Population Health:
A Team-Based Model of Care

Authors: Eileen Haley, MSN, RN, CNS, CCM, Samantha Madonis, MSN, RN, Holly Smith, MSN, RN, CNE, Lindsey Pierce, MSN, RN with contributions by Population Health team

For the past 5 years, UC San Diego Health (UCSDH) Population Health Services Organization (PHSO) has been working to expand care coordination resources to primary care providers (PCP) and our patients. The catalyst for this expansion was the result of the changing reimbursement landscape from a fee-for-service structure to a value-based care model. This payment model shifts the expectations of primary care providers to an outcomes-based model, with emphasis on total cost of care. Value based care focuses on reducing avoidable and unnecessary events through comprehensive care planning, improving access, and close patient follow-up, measuring patient outcomes, and meeting national HEDIS quality metrics outlined by the National Accreditation Quality Assurance (NCQA). As Margaret O'Kane, President, NCQA, states, "Population health is a model of care that strives to address patients' health needs at all points along the care continuum, including the community setting, by increasing patient participation and engagement, and targeting interventions." Knowing that providers cannot do it all, a team-based approach was employed in order to augment the provider's capacity and help their patients get the right care, in the right place, at the right time.

Eileen Haley, MSN, RN, CNS, CCM is the Director for Population Heath team. Over the past six year she has worked on building the Population Health team and is honored to be on this team helping to create innovative approaches to improve health care for all. She has many years of nursing and case management experience and enjoys mentoring future nurses and leaders.

Samantha Madonis, MSN, RN has been with UCSDH Population Health Digital Health since we started the program. She has been an asset to the program and has helped grow our patient engagement in digital health tools, specifically with patient show have Hypertension.

Holly Smith, MSN-Ed, RN is the Population Health Clinical Nurse Educator. She joined the Population Health efforts two years ago with 24 years of broad patient care and clinical operations expertise to expand nursing student experiential learning opportunities, meeting the new core competencies of professional nurse education while driving positive outcomes for UCSDH patients. She enjoys using innovative teaching strategies to build effective programs for staff education and incorporating principles of lean healthcare.

Lindsey Pierce, MSN, RN, CCM is the Assistant Director of UC San Diego Health's Population Health Complex Case Management and UCSDH at Home Programs. Lindsey is an experienced leader, skilled in the use of functional evidenced base care, Accountable Care Organizations (ACO's), Value Based Care, applied lean Six-Sigma techniques and the use of innovative technology. Lindsey has led payer and provider based programs aimed at improving quality, reducing cost of care, and improving the patient and provider experience. She is certified in Case Management through the Commission for Case Management and holds a Master's degree in Nursing Administration. Lindsey is a San Diego native and has a passion for bee keeping, animal rescue and open ocean swimming.

The Population Health Team Provides a Menu of Resources

Housed within PHSO is the Population Health team, consisting of nurses, social workers, advanced practice providers (APPs), physicians, medical assistants, care navigators, and digital health coaches. The team supports patients and providers in a myriad of ways under six (6) key programs which include; quality team for care gap closures and performance tracking with targeted campaigns, student nurses for clinical rotations, utilization management for HMO contracts and member authorizations, post discharge team for support from hospital and skilled nursing facility to home, disease management team for digital health monitoring and coaching, and telephonic and in-home provider visits for high risk seniors. For each program, providers refer to nurses and they are the first touch point for patients who are offered a menu of resources based on the patient's needs and goals. This menu may consist of simple reminders for lab and cancer screenings to providing outreach and tools to help with blood pressure, hypertension and mild depression to offering complex care management services. Other resources include patient outreach post discharge to reinforce discharge instructions and medication education and secure

Population Health leadership team. Left to Right: Ken Bychak, RN, Victoria Harris, MPH, Eileen Haley, RN, Melissa Gellman, RN, Nancy Renshaw, RN, Melinda Perias, RN, Holly Smith, RN, Allison Kretchman, RN student, Anna Mekhed, RN, Parag Agnihotri, MD (missing Lindsey Pierce, RN)

UCSD at Home: Janet Davis, NP 2021. Home visit.

community resources. In addition, specially designed for our more complex vulnerable patients, we offer our UCSDH at Home services. UCSDH at Home uses an interdisciplinary approach and consists of a small team of APPs and physicians who perform in home visits throughout San Diego with the support of nurse case managers, social workers, and medical assistants. This interdisciplinary team works with primary care providers, palliative care, behavioral health and community partnerships to coordinate the patients care across the continuum. The UCSDH at Home team focuses on our highest-risk senior patients and provides in home vaccines, medication management and comprehensive care planning to help meet patient's medical, physical and social needs. UCSDH at Home are the eyes and ears for primary care providers helping to keep their most vulnerable senior patients safe in their home. In addition, and in some ways a benefit of the COVID 19 pandemic, student nurses who had to find alternative clinical assignments from the hospital setting found a home within our Population Health teams. Population Health provides a robust training ground for students, offering nursing student cohorts daily engagement in a variety of population health initiatives with core learning modules for training and direct patient outreach, with oversight.

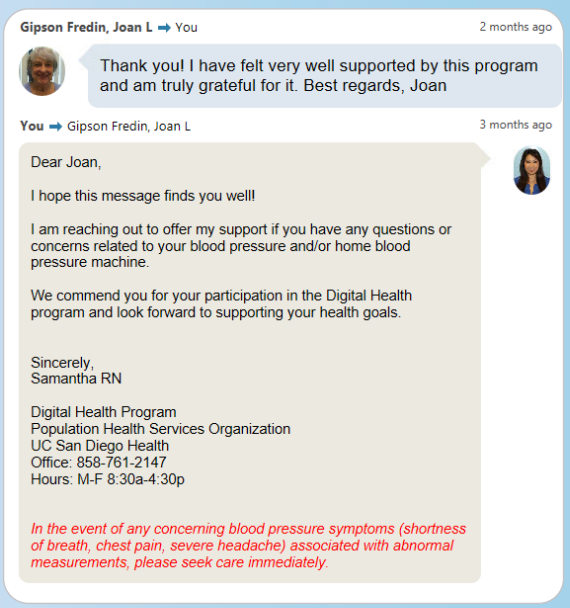
A Snapshot of the Impact of Population Health

Despite being a relatively newer program, Population Health has demonstrated considerable success already and continues to adapt and grow based on the needs of its patients. Samantha Madonis, a Digital Health RN Care Manager, shared this snapshot of a patient's journey to illustrate the menu of services and the impact of Population Health programs:

Joan is a 74 year-old female living with osteoarthritis of both hips, for which she was planning hip replacement surgery for the spring of 2021. Unfortunately, in April 2021 Joan suffered from a stroke before she could have the surgery. Not only did she have residual weakness after the stroke, she had chronic conditions specifically poorly controlled hypertension, excluding her as a candidate for the surgery she needed. At the time when Joan enrolled in the Digital Health and UCSDH at Home programs after her stroke she was being followed by 3 specialists, considered high risk with multiple comorbidities, and had 3 hospital admissions over 2 months. Joan opted to enroll in our Population Health programs in August 2021 where she received ongoing follow-up and care coordination. A nurse-led team worked closely to achieve blood pressure control, pharmacy was included to optimize her medications, and a nurse practitioner performed intermittent at-home visits in collaboration with the PCP and initiated home physical therapy with the goal to mitigate potentially avoidable events and help her progress safely at home.

Through dedicated engagement, the next 6 months proved that team-based care leads to successful, measurable, and achievable outcomes. Joan was able to regain her strength, improve her mental well-being with the additional supports from the team. The Digital Health team provided her with an at-home blood pressure cuff that transmitted directly to Joan's Electronic Health Record which demonstrated her progressive blood pressure improvement from 160's/100's to below 130/80. This allowed Joan to schedule her hip surgery in October 2022. She no longer needs all the services that she was receiving from UCSDH Population Health but continues to take and transmit her blood pressure readings and knows that the team is a phone call away.

Joan is very appreciative of the care she received. Below is one example of the type of communication and follow up between her and our RN Care Manager:



Gipson Fredin, Joan L ➡ You — 2 months ago

Thank you! I have felt very well supported by this program and am truly grateful for it. Best regards, Joan

You ➡ Gipson Fredin, Joan L — 3 months ago

Dear Joan,

I hope this message finds you well!

I am reaching out to offer my support if you have any questions or concerns related to your blood pressure and/or home blood pressure machine.

We commend you for your participation in the Digital Health program and look forward to supporting your health goals.

Sincerely,
Samantha RN

Digital Health Program
Population Health Services Organization
UC San Diego Health
Office: 858-761-2147
Hours: M-F 8:30a-4:30p

In the event of any concerning blood pressure symptoms (shortness of breath, chest pain, severe headache) associated with abnormal measurements, please seek care immediately.

2021 IHA CLINICAL QUALITY TOP 10% PERFORMER

Commercial HMO achievement at or above the 90th percentile in the Clinical Quality Domain

2021 IHA MEDICARE ADVANTAGE

Medicare Advantage providers earning an overall star rating of 5 or 4.5 stars against national benchmarks established by CMS

One of the nursing student rotations from Azusa Pacific University with Holly Smith, Population Health Nurse Educator

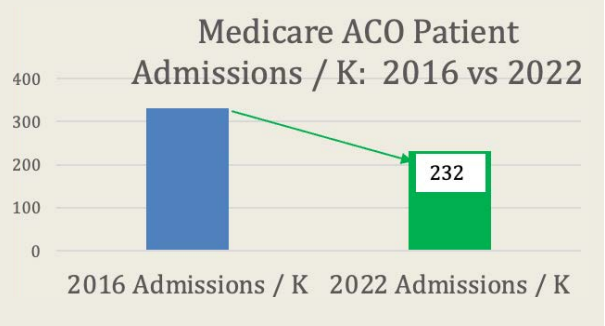


Figure 1

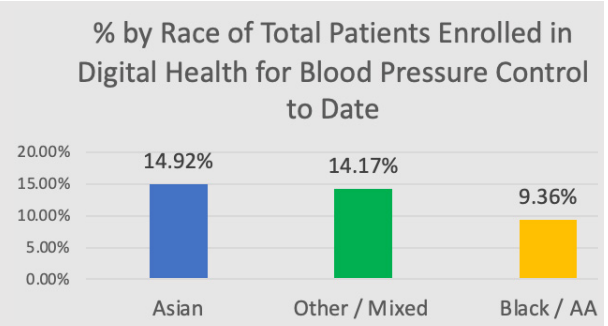


Figure 2

In summary, over the past five years, our Population Health nurse-led team has developed innovative programs to support providers and patients by offering a menu of services to support the right care, at the right time with the right patients. Population Health's North Star is the Quintuple Aim which includes improving population health, enhancing the patient care experience, reducing costs, improving quality, all with a focus on health equity. Building this infrastructure to complement existing teams and build value based care is a work in progress. Thanks to this partnership with UCSDH providers and clinics, we have seen improvements in many areas, most notably reducing unplanned admissions for senior patients (Figure 1), and improved blood pressure control from 64% to 72% (Figure 2) and diabetes bundle control from 29% to 43% (Figure 3). Moreover, we have achieved a 5 STAR quality rating for our Medicare patients and have been in the top 10% for quality in California for our commercial patients (Figure 4). We owe a special thank you to our CMO, Dr. Parag Agnihotri, whose support of nursing practice and the vision for Population Health, grounded in evidence, is helping many UCSDH patients have healthier days at home. Using a data driven approach we continue to grow nurse-led initiatives to improve care to all our patients in their homes in partnership with leadership, providers, clinics, pharmacists and our amazing analytics and EPIC team.

Be There San Diego: DM HbA1c Control by Group and Race/Ethnicity

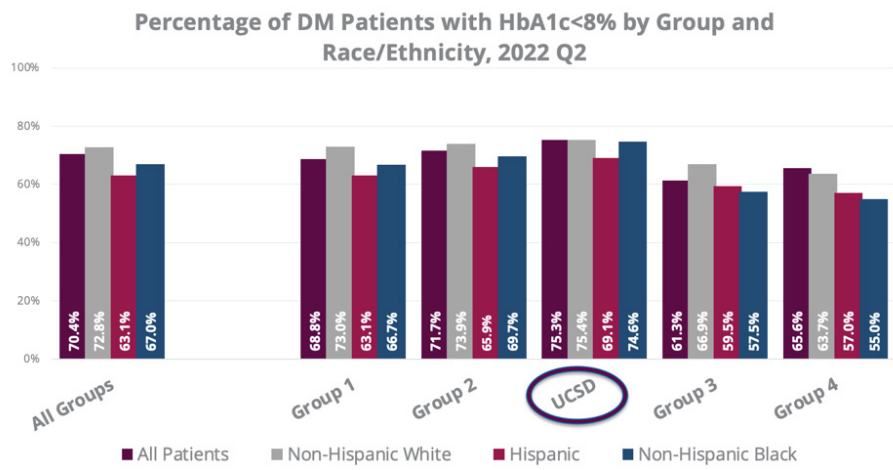


Figure 3

Figure 4