UC DAVIS HEALTH | BETTY IRENE MOORE SCHOOL OF NURSING

Betty Irene Moore School of Nursing at UC Davis

Report to the Gordon and Betty Moore Foundation

March 31, 2022

Preface

The Betty Irene Moore School of Nursing at UC Davis was established in March 2009 through a $100 million commitment from the Gordon and Betty Moore Foundation. The School of Nursing team is grateful for the opportunity to conduct an in-depth review as part of its end-of-grant reporting for the Foundation. The recent ten-year anniversary was aptly marked as the "Decade of Discovery." It has been illuminating for the team to better understand the vision for the School's future by looking back at the efforts and achievements since inception. We thank the many contributors from the School of Nursing and the UC Davis School of Medicine Office of Research Evaluation Unit, as well as the external review colleagues, who made this report possible.

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Original Vision and Mission at Launch

Vision

Vision

The Betty Irene Moore School of Nursing at UC Davis advances health and ignites leadership through innovative education, transformative research and bold system change.

Mission

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence through immersive, interprofessional and interdisciplinary education and research in partnership with the communities it serves. Faculty, staff and students discover and disseminate knowledge to advance health, improve quality of care and shape policy.

CORE ATTRIBUTES

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence and addresses urgent societal needs through:

- **Leadership development**—build capacity for advocacy and action at all levels.
- **Interprofessional/interdisciplinary education**—health professionals learn multiple perspectives to work and communicate as teams.
- **Transformative research**—apply the science of nursing to improve health and reshape health systems with emphasis on aging, rural health and diverse communities.
- **Cultural inclusiveness**—teach culturally-appropriate approaches to care and involve communities to design and conduct relevant research.
- **Innovative technology**—use technology to create an engaged and interactive approach to nursing education, research and practice.

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Current Vision and Mission

UC DAVIS HEALTH | BETTY IRENE MOORE SCHOOL OF NURSING

Vision and mission

Vision

Optimal health and health care equity for all

Mission

Integrating the science and humanity of nursing and other health disciplines, the Betty Irene Moore School of Nursing leads innovative research, education and practice and prepares leaders who advance health, transform health care and ignite bold system change locally, nationally and globally.

Core attributes

We promote health equity and high-quality health care through innovative research, education, clinical practice and health policy—as guided by our core values:

Community connection: action is created with, and relevant to, our local, regional and global communities.

Diversity and inclusion: the voices and perspectives of people from diverse backgrounds and experiences are affirmed and included to achieve health and health care equity.

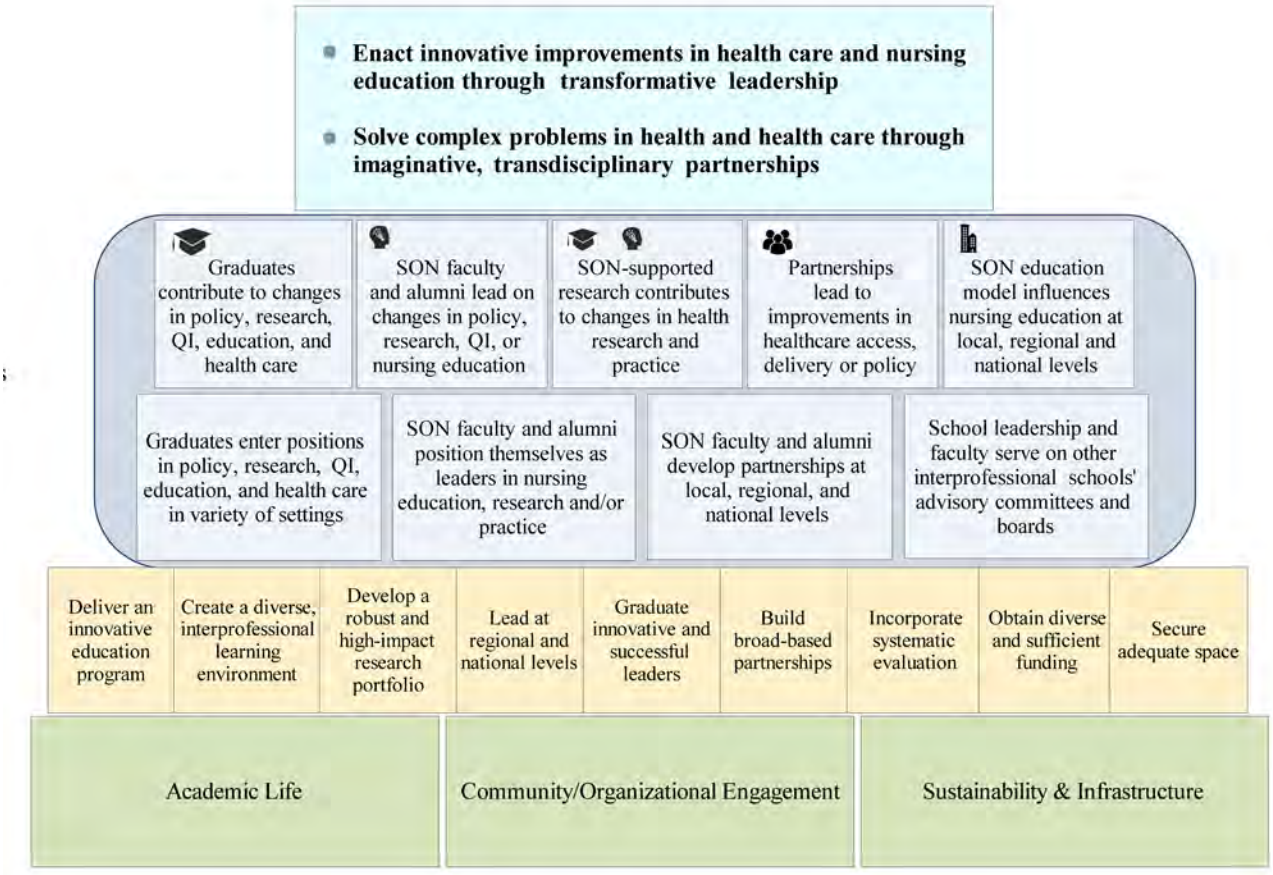
Leadership: the essential skills and abilities needed to effect change are emphasized for all researchers, educators and clinicians.

Innovative solutions: technology and data science are leveraged to advance research, enhance education and improve clinical practice.

Collaboration: interdisciplinary and interprofessional partnerships are necessary to strengthen the quality of research, education, clinical practice and health policy.

Logic Model

To articulate the short-term and intermediate goals of the Betty Irene Moore School of Nursing, a program theory-driven evaluation approach was used.[1] In this approach, the theory or logic that underlies a program is visually represented through a model. The School of Nursing logic model was developed collaboratively by the school leadership and evaluators. The school's logic model (shown below) highlights the foundational elements on which the school was built and the expected intermediate outcomes (middle blue section) and long-term outcomes (top section).



[1] Donaldson, SI. (2007). Program Theory-Driven Evaluation Science: Strategies and Applications. Taylor & Francis: New York.

Timeline

2007

Early planning

The Gordon and Betty Moore Foundation and UC Davis **announce $100 million commitmen**t to launch school of nursing at UC Davis

UC Davis leaders **meet with Mrs. Moore** to review leadership and strategic development

2008

Great Recession

UC Board of Regents **appoints Dr. Heather M. Young** as associate vice chancellor for nursing at UC Davis

School's first faculty member Dr. Debbie Ward arrives, searches launch for founding faculty

Strategic Design Summit convened in Sacramento with national nursing and education thought leaders to develop curriculum, partnerships and faculty proposals

2009

University of California Board of Regents **formally approves** the Betty Irene Moore School of Nursing

UC Davis **convenes National Advisory Board** of national nursing leaders as well as UC Davis leadership to build the vision and mission for the school

2010

UC Office of the President (UCOP) approves interprofessional Nursing Science and Health-Care Leadership Graduate Degree Programs: **MS** and **PhD**

Inaugural **Welcome Ceremony** for 8 PhDs and 25 Master of Science-Leadership classes; **start of National Advisory Council** chaired by Dr. Fagin, Dean Emeritus, Univ of Penn SON

Academic programs launch with **27 interprofessional faculty** in inaugural Nursing Science and Health Care Leadership Graduate Group

2011

Betty Irene Moore School of Nursing **appoints first associate dean for research**, Dr. Jill Joseph

Commission of Collegiate Nursing Education (CCNE) **accredits MS-L program**

2012

Master of Science leadership (**MS-L**) program **inaugural cohort graduates**

CCNE **accredits MSL**

Program engages **9 community partners** in Long Term Care-based participatory collaborations

2013

Expansion

UC Davis Master of Science - Family Nurse Practitioner (**FNP**), Master of Health Services - Physician Assistant Studies (**PA**) **programs transition to School of Nursing** as interprofessional master's degree programs

2014

Inaugural cohort of Doctor of Philosophy candidates receive degrees

Western Association of Schools and Colleges (WASC) **accredits PhD program**

2015

$2.5 million gift from Dignity Health creates **first endowed deanship at UC Davis**

Ground breaks on Betty Irene Moore Hall

Inaugural cohorts of the FNP and PA programs **graduate**

2016

Inaugural cohort matriculates into Master's Entry Program in Nursing (**MEPN**)

CCNE **accredits FNP program;** ARC-PA **accredits PA program**

SON partners with more than **450 clinical sites** across California

2017

Family Caregiving Institute launched with a $5M grant from the Gordon and Betty Moore Foundation

Grand Opening of Betty Irene Moore Hall

CCNE **accredits MEPN program; Inaugural cohort** in Master's Entry Program in Nursing graduates

2018

Dean transition

First time **alumni outnumber current students**

Founding Dean **Dr. Heather M. Young steps down** after 10 years of leadership; Dr. Debbie Ward appointed as interim dean

Gordon and Betty Moore Foundation establishes the $1.7M **Heather M. Young Postdoctoral Fellowship**

2019

Dr. Stephen J. Cavanagh appointed as the school's second dean and Dignity Health Dean's Chair for Nurse Leadership

The **Nurse Practitioner Residency program is established** among the School of Nursing, UC Davis Health Medical Center, and multiple Federally Qualified Health Clinics

The Betty Irene Moore **Fellowship for Nurse Leaders and Innovators launches** with a $37.5 million grant from GBMF

2020

School moves to **online curriculum** as necessitated by COVID-19 pandemic. All eligible students **graduate on time**

2021

New strategies

COVID-19 pandemic

MS-L program paused after graduating 2021 class. Leadership themes remain integrated through all programs, specifically the **new Doctor of Nursing Practice (DNP-FNP) degree**, which opened admissions in fall 2021

Consortium Office for UC Psychiatric Mental Health Nurse Practitioner (PMHNP) post-graduate certificate is established with a grant from the California Health Care Foundation

Dr. Janice Bell is announced as the **Western Health Advantage Endowed Professorship**

38 full-time faculty and 7 part-time faculty

Growth of the School

The School of Nursing has grown markedly over the last decade. The School has graduated 865 students in 5 professional programs. Faculty has increased from 7 original members to 49 faculty in research, teaching, and clinical education.

Figure 1. Cumulative alumni by program, 2011-2021

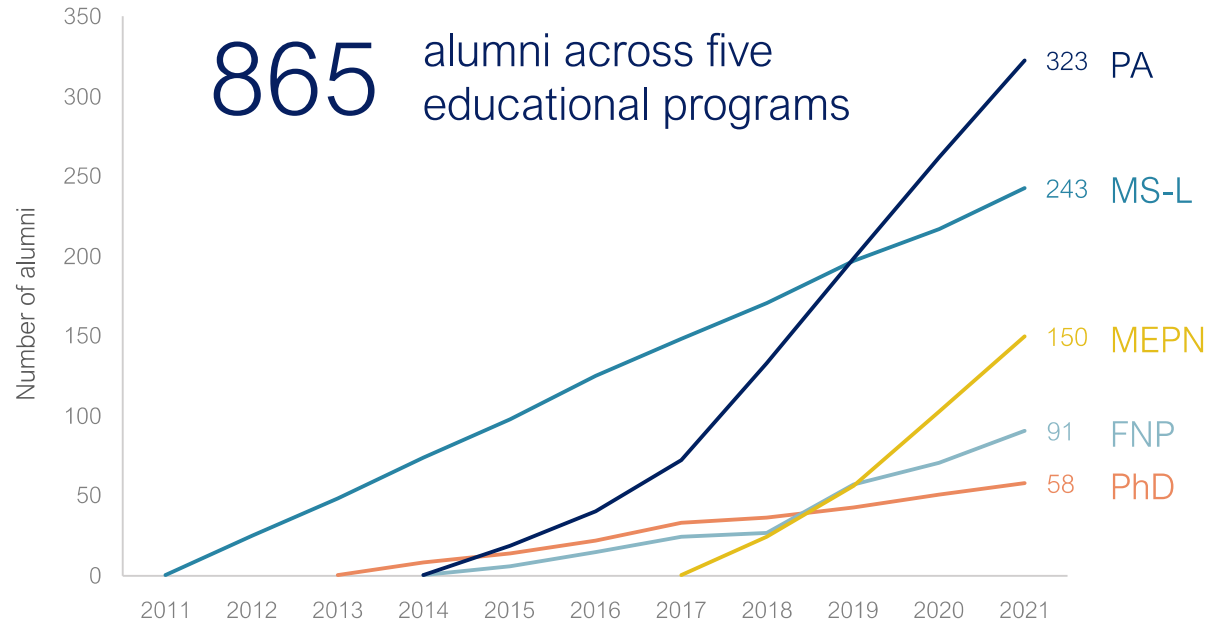
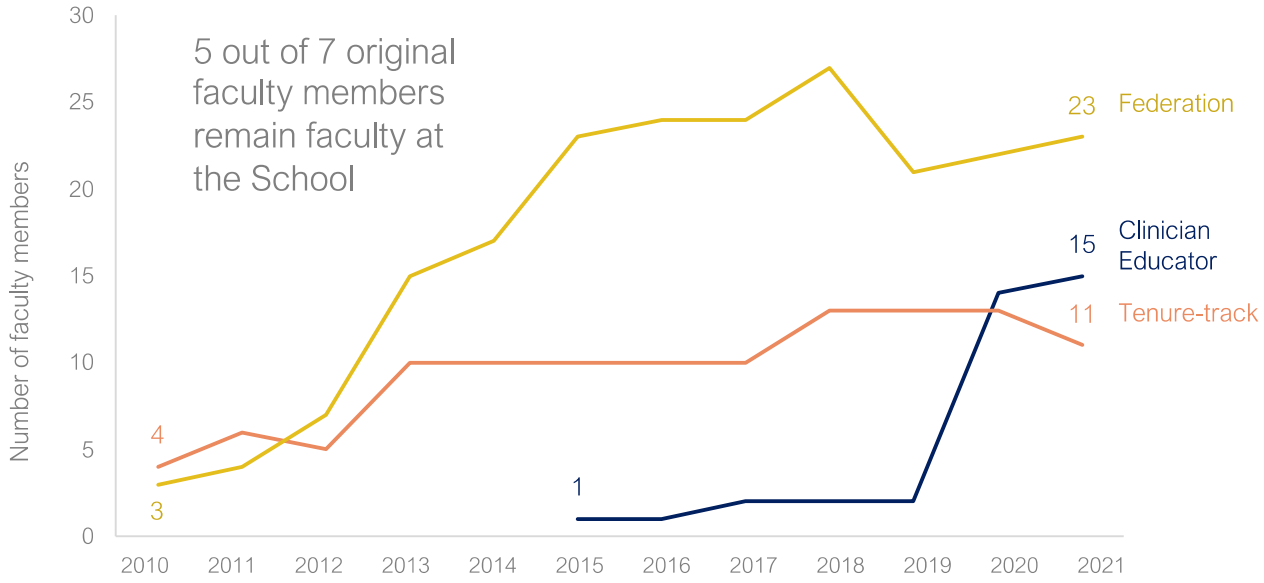


Figure 2. Faculty growth, 2011-2022



Section I: History

Interprofessional team creates a vision and prepares foundation for the School

In the fall of 2006, Gordon and Betty Moore Foundation (GBMF) President Dr. Ed Penhoet[2] approached the University of California (UC) Davis School of Medicine Dean and Vice Chancellor for Health Sciences, Dr. Claire Pomeroy to explore her vision for nursing education. Dr. Pomeroy shared a compelling concept of authentic interprofessional education, leadership development, evidence-based practice and integration of technology in care models that resonated with the Foundation leadership. UC Davis was invited to submit a concept proposal in March of 2007. For the following three months, leaders collaborated with foundation staff to prepare a robust proposal to achieve a vision for innovation in education, made possible by the strong academic, interprofessional and collaborative environment of UC Davis -- a leading research land-grant university committed to serving communities across the Central Valley. This effort was also predicated on the original investment of time and vision from the School of Medicine and partners across the entire campus.

[2] For this section, unless stated otherwise, all references to positions utilize the title the person occupied at the time of the occurrence referenced.

The Gordon and Betty Moore Foundation Board of Trustees approved UC Davis as the top candidate for the investment in May 2007 and conditions for the award were memorialized by the University of California Office of the President and UC Davis leadership in July 2007. The UC Davis leadership team met with Mrs. Betty Moore to review leadership and strategic development ideas in that same year. The intention was to create a school with an innovative nursing education model preparing new leaders in health care. On July 31, 2007, Dr. Penhoet announced the $100 million commitment to launch the new school of nursing at UC Davis at a press conference joined by nurses from UC Davis and campus leadership.

After the announcement, the planning group hit the ground running, including conducting an extremely rapid dean search in consultation with national nurse leaders. This search culminated in the University of California Board of Regents appointing Dr. Heather M. Young as Associate Vice Chancellor for Nursing at UC Davis in June 2008; and the convening of a strategic design summit with nursing and education thought leaders in September. The School was formally approved by the Board of Regents in March of 2009, which allowed for Dr. Young to be formally appointed as Dean later in the year. The UC Office of the President approved the inaugural Nursing Science and Health-Care Leadership Graduate Degree Programs: Master of Science (MS-L) and Doctor of Philosophy (PhD) in January 2010. Twenty-five Master's and eight PhD students were welcomed in September 2010 and began their studies.

Entrepreneurial spirit and campus support

The School's leadership team understood that several elements were critical to the success of the launch of the School of Nursing: strong collaboration across UC Davis and the UC Office of the President, early stakeholder engagement, an aggressive implementation plan with sound contingency planning, a robust evaluation plan that could offer early course corrections, and an entrepreneurial spirt. An early emphasis was placed on relationship building within UC Davis and the University of California. UC Davis Vice Chancellor for Planning and Budget Dr. John Meyer and then Associate Vice Chancellor for Budget and Institutional Analysis Kelly Ratliff from the Offices of the UC Davis Chancellor and Provost understood the value of the opportunity and joined School leaders in critical discussions with the Office of the President. In addition, UC Davis Academic faculty leaders, including Chair of the Academic Senate Dr. Bob Powell, Vice Chair of the Academic Senate Dr. Andre Knoesen and Dean of Graduate Studies Dr. Jeff Gibeling, provided wise counsel assisting the team in navigating the curricular and strategic requirements of securing approval for establishing the academic business unit of the school and launching new academic programs.

Leaders at the School appreciated the urgency of moving quickly to open admissions and recruit the first two cohorts. The desired timeline was at odds with lengthy traditional university processes for approvals. Only through preparation and partnership was the School able to succeed in gaining support and approvals. Early team members prided themselves on being nimble change-agents within the academic system. This spirit was all the more critical in the early days of the School as the Great Recession took hold and major funding cuts across the UC System dampened enthusiasm for new programs and required leadership to navigate sustainability as well as strategic campus relationships. The new nursing degree programs were launching as other programs faced deep cuts or were retired entirely. However, on the whole, the UC Davis community understood this was an opportunity to support and grow the vision for health care education and influence the region's models of care.

The School could not have launched without the tireless work of many campus teams, including the Offices of the Chancellor and Provost, the School of Medicine and academic health center, the UC Davis Academic Senate, the Office of Graduate Studies, the Office of the University Registrar, system-wide senate, and the health science team at the UC Office of the President. Acting as de facto members of the School of Nursing launch team, not only did these colleagues advance the School's non-traditional timeline, but they did so often while learning more about nursing science and education. School of Nursing leaders provided necessary context and helped stakeholders understand the role of nursing in health care, the needs of the populations the School would serve, and the academic contributions that nursing could make in education and research. This background was vital for securing approvals to launch the School.

UC Davis's long tradition of interdisciplinary graduate education, in the form of graduate groups that confer advanced degrees, provided a unique opportunity to grow the School in advance of recruiting a full cadre of faculty. The School organized an interdisciplinary graduate group, Nursing Science and Health-Care Leadership, comprised of faculty from a wide range of relevant fields. This group collaborated to hone the vision for graduate nursing education and served as founding faculty for the program. This model gives students the freedom to explore interests across disciplines, engage in various areas of research and otherwise expand their knowledge beyond their area of core study. The Nursing Science and Health-Care Leadership Graduate Group, made up of more than 60 UC Davis faculty from disciplines including nursing, medicine, health informatics, human ecology, pharmacy, plant biology, sociology and public health, oversees the curriculum for the School's academic programs.

Launched and chaired by Dr. Paul Fitzgerald, an experienced academic leader and the Distinguished Professor and Chair of the Department of Cell Biology and Anatomy, the graduate group ultimately cemented the School's foundations in interprofessional education and allowed it to build a cross-disciplinary program with commitment from faculty across campus. Coupled with the consultation of several distinguished visiting nursing professors, the graduate group approach enabled School leaders to move quickly with curriculum development and approvals for tenure-track positions while recruiting nurse faculty. This inaugural group of faculty and visiting professors advanced the vision for the School and spent extended time with nursing leadership to develop programs. The spirit of teamwork and entrepreneurship formed a solid foundation for the launch.

Emphasis on analysis, planning and strategy

Dr. Ann Bonham, executive associate dean at the School of Medicine, was named Interim Associate Vice Chancellor for Nursing to lead the search for the new Dean of the School of Nursing and help launch the School. Dr. Bonham consulted with distinguished national nurse leaders for early advice on strategy and dean recruitment in 2007. Upon appointment in 2008, Associate Vice Chancellor for Nursing Dr. Heather M. Young established a School leadership team, including Associate Dean for Academics, Dr. Debbie Ward. Dr. Young invited prominent national nursing and education thought leaders to come to UC Davis Health for the aforementioned strategic design summit to build the vision for educating nurses for the future, including identifying critical curricular elements and priority areas for nursing research. Immediately following, leaders of the School convened a series of town halls to hear from community and practice stakeholders in the region, assuring that the design would take into account both local and national priorities and identify willing community partners. Stakeholders involved from the nursing science community viewed this as a milestone opportunity for nursing education. The Institute of Medicine was soon to release the landmark Future of Nursing: Leading Change, Advancing Health report, which recommended significant changes to how nurses' roles, responsibilities and education should advance. The School was well positioned to capitalize on the momentum in how the profession was advancing.

The National Advisory Council (NAC), led by Dr. Claire Fagin, dean emeritus of the University of Pennsylvania School of Nursing, held its inaugural meeting in 2010 in tandem with the inaugural Welcome Ceremony for the PhD and MS-L cohorts. The NAC and its education, research and evaluation subcommittees provided critical, strategic advice and feedback on the School's progress in launching programs, building the faculty body and achieving sustainability. The NAC's role in reflecting broader trends in health care, education and technology remains vital for strategic planning for the School.

Also paramount to the School's foundation is the summative and formative evaluation process that has guided its development and growth. The School of Nursing's Dean's Office engaged the UC Davis School of Medicine Office of Research Evaluation Unit to develop an evaluation strategic plan and logic model to outline measurable early, intermediate and long-term outcomes that would help the School achieve its vision and mission. The evaluation plan encompassed the length of the founding grant and was developed around academic, community and sustainability goals that would advance the mission and vision.

The arms-length evaluators – led by founding Director Dr. Julie Rainwater and now current Director Dr. Stuart Henderson, engaged the NAC, led student focus groups, deployed quality improvement assessments, and produced an annual report to evaluate and chart the School's progress towards strategic benchmarks and outcomes. These critical colleagues provided valuable information for early course correction and were vital in helping the School move successfully from blueprint to program building and to increase sustainability and innovation.

Inaugural Dean Heather M. Young convened the 2008 strategic design summit with early School of Nursing leadership and national stakeholders.

Operationalizing and stabilizing launch programs

In its first years, the Betty Irene Moore School of Nursing at UC Davis was gaining visibility, building its reputation and focusing on establishing research and education partnerships across UC Davis, as well as the community. The School named its first Associate Dean for Research, Dr. Jill Joseph, in the summer of 2011 and graduated inaugural cohorts from the MS-L and PhD programs in 2012 and 2014, respectively. The MS-L program was nationally accredited in the fall of 2011 by the Commission of Collegiate Nursing Education (CCNE) and subsequent programs would be equally successful in garnering the appropriate accreditations/regulatory approvals.

External events impacted the School's early trajectory. The Great Recession was a period of marked decline in the U.S. economy from 2007-2009. Its effects continued to ripple across all aspects of the country, including higher education, just as the School was launching. Financial realities required that the School quickly pivot from its initial sustainability model, which was predicated on state and philanthropic funding. It was important to launch the flagship MS-L and PhD programs to prepare nursing leaders for practice and research and to help address the increasing shortage of nursing faculty. Launching a research program was also bedrock to the School's mission, both in its commitment to nursing science and to fulfill the School's role as part of a top research, or Research1 (R1), university. However, it became increasingly apparent that those programs alone would not provide enough funds for sustainability nor garner the volume of impact School founders hoped to achieve. Leaders eventually developed a new sustainability model predicated on professional tuition revenue.

Three degrees were originally modeled in the grant – PhD, MS-L and the Bachelor's of Science in Nursing (BSN). The new, tuition-based financial model required an expansion of degree programs and a full analysis of a pre-licensure degree offering a BSN. In 2013, the Chair of the Department of Family and Community Medicine approached Dean Young to discuss evolving the existing UC Davis Nurse Practitioner and Physician Assistant undergraduate certificate programs to graduate level education. Given the academic strength of the Nursing Science and Health-Care Leadership Graduate Group, the Chair and Dean developed an agreement to transition the certificate program to the School of Nursing and into the Master of Science – Family Nurse Practitioner (FNP) and the Master of Health Services – Physician Assistant Studies (PA) programs. This transition enhanced these professional roles by increasing the educational preparation of these practitioners, elevating their professional reputation in the health system, and by preparing graduates who had a better understanding of how to advance health, improve quality of care and even shape policy.

Though not in the original model, the opportunity to integrate the two historic UC Davis clinical programs into the School of Nursing ultimately moved the School in a promising new direction. Transitioning the programs to interprofessional master's degree programs was in line with the future of advanced practice professional education, as outlined in the 2011 Future of Nursing report. It also increased the School's capacity to effect change in rural and underserved areas by elevating the value of Advanced Practice Providers and Registered Nurses to address the shortage of primary care providers, which still exists today. The inaugural master's prepared FNP and PA cohorts graduated in 2015.

In this same time frame, School of Nursing colleagues undertook a rigorous 18-month analysis to consider launching a pre-licensure program – one that would prepare new Registered Nurses, such as the BSN. Leaders in the School secured grant funding from the Sierra Health Foundation to explore the health education needs of the Sacramento region and found that a large number of associate degree nursing students already had a bachelor's degree (or higher) in another field making them eligible for graduate education in a master's degree program. This combined with the acknowledged strength of existing Bachelor of Science programs in the area (such as California State Universities Sacramento, Chico and Stanislaus), led to the School launching a Master's Entry Program in Nursing (MEPN). This program created a viable pathway for bachelor's degree students to pursue higher nursing education and cemented the Betty Irene Moore School of Nursing as a graduate school.

Enrollment growth in these new clinical programs (FNP, PA, MEPN) was key to sustainability; however, it also required physical expansion. To effectively launch and grow the clinical programs, the School needed to create an environment for clinical and scientific learning. Betty Irene Moore Hall broke ground in 2015 with support from the UC Office of the President, the UC Davis Chancellor and the Gordon and Betty Moore Foundation – including Gordon and Betty Moore Foundation Board permission for the School to use $9 million of the original $100 million grant for capital investment. UC Davis also committed $38 million from the campus budget to support this next phase of development. This permanent home solidified the School's sustainability and led to increasing the nursing workforce at both the Registered Nurse and Advanced Practice Provider levels.

In addition to being a permanent home for the School of Nursing, Betty Irene Moore Hall quickly became an important part of campus – it is a hub for interprofessional learning, community meetings and has even played a role in the COVID-19 pandemic response as a campus testing site. It was designed to include innovative spaces to promote transformative and interprofessional experiences in health care, including simulation facilities designed to dovetail with UC Davis' nationally recognized use of telehealth. The flagship building transformed the UC Davis Health campus becoming part of a central 4-building education zone.

By 2016 the Betty Irene Moore School of Nursing had launched its core five programs (PhD, MS-L, FNP, PA, MEPN), each consistent with its mission for graduate education and with the financial model for the School. Careful planning and a culture of exacting analysis when considering new program opportunities has allowed the School to operate sustainably and in step with its mission and vision to advance nursing education, research, innovation and practice.

Alumni break ground on Betty Irene Moore Hall in 2015.

Building into the next decade

Inaugural Dean Heather M. Young stepped down in 2018 and Interim Dean Debbie Ward was in place until July 2019 when Dean Stephen J. Cavanagh arrived. The School of Nursing team navigated the leadership change much as it has navigated its history – by being nimble, open to change and committed to creative solutions to advance nursing science and health education.

School leadership, faculty and staff embarked on a strategic planning process in 2020 to lay the road map for the School's next decade of excellence. In considering the history of the past ten plus years, it is important to acknowledge the role that vision, entrepreneurship, relationship building, analysis, planning and examination of lessons learned have played in the School's success – best practices the team intends to continue into the next decade.

Dean Stephen J. Cavanagh arrived in July 2019.

Section II: Achievements and Outcomes

Introduction

Over the past decade, the Betty Irene Moore School of Nursing at UC Davis has built upon five core values to actualize its vision and mission: Leadership, Interprofessional/Interdisciplinary Education, Transformative Research, Cultural Inclusiveness and Innovative Technology. These values shaped all the activities of the School's approach to education, scholarship and practice. The early and intermediate indicators of progress towards these goals were identified in the evaluation plan and noted in the evaluation logic model, which was developed to help School leaders benchmark their progress in these areas. In addition, two long-term outcomes set forth overall goals for the School:

- Enact innovative improvements in health care and nursing education through transformative leadership
- Solve complex problems in health and health care through imaginative, transdisciplinary partnerships

This section will review the School's achievements and outcomes since inception through the lens of leadership and broad-based partnerships, interprofessional education, bold systems change through research and innovation, and sustainability. It will also reference the following programs:

- Doctor of Philosophy (PhD)
- Doctor of Nursing Practice – Family Nurse Practitioner (DNP-FNP)
- Master of Science – Leadership (MS-L)
- Master of Science – Family Nurse Practitioner Program (FNP)
- Master of Health Services – Physician Assistant Studies Program (PA)
- Master's Entry Program in Nursing (MEPN)

Leadership vision

The Betty Irene Moore School of Nursing was launched in 2010 to enact innovative improvements and solve complex problems in health care through partnership and leadership. In the same time frame, the nursing field was galvanized by the 2011 landmark Institute of Medicine Future of Nursing: Leading change, Advancing Health report. The recommendations outlined how nurses' roles, responsibilities and education needed to change in order to meet the increased demand created by health care reform and to effectively advance improvements in an increasingly complex health system. This report was a useful guide as it complemented the new School's vision and mission.

Almost ten years later a new Future of Nursing report was released -- The Future of Nursing (FON) 2020 – 2030: Charting a Path to Achieve Health Equity. Beyond achieving better health outcomes through building the capacity of the nursing workforce, the report findings argue that nursing capacity has an important role to play in addressing complex health and social issues and inequities.

In 2020, the School released a refreshed vision and mission after a cycle of discussions involving feedback from faculty, students, staff and alumni. After reviewing the work from the past decade, the team also drew a line between leadership and health equity and arrived at the current charge of "optimal health and health care equity for all." This vision pairs with and builds on the original vision and mission and reflects the progress the School made in its first decade.

Building capacity for advocacy and action at all levels

Leadership has been core to the Betty Irene Moore School of Nursing since the beginning. Building capacity for advocacy and action at all levels means all professionals can lead from where they are, at any point in their career. The founding School of Nursing faculty were intentional about building leadership, culturally-appropriate approaches to care and community connection into the curriculum. For instance, the Student Leadership Immersion Week is a corner-stone student experience. This mandatory orientation immerses students in the School of Nursing's philosophy as they are introduced to nursing leadership concepts, as well as how health equity plays a role in education, research, policy and practice.

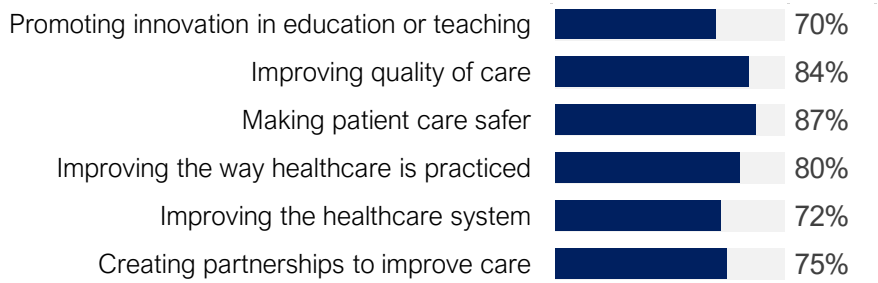
The Betty Irene Moore School of Nursing was recognized for its leadership and ranked as one of the top 50 schools of nursing in the country for the master's degree leadership program by *U.S. News and World Report* the first year the School was eligible. By 2021, the School moved up to 40th for its master's-degree programs, which then included the MS-L, FNP and MEPN programs. In 2022, the programs moved up to rank among the top 25 best master's degree programs. The 2023 report ranked the School's master's-degree programs as No. 23. The FNP program was ranked for the first time at No. 7.

The Betty Irene Moore Fellowship for Nurse Leaders and Innovators is a natural extension of the School's history preparing leaders. The national program launched in November 2019 with a $37.5M grant from the Gordon and Betty Moore Foundation. The program recognizes and advances early to mid-career nursing scholars and innovators with high potential to accelerate leadership in nursing-science research, practice, education, policy, and entrepreneurship. It is funded for five full cohorts from 2020 through 2025 and includes Fellows from the Betty Irene Moore School of Nursing. The Fellowship deepens the School's commitment to fostering the next generation of nurse leadership and innovation by working collaboratively on a national stage and building faculty and health system leadership capacity.

Alumni contributing and leading in nursing education, research, and/or practice

The School of Nursing develops leaders across a range of priority areas, including in healthcare policy, research, education or teaching, clinical care, and quality improvement. To assess the School's graduates' contributions in these areas, alumni of the five educational programs were asked to rate their self-perceived level of contribution in the School's six areas of impact on the 2021 alumni survey. Overall, 163 alumni answered the survey with a response rate of 54% (PhD); 29% (MS-L); 30% (NP); 19% (PA); and 32% (MEPN). Alumni rated their contribution on a scale of 1-10 (1 = I have not contributed at all in this area; 10 = I have contributed a great deal in this area). As a group, alumni from all educational programs reported significant contributions in the School's priority areas (Figure 3). PhD alumni self-reported contributions were highest in improving quality of care and creating partnerships. Whereas, MS-L, FNP, PA, and MEPN graduates noted highest contributions in making patient care safer (data not shown).

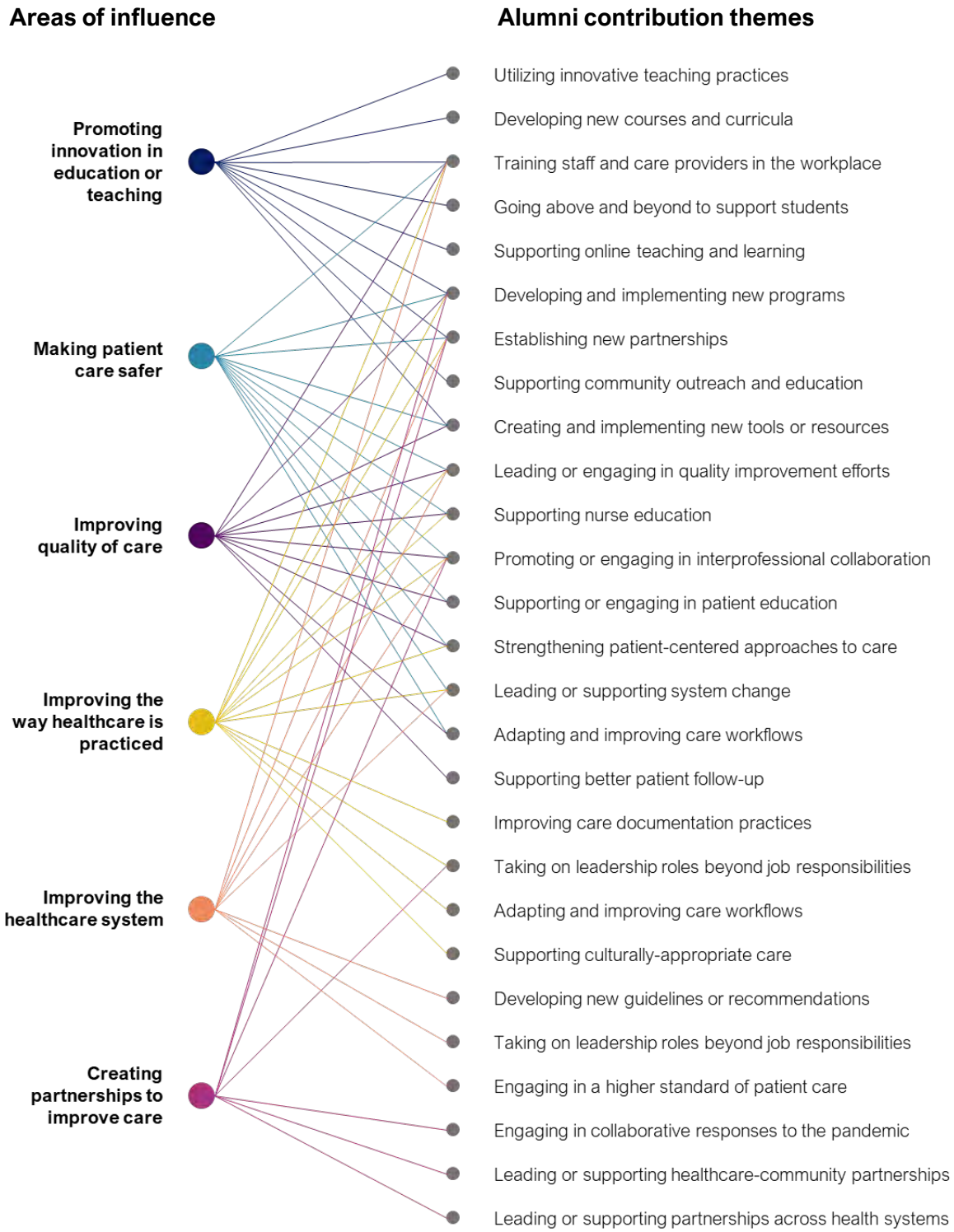
Figure 3. Percent of alumni (all programs) who reported moderate to high contributions in the corresponding area of influence (n=163)



Note: 1 = I have not contributed in this area; 10 = I have contributed a great deal in this area. Moderate to high contribution is defined as a score of 5 or above.

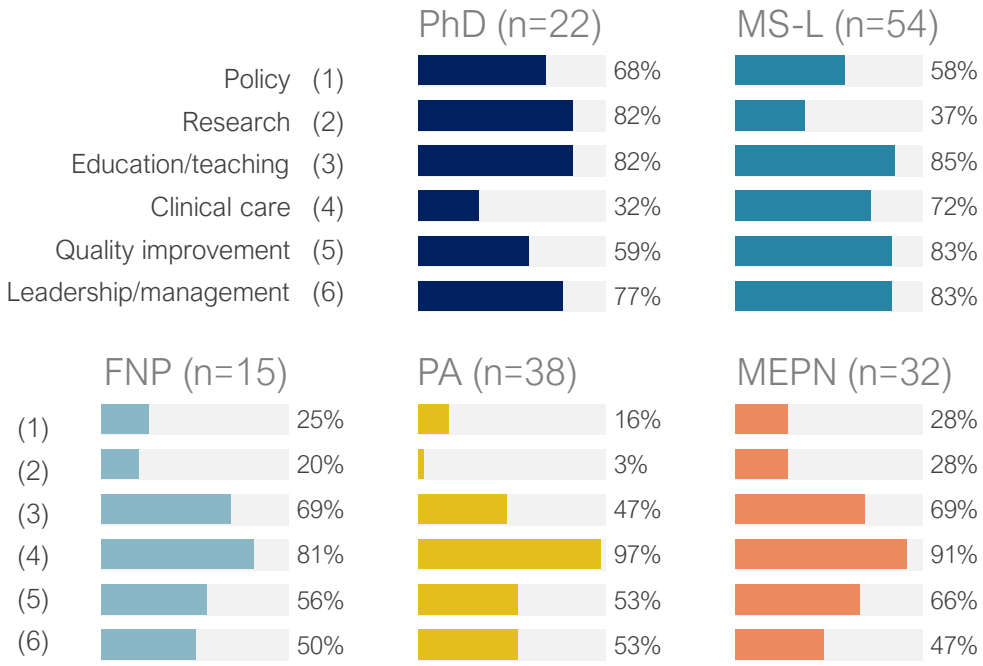
Alumni who reported high (score of 7 or above) contribution in an area of influence shared examples of their work. Figure 4 summarizes major themes across all alumni contributions and crosswalks to their corresponding areas of influence as indicated by alumni respondents.

Figure 4. Themes of alumni contributions corresponding to each area of influence



The alumni survey also asked graduates to report on areas in which they work in their current positions (Figure 5). Among all the programs, alumni hold positions which require at least some of their effort in policy, research, education/teaching, clinical care, quality improvement, and leadership. The highest percentage of PhD alumni reported effort in research and education/teaching; MS-L alumni were highest in education/teaching and quality improvement, and the clinical programs were highest in clinical care. For leadership and management, 77% of PhD alumni, 83% of MS-L alumni, 50% of FNP alumni, 53% of PA alumni, and 47% of MEPN alumni reported at least some of their effort was focused in this area.

Figure 5. Percent of alumni by program who reported at least some of their work is in each School of Nursing priority area



Note: Alumni who reported "at least some" of their work is in the corresponding area (3 or higher on 5-point scale, where 1 = none of my work is in this area, 3 = some of my work is in this area, and 5 = I work extensively in this area)

Alumni in academia:

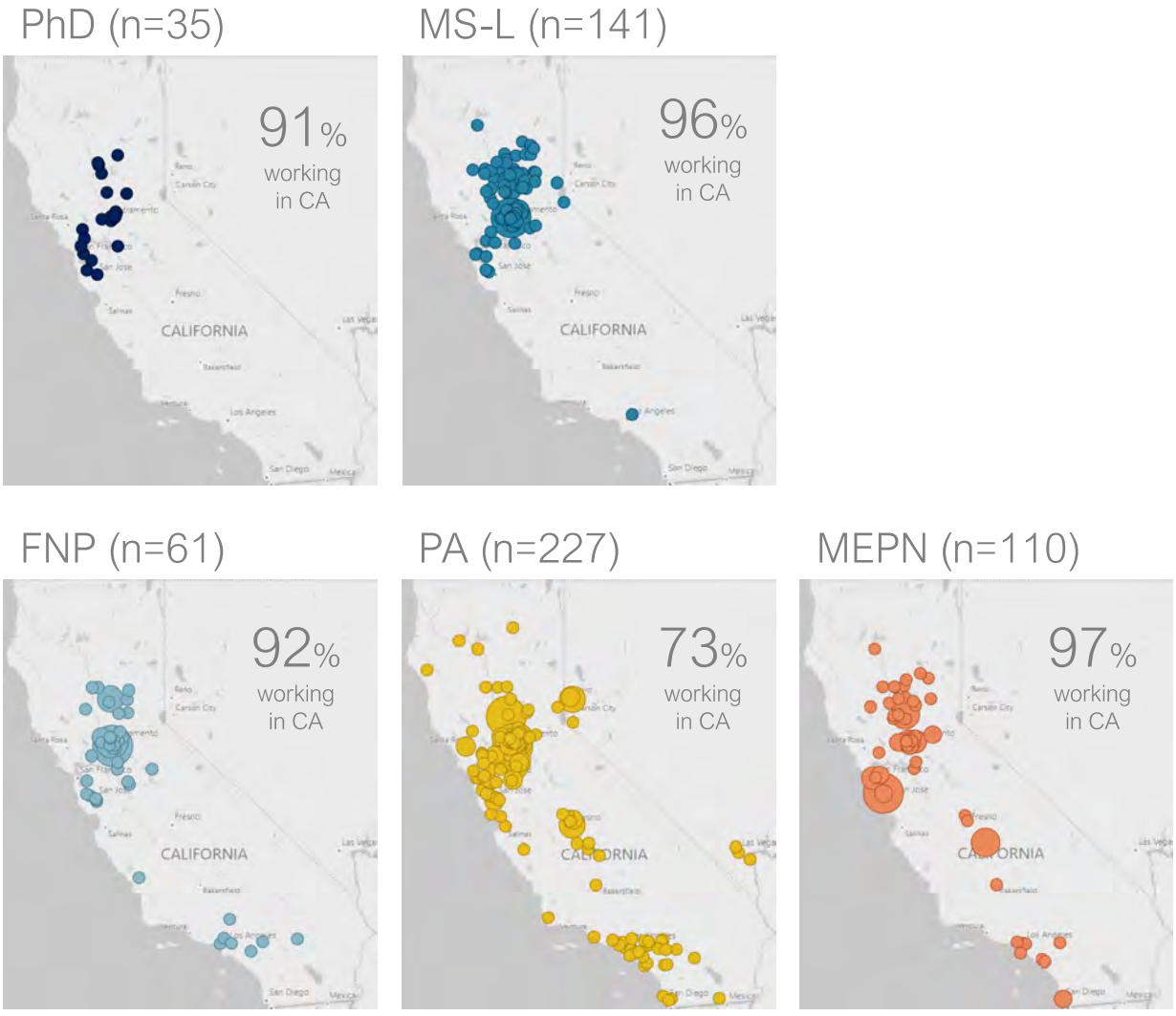
- 3 American Academy of Nursing Fellows (FAAN)
- 30 faculty members, including:
  - 10 at California State Universities
  - 12 at colleges or universities outside CA
  - 5 at UC Davis
  - 3 community college instructors

Alumni employment locations

More than 600 alumni have served in California as practitioners or educators, and 30 alumni, including post-doctoral fellows, hold academic appointments in California or in six other states. There are also many alumni working as clinical instructors or preceptors, including in the UC Davis Health System.

Each year, the School of Nursing sends a contact survey to recent alumni and conducts a more comprehensive impact survey on a triennial basis. Additionally, the School tracks alumni employment information as available. The maps below (Figure 6) illustrate where the School of Nursing alumni are contributing in the state.

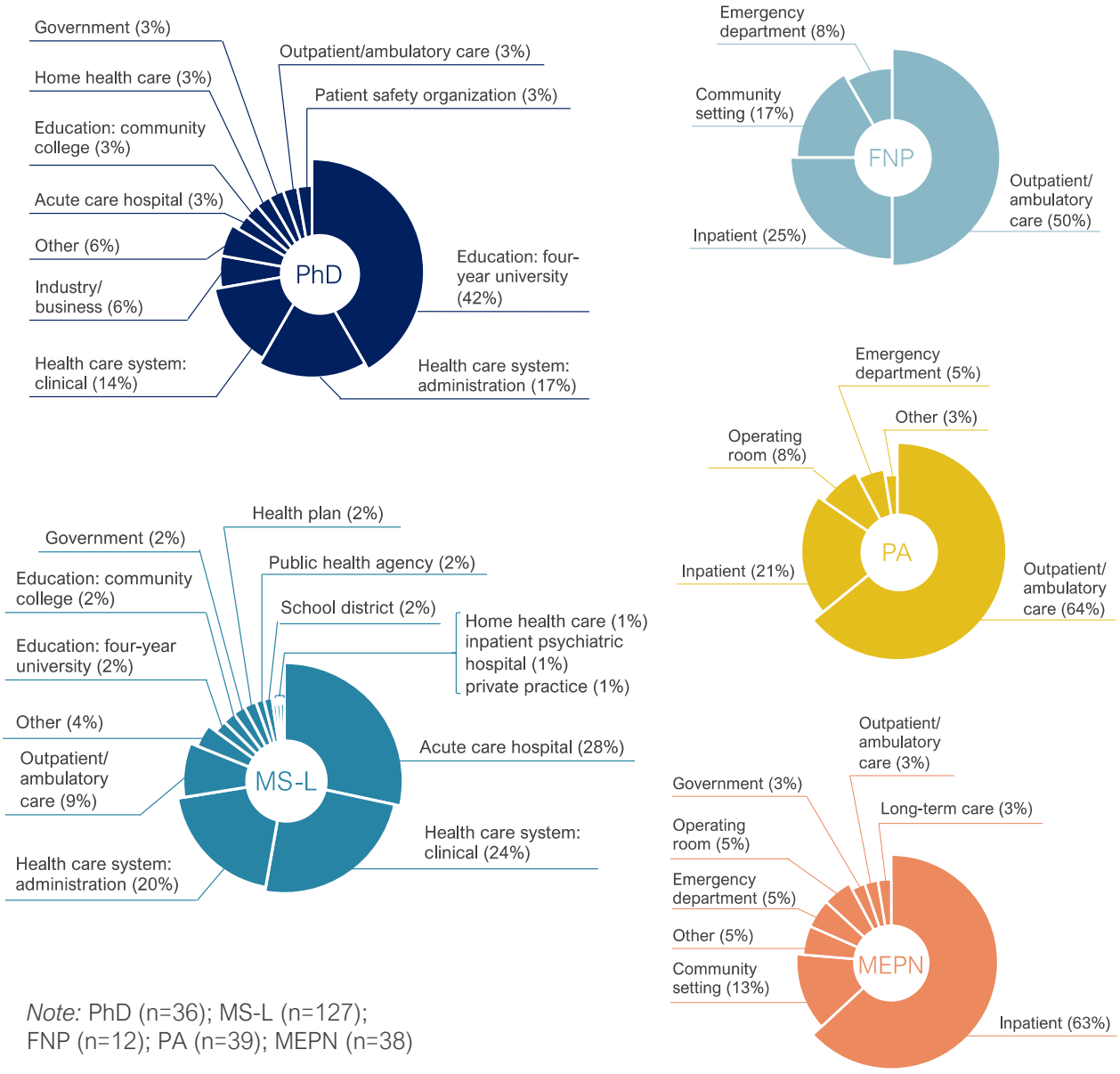
Figure 6. Alumni work locations among those with known employment information



Alumni employment settings

On the alumni survey, School of Nursing alumni also reported the setting of their primary role. A summary of these results is shown in Figure 7 below.

Figure 7. Alumni work settings among those with known employment information

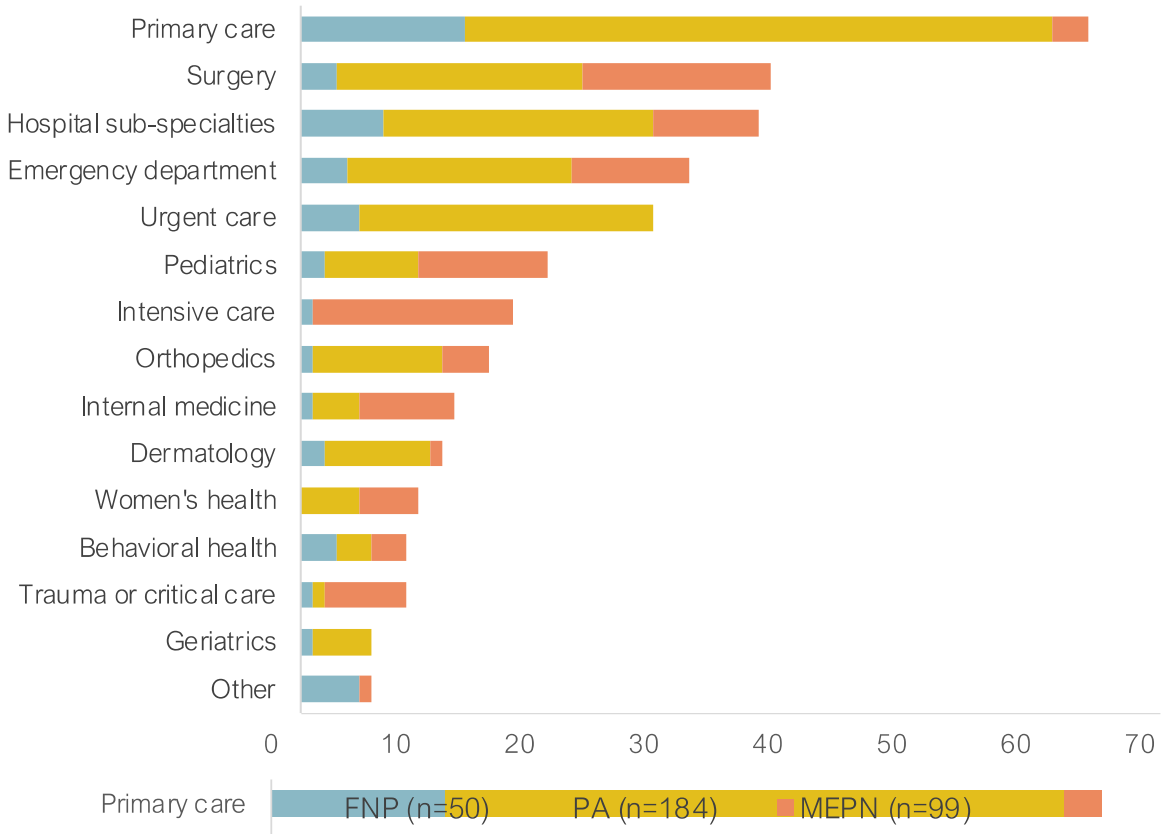


Note: PhD (n=36); MS-L (n=127); FNP (n=12); PA (n=39); MEPN (n=38)

Alumni clinical practice specialties

Alumni of the clinical programs also report their specialty area of focus in their current primary role. Alumni are working in a wide variety of specialty areas as shown in Figure 8 below.

Figure 8. Clinical specialties among alumni of the clinical programs



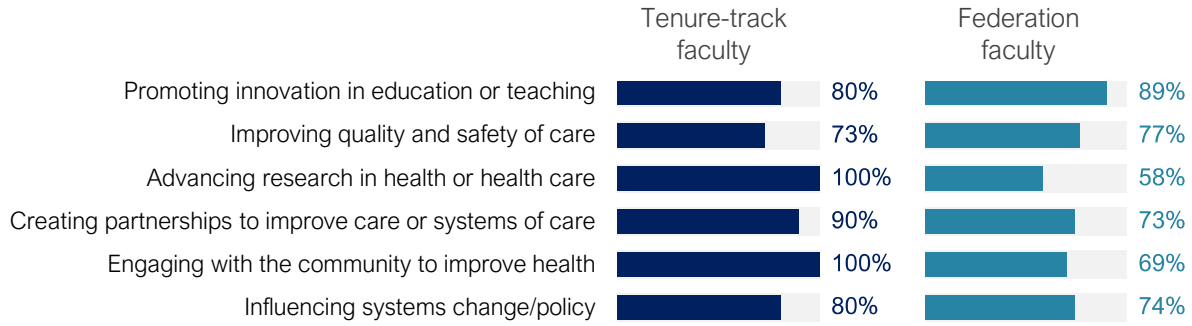
Faculty contributing and leading in nursing education, research, and/or practice

Faculty are also contributing to and leading in the School's priority areas. In 2021, a faculty survey, which included responses from 38 of 39 faculty, illustrated a range of contributions. Some results are presented below.

- 100% of tenure-track faculty report they are engaged in research and/or disseminating knowledge with interdisciplinary teams and/or non-traditional colleagues emphasizing quality and safety, practice innovation and interprofessional education. Examples from all faculty include the SPLICE program, NP Residency program, the Central Valley Road Trip, co-championing the UC Davis Healthy Aging in a Digital World initiative, ACTIVATE: telehealth for underserved and rural communities in COVID and development of AARP videos for family caregivers.

- Similar to alumni, faculty were asked to self-rate their contributions in six areas. One hundred percent of tenure-track faculty rated their contributions moderate to high in advancing research in health or health care and engaging with the community to improve health. Federation faculty reported their highest contributions in promoting innovation in education or teaching (Figure 9).

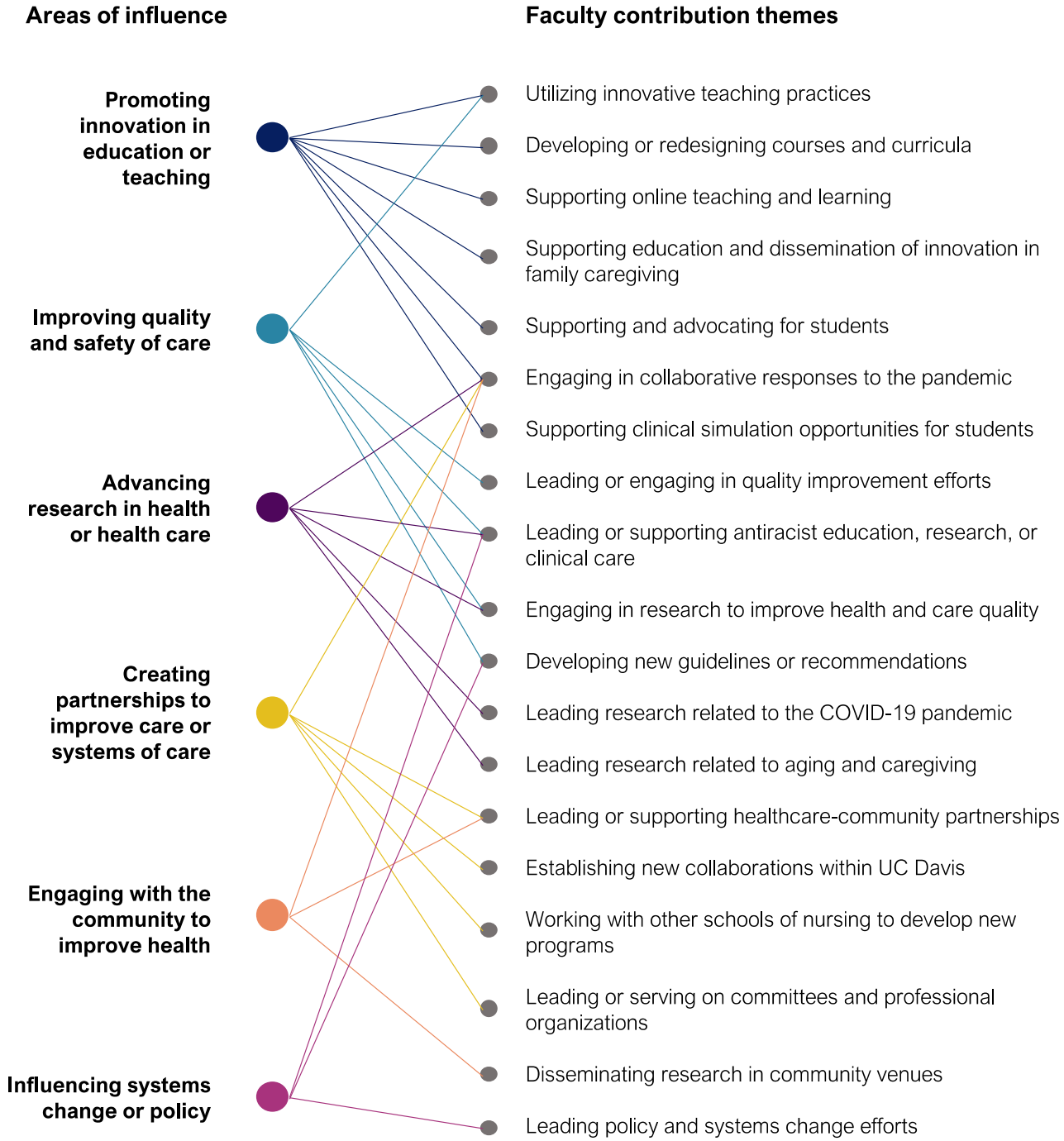
Figure 9. Percent of tenure-track faculty (n=11) and federation faculty (n=27) who reported moderate to high contributions in the corresponding area of influence



Note: 1 = I have not contributed in this area; 10 = I have contributed a great deal in this area. Moderate to high contribution is defined as a score of 5 or above.

Within each area of influence, faculty provided examples of their contributions. Figure 10 categorizes the faculty examples into prominent themes.

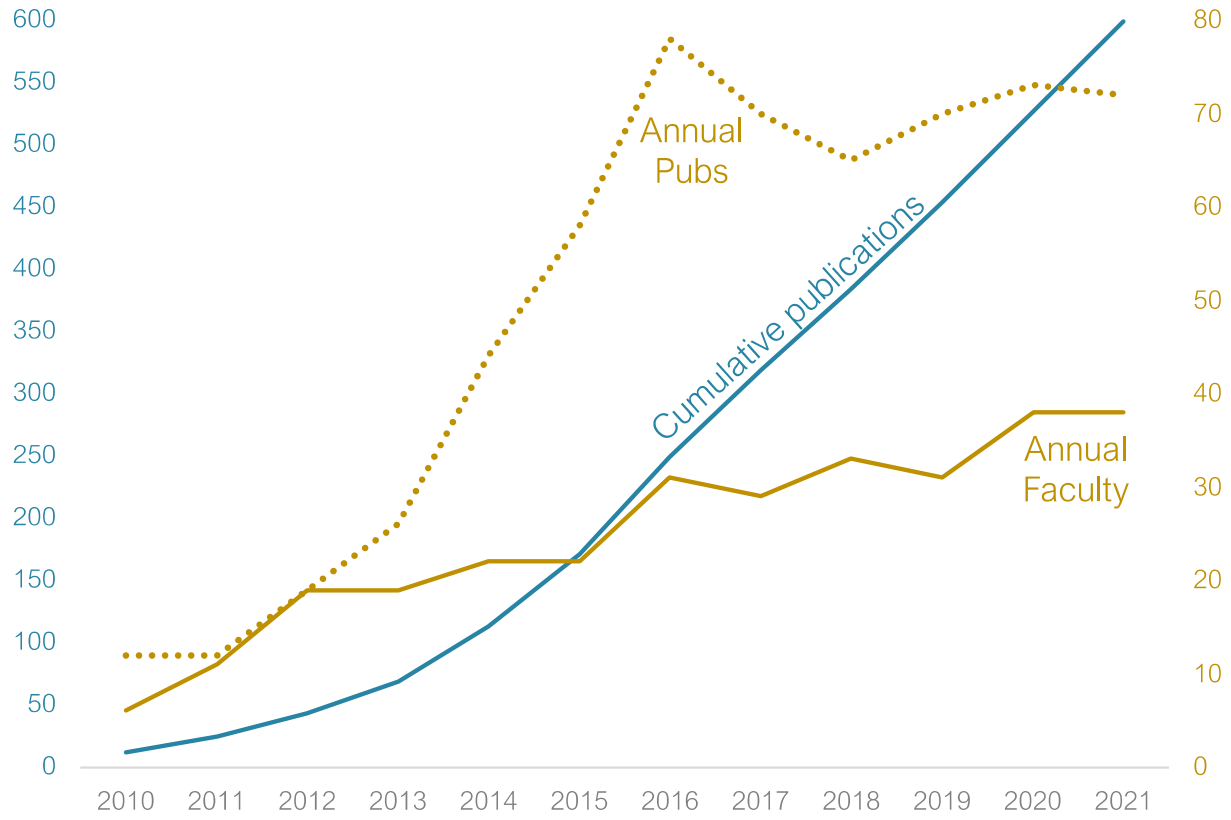
Figure 10. Themes of faculty contributions corresponding to each area of influence



Faculty productivity over time

Faculty have also contributed to nursing education, research and practice through their activity in scholarly publications. Since 2010, faculty have published nearly 600 peer-reviewed articles, books, edited books, and book chapters. Mirroring the interdisciplinary and interprofessional nature of the School, they have published in more than 160 unique journals in nursing, medicine, social sciences, and policy (Figure 11).

Figure 11. Annual and cumulative faculty publications, 2010-2021



Faculty are also adept at pivoting and staying nimble to underscore how education and research will help address population health challenges, including during the COVID-19 pandemic. Additionally, faculty influence health care challenges and opportunities through professional organizations or state and national agencies.

Building the infrastructure to support leadership in health equity

Health inequities have adverse implications for the population including increased economic and health care costs, as well as decreased individual quality of life and health outcomes. Health equity is foundational to influencing effective nursing and health care strategies going forward.

The Betty Irene Moore School of Nursing launched with a commitment to cultural inclusiveness and an understanding that quality care is steeped in individual care. The School of Nursing has threaded social determinants of health across programs to ensure nurses and advanced practice providers are equity-minded practitioners. These principles are embedded in courses on health equity, leadership, and health policy. Achievements and progress in this area are noted below.

The Betty Irene Moore School of Nursing received the 2021 Health Professions Higher Education Excellence in Diversity (HEED) Award. The School was one of 50 health professions colleges and universities in the nation to be identified as a HEED winner by *Insight into Diversity* magazine. This award is notable for its comprehensive and rigorous requirements for consideration. Additionally, in 2020, the School was recognized as one of 12 schools in the country as a Nursing Diversity Champion by *Minority Nurse* magazine. These honors highlight the School's commitment to recruit and retain diverse students, faculty and residents and are predicated on continued leadership support for diversity, equity and inclusion. Related, until the diversity of the nursing workforce reflects the diversity of the population, it will be important to continue to increase not only the diversity in the clinical workforce, but the number and diversity of PhD and DNP-FNP graduates who become researchers and educators. These roles working together will help drive health equity and better health outcomes.

Dr. Piri Ackerman Barger was named the inaugural Associate Dean for Health Equity, Diversity and Inclusion at the School of Nursing in 2020. This role reports both to the UC Davis Health Vice Chancellor of Health Equity, Diversity and Inclusion and the Dean of the School of Nursing, which connects the School with the broader UC Davis vision for diversity, equity and inclusion. The School will continue its work guided by Dr. Ackerman Barger, as well as the Health Equity, Diversity and Inclusion Committee, which is responsible for the School's 2021-2026 strategic plan for Health Equity, Diversity and Inclusion, and with the commitment of all faculty and staff.

Building broad-based community partnerships

Since inception, Betty Irene Moore School of Nursing faculty and staff members have successfully developed and expanded partnerships both locally and nationally. The School has engaged nearly 435 clinical sites and preceptor partners and, from 2011 – 2018, faculty report collaborating with nearly 350 unique partners. These partnerships include both educational and research ties across many sectors of academia, community agencies, public health and government, and professional organizations. They also include a variety of racial/ethnic populations across the lifespan. Many partnerships, for example Alameda County Care Alliance, Sacramento Food Bank and Family Services, Asian Resource Center of Sacramento, and Interdisciplinary Frontiers in Humanities and Arts at UC Davis, have been longstanding. The faculty research portfolio and research funding partners are discussed in more depth on pp. 45 and 51.

Partnerships supporting education and practice include the Interprofessional Central Valley Road Trip and the Anti-Racism and Cultural Humility (ARC) training. The road trip is a one-of-a-kind immersive field trip emphasizing the contributions and histories of the diverse people of California's Central Valley to better understand and apply the lessons of population health.

Dr. Jann Murray-Garcia leads UC Davis faculty, staff, students and community members on the spring 2019 Central Valley Road Trip.

ARC training began as an innovative partnership between the School of Nursing and UC Davis Health Nursing to train nursing directors and managers throughout the hospital. The project has collected early evidence suggesting the training has changed nurse leadership behavior and enhanced skills among this group to engage around issues of anti-racism, cultural humility, and health equity. This builds the capacity of the health system to deliver the highest quality, most effective, and respectful care.

Some of the community-facing programs created or co-created with School of Nursing faculty or with School of Nursing funding are now under the umbrella of UC Davis Health, including the Interprofessional Central Valley Road Trip and ARC Training. The Office of Health Equity, Diversity and Inclusion (HEDI) underwrites some of the work of Associate Dean Ackerman Barger and faculty member Dr. Murray-Garcia as the Director for Social Justice and Immersive Learning, signaling the value of these initiatives to the system beyond just the School of Nursing. This development indicates a recognition of the School of Nursing's leadership and content expertise in this area.

The School is also building partnerships in support of clinical education outside of UC Davis Health. Humboldt County is a rural, medically underserved community with a shortage of primary care providers who play a vital role in delivering rural health care. The School of Nursing worked with local stakeholders to understand the needs of the community, resulting in grant-funded, subsidized housing for students whom the School places in the local community for clinical practice rotations throughout the Humboldt area. This not only increases care providers in the area but introduces soon to be new graduates to a community where they could live and practice. This initiative is now being expanded throughout the Central Valley to replicate the partnership with rural communities in need of health care providers.

Partnerships in research also further the School of Nursing's influence on aging and advanced illness care and in the community setting. For several years, Associate Dean for Research Dr. Janice Bell and Inaugural Associate Dean for Research and Professor Emeritus Dr. Jill Joseph collaborated with the Alameda County Care Alliance Advanced Illness Care Program (ACCA-AICP). What started out as a volunteer effort initiated by a small group of African-American churches has grown into a high impact program promoting lay care navigation support to persons needing advanced illness care and their families/caregivers in the community setting. The program reaches more than forty churches across three Bay Area counties and has secured funding to expand into Southern California. Dr. Bell was funded by the Rita and Alex Hillman Foundation Innovations in Care Program to use the ACCA work to derive the Serious Illness Care Model Implementation Framework designed to help build better serious illness care programs. The framework was a collaborative effort of the Coalition to Transform Advanced Care (C-TAC), Healthsperien and the School of Nursing with funding from the Gordon and Betty Moore Foundation.

The Latino Aging Research Resource Center (LARRC) was a collaboration between the School of Medicine and the School of Nursing for the funding period 2012 - 2017. One of seven national NIH-funded Resource Centers for Minority Aging Research, the Center's mission was to reduce disparities related to cognitive health and healthcare in Latinos through an integrated, interdisciplinary, and interprofessional mentoring program to diversify the research workforce. The Center also addressed health disparities and cognitive health and healthcare needs for Latinos in California's Central Valley by creating a network of community agencies, healthcare leaders and regional healthcare leaders. Dr. Heather Young was co-director with Director Ladson Hinton of the Department of Psychiatry and was joined by faculty members Dr. Mary Lou de Leon Siantz and Dr. Carolina Apesoa-Varano in contributing time and mentoring scholars. Over five years, LARRC provided pilot funding and support to 17 Latino scholars recruited from across the United States.

Dr. Robin Whitney (PhD 2016) presents at the 2016 Academic Symposium, an annual event showcasing scholarly work from all programs.

Innovative interprofessional education

Creating an interprofessional learning environment

UC Davis's unique approach to graduate education allowed the Betty Irene Moore School of Nursing to organize as an interdisciplinary graduate group, which served the vision for nursing education. This model fosters faculty research collaboration across disciplines and gives students the freedom to explore interests across fields, engage in various areas of research and otherwise expand their knowledge beyond their area of core study. The Nursing Science and Health-Care Leadership Graduate Group oversees the curriculum for each of the School's academic programs. This includes curricula for the inaugural Master of Science in Leadership (MS-L) and Doctor of Philosophy (PhD) programs, and later, the Master of Science – Family Nurse Practitioner (FNP) and Master of Health Services – Physician Assistant (PA) programs, as well as the Master's Entry Program in Nursing (MEPN).

The School has integrated interprofessional education throughout all academic programs. All MS-L and PhD students work with faculty outside of nursing on their thesis and dissertations and all clinical students work with interprofessional faculty members during their project work and educational experiences. The PhD program, intended to develop academic and research professionals, was deliberately designed to be interdisciplinary in nature. Recruiting candidates from outside of nursing has created nursing science leaders who can act as ambassadors across disciplines and teams.

The School launched the five programs – PhD, MS-L, FNP, PA, and MEPN – in a relatively short period of time (2010 – 2016). The programs all focus on leadership, health equity and team-based learning and highlights the importance of multiple perspectives in an interprofessional working environment. When possible, students from the five programs have learned and practiced together within nursing and with other disciplines in interprofessional teams in their coursework.

Developing and delivering an innovative educational program

Faculty and staff have always taken a methodical, thoughtful approach when creating new or evolving existing programs. The School launched with an emphasis on evaluation, engaging arm's length evaluators from the UC Davis School of Medicine Office of Research Evaluation Unit to co-develop an evaluation strategy and annually assess the School's development around academic, community engagement, and sustainability milestones.

This included a robust focus group model during the early years of each academic program, which monitored student satisfaction and allowed for rapid cycle improvements that drove curriculum changes and informed strategic change. Students in inaugural cohorts were instrumental in setting curricular directions and that student feedback loop continues today.

Leaders of the School undertook a rigorous analysis when looking specifically at creating a program for new nurses. Funding from the Sierra Health Foundation allowed the team to explore the health education needs of the Sacramento region. Findings indicated a large number of Associate Degree nursing students already had a bachelor's degree (or higher) in another field making them eligible for graduate education in a master's degree program. Additionally, UC Davis educates 6,000 pre-health sciences students across colleges every year, allowing for a direct pipeline of potential graduate students. This, combined with the acknowledged strength of existing Bachelor of Science programs in the area (such as California State Universities Sacramento, Chico and Stanislaus) and the lack of a master's level prelicensure program, led to the School launching a Master's Entry Program in Nursing (MEPN) rather than a bachelor's program. This program created a pathway for bachelor's degree students to pursue higher nursing education and cemented the Betty Irene Moore School of Nursing as a graduate school.

The team also applied this same rigor when considering the evolution of programs. The MS-L program was integral to grounding the School in its mission to prepare graduate-level leaders to advance health, transform health care and ignite bold system change. After careful reflection and review of program strengths and market changes, it was paused after the graduating class of 2021 as a stand-alone program. However, the core experiences from the program have informed the foundations of the MEPN, FNP and PA programs, as well as the Doctor of Nursing Practice with a Family Nurse Practitioner Concentration (DNP-FNP), which launches in June 2022. The DNP-FNP is the next evolution of the master's level FNP program. It will capitalize on the spirit of the MS-L program by going beyond clinical education courses to elevate students as leaders who effect system change and promote health care innovation by informing and advancing health policy and health equity. The PhD program continues to prepare leaders in health care, health policy, education and research.

PhD alumni leading as prepared

- Healthcare Operations – Rayne Soriano (2015) is the Regional Director for Operations and Nursing Professional Practice at Kaiser Permanente Hawaii.
- Health System Research – Lori Madden (2014) leads the Center for Nursing Science at UC Davis Health. As a Clinical Nurse Scientist she fosters clinical inquiry and evidence-based practice with nurses in a range of clinical settings.
- Health Policy – Ronit Ridberg (2014) is a national expert on produce prescription programs. She manages the Precision Nutrition Program in the UC Davis Health Center for Precision Medicine and Data Sciences. She works at the intersection of community nutrition, food policy and health care.
- Education – Perry Gee (2014), adjunct faculty member at the University of Utah, University of California – Irvine, CAMPUS, and Arizona State, as well as the first Nurse Scientist for Intermountain Healthcare in Salt Lake City.
- Research – Sheridan Miyamoto (2014), Associate Professor at Penn State, Director of the Sexual Assault Forensic Examination Telehealth (SAFE-T) Center, has a nationally recognized body of research on child maltreatment and sexual assault. She also works with her state senator to write bills and policy to advance forensic nursing access in Pennsylvania.

The School has leveraged grant funding to develop pilot education programs that later informed larger initiatives. For instance, a series of Song Brown Healthcare Workforce Training Grants through the state of California have supported the development of Integrative Case-Based Learning (ICBL). The resulting simulation case scenarios offer experiential learning, moving students beyond a focus on chronic condition or diagnosis to explore how family relations, regional geography, cultural differences and socioeconomic demographics all impact individual health. Through these cases, students acquire a unique set of knowledge, skills and attitudes that help them administer care effectively and lead a team in the best interest of the individual at the center of care.

The ICBL cases were used to develop the System-transforming, Patient-Centered, Longitudinal, Interprofessional, Community-based Education (SPLICE) program. This program is an interprofessional opportunity for first-year students in nursing, medicine, PA, FNP as well as pharmacy residents. The experiential learning activities offer a comprehensive teamwork experience in both the classroom and in practice. The program targets students and pharmacy residents who want to work in primary care, especially with under-served populations. Through this program, more than 300 faculty, staff and students in the School of Nursing and School of Medicine have been trained, including staff at the Sacramento County Health Clinic, which partners with UC Davis Health to educate students.

Students participate in a poverty simulation exercise in 2021 to better understand nursing and health clinician roles in population health.

Influencing nursing at UC Davis Health

The influence of developing leadership skills on students' career trajectories was immediately apparent with the first cohort. Many of the MS-L students become Quality Champions at UC Davis Health even prior to graduation. These new roles allowed the system to benefit from the student's burgeoning leadership and quality improvement skills, while enhancing care outcomes. School of Nursing alumni in these initial pilot roles functioned as change agents, which helped UC Davis Health move towards Magnet status – the highest credential for nursing facilities in the United States. UC Davis Health expanded on these pilot roles and now employs nine Quality Champions across the health system, the majority of which are Betty Irene Moore School of Nursing alumni. A number of graduates across programs continue their career at UC Davis Health, including 13 PhD, 100 MS-L, 5 PA, 10 FNP and 54 MEPN alumni, according to the most recent alumni employment data.

The health system did not have a tradition of hiring new Registered Nurses (RNs) until it launched its New Graduate Nurse Residency program in early 2012. The School was positioned to further influence this change in hiring practice when it opened the MEPN program in 2016. The health system became a key hiring stakeholder for new RN graduates. UC Davis Health hired 25% of the first MEPN cohort because of the Betty Irene Moore School of Nursing's reputation for excellence and the growing history of partnership established with UC Davis Health. Since then, more than 40 new RN graduates have been hired, which again accounts for about 25% of the total MEPN graduate population since inception.

The health system also continues to hire new graduates from across all the School's program – some 200 alumni have worked at UC Davis Health, about 24% of its total alumni population. PhD graduates are also sought after to work at all the regional health systems – Kaiser Permanente, Dignity Health, Sutter, Veteran's Administration and UC Davis. This is a key achievement as it brings doctoral level expertise to the organizations and builds capacity in these organizations for nurse leadership and nursing science.

Influencing health education at UC Davis Health

Clinical skills training and practice is integral to clinical student success; however, securing clinical sites and ensuring a breadth of experiences can be difficult. The Betty Irene Moore School of Nursing addresses these challenges in new ways.

The first was by challenging expectations of the California Board of Registered Nursing (BRN) for clinical sites. The BRN, as in other states, is charged with protecting the health, safety and well-being of the public through fair and consistent application of the statutes that govern nursing practice and education.

As such, these bodies require compelling, fact-driven discussions before altering policy or practice. School of Nursing Faculty successfully made the argument that pediatric health priorities substantially exist in the community rather than just in hospital settings. The majority of care for children is based around prevention and population health strategies, focusing on areas such as asthma and autism. This argument enabled the School to secure permission to partner with community agencies for clinical pediatric rotations for students rather than relying entirely on limited acute care hospital sites.

In response to reduced availability of clinical practice sites for education due to the COVID-19 pandemic, Dean Emerita Dr. Heather M. Young worked with colleagues at the UC Office of the President and HealthImpact to successfully provide information to California Governor Newsom's office resulting in an executive order to increase the proportion of simulation education activities allowed for prelicensure programs. Increasing simulation education helps address the shortage of clinical sites thereby keeping students on track to graduate without impacting the quality of their clinical experience. The group of colleagues then worked with the BRN on best practices for implementation. This change in practice had a direct result on Betty Irene Moore School of Nursing student graduation rates, which remained unchanged during COVID-19 signaling that the pandemic did not impede student progression.

Another means of influence is through a commitment to simulation education. When designing Betty Irene Moore Hall, the School prioritized innovative spaces that could promote growth and transform interprofessional experiences in health care. Betty Irene Moore Hall was designed to support simulation innovation across settings (home, ambulatory care and hospital). The 70,000 square feet structure provides learning space for future health professionals in nursing as well as medicine, health informatics and public health. The simulation space is also utilized by hospital and clinic teams to provide additional training for working professionals.

The simulation spaces are designed to complement UC Davis' nationally recognized use of clinical simulation. Betty Irene Moore Hall includes an in-patient 8-bed hospital ward, task and anatomy skills lab, 15-room primary care clinic simulation with debriefing rooms; and one-bedroom home health suite, which allows for training in areas of interest, such as the care of older adults. It was important to build in simulation opportunities that allowed for greater flexibility and accommodation of how students could gain clinical experiences. In addition to traditional environments, the simulation spaces also support more complex situations to prepare students for what they will likely see in real-world practice. This allows students to experience clinical challenges they may not encounter or achieve adequate practice with during clinical practice rotations, including end-of-life dilemmas and resuscitations and other emergencies.

Students utilize the home health suite to simulate care in a home setting; faculty and other students observe in person and via video.

Finally, the School is also influencing the health education model at UC Davis Health with its commitment to quality clinical training through the Clinician Educator Faculty Model. The School piloted this new model of education for the system in 2016 by creating a position that combined the equally coveted roles of advanced practice provider and graduate degree program educator. This “clinician educator” professional can deliver quality clinical care where it is most needed while also preparing the next generation of providers. The Clinician Educator Faculty model entails hiring a full-time faculty member through the School of Nursing and then contracting that faculty out to a clinical practice site for 80% of their time. The Clinician Educator Faculty is a full-time educator -- both in the clinical practice site and the classroom. While in clinical practice, the faculty are continuously precepting students and they spend one day per week in the classroom with students.

This model creates consistent preceptors for students, at a time when preceptors are the largest rate-limiting factor for all schools of nursing throughout California. This role was piloted as a collaboration with the Sacramento County Health Center, which has been a consistent partner for the School of Nursing for the past six years. In 2020, the pilot expanded to hire a dozen more faculty to practice in primary care, women's health, mental health, and pediatrics at the County, as well as at UC Davis Health clinics and other community Federally Qualified Health Clinics (FQHCs). These impacted areas are some of the most competitive clinical practice rotation sites for students. This new model of education generates clinical income and teaches advanced practice students with School of Nursing faculty, while also helping solve preceptor shortages in a competitive education market.

Bold systems change

The Betty Irene Moore School of Nursing at UC Davis was launched with a vision to advance health and ignite leadership through innovative education, transformative research and bold system change. Bold change lies in the ability to envision new roles for nursing and health clinicians, create innovative partnerships, move research to practice and leverage technology and innovation to transform health care.

New roles for nursing and health clinicians

The School of Nursing had a growing reputation for creating change agents as its initial alumni were hired at health systems including UC Davis Health. The School added to this reputation with the establishment of its advanced practice provider programs – the Master of Science – Family Nurse Practitioner (FNP) and the Master of Health Services – Physician Assistant (PA) programs, respectively.

This transition enhanced the roles of these professions by first, converting them into advanced practice professional level graduate programs offering a master's degree and second, integrating the known School of Nursing principles of leadership and social determinants of health into their training. This resulted in graduates who had a more comprehensive understanding of how to advance health, improve quality of care and shape policy, which in turn, helped enhance the professional reputation of advanced practice professionals in the system. Additionally, it increased the School of Nursing's capacity to effect change and improve health in rural and underserved areas by elevating the value of Advanced Practice Providers and Registered Nurses delivering primary care.

Alumni in new roles

- Innovation – Satish Mahajan (PhD 2014) is Chief, Research and Innovation at the Veterans Affairs Palo Alto Health Care System. His work focuses on using predictive analytics in learning health systems for data-driven care models.

- Quality - Jacqueline De Mellow (PhD 2017) is Director of Quality at Dignity Health in Stockton, CA. Her work focuses on finding solutions to apply evidence-based practice to patients who have suffered critical illness.

- NP Residency – Carrie Garland (FNP 2020), Miriam Lakes (FNP 2021), Joseph Langowski (FNP 2021), Mallory Matthews (FNP 2021) are members of the inaugural 2021 NP-PRACTICE Residency cohort.

From the beginning, the School of Nursing leadership team understood that quality and safety were fundamental to Mrs. Moore's initial vision for nursing and health care. Master's level clinical students are educated with an emphasis on improving patient safety and health care quality through quality improvement projects. The FNP, PA and Master's Entry Program in Nursing (MEPN) students have participated in quality improvement theses, scholarly projects and interprofessional projects as required coursework since the inception of each program. Projects focus on evidence-based practices, education research, and quality improvement tactics in care settings. Students are partnered with practicing clinicians in different care clinics to determine project needs and develop potential solutions to clinical care scenarios.

School of Nursing faculty further supported advanced practice professionals with the creation of the Advanced Nurse Practitioner NP – PRACTICE Residency. This residency was created in partnership with UC Davis Health and affiliated centers and clinics via federal Health Resources and Services Administration (HRSA) funding, which was used to create partnerships with multiple Federally Qualified Health Clinics (FQHCs). The program provides teaching and clinical education experiences and prepares recently graduated Family and Adult Gerontology Nurse Practitioners to provide high-quality primary care in under-resourced areas. The residency program increases successful transition to practice and is seeding the next generation of interprofessional teams at UC Davis Health. The program has garnered interest from regional partners, such as the Shasta Community Health Center, which reached out to establish an academic partnership with UC Davis for its own residency program.

As mentioned, the FNP evolved into the Doctor of Nursing Practice with a Family Nurse Practitioner Concentration (DNP-FNP) – the first cohort of DNP-FNP students will enter in June of 2022. This decision was made after analyzing the trends in advanced practice training. Clinical DNP-FNP graduates will have more influence in practice, translational research, implementation science and policy – just as PhD graduates lead in these areas.

Built on the foundation of the MS-FNP program, the newly developed hybrid (online and in-person learning) DNP-FNP program will include students who are recruited from across California and from rural and underserved areas in particular. The goal is to support students who would like to stay and practice in their own community upon graduation. Registered Nurses are often motivated to become Family Nurse Practitioners to make an impact upstream from the hospital setting as they recognize much of what is seen in the acute care setting could be prevented through collaborative relationships with patients and clients that focus on preventative care and management of chronic disease. These learners can take advantage of University of California Davis distance-education while completing clinical practice experiences in their local community. Upon graduation, they are qualified and prepared to join the local health-care workforce and contribute to their local community.

The School is striving to prepare DNP-FNPs to meet the needs of the state including addressing a faculty shortage, long-term care services and supports, and quality and patient safety initiatives. One way it will accomplish this is through the incorporation of complementary graduate academic unit certificates in education, family caregiving, and quality and patient safety.

Innovative partnerships

Complex problems in health and health care will be solved through imaginative transdisciplinary partnerships and engagement with communities for research, education, practice and policy.

The University of California (UC) partnered with other health, foundation and policy leaders in the state on the California Future Health Workforce Commission. Then UC President Janet Napolitano co-chaired the commission and Dean Emerita Young and served as a commissioner. Together this deliberative body prioritized mental health care in primary care settings, targeting under-served communities in California. One of the ten commission recommendations was to establish a program to prepare Family Nurse Practitioners to also practice as Psychiatric Mental Health Nurse Practitioners, delivering mental health services in the community.

UC Nursing responded by successfully developing a consortium among UCSF, UCLA, UC Irvine and UC Davis to support the Psychiatric Mental Health Nurse Practitioner (PMHNP) multi-campus certificate program. In launching this program, leaders in the School leaned on lessons learned about pushing boundaries, conducting analysis and implementing a shared services model across campus that is collaborative rather than competitive. The PMHNP program expands the School's support of developing a rural or underserved workforce. UC Davis is leading the consortium office for the participating schools. The program will target the current NP workforce in California and aim to train 300 PMHNPs in five years.

The Betty Irene Moore School of Nursing has also functioned as AARP Public Policy Institute's clinical practice partner, complementing their policy and research efforts in the area of caregiving. Senior Vice President at AARP and Public Policy Institute Director Dr. Susan Reinhard was an inaugural member of the School's National Advisory Council (NAC) and was instrumental in connecting the School to national initiatives. This included the Home Alone caregiver studies and resulting Home Alone Alliance and Caregiver Advice Record Enable (CARE) Act implementation, all of which the School played a lead role in. These nationally led collaborations are driving change among health care professionals, delivery systems, policy makers and the public at large.

Early on, the School of Nursing strengthened the interprofessional bond with the UC Davis School of Medicine as partners on the Interprofessional Pain Management Competency Program. The program created core competencies for learners with the goal of changing how health care professionals respond to and mange pain.

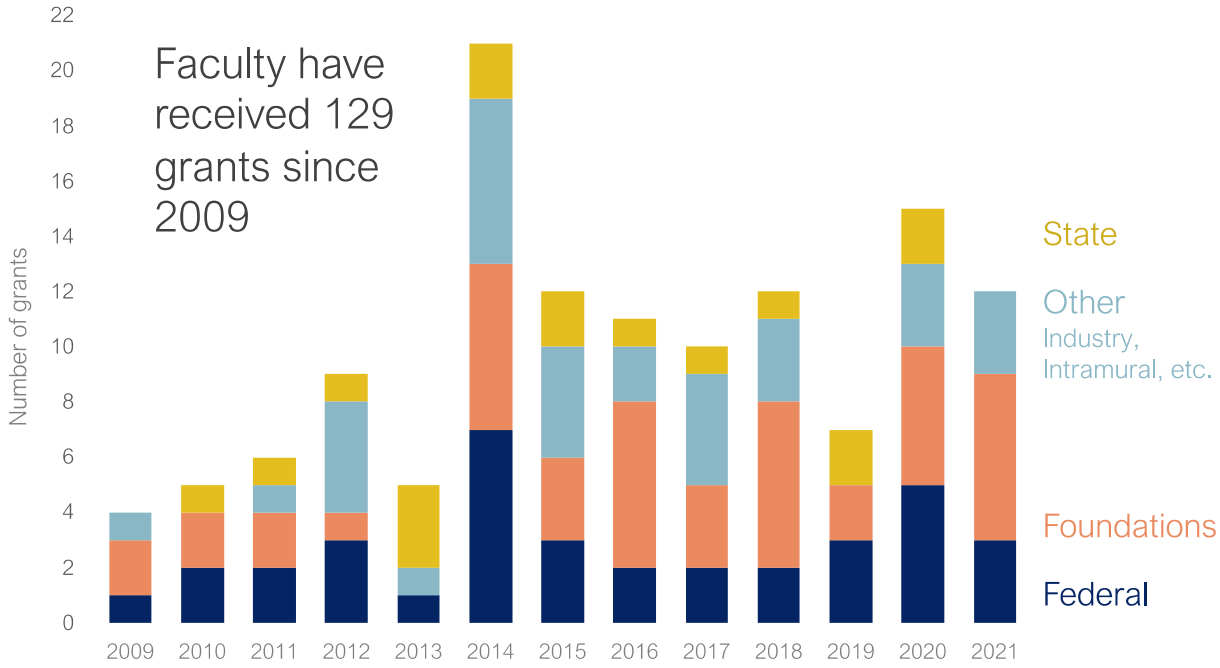
The project examined existing competencies and the topic of pain in curricula across multiple disciplines. Numerous interprofessional leaders were engaged to develop consensus-derived competencies across disciplines. Additional work included the development of curricular modules and learning activities with follow-up to measure impact. This cross-discipline model also informed future caregiving competency work by the Family Caregiving Institute.

Developing a robust research portfolio to contribute to change in practice

The Betty Irene Moore School of Nursing's research program is the engine that drives new solutions that put individuals, as well as families and communities, at the center of care. The School's early focus was on aging, rural health, and diverse communities. Faculty have received 129 grants since 2009 (Figure 12). While faculty have made strides in these areas, ten years on, the School's leadership is also aware of how the demands of operationalizing the core education mission to some extent limited the development of the research program thus far.

However, a confluence of faculty research has still created new knowledge in core areas of interest for the School including aging and caregiving, health equity and leveraging technology and innovative informatics to increase quality and safety outcomes ultimately influencing bold systems change.

Figure 12. Number of grants over time, 2009-2021



Aging/family caregiving

Over the last ten years, the School's faculty and staff have established a national leadership role in aging and family caregiving research and practice culminating in the establishment of the Family Caregiving Institute in 2017 through a $5M investment from the Gordon and Betty Moore Foundation. Researchers at the Family Caregiving Institute at the Betty Irene Moore School of Nursing strive to support the millions of individuals who provide care to aging family members or friends. Lead by institute director and professor Dr. Terri Harvath, the institute has advanced the field through research and development of education programs for graduate students as well as working professionals. The institute developed the Family Caregiving Competencies and Domains of Preparedness to inform caregiving education for health professionals. The resulting certificate programs educate health professionals on how to prepare caregivers for the demands on their role, as well as how to influence a larger conversation and policies that support older adults and caregivers. The Family Caregiving Institute has also grown in visibility on the UC Davis Health campus and plays a cornerstone role in the Healthy Aging Initiative and related Healthy Aging Clinic.

Family Caregiving Institute faculty lead family caregiving consultations in the Healthy Aging Clinic.

Specific research focused contributions in aging and family caregiving from Family Caregiving Institute associated faculty include:

- The 2018 Family Caregiving Institute Research Priorities in Caregiving Summit identified a set of research priorities to advance the field. Several papers were published in a Gerontologist supplement -- Research Priorities in Family Caregiving: Process and Outcomes of a Conference on Family-Centered Care Across the Trajectory of Serious Illness.
- The Family Caregiving Institute's program and policy evaluation unit, led by Dr. Heather Young and Dr. Janice Bell, has emerged as a means to influence optimal programming for caregivers. The Unit collaborated with the California Caregiving Resource Centers to evaluate an expansion project and assess the design and implementation of a $30M contract from the state of California. The work has resulted in ongoing funding.
- Clinical Professor Dr. Debra Bakerjian and Associate Professor Emeritus Dr. Elena Siegel conducted independent research in collaboration with the California Association of Health Facilities Music & Memory Project, which is designed to improve the lives of residents in skilled nursing facilities who suffer from Alzheimer's disease and other cognitive disorders.

- Dr. Siegel's research addressed quality of care in nursing home settings, often investigating critical skill sets needed by nursing-home management teams to influence policy, improve care and reduce costs. One pilot study established the feasibility of a mixed methods approach to collecting data from nursing home administrators and their multi-facility provider organizations to better understand both administrator and provider role in quality and quality improvement. The findings provided preliminary data for a proposed larger-scale national study.
- Past Faculty member Dr. Fawn Cothran's research focused on stresses that affect African-American family caregivers, including the means to scientifically document and measure stress levels. She became the Hunt Research Director for the National Alliance for Caregiving in late 2021.
- Assistant Professor Dr. Julie Bidwell shifted her focus from bedside care in a cardiovascular unit to research after witnessing the challenges people with heart disease, and their family caregivers, face when discharged from the hospital. Since joining the School of Nursing, Dr. Bidwell has secured two grants as PI to fund her couples-based research in heart failure management. Both studies are currently in data collection: one focuses on challenges couples face when managing distressing heart failure symptoms, and the other focuses on the impacts of managing heart failure and frailty. Bidwell received a three-year mentored career development (K-Award) funded by the National Institutes of Health/National Institute of Nursing Research in March 2022.

Diverse communities, equity and inclusion

Specific research focused contributions in diverse communities, equity and inclusion include:

- Associate Dean Piri Ackerman Barger's funded research includes two Center for a Diverse Healthcare Workforce and Health Resource and Services Administration (HRSA) projects: Promoting Wellness and Satisfaction in Medical Residents, Nursing Students and Physician Assistant Students by Understanding Microaggressions; and Understanding Microaggressions in Health Professions Students. Resulting publications included "Seeking Inclusion and Excellence: understanding microaggressions experienced by underrepresented medical and nursing students" in Academic Medicine.
- Professor Dr. Carolina Apesoa-Varano and Professor Dr. Sheryl Catz received funding from the Public Impact Research Initiative at UC Davis for a partnership with Wellspring Women's Center to build understanding of COVID-19 vaccine confidence among low-income women in Sacramento.
- Professor Emerita Dr. Mary Lou de Leon Siantz' research focused on the well-being of Hispanic immigrant adolescents, identifying how education could inform and lead to

better health outcomes. Dr. de Leon Siantz also served as the director of the Center for the Advancement of Multicultural Perspectives on Science (CAMPOS), a research center aimed at promoting women in science, starting with Latina STEM scholars.

- Alumni and former faculty member Dr. Katherine Kim was the site CO-PI, Consortium Participant Engagement and Enrollment Leader for the California Precision Medicine Consortium, which is the regional enrollment center for the NIH All of Us: Precision Medicine Initiative. The program is inviting one million people across the U.S. to help build a diverse health database. Dr. Kim is now at MITRE, a non-profit organization, in the Consumer Health Informatics and Health Science unit.
- Retired Professor Dr. Jeri Bigbee received funding from the National Council of State Boards of Nursing to look at the relationship between nurse-to-population ratio and the populations' health over a two-year study. Dr. Bigbee also published on the recruitment and retention of rural nurses and rural nursing students in the Journal of Rural and Remote Health Care.

Informatics and innovation

Specific research focused contributions in informatics and innovation include:

- Healthy Aging in a Digital World – The HADW initiative aims to use technology to provide a bridge between independent living and access to health care across a person's lifespan. The cross-disciplinary project includes School of Nursing faculty. HADW and Family Caregiving Institute faculty and staff are in conversation to consider technologies to support caregivers.
- When the COVID-19 pandemic began, Dr. Katherine Kim was approached to lead six different funded efforts to focus on using data science to look at community impact around the public health crisis.
- Associate Professor Dr. Tae Youn Kim's work aims to increase the power of health data by improving how information on treatments and outcomes is classified and saved.
- Dr. Young and her team (Dr. Madan Dharmar and PhD alumna Dr. Sheridan Miyamoto) conducted a nurse coaching trial to improve health in diabetes with funding from the Clinical and Translational Science Center at UC Davis. Building on this work, she co-founded and led the Initiative for Wireless Health funded by UC Davis, developing mHealth approaches to promote health. These foundational studies led to the first Patient Centered Outcomes Research Institute (PCORI) study awarded to a Nurse Scientist as Principal Investigator. The study, Patient and Provider Engagement and Empowerment Through Technology (P2E2T2), used nurse-coaching coupled with mHealth to improve health for persons living with diabetes.

- Dr. Joseph and Dr. Katherine Kim were part of the interdisciplinary team from the School of Nursing and the UC Davis Comprehensive Cancer Center which launched the Collaborative Care Coordination Research Group to explore new models of nurse-directed, technology-enabled care coordination.

Leveraging technology and innovation in education

The Gordon and Betty Moore Foundation informed the School's ethos to leverage technology in service of better care for individuals and their families. This is also evident in how the School leverages the expertise of stakeholders and delivers education to meet students where they are.

The School of Nursing was one of the early adopters of online education at UC Davis. It has also built on UC Davis' strong history of offering a robust simulation program. Both of these tools allow faculty to deliver innovative education programs for today's nursing and health professional student. The School had initially adopted online education to enable working professionals to earn graduate education certificates faster; however, it also created a path for future online educational experiences. The ability to deliver education online combined with a robust simulation space enabled faculty to quickly pivot education and clinical experiences for students at the advent of COVID-19. This allowed students to continue to learn and train without delaying program progression due to the pandemic.

The School's online footprint will deepen with the launch of the hybrid DNP-FNP program in summer 2022. The hybrid decision was made to allow students greater flexibility to work and remain in their communities while pursuing a doctoral degree. This is important considering the emphasis the School has placed on recruiting students from rural and under-served communities. This program allows professionals to seek additional education without removing a much-needed clinician from an under-served community.

The School is also part of broader partnerships that build across units in support of the UC Davis commitment to telehealth and innovation. The Healthy Aging in a Digital World (HADW) initiative, co-lead by Dr. Young and Emeritus Associate Vice Chancellor for Strategic Technologies and Alliances, Dr. Tom Nesbitt, aims to use technology to provide a bridge between independent living and access to health care across a person's lifespan. A group of colleagues from the Schools of Nursing and Medicine, the UC Davis Center for Health and Technology and the UC Berkeley Center for Information Technology Research in the Interest of Society (CITRIS) partner on the initiative, which was one of six "Big Ideas" awarded philanthropic support in a campus-wide competition for cross-disciplinary work. HADW has raised more than $11 million in funding and is working with investigators across the campus to develop research proposals and organize a consortium for this research.

Sustainability

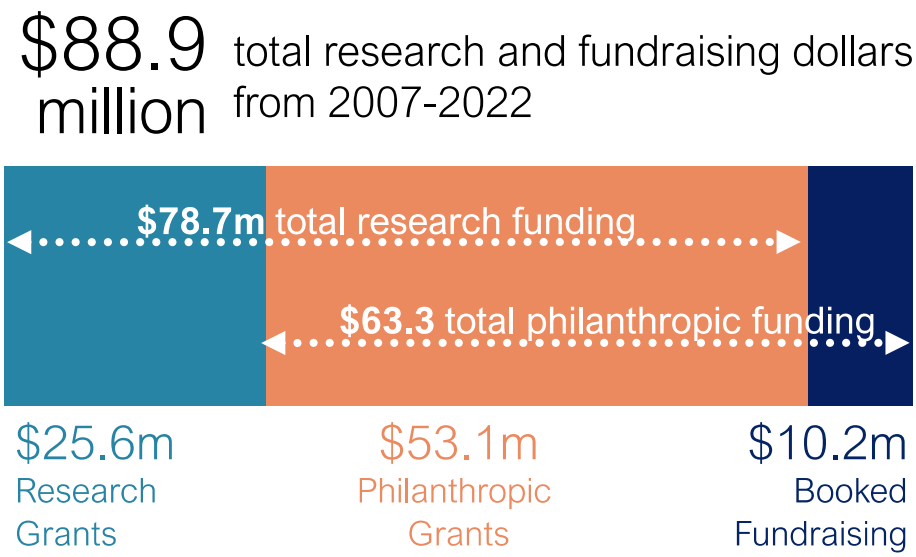
The Betty Irene Moore School of Nursing is grateful for the founding grant and continued support of the Gordon and Betty Moore Foundation. The Family Caregiving Institute at the Betty Irene Moore School of Nursing at UC Davis launched with a $5M Foundation grant in 2017; the Heather M. Young Postdoctoral Fellowship launched via a $1.7M grant in October of 2018; and the Betty Irene Moore Fellowship for Nurse Leaders and Innovators launched in November of 2019 with a $37.5M grant.

UC Davis leadership has been fully committed to the success of the Betty Irene Moore School of Nursing and has partnered with School leadership on meeting necessary growth milestones, including contributing more than $37 million for building Betty Irene Moore Hall. This is in addition to the history of campus partnership that includes facilitating review of new degrees and supporting the Dean leadership transition. UC Davis has been fully inclusive of the Betty Irene Moore School of Nursing both on the UC Davis and UC Davis Health campuses.

Professor and Dean Emerita Heather M. Young with the 2019 Heather M. Young Postdoctoral Fellows.

The School has also made successful inroads in sustainability beyond the Gordon and Betty Moore Foundation grant or campus funding. A commitment to philanthropy by staff, faculty, students and alumni, as well as growing philanthropic and research grant support, has contributed to the School's growth (Figure 13).

Figure 13. Betty Irene Moore School of Nursing funding



Inaugural cohorts set a humbling and important precedent of student and early alumni giving through the Nursing Science and Health-Care Leadership Student and Alumni Scholarship Fund, which was seeded with an initial gift from the 2012 MS-L and 2014 PhD cohorts and continues to grow with gifts from other students and alumni. The Class of 2015 Doctoral Student Scholarship Fund provides support to doctoral students demonstrating career achievements in scholarship, leadership, advocacy, community engagement or research.

It has always been important for the School to seek diverse external funding and faculty are having increasing success in securing high-impact grants. This includes a $2 million Patient Centered Outcomes Research Institute (PCORI) grant, as well as $1.38 million in Health Resources and Services Administration (HRSA) federal funding and $1.47 million in California SONG Brown grants in support of advanced practice provider training and student support.

External Funding Highlights

Donors

1254 individual donors

137 organization donors

Alumni Giving

270 alumni donors

$395,150 in total alumni giving

Student and Endowment Support

- Total endowment: $10,429,272 market value
- Scholarships: 65
- Endowed professor/deanships: 2
- Endowed scholarship funds awarded: $1,326,567
- Additional scholar support awarded: $313,000

Through FY21 Q3

Federal Grants

$18,728,833

State Grants

$3,098,592

Section summary

Since the 2007 grant announcement, the Betty Irene Moore School of Nursing team has launched the School, stabilized core programs and navigated unforeseen challenges. This has required the full energies and commitment of leadership at the School and campus level, as well as all faculty and staff, cultivating a culture of teamwork and innovation. Specific areas of influence have also been emerging over the past ten years. The next sections will explore these areas and consider how the School might capitalize on current efforts or consider additional opportunities in the next decade.

Section III: Impact

Introduction

No single action or outcome advances health, transforms health care or ignites bold system change on a local, national or global level on its own. These developments require a harmony of efforts across research, education, policy and practice. Given this understanding, faculty and staff have sought to influence the health care landscape through a myriad of trusted partnerships and ongoing actions in key priority areas, which have been highlighted throughout this report.

To understand and evaluate the School's impact for this end-of-grant report, it was important to not only provide evidence of contributions alumni, postdoctoral scholars, faculty, and leadership have made in the priority areas, but also to gather reflections from respected colleagues and stakeholders about those contributions. Thus, the School collaborated with its arms-length evaluation team from the School of Medicine Office of Research Evaluation Unit to develop an external review process to assess its level of influence and impact in four key priority areas.

1. Launch Outcomes and Growth Achievements
2. Vision for Leadership, Optimal Health and Health Care Equity for All
3. Influencing Systems Change, Creating Change Agents
4. Aging and Family Caregiving

School leadership outlined each "case" and School of Nursing faculty and staff groups were invited to participate in a group interview with the arms-length evaluators to share their thoughts on achievements and influence in their priority area. School of Nursing staff then worked with the evaluation team to develop each "case" for external review.

Four external review committees were organized to provide an external perspective and reflect on the School of Nursing's progress and impact toward its goals. The review committees, which included 4-5 reviewers who are national experts or experienced practitioners in the areas of focus, were identified by the School and invited to take part in the process.

Assessment process

Each reviewer received an evidence packet that provided detailed information about the School's achievements or progress in a specific "case" area of review. Reviewers independently appraised all materials and provided an overall impact rating on a 1-to-5-point scale as well as answered open-ended questions on strengths of the School, areas for improvement, and future opportunities.[3] For each topic area, reviewers' scores were averaged to issue a single (mean) Impact Score. The case findings on page 55 – 66 have been summarized by the Office of Research Evaluation Unit.

[3] Assessment questions were adapted from the National Institute for Occupational Health and Safety (NIOSH) expert panel review (p.32) and University of San Francisco's Sample Questions for External Reviewers (p. 2 – 3).

Summaries of external case reviews

Reflections on launch - outcomes

Reviewers:

- **Russ Bell, PhD**
  President, Retired
  Beckman Coulter
- **Linda Burnes Bolton, DrPH, MSN**
  Senior Vice President
  Chief Health Equity Officer
  Cedars-Sinai Medical Center
- **Joanne Disch, PhD, RN**
  Professor Ad Honorem
  University of Minnesota
- **Claire Fagin, PhD, RN**
  Dean Emeriti
  University of Pennsylvania School of Nursing
- **Lydia Yu, MHS**
  Senior Advisor
  Health Policy and Legislation
  UC Health, University of California, Office of the President

Impact score: 4.8
On a 5-point review scale, 5 represented "the School is progressing at a level that exceeds the progress one would expect of a top-tier nursing school in its first ten years. Its achievements would be considered outstanding and excellent by experts in nursing and health care."

School of Nursing's Influence Statement

The Betty Irene Moore School of Nursing at UC Davis' programs and alumni are influencing UC Davis Health systems of care and are part of a larger response to health care needs and trends in California. The School launched with a vision to enact systems change through education, partnership, and policy. Over the past ten years, it is beginning to realize this vision through its graduates, influence on campus and outcomes.

Reviewers' assessment of impact

Reviewers noted several strengths of the School including strong leadership, faculty and students bolstered by supportive university administration; high-quality graduate programs centered on preparing nurse leaders; and a committed focus on interprofessional education. One reviewer commented, "preparing all graduates as nurse leaders…quickly magnifies the impact on the nursing profession."

Additionally, reviewers praised the School's initial concept and vision as well as its strategic follow through on its goals. A reviewer summarized the development of the School noting, "The school has made significant strides in its ability to Call the Circle! They have invited diverse voices in from around the nation and identified a curricula that meets the future needs of our country."

Opportunities

Reviewers were asked to identify opportunities upon which the School might build. Opportunities were seen in collaboration, engagement, and innovation. For instance, the reviewers suggested:

- "Given the nature of the UC Davis campus and community, there exists a significant opportunity to establish the strongest academic/clinical partnership in the country, incorporating interprofessional aspects as well as community partnerships."
- Explore "opportunities for financial support/in kind given the number of School of Nursing graduates that go on to work for UC Davis Health (pipeline for hiring). The School is collaborative in nature, working with others on campus, and its sister UC nursing schools…encourage continued work with other University of California Schools of Nursing as appropriate."
- Continued "engagement of faculty, students, staff and board members on the overall mission [and] identification of the uniqueness that the school provides to students and faculty in terms of their experience and the opportunities they have to make a difference!"
- "Moving ahead of the tide whenever possible. Speaking up and out."
- "Continue commitment to producing transformative nursing leaders at every level…Do not broaden research focus prematurely."

Future Considerations

Reviewers were also asked to identify potential challenges the School might face in the next decade. They identified three areas.

Maintaining sustainability: Although the School has modeled sustainability on a tuition-based financial model, one reviewer suggested the School look to other funding sources such as increasing state funding, noting the amount received is lower than what other University of California nursing schools receive. The reviewer suggested the School "revisit the revenue amount received from the state (especially in light of the COVID-19 pandemic shining a spotlight on the state's need for health care workers, and potential surplus of state funds in 2022-2023)."

Changing learning environment and workforce: A reviewer summarized the second challenge commenting, "one area is to successfully anticipate the need for new kinds of knowledge and ways of teaching and learning. There are already shifts in competency requirements and the nature of the workforces. Reorienting the staff and faculty to these nascent trends will be crucial."

Communicating innovation and accomplishments: A third challenge noted by reviewers concerned the continuing engagement of a diverse student body and faculty to "move forward." One reviewer tied engagement to "conveying the innovative accomplishments of SON as a leader in nursing education throughout the country." They suggested "better marketing and/or faculty engagement and visibility in national initiatives could help."

"Kudos to the achievements of the Betty Irene Moore School of Nursing in its first ten years! I hope that GBMF is pleased with its investment in standing up the Davis nursing school and the legacy it and its graduates will have on the nursing profession."

Reviewers:

- **Bobbie Berkowitz, PhD, RN**
  Dean Emerita and Professor
  Columbia University
  School of Nursing
- **Frances Patmon, PhD, FNP-C**
  Transition of Care Nurse Practitioner
  Sutter Roseville Medical Center
- **Casey Shillam, PhD, RN**
  Dean and Professor
  University of Portland
  School of Nursing
- **Sarah Szanton, PhD, MSN**
  Dean and Professor
  Johns Hopkins University
  School of Nursing

Impact score: 4.5
On a 5-point review scale, 5 represented "the School has made major contribution(s) to leadership and health care equity which would be readily recognizable by disciplinary experts in the field."

A score of 4 represented the "School of Nursing has made some contributions and/or demonstrates great potential to contribute to leadership and health care equity which would be readily recognizable by experts in health care."

Reflections on leadership and health care equity - outcomes

School of Nursing's Influence Statement

Leadership and cultural inclusiveness are core values of the School of Nursing. Both of these core values are intended to help move the School closer to its long-term vision for impact. Over the first decade, foundational program building in leadership and in diversity, equity and inclusion has been developed, resulting in a springboard for emerging health equity strategies. As discussed in The Future of Nursing (FON) 2020 – 2030: Charting a Path to Achieve Health Equity report, better health outcomes lie in better health care and access to care for all. The report highlights the need to move from building the capacity of the nursing workforce to focusing on the question of to what end. As noted in the preface to the report, "Nursing capacity must be brought to bear on complex health and social issues and inequities." The Betty Irene Moore School of Nursing strives to champion students, alumni, faculty and staff leaders to meet these challenges.

Reviewers' assessment of impact

Reviewers suggested the School's emphasis on equity and leadership served as a building block for change. They pointed to the School's faculty connections, innovation, networks, and community engagement as major assets, which extended to the students, school, and entire university. As one reviewer wrote, "The School of Nursing and the health system understand the multi-faceted role of nursing in terms of innovation in how nursing is utilized beyond patient care." A second reviewer provided an overview of the School's strengths: "The school has blended these two important areas [leadership and health care equity] to now impact programs of research, clinical practice, and leadership through the alumni of programs and fellowships."

Opportunities

Reviewers identified various opportunities for the School to build upon existing strengths. Many of these opportunities focused on expansion and development of programs, especially around policy.

- "Building or collaborating to provide health care fellows to work in the Capitol"
- Developing "fellowships related to health care policy"
- "Continue to answer the question – to what end? And for whom and with whom?"
- "The time seems right to focus on establishing Centers of Excellence, such as the Family Caregiving Center. This approach would allow for intersections of different areas of expertise while focusing on one core area of impact."
- "Utilize expertise in policy that will focus on improving the lives of families, communities…focus on diversity while assuring that nursing is focused on equity."

Faculty guide student clinical skills and task training

Future Considerations

Building on these opportunities, reviewers also noted two potential challenges the School may face related to its goals around influencing leadership and health equity.

Developing leaders: One reviewer noted: "Leadership in health policy is an essential asset and critical for nursing." However, with the upcoming retirement of a large proportion of leaders and the challenges facing leadership in the health care delivery system, there will be a need to develop new leaders with unique skill sets. To this end, it was suggested that embedding design thinking, innovation, and business-models into all curricula for the next generation of leaders would be critically important. Additionally, opportunities for fellowships related to health care policy were also recommended for developing leaders.

Moving students through the pipeline: Related to developing leaders are the potential barriers to students entering and completing programs. One reviewer highlighted the challenge of students needing to pay to come to nursing school when this generation is hesitant to take on debt. Another reviewer commented on the challenge of securing clinical placements, "This continues to be difficult, fighting for placement." To develop nurse leaders, reviewers suggested recruiting and moving students through the program is key.

> "The founding of the School in principles of leadership was a powerful new chapter for academic nursing."

Reviewers:

- **Catherine Gilliss, PhD, RN**
  Dean and Professor
  University of California
  San Francisco
  School of Nursing
- **Cathryn Nation, MD**
  Vice President, UC Health
  University of California
  Office of the President
- **Jennie Chin Hansen, MSN**
  Senior Strategic Advisor
  Hirsch and Associates, LLC
- **J. Taylor Harden, PhD, RN**
  Visiting Professor
  University of Texas, Austin
  School of Nursing

Impact score: 4.3
On a 5-point review scale, a score of 4 represented the "School of Nursing has made some contributions and/or demonstrates great potential to contribute to systems change and creating change agents which would be readily recognizable by experts in health care."

Reflections on systems change and creating change agents - outcomes

School of Nursing's Influence Statement

The Betty Irene Moore School of Nursing's programs and alumni are influencing UC Davis Health systems of care and are part of a larger response to health care needs and trends in California and the nation. The School launched with a vision to enact systems change through education, partnership and policy. Since its founding, the School has established a variety of programs and internal and external partnerships that have both influenced the landscape of nursing and health education as well as developed a pipeline of change agents. The School also has supported the development of a workforce that serves rural or underserved communities.

Reviewers' assessment of impact

Reviewers noted many strengths of the School including its tremendous clarity in (and adherence to) its vision and mission; its establishment of a world class advisory group and highly capable faculty, particularly given the economic conditions present at launch; and its impact/influence on education, clinical practice, and policy.

Regarding education, reviewers commented on the School's focus on leadership development and interprofessional and interdisciplinary education and research across educational programs. They also highlighted the School's efforts in elevating and establishing "residencies" for smoother transition to practice" in a variety of areas.

Regarding clinical practice, reviewers praised the engagement of "clinicians who are also educators with a format that adds to preceptor and institutional relationships and credibility" as well as the development of "sophisticated simulation tools and methods useful for not only [their] own learners but used as an interprofessional template in the area of simulation." Reviewers also noted the School's impact on policy through its efforts supporting AB890.

Opportunities

The reviewers saw potential future opportunities for the School to leverage successes and convene and engage others to further their system change efforts. Selected examples highlight some of the reviewers' suggestions.

- Explore "synergy between the School and the Betty Irene Moore Fellowship for Nurse Leaders and Innovators to advocate for greater public funding of community and public health nursing."
- "Prioritizing work and strengthening the partnership with UCDH leaders and decision-makers will be critically important in expanding both teaching opportunities and future employment options for graduates."
- "Bring in experts (interdisciplinary who are leaders from different health and health care environments) as mentors and salon discussants about contemporary issues."
- If the National Advisory Council "is no longer active, would recommend reassessing the opportunities for guidance from thought leaders nationally."
- Confront "racism as a significant nursing challenge as we FIGHT collectively for real health care equity."
- "Sustain and possibly expand community partnerships that are closely aligned in mission and aims."
- "With the School's commitment to serving at-risk communities, show how the issues of disparity and diversity have been visible gaps and goals to close."

Future Considerations

In response to the question about potential challenges the School may need to address, reviewers' comments fell into two main categories.

Sustainability, including staffing and clinical teaching sites: Similar to reviewers of other areas, sustainability of the School and its programs was seen as a potential future challenge for systems change reviewers. In terms of financial sustainability, one reviewer stated, "Building strong and diversified revenue streams will help position the School for its next decade of success." Regarding sustaining programmatic resources, a second reviewer noted, "Challenges will continue around the recruitment and retention of top graded faculty educators. Without them, we cannot staff for future challenges of population health." Another commented, "It will also be important to seek new partners given growing pressures in accessing clinical teaching sites."

Telling the story of impact: Providing "evidence of impact" and "telling the story from origin to influence to impact" was posed as a challenge by two reviewers. As one reviewer states, "The report details what you have done but impact - to date - is limited. At this juncture, I would set metrics and start to measure. (You do what you measure.) For instance, the northern counties need health care providers. I would not just cite the numbers of students who rotated through or even moved there, but what kinds of lasting change can you facilitate through their educational experiences up north?"

Additional questions one reviewer suggested the School might explore included, "what you and the students have done to make a difference can be enhanced with a lens of diversity, first generation students, rural and collaboration and policy change can be made more powerfully for not only state but national impact."

"Commitments to collaborate across disciplines and with UCDH, and community/regional partners have helped build a strong and well-diversified foundation for teaching, research and practice."

Reviewers:

- **Barbara Bowers, PhD, RN**
  Emerita Professor
  University of Wisconsin-Madison School of Nursing
- **Barbara Given, PhD, MSN**
  Professor
  Michigan State University School of Nursing
- **Kathleen Kelly, MPA**
  Executive Director
  Family Caregiving Alliance
- **Peter Vitaliano, PhD**
  Professor
  University of Washington Psychiatry and Behavioral Health

Impact score: 5.0
On a 5-point review scale, 5 represented "the School has made major contribution(s) to family caregiving which would be readily recognizable by disciplinary experts in the field."

Reflections on contribution to family caregiving - outcomes

School of Nursing's Influence Statement

Family caregivers have always played a vital role in caring for older adults; however, this important contribution has remained relatively invisible in both health systems and the community. In past decades caregiving was defined narrowly and the vast majority of focus centered on dementia care. As such, funding opportunities targeted only specific interventions and limited inclusion of the full array of challenges family caregivers face across diverse circumstances. In recent years, the visibility and the importance of the role of the unpaid caregiver has risen. The Betty Irene Moore School of Nursing, including the Family Caregiving Institute (FCI), are elevating the role of caregiving through partnerships, convening experts to advance science, curriculum and practice, and by establishing a caregiving curriculum, research body of work and creating models of care.

Reviewers' assessment of impact

Reviewers noted a major strength was the extremely wide and diverse reach of the School's caregiving work in the areas of education, policy, research, and practice. They specifically acknowledged how the FCI's leadership and strong partnerships with community, academic institutions and external agencies (such as AARP) contributed to local, state, and national impact. Reviewers also highlighted the School's ability to identify and pursue cutting edge issues. One reviewer wrote the School and FCI "have made a very impressive impact on how caregiving is conceptualized, studied, taught about and implemented."

Summarizing the overall strengths, a second reviewer noted, "I believe the faculty have been very productive…Their unusual blend of clinical expertise with state-of-the-art research methods will solidify the Betty Irene Moore's place as one of the best venues to do caregiving research."

Opportunities

Reviewers saw opportunities for the School to set a standard for family caregiving, develop a model for adoption and expand its influence and contributions. Selected reviewers' comments on potential opportunities included:

- "With the interdisciplinary staff assembled at the SON, there is the opportunity to develop a program that would establish a recognized level of skills in working with caregiving families across diagnosis and health settings."
- "Be a model for other programs to emulate, specifically in terms of partnerships."
- "I would like to see the FCI hold training programs for schools of nursing across the country to develop, as much as possible, similar approaches."
- "Findings of FCI need to be more broadly disseminated...To reach both those in the formal system as well as the informal system."

> "What sets this program apart from many others that focus on caregiving is the strong and strategic partnerships that FCI leaders have developed, the ability to identify and pursue cutting edge issues, and the direct impact on clinical services."

Future Considerations

Reviewers also identified two potential challenges the School may encounter in the next decade.

Sustainability: As mentioned in previous review sections, sustainable funding was noted as a potential future challenge. One reviewer wrote, "It appears that NIH is not continuing some of the program announcements that they have had for a few years. The priority seems to be lower or in fact missing, thus getting funding might be an issue." Another concurred, "It would be important to have a clear succession plan to ensure sustainability of (family caregiving) programs. Sustainability is always a challenge with implementation of clinical programs in particular. While I absolutely applaud the wide range of efforts and impacts, it would be important to be cognizant of not spreading themselves too thin and to attend carefully to sustainability of the programs and even more so, the quality of the programs."

Representation of stakeholders: A common theme among multiple reviewers was the importance of recognizing caregiving sub-groups. For instance, one reviewer commented on "the difficulty of having one or two individuals represent whole categories of key [caregiver] stakeholders" in practice, research, and policy. Related to research on the population of caregivers, another reviewer highlighted the importance of identifying "subgroups of caregivers that are at greatest risk for relinquishing their roles because of exacerbations of co-morbidities in their health history." In regard to the School itself, an eye toward "sufficient leadership from less well represented stakeholder groups in FCI leadership positions" was recommended.

School of Nursing leadership response

It was enormously gratifying to read the encouraging words of the panel of experts and to understand what they identified as program strengths. It was also advantageous to understand where this group sees challenges ahead or areas where the School can continue to grow.

The leadership team understands that it needs to be strategic about any future growth in programs or research while remaining committed to the School's roots in leadership and innovation. Preparing transformative leaders at every level promotes bold system change. Similarly, faculty and staff will continue to move new ideas forward with thoughtful analysis and an innovative spirit.

The School will always look for ways to capitalize on state funding opportunities, and leadership remains aware that such funding will only enhance, not fully support, the innovative and transformative programs and initiatives required to realize the School's potential as a national leader. Future efforts will also emphasize the importance of stakeholder input and relationship building. The National Advisory Council has been an invaluable resource for the School – both as expert consultants and relationship builders. The School is reassessing the composition of the Council and is in recruitment for members with both national and local insights.

Faculty and staff are already imagining the next phase of development in the School's areas of strength and will leverage leadership, bold system change and innovation to influence health care delivery and better health outcomes.

Section IV: Future

The faculty and staff of the Betty Irene Moore School of Nursing at UC Davis have deployed strategic problem solving, robust analysis and data-driven evaluation to establish the School as an emerging leader in education, research, clinical practice and health policy. From the beginning, the National Advisory Council encouraged the leadership team to consider where the School would contribute on a deeper and broader level. Faculty leaders responded by convening stakeholders in areas such as aging, caregiving, health equity and leadership in order to lead significant conversations with the ability to influence outside of UC Davis.

This momentum has led to signature programs such as the Family Caregiving Institute and the Betty Irene Moore Fellowship for Nurse Fellows and Innovators. School of Nursing leadership acknowledges that to be successful in its second decade, it will need to commit resources and seek outside investment to innovate and actualize the envisioned research program as other areas of influence further develop. It will also be important to grow support for the PhD program in order to continue to address a nurse faculty shortage and to discover new knowledge necessary to address the complex challenges of delivering quality care and advancing health. As has been true since the inception of the School, the challenge of supporting emerging nurse scientists requires external resources to attract the best and brightest candidates to pursue academic careers. During the first decade, the doctoral alumni have delivered on the promise of the doctoral program and are leaders in many settings.

In 2021 the School underwent a strategic planning process that coincided with UC Davis Health, including the School of Medicine, and the UC Davis Health Office of Health Equity, Diversity and Inclusion also undertaking complementary strategic planning efforts. This presented an opportunity to identify emerging areas of influence for the School while also capitalizing on emerging health system efforts that could further catalyze the School's mission and vison. The outcomes of the strategic planning analysis informed goals and strategies to optimize health through integrated, innovative care delivery, prepare the next generation of leaders in healthcare, grow the research enterprise, and advance community and workforce partnerships that support health equity.

In the next ten years, the following themes will be essential to the future of nursing and healthcare and will be used to leverage the Betty Irene Moore School of Nursing's unique position within UC Davis and UC Davis Health to build local and national influence through bold system change.

Advance health for the aging population, inclusive of family caregivers

Care provided by family caregivers is conservatively estimated to exceed $470 billion dollars annually, eclipsing annual government spending on long-term care and comprising the majority of long-term care in the United States. Nurses and advanced practice providers are in a unique position to support family caregivers who are often providing complex care in the home. These health professionals understand the care required across settings -- inpatient, outpatient and in the community – and can apply a holistic family-centered approach.

In just five years, with support from the Gordon and Betty More Foundation, the Family Caregiving Institute at the Betty Irene Moore School of Nursing at UC Davis established a strong track record as a national leader in family caregiving research and education with emerging influence in clinical practice and policy. The faculty and staff team have advanced a variety of initiatives to support caregivers and have developed a reputation as a national convener, engaging experts in order to establish a research agenda and educational competencies to further the field. The plan is to expand the reach of the Institute in the near future through multi-pronged solutions across research, education, practice and policy spaces. This includes continuing to convene stakeholders and expanding workforce education offerings and connections between research and practice.

Nurses and advanced practice providers unleash the power of data to guide and inform individualized patient care

School leaders have sought out conversations and collaborations, such as Healthy Aging in a Digital World, that leverage the power of health data to improve health outcomes. It will be important to build on this effort to actualize new and necessary approaches to nursing care. Informatics innovation must become the next level of expertise nurses and advanced practice providers utilize for improving the quality and safety of care, and patient outcomes. While a significant departure from aligning solely with the national and organizational policies and care standards that typically guide nursing practice, this approach can power more informed decisions resulting in more individualized patient care.

UC Davis Health's work to build data systems to inform patient care and create distributive networks and strategic partnerships with global organizations such as Amazon Web Services creates a fertile ground for new opportunities and energy for collaboration. New appointments in informatics and data science also signal a determination to become a local, regional and national leader in precision care. The School of Nursing is poised to take a leadership role in this work, including growing the opportunity to meaningfully connect the work of the Family Caregiving Institute and the Healthy Aging in a Digital World initiative to drive technologies to support an individualized model of care for older adults.

Technology leveraged to improve systems that enhance quality and safety

The adoption of innovative technologies will have the greatest impact on nursing, including the way nurses and advanced practice providers care for patients and influence patient outcomes. These health care professionals are positioned to integrate social, familial and personal determinants of health into any treatment plan. The School will continue to prepare nurse and health care leaders with a broad world-view and will increase the emphasis on their role in creating and/or implementing technologies and processes that improve health outcomes through efficiencies, improved clinical-decision making (including diagnosis prediction of treatment success) and by making health care safer and access to care more equitable.

Interdisciplinary education and practice, as well as innovative partnerships, will only grow in importance as multiple fields and industries look for ways to innovate. The School has always valued non-traditional routes and will continue to invent in service of patient safety and quality improvement. UC Davis has also taken steps to foster an inter-disciplinary environment through Aggie Square, a planned innovation hub on the UC Davis Sacramento campus that will bring university, industry and community partners together. The graduate curriculum coupled with the Betty Irene Moore Fellowship for Nurse Leaders and Innovators provides an extensive and varied content to advance this theme. Leadership, ever core to the Betty Irene Moore School of Nursing's vision for excellence, will naturally be deployed to support technology systems design and systems change.

Promote a vision for health equity and inclusion in nursing and advanced practice provider education and practice

The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity called for nurses to leverage their collective power, knowledge, and skills in service of improving health outcomes for communities that have historically experienced health inequities. This call to action has galvanized the field and provides an opportunity for the School to further integrate health equity into education and practice.

Health inequities have multiple implications for health outcomes including economic costs and health care costs, as well as individual quality of life outcomes. Health disparities represent a complex problem without a single solution; however, an emergence of multiple efforts across disciplines has the power to improve outcomes.

The School's programs have always prepared equity minded health professionals trained to apply social determinants of health to complex problems. School processes and policies are also committed to achieving a representative healthcare workforce, which is built upon recruitment and retention of a diverse faculty, staff and student body. As a component of inclusion, the School can also advance the evidence to bolster the well-being of nurses and health providers as a component of quality and safety initiatives.

In the coming years, faculty, staff and students will engage in leadership, system change and quality improvement efforts for all communities building on the existing culture and deep commitment to community partnerships. Overall quality and health outcomes will only be achieved by directly focusing on marginalized communities through a holistic approach to population health. Expanded community-participatory research, enhanced education, and local, regional and national engagement by the faculty and staff of the School will contribute to these strategic goals.

Summary

The Betty Irene Moore School of Nursing leadership team sees its future in the strength of its past. Exciting opportunities exist to influence health outcomes for older adults, build better models of individualized care through data and technology, and increase health equity across communities. This can only be realized with sustained excellence in education, research, practice and policy.

Opportunities exist to attract new student audiences committed to our mission and vision and who will be empowered to make bold system changes in healthcare. To bring this to fruition, identifying new corporate and foundation partners along with other revenue opportunities will be a major part of future strategies.

The leadership of the Betty Irene Moore School of Nursing is committed to ensuring the legacy of Mrs. Moore's vision is sustained in perpetuity. UC Davis remains grateful for the trust of the Foundation in campus leaders to launch this nationally recognized school. The leadership team looks forward to keeping the Gordon and Betty Moore Foundation apprised of future accomplishments and strategic directions as they unfold in the next decade.

Appendix – External Review Cases

A. Launch Outcomes and Growth Achievements

B. Vision for Leadership, Optimal Health and Health Care Equity for All

C. Influencing Systems Change, Creating Change Agents

D. Aging and Family Caregiving

E. External Review Committee List

Appendix A

UC DAVIS HEALTH | BETTY IRENE MOORE SCHOOL OF NURSING

Launch Outcomes:
Achievements in the First Decade

A Message from the Betty Irene Moore School of Nursing at UC Davis

This packet contains a high-level overview of the Betty Irene Moore School of Nursing's achievements and contributions in its first decade. These outcomes have been organized around the original mission and vision. We would appreciate your reflections on the school's influence and impact over the last 10 years as it will inform our self-assessment and help us understand the contributions the Betty Irene Moore School of Nursing has made in nursing and clinician education, nursing science, and health care. We would appreciate your feedback on areas of significance that are notable as well as opportunities for improvement as we continue to develop and broaden our reach in the coming years. If you have questions about the material or the review, please contact Stacey Pasco at slpasco@ucdavis.edu. Thank you for your time and contribution to our school's development.

Stephen Cavanagh, PhD, MPA, RN, FACHE, FAAN
Dignity Health Dean's Chair for Nursing Leadership
Dean and Professor, Betty Irene Moore School of Nursing

Material contained in review packet:

3 **A History of the Betty Irene Moore School of Nursing**

- Vision and Mission at School Launch
- Timeline
- Logic Model

7 **Launch Outcomes: Achievements in the First Decade**

24 **School of Nursing's Launch Outcomes Assessment**

A History of the Betty Irene Moore School of Nursing

The Betty Irene Moore School of Nursing at UC Davis prepares successful leaders in health care. We offer programs for future nurses, physician assistants, family nurse practitioners and nursing science researchers. As one of the only graduate nursing schools committed to activating change where it's needed the most, the school goes beyond clinical education with programs that provide graduates with the skills, confidence and vision to be change agents on many levels and with many different titles.

The Betty Irene Moore School of Nursing at UC Davis was established in March 2009 through a $100 million commitment from the Gordon and Betty Moore Foundation. Together, we work toward a future where health and well-being are open, accessible and equitable.

The school admitted its first classes in Fall 2010. The school has offered five graduate degree programs over its first decade:

- Doctor of Philosophy in Nursing Science and Health-Care Leadership
- Master of Science in Nursing Science and Health-Care Leadership
- Master's now Doctor of Nursing Practice — Family Nurse Practitioner
- Master of Health Services — Physician Assistant Studies
- Master's Entry Program in Nursing

The graduate degree programs are led by the Nursing Science and Health-Care Leadership Graduate Group, an interprofessional team of more than 60 faculty members from disciplines including nursing, medicine, health informatics, nutrition, biostatistics, pharmacy, sociology and public health. The School of Nursing is part of UC Davis Health, a hub of innovation that encompasses UC Davis Medical Center, UC Davis School of Medicine and UC Davis Medical Group.

UC Davis Health, one of five health systems within the University of California, is an integrated, academic health system consisting of the UC Davis School of Medicine, the Betty Irene Moore School of Nursing, the 646-bed, multispecialty, acute-care hospital and clinical services of UC Davis Medical Center and the UC Davis Medical Group. The health system also includes the UC Davis Comprehensive Cancer Center, UC Davis Children's Hospital and a Level I trauma center.

The health system is a major driver of economic prosperity in the Sacramento region and Northern California, generating more than $3.4 billion in annual economic output and more than 20,000 jobs. The health system is a hub of innovation that is improving lives and transforming health care by providing excellent patient care, conducting groundbreaking research, fostering innovative, interprofessional education, and creating dynamic, productive partnerships with the community.

2020 marked a significant milestone for the Betty Irene Moore School of Nursing at UC Davis. The first 33 students embarked upon their graduate education at the school 10 years ago. Now, more than 835 alumni make an indelible impact on the clinics, classrooms and communities in which they serve. They embody and enact the vision and mission of our founders from bedside care to individuals and families to bold changes in health care systems across California and the nation.

Vision

Vision

The Betty Irene Moore School of Nursing at UC Davis advances health and ignites leadership through innovative education, transformative research and bold system change.

Mission

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence through immersive, interprofessional and interdisciplinary education and research in partnership with the communities it serves. Faculty, staff and students discover and disseminate knowledge to advance health, improve quality of care and shape policy.

CORE ATTRIBUTES

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence and addresses urgent societal needs through:

- Leadership development—build capacity for advocacy and action at all levels.
- Interprofessional/interdisciplinary education—health professionals learn multiple perspectives to work and communicate as teams.
- Transformative research—apply the science of nursing to improve health and reshape health systems with emphasis on aging, rural health and diverse communities.
- Cultural inclusiveness—teach culturally appropriate approaches to care and involve communities to design and conduct relevant research.
- Innovative technology—use technology to create an engaged and interactive approach to nursing education, research and practice.

UCDAVIS
BETTY IRENE MOORE
SCHOOL OF NURSING

Betty Irene Moore School of Nursing Timeline

2007

Early planning

The Gordon and Betty Moore Foundation and UC Davis **announce $100 million commitment** to launch school of nursing at UC Davis

UC Davis leaders **meet with Mrs. Moore** to review leadership and strategic development

2008

Great Recession

UC Board of Regents **appoints Heather M. Young** as associate vice chancellor for nursing at UC Davis

School's first faculty member Debbie Ward arrives, searches launch for founding faculty

Strategic Design Summit convened in Sacramento with national nursing and education thought leaders to develop curriculum, partnerships and faculty proposals

2009

University of California Board of Regents **formally approves** the Betty Irene Moore School of Nursing

UC Davis **convenes National Advisory Board** of national nursing leaders as well as UC Davis leadership to build the vision and mission for the school

2010

UC Office of the President (UCOP) approves interprofessional Nursing Science and Health-Care Leadership Graduate Degree Programs: **MS** and **PhD**

Inaugural **Welcome Ceremony** for 8 PhDs and 25 Master of Science-Leadership classes; **start of National Advisory Council** chaired by Dr. Fagin, Dean Emeritus, Univ of Penn SON

Academic programs launch with **27 interprofessional faculty** in inaugural Nursing Science and Health Care Leadership Graduate Group

2011

Betty Irene Moore School of Nursing **appoints first associate dean for research**, Dr. Jill Joseph

Commission of Collegiate Nursing Education (CCNE) **accredits MS-L program**

2012

Master of Science leadership (**MS-L**) program **inaugural cohort graduates**

CCNE **accredits MSL**

Program engages **9 community partners** in Long Term Care-based participatory collaborations

2013

Expansion

UC Davis Master of Science - Family Nurse Practitioner (**FNP**), Master of Health Services - Physician Assistant Studies (**PA**) **programs transition to School of Nursing** as interprofessional master's degree programs

2014

Inaugural cohort of Doctor of Philosophy candidates receive degrees

Western Association of Schools and Colleges (WASC) **accredits PhD program**

2015

$2.5 million gift from Dignity Health creates **first endowed deanship at UC Davis**

Ground breaks on Betty Irene Moore Hall

Inaugural cohorts of the FNP and PA programs **graduate**

2016

Inaugural cohort matriculates into Master's Entry Program in Nursing (**MEPN**)

CCNE **accredits FNP program;** ARC-PA **accredits PA program**

SON partners with more than **450 clinical sites** across California

2017

Family Caregiving Institute launched with a $5M grant from the Gordon and Betty Moore Foundation

Grand Opening of Betty Irene Moore Hall

CCNE **accredits MEPN program; Inaugural cohort** in Master's Entry Program in Nursing graduates

2018

Dean transition

First time **alumni outnumber current students**

Founding Dean **Dr. Heather M. Young steps down** after 10 years of leadership; Dr. Debbie Ward appointed as interim dean

Gordon and Betty Moore Foundation establishes the $1.7M **Heather M. Young Postdoctoral Fellowship.**

2019

Dr. Stephen J. Cavanagh appointed as the school's second dean and Dignity Health Dean's Chair for Nurse Leadership

The **Nurse Practitioner Residency program is established** among the School of Nursing, UC Davis Health Medical Center, and multiple Federally Qualified Health Clinics

The Betty Irene Moore **Fellowship for Nurse Leaders and Innovators launches** with a $37.5 million grant from GBMF

2020

New strategies
COVID-19 pandemic

School moves to **online curriculum** as necessitated by COVID-19 pandemic. All eligible students **graduate on time**

2021

MS-L program paused after graduating 2021 class. Leadership themes remain integrated through all programs, specifically the **new Doctor of Nursing Practice (DNP-FNP) degree**, which opened admissions in fall 2021

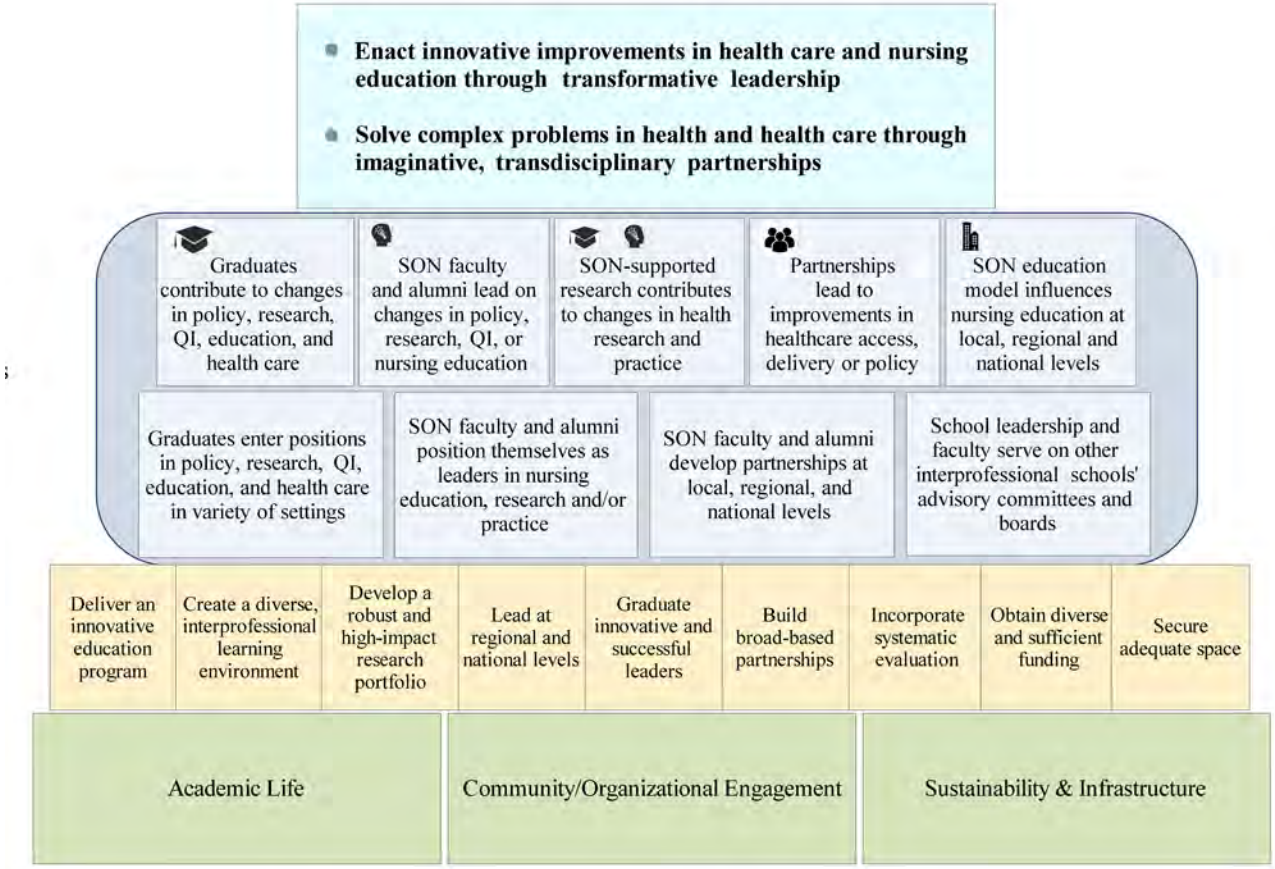
Consortium Office for UC Psychiatric Mental Health Nurse Practitioner (PMHNP) post-graduate certificate is established with a grant from the California Health Care Foundation

Janice Bell is announced as the **Western Health Advantage Endowed Professorship**

38 full-time faculty and 7 part-time faculty

LOGIC MODEL

To articulate the short-term and intermediate goals of the Betty Irene Moore School of Nursing, a program theory-driven evaluation approach was used.[1] In this approach, the theory or logic that underlies a program is visually represented through a model. The School of Nursing logic model was developed collaboratively by the school leadership and evaluators. The school's logic model (shown below) highlights the foundational elements on which the school was built and the expected intermediate outcomes (middle blue section) and long-term outcomes (top section).



[1] Donaldson, SI. (2007). Program Theory-Driven Evaluation Science: Strategies and Applications. Taylor & Francis: New York.

Launch Outcomes: Achievements in the First Decade

I. Introduction

Over the past decade, the Betty Irene Moore School of Nursing at UC Davis has built upon five foundational pillars to actualize its vision and mission. The School structured its work around the core concepts outlined in the vision and mission at launch, as well as outcome goals highlighted in its strategic evaluation plan logic model (see page 5 of this document). These pillars are:

- Leadership
- Innovative Interprofessional Education
- Cultural Inclusiveness
- Transformative Research
- Innovative Technology

The School also launched with an emphasis on evaluation, engaging arm's length evaluators from the UC Davis School of Medicine Office of Research Evaluation Unit to annually assess the School's development around academic, community engagement, and sustainability milestones. This included a robust focus group model during the early years of each academic program, which drove curriculum changes, monitored student satisfaction, and informed strategic change. Students in inaugural cohorts were instrumental in setting curricular directions and that student feedback loop continues today.

What follows is a high-level outline of achievements under each of these five pillars.

II. Leadership

Core Value: Leadership - build capacity for advocacy and action at all levels.
Related Logic Model Outcomes: Lead at regional and national levels; Graduate innovative and successful leaders; Faculty and alumni position themselves as leaders in nursing education, research and/or practice; Faculty and alumni contribute to changes in policy, research, quality improvement and health care.

Building capacity for advocacy and action at all levels

Leadership has been a core principle of the Betty Irene Moore School of Nursing since its launch. As stated, the School intends to build capacity for advocacy and action at all levels – meaning, all professionals can lead from where they are, at any point in their career. The School has been intentional about building leadership into the curriculum and has begun to see the fruits of this effort. Highlights of the School's efforts and accomplishments include:

- **Curriculum to Actualize Leadership in Students –** The founding School of Nursing faculty built a curriculum to actualize leadership in students. The foundational course, Leadership in Healthcare (NRS 203), has been open to interprofessional graduate students in the health sciences since the

School launched. All Betty Irene Moore School of Nursing students are required to take this course; however, leadership is emphasized throughout the curriculum of all programs. In this course, students learn basic theoretical principles of leadership and have opportunities to practice leadership skills related to active listening and strategic communication with various stakeholders, goal setting, and team building. Students also learn how to engage with governmental and regulatory agencies and how to communicate effectively via letters to the editor and other publications. Graduates lead projects or teams on the job and assume leadership roles in their community. Initial courses also focused on community-based learning (NRS 206) and implementation science (NRS 202). In many instances master's and doctoral students learned together. The inaugural programs were designed to conclude with a master's thesis or doctoral dissertation.

- **Nursing Science and Health-Care Leadership Graduate Group –** This group, made up of more than 60 faculty from across UC Davis, oversees the curriculum for each program at the School of Nursing. This includes curricula for the inaugural Master of Science (MS-L) and Doctor of Philosophy (PhD) programs, and later, the Master of Science – Family Nurse Practitioner (NP) and Master of Health Services – Physician Assistant (PA) programs, as well as the Master's Entry Program in Nursing (MEPN).

- **Student Leadership Immersion Week –** One of the School's corner-stone student experiences is the Student Leadership Immersion Week. This mandatory orientation for students launched with the first cohorts and continues to this day. Immersion steeps students in the Betty Irene Moore School of Nursing philosophy as they are introduced to nursing leadership concepts, team building, and faculty, staff and other students.

- **Quality Champions –** The influence of leadership on students' career trajectories was immediately apparent as many of the MS-L students become quality champions at UC Davis Health even prior to graduation. These roles allowed the system to benefit from the student's burgeoning leadership and quality improvement skills, while increasing care outcomes. The MS-L program went on to inform the foundations of future academic programs, including the soon to launch (June 2022) Doctor of Nursing Practice – Family Nurse Practitioner (DNP-FNP) program. The foundational content of the MS-L program was based on the core values of the School and the resulting coursework informed the NP, PA, and MEPN programs as they launched. The initial courses in leadership, systems change, health informatics and social determinants of health were all continued as courses or threads in each of the clinical programs.

- **Top 25 Best Master's Degree Nursing Programs –** The Betty Irene Moore School of Nursing was ranked as one of the top 50 schools of nursing in the country, for the master's leadership program, by U.S. News and World Report the first year the School was eligible. By 2021, the Master's Entry Program in Nursing and master's-degree leadership program were ranked 40th, up six spots from 2020. In 2022, the programs moved up to rank among the top 25 best master's-degree nursing programs in the publication's Best Graduate Schools report.

- **Betty Irene Moore Fellowship for Nurse Leaders and Innovators -** A natural extension of the School's history creating and advocating for student leaders is the Betty Irene Moore Fellowship for Nurse Leaders and Innovators. The national program launched in November 2019 with a $37.5M grant from the Gordon and Betty Moore Foundation. The program recognizes and advances early to mid-career nursing scholars and innovators with high potential to accelerate leadership in nursing-science research, practice, education, policy, and entrepreneurship. It is

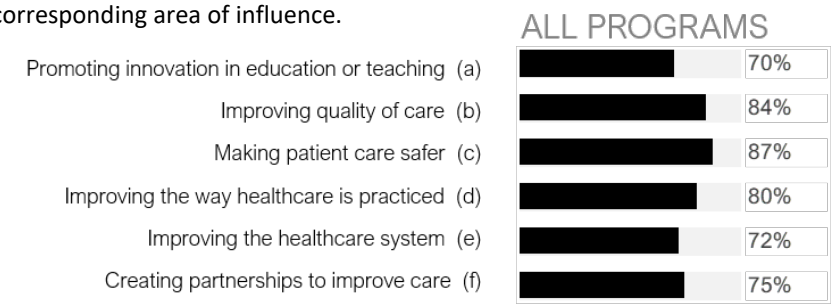
funded for five full cohorts from 2020 through 2025; and includes Fellows from the Betty Irene Moore School of Nursing. The Fellowship deepens the School's commitment to fostering the next generation of nurse leadership and innovation by working collaboratively on a national stage.

Alumni contributing and leading at the academic, research, community, and policy levels

The School of Nursing aims to develop leaders across a range of priority areas, including in healthcare policy, research, education or teaching, clinical care, and quality improvement. As a single role may involve several of these areas, alumni of the school's five educational programs were asked to rate their self-perceived level of contribution in the school's six areas of impact on the 2021 alumni survey. Alumni rated their contribution on a scale of 1-10 (1 = I have not contributed at all in this area; 10 = I have contributed a great deal in this area). Overall, 163 alumni answered the survey with a response rate of 54% (PhD); 29% (MS-L); 30% (NP); 19% (PA); and 32% (MEPN). Figure 1 below shows alumni who rated their contributions moderately to highly across all areas of impact (i.e., 5 or higher) for all programs.

The alumni survey also asked graduates to report whether they held a leadership or management role within their current professional positions. Of the alumni who responded, 77% of PhD alumni, 83% of MS-L alumni, 50% of NP alumni, 53% of PA alumni, and 47% of MEPN alumni reported being in leadership positions.

Percent of alumni who reported moderate to high contribution (5-10) in the corresponding area of influence.



A selection of leadership roles includes:

- Dr. Casey Shillam (2010 – 2012 postdoctoral fellow) is the current Dean of the University of Portland School of Nursing and is an RWJF and a Fellow in the American Academy of Nursing (AAN).

- Dr. Sheridan Miyamoto (PhD 2014), Associate Professor at Penn State and Director of the Sexual Assault Forensic Examination Telehealth (SAFE-T) Center, has a nationally recognized body of research on child maltreatment and sexual assault. Dr. Miyamoto is also a Fellow of the American Academy of Nursing (FAAN) and an inaugural fellows of the Betty Irene Moore Fellowship for Nurse Leaders and Innovators.

- Dr. Perry Gee (PhD 2014) is the first Nurse Scientist for Intermountain Healthcare in Salt Lake City and is currently an adjunct faculty member at the University of Utah, University of California, and Arizona State University. Dr. Gee is also a Fellow of the American Academy of Nursing (FAAN).

- Dr. Rayne Soriano (PhD 2015) is the Regional Director for Operations and Nursing Professional Practice at Kaiser Permanente Hawaii and Adjunct Professor for the University of San Francisco.

- Melissa Johnson-Camacho (MS-L 2019) is the California Nurses Association Chief Nurse Representative for UC Davis Medical Center.

- Jonathan Lippman (PA 2019) founded a small business to help PA students prepare for the national PA board exam, the Physician Assistant National Certifying Examination (PANCE).

- Brandon Coustette (MEPN 2018) is an emergency department nurse in Chico, California, and a clinical instructor for the nursing program at California State University, Chico. He engages policy makers on investing in mental health services based on what he experiences in practice.

- Student leadership and participation in professional societies connect communities.

    - MS-L alumus Carter Todd (MS-L 2019), also recognized as a Sacramento 40 Under 40 by the Sacramento Business Journal, and MS-L graduate (2018) Sheree Criner launched the inaugural Sacramento chapter of the National Black Nurses Association - the Capitol City Black Nurses Association (CCBNA). CCBNA advocates for nurses and optimizes health outcomes in communities where health disparities exist while also enhancing the nursing education pipeline.

    - Sandra Calderon (NP 2015) helped launch the local chapter of the National Association of Hispanic Nurses (NAHN) and serves as current secretary. She is currently a PhD student at the School of Nursing, as well.

    - Students from the inaugural cohorts and founding faculty also started the local Sigma Theta Tau chapter in partnership with California State University, Sacramento to recognize leadership and excellence in nursing. Members from both schools continue to lead the board, present research, and host professional events together.

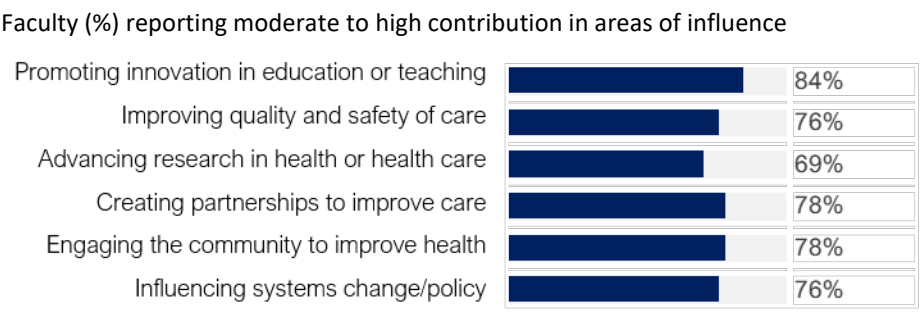
- School of Nursing alumni have also contributed to nursing education and practice in the region. More than 600 alumni have served in California as practitioners or educators. More than 40 alumni, including post-doctoral fellows, hold academic appointments in California or in six other states. This includes alumni within the California State University system. There are also many alumni working as clinical instructors or preceptors, including in the UC Davis Health System.

Faculty contributing and leading in nursing education, research, and or practice

In 2021, faculty were surveyed to gather information about their contributions and leadership in several priority areas. Thirty-seven of the 38 faculty responded to the survey. Some results are presented below.

- 80% of faculty report they are engaged in research and/or disseminating knowledge with interdisciplinary teams and/or non-traditional colleagues emphasizing quality and safety, practice innovation and interprofessional education. Examples include the SPLICE program, NP Residency program, the Central Valley Road Trip, co-championing the UC Davis Healthy Aging in a Digital World initiative, ACTIVATE: telehealth for underserved and rural communities in COVID and development of AARP videos for family caregivers.

- Similar to alumni, faculty were asked to self-rate their contributions in six areas. In each area, nearly 70% of faculty rated their contribution moderate to high (i.e., 5 or higher on a 10-point scale with 1 = "I have not contributed at all" to 10 = "I have contributed a great deal in this area") (figure above). Faculty reported contributing most to education or teaching (84%), whereas their lowest average ratings were advancing research in health or healthcare (69%). (Note: this graphic was updated in the March 31, 2022 report.)



Faculty also influence health care challenges and opportunities through professional organizations or state and national agencies. A selection of leadership roles includes:

- Associate Clinical Professor Dr. Susan Adams was the legislative liaison for the California Association for Nurse Practitioners (2020)
- Clinical Professor Dr. Debra Bakerjian is Board Chair for the Health Impact California Statewide Nursing Workforce group
- Assistant Professor Dr. Julie Bidwell is Vice Chair, Complex Cardiovascular Patient and Family Care Committee, Council on Cardiovascular and Stroke Nursing, American Heart Association
- Associate Professor Dr. Tae Youn Kim is a member of the Nursing Terminology Work Group, California Hospitals Association
- Assistant Professor of Clinical Nursing Dr. Jessica Draughon Moret was member-at-large for the Nursing Network on Violence Against Women International Board of Directors (2015 – 2016)
- Clinical Professor and FCI Director Dr. Terri Harvath is a member of the Advisory Board for the Edward R. Roybal Centers for Translational Research in the Behavioral and Social Sciences of Aging at Emory University and Oregon Health and Science University
- Associate Clinical Professor Dr. Jann Murray-Garcia is a member, AAMC Equity, Diversity and Inclusion Cross-Continuum Competency Committee, Association of Medical Colleges
- Associate Clinical Professor Dr. Shana Ruggenberg is Secretary for the California Association of Colleges of Nursing Board of Directors
- Associate Professor Emeritus Dr. Elena Siegel is a member of the LeadingAge University Advisory Council
- Assistant Clinical Professor Gordon Worley is President, California Association for Nurse Practitioners, Sacramento Chapter
- Professor and Dean Emerita Dr. Heather M. Young is co-chair of the University of California Office of the President COVID-19 working group on academics; member, UC Health Coordinating Committee Executive Group

III. Innovative Interprofessional Education

Core Value: Interprofessional/Interdisciplinary Education - health professionals learn multiple perspectives to work and communicate as teams.
Related Logic Model Outcomes: Create a diverse interprofessional learning environment; Deliver an innovative education program; SON education model influences nursing education at local, regional and national levels.

Creating a diverse interprofessional learning environment

UC Davis's unique approach to graduate education allowed the Betty Irene Moore School of Nursing to organize as an interdisciplinary graduate group, which well served its vision for nursing education. This model gives students the freedom to explore interests across disciplines, engage in various areas of research and otherwise expand their knowledge beyond their area of core study. The Nursing Science and Health-Care Leadership Graduate Group, which includes faculty from various disciplines including nursing, medicine, health informatics, nutrition, , human ecology, pharmacy, plant biology, psychology, sociology and public health, oversees the curriculum for each of the School's academic programs. Similar to its approach with leadership, the School has integrated interprofessional education and training throughout the educational experience for all academic programs. All MS-L and PhD students work with faculty outside of nursing on their thesis and dissertations and all clinical students work with interprofessional faculty members during their project work and education.

The School used the landmark 2011 Institute of Medicine Future of Nursing: Leading change, Advancing Health report recommendations as guideposts, exploring how nurses' roles, responsibilities and education must change to meet the increased demand for care that will be created by health care reform, and to advance improvements in an increasingly complex health system. The PhD program, intended to create academic and research professionals, was deliberately designed to be interdisciplinary in nature. Recruiting candidates from outside of nursing has created nursing science leaders who can act as ambassadors across disciplines and teams.

In a relatively short period of time, from 2010 to 2016, the School launched five programs – PhD, MS-L, NP, PA, and MEPN. The programs all focused on team-based learning and the importance of multiple perspectives in an interprofessional working environment. When possible, students from the five programs have learned and practiced together within nursing and with other disciplines in interprofessional teams. For example,

- All students enroll in NRS 201 (Health Status and Care Systems). In the course, they work in interprofessional teams to review population health and social determinants of health data to come up with population-focused solutions to health topics.

- Students across programs also learn together in the NRS 210 (Applied Health Informatics) course to understand the implications of data for quality health care delivery and to solve problems.

- All students take NRS 203 (Leadership in Health Care) together. The focus is on individual leadership development as well as group dynamics to prepare graduates to address health and health care advocacy. The course will soon relaunch as a hybrid course for clinical students, including the DNP-FNP. It will remain as designed for PhD students.

- Dr. Susan Adams was also named as the first Director of Interprofessional Education in 2021. This new leadership position supports the development of interprofessional education programs at UC Davis Health.

Developing and delivering an innovative educational program

The School also undertook rigorous analysis whenever launching new or evaluating existing programs. For instance, it utilized funding from the Sierra Health Foundation to explore the health education needs of the Sacramento region and found that a large number of Associate Degree nursing students already had a bachelor's degree (or higher) in another field. This, combined with the acknowledged reputation of existing

Bachelor of Science programs in the area (such as California State Universities Sacramento, Chico and Stanislaus) and the lack of a master's level prelicensure program, led to the School launching a Master's Entry Program in Nursing (MEPN) rather than a bachelor's program. This program created a pathway for bachelor's degree students to pursue higher nursing education and cemented the Betty Irene Moore School of Nursing as a graduate school.

Similarly, evaluation and analysis also informed how to evolve programs. For instance, the MS-L program was integral to grounding the School in its mission to prepare graduate-level leaders to advance health, transform health care and ignite bold system change. After careful reflection and review, it was paused after the graduating class of 2021 as a stand-alone program. However, the core leadership principles went on to inform the foundations of the future MEPN, NP and PA programs, as well as the soon-to-launch DNP-FNP program. The DNP-FNP capitalizes on the spirit of the MS-L program by going beyond clinical education courses to elevate students' ability as leaders. The goal of the program is to create leaders who effect system change and promote health care innovation by informing and advancing health policy and health equity locally, nationally and globally. The PhD program continues in its mission to prepare leaders in health care, health policy and education and research.

Influencing nursing and health education at local, regional and national levels

SON Education Influence on UC Davis Health

Once the School of Nursing opened the MEPN program in 2016, the health system became a key hiring stakeholder for new RN graduates. UC Davis Health hired 25% of the first MEPN cohort because of the Betty Irene Moore School of Nursing's reputation for excellence and the growing history of partnership established with UC Davis Health. Since then, more than 40 new RN graduates have been hired, which again accounts for about 25% of the total MEPN graduate population since inception. The Health System also continues to hire new graduates from across all the School's program – some 200 alumni have worked at UC Davis Health, about 24% of its total alumni population. PhD graduates have also gone on to work at all the regional health systems – Kaiser Permanente, Dignity Health, Sutter, and UC Davis. This is a key achievement as it brings a doctoral level of expertise to the organizations and helps disseminate the School's approach to nurse leadership and nursing science.

SON Education Influence on UC Davis Campus

UC Davis Health and nursing leadership built cross-disciplinary commitments from stakeholders across the UC Davis campus before the School of Nursing launched. This enabled the School to secure the faculty necessary to efficiently gain program approvals and hire School of Nursing faculty. Leaders in the School built on relationships with faculty senate leaders to help move approvals for new educational offerings on campus forward, including the adoption of innovations such as direct entry graduate-level certificates and online learning platforms. These partnerships with the UC Davis Faculty Senate resulted in an overall willingness to be more nimble and reactive to market changes affecting education. The School could not have been as proactively successful without the buy-in of campus colleagues.

SON Education Influence on Nursing and Health Education: SON Education Models

Simulation

The Betty Irene Moore School of Nursing has made strides in its commitment to simulation education. When designing Betty Irene Moore Hall, the School prioritized innovative spaces that could promote transformative and interprofessional experiences in health care. The 70,000 square feet structure is the fourth facility in the UC Davis Sacramento campus education zone and is available to all health professional students on campus. The simulation spaces are designed to further UC Davis' nationally recognized use of telehealth and clinical

simulation. This included an in-patient 8-bed hospital ward, task and anatomy skills lab, 15 room primary care clinic simulation with debriefing rooms; and one-bedroom Home health suite, which allows for training in areas of interest, such as the care of older adults.

In 2020, in response to reduced availability of clinical practice sites for education due to the COVID-19 pandemic, Dean Emerita Heather M. Young worked with colleagues at the University of California Office of the President and HealthImpact to successfully provide information to California Governor Newsom's Office resulting in an executive order to increase the proportion of simulation education activities allowed for prelicensure programs. Increasing simulation education helps address the shortage of clinical sites thereby keeping students on track to graduate without impacting the quality of their clinical experiences. The group of colleagues then worked with the Board of Registered Nursing on best practices for implementation.

Ribbon cutting ceremony at the Betty Irene Moore Hall grand opening.

Clinician Educator Model

The School of Nursing piloted a new model of education for the system in 2016 by creating a position that combined the equally coveted roles of advanced practice provider and graduate degree program educator. This "clinician educator" professional can deliver quality care where it is most needed while also preparing the next generation of providers. The Clinician Educator Faculty model entails hiring a full-time faculty member through the School of Nursing and then contracting that faculty out to a clinical practice site for 80% of their time. The Clinician Educator Faculty is a full-time educator—both in the clinical practice site and the classroom. The faculty precepts students in the clinic four days per week and teaches in the classroom one day per week. This model creates consistent preceptors for students, at a time when preceptors are the largest rate-limiting factor for all schools of nursing throughout California. This role was piloted as a collaboration with the Sacramento County Health Center, who has been a consistent partner for the School of Nursing for the past six years. In 2020, the pilot expanded to hire a dozen more faculty to practice in primary care, women's health, mental health, and pediatrics at the County, as well as at UCDH clinics and other community FQHCs. Theses impacted areas are some of the most competitive clinical practice rotation sites for students. This represents a new model of education for the system, which can generate clinical income and teach advanced practice students with School of Nursing faculty and help solve a preceptor shortage in a competitive education market.

IV. Transformative Research

Core Value: Transformative Research - apply the science of nursing to improve health and reshape health systems with emphasis on aging, rural health and diverse communities.
Related Logic Model Outcomes: Develop a robust and high-impact research portfolio**;** SON-supported research contributes to changes in health research and practice.

The Betty Irene Moore School of Nursing's research program is the engine that drives new solutions that put individuals, as well as families and communities, at the center of care. The School's early focus was on aging, rural health, and diverse communities. While it has made strides in these areas, ten years on, the School's leadership is also aware of how the demands of operationalizing the core education mission to some extent limited the development of the research program.

In 2021 the School underwent a strategic planning process; at the same time UC Davis Health and the UC Davis Health Office of Health Equity, Diversity and Inclusion undertook their own strategic planning efforts. This was an opportunity to identify and build on the momentum of the first decade and to capitalize on emerging health system efforts that could further catalyze the School's mission and vison. As such, the faculty remain focused on aging and rural and underserved health but also see opportunities to strengthen the School's commitment to diverse communities through an expanded focus on social justice, diversity, equity, and inclusion; and an opportunity to grow its research portfolio in informatics and innovation. Leadership acknowledges that to be successful in its second decade, the School must commit resources and seek outside funding to truly innovate and create the research program it envisions.

Developing a robust, high-impact research portfolio contribute to change in health research and practice

The Betty Irene Moore School of Nursing has foundational research portfolio advancements in the following areas:

Aging and Family Caregiving

- Researchers at the Family Caregiving Institute at the Betty Irene Moore School of Nursing strive to support the millions of individuals who provide care to aging family members or friends. The Institute hosted the Research Priorities in Caregiving Summit in 2018. The summit, hosted shortly after the FCI's launch, was conceived to provide a forum for stakeholders to identify, define and map out research priorities to advance the field, not specific to just the Institute's vision. The summit resulted in several papers, which were published in a Gerontologist supplement - Research Priorities in Family Caregiving: Process and Outcomes of a Conference on Family-Centered Care Across the Trajectory of Serious Illness.

- The Family Caregiving Institute's program and policy evaluation unit, led by Dr. Young and Professor and Associate Dean for Research Dr. Janice Bell, collaborated with the California Caregiving Resource Centers to evaluate an expansion project and assess the design and implementation of a $30M contract from the state of California.

- Dr. Bell was funded by the Rita and Alex Hillman Foundation Innovations in Care Program for a collaboration with faith-based organizations in Alameda County that address advanced illness care disparities through the Alameda County Care Alliance (ACCA) Advanced Illness Care Program. The work resulted in the Serious Illness Care Model Implementation Framework designed to help build better serious illness care programs. The framework was a collaborative effort of the Coalition to Transform Advanced Care (C-TAC), Healthsperien and the School of Nursing with funding from the Gordon and Betty Moore Foundation.

- Dr. Bakerjian and Dr. Siegel conducted independent research in collaboration with the California Association of Health Facilities Music & Memory Project, which is designed to improve the lives of residents in skilled nursing facilities who suffer from Alzheimer's disease and other cognitive disorders.

- Dr. Siegel's work addressed quality of care in nursing home settings, often investigating critical skill sets needed by nursing-home management teams to influence policy, improve care and reduce costs. This included a study funded by the Foundation of the National Association of Long Term Care Administrator Boards to build on a previously-funded project from the Robert Wood Johnson Foundation. The resulting pilot study established the feasibility of a mixed methods approach to collecting data from nursing home administrators and their multi-facility provider organizations. The goal was to better understand both administrator and provider organization roles in quality and quality improvement. The findings provided preliminary data for a proposed larger-scale national study.

- Past faculty member Dr. Fawn Cothran credits watching her own family care for a relative with dementia with leading her to become a gerontological nurse who conducts research focusing on stresses that affect African-American family caregivers. Cothran was also named an inaugural Betty Irene Moore Nurse Leaders and Innovator Fellow. She became the Hunt Research Director for the National Alliance for Caregiving in late 2021.

- Dr. Bidwell shifted her focus from bedside care in a cardiovascular unit to research after witnessing the challenges people with heart disease, and their family caregivers, face when discharged from the hospital.

- Dr. Young was appointed as a Senior Policy Fellow at the AARP Public Policy Institute and worked with colleagues at AARP and the Family Caregiver Alliance to develop and conduct the ground-breaking study, Home Alone Revisited. This national survey has captured the attention of policymakers and was cited in the National Academy of Medicine report on Families Caring for an Aging America and the RAISE Family Caregiving Advisory Council issued an Initial Report to Congress in September 2021.

Rural Health

- Dr. Young was principal investigator for a Patient-Centered Outcomes Research Institute (PCORI) study seeking to improve health for individuals with diabetes through technology-enabled nurse coaching. She partnered with then faculty member Dr. Madan Dharmar and alumnus Dr. Sheridan Miyamoto (PhD 2014) on the Patient and Provider Engagement and Empowerment Through Technology (P2E2T2) project to provide nurse-coaching for diabetes patients in rural communities.

- Past faculty member Dr. Jeri Bigbee received funding from the National Council of State Boards of Nursing to look at the relationship between nurse-to-population ratio and the populations' health over a two-year study. Dr. Bigbee also published on the recruitment and retention of rural nurses and rural nursing students in the *Journal of Rural and Remote Health Care.*

Diverse Communities, Equity and Inclusion – Social Justice

- Clinical Professor and Associate Dean for Health Equity, Diversity and Inclusion Dr. Piri Ackerman-Barger works with an interprofessional team of researchers to better understand the experiences of minority health professions students with the ultimate goal of increasing diversity in the health professions to ensure clinicians represent the communities they serve.

- Dr. Ackerman-Barger's funded research includes two Center for a Diverse Healthcare Workforce and Health Resource and Services Administration (HRSA) projects: Promoting Wellness and Satisfaction in Medical Residents, Nursing Students and Physician Assistant Students by Understanding Microaggressions; and Understanding Microaggressions in Health Professions Students. Resulting publications included "Seeking Inclusion and Excellence: understanding microaggressions experienced by underrepresented medical and nursing students" in *Academic Medicine*.

- Professor Dr. Carolina Apesoa-Varano and Professor Dr. Sheryl Catz received funding from the Public Impact Research Initiative at UC Davis for a partnership with Wellspring Women's Center in order to build understanding of COVID-19 vaccine confidence among low-income women in Sacramento.

- For several years, Dr. Bell and Inaugural Associate Dean for Research and Professor Emeritus Dr. Jill Joseph collaborated with the Alameda County Care Alliance Advanced Illness Care Program (ACCA-AICP), Dr. Bell serving as the program's lead evaluator, and Dr. Joseph serving as the intervention lead working with community members to co-design the program's intervention and training. The ACCA-AICP is a faith-based and culturally embedded program providing lay care navigation support to persons needing advanced illness care and their families/caregivers in the community setting. The focus is on addressing long standing health disparities in the African American community related to the burden of advanced illness and lack of access to care that relieves suffering and promotes quality of life, including uptake of palliative care and hospice. What started out as a volunteer effort initiated by a small group of African-American churches in Alameda County has grown into a high impact program promoting health equity, and now reaches over forty churches across three Bay Area counties with plans to expand to Southern California. The partnership and collaboration with ACCA reflects the SON mission to improve health and health care and embodies all of our core values of community connection, diversity and inclusion, leadership, innovative solutions and collaboration.

- Professor Emerita Dr. Mary Lou de Leon Siantz research focused on the well-being of Hispanic immigrant adolescents and identifying what education would inform better outcomes and produce health individuals. Dr. de Leon Siantz also served as the director of the Center for the Advancement of Multicultural Perspectives on Science (CAMPOS), a research center aimed at promoting women in science, starting with Latina STEM scholars.

- Former faculty member Dr. Katherine Kim was the site CO-PI, Consortium Participant Engagement and Enrollment Leader for the California Precision Medicine Consortium, which is the regional enrollment center for the NIH All of Us: Precision Medicine Initiative. The program is inviting one million people across the U.S. to help build a diverse health database.

Informatics and Innovation

- Alumni and recent faculty member Dr. Katherine Kim Katherine Kim leveraged 25 years in health care services administration and private industry health-related technology product management to solve problems in health care as a researcher. When the COVID-19 pandemic began, Dr. Kim was approached to lead six different funded efforts to focus on using data science to look at community impact around this new public health crisis.

- Associate Professor Dr. Tae Youn Kim's work aims to increase the power of health data by improving how information on treatments and outcomes is classified and saved.

V. Cultural Inclusiveness

Core Value: Cultural Inclusiveness - teach culturally-appropriate approaches to care and involve communities to design and conduct relevant research.
Related Logic Model Outcomes: Build broad-based partnerships; Partnerships lead to improvements in healthcare access, delivery or policy; SON Faculty and alumni develop partnerships at local, regional and national levels

The Betty Irene Moore School of Nursing launched with a commitment to cultural inclusiveness understanding that quality care is steeped in individual care and individual understanding. The School of Nursing has threaded social determinants of health across programs to ensure nurses and advanced practice providers are equity minded practitioners. These principles are embedded in courses on health equity, leadership, and health policy.

Building the Infrastructure to Support Diversity, Equity and Inclusion Structures

In 2016, then Dean Heather M. Young appointed the Diversity and Inclusion Task Force to develop a set of recommendations that would help make the Betty Irene Moore School of Nursing a more diverse and inclusive place to work and learn. After the report was issued in 2016, an implementation committee was charged to actualize the foundational goals and strategies outlined by the task force and to address the gaps identified between the School's vision and current outcomes. These efforts evolved into the Health Equity, Diversity and Inclusion Committee, which issued the School's diversity statement in 2019. The purpose of the committee is to expand and fortify the structure that supports the School's ultimate vision to promote optimal health and health care equity for all. The statement exists as a road map for the School's tangible efforts to support student learning and community care through education, community partnership, and research.

This foundational work contributed to the School's receipt of the 2021 Health Professions Higher Education Excellence in Diversity (HEED) Award. The School is one of 50 health professions colleges and universities in the nation to be identified as a HEED winner by *Insight into Diversity* magazine. According to publisher Lenore Pearlstein "this award process consists of a comprehensive and rigorous application that includes questions relating to the recruitment and retention of students and employees – and best practices for both – continued leadership support for diversity, and other aspects of campus diversity and inclusion." In 2020, the School was recognized as one of 12 schools in the country as a Nursing Diversity Champion by *Minority Nurse*. The honor highlights the School's commitment to recruit and retain diverse students, faculty and clinicians.

Dr. Ackerman-Barger was named the inaugural Associate Dean for Health Equity, Diversity and Inclusion in 2020. This role reports both to the UC Davis Health Vice Chancellor of Health Equity, Diversity and Inclusion and the Dean of the School of Nursing. Therefore, Dr. Ackerman-Barger plays an integral role in connecting the School of Nursing with the broader UC Davis vision of Diversity, Equity and Inclusion. She chairs the School's Healthy Equity, Diversity and Inclusion Committee, which is responsible for the iterative and collaborative process that drove both the development of the diversity statement and the drafting of the School of Nursing's 2021 – 2026 strategic plan for Health Equity, Diversity and Inclusion.

As mentioned, the School has consistently threaded social determinants of health across all its programs with an eye towards educating nurses to be equity minded. This built on the initial 2011 Institute of Medicine Future of Nursing: Leading change, Advancing Health report as well as the recently issued Future of Nursing

2020 – 2030: Charting a Path to Achieve Health Equity report. Health inequities have multiple implications for health outcomes including economic costs and health care costs, as well as individual quality of life and health outcomes. Health equity is foundational to influencing effective nursing and health care strategies going forward. The School built these principles in to the student orientation Immersion Week, which sets the tone for not only how the School will help students actualize leadership, but also how health equity plays a role in education, research, policy and practice.

Teaching culturally-appropriate approaches to care and involve communities to design and conduct relevant research

Foundational courses include the Community Connections (NRS 206) course, which was initially launched as part of the MS-L program; however, it has been retooled and will be relaunched as an integral part of the DNP-FNP Program in 2022. The community-based learning experience partners students with community organizations on health improvement projects, addressing systems-level problem solving. Thirty-eight community groups worked with the School of Nursing over ten years, some over several consecutive years as was the goal. Partners included the California Department of Public Health, Mutual Housing California, VA Northern California Health Care System, Tahoe Forest Health System, Amador Senior Center First 5 Amador, Native American Health Center, and 4-H Youth Development Program. The Sacramento Food Bank and Family Services was a partner for all ten years.

Students in all programs also take a foundational course that focuses on social determinants of health and health equity. MEPN and PA students take NRS 220 – The Social and Determinants of Health; DNP-FNP students will take NRS 353 – Improving Patient & Population Health. The goal of each course is to ensure that student scholars have the framework and skills needed to advance health equity. NRS 213 Race and Health in the United States is offered as an elective course for all programs. The course illustrates race as a social construct contributing to unequal health care distribution in the United States. It emphasizes practical health care leadership skills to end racial inequalities in health. Beyond these course examples, concepts of health equity and social determinants of health are threaded throughout core coursework for all programs.

Faculty are also adept at pivoting and staying nimble to underscore how students will help address population health challenges. Current events involving the pandemic and social justice are inextricably linked to social determinants of health. Seventy-six percent of faculty noted that they had taken on new opportunities related to COVID-19 research or completed or delivered training related to racial justice in the 2021 faculty impact survey. Faculty efforts included leading a study bolstering family caregivers dealing with the impacts of COVID-19, participating on panels to address vaccine hesitancy in communities of color, and shifting work with students to focus on health disparities and COVID-19 prevention. Students, faculty and staff pivoted to lead and support community-based efforts to rapidly provide COVID-19 testing, vaccinations and then boosters, volunteering at both UCDH-led efforts throughout the region as well as FQHC-based mobile efforts.

Building broad-based partnerships- *Institutionalized Experiences*

The School of Nursing is a collaborative partner. Programs are designed to be interprofessional, which supports expansion to other schools on campus. Similarly, programs that were created or co-created with School of Nursing faculty or with School of Nursing funding are now under the umbrella of the Health System, which indicates recognition of the importance of health equity as foundational to better health outcomes for all. A few examples include:

- The Interprofessional Central Valley Road Trip is one-of-a-kind immersive field trip emphasizing the contributions and histories of the diverse people of California's Central Valley. Together students, faculty, staff, and community members learn about concepts such as health, health

inequities, population health, and cultural humility, a concept co-developed by founding faculty member Jann Murray-Garcia. Initially financially supported by the School of Nursing alone, the program is now co-sponsored by UC Davis Health. An evaluation study in the *Journal of Health Care for the Poor and Underserved* is due out in May of 2022. According to project leadership, findings from the evaluation can "inform health professions educators in innovating approaches to active learning that take advantage of intergenerational, interprofessional, mobile classrooms to appreciate the contributions, sociohistorical complexities, and challenges of the geographic regions wherein the students and patients live."

- The poverty simulation for entry -level nursing students helps students better understand what it is like to live in poverty and the implications for health. Plans are underway to combine School of Nursing and School of Medicine students into interprofessional teams for a future pilot.

- The Interprofessional book club launched on the UC Davis Health campus in the fall of 2010 by School of Nursing founding faculty Dr. Murray-Garcia for students, faculty, and staff at UC Davis Health. The book club is now also open to community outside of UC Davis and UC Davis Health and is run out of the UC Davis Office of Diversity, Equity and Inclusion.

- The Anti-Racism and Cultural Humility (ARC) training began as an innovative partnership between the School of Nursing and UC Davis Health Nursing to train nursing directors and managers throughout the hospital. Developed by School of Nursing faculty Dr. Murray-Garcia, Dr. Ackerman-Barger and post-doctoral fellow Dr. Victoria Ngo, the three-day sessions were well received and expanded to train School of Nursing and Medicine faculty and staff, as well as health system physicians and administration. The project has collected early evidence that the training has changed nurse leadership behavior and enhanced skills among this group to engage around issues of anti-racism, cultural humility, and health equity. This builds the capacity of the health system to deliver the highest quality, most effective, and respectful care.

- The Office of Health Equity, Diversity and Inclusion (HEDI) underwrites the work of Associate Dean Ackerman-Barger, as well as Dr. Murray-Garcia as the Director for Social Justice and Immersive Learning, and post-doctoral fellow Dr. Ngo (PhD 2019) signaling the value of these initiatives to the system beyond the School of Nursing.

Building broad-based partnerships- *Community Engagement*

- Throughout the first ten years, the School has worked with over 450 partners. Currently it has more than 250 collaborators and community partners, including clinical and preceptor sites. The School rotates clinical sites with many communities to mitigate the impact of annual service.

- The School of Nursing has employed Town Halls as a means to gather community feedback at critical junctures, including those held to inform the creation and launch of the School of nursing, as well as more recent Town Halls that engaged community partners as part of the 2019 School of Nursing Dean recruitment. Community members are also welcome at conferences, such as the Coalition for Health Equity Conference as organized and hosted by students from the UC Davis School of Medicine and Betty Irene Moore School of Nursing. The annual event strengthens the understanding and integration of marginalized populations in healthcare.

VI. INNOVATIVE TECHNOLOGY

Core Value: Innovative Technology - use technology to create an engaged and interactive approach to nursing education, research and practice.

The Gordon and Betty Moore Foundation informed the School's ethos to leverage technology in service of better care for individuals and their families. This is evident in how it translates research to practice, leverages expertise of stakeholders, and delivers education through simulation.

Translating Research to Practice

- Healthy Aging in a Digital World (HADW) - The HADW initiative aims to use technology to provide a bridge between independent living and access to health care across a person's lifespan. The initiative is led by Dr. Young and School of Medicine Emeritus Associate Vice Chancellor for Strategic Technologies and Alliances Tom Nesbitt, as well as a group of colleagues from the Schools of Nursing and Medicine and the UC Davis Center for Health and Technology and the UC Berkeley Center for Information Technology Research in the Interest of Society. Young and Nesbitt competed against 220 proposals in the initial UC Davis Big Ideas campaign and were among the six selected. HADW has raised more than $11 million in funding for this effort and is working with investigators across the campus to develop research proposals and to organize a consortium for this research.

- Dr. Young was principal investigator for a Patient-Centered Outcomes Research Institute (PCORI) study seeking to improve health for individuals with diabetes through technology-enabled nurse coaching. Partnered with then faculty member Dr. Madan Dharmar and alumni Dr. Sheridan Miyamoto (PhD 2014).

- Dr. Joseph and Dr. Katherine Kim were part of the interdisciplinary team from the School of Nursing and the UC Davis Comprehensive Cancer Center which launched the Collaborative Care Coordination Research Group to explore new models of nurse-directed, technology-enabled care coordination.

Leveraging Expertise of Stakeholders

- The National Advisory Council advises the Dean on long-range plans in several arenas including strategies to achieve the School's vision, opportunities to innovate, and continuous improvement and evaluation of the School's impact and sustainability. Several of its members come from industry including founding member and long-time Chair Russ Bell, senior vice president and chief scientific officer (retired) of Beckman Coulter; Doug Bush, chief operating officer (retired) of Care Innovations, Louis Burns, chief executive officer (retired), Care Innovations. The council also counted President of the California Health Care Foundation (CHCF) Dr. Sandra Hernandez among its membership – CHCF aims to bridge the innovation gap by developing platforms that enable safety-net providers and health plans to work with entrepreneurs on delivery system improvement.

- The Betty Irene Moore School of Nursing at UC Davis Lecture Series brought nationally recognized leaders to UC Davis to illuminate academic, research and clinical topics that advance health, ignite leadership and promote bold system change. This included the Community Conversation: Why is

my Smart Phone Personalized but My Health Care is Not? The discussion addressed using technology to create customized care to improve health, as well as balancing the tension between efficiency and innovation. Panelists included Kristen Miranda, then chief integration officer and California market president for Agilon Health; and Dan Weberg, then director of nursing research and practice with the Nurse Scholars Academy of Kaiser Permanente and currently the head of Clinical Innovations at Trusted Health.

- The School collaborates with others in the health and technology space, including the Center for Information Technology Research in the Interest of Society (CITRIS) at UC Berkeley. Director of CITRIS Health David Lindeman is part of the Healthy Aging in a Digital World team. CITRIS has supported the School of Nursing since its inception, including hosting the 2010 research exchange: Advancing Health through Technology: The Vision of the Betty Irene Moore School of Nursing at UC Davis to raise visibility for the School. Faculty have since collaborated with CITRIS on shared projects.

- The Regional Advisory Group is made up of health care leaders from systems and community agencies across the Northern California and Sacramento region. These leaders helped provide critical input when developing courses for clinical students to ensure graduates were well prepared for the workforce, including understanding expected technology capabilities. For example, their input helped shape content for the Applied Health Informatics (NRS 210) course.

Delivering Education- *Telehealth Delivery*

UC Davis has a strong history of telehealth delivery and simulation which enabled the School of Nursing to quickly pivot education and clinical experiences considering COVID-19. This allowed students to continue to learn and train without delaying program progression due to the pandemic.

- The Betty Irene Moore School of Nursing initially adopted online education to move graduate certificates forward faster. This allowed the School to meet working professionals where they were, and had the effect of pushing UC Davis to move faster on online education.

- The School's online footprint will deepen with the launch of the new hybrid DNP-FNP program in 2022. This decision was made to allow students greater flexibility to work and remain in their communities. This is important considering the emphasis the School has placed on recruiting students from rural and under-served communities. This program allows professionals to seek additional education without removing a much-needed clinician from an under-served community.

Delivering Education- *Simulation*

- The School of Nursing leveraged a series of Song Brown (California healthcare workforce training program grants) funding that helped develop integrative case-based learning (ICBL) simulations for all clinical programs. These case scenarios help learners move beyond the chronic condition or diagnosis to explore how family relations, regional geography, cultural differences and socioeconomic demographic details all impact individual health.

- Innovative spaces promote growth and transformation in health care, as well as optimal education. As mentioned, Betty Irene Moore Hall was designed to support simulation innovation across settings (home, ambulatory care and hospital) and provides learning space for future health professionals in nursing as well as medicine, health informatics and public health. The simulation

space is also utilized by hospital and clinic teams to provide additional training for working professionals and also hosted community outreach programs such as the surgery workshop for local high school students organized by the Office of Student and Resident Diversity.

- When building Betty Irene Moore Hall, the School considered it paramount to build in simulation opportunities to allow for greater flexibility and accommodation for how students could gain clinical skills. In addition to traditional environments, such as hospital ward, the School was sure to support more complex situations to prepare students for what they will likely see in real-world practice. This also allows students to experience clinical challenges they may not encounter or achieve adequate practice with during rotations, including end-of-life dilemmas and resuscitations and other emergencies.

- Assistant Clinical Professor Jenn Edwards was named as the second Director of Clinical Simulation for the School of Nursing in 2021. She partners with staff and faculty throughout the School in the development and delivery of simulations and supports the implementation of simulation best practices, working in collaboration with the health sciences simulation team and colleagues at the UC Davis School of Medicine.

VII. Summary

The Betty Irene Moore School of Nursing leadership understands the importance of moving nursing science and better health outcomes forward as part of a collective voice. From the early beginnings it actively worked to actualize the recommendations made in the 2011 Future of Nursing Report, which galvanized the field. These recommendations included expanding opportunities for nurses to lead and diffuse collaborative improvement efforts, increasing the number of nurses with a doctorate, and preparing and enabling nurses to lead change to advance health. Today the School is using the Future of Nursing 2020 – 2030 report as a guide to understand how it can continue to bolster and grow efforts to leverage nurse and advanced practice expertise to achieve health equity and as a framework to reflect on progress towards diversity, equity, and inclusion strategies. It is also guided by the Strategic Plans for UC Davis Health, as well as leading voices in the health care field.

In ten years, the School has launched operations, stabilized core programs and navigated unforeseen challenges. This has required the full energies and commitment of leadership at the School and campus level, as well as all faculty and staff, cultivating a culture of teamwork and innovation – two key ingredients for future success. The School embarked on a strategic planning endeavor in 2021 to lay the road map for its next decade of excellence and looks forward to building on core values of leadership, equity and innovative education, technology, and research.

School of Nursing's Launch Outcomes

Considering the information provided in this packet and your knowledge of the School and its goals, please answer the following questions about the Betty Irene Moore School of Nursing's outcomes using this link.

1. Please rate the overall progress of the School in its first 10 years according to the following definitions:

   5 = The School is progressing at a level that exceeds progress as expected or that one would expect of a top-tier nursing school in its first ten years. Its achievements would be considered outstanding or excellent by experts in nursing and health care.

   4 = The School is progressing at the level one would expect to find at a top-tier school of nursing and has the potential to become an outstanding or excellent school, a standard that would be readily recognizable by experts in nursing and health care.

   3 = The School is progressing at an acceptable level that one would expect to find at a top-tier nursing school. There are a few notable areas where improvements could be made which would be readily recognizable by experts in nursing and health care.

   2 = The School needs to address critical issues to improve its current progress as there are many areas where improvement may be warranted for the school to progress at the level of a top tier school of nursing which would be readily recognizable by disciplinary experts in the field.

   1 = The School is progressing on its goals and outcomes below the level one would expect to find at a top-tier school of nursing.

2. What do you see as the School's greatest strength(s)? In what ways has the School had the most impact?

3. Where could the School most improve? What challenges or barriers do you foresee the School facing in the next decade?

4. Given your expertise in nursing and health care, what opportunities exist for the School to build on their present strengths?

5. Please provide any additional feedback or thoughts on the Betty Irene Moore School of Nursing's first 10 year of progress.

Appendix B

UC DAVIS HEALTH | BETTY IRENE MOORE SCHOOL OF NURSING

Vision for Leadership, Optimal Health and Health Care Equity for All:
10 Years of Progress

A Message from the Betty Irene Moore School of Nursing at UC Davis

This packet contains a high-level overview of the Betty Irene Moore School of Nursing's achievements and contributions in the area of leadership and health care equity. As a colleague with knowledge of the school's efforts to develop leaders or expertise in health and health care equity, we would appreciate your assessment of the school's influence and impact in this area. Your reflection will inform the school's self-assessment and help us understand the contributions the Betty Irene Moore School of Nursing has made toward the vision of optimal health and health care equity over the last decade. We appreciate your feedback on areas of significance that are notable as well as opportunities for improvement as we continue to develop and broaden our reach in the coming years. If you have questions about the material or the review, please contact Stacey Pasco at slpasco@ucdavis.edu. Thank you for your time and contribution to our school's development.

Stephen Cavanagh, PhD, MPA, RN, FACHE, FAAN
Dignity Health Dean's Chair for Nursing Leadership
Dean and Professor, Betty Irene Moore School of Nursing

Material contained in review packet:

3 **A History of the Betty Irene Moore School of Nursing**

- Vision and Mission at School Launch
- Timeline
- Logic Model

7 **Achievements: Leadership and Health Care Equity**

22 **Contribution to Leadership and Health Care Equity Assessment**

A History of the Betty Irene Moore School of Nursing

The Betty Irene Moore School of Nursing at UC Davis prepares successful leaders in health care. We offer programs for future nurses, physician assistants, family nurse practitioners and nursing science researchers. As one of the only graduate nursing schools committed to activating change where it's needed the most, the school goes beyond clinical education with programs that provide graduates with the skills, confidence and vision to be change agents on many levels and with many different titles.

The Betty Irene Moore School of Nursing at UC Davis was established in March 2009 through a $100 million commitment from the Gordon and Betty Moore Foundation. Together, we work toward a future where health and well-being are open, accessible and equitable.

The school admitted its first classes in Fall 2010. The school has offered five graduate degree programs over its first decade:

- Doctor of Philosophy in Nursing Science and Health-Care Leadership
- Master of Science in Nursing Science and Health-Care Leadership
- Master's now Doctor of Nursing Practice — Family Nurse Practitioner
- Master of Health Services — Physician Assistant Studies
- Master's Entry Program in Nursing

The graduate degree programs are led by the Nursing Science and Health-Care Leadership Graduate Group, an interprofessional team of more than 60 faculty members from disciplines including nursing, medicine, health informatics, nutrition, biostatistics, pharmacy, sociology and public health. The School of Nursing is part of UC Davis Health, a hub of innovation that encompasses UC Davis Medical Center, UC Davis School of Medicine and UC Davis Medical Group.

UC Davis Health, one of five health systems within the University of California, is an integrated, academic health system consisting of the UC Davis School of Medicine, the Betty Irene Moore School of Nursing, the 646-bed, multispecialty, acute-care hospital and clinical services of UC Davis Medical Center and the UC Davis Medical Group. The health system also includes the UC Davis Comprehensive Cancer Center, UC Davis Children's Hospital and a Level I trauma center.

The health system is a major driver of economic prosperity in the Sacramento region and Northern California, generating more than $3.4 billion in annual economic output and more than 20,000 jobs. The health system is a hub of innovation that is improving lives and transforming health care by providing excellent patient care, conducting groundbreaking research, fostering innovative, interprofessional education, and creating dynamic, productive partnerships with the community.

2020 marked a significant milestone for the Betty Irene Moore School of Nursing at UC Davis. The first 33 students embarked upon their graduate education at the school 10 years ago. Now, more than 835 alumni make an indelible impact on the clinics, classrooms and communities in which they serve. They embody and enact the vision and mission of our founders from bedside care to individuals and families to bold changes in health care systems across California and the nation.

Vision

Vision

The Betty Irene Moore School of Nursing at UC Davis advances health and ignites leadership through innovative education, transformative research and bold system change.

Mission

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence through immersive, interprofessional and interdisciplinary education and research in partnership with the communities it serves. Faculty, staff and students discover and disseminate knowledge to advance health, improve quality of care and shape policy.

CORE ATTRIBUTES

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence and addresses urgent societal needs through:

- Leadership development—build capacity for advocacy and action at all levels.
- Interprofessional/interdisciplinary education—health professionals learn multiple perspectives to work and communicate as teams.
- Transformative research—apply the science of nursing to improve health and reshape health systems with emphasis on aging, rural health and diverse communities.
- Cultural inclusiveness—teach culturally appropriate approaches to care and involve communities to design and conduct relevant research.
- Innovative technology—use technology to create an engaged and interactive approach to nursing education, research and practice.

UCDAVIS
BETTY IRENE MOORE
SCHOOL OF NURSING

Betty Irene Moore School of Nursing Timeline

2007

Early planning

The Gordon and Betty Moore Foundation and UC Davis **announce $100 million commitment** to launch school of nursing at UC Davis

UC Davis leaders **meet with Mrs. Moore** to review leadership and strategic development

2008

Great Recession

UC Board of Regents **appoints Heather M. Young** as associate vice chancellor for nursing at UC Davis

School's first faculty member Debbie Ward arrives, searches launch for founding faculty

Strategic Design Summit convened in Sacramento with national nursing and education thought leaders to develop curriculum, partnerships and faculty proposals

2009

University of California Board of Regents **formally approves** the Betty Irene Moore School of Nursing

UC Davis **convenes National Advisory Board** of national nursing leaders as well as UC Davis leadership to build the vision and mission for the school

2010

UC Office of the President (UCOP) approves interprofessional Nursing Science and Health-Care Leadership Graduate Degree Programs: **MS** and **PhD**

Inaugural **Welcome Ceremony** for 8 PhDs and 25 Master of Science-Leadership classes; **start of National Advisory Council** chaired by Dr. Fagin, Dean Emeritus, Univ of Penn SON

Academic programs launch with **27 interprofessional faculty** in inaugural Nursing Science and Health Care Leadership Graduate Group

2011

Betty Irene Moore School of Nursing **appoints first associate dean for research**, Dr. Jill Joseph

Commission of Collegiate Nursing Education (CCNE) **accredits MS-L program**

2012

Master of Science leadership (**MS-L**) program **inaugural cohort graduates**

CCNE **accredits MSL**

Program engages **9 community partners** in Long Term Care-based participatory collaborations

2013

Expansion

UC Davis Master of Science - Family Nurse Practitioner (**FNP**), Master of Health Services - Physician Assistant Studies (**PA**) **programs transition to School of Nursing** as interprofessional master's degree programs

2014

Inaugural cohort of Doctor of Philosophy candidates receive degrees

Western Association of Schools and Colleges (WASC) **accredits PhD program**

2015

$2.5 million gift from Dignity Health creates **first endowed deanship at UC Davis**

Ground breaks on Betty Irene Moore Hall

Inaugural cohorts of the FNP and PA programs **graduate**

2016

Inaugural cohort matriculates into Master's Entry Program in Nursing (**MEPN**)

CCNE **accredits FNP program;** ARC-PA **accredits PA program**

SON partners with more than **450 clinical sites** across California

2017

Family Caregiving Institute launched with a $5M grant from the Gordon and Betty Moore Foundation

Grand Opening of Betty Irene Moore Hall

CCNE **accredits MEPN program; Inaugural cohort** in Master's Entry Program in Nursing graduates

2018

Dean transition

First time **alumni outnumber current students**

Founding Dean **Dr. Heather M. Young steps down** after 10 years of leadership; Dr. Debbie Ward appointed as interim dean

Gordon and Betty Moore Foundation establishes the $1.7M **Heather M. Young Postdoctoral Fellowship.**

2019

Dr. Stephen J. Cavanagh appointed as the school's second dean and Dignity Health Dean's Chair for Nurse Leadership

The **Nurse Practitioner Residency program is established** among the School of Nursing, UC Davis Health Medical Center, and multiple Federally Qualified Health Clinics

The Betty Irene Moore **Fellowship for Nurse Leaders and Innovators launches** with a $37.5 million grant from GBMF

2020

New strategies
COVID-19 pandemic

School moves to **online curriculum** as necessitated by COVID-19 pandemic. All eligible students **graduate on time**

2021

MS-L program paused after graduating 2021 class. Leadership themes remain integrated through all programs, specifically the **new Doctor of Nursing Practice (DNP-FNP) degree**, which opened admissions in fall 2021

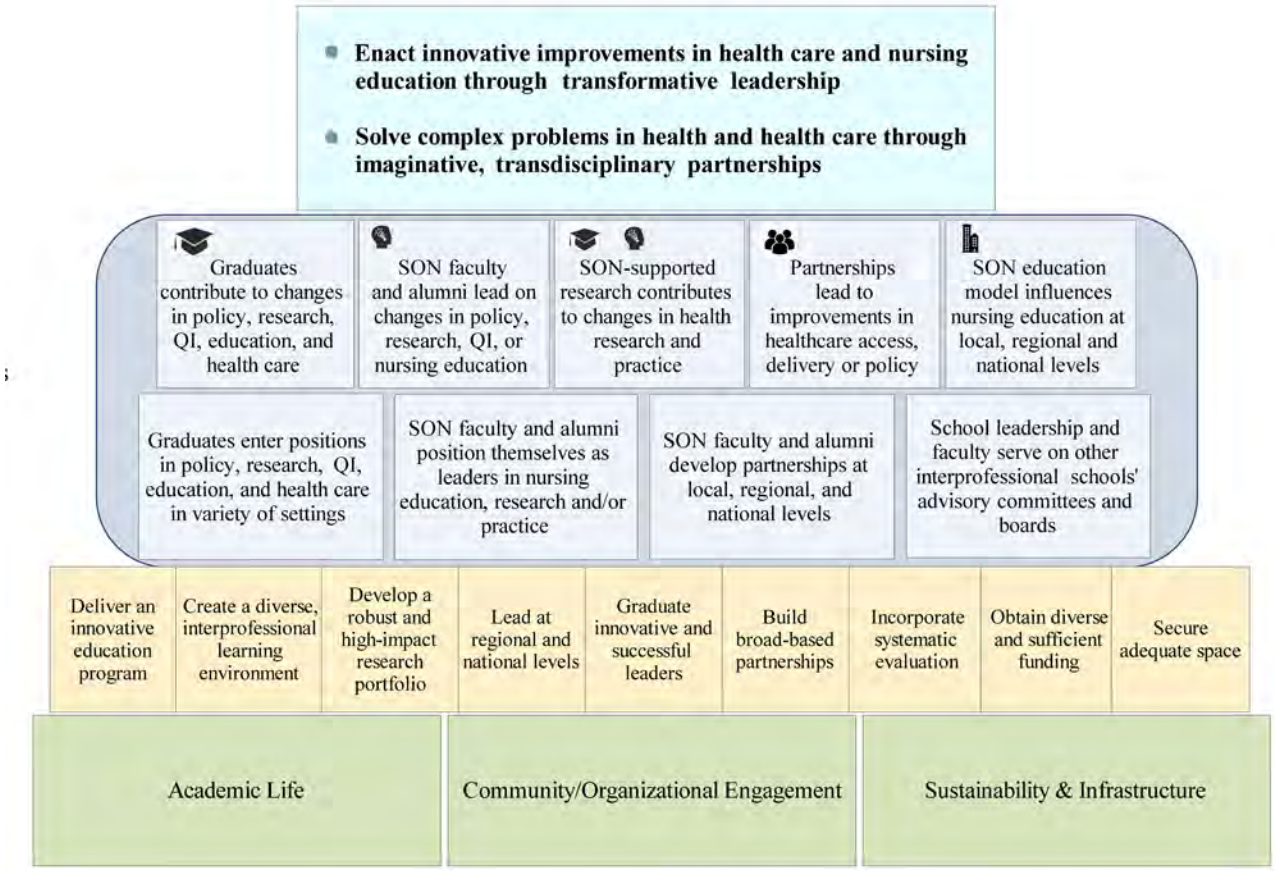
Consortium Office for UC Psychiatric Mental Health Nurse Practitioner (PMHNP) post-graduate certificate is established with a grant from the California Health Care Foundation

Janice Bell is announced as the **Western Health Advantage Endowed Professorship**

38 full-time faculty and 7 part-time faculty

LOGIC MODEL

To articulate the short-term and intermediate goals of the Betty Irene Moore School of Nursing, a program theory-driven evaluation approach was used.[1] In this approach, the theory or logic that underlies a program is visually represented through a model. The School of Nursing logic model was developed collaboratively by the school leadership and evaluators. The school's logic model (shown below) highlights the foundational elements on which the school was built and the expected intermediate outcomes (middle blue section) and long-term outcomes (top section).



[1] Donaldson, SI. (2007). Program Theory-Driven Evaluation Science: Strategies and Applications. Taylor & Francis: New York.

Vision for Leadership, Optimal Health and Health Care Equity for All

I. Introduction

Leadership and cultural inclusiveness are core values of the School of Nursing
Leadership has been a core tenet of the Betty Irene Moore School of Nursing since its launch. Highlighted as a core value as well as a foundational logic model outcome, the School has propelled its mission and vision forward using the following guides:

- As a core **value** – leadership builds capacity for advocacy and action at all levels
- As a foundational **goal** - The Betty Irene Moore School of Nursing leads at regional and national levels; graduates innovative and successful leaders.

Cultural Inclusiveness, encompassing diversity, equity and inclusion is also a foundational value for the School:

- As a core **value** - teach culturally-appropriate approaches to care and involve communities to design and conduct relevant research
- As a foundational **goal** – build-broad based innovative/unique partnerships

Both of these core values are intended to help move the School closer to the long-term vision for impact as outlined in its logic model. The Betty Irene Moore School of Nursing will:

- Enact innovative improvements in health care and nursing education through transformative leadership
- Solve complex problems in health and health care through imaginative transdisciplinary partnerships

What is emerging is a confluence of foundational program building in leadership and in diversity, equity and inclusion resulting in a springboard for emerging health equity strategies. As illustrated in The Future of Nursing (FON) 2020 – 2030: Charting a Path to Achieve Health Equity report, better health outcomes lie in better health care and access to care for all. As the report highlights, while the landmark 2011 Future of Nursing report was about building the capacity of the nursing workforce, the 2020 – 2030 report answers the question of to what end. As noted in the preface to the report, "Nursing capacity must be brought to bear on complex health and social issues and inequities." What better time to activate the skills championed and expected in all Betty Irene Moore School of Nursing student, alumni, faculty and staff leaders than now.

II. Leadership – Building Block for Change

The Betty Irene Moore School of Nursing has intentionally used leadership as a building block for change through the development, implementation, and cultivation of the following programs, activities and strategies:

- **Nursing Science and Health-Care Leadership Master of Science – Leadership (MS-L) and Doctor of Philosophy (PhD) programs –** These inaugural programs were organized with leadership at the forefront. Each program included courses designed to emphasize the student's role in leading change in their current role, as well as preparing for future roles. Courses focused on leadership at the patient, organizational, and policy levels (Course: NRS 203); equity-focused community-based learning (Course: NRS 206); implementation science (Course: NRS 202); as well as a final master's thesis or doctoral dissertation. In many instances master's and doctoral students learned together. In addition, the PhD program reached beyond nursing to recruit doctoral students from other disciplines thereby developing interprofessional leaders in nursing science research.

  Both the MS-L and PhD programs recruited students with experience or interest in transforming health care through nursing, education or research. Graduates are prepared for academic and leadership positions at health organizations and agencies, including community clinics, advocacy groups, and community colleges as well as other positions such as prelicensure nursing faculty, legislative and governmental agency staff, or other roles across the health-care sector including insurance, pharmaceutical, home health, aging support services and other industries.

  The foundational courses in leadership, systems change, health informatics and social determinants of health have all continued as courses or threads in each of the clinical programs that followed – Master of Science - Family Nurse Practitioner (NP), Master of Health Services – Physician Assistant Studies (PA), Master's Entry Program in Nursing (MEPN) and the soon-to-launch Doctor of Nursing Practice – Family Nurse Practitioner Program (DNP-FNP) programs. The MS-L program was integral to grounding the School in its mission to prepare graduate level leaders to advanced health, transform health care and ignite bold systems change. Though paused after the graduating class of 2021 as a stand-alone program, the DNP-FNP capitalizes on the spirit of the MS-L program by going beyond clinical education courses to elevate students' ability as leaders. The goal of the program is to create leaders who effect system change and promote health care innovation by informing and advancing health policy and health equity locally, nationally and globally.

- **Quality Champions –** The influence of leadership on students' career trajectory was immediately apparent as many of the MS-L students become quality champions at UC Davis Health even prior to graduation. The leadership at the medical center quickly realized the value of these newly

educated leaders and created a new type of role: Quality Champions. This role was designed to focus on quality of care thereby increasing care outcomes. These initial pilot hires functioned as change agents and were highly effective in their role, helping UC Davis Health move toward Magnet status, which is the highest credential for nursing facilities in the United States. UC Davis Health expanded on these pilot roles and now employs nine Quality Champions across the health system, the majority of whom have been School of Nursing alumni.

- **Quality Improvement Projects –** Student leadership extended to the clinical programs. While enrolled, NP and PA students take part in quality improvement projects necessary for healthcare innovations. Through an interprofessional course series in Quality Improvement and Evidence Based Practice (NRS 222), the students gain the foundational knowledge and skills needed to provide safe, competent and compassionate care in a highly technical and digital environment. The course series goes beyond the classroom and assigns students to existing Quality Improvement Project Teams in the Health System where they can contribute to moving evidence into practice. Students are able to see the theory in a workforce setting, which helps prepare them to utilize this type of approach in their future practice. Students' projects are presented at the annual Academic Symposium, thus furthering their experience with publicly disseminating knowledge.

- **Leadership Curriculum –** The founding School of Nursing faculty built a curriculum to actualize leadership in students. Fundamental to the curriculum is a foundational course, "Leadership in Healthcare" (NRS 203), that has been open to interprofessional graduate students in the health sciences since the School launched. In NRS 203, students learn basic theoretical principles of leadership and have opportunities to practice leadership skills related to active listening, communication, goal setting, and team building. All Betty Irene Moore School of Nursing students are required to take this course; however, leadership is emphasized in the curriculum for all the educational programs. Throughout the curriculum, students learn how to engage with governmental and regulatory agencies, how to communicate effectively via letters to the editor and other publications. Graduates lead projects or teams on the job and assume leadership roles in their community. Many have cited the leadership content in their programs as helpful in helping them achieve their professional goals.

- **Betty Irene Moore Fellowship for Nurse Leaders and Innovators** – A natural extension of the School's history creating and advocating for student leaders is the Betty Irene Moore Fellowship for Nurse Leaders and Innovators launched in November 2019 with a $37.5M grant from the Gordon and Betty Moore Foundation. The program recognizes and advances early to mid-career

nursing scholars and innovators with high potential to accelerate leadership in nursing-science research, practice, education, policy and entrepreneurship. It is funded for five full cohorts from 2020 through 2025. The Fellowship deepens the School's commitment to fostering the next generation of nurse leadership and innovation by working collaboratively on a national stage. As a young school, it was an important vote of confidence to receive funding for a national program of this scale.

III. Diversity, Equity & Inclusion – Building Infrastructure

The Betty Irene Moore School of Nursing's diversity, equity, and inclusion accomplishments, programs and activities since inception include:

Diversity Awards

- **2021 Health Professions Higher Education Excellence in Diversity (HEED) Award** – The Betty Irene Moore School of Nursing received the 2021 Health Professions Higher Education Excellence in Diversity (HEED) Award, signaling the School is creating the right foundation for diversity, inclusion and equity practices to grow and succeed. The School is one of 50 health professions colleges and universities in the nation to be identified as a HEED winner by *Insight into Diversity* magazine. According to publisher Lenore Pearlstein "this award process consists of a comprehensive and rigorous application that includes questions relating to the recruitment and retention of students and employees – and best practices for both – continued leadership support for diversity, and other aspects of campus diversity and inclusion."

- **2020 Nursing Diversity Champion by *Minority Nurse* –** In 2020, the School was also recognized as one of 12 schools in the country as a Nursing Diversity Champion by *Minority Nurse*. The honor highlights the School's commitment to recruit and retain a diverse group of students, faculty and clinicians.

Educational Efforts

- **2011 – 2016 HRSA grant –** A 2011 – 2016 Health Resources and Services Administration (HRSA) grant was used to educate faculty on how to better instruct underrepresented students, particularly students of color. The School of Nursing worked with the School of Education to develop workshops for School of Nursing and School of Medicine faculty learning.

- **New Student Leadership Immersion Week –** The School has consistently threaded social determinants of health across programs with the intention of educating nurses to be equity minded. This built on the initial IOM Future of Nursing: Leading change, Advancing Health report as well as the recently issued Future of Nursing 2020 – 2030: Charting a Path to Achieve Health Equity report. Health equity is foundational to influencing effective nursing and health care strategies going forward. The School built these principles into the New Student Leadership Immersion Week, which sets the tone for not only how the School will help students actualize leadership, but also how health equity plays a role in education, research, policy and practice.

Efforts to Recruit and Retain Diverse Students and Faculty

- **A Holistic Approach to Admissions –** School of Nursing faculty takes a holistic approach to admissions and meets annually to evaluate whether the admissions committee is upholding the School's commitment to diversity, equity and inclusion. This includes an admissions statement that is in line with the School's vision for building and sustaining a diverse academic community.

- **Scholarships for Disadvantaged Students (SDS) program –** In 2020, the School announced a Scholarships for Disadvantaged Students (SDS) program funded by a $2.6 million grant from HRSA. The program provides tuition support to disadvantaged students in the school's entry-level nursing program.

- **Efforts are also made to recruit and retain a diverse faculty workforce.** One such example is blinding faculty candidate materials during a search, as was recently done with recruitment for Family Caregiving Institute research faculty. This follows guidance from Academic Affairs in line with the University's Advancing Faculty Diversity Grant.

- **Inaugural Associate Dean for Health Equity, Diversity and Inclusion –** Dr. Piri Ackerman-Barger was named the inaugural Associate Dean for Health Equity, Diversity and Inclusion in 2020. This role reports both to the UC Davis Health Vice Chancellor of Health Equity, Diversity and Inclusion as well as the Dean of the School of Nursing. Therefore, Dr. Ackerman-Barger plays an integral role in connecting the School of Nursing with the broader UC Davis vision. She chairs the School's Healthy Equity, Diversity and Inclusion Committee, which is built on previous task force and committee bodies. The committee is responsible for the iterative and collaborative process that drove both the development of the School's diversity statement in 2019 and the drafting of the School of Nursing's 2021 – 2026 strategic plan for Health Equity, Diversity and Inclusion. This plan provides a proactive structure to help embed principles of health equity, diversity, inclusion, cultural humility and anti-racism into the fabric of the School of Nursing – how it operates and the outcomes it hopes to achieve. The committee used the University of California Office of the President Diversity, Equity and Inclusion plan and The UC Davis Diversity and Inclusion Strategic Vision as frameworks for the School of Nursing's Strategic plan.

IV. Connecting to the Future of Nursing and Advanced Practice

The Betty Irene Moore School of Nursing understands the importance of moving nursing science and better health outcomes forward as part of a collective voice. From the early beginnings it actively worked to actualize the recommendations made in the 2011 Future of Nursing (FON) Report, which galvanized the field. These recommendations included expanding opportunities for nurses to lead and diffuse collaborative improvement efforts, increasing the number of nurses with a doctorate and preparing and enabling nurses to lead change to advance health. Today the School is using the Future of Nursing 2020 – 2030 report as a guide to understand how it can continue to bolster and grow efforts to leverage nursing and advanced practice expertise to achieve health equity. It is also using the report recommendations as a framework to reflect on progress towards diversity, equity and inclusion strategies.

Educating Nurses and Health Professionals for the Future

Chapter 7 of the 2020-2030 report illustrates the importance of educating and retaining a diverse workforce, as well as preparing nurses to address social determinants of health to achieve health equity. The chapter's conclusions suggest best practices to achieve health equity goals as follows:

- Creating coursework and experiential learning that prepares students to promote health equity, reduce health disparities, and improve the health and well-being of the population in order to build the capacity of the nursing workforce through curriculum.

- Increasing the number of nurses with PhD degrees who focus on connections among social determinants of health, health disparities and health equity.

- Learning experiences that develop nursing students' understanding of health equity, social determinants of health and population health and prepare students to incorporate that understanding in to their professional practice, including interprofessional collaboration, applying cultural humility to recognize one's own implicit biases, develop technical competencies in use of telehealth or digital health tools; and to gain substantive experience delivering care in diverse community settings, including public health departments, schools, workplaces and neighborhood clinics.

- Supporting and mentoring students and faculty from a wide range of backgrounds to diversify the nursing workforce.

The following sections outline the School of Nursing's curricular, faculty and staff development, and institutionalized experiences that speak to many of the themes in the FON report indicating where the School is contributing to the common wisdom currently guiding the nursing and health professions.

Curricular

As with leadership, the School of Nursing has been threading social determinants of health across programs to ensure nurses and advanced practice providers are equity minded practitioners. These principles are embedded in courses on health equity, leadership, and health policy. Examples of these courses include:

- **Community Connections (Course: NRS 206) –** Foundational courses include the NRS 206 Community Connections course, which was initially launched as part of the MS-L program; however, it has been retooled and will be an integral part of the DNP-FNP Program. The community-based learning experience partners students with community organizations on health improvement projects, addressing systems-level problem-solving. The experience encompasses community engagement, data collection and analysis and collaborative leadership practice under the guidance of community members and nursing faculty. Over ten years, students in this course have worked with more than 40 community partners, some for several consecutive years, as was the goal. Partners include the California Department of Public Health, Mutual Housing California, San Joaquin County Public Health Services, Sacramento Food Bank and Family Services, VA Northern California Health Care System, Tahoe Forest Health System, Yolo Hospice, Amador Senior Center First 5 Amador, Native American Health Center, and 4-H Youth Development Program. Throughout the 3-course series, students engaged in ongoing self-reflection regarding their own racial identities through weekly classroom dialogue and directed journaling while learning about health inequities as contextualized in the history of race relations in the United States.

- **Social Determinants of Health and Health Equity (Courses: NRS 220 and NRS 353) –** Students in all programs also take a foundational course that focuses on social determinants of health and health equity. MEPN and PA students take NRS 220 – The Social and Determinants of Health; DNP-FNP students will take NRS 353 – Improving Patient & Population Health. The goal of each course is to ensure that student scholars have the framework and skills needed to advance health equity.

- **Race and Health in the United States (Course: NRS 213)–** This course is offered as an elective for all programs. The course illustrates race as a social and historical construct contributing to unequal health care distribution in the United States. It emphasizes practical health care leadership skills to end racial inequalities in health.

- The School is also addressing the domains and competencies in equity in nursing education as outlined in the FON report (page 202) in various ways including:

    - **Policy and its impact on health outcomes** – Health Status and Healthcare Systems course (NRS 201) examines human health and major population health issues in the U.S. from a variety of perspectives. The course focuses on introducing students to the social, political and economic determinants of health.

    - **Epidemiology and biostatistics** – PhD students survey foundational concepts in mathematics and statistics, as well as some basic methods of data analysis in Introduction to Applied Statistics (NRS 298).

    - **A basic understanding of social determinants of health and illness across populations, including how to assess and intervene to improve health and well-being** – The School makes use of Integrative Case-Based Learning (ICBL) in all clinical programs. These case scenarios help learners move beyond the chronic condition or diagnosis to explore how family relations, regional geography, cultural differences, and socioeconomic demographic details all impact individual health. These cases were later used to develop a broader interprofessional program –the System-transforming, Patient-Centered, Longitudinal, Interprofessional, Community-based Education (SPLICE) program. First-year nursing, medicine, PA, FNP; medical and pharmacy residents participated in a variety of simulations that bring students and residents from different health disciplines together in shared experiential learning. The program targets students who want to work in primary care, especially with under-served populations. Groups of learners partner in clinical practice settings and are exposed to community-based health professionals concerned with the social determinants of health and health equity.

    - **Health equity as an overall goal of health care** - as established in the School's vision. The School of Nursing engaged a broad audience of student, faculty, staff, alumni and community partners in 2019 and 2020 to revisit the School's inaugural vision and mission. Though similar in spirit, the refreshed vision and mission specifically sets a vision for optimal health and health care equity for all.

    - **Interprofessional and team building as a key mechanism for improving population health** - In 2021 the School of Nursing and the School of Medicine created a director of interprofessional education and clinical practice role in each school. This creates cross-program opportunities to foster an interprofessional learning and practice environment where students learn together and engage in topics related to diversity, inclusion, and the social determinants of health.

- **The economics of health care, including an understanding of basic payment models and their impact on services delivered and outcomes achieved** – Financial concepts are woven throughout relevant courses, for example the Developing Future Nurse Leaders course (NRS 224) for MEPN students and in Preparation for Clinical Practice (NRS 440) for the Nurse Practitioner and Physician Assistant students. In addition, upcoming DNP-FNP courses will address health care financing issues. Inaugural faculty member Dr. Elena Siegel leverages skills in nursing, health care systems, business, and finance to conduct research at the intersection of practice and policy. She utilized her expertise to develop Business Essentials for Health Care (NRS 357). This interprofessional online course is designed to establish a foundational understanding of healthcare business basics including finance, human resources, management and physical resources. Students develop leadership-level thinking to provide quality cost-effective care.

- **Systems thinking, including the ability to understand complex demands, develop solutions, and manage change at the micro and macro system levels** – Students broaden their systems change thinking in Implementation Science (NRS 202), which addresses change process in healthcare from political, historic, economic and sociologic frameworks. Similarly, Dr. Siegel designed a new course targeting incoming DNP-FNP students, Organizational and System Change Through Leadership, Research and Practice (NRS 352), to deepen their critical understanding and analysis of leadership theory as it relates to healthcare systems. It will address change processes in healthcare from political, historic, economic and sociological frameworks through learning from both historic and current examples of transformative change.

Faculty & Staff Development

Betty Irene Moore School of Nursing faculty and staff benefit from a rich professional development slate of offerings from both the School as well as the UC Davis Health Office of Health Equity, Diversity, and Inclusion. Associate Dean for Health Equity, Diversity and Inclusion Dr. Ackerman-Barger distributes a monthly newsletter highlighting trainings, events, articles, and opportunities for engagement with health equity, diversity, and inclusion topics. It includes a course calendar listing opportunities for professional development specific to health equity topics on the health campus in Sacramento, as well as the Davis campus. Campus-based courses are also promoted through various campus channels.

One of the highlights of these offerings is the **Anti-Racism and Cultural Humility (ARC) training**, which began as an innovative partnership between the School of Nursing and UC Davis Health Nursing to train nursing directors and managers throughout the hospital. Developed by School of Nursing faculty Dr. Jann Murray Garcia, Dr. Ackerman-Barger and post-doctoral fellow Dr. Victoria Ngo, the three-day sessions were highly rated and well received and expanded to train School of Nursing and Medicine faculty and staff, as well as health system physicians and administration. The project has collected early evidence that the training has changed nurse leadership behavior and enhanced skills among this group to engage around issues of anti-racism, cultural humility, and health equity. This builds the capacity of the health system to deliver the highest quality, most effective and respectful care. Promising program data were highlighted in podium presentations at the following 2021 national conferences: American Organization for Nurse Leaders (AONL), the Institute for Healthcare Improvement (IHI), and the National Association of Diversity Officers in Higher Education (NADOHE). The Health System's Office of Health Equity, Diversity and Inclusion now hosts the ARC Fellowship and Academy. Of the interprofessional inaugural cohort of fellows, six are clinical nurses at UC Davis health system, aspiring to be equity champions and trainers at UC Davis Health, and one is a School of Nursing staff member. The six-month fellowship is built on the framework of cultural humility, a pedagogy that was co-developed by Dr. Murray Garcia. Cultural humility marries a life-long commitment to self-evaluation and self-critique as integral to addressing the power imbalances in the patient-clinician dynamic. It also seeks to develop mutually beneficial and nonpaternalistic clinical and advocacy partnerships with communities on behalf of individuals and defined populations.

Embedded/Institutionalized experiences

The School of Nursing is set up to encourage collaborative partnerships. Many programs were designed to be interprofessional and continue to expand their footprint. Similarly, programs that were created or co-created with School of Nursing faculty or with School of Nursing funding are now under the umbrella of the Health System, which indicates recognition of the importance of health equity as a priority for professional development and as foundational to better health outcomes for all. A few examples include:

- **The Interprofessional Central Valley Road Trip** – This immersive field trip emphasizes the contributions and histories of the diverse people of California's Central Valley. Together students, faculty, staff and community members learn about concepts such as health, health inequities, population health and cultural humility, a concept co-developed by founding faculty member Jann Murray Garcia.
    - Participants have been joined by a historian and documentary film maker of the Central Valley and by students and faculty from the UC Davis Schools of Law and Education, the UC Davis Program in Public Health, and the Department of Environmental Chemistry. To the faculty's knowledge, this is the first experience across the nation using field trip pedagogy where the learners included a professionally diverse, multigenerational group of university students, faculty, administrators, staff and community members. The expertise of community members from and working in the Central Valley was highlighted along the way.
    - The road trip experience will be required for entering DNP-FNP students. Initially financially supported by the School of Nursing alone, the program is now co-sponsored by UC Davis Health. An evaluation study in the *Journal of Health Care for the Poor and Underserved* is due out in May of 2022. According to project leadership, findings from the evaluation can "inform health professions educators in innovating approaches to active learning that take advantage of intergenerational, interprofessional, mobile classrooms to appreciate the contributions, sociohistorical complexities, and challenges of the geographic regions wherein the students and patients live."

- **The Poverty Simulation –** This simulation designed for entry-level nursing students helps students better understand what it is like to live in poverty and the implications for health. Plans are underway to combine School of Nursing and School of Medicine students into interprofessional teams. The pilot will run in Winter quarter 2022.

- **The Interprofessional Book Club –** The book club launched on the UC Davis Health campus in the fall of 2010 led by School of Nursing founding faculty Dr. Jann Murray-Garcia for students, faculty and staff at UC Davis Health. It is an off shoot of the UC Davis campus book project which is a means of promoting conversation around a common subject by sharing and discussing all perspectives respectfully and in accordance with the UC Davis Principles of Community. Past selections include *How to be an Antiracist* by Ibram X. Kendi; *Stuffed and Starved: The Hidden Battle for the World Food System* by Raj Patel; and *Why are all the Black Kids Sitting Together in the Cafeteria?* by Beverly Daniel Tatum.

- The Office of Health Equity, Diversity and Inclusion (HEDI) underwrites the work of Associate Dean Ackerman-Barger, as well as Dr. Murray-Garcia as the Director for Social Justice and Immersive Learning, and post-doc Dr. Victoria Ngo (PhD 2019), signaling the value of these initiatives to the system beyond the School of Nursing.

Nurses Leading Change

Chapter 9 of the FON 2020-2030 report illustrates the importance of leadership in readdressing the barriers to achieving health equity. The chapter's conclusions suggest that:

- Nurse leaders at every level and across all settings can strengthen the profession's long-standing focus on social determinants of health and health equity to meet the needs of underserved individual, neighborhoods and communities, and to prioritize the elimination of health inequities.

- Achieving health equity will require multisector collaboration, and nurse leaders can participate in and lead these efforts.

- Community and public health nurse leaders have expertise and experience in leading cross-sector partnerships to meet social needs and address social determinants of health; their expertise can be leveraged to inform the broader nursing profession in both practice and education.

- Nurse leaders have a responsibility to address structural racism, cultural racism, and discrimination within the nursing profession and to build structures and systems at the societal level that address these issues to promote health equity.

Eight skills and competencies were identified in the report (page 282) as essential for nursing leadership in nearly every setting. They are:

1) visioning for health equity
2) leading multisector partnerships
3) leading change
4) innovating and improving
5) teaming across boundaries
6) creating a culture of equity
7) creating systems and structures for equity
8) mentoring and sponsoring

Each of these skills is emphasized through School of Nursing partnerships, research, models of influence and students and alumni in the community. Exemplars of each are noted below.

Partnerships/Collaborations

The School of Nursing emphasizes leading change through community and education partnerships. A few partnerships are highlighted below.

- **Federally Qualified Health Centers (FQHC) –** FQHCs strive to meet the needs of underserved populations. The School of Nursing's NP Residency and the SPLICE program both partner with FQHCs to provide students with hands-on primary care clinical experiences in an interprofessional care setting.

- **The One Health Street Team –** This team addresses health care needs of the homeless population through providing care for humans and pets. Associate Clinical Professor Dr. Susan Adams is piloting the program with Dr. Kristin Janakowski for veterinary medicine and MEPN students. Pet owners will often seek care for their pet before care for themselves. A One Health Center accommodates human and pet care under one roof to increase access to care. The Street Team runs tangentially to the Student-run Clinic at Knights Landing where human care is provided. Student human health clinicians engage with the human partners of the animals at the vet care clinical day, providing health information and some basic screening such as random glucose screening, blood pressure screening, and Covid-19 screening. An MD consult at the student-run clinic is available to respond should urgent issues be identified. The MEPN student post-experience survey responses demonstrated that the experience provided a unique look at the healthcare needs/challenges for this community and they found the experience valuable for connecting to people "where they are."

- **Summer Health Institute for Nursing Exploration and Success (SHINES) –** The School is developing the Summer Health Institute for Nursing Exploration and Success (SHINES) program targeting teens ages 16 to 17. The purpose is to engage current high school students or recent graduates and help them make informed professional and academic decisions about whether nursing is a career for the, what nursing pathways would suit their needs and interests, and how to become successful in their academic aspirations. The program is slated to launch summer 2022.

Research

The School of Nursing faculty are addressing structural racism within the health profession and barriers to health equity at the societal level through research such as:

- Clinical Professor and Associate Dean for Health Equity, Diversity and Inclusion Piri Ackerman-Barger works with an interprofessional team of researchers to better understand the **experiences of minority health professions students** with the ultimate goal of increasing diversity in the health professions to ensure clinicians represent the communities they serve.

- Dr. Ackerman-Barger's funded research includes **two Center for a Diverse Healthcare Workforce and Health Resource and Services Administration (HRSA) projects**: Promoting Wellness and Satisfaction in Medical Residents, Nursing Students and Physician Assistant Students by Understanding Microaggressions; and Understanding Microaggressions in Health Professions Students. Resulting publications included "Seeking Inclusion and Excellence: Understanding Microaggressions Experienced by Underrepresented Medical and Nursing Students" in *Academic Medicine*.

- Professor Dr. Carolina Apesoa-Varano and Professor Dr. Sheryl Catz received funding from the Public Impact Research Initiative at UC Davis for a partnership with Wellspring Women's Center in order to build **understanding of COVID-19 vaccine confidence among low-income women** in Sacramento.

- For several years, Dr. Janice Bell and Dr. Jill Joseph collaborated with the **Alameda County Care Alliance Advanced Illness Care Program (ACCA-AICP)**. Dr. Bell served as the program's lead evaluator, and Dr. Joseph served as the intervention lead working with community members to co-design the program's intervention and training. The ACCA-AICP is a faith-based and culturally embedded program providing lay care navigation support to persons needing advanced illness care and their families/caregivers in the community setting. The focus is on addressing long standing health disparities in the African American community related to the burden of

advanced illness and lack of access to care that relieves suffering and promotes quality of life, including uptake of palliative care and hospice. What started out as a volunteer effort initiated by a small group of African-American churches in Alameda County has grown into a high impact program promoting health equity, and now reaches over forty churches across three Bay Area counties with plans to expand to Southern California. The partnership and collaboration with ACCA reflects the SON mission to improve health and health care and embodies all of our core values of community connection, diversity and inclusion, leadership, innovative solutions and collaboration.

Models of Influence

The School of Nursing faculty have led efforts to continue the work toward health equity as highlighted below.

- As previously mentioned, Dr. Murray Garcia helped coin the term "**Cultural Humility**." The School recognized the importance of Dr. Murray Garcia's work and valued her expertise and leadership in developing core programs and curriculum. She is a foundational expert informing how the School structured its work.

- Dr. Ackerman-Barger developed the **Inclusion Curriculum Assessment for Representation and Equity (I-Care) tool** to support the **Inclusion, Diversity, Anti-Racism and Equity (I-DARE) task force initiative** in the School of Nursing. The one-year initiative supported a task force to address immediate diversity, equity and inclusion (DEI) needs, train future leaders on DEI, and utilize a standardized needs assessment to develop School and institutional action plans to advance the UC Davis DEI strategic vision goals. The purpose of conducting a health equity curriculum assessment at the Betty Irene Moore School of Nursing is to ensure that the curricula, across all degree programs, reflects and actualizes the health equity, diversity and inclusion aspirations of both the School of Nursing and overall health professions. The tool is currently being validated and will be usable across health professions.

Students and Alumni in the community

Students are encouraged to exercise leadership skills while enrolled in their educational program. Students may take part in student governance and/or engage in professional societies, or many attend conferences and contribute to policy and community initiatives as well. Alumni carry these connections to the community into their leadership roles and their careers.

<u>Clinical:</u>

- Many clinical graduates are rising in their roles; **more than 40 alumni now serve as clinical instructors.**

- MEPN graduates actively engage in leadership in their roles at their healthcare institutions. Examples of this include:

    - Brandon Coustette is an Emergency Department (ED) nurse at Enloe in Chico, California, and a clinical instructor for the nursing program at California State University, Chico. During the Paradise fires in 2018, he was instrumental in organizing supportive services for fire victims. He also engages policy makers on investing in mental health services based on what he sees in practice.

- Gina Gerace is an Intensive Care Unit (ICU) nurse at a hospital in Oroville, CA which serves the rural Butte County. Gerace has been approached to develop a new program that would provide ICU nurses for ED patients who are being held in the ED because of a lack of beds.

Policy:

- Students and faculty actively worked on policy changes with the California Association of Nurse Practitioners (CANP) in 2020 on **AB: 890** which sought to remove mandatory supervision of nurse practitioners and to expand their scope of practice. The bill was subsequently signed into law that same year. The Sacramento Chapter of the California Association for Nurse Practitioners lobbied legislators at the Capitol, including issuing an invitation to join a discussion with NPs to hear more about why full practice authority is important, especially in underserved areas. The chapter was led by then Board President Ricky Norwood, assistant clinical professor for the School of Nursing MS-FNP and MHS-PA programs, as well as then FNP students who were also members of the board.

Community:

- School of Nursing students participate in the student-run, annual community health and equity conference (CHEq). Hosted and organized by students from the UC Davis School of Medicine and Betty Irene Moore School of Nursing, the annual event is aimed at strengthening the understanding and integration of marginalized populations through the health care lens. The most recent conference focused on marginalized communities and vaccine hesitancy.

- NP and PA students look for opportunities to be of service in the community through the Student Interest Group – Inclusive Medicine.

Professional Associations and Honors:

- **Capitol City Black Nurses Association**: Then MS-L student Carter Todd (MS-L 2019), also recognized as a Sacramento 40 Under 40 by the Sacramento Business Journal and who recently earned an MBA degree, and MS-L graduate (2018) Sheree Criner launched the Sacramento chapter of the National Black Nurses Association (NBNA) - the Capitol City Black Nurses Association (CCBNA). CCBNA advocates for nurses and optimizes health outcomes in communities where health disparities exist while also enhancing the nursing education pipeline. Other graduates have joined the association, including Aron King (MS-L2021). The chapter is nationally recognized by the NBNA as having the most male members and the most lifetime members. On June 12, 2021, Carter Todd and Aron King led the CCBNA in hosting a several bi-coastal, virtual "Barbershop Health Talks" in collaboration with Greater New York City - Black Nurses Association, Inc. The event was streamed live coast to coast and covered a number of important topics of urgent relevance to the health of Black men.

- Sandra Calderon, current PhD student (FNP-2016), agreed to lead the newly formed Sacramento chapter of the National Association of Hispanic Nurses (NAHN) in 2019.

- Melissa Johnson Camacho (MS-L 2019) is also the California Nurses Association Chief Nurse Representative for UC Davis Medical Center

Academic and Leadership Roles include:

- Michelle Camicia (PhD 2018) – Director of Operations for Kaiser Foundation Rehabilitation Center, FAAN

- Perry Gee (PhD 2014) – **First nurse scientist for Intermountain Healthcare in Salt Lake City**; adjunct faculty member at the University of Utah, University of San Francisco and Arizona State University Schools of Nursing, FANN

- Rayne Soriano (PhD 2015) – **Regional Director for Operations and Nursing Professional Practice at Kaiser Permanente Hawaii**, Adjunct Professor for the University of San Francisco

- Jacqueline Clavo Hall (PhD 2017) – **Assistant Professor, Assistant Director School of Nursing Touro University, California**

- Maritza A. Lara (MS-L 2017) – **Population Health Director at Health Improvement Partnership of Santa Cruz County**

- Sheridan Miyamoto (PhD 2014), **Associate Professor at Penn State and Director of the Sexual Assault Forensic Examination Telehealth (SAFE-T) Center**, has a nationally recognized body of research on child maltreatment and sexual assault, FAAN.

- Casey Shillam (2010 – 2012 postdoctoral fellow) – **Dean of the University of Portland School of Nursing**, RWJF Fellow

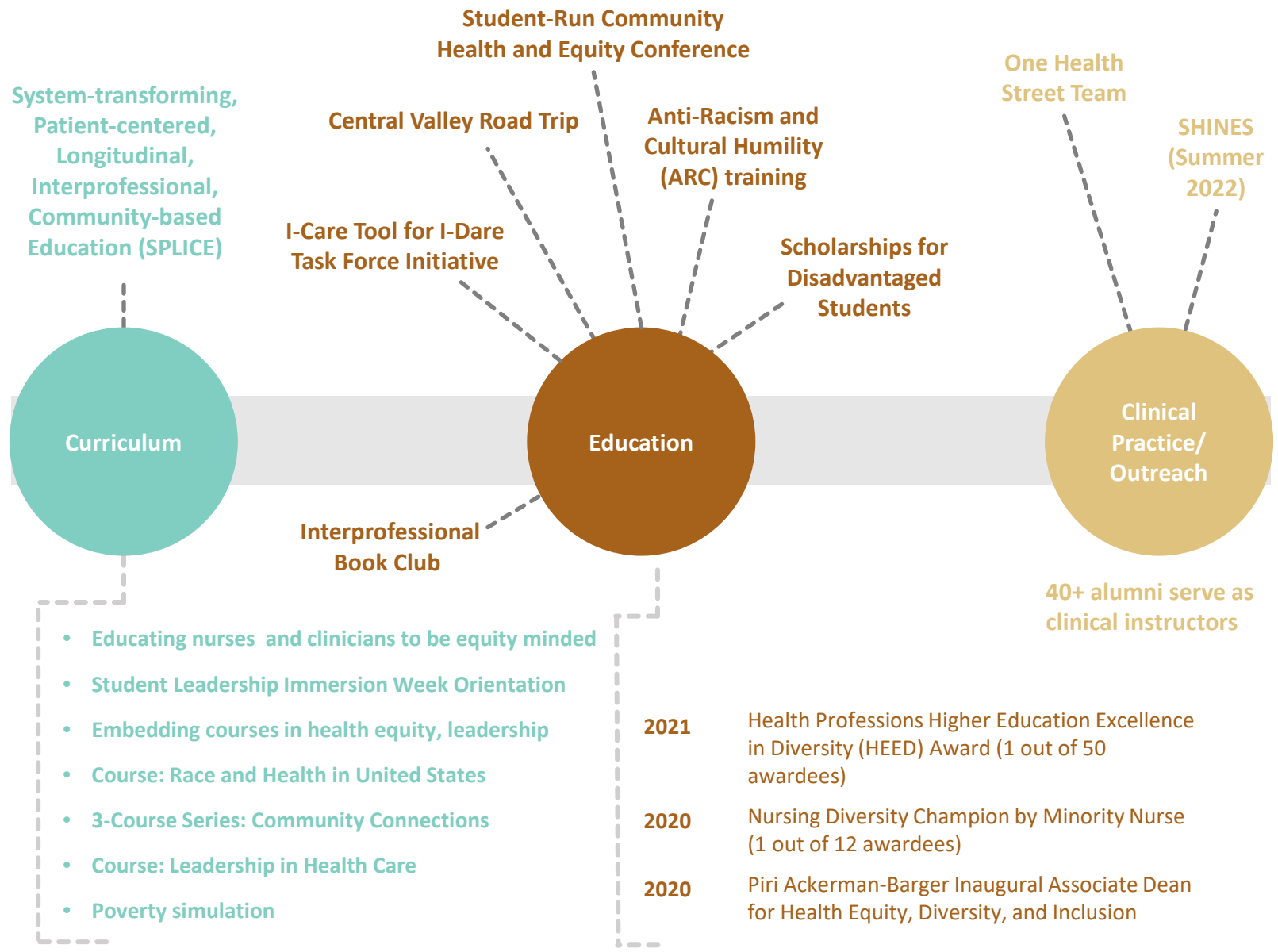
- **More than 40 alumni, including post-doctoral fellows, hold academic appointments in California or in six other states.** This includes six within the California State University system and multiple alumni working as clinical instructors or preceptors in the UC Davis Health system.

- Several MEPN students are now **clinical instructors for the School of Nursing**, including Neil Oppenheimer (2017), Jenna Ricks (2019) and Eric Yai (2019). Charis Ong (MS-L 2018) has also taught in the MEPN program since graduating.

V. Summary

As the Betty Irene Moore School of Nursing moves forward in the 2020 decade, faculty and staff will continue to place a priority on leadership and health equity initiatives to actualize the School's vision and the strategic pillars put forth in the 2021-2026 School of Nursing Strategic Plan. Namely, by preparing exceptional nurses, physician assistants and related health professionals to become the next generation of leaders in health care; strengthening engagement with the community to improve health and health equity for all; and advancing diversity, equity and inclusion throughout the School of Nursing and in the workforce. The team will build on the school's history of leadership, preparation of equity minded practitioners, community partnerships and programs.

Leadership, Optimal Health and Health Equity Activity Summary



- Educating nurses and clinicians to be equity minded
- Student Leadership Immersion Week Orientation
- Embedding courses in health equity, leadership
- Course: Race and Health in United States
- 3-Course Series: Community Connections
- Course: Leadership in Health Care
- Poverty simulation

2021	Health Professions Higher Education Excellence in Diversity (HEED) Award (1 out of 50 awardees)
2020	Nursing Diversity Champion by Minority Nurse (1 out of 12 awardees)
2020	Piri Ackerman-Barger Inaugural Associate Dean for Health Equity, Diversity, and Inclusion

Alumni Leading in Optimal Health and Health Equity

- Carter Todd (MS-L 2019) and Sheree Criner (MS-L 2018) launched the Capitol City chapter of the National Black Nurses Association
- Sandra Calderon, current PhD student, President of newly formed Sacramento chapter of the National Association of Hispanic Nurses
- Maritza Lara (MS-L 2017)- Population Health Director at Health Improvement Partnership of Santa Cruz County
- Brandon Costette (MEPN 2018) organized supportive services for the Paradise fire- ED nurse/clinical instructor
- Rayne Soriano (PhD 2015) – Regional Director for Operations and Nursing Professional Practice at Kaiser Permanente Hawaii
- Perry Gee and Sheridan Miyamoto (PhD 2014 alumni) and Michelle Camicia (PhD 2018) inducted as Fellows in the American Academy of Nursing
- Jacqeuline Clavo Hall (PhD 2017) – Assistant Director School of Nursing Touro University, California
- Melissa Johnson Camacho (MS-L 2019) serves as the CNA Chief Nurse Representative for UC Davis Medical Center
- Casey Shillam (2010 – 2012 postdoctoral fellow) – Dean of the University of Portland School of Nursing

Betty Irene Moore School of Nursing's Contribution to Leadership and Health Care Equity Assessment

Considering the information provided in this packet and your knowledge about leadership and health and health care equity, please answer the following questions about the Betty Irene Moore School of Nursing's contribution in this area using this link.

1. **Have (or is it likely in the future) the School of Nursing's activities and outputs directly or indirectly led to improvements in leadership and health care equity? Please use the 1 to 5 rating scale below.**

   5 = School of Nursing has made major contribution(s) to leadership and health care equity which would be readily recognizable by experts in health care.

   4 = School of Nursing has made some contributions and/or demonstrates great potential to contribute to leadership and health care equity which would be readily recognizable by experts in health care.

   3 = School of Nursing activities are ongoing, and outputs are produced that are likely to result in improvements in leadership and health care equity which would be readily recognizable by experts in health care.

   2 = School of Nursing activities are ongoing, and outputs are produced that may result in a contribution to leadership and health care equity, but only limited application is expected.

   1 = Research, activities, and outputs have not resulted in or are not likely to have any application.

2. **What do you see as the school's greatest strength(s) in advancing or having an influence in the area of leadership and health care equity? In what ways has the school had the most impact in this area?**

3. **Where could the school most improve in advancing or having an influence in the area of leadership and health care equity? What challenges or barriers do you foresee the school facing in the next decade in this area?**

4. **Given your knowledge of leadership and health care equity, what opportunities exist for the school to build on their present strengths in this area?**

5. **Please provide any additional feedback or thoughts on the school's efforts in advancing or influencing leadership and health care equity.**

Appendix C

UC DAVIS HEALTH | BETTY IRENE MOORE SCHOOL OF NURSING

Influencing Systems Change, Creating Change Agents: 10 Years of Progress

A Message from the Betty Irene Moore School of Nursing at UC Davis

This packet contains a high-level overview of the Betty Irene Moore School of Nursing's achievements and contributions in the area of systems change. As a colleague with expertise in health and health systems of care, we would appreciate your assessment of the school's influence and impact in this area. Your reflection will inform the school's self-assessment and help us understand the contributions the Betty Irene Moore School of Nursing has made in influencing systems change over the last decade. We appreciate your feedback on areas of significance that are notable as well as opportunities for improvement as we continue to develop and broaden our reach in the coming years. If you have questions about the material or the review, please contact Stacey Pasco at slpasco@ucdavis.edu. Thank you for your time and contribution to our school's development.

Stephen Cavanagh, PhD, MPA, RN, FACHE, FAAN
Dignity Health Dean's Chair for Nursing Leadership
Dean and Professor, Betty Irene Moore School of Nursing

Material contained in review packet:

3 **A History of the Betty Irene Moore School of Nursing**

- Vision and Mission at School Launch
- Timeline
- Logic Model

7 **Achievements: Influencing Systems Change and Creating Change Agents**

15 **School of Nursing's Influence on Systems Change Assessment**

A History of the Betty Irene Moore School of Nursing

The Betty Irene Moore School of Nursing at UC Davis prepares successful leaders in health care. We offer programs for future nurses, physician assistants, family nurse practitioners and nursing science researchers. As one of the only graduate nursing schools committed to activating change where it's needed the most, the school goes beyond clinical education with programs that provide graduates with the skills, confidence and vision to be change agents on many levels and with many different titles.

The Betty Irene Moore School of Nursing at UC Davis was established in March 2009 through a $100 million commitment from the Gordon and Betty Moore Foundation. Together, we work toward a future where health and well-being are open, accessible and equitable.

The school admitted its first classes in Fall 2010. The school has offered five graduate degree programs over its first decade:

- Doctor of Philosophy in Nursing Science and Health-Care Leadership
- Master of Science in Nursing Science and Health-Care Leadership
- Master's now Doctor of Nursing Practice — Family Nurse Practitioner
- Master of Health Services — Physician Assistant Studies
- Master's Entry Program in Nursing

The graduate degree programs are led by the Nursing Science and Health-Care Leadership Graduate Group, an interprofessional team of more than 60 faculty members from disciplines including nursing, medicine, health informatics, nutrition, biostatistics, pharmacy, sociology and public health. The School of Nursing is part of UC Davis Health, a hub of innovation that encompasses UC Davis Medical Center, UC Davis School of Medicine and UC Davis Medical Group.

UC Davis Health, one of five health systems within the University of California, is an integrated, academic health system consisting of the UC Davis School of Medicine, the Betty Irene Moore School of Nursing, the 646-bed, multispecialty, acute-care hospital and clinical services of UC Davis Medical Center and the UC Davis Medical Group. The health system also includes the UC Davis Comprehensive Cancer Center, UC Davis Children's Hospital and a Level I trauma center.

The health system is a major driver of economic prosperity in the Sacramento region and Northern California, generating more than $3.4 billion in annual economic output and more than 20,000 jobs. The health system is a hub of innovation that is improving lives and transforming health care by providing excellent patient care, conducting groundbreaking research, fostering innovative, interprofessional education, and creating dynamic, productive partnerships with the community.

2020 marked a significant milestone for the Betty Irene Moore School of Nursing at UC Davis. The first 33 students embarked upon their graduate education at the school 10 years ago. Now, more than 835 alumni make an indelible impact on the clinics, classrooms and communities in which they serve. They embody and enact the vision and mission of our founders from bedside care to individuals and families to bold changes in health care systems across California and the nation.

Vision

Vision

The Betty Irene Moore School of Nursing at UC Davis advances health and ignites leadership through innovative education, transformative research and bold system change.

Mission

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence through immersive, interprofessional and interdisciplinary education and research in partnership with the communities it serves. Faculty, staff and students discover and disseminate knowledge to advance health, improve quality of care and shape policy.

CORE ATTRIBUTES

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence and addresses urgent societal needs through:

- Leadership development—build capacity for advocacy and action at all levels.
- Interprofessional/interdisciplinary education—health professionals learn multiple perspectives to work and communicate as teams.
- Transformative research—apply the science of nursing to improve health and reshape health systems with emphasis on aging, rural health and diverse communities.
- Cultural inclusiveness—teach culturally appropriate approaches to care and involve communities to design and conduct relevant research.
- Innovative technology—use technology to create an engaged and interactive approach to nursing education, research and practice.

UCDAVIS
BETTY IRENE MOORE
SCHOOL OF NURSING

Betty Irene Moore School of Nursing Timeline

2007

Early planning

The Gordon and Betty Moore Foundation and UC Davis **announce $100 million commitment** to launch school of nursing at UC Davis

UC Davis leaders **meet with Mrs. Moore** to review leadership and strategic development

2008

Great Recession

UC Board of Regents **appoints Heather M. Young** as associate vice chancellor for nursing at UC Davis

School's first faculty member Debbie Ward arrives, searches launch for founding faculty

Strategic Design Summit convened in Sacramento with national nursing and education thought leaders to develop curriculum, partnerships and faculty proposals

2009

University of California Board of Regents **formally approves** the Betty Irene Moore School of Nursing

UC Davis **convenes National Advisory Board** of national nursing leaders as well as UC Davis leadership to build the vision and mission for the school

2010

UC Office of the President (UCOP) approves interprofessional Nursing Science and Health-Care Leadership Graduate Degree Programs: **MS** and **PhD**

Inaugural **Welcome Ceremony** for 8 PhDs and 25 Master of Science-Leadership classes; **start of National Advisory Council** chaired by Dr. Fagin, Dean Emeritus, Univ of Penn SON

Academic programs launch with **27 interprofessional faculty** in inaugural Nursing Science and Health Care Leadership Graduate Group

2011

Betty Irene Moore School of Nursing **appoints first associate dean for research**, Dr. Jill Joseph

Commission of Collegiate Nursing Education (CCNE) **accredits MS-L program**

2012

Master of Science leadership (**MS-L**) program **inaugural cohort graduates**

CCNE **accredits MSL**

Program engages **9 community partners** in Long Term Care-based participatory collaborations

2013

Expansion

UC Davis Master of Science - Family Nurse Practitioner (**FNP**), Master of Health Services - Physician Assistant Studies (**PA**) **programs transition to School of Nursing** as interprofessional master's degree programs

2014

Inaugural cohort of Doctor of Philosophy candidates receive degrees

Western Association of Schools and Colleges (WASC) **accredits PhD program**

2015

$2.5 million gift from Dignity Health creates **first endowed deanship at UC Davis**

Ground breaks on Betty Irene Moore Hall

Inaugural cohorts of the FNP and PA programs **graduate**

2016

Inaugural cohort matriculates into Master's Entry Program in Nursing (**MEPN**)

CCNE **accredits FNP program;** ARC-PA **accredits PA program**

SON partners with more than **450 clinical sites** across California

2017

Family Caregiving Institute launched with a $5M grant from the Gordon and Betty Moore Foundation

Grand Opening of Betty Irene Moore Hall

CCNE **accredits MEPN program; Inaugural cohort** in Master's Entry Program in Nursing graduates

2018

Dean transition

First time **alumni outnumber current students**

Founding Dean **Dr. Heather M. Young steps down** after 10 years of leadership; Dr. Debbie Ward appointed as interim dean

Gordon and Betty Moore Foundation establishes the $1.7M **Heather M. Young Postdoctoral Fellowship.**

2019

Dr. Stephen J. Cavanagh appointed as the school's second dean and Dignity Health Dean's Chair for Nurse Leadership

The **Nurse Practitioner Residency program is established** among the School of Nursing, UC Davis Health Medical Center, and multiple Federally Qualified Health Clinics

The Betty Irene Moore **Fellowship for Nurse Leaders and Innovators launches** with a $37.5 million grant from GBMF

2020

New strategies
COVID-19 pandemic

School moves to **online curriculum** as necessitated by COVID-19 pandemic. All eligible students **graduate on time**

2021

MS-L program paused after graduating 2021 class. Leadership themes remain integrated through all programs, specifically the **new Doctor of Nursing Practice (DNP-FNP) degree**, which opened admissions in fall 2021

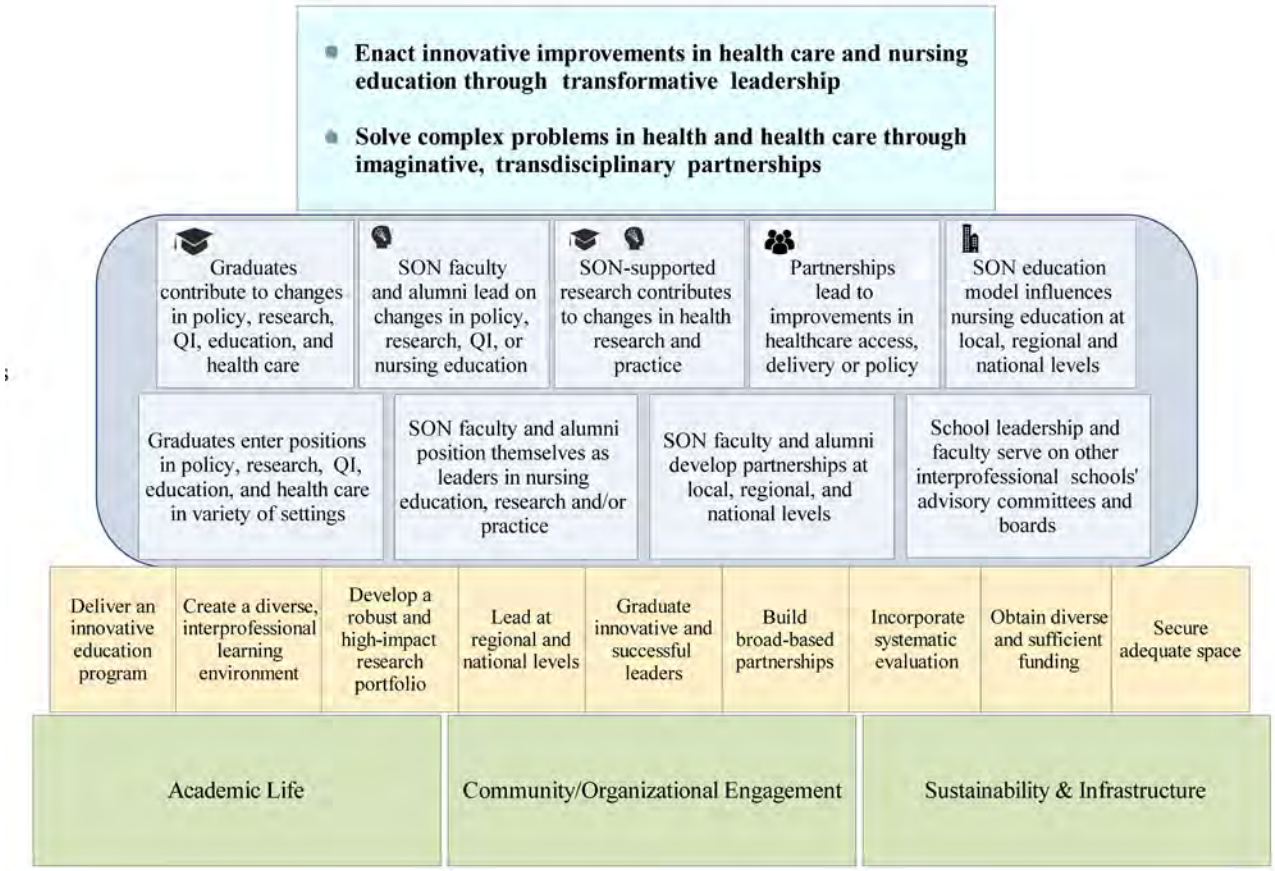
Consortium Office for UC Psychiatric Mental Health Nurse Practitioner (PMHNP) post-graduate certificate is established with a grant from the California Health Care Foundation

Janice Bell is announced as the **Western Health Advantage Endowed Professorship**

38 full-time faculty and 7 part-time faculty

LOGIC MODEL

To articulate the short-term and intermediate goals of the Betty Irene Moore School of Nursing, a program theory-driven evaluation approach was used.[1] In this approach, the theory or logic that underlies a program is visually represented through a model. The School of Nursing logic model was developed collaboratively by the school leadership and evaluators. The school's logic model (shown below) highlights the foundational elements on which the school was built and the expected intermediate outcomes (middle blue section) and long-term outcomes (top section).



[1] Donaldson, SI. (2007). Program Theory-Driven Evaluation Science: Strategies and Applications. Taylor & Francis: New York.

Achievements: Influencing Systems Change and Creating Change Agents

I. Introduction

The Betty Irene Moore School of Nursing at UC Davis' programs and alumni are influencing UC Davis Health systems of care and are part of a larger response to health care needs and trends in California. The School launched with a vision to enact systems change through education, partnership and policy. Over the past ten years, it is beginning to realize this vision through its graduates and outcomes.

II. Landscape in the Sacramento Region When the School Launched

The Sacramento region has a history of quality nursing education programs focused on creating new RNs at the associate and bachelor's degree levels - Sacramento City College and California State Universities Sacramento, Stanislaus, and Chico, being strong players. However, the focus has been on creating bedside nurses. The Betty Irene Moore School of Nursing launched with the goal of creating master's prepared nurses and applying nursing science to influence systems change resulting in higher quality care across the region. The choice to focus on graduate degree programs was intentional to complement the other programs in the region rather than to compete with them. This in turn influenced not only UC Davis Health (UCDH) but created a footprint for partnerships to build on complementary goals of influencing high quality care via the role of registered nurses (RNs) and advanced practice providers (APPs), including nurse practitioners (NPs) and physician assistants (PAs), in the region.

From the beginning UC Davis Health, including the Medical Center, was interested in growing its interprofessional education and care delivery team strategies, which was instrumental in UC Davis receiving the commitment from the Gordon and Betty Moore Foundation in 2009 to launch the Betty Irene Moore School of Nursing. Adding a school of nursing to the health campus allowed students from all professions to learn and train together. Over the last ten years the School of Nursing has increased visibility for the role of RNs and advanced practice providers in health care at the system and regional level.

III. The Impact of the Betty Irene Moore School of Nursing on the UC Davis Health System and the Nursing and Advanced Practice Provider Professions

Since its founding, the School of Nursing has established a variety of programs and internal and external partnerships that have both influenced the landscape of nursing and health education in its region as well as developed a pipeline of change agents. The following is a brief review of some of the School's accomplishment in these areas over the last 10 years.

Education Programs

The inaugural 2012 cohort of the **Master of Science – Leadership (MS-L)** included UCDH RNs seeking a master's degree. The program was distinct in its emphasis and focus on leadership and quality improvement. Even before graduation, the UC Davis Medical Center realized the value of these students and elevated

some of them into a newly identified role, **Quality Champions**. This health system role capitalized on the students' burgeoning leadership and quality improvement skills. The Quality Champion Role was designed to focus on quality of care thereby increasing care outcomes. School of Nursing alumni in these initial pilot roles functioned as change agents, which helped the Medical Center move toward Magnet status—the highest credential for nursing facilities in the United States. UCDH expanded on these pilot roles and now employs nine Quality Champions across the health system, the majority of which have been Betty Irene Moore School of Nursing alumni.

Inaugural Master's Entry Program in Nursing Class of 2017

The UC Davis health system did not have a tradition of hiring new RNs until it launched its New Graduate Nurse Residency program in early 2012. The School was well positioned to further influence this change in hiring practice when it opened the **Master's Entry Program in Nursing (MEPN)** in 2016. The health system became a key hiring stakeholder for these new RN graduates. UCDH hired 25% of the first MEPN cohort because of the Betty Irene Moore School of Nursing's reputation for excellence and the growing history of partnership established with UCDH. Since then, more than 40 new RN graduates have been hired, which again accounts for about 25% of the total MEPN graduate population since inception. The Health System also continues to hire new graduates from across all the School's educational programs – over 200 School of Nursing alumni have worked or are working at UC Davis Health, about 24% of the School's total alumni population.

The School of Nursing built on its reputation for creating change agents with the establishment of its Advanced Practice Provider programs. In 2014, the former NP and PA undergraduate certificate programs housed in the Department of Family and Community Medicine were converted to the **Master of Science – Family Nurse Practitioner (FNP) and the Master of Health Services – Physician Assistant Studies (PA**) programs respectively. This transition enhanced the roles of these professions by first, converting them into advanced practice professional level graduate programs offering a master's degree and second, integrating the School of Nursing principles of leadership, social determinants of health, and population health. These changes helped enhance the professional reputation of APPs in the health system, and also trained graduates who had a more comprehensive understanding of how to advance health, improve quality of care and even shape policy. Additionally, it increased the School of Nursing's capacity to affect change in rural and underserved areas by elevating the value of advanced practice providers and RNs delivering primary care.

Clinician Educator Model

The School of Nursing piloted a new model of education for the UC Davis Health system in 2016 by creating a position that combined the equally coveted roles of advanced practice provider and graduate degree program educator. This professional can deliver quality care where it is most needed while also preparing the next generation of providers. The model entails hiring a full-time faculty member through the School of Nursing and then contracting that faculty out to a clinical practice site for 80% of their time. The Clinician Educator

Faculty is a full-time educator—both in the clinical practice site and the classroom. The faculty precepts students in the clinic four days per week and teaches in the classroom one day per week. This model creates consistent preceptors for students, at a time when preceptors are the largest rate-limiting factor for all schools of nursing. This role was piloted as a collaboration with the **Sacramento County Health Center**, who has been a consistent partner for the School of Nursing for the past six years. In 2020, the pilot expanded to hire a dozen more faculty to practice in primary care, women's health, mental health, and pediatrics. Theses impacted areas are some of the most competitive clinical practice rotation sites for students. This new model of education for the system is especially noteworthy because it generates clinical income, teaches advanced practice students with School of Nursing faculty, and helps solve a preceptor shortage in a competitive education market.

Policy

AB: 890 Nurse Practitioners: Scope of Practice: Practice without Standardized Procedures – In support of the APP FNP role, faculty members Debra Bakerjian, Susan Adams, Ricky Norwood, and Heather M. Young all actively worked on policy changes with the California Association of Nurse Practitioners (CANP) in 2020 on AB: 890, a California Assembly Bill which sought to remove mandatory supervision of nurse practitioners and to expand their scope of practice. The Sacramento Chapter of the California Association for Nurse Practitioners lobbied legislators at the Capitol, including issuing an invitation to join a discussion with NPs to hear more about why full practice authority is important, especially in underserved areas. The chapter was led by then Board President Ricky Norwood, assistant clinical professor for the MS-FNP and MHS-PA programs, as well as then FNP students who were also members of the board. The bill was subsequently signed into law in Fall 2020.

Partnerships - UC Davis Health

Clinical Partnerships. The Betty Irene Moore School of Nursing has created a strong partnership with nurses in the UC Davis health system, specifically through MS-L and PhD graduates and the Advanced Practice Council. The Advance Practice Council implements and maintains standards of advanced clinical nursing practice and patient care consistent with evidence-based practice of the requirements of regulatory agencies. The Betty Irene Moore School of Nursing contributes to change in the UC Davis Health system through:

- **New Hires and Promotions of Alumni –** Master's leadership graduates often work either as quality and safety champions or as nurse managers or assistant nurse managers. In these roles they serve as guest lecturers, participants in grant activities, or as preceptors for quality and safety practicums.

- **PhD graduates** have been hired in roles such as nurse managers or Clinical Nurse Scientists, where they have led clinical research within the health system and often interface with School of Nursing students and nurse practitioner residents.

- **Improving Patient Safety and Healthcare Quality –** More than 200 quality improvement projects (QI) were developed through the NRS 493 (Quality in Healthcare) course series within the UCDH system and the NRS 242 series (Implementation Science for Clinicians) with students working with UCDH system partners and in many different primary care clinics in Northern California. FNP and PA students worked together on quality improvement projects on topics such as:
    - adherence to compression therapy and leg elevation;
    - addressing the lack of a standard process for evaluation of TB compliance during well-child vaccination updates;
    - accurately rechecking blood pressures that may be falsely elevated in an outpatient setting; and
    - creating a supportive work environment by understanding and addressing increasing fatigue, decline in teamwork and compassion fatigue among nursing staff.

- **Advanced Practice Council –** The School of Nursing has a faculty representative on the Advanced Practice Council (currently Clinical Professor Debra Bakerjian), which has led to increased partnership with this group. The APPs in the health system are mentors for the School's NP Residency and also precept NP and PA students in various specialty rotations.

- **Advanced Nurse Practitioner NP – PRACTICE Residency –** This residency was created in partnership with UC Davis Medical Center and affiliated centers and clinics, as well as with Health Resources and Services Administration (HRSA) funding, which was used to create partnerships with multiple Federally Qualified Health Clinics (FQHCs). The full-time, limited-term employment and training opportunity prepares recently graduated family and adult gerontology nurse practitioners (FNPs and AGNPs) to provide high-quality primary care in under-resourced areas. The residency program was developed to increase successful transition to practice and is seeding the next generation of interprofessional teams at UC Davis Health. Though only in its second cohort year, the program has garnered interest from regional partners, such as the Shasta Community Health Center. The center reached out to establish an academic partnership with UC Davis for its own residency program.

- **Advanced Practice Fellowship –** The UCDH Advanced Practice Fellowship is working closely with the School's NP Residency and there are plans to combine the two programs. In the future, many of the residents will be hired as Clinician Educator faculty in this transition-to-practice role, further expanding the number of high-quality advanced practice providers who will be trained as preceptors and educators.

Education Partnerships. The Betty Irene Moore School of Nursing has also created education partnerships that have impacted systems change and created change agents.

- **Integrative Case-Based Learning (ICBL) –** The School of Nursing leveraged grant funding to develop pilot education that later informed larger educational initiatives. For instance, the School had a series of Song Brown (California healthcare workforce training program grants) funding that helped develop integrative case-based learning (ICBL). These case scenarios help learners move beyond the chronic condition or diagnosis to explore how family relations, regional geography, cultural differences and socioeconomic demographic details all impact individual health. Through these cases, students acquire a unique set of knowledge, skills and attitudes that help them administer care effectively and lead a team in the best interest of the individual at the center of care. ICBL was later used to develop the SPLICE simulations described below.

- **System-transforming, Patient-Centered, Longitudinal, Interprofessional, Community-based Education (SPLICE) program –** This program is an interprofessional opportunity for first-year nursing, medicine, PA, FNP and pharmacy residents. The experiential learning activities offer a comprehensive teamwork experience in both the classroom and in practice. The program targets students and pharmacy residents who want to work in primary care, especially with under-served populations. Through this program, more than 300 faculty, staff and students in the School of Nursing and School of Medicine have been trained, including staff at the Sacramento County Health Clinic, which partners with UCDH to educate students.

- **SPLICE Simulations Based on the ICBL Cases –** HRSA funding supported the development of the 17 SPLICE simulations. In these simulations, students learn to manage a variety of health conditions in varying patient populations with a focus on social determinants of health. Additional HRSA funding in 2021 supported the addition of another six simulations. SPLICE educators developed the first primary care simulation template, which is now being used by the California Simulation Alliance, which trains hundreds of faculty members in how to conduct and debrief simulations with students. The template is also being converted to align with new public health simulations being developed. A newer HRSA primary care grant will expand on the legacy of the SPLICE program and continue to support student housing in rural rotations so they can participate in longer-term primary care experiences.
- **Student Run Clinics –** The School of Nursing has also established relationships with the School of Medicine student run clinics, which provide care to marginalized and underserved communities in the Sacramento area. FNP and PA students not only participate in the delivery of care, but also in leadership roles as student officers in these clinics.

Partnerships - Regional

As the Betty Irene Moore School of Nursing established itself in the Northern and Central Valley regions, it has seen an uptick in partners reaching out to be collaborators. The School has embraced this convener role and understands it is a key academic partner in the region, capable of connecting new networks and establishing pipelines for workforce, research, clinical practice innovations, graduate-level education and quality improvement projects. It is important to note that any partnership involves leading and learning. The School emphasizes two-way partnerships that benefit all involved. Highlights include:

- **Humboldt Partnership** – a rural, medically underserved community with a shortage of primary care providers who play a vital role in delivering rural health care. The School of Nursing worked with local stakeholders including the area Chamber of Commerce, donors, and a local hospital in order to understand the needs of the community. The conversation resulted in subsidized housing

for students rotating through the Humboldt area. Initially funded through a grant, the Humboldt clinical rotation housing support grew from 2 students each rotation to 5 students each rotation, for up to 60 students per year. This not only increases care providers in the area but introduces soon to be new graduates to a possible community where they can live and practice. Through grant investments, the School has been able to increase the number of students rotating in the area, including in smaller outlying towns. This initiative has resulted in a new graduate moving to Humboldt to live and work, thus adding workforce in a much-needed shortage area. This initiative is now being expanded throughout the Central Valley to replicate the partnership with rural communities in need of health care providers.

- **Federally Qualified Health Centers (FQHCs) –** The School of Nursing currently has partnerships with a dozen FQHCs through the NP Residency program and is expanding learner access to potentially include additional graduate students from the School in the next year.

- **Development of Sustainable Regional Learning Collaboratives –** The School is also working on collaboratives, which are currently coordinated with grant funding. These collaboratives will leverage and share best practices and expertise among partners.

IV. Building on Efforts for the Future

The School has further expanded its support of developing rural or underserved workforce through its emerging **Doctor of Nursing Practice – Family Nurse Practitioner Program (DNP-FNPs)** and **Psychiatric Mental Health Nurse Practitioner (PMHNP)** programs.

- **Doctor of Nursing Practice with a Family Nurse Practitioner Concentration (DNP-FNP):** The first cohort of DNP-FNPs will enter in June 2022. Built on the foundation of the existing NP program, the newly developed hybrid (online and in-person learning) DNP-FNP program will recruit students from across California and from rural and underserved areas in particular. The goal is to support students who would like to stay and practice in their own community upon graduation. By partnering with local communities to identify the next generation of advanced practice leaders, those learners can take advantage of University of California Davis distance-education while completing clinical practice experiences in their local community. Upon graduation, they are qualified and prepared to join the local health-care workforce and contribute to their local community.

  The School of Nursing is leveraging nursing science to meet the health care needs of California. Clinical DNP-FNP graduates will have more influence among practice, translational research, implementation science and policy, just as PhD graduates lead in these areas. The School is striving to prepare DNP-FNPs to meet the needs of the state including addressing a faculty shortage, long-term care services and supports, and quality and patient safety initiatives. One way it will accomplish this is through the incorporation of complementary graduate academic unit certificates in education, family caregiving, and quality and patient safety.

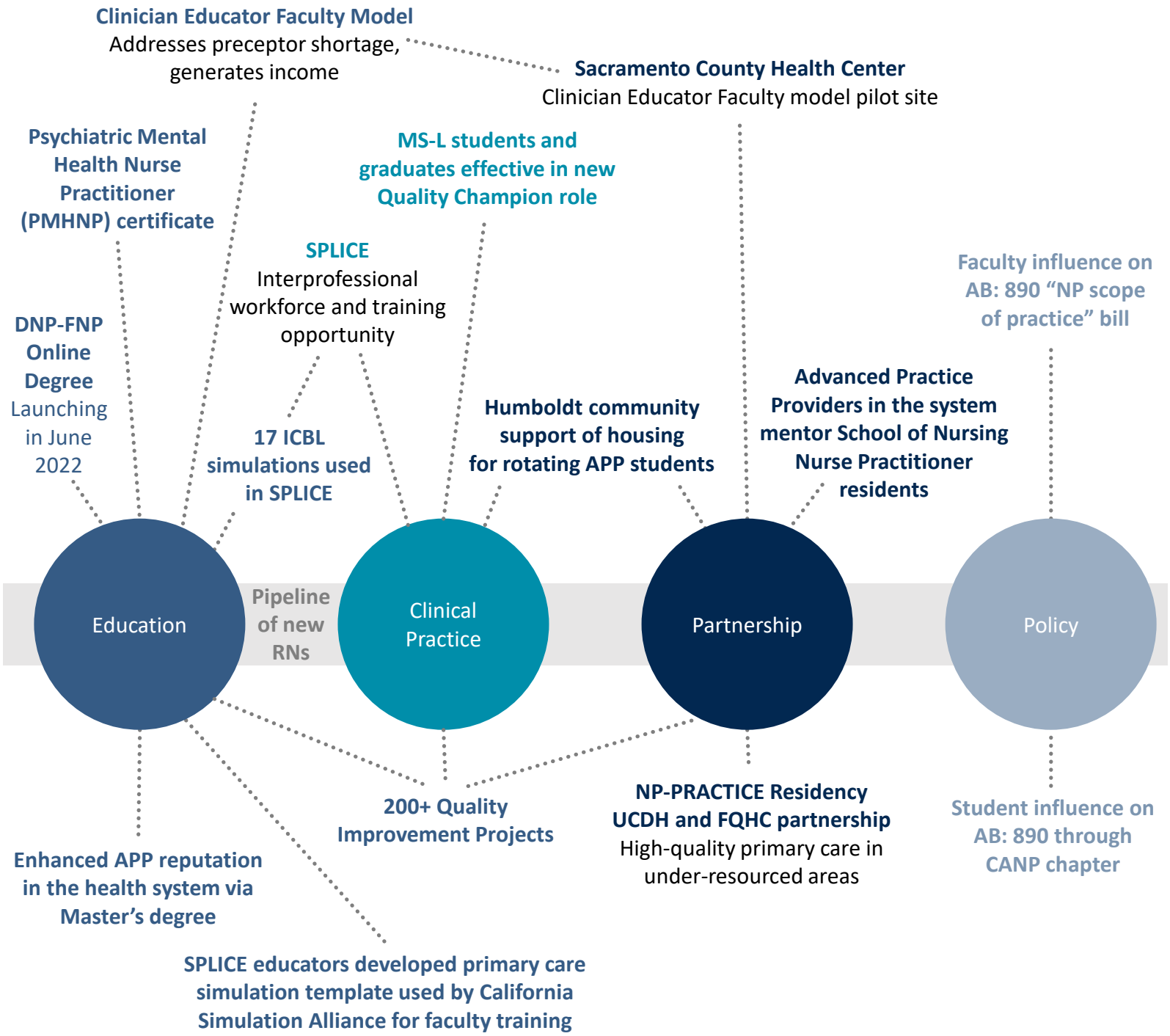
- **Psychiatric Mental Health Nurse Practitioner (PMHNP):** The Betty Irene Moore School of Nursing at UC Davis is working with two other UC Schools of Nursing (UCSF and UCLA) to launch the Psychiatric Mental Health Nurse Practitioner (PMHNP) program among the campuses; UC Davis will host the consortium office. Ultimately the PMHNP program will meet a vital need identified in the California Future Health Workforce Commission report published in 2019 – to bridge the gap in behavioral health providers, as well as create a more diverse workforce, by expanding the number of psychiatric mental health nurse practitioners in the state.

In California, more than 50% of individuals with mental illness don't have access to care and workforce indicators suggest there is a gap of more than 7,000 psychiatrists/psychiatric mental health nurse practitioners (PMHNPs) in the state. To address this issue, faculty and leaders at the UC Schools of Nursing set out to create the first hybrid/online multi-campus post-graduate PMHNP certificate program in California. The program will target the current NP workforce in California and aims to train 300 PMHNPs in five years. Upon completion of the program, NPs will be trained as PMHNPs and be eligible to sit for national board certification. This certification allows the NP an expanded scope of practice, including prescribing authority, treatment of severe mental illness and substance use disorders, as well as the ability to bill for psychiatric care. This preparation allows the PMHNP to provide care comparable to a psychiatrist, with the additional skill in psychiatric assessment, diagnosis, and treatment, including medication management and therapy. NPs are more likely to practice in rural and underserved communities, thereby extending care to populations with limited access.

V. Outlook for the Next Decade

Going into the next decade, the Betty Irene Moore School of Nursing will continue to develop programs with an eye on health care needs and trends in California and pursue new, and advance existing, partnerships with a vision to enact systems change and create change agents through education, partnership and policy.

Influencing Systems Change Activity Summary



Upcoming:

- June 2022 the Doctor of Nursing Practice with a Family Nurse Practitioner Concentration (**DNP-FNP**) program will begin. Built on the existing NP program, the DNP hybrid program will recruit students from rural and underserved areas to support students who would like to stay and practice in their own community.

Upcoming:

- Regional partners, such as the **Shasta Community Health Cente**r reached out to establish an academic partnership with UC Davis for its own residency program.

Betty Irene Moore School of Nursing Influence on Systems Change and Creating Change Agents Assessment

Considering the information provided in this packet and your knowledge about influencing systems change and creating change agents, please answer the following questions about the Betty Irene Moore School of Nursing's contribution in this area using this link.

1. **Have (or is it likely in the future) the School of Nursing's activities and outputs directly or indirectly led to improvements in systems change and creating change agents? Please use the 1 to 5 rating scale below.**

   5 = School of Nursing has made major contribution(s) to systems change and creating change agents which would be readily recognizable by experts in health or systems of care.

   4 = School of Nursing has made some contributions and/or demonstrates great potential to contribute to systems change and creating change agents which would be readily recognizable by experts in health or systems of care.

   3 = School of Nursing activities are ongoing, and outputs are produced that are likely to result in improvements in systems change and creating change agents which would be readily recognizable by experts in health or systems of care.

   2 = School of Nursing activities are ongoing, and outputs are produced that may result in improvements in systems change and creating change agents, but only limited application is expected.

   1 = Research, activities, and outputs have not resulted in or are not likely to have any application.

2. **What do you see as the school's greatest strength(s) in advancing or having an influence in the area of systems change and creating change agents? In what ways has the school had the most impact in this area?**

3. **Where could the school most improve in advancing or having an influence in systems change and creating change agents? What challenges or barriers do you foresee the school facing in the next decade in this area?**

4. **Given your knowledge of influencing systems change and creating change agents, what opportunities exist for the school to build on their present strengths in this area?**

5. **Please provide any additional feedback or thoughts on the school's efforts in advancing or influencing systems change and creating change agents.**

Appendix D

UC DAVIS HEALTH | BETTY IRENE MOORE SCHOOL OF NURSING

Family Caregiving: 10 Years of Progress

A Message from the Betty Irene Moore School of Nursing at UC Davis

This packet contains a high-level overview of the Betty Irene Moore School of Nursing's achievements and contributions in the area of family caregiving. As an expert in family caregiving, we would appreciate your assessment of the school's influence and impact in this area. Your reflection will inform the school's self-assessment and help us understand the contributions the Betty Irene Moore School of Nursing has made in the field of family caregiving over the last decade. We appreciate your feedback on areas of significance that are notable as well as opportunities for improvement as we continue to develop and broaden our reach in the coming years. If you have questions about the material or the review, please contact Stacey Pasco at slpasco@ucdavis.edu. Thank you for your time and contribution to our school's development.

Stephen Cavanagh, PhD, MPA, RN, FACHE, FAAN
Dignity Health Dean's Chair for Nursing Leadership
Dean and Professor, Betty Irene Moore School of Nursing

Material contained in review packet:

3 **A History of the Betty Irene Moore School of Nursing**

- Vision and Mission at School Launch
- Timeline
- Logic Model

7 **Achievements: Contribution to Family Caregiving**

18 **School of Nursing Family Caregiving Assessment**

A History of the Betty Irene Moore School of Nursing

The Betty Irene Moore School of Nursing at UC Davis prepares successful leaders in health care. We offer programs for future nurses, physician assistants, family nurse practitioners and nursing science researchers. As one of the only graduate nursing schools committed to activating change where it's needed the most, the school goes beyond clinical education with programs that provide graduates with the skills, confidence and vision to be change agents on many levels and with many different titles.

The Betty Irene Moore School of Nursing at UC Davis was established in March 2009 through a $100 million commitment from the Gordon and Betty Moore Foundation. Together, we work toward a future where health and well-being are open, accessible and equitable.

The school admitted its first classes in Fall 2010. The school has offered five graduate degree programs over its first decade:

- Doctor of Philosophy in Nursing Science and Health-Care Leadership
- Master of Science in Nursing Science and Health-Care Leadership
- Master's now Doctor of Nursing Practice — Family Nurse Practitioner
- Master of Health Services — Physician Assistant Studies
- Master's Entry Program in Nursing

The graduate degree programs are led by the Nursing Science and Health-Care Leadership Graduate Group, an interprofessional team of more than 60 faculty members from disciplines including nursing, medicine, health informatics, nutrition, biostatistics, pharmacy, sociology and public health. The School of Nursing is part of UC Davis Health, a hub of innovation that encompasses UC Davis Medical Center, UC Davis School of Medicine and UC Davis Medical Group.

UC Davis Health, one of five health systems within the University of California, is an integrated, academic health system consisting of the UC Davis School of Medicine, the Betty Irene Moore School of Nursing, the 646-bed, multispecialty, acute-care hospital and clinical services of UC Davis Medical Center and the UC Davis Medical Group. The health system also includes the UC Davis Comprehensive Cancer Center, UC Davis Children's Hospital and a Level I trauma center.

The health system is a major driver of economic prosperity in the Sacramento region and Northern California, generating more than $3.4 billion in annual economic output and more than 20,000 jobs. The health system is a hub of innovation that is improving lives and transforming health care by providing excellent patient care, conducting groundbreaking research, fostering innovative, interprofessional education, and creating dynamic, productive partnerships with the community.

2020 marked a significant milestone for the Betty Irene Moore School of Nursing at UC Davis. The first 33 students embarked upon their graduate education at the school 10 years ago. Now, more than 835 alumni make an indelible impact on the clinics, classrooms and communities in which they serve. They embody and enact the vision and mission of our founders from bedside care to individuals and families to bold changes in health care systems across California and the nation.

Vision

Vision

The Betty Irene Moore School of Nursing at UC Davis advances health and ignites leadership through innovative education, transformative research and bold system change.

Mission

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence through immersive, interprofessional and interdisciplinary education and research in partnership with the communities it serves. Faculty, staff and students discover and disseminate knowledge to advance health, improve quality of care and shape policy.

CORE ATTRIBUTES

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence and addresses urgent societal needs through:

- Leadership development—build capacity for advocacy and action at all levels.
- Interprofessional/interdisciplinary education—health professionals learn multiple perspectives to work and communicate as teams.
- Transformative research—apply the science of nursing to improve health and reshape health systems with emphasis on aging, rural health and diverse communities.
- Cultural inclusiveness—teach culturally appropriate approaches to care and involve communities to design and conduct relevant research.
- Innovative technology—use technology to create an engaged and interactive approach to nursing education, research and practice.

UCDAVIS
BETTY IRENE MOORE
SCHOOL OF NURSING

Betty Irene Moore School of Nursing Timeline

2007

Early planning

The Gordon and Betty Moore Foundation and UC Davis **announce $100 million commitment** to launch school of nursing at UC Davis

UC Davis leaders **meet with Mrs. Moore** to review leadership and strategic development

2008

Great Recession

UC Board of Regents **appoints Heather M. Young** as associate vice chancellor for nursing at UC Davis

School's first faculty member Debbie Ward arrives, searches launch for founding faculty

Strategic Design Summit convened in Sacramento with national nursing and education thought leaders to develop curriculum, partnerships and faculty proposals

2009

University of California Board of Regents **formally approves** the Betty Irene Moore School of Nursing

UC Davis **convenes National Advisory Board** of national nursing leaders as well as UC Davis leadership to build the vision and mission for the school

2010

UC Office of the President (UCOP) approves interprofessional Nursing Science and Health-Care Leadership Graduate Degree Programs: **MS** and **PhD**

Inaugural **Welcome Ceremony** for 8 PhDs and 25 Master of Science-Leadership classes; **start of National Advisory Council** chaired by Dr. Fagin, Dean Emeritus, Univ of Penn SON

Academic programs launch with **27 interprofessional faculty** in inaugural Nursing Science and Health Care Leadership Graduate Group

2011

Betty Irene Moore School of Nursing **appoints first associate dean for research**, Dr. Jill Joseph

Commission of Collegiate Nursing Education (CCNE) **accredits MS-L program**

2012

Master of Science leadership (**MS-L**) program **inaugural cohort graduates**

CCNE **accredits MSL**

Program engages **9 community partners** in Long Term Care-based participatory collaborations

2013

Expansion

UC Davis Master of Science - Family Nurse Practitioner (**FNP**), Master of Health Services - Physician Assistant Studies (**PA**) **programs transition to School of Nursing** as interprofessional master's degree programs

2014

Inaugural cohort of Doctor of Philosophy candidates receive degrees

Western Association of Schools and Colleges (WASC) **accredits PhD program**

2015

$2.5 million gift from Dignity Health creates **first endowed deanship at UC Davis**

Ground breaks on Betty Irene Moore Hall

Inaugural cohorts of the FNP and PA programs **graduate**

2016

Inaugural cohort matriculates into Master's Entry Program in Nursing (**MEPN**)

CCNE **accredits FNP program;** ARC-PA **accredits PA program**

SON partners with more than **450 clinical sites** across California

2017

Family Caregiving Institute launched with a $5M grant from the Gordon and Betty Moore Foundation

Grand Opening of Betty Irene Moore Hall

CCNE **accredits MEPN program; Inaugural cohort** in Master's Entry Program in Nursing graduates

2018

Dean transition

First time **alumni outnumber current students**

Founding Dean **Dr. Heather M. Young steps down** after 10 years of leadership; Dr. Debbie Ward appointed as interim dean

Gordon and Betty Moore Foundation establishes the $1.7M **Heather M. Young Postdoctoral Fellowship.**

2019

Dr. Stephen J. Cavanagh appointed as the school's second dean and Dignity Health Dean's Chair for Nurse Leadership

The **Nurse Practitioner Residency program is established** among the School of Nursing, UC Davis Health Medical Center, and multiple Federally Qualified Health Clinics

The Betty Irene Moore **Fellowship for Nurse Leaders and Innovators launches** with a $37.5 million grant from GBMF

2020

New strategies
COVID-19 pandemic

School moves to **online curriculum** as necessitated by COVID-19 pandemic. All eligible students **graduate on time**

2021

MS-L program paused after graduating 2021 class. Leadership themes remain integrated through all programs, specifically the **new Doctor of Nursing Practice (DNP-FNP) degree**, which opened admissions in fall 2021

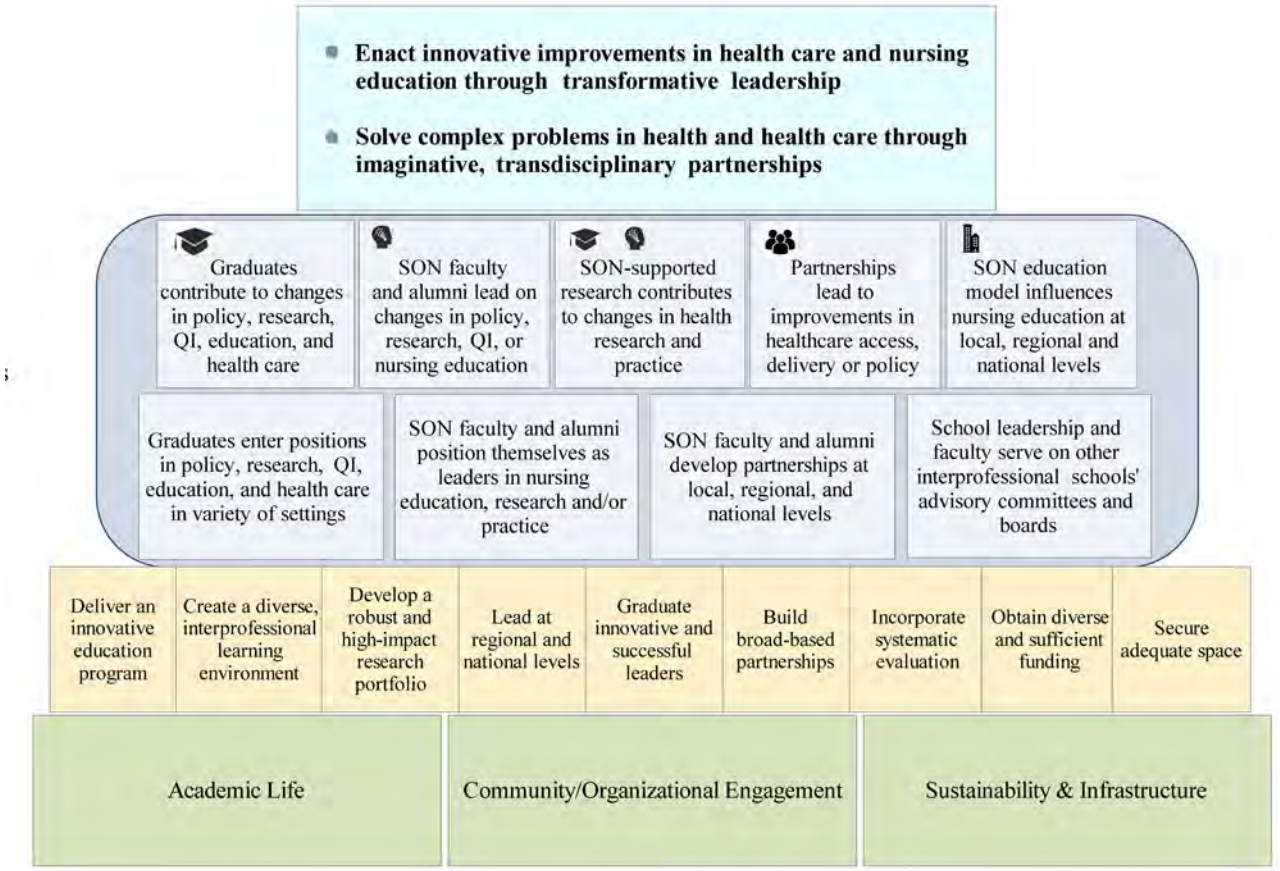
Consortium Office for UC Psychiatric Mental Health Nurse Practitioner (PMHNP) post-graduate certificate is established with a grant from the California Health Care Foundation

Janice Bell is announced as the **Western Health Advantage Endowed Professorship**

38 full-time faculty and 7 part-time faculty

LOGIC MODEL

To articulate the short-term and intermediate goals of the Betty Irene Moore School of Nursing, a program theory-driven evaluation approach was used.[1] In this approach, the theory or logic that underlies a program is visually represented through a model. The School of Nursing logic model was developed collaboratively by the school leadership and evaluators. The school's logic model (shown below) highlights the foundational elements on which the school was built and the expected intermediate outcomes (middle blue section) and long-term outcomes (top section).



[1] Donaldson, SI. (2007). Program Theory-Driven Evaluation Science: Strategies and Applications. Taylor & Francis: New York.

Achievements: Contribution to Family Caregiving

I. Introduction

How family caregiving gained momentum at the Betty Irene Moore School of Nursing
Family caregivers have always played a vital role in caring for older adults; however, this important contribution has remained relatively invisible in both health systems and the community. In past decades caregiving was defined narrowly and the vast majority of focus centered on dementia care. As such, funding opportunities targeted only specific interventions and limited inclusion of the full array of challenges family caregivers face across diverse circumstances.

What is now known, according to the Congressional Budget Office report, "Rising Demand for Long-Term Services and Supports for Elderly People," is that the majority of older adults (80%) receiving assistance live in private homes, not in facilities. Increased attention to the importance of family caregiving resulted in the appointment of the RAISE Family Caregiving Advisory Council, charged with making recommendations to Congress to improve supports and services for family caregivers and enhance research and professional education. As noted in the 2021 RAISE Family Caregivers Act initial report to Congress, "the nature of family caregiving is becoming ever more complex in the modern era as it extends to more medical, administrative, and care coordination activities than ever before. Whereas caregiving at one time might have meant helping with activities of daily living (ADLs), now it can include medication management, dealing with insurance payers, technical support for electronic equipment and medical devices, coordinating care across systems, and much more." In addition, the 2018 Home and Community Preferences national survey commissioned by AARP found that 76% of older adults prefer to age in place rather than transition to institutional care. However, even when older adults are in nursing homes or other residential settings, family caregivers play a vital role in their well-being.

The Betty Irene Moore School of Nursing was well positioned in its early years to influence practice and policy in support of a broader definition of family caregiving. Founding School of Nursing faculty, including Founding Dean Emerita and Professor Dr. Heather M. Young and Professor Dr. Terri Harvath, had already invested programmatic and research energy in caregiving. The school was also attracting a diverse team of educators, researchers and clinicians who were poised to make an impact on the healthy aging of older adults, which included caregiver support. **In 2017, the Family Caregiving Institute at the Betty Irene Moore School of Nursing (FCI) was launched with a $5 million grant from the Gordon and Betty Moore Foundation.** This allowed the school to hire institute-specific faculty and to staff initiatives in service of its founding principle - *dedication to the*

well-being and capacity of family caregivers through education and research. Dr. Harvath was named Institute Director and Dr. Young was named Associate Director for Strategic Partnerships.

The FCI recognizes family caregivers as an essential member of a person's health care team. A caregiver is a person (family, friend, or personal connection) who helps a relative, neighbor, or friend who needs assistance with daily living or care concerns because of their physical or cognitive health challenges. (Note: throughout this document, "family caregiver" or "caregiver" will refer to an unpaid individual. Related, although family caregiving is applicable to the full lifespan, the work of the FCI is focused on unpaid caregivers of older adults.) Family caregiving was initially conceptualized as personal care assistance such as picking up groceries or medications or assisting with personal grooming but is now known to be a much more expansive role, potentially including performing medical or nursing tasks, care coordination and navigating complex and serious illness.

Through its activities, the FCI addresses education, research, policy and practice. Specifically, Institute faculty develop programs and resources to equip clinicians and health professions students to be more effective in anticipating and meeting the needs of caregivers. In addition to examining best practices and methods to support caregivers, FCI researchers also partner with caregiver serving agencies to evaluate and improve the quality of their services and supports. The Institute also recently expanded its focus to include piloting direct caregiver services in a clinic setting. Finally, the Family Caregiving Institute collaborates with colleagues who are also engaged in different ways in this space, including The Caregiver Initiative at Rush University and the Roybal Centers for Translational Research in the Behavioral and Social Sciences of Aging at Emory University and Oregon Health and Sciences University.

By addressing caregiving through the lens of education, research, policy, and practice, the Institute fosters meaningful systems change in support of caregivers and the older adults they care for. Relatedly, a major strength of the FCI is integrating education and research to build capacity for meaningful change in policy and practice. It has accomplished this through elevating the profile of caregiving through state and national partnership, acting as a catalyst for conversation, conducting implementation research and fostering adoption of models of care and curriculum to influence practice.

II. ELEVATING THE PROFILE OF CAREGIVING THROUGH PARTNERSHIPS

AARP and Home Alone Alliance Partners connects FCI on a national stage

The Betty Irene Moore School of Nursing has functioned as AARP Public Policy Institute's clinical

practice partner, complementing their policy and research efforts in the area of caregiving. Senior Vice President at AARP and Public Policy Institute Director Dr. Susan Reinhard was an inaugural member of the school's National Advisory Council (NAC). As an NAC member, she was an integral partner in connecting the school to national initiatives and provided expertise and context in strategic conversations around developing research areas of interest, such as caregiving and healthy aging.

As stated previously, changing demographics, including an increasingly larger older adult population, and more recent literature, have challenged assumptions about caregivers. Key studies issued in the 2010s that influenced the caregiving conversation include The Home Alone: Family Caregivers Providing Complex Chronic Care study (2012), and the follow-up report , The Home Alone Revisited: Family Caregivers Providing Complex Care (2019), as well as the 2016 Families Caring for an Aging America – National Academy Report.

The Home Alone: Family Caregivers Providing Complex Chronic Care study (2012) authored by AARP and the United Hospital Fund and with funding from The John A. Hartford Foundation and The AARP Foundation challenged the common wisdom that family caregiving was focused solely on personal care or household chores. Instead, it clearly laid out how the role of caregiver had dramatically expanded to include performing medical/nursing tasks of the kind and complexity once provided by hospital-based professionals alone. It was the first national look at how caregivers were increasingly expected to take on medical/nursing tasks.

This study resulted in the Home Alone Alliance, a group of collaborators who aim to drive change among health care professionals, delivery systems, policy makers, and the public at large. The Betty Irene Moore School of Nursing at UC Davis is a founding partner of this alliance along with AARP, Family Caregiver Alliance, and United Hospital Fund. The Alliance is a partnership of public, private and nonprofit sector organizations established to create guidance for healthcare professionals who engage with family caregivers and tools for family caregivers providing complex care. Several important initiatives have grown out of this collaboration, including public education, further research on medical nursing tasks performed by caregivers, and evaluation of the CARE Act in hospitals across the US. The Betty Irene Moore School of Nursing played a content development and production role in the subsequent Family Caregiving How-To Video Series, as produced by the AARP Public Policy Institute and Home Alone Alliance. These free videos and resource guides for family caregivers give instruction on specific medical/nursing tasks with many available in Spanish and Chinese.

Building on the original study, The Home Alone Revisited: Family Caregivers Providing Complex Care report (2019), reaffirmed the original findings and expanded on the current prevalence of caregiving issues and perceptions of caregivers. It also sought to ensure multicultural representation and investigate generational differences. Dr. Heather Young and Family Caregiver Alliance Executive Director Dr. Kathleen Kelly joined Dr. Reinhard and authors on this research and a subsequent publication. These studies resulted in the creation and adoption of The **Caregiver Advice Record Enable (CARE) Act**, currently signed in to law in 40 states. This act requires hospitals to record the name of the family caregiver in the electronic health record, inform caregivers when the person

they are responsible for is discharged and provides the family caregiver with education and instruction on medical/nursing tasks they will be expected to perform at home. The Care Act Implementation: Progress and Promise report (2019) looked at how health systems created structures and processes to support caregivers, including supports needed to fulfill the Care Act. Dr. Heather Young was an author on both the 2016 and 2019 reports and was one of the lead researchers tasked with evaluating implementation, conducting site visits to hospitals, and developing resources and practices to be disseminated widely so as to influence practice on a national scale.

FCI Program and Policy Evaluation Unit demonstrates value and prominence of caregivers
The Family Caregiving Institute's Program and Policy Evaluation Unit draws on the decades of research expertise of lead faculty partners, Dr. Heather Young, and Associate Dean for Research and FCI faulty leader Dr. Janice Bell. The unit assists service agencies in evaluating their caregiving programs through qualitative and quantitative methods thereby better understanding quality, effectiveness, and research for the agency, as well as implications for practice and policies. FCI's Program and Policy Evaluation Unit accomplishments since inception include:

- **California Caregiver Resource Centers (CCRC) –** CCRC received a $30 million contract from the state of California to expand services offered through its 11 sites, including development of a web portal for caregivers. This effort was led by Dr. Kathy Kelly, Executive Director of the Family Caregiving Alliance. The Evaluation Unit was selected to evaluate the implementation of the expanded services and the impact on family caregivers and communities in California. Findings guide the CCRCs in program evaluation, assessment of outreach efforts, and determining the effectiveness of program elements in improving caregiver outcomes. The Unit issued the second annual report in late 2021. Findings illuminate that California caregivers served by the CCRCs are diverse and involved in more intensive caregiving than previous national and state surveys report. The CCRC database offers unique opportunities to study caregivers and their experiences over time, with a large sample of diverse participants. With the array of services provided by the CCRCs, the Evaluation Unit will focus in the future on more robust outcome evaluation of the various interventions and the extent to which CCRCs are reaching underserved populations. Funding for CCRCs has become a permanent line item in the state budget including funding for the Evaluation Unit. In response to dissemination to date, other states have indicated interest in CareNav, the caregiving tool developed by the Family Caregiver Alliance, and the Evaluation Unit is providing support in strategic thinking about potential expansion to other states.

- **Diverse Elders Coalition, Benjamin Rose Institute on Aging, and AAR Partnership –** The purpose of this partnership is to deepen understanding of research findings and to engage diverse caregivers in generating relevant implications of caregiver research. The resulting publication Stakeholder Voices: Interpreting Caregiving Research and Designing Next Steps (Young, Kilaberia, Whitney, Bell, Choula, & Reinhard, 2021) in the *Journal of Gerontological Nursing* looked at how "stakeholder engagement can enhance interpretation of research findings and promote meaningful dissemination into policy and practice ... Although there are common experiences and demands for caregivers, the meanings of these experiences are shaped by cultural context, and the intersectionality of caregiver experiences by age, race/ethnicity, gender identify, sexual

orientation, immigrant status, and other factors (that) bring into focus the diversity of life and caregiving experience." The article was authored by Evaluation Unit leads Young and Bell, with FCI Post-Doc Tina Kilaberia; 2017 PhD alum Robin Whitney, and AARP colleagues – Rita Choula, director of caregiving, AARP Public Policy Institute; and Susan Reinhard, senior vice president at AARP, director Public Policy Institute. The article also helped inform the Institute's Research Priorities in Caregiving Summit, which will be discussed in more detail in a following section.

FCI and School of Nursing stakeholders have an emerging role enabling it to influence larger policy bodies in California

- **California Future Health Workforce Commission –** The priorities around primary care and community-based care for older adults and behavioral health were paramount in the commission's work, aligning strongly with the commitments of the FCI. Commissioners included senior leadership representing health, education, employment, labor and government sectors. The Commission was co-chaired by then University of California President Janet Napolitano and CommonSpirit Health CEO Lloyd Dean, and commissioners included former NAC member Linda Burnes Bolton, then Vice President for Nursing, Chief Nursing Officer Cedars-Sinai; and Young, who also co-chaired the subcommittee on Healthy Aging and Care for Older Adults with Christine Cassel, UCSF Presidential Chair in the Department of Medicine. The sub-committee's contributions focused on the importance of enhancing health professional capacity to work as a team in supporting older adults and their caregivers, by recruiting and preparing a strong workforce of geriatricians, nurses, nurse practitioners, home care workers, home health aides and social workers (California Future Health Workforce Commission, 2019).

- **California Master Plan on Aging Task Force –** Dr. Young served on the stakeholder advisory committee and partnered with committee members and AARP representatives and Caregiver Resource Centers in the state to ensure caregiving was well represented in the plan and the workforce serving older adults and their families was prepared and supported. Ultimately caregiving was a stand-alone recommendation – Goal Four: Caregiving that Works was one of five recommendations put forth in the 2021 report along with robust recommendations to build workforce capacity.

- **Governor's Task Force on Alzheimer's Prevention, Preparedness and Path Forward –** The Master Plan on Aging was aligned with the governor's task force. UC Davis Health CEO David Lubarsky was an appointed task force member. He regularly consulted with health system leadership, including the FCI, on topics he thought should be brought to the Alzheimer task force's attention.

- **Summit on Public-Private Innovation in Family Caregiving –** Associate Director of Institute Operations Jennifer Mongoven was invited to participate in the summit convened by the National Alliance for Caregiving in Washington, D.C. in 2018. She joined federal agency, academia, industry and private foundation stakeholders in discussing the development of an implementation strategy for an innovation fund to address the recommendations in the National Academies of Sciences Caring for an Aging America report.

III. CONVENING EXPERTS TO ADVANCE SCIENCE, CURRICULUM, AND PRACTICE

The FCI creates a **community of scholars** that includes FCI-appointed faculty, faculty collaborators from across campus, FCI faculty affiliates from other universities, postdoctoral and predoctoral scholars, Graduate Student Researchers, and staff. Through this community, the Institute has increased the number of skilled researchers with expertise in family caregiving. It operates as a training hub in caregiving research and continuously recruits pre- and post-doctoral scholars with an interest in this area, as well as external researchers from throughout the country who seek mentorship from FCI faculty as part of their NIH Career Development Awards.

FCI Works-in-Progress meetings are open to all and are designed to provide a forum for scholars to share work in any stage of development for discussion and feedback. These sessions serve as a learning lab that allows pre- and postdoctoral scholars an opportunity to hone their presentation skills and receive feedback from diverse faculty members. The Family Caregiving Institute also provides pilot funds for faculty and post-doctoral scholars to advance family caregiving research, as well as support for pre- and postdoctoral scholars to attend professional conferences.

The FCI convenes summits of experts in the field with the goal of advancing science, curriculum, and practice

- **Research Priorities in Caregiving Summit –** The FCI hosted a summit in 2018 to map out and achieve consensus on ten research priority areas in caregiving. Outcomes from the summit resulted in the Research Priorities in Caregiving: Advancing Family-Centered Care across the Trajectory of Serious Illness report released in 2018. More than 50 thought leaders including researchers, educators as well as community leaders and funders came together over a two-day summit to identify research priorities and potential research questions related to the trajectory of caregiving, multicultural caregiving, heterogeneity of caregiving, and technology enabled solutions to support caregiving. The summit, hosted shortly after the FCI's launch, was conceived to provide a forum for researchers to identify, define and map out research priorities to advance the field. FCI also used these priorities to inform its research agenda. The summit resulted in several papers being published in a 2020 The Gerontologist supplement *Advancing Family Caregiving Research*, including FCI faculty led papers "Research Priorities in Family Caregiving: Process and Outcomes of a Conference on Family-Centered Care Across the Trajectory of Serious Illness," and "Social Determinants of Health: Underreported Heterogeneity in Systemic Reviews of Caregiver Interventions."

Chris Cassel, planning dean for the Kaiser Permanente School of Medicine, and Diana Mason, a professor at George Washington School of Nursing, serve as summit facilitators.

- **Pre-conference Workshop at the GSA 2018 Annual Scientific Meeting –** This FCI led workshop discussed Advancing Family-Centered, Collaborative Care. The meeting agenda included a review of the priorities created at the Research Priorities in Caregiving Summit, challenges and methodological issues faced in family caregiving, and discussion on growing capacity in caregiving research through the support of new scientists and partnership building.

- **Innovations in Workforce Education for Family Caregiving –** The FCI convened this summit in 2020. The summit was hosted virtually due to COVID-19 and many of the sessions capitalized on the opportunity to think about how to support caregivers during a pandemic. Sessions focused on education that prepares health care providers to incorporate caregivers as team members.

- The strengths of the FCI faculty in the School of Nursing have attracted the attention of students and post-doctoral fellows who are interested in a career in family caregiving research. Over the past five years, there has been a significant increase in the number of pre/post-doctoral applicants to the School. In addition, nurse practitioner and physician assistant students have started clinical rotations in the healthy aging clinic at UC Davis, which includes consultation for caregivers. Building this next generation of family caregiving scholars and clinicians will sustain the School's efforts well into the future.

- In 2022, the Institute plans to convene a panel of experts to deliberate on how to identify caregivers at risk, considering both the contributing factors and the potentially relevant outcomes.

IV. CREATING MODELS OF CARE AND CAREGIVING CURRICULUM

The FCI promotes a model of education that prepares health care providers to incorporate caregivers as team members

Education can be delivered to health professional students or as continuing education for professionals already in the field. The FCI's educational accomplishments include:

- **Graduate Academic Unit Certificate –** The FCI was originally focused on preparing students for the workforce though this certificate, which functions like a "minor" in family caregiving. The intention is to educate graduate students and health care professionals to conduct comprehensive caregiver assessments and integrate family caregivers into the health care team. The curriculum demonstrates the application of best practices of research findings to inform leadership and clinical practice, so students are better able to effect change and lead a necessary paradigm shift from person to family-centered care. Post-doctoral fellows and K-awardees from other institutions also benefit from this focused series of courses on family caregiving.

- **Continuing Education Offering –** The Institute is currently evolving the Graduate Academic Unit Certificate into a continuing education offering for working professionals, enabling them to become family caregiving champions at their home institutions. The planned program will include a focus on health equity, in line with the school's vision for optimal health and health care equity for all.

- **Doctor of Nursing Practice (DNP) Program –** The School of Nursing is also recruiting students who have an interest in aging and caregiving for this soon to open program. Students will be able to choose from an **academic certificate in family caregiving**, as a health professions educator or other options – all with an eye towards influencing practice and policy.

The FCI promotes research priorities and education competencies
An early driver for FCI was to create synergy among colleagues to address the complex challenges that arise in caregiving research and education. FCI is involved in creating caregiving focused research priorities and education competencies. Highlights include:

- **Family Caregiving Competencies –** FCI developed and disseminated a set of competencies to be used in education by health care organizations and academic partners. The **National Alliance for Caregiving** is considering using the competencies as a foundation for other health professional competencies.

- **Consortium for Family Caregiving in Nursing Education –** The 2020 Innovations in Workforce Education for Family Caregiving summit resulted in a new partnership with the University of Utah – the University expressed interest in coordinating efforts for integrating the Family Caregiver Competencies in to Nursing Education on their campus. The Betty Irene Moore School of Nursing shared how it had built family caregiving competencies into its Master's Entry-Program in Nursing and also outlined the doctoral-level certificate in caregiving. From those initial conversations, the project has evolved into the development of a consortium with diverse representation from all regions of the country, including the different programs through which nurses may enter practice (AAS, BS, MEPN). Initial activities include identifying core family caregiving competencies for the entry level nursing professional based on the Interprofessional Competencies for Health Care Professionals; leveling core family caregiving competencies across nursing education, conducting an environmental scan and needs assessment at Consortium Institutions, and planning and developing an impact evaluation.

- **Research Priorities –** FCI continues to promote the research priorities identified by the research priorities in caregiving summit. In addition, the Institute provided pilot funding for FCI faculty research that incorporated research priorities.

The FCI's impact on UC Davis Health
UC Davis Health launched the Healthy Aging Initiative in 2020. The vision is to create the healthiest and highest-functioning older adult population in Northern California due to the care, research, and innovation at UC Davis Health. FCI's visibility on campus and presence in leadership conversations contributed to caregiving's inclusion in the initiative's mission and vision. This built on the School of Nursing's work within the health system to elevate aging and caregiving programs and specialized services.

Director of the Institute Dr. Harvath also has a visible leadership role in the Health Healthy Aging Initiative, which promotes healthy aging through an integrated approach across the lifespan and all care settings. UC Davis Health recognized the importance of caregivers in this endeavor and Dr. Harvath has increased caregiver visibility through her leadership of the initiative's clinical delivery committee and her role designing and leading caregiving consultations in the healthy aging clinic.

Similarly, Dr. Young has connected the FCI to broader initiatives such as Healthy Aging in a Digital World (HADW), which envisions technology as a means to provide a bridge between independent living and access to health care across a person's lifespan. Both HADW and the FCI work in similar spaces and are building partnerships that go beyond medicine.

FCI is piloting clinical services at UCDH Healthy Aging Clinic, part of the University's newly launched Healthy Aging Initiative

The Institute was tapped to provide services at the clinic. FCI leadership views this not only as an opportunity to impact the health and wellness of older adults and their caregivers in the immediate campus-area, but to also use the clinic as a learning lab for new approaches to caregiver support and education that could eventually be scaled up in other settings. Similar programs on a national scale include Sloan Kettering – caregivers in cancer care – mental health focused; Rush – dementia; Emory – dementia. Pilot services include:

- **Caregiver Consultation –** A one-on-one meeting with a clinician experienced in geriatric care and caregiving to discuss medical task guidance, stress relief and community resource agencies that can offer support is offered to caregivers of older adults seen in the Healthy Aging Clinic or the Dementia Care Program. However, any UCDH patient who is a caregiver can be referred for a consultation regardless of who they are caring for.

Terri Harvath, FCI Director and School of Nursing faculty, providing a consultation.

- **Decisional Support for Caregiving Dilemmas (DECIDE) –** This program is in the pilot phase at the clinic. Caregivers face difficult choices when assuring another persons' welfare. The DECIDE program helps caregivers identify a pertinent dilemma and consider different options. The program helps caregivers understand how autonomy, safety, quality of life and health trajectory come in to play when making decisions on behalf of an older adult, while honoring the values and preferences of the older adult. DECIDE is led by Harvath and FCI Faculty Mark Fedyk and Lisa Soederberg Miller. The team is currently in conversation with the UC Davis Medical Center's ethics committee about adopting the model in the hospital/clinics.

- **Caregiver Support Groups –** These groups are for caregivers seen at the Healthy Aging Clinic or through the Dementia Care Program. FCI faculty will work in partnership with Healthy Aging Clinic colleagues to develop the pilot in 2022.

- **Emerging Partnership with Trualta –** FCI has an emerging partnership with Trualta to offer online training and resources for caregivers seen in the clinic. FCI's evaluation unit will partner with clinicians and Trualta colleagues to understand how caregivers engage with the online tool, what

interventions could increase satisfaction and/or engagement with the tool, and if there are improvements in care that can be attributed to the resource. This evaluation will provide data as a basis for future funding allocations for caregiver resources.

The FCI promotes models for national adoption
Highlights of ways FCI is promoting educational models for national adoption include:

- **Achieving Care Excellence in Caregiving Simulation Series –** The National League on Nursing (NLN) partnered with FCI for content expertise in the development of the series which included simulations, teaching strategies, and an introductory course to the family caregiving competencies. The content was made available to all nursing faculty across the country through a grant from AARP and the John A. Hartford Foundation.

- **Presented on the Application of the Simulation Series –** FCI presented to faculty in the hospital education environment, members of Nurses Improving Care for Healthsystem Elders (NICHE), and members of the Optum Health Education Community, reaching more than 1,000 health care professionals across the country who were interested in improving support to family caregivers both in and out of the hospital.

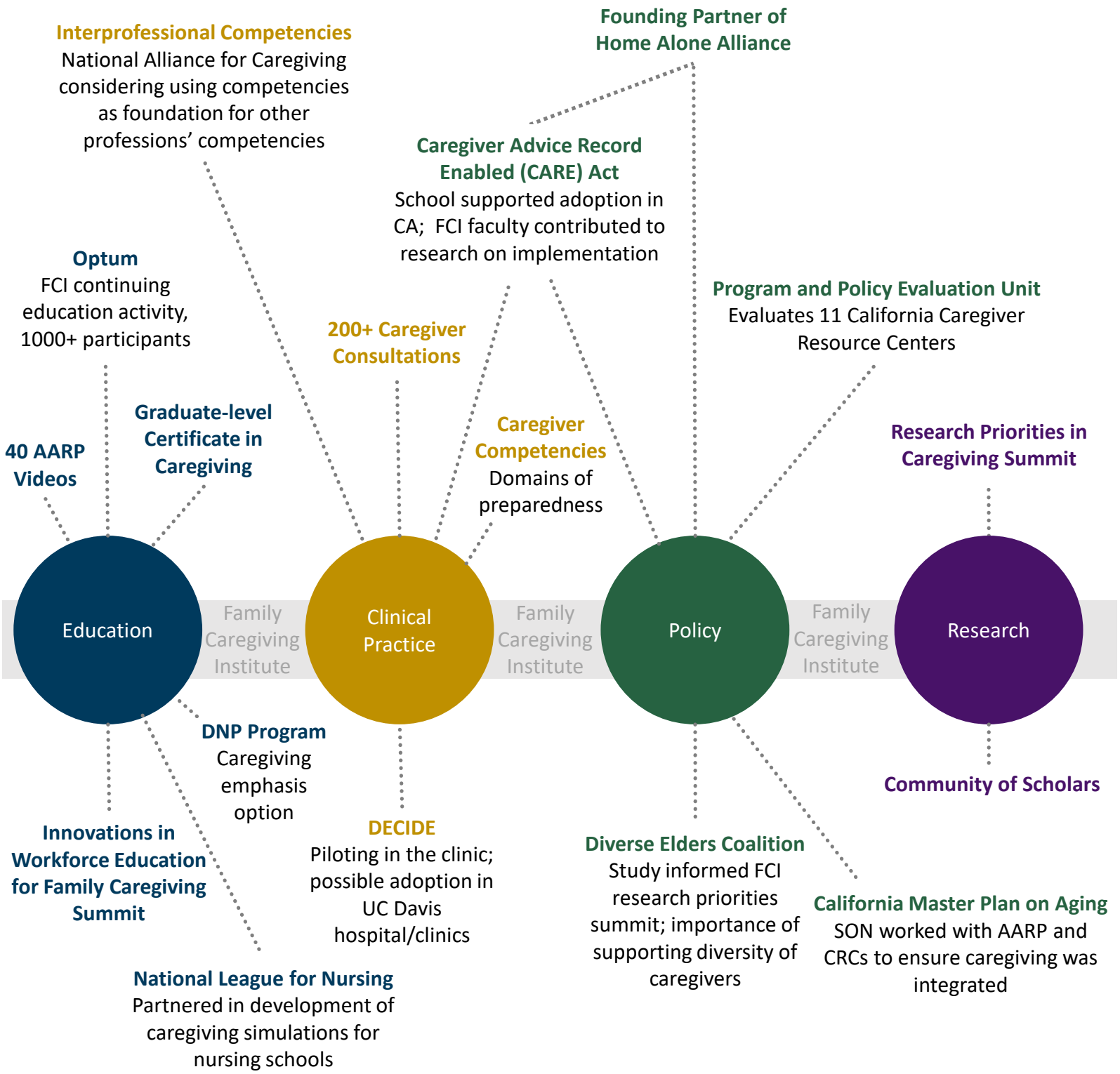
- **Gerontological Society of America (GSA) meeting –** FCI faculty presented key findings from the Education Summit at the 2021 meeting.

- **Amyotrophic Lateral Sclerosis (ALS) –** In 2020, leaders in the ALS community approached the Evaluation Unit of FCI to discuss how research could inform policy to better support persons with ALS and their caregivers at home. Motivated by the experiences of family caregivers, there are vital needs for better support during this progressive and debilitating condition that often entails profound losses of physical function, ability to communicate, and swallow. FCI faculty Young and Bell have been engaged with both regional and national ALS organizations to develop a strategy to advance better policy, including conducting a systematic review of the needs of persons with ALS for support at home, partnering with the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) to develop clinical guidelines and consulting to the ALS Society regarding policy implications of the research. The team submitted a proposal to ALSFAC for funding the effort and response is pending.

V. Outlook for the Future

The Betty Irene Moore School of Nursing and the Family Caregiving Institute have growing influence in increasing the visibility of the importance and diversity of the caregiving experience; engage in robust collaborations regionally and nationally; and are working across missions – education, research, practice and policy - to achieve the goals of increasing capacity for both family caregivers and health care professionals who play a vital role in including and supporting family caregivers.

School of Nursing Family Caregiving Activity Summary



Upcoming:

- Professional education version of Certificate in Caregiving currently in development

Upcoming:

- Complex Care and Risk Summit in 2022
- Support group pilot planned for Quarter 1 of 2022

School of Nursing Family Caregiving Assessment

Considering the information provided in this packet and your knowledge about family caregiving, please answer the following questions about the Betty Irene Moore School of Nursing's contribution in this area using this link.

1. **Have (or is it likely in the future) the School of Nursing's activities and outputs directly or indirectly led to improvements in family caregiving? Please use the 1 to 5 rating scale below.**

   5 = School of Nursing has made major contribution(s) to family caregiving which would be readily recognizable by disciplinary experts in the field.

   4 = School of Nursing has made some contributions and/or demonstrates great potential to contribute to family caregiving which would be readily recognizable by disciplinary experts in the field.

   3 = School of Nursing activities are ongoing, and outputs are produced that are likely to result in improvements in family caregiving which would be readily recognizable by disciplinary experts in the field.

   2 = School of Nursing activities are ongoing, and outputs are produced that may result in a contribution to family caregiving, but only limited application is expected.

   1 = Research, activities, and outputs have not resulted in or are not likely to have any application.

2. **What do you see as the school's greatest strength(s) in advancing or having an influence in the area of family caregiving? In what ways has the school had the most impact in this area?**

3. **Where could the school most improve in advancing or having an influence in the area of family caregiving? What challenges or barriers do you foresee the school facing in the next decade in this area?**

4. **Given your knowledge of family caregiving, what opportunities exist for the school to build on their present strengths in this area?**

5. **Please provide any additional feedback or thoughts on the school's efforts in advancing or influencing family caregiving.**

External Review Committees

The School of Nursing enlisted valued stakeholders to review efforts in four areas. Stakeholders were selected due to their knowledge of programs, partnership and/or expertise in the field.

Launch Outcomes: Achievements in the First Decade

Russ Bell, PhD
President, Retired
Beckman Coulter
National Advisory Council Chair Emeritus

Linda Burnes Bolton, DrPH, RN
Senior Vice President
Chief Health Equity Officer
Cedars-Sinai Medical Center
National Advisory Council Emeritus

Joanne Disch, PhD, RN, FAAN
Professor Ad Honorem
School of Nursing
University of Minnesota
National Advisory Council Co-Chair Emeritus

Claire Fagin, PhD, RN, FAAN
Professor of Nursing and Dean Emeriti
School of Nursing
University of Pennsylvania
National Advisory Council Inaugural Chair Emeritus

Lydia Yu, MHS
Senior Advisor
Health Policy and Legislation
UC Health
University of California, Office of the President

Vision for Leadership, Optimal Health and Health Care Equity for All

Frances Patmon, PhD, RN, FNP-C
Transition of Care Nurse Practitioner
Sutter Roseville Medical Center, CA
PhD-2014 inaugural cohort alum

Sarah Szanton, PhD, RN
Dean and Patricia M. Davidson Professor for Health Equity and Social Justice
School of Nursing
Johns Hopkins University
Colleague

Casey Shillam, PhD, RN
Dean and Professor
School of Nursing
University of Portland
2010 - 2012 postdoctoral fellow alum

Bobbie Berkowitz, PHD, RN, NEA-BC, FAAN
Dean Emerita and Professor of Nursing and Health Policy and Management
School of Nursing
Senior Vice President, Medical Center
Columbia University
Colleague

Influencing Systems Change, Creating Change Agents

Catherine L. Gilliss, PhD, RN, FAAN
Dean and Styles Professor of Nursing
Associate Vice Chancellor, Nursing Affairs
University of California, San Francisco
Colleague

Cathryn Nation, M.D.
Vice President
UC Health
University of California, Office of the President

Jennie Chin Hansen
Senior Strategic Advisor
Hirsch and Associates, LLC
American Geriatrics Society, past CEO
National Advisory Council Emeritus

J. Taylor Harden, PhD, RN, FGSA, FAAN
Visiting Professor
School of Nursing
University of Texas, Austin
Director Emeritus, National Hartford Center of Gerontological Nursing Excellence
National Advisory Council Emeritus

Aging and Family Caregiving

Kathleen Kelly
Executive Director
Family Caregiving Alliance
Current Partner and Colleague

Barbara Bowers, PhD, RN, FAAN
Professor Emerita
Founding Director Center for Aging Research and Education
School of Nursing
University of Wisconsin-Madison
Consultant and Colleague

Barbara Given, PhD
Professor, Interim Associate Dean of Research
Cancer Center; School of Nursing
Michigan State University
Colleague

Peter Vitaliano, PhD
Professor
Department of Psychiatry and Behavioral Sciences
University of Washington
Consultant and Colleague