritas Consortium event has become a centerpiece for this widespread work and is, in my opinion, the most effective, inspirational, and practical health care conference I have attended.”

—Bruce Cryer, CEO, Lissa Rankin Inc, senior advisor, HeartMath Inc.

#### 2. Evidence-in-Practice Assessment Tool

In 2013, an on-site survey assessment tool was developed by the regional CSI team to evaluate the integration of Caring Science at each Medical Center. Specifically, 13 evidence-in-practice indicators were defined to capture the range of actions and authentic practices believed to be informed by Caring Science. The indicators were grouped into 4 categories, 2 designed to assess the level of awareness and adoption, and 2 designed to assess the scope of integration and transformation (Table 1).

- **Awareness and adoption:** Education, awareness, and spread (*three indicators*) and staff practices and behaviors (*three indicators*)
- **Integration and transformation:** Caritas Council leadership (*four indicators*) and administrative implementation (*three indicators*).

Each on-site assessment was conducted by a member of the regional CSI team in coordination and collaboration with local leadership, with the evaluation based on observation of practice and environmental cues, review of documentation, and elicitation of stories and

exemplars from staff and management. A regional leader, not involved in any of the site visits and who had deep knowledge of Caring Science, was assigned sole responsibility to review the resulting narrative and supporting materials for each Medical Center with the intent to mitigate variation and issues of interrater reliability. For each indicator, the expert reviewer established a numeric score within the range of 1 (low) to 5 (high):

- 1 = No knowledge or no evidence of the indicator
- 5 = Indicator consistently performed, completed, and/or evidenced in all units.

Assessments were completed for all 21 Medical Centers in 2013, providing a quantifiable means to explore the link between Caring Science, patient satisfaction, and patient quality outcomes. Accordingly, 3 patient satisfaction and

4 patient safety outcome metrics were selected for a comparative analysis to the overall average Caring Science assessment score. Four Medical Centers were excluded from the comparative analysis because their Caring Science assessment was conducted at a service area level (East Bay: Oakland and Richmond; Central Valley: Manteca and Modesto) and thus, it was not possible to establish a direct link between

**Table 1. Caring Science evidence-in-practice assessment tool: 13 indicators, by dimension and category**

Dimension	Category	Measure	Action/authentic practice	Evidence in practice
Integration and transformation	Caritas Council leadership	1A	Councils	Monthly or bimonthly Caritas Councils held
		2A	Charter	Charter, vision, mission statement developed
		3A	Disciplines other than nursing	Caritas Council projects shared with other disciplines (respiratory therapy, rehabilitation, social work, chaplaincy, etc.)
		4A	Hospital design and programs	Caritas Council projects manifested in hospital design or programs
Adoption and awareness	Education, awareness, and spread	5B	Staff education and resources	Caring Science awareness/education/resources provided for staff
		6B	Unit-level education	"Caritas in Action" education used for in-servicing on the unit level
		7B	Caritas practice sharing	Poster/presentation at June 2012 or July 2013 Caritas Consortium
	Staff practices and behaviors	8C	Incorporation in staff meetings and huddles	Centering, caring story; team sharing used for huddles/meetings
		9C	Centering practices evident	Staff articulated a technique for awareness/focus
10C	Caring behaviors evident	Staff articulated caring behaviors used to connect with their patients on a daily basis		
Integration and transformation	Administrative implementation	11D	Documentation/daily processes/quality	Caring Science incorporated into daily processes, informational resources, documentation, and/or patient quality outcomes
		12D	Interview questions	Caring Science question used for job interviews
		13D	Policy/procedures	All nursing policies updated with Caring Science principles or with a Caring Science policy statement

**Table 2. Caring Science assessment tool score compared with key patient satisfaction and patient safety outcome data**

Tier <sup>a</sup>	No. Hospitals	2013 Caring Science	2013 Patient Satisfaction (HCAHPS <sup>b</sup> & Avatar <sup>c</sup> )			2013 Patient Safety			
		Average score	Rate hospital <sup>d</sup>	Nurse communication <sup>e</sup>	Caritas nursing <sup>f</sup>	HAPU 3+ <sup>g</sup>	Falls with injury <sup>h</sup>	C-diff <sup>i</sup>	ICU BSI <sup>j</sup>
High—both dimensions	2	4.08	78.4	79.0	75.1	0.00	0.0	3.1	3
High—composite	4	3.93	74.7	77.4	74.7	0.00	0.5	3.8	2
Mid—composite	10	3.24	73.3	75.2	71.5	0.06	0.3	5.0	1
Low—composite	3	2.49	69.8	73.7	70.1	0.07	0.3	5.3	2

<sup>a</sup> Tier assignment is based on the average numerical score across indicators for each Medical Center; High  $\geq 3.75$  and Low is  $\leq 2.75$ ; accordingly, Mid is 2.76-3.74.  
<sup>b</sup> HCAHPS: (Hospital Consumer Assessment of Healthcare Providers and Systems survey): the first national, standardized, publicly reported survey of patients' perspectives of hospital care.  
<sup>c</sup> Avatar: a Centers for Medicare and Medicaid Services-approved provider of the HCAHPS survey; Avatar offers clients a powerful research tool that incorporates fully customized service- or specialty-related items.  
<sup>d</sup> Rate hospital: a global HCAHPS survey question regarding the overall rating of the hospital by the patient.  
<sup>e</sup> Nurse communication: a composite of three HCAHPS survey questions: During this hospital stay, how often did nurses 1) treat you with courtesy and respect; 2) listen carefully to you; and 3) explain things in a way you could understand?  
<sup>f</sup> Caritas nursing: a composite of two Avatar survey questions: 1) My nurses consistently provided care to me with loving-kindness; and 2) My nurses accepted and supported my cultural traditions and spiritual beliefs.  
<sup>g</sup> HAPU 3+: the incidence of hospital-acquired pressure ulcers (HAPU) that were documented as stage 3 or above.  
<sup>h</sup> Falls with injury: the incidence of patient falls that resulted in an injury.  
<sup>i</sup> C-diff: the incidence of *Clostridium difficile* bacteria infection acquired during hospital stay; one of several health care-associated infections considered to be a leading threat to patient safety by the Agency for Healthcare Research and Quality.  
<sup>j</sup> ICU BSI: the incidence of central line-associated bloodstream infection (BSI) acquired during hospital stay within the intensive care unit (ICU); one of several health care-associated infections considered to be a leading threat to patient safety by the Agency for Healthcare Research and Quality.

their assessment scores and the patient satisfaction and patient safety metrics that are documented at the independent hospital level.

To delineate the degree to which Caring Science was embedded in practice, environment, and culture within each Medical Center, a tier designation was established and assigned by the regional CSI team on the basis of the overall average Caring Science assessment score. An average score at or above 3.75 was considered indicative of a high level of integration and an average score at or below 2.75 was considered indicative of a low level of integration, with the mid-tier reflecting scores in between.

Comparative analysis of overall average Caring Science assessment scores appears to correlate and give context to scores on key patient satisfaction and patient safety outcome data (Table 2). The average scores for hospitals in the high tier had more positive outcomes on the seven patient-centric metrics we reviewed than those in the mid tier and low tier. This distinction was even more definitive when we looked at the average of the two hospitals that scored in the high tier on both the adoption and awareness dimension and the integration and transformation dimension of the Caring Science indicator evidence-in-practice tool. This leads us to an emerging hypothesis that as the leaders, frontline managers, and staff within our Medical Centers move from a shared understanding of Caring Science theory to a shared foundational ethic of caring-healing that informs practice, environment, and culture across administrative, operational, and clinical areas, they are more likely to demonstrate high quality and highly reliable performance on key patient-centric metrics.

## DISCUSSION

### Limitations

We recognize that there are several limitations to the use of this tool and its associated scores and findings. First, the assessment tool and site visits were conducted only once for each hospital in the Region (in 2013), and thus we did not have either a pre-Caring

Science baseline score or a year-over-year score to gauge change or progression of Caring Science evidence in practice over time. Although information to validate multiple indicators of the tool was collected by request, portions of the assessment reflect the limited snapshot of activity that was observed on the specific day of the on-site visit. In addition, the wave of assessments occurred during several months, thus hospitals that were visited later in the year inadvertently had more time to develop and deepen Caring Science practices relative to those that were visited earlier in the year. Finally, because the number of professionals qualified and resources available to conduct the assessments was limited, the tool did not undergo a rigorous process for data validity and interrater reliability, although attentiveness to consistency was built into the design. Despite these limitations, the results of this first-wave assessment were compelling and our hypothesis that Caring Science is a meaningful component in delivering high-quality outcomes and patient-centric care will, we hope, guide further evaluative analysis and assessment at KPNC.

### Inquiry, Insight, and Innovation

It is notable to acknowledge that all 21 Medical Centers had several distinct service, quality, and patient safety initiatives in place before and during the CSI efforts outlined, and that these also played a meaningful role in fostering a culture of caring-healing within the organization. The interconnectedness between Caring Science and these patient-facing areas is believed to be a significant factor in the transformation we have seen. Leaders across these areas engaged in collaboration and inquiry to ensure alignment with the core guiding principles of Caring Science. For example, Caring Science was one of several motivating factors that led the organization to reframe the term *service to care experience* and has directly influenced the approach and language used in care experience initiatives. Perceived as a valuable tenet of KPNC's person- and family-centered focus,

Caring Science is trusted for bringing greater attentiveness to the covenant we hold as caregivers, encouraging us to honor and to hold the patient/family perspective, to promote total health and well-being from a whole-person identity, and to take time to nurture our souls as healers.

At its core essence, Caring Science captures the heart-centered intentionality of KP caregivers to promote human flourishing, acknowledging the power that is theirs for affecting change and transforming care. At the individual level, Caring Science expands the concept of accountability, inspiring behavior that is authentic, responsible, and intentional, and promoting reliance on psychosocial-emotional-spiritual wisdom as well as intellectual-tactical knowledge. At the system level, given our study design, integration of Caring Science across administrative, operational, and clinical areas within a Medical Center appears to demonstrate positive interconnectivity toward higher patient satisfaction scores and patient quality outcome metrics.

## CONCLUSION

Implementing Caring Science as a consistent framework for process and culture change across a large integrated care delivery system has provided a platform for meaningful dialogue at all levels within the organization. Caring Science provides a language that resonates with caregivers, re-engaging them in the purpose and value of their work. It serves as the lens by which they can see the interconnectivity between their values, behaviors, and beliefs and the strategic priorities, programs, policies, and initiatives that guide practice within KPNC. This awareness and alignment inspire more cohesive orchestration at the individual, team, and system levels. These observations and early evidence can guide future research on how Caring Science or other professional practice models can serve as a foundation to transform the ethic of caring-healing practice, environment, and culture in alignment with the industrywide

momentum for broadening a commitment to total health that focuses on healing, well-being, and wholeness.<sup>31</sup> ❖

#### Disclosure Statement

The author(s) have no conflicts of interest to disclose.

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#### References

- Watson J. Intentionality and caring-healing consciousness: a practice of transpersonal nursing. *Holist Nurs Pract* 2002 Jul;16(4):12-9. DOI: <http://dx.doi.org/10.1097/00004650-200207000-00005>.
- Watson J. Caring theory as an ethical guide to administrative and clinical practices. *Nurs Adm Q* 2006 Jan-Mar;30(1):48-55. DOI: <http://dx.doi.org/10.1097/00006216-200601000-00008>.
- Watson J. *Nursing: the philosophy and science of caring*. Revised edition. Boulder, CO: University Press of Colorado; 2008.
- Watson J. Caring science and human caring theory: transforming personal and professional practices of nursing and health care. *J Health Hum Serv Adm* 2009 Spring;31(4):466-82.
- Watson J. *Human caring science: a theory of nursing*. 2nd ed. Sudbury, MA: Jones & Bartlett Learning; 2011.
- Hills M, Watson J. *Creating a caring science curriculum: an emancipatory pedagogy for nursing*. New York, NY: Springer Publishing Company, LLC; 2011.
- Parker ME, Smith MC. *Nursing theories and nursing practice*. 3rd ed. Philadelphia, PA: FA Davis Company; 2010.
- Pipe TB. Optimizing nursing care by integrating theory-driven evidence-based practice. *J Nurs Care Qual* 2007 Jul-Sep;22(3):234-8. DOI: <http://dx.doi.org/10.1097/01.NCQ.0000277780.27771.91>.
- Drenkard KN. Integrating human caring science into a professional nursing practice model. *Crit Care Nurs Clin North Am* 2008 Dec;20(4):403-14. DOI: <http://dx.doi.org/10.1016/j.ccell.2008.08.008>.
- Watson J, Brewer BB. Caring science research: criteria, evidence, and measurement. *J Nurs Adm* 2015 May;45(5):235-6. DOI: <http://dx.doi.org/10.1097/NNA.0000000000000190>.
- About Kaiser Permanente [Internet]. Oakland, CA: Kaiser Permanente; 2015 [cited 2015 Jul 13]. Available from: <http://share.kaiserpermanente.org/about-kaiser-permanente/>.
- Dijkstra K, Pieterse M, Pruyn A. Physical environmental stimuli that turn healthcare facilities into healing environments through psychologically mediated effects: systematic review. *J Adv Nurs* 2006 Oct;56(2):166-81. DOI: <http://dx.doi.org/10.1111/j.1365-2648.2006.03990.x>.
- Lamke D, Catlin A, Mason-Chadd M. "Not just a theory": the relationship between Jin Shin Jyutsu® self-care training for nurses and stress, physical health, emotional health, and caring efficacy. *J Holist Nurs* 2014 Dec;32(4):278-89. DOI: <http://dx.doi.org/10.1177/0898010114531906>.
- Lane MR. Arts in health care: a new paradigm for holistic nursing practice. *J Holist Nurs* 2006 Mar;24(1):70-5. DOI: <http://dx.doi.org/10.1177/0898010105282465>.
- Norred CL. Minimizing preoperative anxiety with alternative caring-healing therapies. *AORN J* 2000 Nov;72(5):838-40, 842-3. DOI: [http://dx.doi.org/10.1016/S0001-2092\(06\)62015-2](http://dx.doi.org/10.1016/S0001-2092(06)62015-2).
- Wood D, Patricolo GE. Using guided imagery in a hospital setting. *Alternative and Complementary Therapies* 2013 Dec;19(6):301-5. DOI: <http://dx.doi.org/10.1089/act.2013.19604>.
- Dewar B. Cultivating compassionate care. *Nurs Stand* 2013;27(34):48-55. DOI: <http://dx.doi.org/10.7748/ns.2013.04.27.34.48.e7460>.
- Dewar B, Nolan M. Caring about caring: developing a model to implement compassionate relationship centred care in an older people care setting. *Int J Nurs Stud* 2013 Sep;50(9):1247-58. DOI: <http://dx.doi.org/10.1016/j.ijnurstu.2013.01.008>.
- Duffy JR. Quality caring in nursing and health systems: implications for clinicians, educators, and leaders. 2nd ed. New York, NY: Springer Publishing Company; 2013.
- Green M, McArdle D, Robichaux C. Creating a culture of caring to foster a healthy workplace. *Crit Care Nurs Q* 2009 Oct/Dec;32(4):296-304. DOI: <http://dx.doi.org/10.1097/CNQ.0b013e3181bad447>.
- Wong CA, Spence Laschinger HK, Cummings GG. Authentic leadership and nurses' voice behaviour and perceptions of care quality. *J Nurs Manag* 2010 Nov;18(8):889-900. DOI: <http://dx.doi.org/10.1111/j.1365-2834.2010.01113.x>.
- Cowling WR 3rd, Smith MC, Watson J. The power of wholeness, consciousness, and caring: a dialogue on nursing science, art, and healing. *ANS Adv Nurs Sci* 2008 Jan-Mar;31(1):E41-51. DOI: <http://dx.doi.org/10.1097/01.ANS.0000311535.11683.d1>.
- Schlitz M, Valentina E. Twelve essential tools for living the life of whole person health care. *Perm J* 2013 Fall;17(4):e155-7. DOI: <http://dx.doi.org/10.7812/TPP/13-089>.
- Connors R, Smith T. Change the culture, change the game: the breakthrough strategy for energizing your organization and creating accountability for results. Reprint ed. New York, NY: Portfolio; 2012.
- Whitney D, Trosten-Bloom A, Rader K. *Appreciative leadership: focus on what works to drive winning performance and build a thriving organization*. New York, NY: McGraw-Hill; 2010.
- Needleman J, Hassmiller S. The role of nurses in improving hospital quality and efficiency: real-world results. *Health Aff (Millwood)* 2009 Jul-Aug;28(4):w625-33. DOI: <http://dx.doi.org/10.1377/hlthaff.28.4.w625>.
- Roussel L, Dearmon V, Buckner E, et al. "Change can be good": unit perspectives on transforming care at the bedside. *Nurs Adm Q* 2012 Jul-Sep;36(3):203-9. DOI: <http://dx.doi.org/10.1097/NAQ.0b013e318258c6c8>.
- Upenieks VV, Needleman J, Soban L, Pearson ML, Parkerton P, Yee T. The relationship between the volume and type of transforming care at the bedside innovations and changes in nurse vitality. *J Nurs Adm* 2008 Sep;38(9):386-94. DOI: <http://dx.doi.org/10.1097/01.NNA.0000323959.52415.86>.
- Sinkowitz-Cochran RL, Garcia-Williams A, Hackbarth AD, et al. Evaluation of organizational culture among different levels of healthcare staff participating in the Institute for Healthcare Improvement's 100,000 Lives Campaign. *Infect Control Hosp Epidemiol* 2012 Feb;33(2):135-43. DOI: <http://dx.doi.org/10.1086/663712>.
- Lukas CV, Holmes SK, Cohen AB, et al. Transformational change in health care systems: an organizational model. *Health Care Manage Rev* 2007 Oct-Dec;32(4):309-20. DOI: <http://dx.doi.org/10.1097/01.HMR.0000296785.29718.5d>.
- Appelbaum SH, Habashy S, Malo JL, Shafiq H. Back to the future: revisiting Kotter's 1996 change model. *Journal of Management Development* 2012;31(8):764-82. DOI: <http://dx.doi.org/10.1108/02621711211253231>.
- Berwick DM. "H4"—IHI 25th National Forum Keynote Address [Internet]. National Forum on Quality Improvement in Healthcare; 2013 Dec 8-11; Orlando, FL. Cambridge, MA: Institute for Healthcare Improvement; 2013 Dec 15 [cited 2015 Jun 11]. Available from: [www.youtube.com/watch?v=5Tbikk44jY](http://www.youtube.com/watch?v=5Tbikk44jY).