A Letter from Elizabeth B. Concordia

Dear Colleagues,

Each and every day, nurses, staff and providers at UCHealth are working to improve the lives of patients and helping them live extraordinary lives. We are focused on providing an excellent experience for everyone we interact with, while achieving nation-leading outcomes.

I am honored to share the 2017–2018 UCHealth Nursing Annual Report, which shows the outstanding accomplishments of our nurses and demonstrates how UCHealth is an innovative leader in patient care.

Over the past year, UCHealth has cared for 1.6 million patients while continuing to improve the quality and safety of the care we provide. Our facilities and nurses have been recognized nationally for always putting patients first. UCHealth is developing and implementing innovative technologies at the bedside, online and throughout our organizations to help transform the future of health care.

In this report, you will see highlights of how nursing has taken technology and innovation to the next level, integrating wearables, virtual reality and telehealth into nursing practice and patient care. Our nurses have a dedication to professional growth and development that is illustrated through the UCHealth Graduate Nurse Residency Program and UEXCEL, two foundational programs that shape the future of nursing at UCHealth.

UCHealth’s nurses work side by side with staff and providers to advance nursing practice and deliver the highest care to our patients. More than ever before, UCHealth is providing this care close to home in primary care clinics and urgent cares throughout our state.

In reading this report, I hope you catch a glimpse of the many ways nurses are making a difference, innovating health care and constantly improving the care and experience of our patients. You will also see how we are helping educate and advance the next generation of nurses and nurse leaders.

I thank and appreciate the nursing teams throughout UCHealth. Together, we are making a difference for patients and improving lives.

Sincerely,

[Signature]

Elizabeth B. Concordia
UCHealth President and Chief Executive Officer
It has been a great honor to serve as the Chief Nurse Executive for UCHealth and Chief Nursing Officer for University of Colorado Hospital. Since arriving in January, I have observed nurses throughout UCHealth in the role of partners and key strategists in creating an environment of life-long learning, teaching and collaborating with the interprofessional teams to carry out our mission of improving lives.

Communities across Colorado rely on UCHealth and UCHealth nurses to be health care leaders, providing exemplary patient- and family-centered care. Our nurses have a genuine focus on patients and their families. I am so proud of the advancements that have been made in nursing practice and care delivery across the system. For example, all regions of UCHealth have adopted and integrated UCHealth’s focus on nursing excellence in Clinical Practice, Education and Evidence-Based Practice and Leadership (UEXCEL) as the Nursing Clinical Practice and Credentialing Model. This model supports nurses in advancing their careers through professional-development opportunities while continuing to provide direct patient care, thus upholding our belief that clinical excellence is our highest priority.

UCHealth nurses are embracing innovation and new technology as evidenced by the launch of the virtual health center as well as innovative technology platforms at our newly built UCHealth Longs Peak Hospital. A system-wide initiative was developed by nurses with nursing executive support to transform nursing documentation, which is fondly called Project Joy. Through standardization and streamlining of nursing documentation paired with innovations in technology, nurses will spend less time entering data while improving the accuracy of the record and increasing the communication of meaningful clinical information with the care team.

We have accomplished a great deal in the last year and will continue to work together to provide quality care. Our promise to our communities is that our success is defined by more than beating statistical averages. Collectively, we are dedicated to improving lives through excellence in patient care, embracing innovation and using research and evidence-based practice to propel us as leaders in health care.

Katherine Howell
MBA, BSN, RN, NEA-BC
Chief Nursing Executive, UCHealth
Chief Nursing Officer, University of Colorado Hospital
Our mission.
We improve lives. In big ways through learning, healing and discovery. In small, personal ways through human connection. But in all ways, we improve lives.

Our vision.
From health care to health.

Our values.
Patients first.
Integrity.
Excellence.

UCHealth.
Our network of nationally recognized hospitals, clinic locations and health care providers extends throughout Colorado, southern Wyoming and western Nebraska. Our experienced, caring nurses are completely committed to the communities we serve. They partner with interdisciplinary teams to provide innovative and cutting-edge healthcare care across the Rocky Mountain region. UCHealth nurses create connections with patients and families through compassionate care, while advocating for and empowering them to improve their lives across the care continuum. Our nurses are supported in the delivery of evidenced-based quality care and in their own continuous professional development.

Stronger together.
UEXCEL

The UEXCEL Nursing Credentialing and Practice model provides a professional framework for clinical registered nurses to be credentialed by practice, to be evaluated using standards based on the American Nurses Association Scope and Standards for Clinical Nurse Practice, and to provide an opportunity for recognition of expertise by advancement. The UCHealth UEXCEL Steering Committee and UEXCEL Boards at the market level provide program oversight. The Boards are primarily composed of clinical nurse representatives and also include nurse leaders and human resources representatives. There are four levels within the UEXCEL program, each with distinct and separate job descriptions, salary ranges and classifications. Advancement to Levels III and IV is based on documented clinical expertise and submission of a digital credentialing portfolio demonstrating excellence in the model components. The UEXCEL Boards within each market review the UEXCEL standards and credentialing guidelines annually as well as perform peer reviews of credentialing nurses’ portfolios.

Number of RNs at each level of UEXCEL at UCHealth:

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>RNs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>85</td>
</tr>
<tr>
<td>II</td>
<td>4528</td>
</tr>
<tr>
<td>III</td>
<td>301</td>
</tr>
<tr>
<td>IV</td>
<td>18</td>
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Nurse Residency Program.

As of 2015, Nurse Residency Programs in the three regions have aligned and are structured according to the guidelines and recommendations provided by the Vizient/AACN Nurse Residency Program™, a year-long transition-to-practice program for new graduate nurses. This transition to competent nursing practice is supported by evidence-based curriculum that is customized to reflect the values and mission of UCHealth, access to content experts and participation in an evidence-based practice (EBP) project. At the 2018 Vizient/AACN Nurse Residency Program Annual Meeting in Savannah, Georgia, nurse residents representing all three regions of the UCHealth Nurse Residency Program were selected for poster presentations for the first time. These projects were chosen from 248 abstract submissions demonstrating the rigor of their evidence-based practice projects and successes of the UCHealth Nurse Residency Program.

UCHealth Nursing Quick Facts

6,041 Total RNs (all areas)

BSN Rate 73%  
MSN Rate 6%  
DNP/PhD 1%

3,673 Certified Nurses

98 podium presentations  
16 research studies

44 publications  
98 poster presentations
UCHealth Traveler Program.

Each year there has been tremendous growth in volume, from 40 UCHealth Travelers in 2011 to 270 in 2017. UCHealth does not advertise for these positions; many of the UCHealth Traveler candidates are referred by current and former UCHealth Travelers. The program primarily aims to recruit BSN-prepared nurses with at least two years of experience. Currently there are more than 250 UCHealth Travelers working in various acute care, ambulatory and procedural settings. They also provide staffing support in all inpatient units for medical, surgical, critical care, women’s care and birth center. In addition, Travelers can be found working in the OR departments, ED and many labs and clinics.

Approximately 30 percent of UCHealth Travelers convert to permanent positions within UCHealth. UCHealth Travelers who converted to permanent staff have gone on to become clinical nurses, clinical charge nurses, clinical nurse educators, associate nurse managers, nurse managers as well as nurse practitioners for specific service lines and support disciplines.

Our new Virtual Health Center.

Now available system-wide, the UCHealth Virtual Health Center (VHC) houses three programs: The Virtual Intensive Care Unit (viCU), Centralized Telemetry and Safety View.

The viCU provides a layer of surveillance and support for nurses, residents and attending physicians to help identify patient deterioration and address needs as rapidly as possible. In addition, the viCU provides consultation and provider services for intensive care unit patients. These services are especially valued by smaller community hospital ICUs. Highly experienced critical care nurses staff the viCU around the clock, rounding on patients using innovative technology to complement the primary bedside staff’s clinical skills and improve patient outcomes. In addition, RNs in the Virtual Health Center are actively piloting Epic predictive models that use vital signs data provided by wearables to identify and select medical-surgical patients to monitor.

When a patient is identified as at risk for deterioration, the viCU RN calls the primary bedside nurse to initiate further interventions at the bedside. The implementation of wearable technology is revolutionizing our nursing care—with the ability to see and trend vital signs continuously for patients, our nurses can now detect deterioration and intervene earlier than ever.

Centralized Telemetry monitoring is now standardized across the UCHealth System. On average, the VHC monitors between 250 and 300 patients daily for telemetry and pulse ox needs.

The Safety View program provides centralized video monitoring by “sitters” who use two-way communication for patients with increased safety needs (typically due to confusion). To prevent patient harm from them falling or removing necessary medical lines, Safety View techs are able to redirect patients’ behaviors through verbal interventions. In addition, a stat alarm can be initiated to notify frontline staff that help is needed immediately. On average, the Safety View program is able to prevent fifteen adverse events per day across the UCHealth system.
Quick facts.

Available beds

678 University of Colorado Hospital
435 Memorial Hospital Central
290 Poudre Valley Hospital
187 Medical Center of the Rockies
86 Memorial Hospital North
51 Longs Peak Hospital
34 Yampa Valley Medical Center
22 Broomfield Hospital
22 Grandview Hospital
15 Pikes Peak Hospital

Emergency Room visits

109,816 Memorial Hospital Central
102,984 University of Colorado Hospital
65,233 Poudre Valley Hospital
56,859 Broomfield Hospital
56,329 Medical Center of the Rockies
44,378 Grandview Hospital
31,575 Memorial Hospital North
11,120 Longs Peak Hospital
8,530 Yampa Valley Medical Center
8,171 Pikes Peak Hospital
Babies delivered

- **3,673** University of Colorado Hospital
- **2,620** Memorial Hospital Central
- **1,986** Poudre Valley Hospital
- **1,824** Memorial Hospital North
- **1,485** Medical Center of the Rockies
- **563** Longs Peak Hospital
- **252** Yampa Valley Medical Center

ANCC Magnet® Recognized Facilities

- **Poudre Valley Hospital**

- **University of Colorado Hospital**

- **Medical Center of the Rockies**
  - 2010, 2016
Annually, around five million patients spend time in an ICU in the U.S. with half to three-quarters of them ending up with some form of PICS. In addition, 75 percent of their family members will develop anxiety problems and 42 percent will show post-traumatic stress disorder symptoms. Two of our nurses thought of a way to help.

Janet and Jenelle, cardiac intensive care RNs at Medical Center of the Rockies, teamed up to produce a booklet to help patients and families. The booklet offers general information about the hospital and ICU care. It uses a descriptive photo of an ICU room, taken from the perspective of the patient in the bed, to explain important parts of the room such as the ventilator, the bedside monitor and even the purpose of the curtains. It also includes a space for family members to journal. In addition, Janet and Jenelle created an ICU survivor and family support group that meets monthly.

Jenelle Baer and Janet Nelson, Medical Center of the Rockies Cardiac Intensive Care RNs
Baby-Friendly at University of Colorado Hospital.

On May 29, 2018, University of Colorado Hospital received the prestigious international recognition as a designated Baby-Friendly Birth Facility. Baby-Friendly USA, Inc. is the U.S. authority for the implementation of the Baby-Friendly Hospital Initiative (“BFHI”), a global program sponsored by the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF).

The initiative encourages and recognizes hospitals and birthing centers that offer an optimal level of care for breastfeeding mothers and their babies. The award recognizes birth facilities that offer breastfeeding mothers the information, confidence and skills needed to successfully initiate and continue breastfeeding their babies.

Breastfeeding with Supplement Given
Inpatient orthopedic care efficiencies at Grandview Hospital.

On October 5, 2016, Grandview Hospital opened its doors for the first time to the Colorado Springs and El Paso County communities as a 22-bed, community-focused hospital. Grandview Hospital then joined UCHealth in December 2017. Since then, procedure case volume has increased from 0–5 to 35–40 per week.
A step forward at Broomfield Hospital.

For the past year, Broomfield Hospital has been planning for growth and is excited to have the opportunity to collaborate with University of Colorado Hospital to provide TeleHealth services from social work, psychiatry and nephrology to support nurses and the care team.

Nurses enjoy the inclusive and collaborative environment embedded in our culture. All hospital staff, including nurses, is enhancing the processes that focus on expanding health care services for our community.

Yampa Valley Medical Center.

Yampa Valley Medical Center joined UCHealth in September 2017, and became a Level III Trauma Center in February of 2018. In June of 2018, it received a Five-Star Hospital and HCAHPS rating from Centers for Medicare and Medicaid Services.

YVVMC has implemented many clinical applications, including:
- Lawson
- Kronos
- Amion
- Parex
- TrackCore
- Alaris Pumps
- Philips Physiological Monitors
- EPIC Go Live

In addition, YVVMC has successfully implemented several service lines:
- Medicine and Critical Care
- Orthopedic
- Peri-Operative
- Women’s Care
- Peds Newborn
- Outpatient
Exemplary Professional Practice

Zero is the goal at Poudre Valley Hospital.

Exemplary professional nursing care leads to exceptional patient outcomes. Clinical nurses throughout Poudre Valley Hospital take pride in their work and advocacy for patient safety. One way to assure patient safety is to prevent Central Line Associated Blood Stream Infections (CLABSI). From July 1, 2017, to June 30, 2018, there were 8,490 central line days for inpatients at Poudre Valley Hospital. Not one patient experienced a CLABSI at Poudre Valley Hospital during that time frame. In fact, there has not been a patient CLABSI identified at Poudre Valley Hospital since 2014, thanks to the exemplary professional practice of clinical nurses throughout the inpatient setting. By utilizing resources such as the Infection Preventionist, Clinical Nurse Specialists and expert clinical nurses, evidence-based practices to prevent CLABSI have been integrated into the clinical nurses’ routines and systems that protect all of our patients with central line catheters. Patients in all areas from the Neonatal Intensive Care Unit to the Medical/Oncology Unit and post-surgical units receive consistent care related to the central line. The clinical nurses advocate for best practices and products to ensure that patients are kept safe from blood stream infections.

<table>
<thead>
<tr>
<th>Poudre Valley Hospital</th>
<th>CLABSI</th>
<th>CENTRAL LINE DAYS FY2018</th>
<th>RATE PER 1000 LINE DAYS</th>
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<tbody>
<tr>
<td>Pediatric Plus Unit</td>
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<td>Orthopedic Unit</td>
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<tr>
<td>Surgical Unit</td>
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<td>1418</td>
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<tr>
<td>Cardiac Unit</td>
<td>0</td>
<td>694</td>
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<tr>
<td>Intensive Care Unit</td>
<td>0</td>
<td>1501</td>
<td>0.00</td>
</tr>
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</table>

Data From July 2017 to June 2018
*Combined Medical/Oncology Unit—units combined November 2017

New HOPE at Memorial Hospital.

Memorial Hospital recently began a unit pilot called The Harm Reduction and Optimum Outcomes for Patients Experiencing Withdrawal (HOPE). HOPE is a medical-surgical unit developed with behavioral health specialists, RNs and certified nursing assistants to implement the Department of Health recommendations on management of patients in withdrawal. Team members were trained on addiction disease, medication management and trauma-informed care.

This pilot project has demonstrated that a specially trained staff with behavioral health resources can lead to decreased injury to staff and patients and increased opportunity for addiction recovery. Patients now have recovery options upon discharge, including peer counseling. After the initial two months, there have been no patient falls and no staff injuries. In addition, over 20 patients have entered structured recovery programs and 10 have connected with formal, community-based peer organizations.

The HOPE numbers.

In the first 90 days, we referred 35 patients to a community partner peer recovery coach for discharge care.

34 patients are still actively working the program. Of those 34, only one patient has been readmitted into Memorial Hospital.

The HOPE mission statement:
While finding and reminding the human being in everyone, we walk alongside each other, providing the HOPE and support toward recovery that changes and improves lives.
Developing future clinicians at Memorial Hospital.

As the U.S. nursing shortage continues, attracting and preparing future nurses and clinicians has become paramount to the future of our country’s health care. In an effort to increase enrollment, many nursing schools and organizations are looking at new and innovative ways to attract and retain top talent.

At Memorial Hospital, we are taking a global approach to partnering with schools locally and nationally to build partnerships and a pipeline to build future clinicians.

Currently, we have 72 affiliate agreements with schools across the country serving multiple disciplines. We have experienced dramatic increases in our nursing student volume as well as our CNA student volume as we expand our partnerships with our local schools, Pikes Peak Community College and University of Colorado Colorado Springs.

Our results:

A 43 percent increase in nursing students.
A 205 percent increase in CNA students.
New Knowledge, Innovations, and Improvements

Hardwired for technology at Longs Peak Hospital.

At Longs Peak Hospital, we use technology and innovation that drive optimal patient care outcomes, enhance workflow, and allow our nurses to function at the top of their scope. We use Vocera and Rover technology, which enables streamlined communication at bedside and immediate alarm notification with an escalation algorithm.

To enhance patient safety, we use state-of-the-art Hill-Rom nurse call integration and Avesure technology to support patients who are at risk for falls. Our bedside tablets allow patients to access their chart, view labs and order meals. Samsung screens at the entrance of every room inform the health care team of the patient’s fall risk status, isolation type, allergies and provider team.

Our IRON Bow technology allows our virtual hub to support patient care from both a nursing and physician collaborative approach. These virtual partners can do everything from verifying a medication to assessing the pupils of a patient to participating in daily bedside interdisciplinary rounds in an ICU setting.
New baby baths at Poudre Valley Hospital.

Edna Sailer MSN, RNC-OB, c-EFM brought new knowledge, innovation and improvement to the Women’s Care Unit with the new process of Swaddle Immersion Baths. During a Swaddle Immersion Bath, a baby is loosely swaddled in a blanket. The newborn and the blanket are immersed—up to the baby’s shoulder—in a tub of water. Each limb is then individually un-swaddled, washed, rinsed and re-swaddled.

To fully integrate the Swaddle Immersion Bath process, Edna developed a pilot for the Women’s Care staff.

The pilot revealed that swaddle baths:

- Decreased bathing time.
- Decreased RN steps in preparation.
- Decreased infant crying.

Parents are much more likely to engage during bath time and are more relaxed with their child. After the implementation of the Swaddle Immersion Bath, there was an increase in patient satisfaction: “Parent had a say in baby’s care.” Since Edna brought this innovation to PVH, she has received calls from hospitals throughout the U.S. to discuss this evidenced-based process.

Edna Sailer, MSN, RNC-OB, c-EFM
Swaddle Immersion Bath
Empirical Outcomes

Award-winning nursing at Medical Center of the Rockies.

As a clinical nurse, Dr. Melanie Roberts demonstrated extraordinary commitment to improving patient outcomes in the critical care setting. The Cardiac Surgery Unit-Advanced Life Support (CSU-ALS) protocol improved mortality rates for cardiovascular surgery patients at Medical Center of the Rockies. The CSU-ALS guidelines focus on prevention of cardiac arrest in post-operative patients through early intervention of the protocol. Initially, there was a decrease in the incidence of cardiac arrest, but we did not see a survival to discharge benefit. However, in 2017, we achieved a survival to discharge of 70%, which is consistent with the literature. There was also a significant decrease in the number of patients who required chest compressions—73% compared to 25% prior to the implementation of the new protocol.

Improved mental health at University of Colorado Hospital Burn Center.

Burn survivors experience traumatic assaults to the body and mind, which present extraordinary challenges to psychological resilience. As burn management improves and mortality declines, greater emphasis needs to be devoted to improving the long-term psychosocial health of patients.

Kelly Tuohy, a charge nurse in the Burn Center, recently implemented a process to screen patients for symptoms of acute stress disorder (ASD) and post-traumatic stress disorder (PTSD) in both the inpatient and outpatient setting. She collaborated with IT to build screening tools into Epic and developed a supplemental guideline outlining supportive interventions, resources and tips on therapeutic communication.
Kelly provided one-on-one staff training and created an educational pamphlet for patients and families. In the first six months following implementation, 20 percent of patients screened positive for ASD/PTSD symptoms. This early detection allows ASD and PTSD symptoms to be identified more quickly, and patients are able to receive the supportive care they so desperately need.

University of Colorado Hospital is one of the first verified Burn Centers in the United States to implement a formal process for screening and treatment of these stress disorders.

Infection prevention at Pikes Peak Regional Hospital.

UCHealth Pikes Peak Regional Hospital has gone more than a year with no hospital-acquired infections. As an important part of our Quality Program, we use a high-level disinfection process with 19 indicators that are monitored monthly to ensure we are compliant.

Hand hygiene remains an area where there’s room for improvement. While the national benchmark for compliance is approximately 50 percent and our rate was 80 percent for June 2018, our goal is to reach 90 percent. This will take a concerted effect from all staff.

We have already begun to improve hand hygiene compliance by making staff from different areas of the hospital secret shoppers in other areas. Each staff takes turns evaluating each other on a monthly basis, with the group changing after that month. Our infection prevention nurse then does real-time training with hand washing. We will implement a poster campaign in the near future.
ANCC National Magnet Nurse of the Year® Award Recipients

2017
Empirical Outcomes
Melanie Roberts
DNP, RN-BC, CNS, CCNS, CCRN

“Receiving the Magnet Nurse of the Year Award for Empirical Outcomes is one of the most profound and meaningful moments in my nursing career over the last 34 years. I was honored to have my work recognized at the national Magnet conference and represent the work we do as nurses at MCR and PVH. It is one of the most memorable experiences of my life, one that I will treasure forever. Winning Magnet Nurse of the Year was the pinnacle of my professional practice.”

2016
New Knowledge, Innovations, and Improvements
Colleen McIlvennan
DNP, ANP-BC, RN

“The award is not only a reflection of the work our research group has done, but the entire organization. The successes of our research were made possible by the collaborative work supported by UCHealth.”

2013
New Knowledge, Innovations, and Improvements
Samantha Weimer
RN, BSN, CCRN

“Winning the National Magnet Nurse of the Year Award for my work with frostbite patients was one of the highlights of my career. Being able to share my work in front of so many nurses was both an uplifting and humbling experience. This would not have been possible if I had not been working at a Magnet hospital. Being a Magnet hospital, University of Colorado Hospital not only supported my work, but encouraged and pushed me to share my ideas to improve patient care. I would hope that other nurses who saw me win this award walked away knowing that they can and do make a difference.”

2011
Structural Empowerment
Tracey Anderson
MSN, RN, CNRN, FNP-BC, ACNP-BC

“(Winning the National Magnet Nurse of the Year Award) It drove home the concept that we can make a difference in the outcomes of patients regardless of the our nursing position, be it at the bedside, doing research, as a nurse administrator or an advanced practice nurse. No action is insignificant and any idea can be taken further if you’re willing to do the necessary legwork.”