

HAWAII MEDICAID OHANA NUI PROJECT EXPANSION (HOPE) PROJECT

MED-QUEST DIVISION

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EXECUTIVE SUMMARY

Hawaii's Vision for Health Care Transformation: Hawai'i 'Ohana Nui Project Expansion (HOPE) Program

The Med-QUEST Division (MQD) is committed to laying the foundation for innovative programs that support and create healthy families and healthy communities. To accomplish this goal, MQD is building the Hawai'i 'Ohana Nui Project Expansion (HOPE) program, a five-year initiative to develop and implement a roadmap to achieve this vision of healthy families and healthy communities.

MQD's vision is that the people of Hawai'i embrace health and wellness. MQD's mission is to empower Hawai'i's residents to improve and sustain wellbeing by developing, promoting and administering innovative and high-quality healthcare programs with aloha. The vision and mission will serve as the "North Star" and guide the work developed through HOPE.

The following guiding principles describe the overarching framework that will be used to develop a transformative healthcare system that focuses on healthy families and healthy communities.

- Assuring continued access to health insurance and health care.
- Emphasis on whole person and whole family care over their life course.
- Address the social determinants of health.
- Emphasis on health promotion, prevention and primary care.
- Emphasis on investing in system-wide changes.
- Leverage and support community initiatives.

In order to accomplish the vision and goals, HOPE activities are focused on four strategic areas.

- Invest in primary care, prevention, and health promotion.
- Improve outcomes for high-need, high-cost individuals.
- Payment reform and alignment.
- Support community driven initiatives to improve population health.

In addition, HOPE activities are supported by initiatives that enhance three foundational building blocks.

- Health information technology that drives transformation.
- Increase workforce capacity and flexibility.
- Performance measurement and evaluation.

MQD developed a driver diagram that depicts the relationships between the guiding principles, strategies and building blocks that enable MQD to achieve the vision of healthy families and healthy communities (see Figure 1).

Figure 1. Hope Driver Diagram

Goals/Aims	Strategies/Primary Drivers	Priority Initiatives/Secondary Drivers	Interventions
<p>By 12/31/2022:</p> <p>Healthy Communities and Healthy Families</p> <p>Achieve the Triple Aim of Better Health, Better Care and Sustainable Costs</p>	<p>Invest in primary care, prevention, and health promotion</p>	<ul style="list-style-type: none"> • Build capacity and improve access to primary care • Integrate behavioral health with physical health across the continuum of care • Support children’s behavioral health • Promote oral health 	<ul style="list-style-type: none"> • Increase the proportion of health care spending on primary care • Cover additional evidence-based services that promote behavioral health integration • Promote and pilot home-visiting for vulnerable children and families • Restore the Medicaid adult dental benefit
	<p>Improve outcomes of High-Need/ High-Cost (HNHC) individuals</p>		
	<p>Payment Reform and Alignment</p>	<ul style="list-style-type: none"> • Improve health by providing access to integrated health care with value-based payment structures 	<ul style="list-style-type: none"> • Evolve current value-based purchasing contracts with managed care plans • Incorporate health-related social needs into provider and insurance payments
	<p>Support community initiatives to improve population health</p>		
	<p>Enhance foundational building blocks: health information technology, workforce capacity and flexibility, and performance management and evaluation</p>	<ul style="list-style-type: none"> • Use data and analytics to drive transformation • Develop payment models that drive use of care teams • Create a core set of metrics to measure HOPE progress 	<ul style="list-style-type: none"> • Develop capacity to collect and analyze data • Promote multidisciplinary team based care • Complete evaluation on HOPE activities

HAWAI'I MEDICAID 'OHANA NUI PROJECT EXPANSION (HOPE) PROJECT

The State of Hawaii's Vision for Healthy Families, Healthy Communities

The Hawai'i Department of Human Services (DHS) is committed to laying the foundation for innovative programs and models that support and create healthy families and healthy communities. To accomplish this overall goal it is necessary to align state programs and funding around a common framework: a multigenerational, culturally appropriate approach that **invests in children and families over the life-cycle to nurture well-being and improve individual and population health outcomes**. This is why the Med-QUEST Division (MQD) of DHS is building the Hawai'i 'Ohana Nui Project Expansion (HOPE) program, a five-year initiative to develop and implement a roadmap to achieve this vision of healthy families and healthy communities.

SECTION 1: VISION AND BACKGROUND

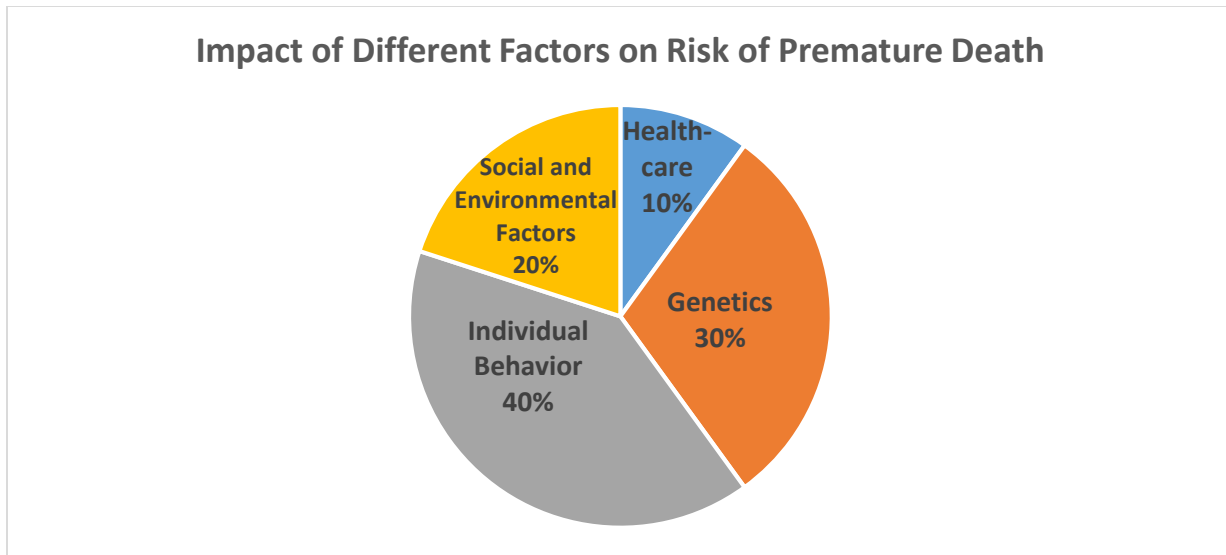
The Vision and Mission of Med-QUEST

MQD's vision is that the people of Hawai'i embrace health and wellness. MQD's mission is to empower Hawaii's residents to improve and sustain wellbeing by developing, promoting and administering innovative and high-quality healthcare programs with aloha. The vision and mission will serve as the "North Star" and guide the work developed through HOPE.

Drivers of Health and Well-Being

Efforts to improve health in the United States have almost exclusively focused on the health care system as the key driver of health and health outcomes. While reforms to the health care system are necessary and important, research has demonstrated that improving population health and achieving health equity also require broader approaches that address social, economic, and environmental factors that influence health.ⁱ Researchers have found that social factors, including education, social supports, and poverty accounted for over a third of total deaths in the United States.ⁱⁱ In addition, individual behaviors (i.e. smoking, diet and drinking) and genetics play a role in health and health outcomes. **It is estimated that health care only accounts for 10% of risk of premature death** (see Figure 1). For this reason, the focus of the HOPE efforts will include health care system redesign as well as strategies to address the health-related social needs and individual behaviors that influence health and well-being.

Figure 2ⁱⁱⁱ



The Goals of the HOPE Initiative

The goal of the plan is to achieve the Triple Aim of **better health, better care, and sustainable costs for our community**. Within five years, MQD anticipates that the investments in healthy families and healthy communities will translate to improved health and well-being, measurably lower prevalence of illness, and a more sustainable growth rate in healthcare spending. The goal is to bring the growth of health care spending more closely in line with the growth of our economy, so that we can invest a greater share of our productivity gains in education, housing and other priorities that have an even greater impact on health and well-being than the Medicaid delivery system.

More specifically, the goals include:

Improved Health	Better Health Care and Consumer Experience	Lower Costs
<p>Achieve or maintain top-quartile performance among states for adoption of best practices for outcomes in:</p> <ul style="list-style-type: none"> • Health • Wellness • Health promotion • Disease prevention • Health improvement • Health-related social needs. 	<p>Achieve high standards for quality and patient experience, including at least:</p> <ul style="list-style-type: none"> • A X% (percent TBD) reduction in the risk factors associated with chronic conditions • An increase in appropriate utilization of behavioral health services • Decrease in preventable utilization for individuals with chronic conditions. 	<p>Generate \$X (number TBD) in cumulative savings by:</p> <ul style="list-style-type: none"> • Reducing unnecessary care • Shifting care to appropriate settings • Curbing increases in unit prices for health care products and services that are not tied to quality.

The Need for Innovation and Change

Although Hawai'i is considered one of the healthiest states in the country in many areas, there is room for continued development.^{iv,v} Hawai'i, like all other states, is experiencing unsustainable increases in health costs, increasing morbidity from costly chronic diseases and behavioral health conditions, uneven access to care, and limited availability of health data and analytics. It is for this reason that MQD is pursuing this initiative to advance statewide innovation to strengthen population health, transform the health delivery system, and achieve the Triple Aim of better health, better care, and sustainable costs. MQD is a critical part of the health care system, and MQD will play a leadership role in health care transformation. **However, it is important to note that system transformation is only possible when patients, the community, health care providers, health plans, payers and other stakeholders work together to achieve transformation.**

Why We Need to Act Now

Despite being the healthiest state in the nation^{vi,vii}, the following information reflects the severity of the issues that individuals and families are experiencing and further demonstrating the need for action to bring about change and transform the health system now.

Table 1: Rationale for Transforming Health Care in Hawai'i

<p>Prevalence of Chronic Diseases</p>	<ul style="list-style-type: none"> • There has been a 128% increase in the prevalence of diabetes in Hawai'i over the last 20 years (from 4.6% in 1997, to 7.6% in 2005, to 10.5% in 2017).^{viii} • There has been a 84% increase in the percentage of obese (Body Mass Index of 30 or higher) adults in the state over the past two decades (from 12.97% in 1997, to 20.6% in 2007, to 23.8% in 2017).^{ix}
<p>Prevalence of Behavioral Health Conditions and Associated Costs</p>	<ul style="list-style-type: none"> • In 2013, results from the Hawai'i Behavioral Risk Factor Surveillance System (BRFSS) survey showed that prevalence for depression among adults increased by 12.7% from 2011 to 2013, with 11.4% (or 125,000 residents in the State) reporting a depressive disorder in 2013.^x • Suicide is the leading cause of death in young people ages 15 through 24, with the rate of suicide more than doubling between 2007 and 2011.^{xi} • More than one in ten (13%) of Native Hawai'i and Pacific Islander high school students attempted suicide one or more times in the previous year, the highest proportion among all racial groups.^{xii}

	<ul style="list-style-type: none"> • The average annual number of drug overdoses nearly doubled from the 1999-2003 period to the 2009-2017 period, and opioid pain relievers such as oxycodone or hydrocodone contributed to more than one third of drug overdose deaths.^{xiii} • Drug overdoses surpassed motor vehicle traffic crashes as the leading cause of fatal injuries.^{xiv} • A 2013 actuarial analysis in Hawai'i found that the average total health care costs for individuals with a behavioral health diagnosis was three times the average total health care cost for those without a behavioral health diagnosis. • Our 2017 actuarial analyses found that individuals facing homelessness had significantly higher costs due to co-morbidities of behavioral health, complex health conditions with intensive social needs. • An analysis by the Hawai'i Health Information Corporation (HHIC) of 2012 statewide data showed that 34% of hospitalizations and 36% of total costs were attributable to individuals with a comorbid behavioral health and physical diagnosis.
Pregnancy	<ul style="list-style-type: none"> • Substance use among pregnant women in Hawai'i is higher than national targets, which reflect there is essentially no acceptable rate of use of these substances. Hawai'i data shows that 5.9% of women reported drinking alcohol in the last trimester of their pregnancy, 8.6% reported cigarette smoking in the last trimester, and 3% reported using illicit drugs during their latest pregnancy.^{xv} • Although teen pregnancy rates have declined in recent decades, the United States rate is still one of the highest in the developed world. Hawai'i ranks 30th in teen pregnancy rates (rank of 1 is the lowest and 50th is the highest).^{xvi}
High Costs	<p><i>Hawai'i-Specific Data on High Costs</i></p> <ul style="list-style-type: none"> • Health care expenditures in Hawai'i increased by almost 40% between 2004 (\$6,391 million) and 2014 (\$10,338 million).^{xvii} • Health premiums in Hawai'i increased from \$1.2 billion in 1995 to \$6.3 billion in 2015, an average increase of 20% each year.^{xviii} Hawai'i health premiums are an increasing percentage of wages, growing from 2.8% in 1974 to 14.7% in 2015.^{xix} • From 2010 to 2015, the small group health premiums in Hawai'i increased each year on average of 6%, and increased 7.5% on average from 2013 through 2015.^{xx}

National Data on High Costs

- United States health care spending increased 4.3% to reach \$3.3 trillion, or \$10,348 per person in 2016.^{xxi} National health spending is projected to grow at an average rate of 5.6% per year for 2016-2025, and 4.7% per year on a per capita basis.^{xxii}
- Between 2002 and 2012, U.S. health insurance premiums increased 97 percent, three times as fast as wages (33 percent) and inflation (28 percent).^{xxiii}
- U.S. covered workers' average dollar contribution to family coverage has increased 74% since 2007 and 32% since 2012.^{xxiv}

Medicaid Cost Data – Hawai'i and National

- Medicaid makes up 16% of Hawaii's total state expenditures, and 11% of the state's general funds.
- Hawai'i general fund expenditures for the state increased by 7.3% and 8.8% from fiscal years 2015-2016 and 2016-2017. Medicaid state fund expenditures increased by 6.3% and 12.3% during the same time period. While this is largely due to increase enrollment, increasing healthcare costs are also part of the increasing trends.
- On a national level, Medicaid has grown from about 20% of total state spending to 29% of total state spending for 2017.^{xxv} Excluding federal funds, Medicaid was nearly 17% of state fund expenditures, or a 7.1% increase in state fund spending.^{xxvi} Combined federal and state expenditures for Medicaid accounted for about 16% of U.S. health care spending in calendar year 2014.^{xxvii}

SECTION II: FRAMEWORK FOR INNOVATION

MQD's Guiding Principles to Innovation

The following guiding principles describe the overarching framework that will be used to develop an innovative, transformative, healthcare system that focuses on healthy families and healthy communities. The framework's foundation is building multi-generational, culturally appropriate approaches that invest in children and families over their life course to nurture well-being and improve individual and population health outcomes.

1. *Assuring Continued Access to Health Insurance and Health Care.*

Hawai'i has a long history of prioritizing health coverage and quality healthcare for our residents. We expanded to low-income adults over twenty years ago, and welcomed the Affordable Care Act's further expansion. MQD will continue to support Hawaii's commitment to health care coverage for all our population through outreach efforts in the communities, partnering with communities and other agencies so that individuals and families continue to have health coverage when transitioning from one life circumstance to another, specifically targeting individuals with serious mental illness, economic vulnerabilities and behavioral health challenges.

2. *Emphasize Whole Person and Whole Family Care over their Life Course. 'Ohana Nui –Focus on Young Children and their Families.*

Whole person care is person-centered and person-engaged throughout the life cycle. Aligning with the social model, home and community-based services that emphasize choice, autonomy and living as independently as possible, it has been demonstrated that a person-centered approach that promotes person's engagement through mutual respect and responsibility leads to improved health outcomes and well-being. Patient engagement is the flip side of "compliance/adherence". Hawaii's Self-Advocacy Advisory Council's slogan succinctly captures this concept: "don't 'should' on me, ask me". HOPE will promote evidence-based practices that activate and engage individuals, families and communities in their own health and health care.

Whole person care also focuses on the person's over-all well-being, and does not silo one into a specific disease or body part. Thus, both the head and the body are one when considering one's health. The mental and oral health viewed in an integrated way with the rest of the body. Physical health and behavioral health need to be integrated in a whole-person perspective. Additionally, a person's larger context is also taken into consideration for one's well-being. Thus, the social determinants of health are essential.

Whole family care views individuals in the context of their family and/or social networks, which is a major driver of health. In Hawai'i, using *'Ohana Nui*, or investing in young children and their families, is imperative to community health and well-being. Investing in children helps children to develop to their full potential, and taking care of the health needs of children yields positive benefits to economies and societies. It is especially important to invest in young children during their most critical period of development and growth (ages 0 to 5). Using a multi-generational life-cycle approach to service delivery is more effective than one that separately addresses individuals' needs. This includes the five pillars that create an intergenerational cycle of opportunity (social capital, early childhood education, postsecondary and employment pathways, health and well-being, and economic assets). As with a whole-person perspective, these pillars are also integral social determinants of health.

3. *Address the Social Determinants of Health (SDOH).*

There is a growing body of research that shows a broad range of social, economic, and environmental factors shape individuals' opportunities and barriers to engage in health behaviors. Social determinants of health, also known as health-related services, are the structural determinants and conditions in which people are born, grow, live, work and age (see Figure 3).^{xxviii} **MQD's approach to addressing these broader determinants of health is to develop integrated solutions within the context of the health care delivery system.** More specifically, MQD will develop initiatives that link health care to broader social needs, and promote and incentivize health systems and providers to coordinate and integrate the delivery system with community services, education, social services, and public health so individuals and families can receive the services that improve their health and well-being.

4. Emphasis on Health Promotion, Prevention and Primary Care

According to the World Health Organization, 80% of chronic diseases are preventable.^{xxix} The major contributors to chronic disease are an unhealthy diet, lack of physical activity, and tobacco use. Lifestyle choices have more impact on health and longevity than any other factor. Prevention and health promotion should be woven into all aspects of our lives, including where and how we live, learn, work, play and pray. Everyone, including government, health care institutions, and individuals have a role in creating healthier families and communities. **In other words, health is everyone's "kuleana", or responsibility.** Initiatives included in HOPE emphasizes the importance of health promotion, prevention, and early detection of disease by encouraging and incentivizing providers to screen and educate individuals and families on the impact of lifestyle choices on health. MQD will promote best practice models of care that emphasize care coordination across providers and have robust primary care capabilities at their center. Additionally, focus on more convenient access to routine primary and preventive services.

5. Emphasis on Investing in System-Wide Changes.

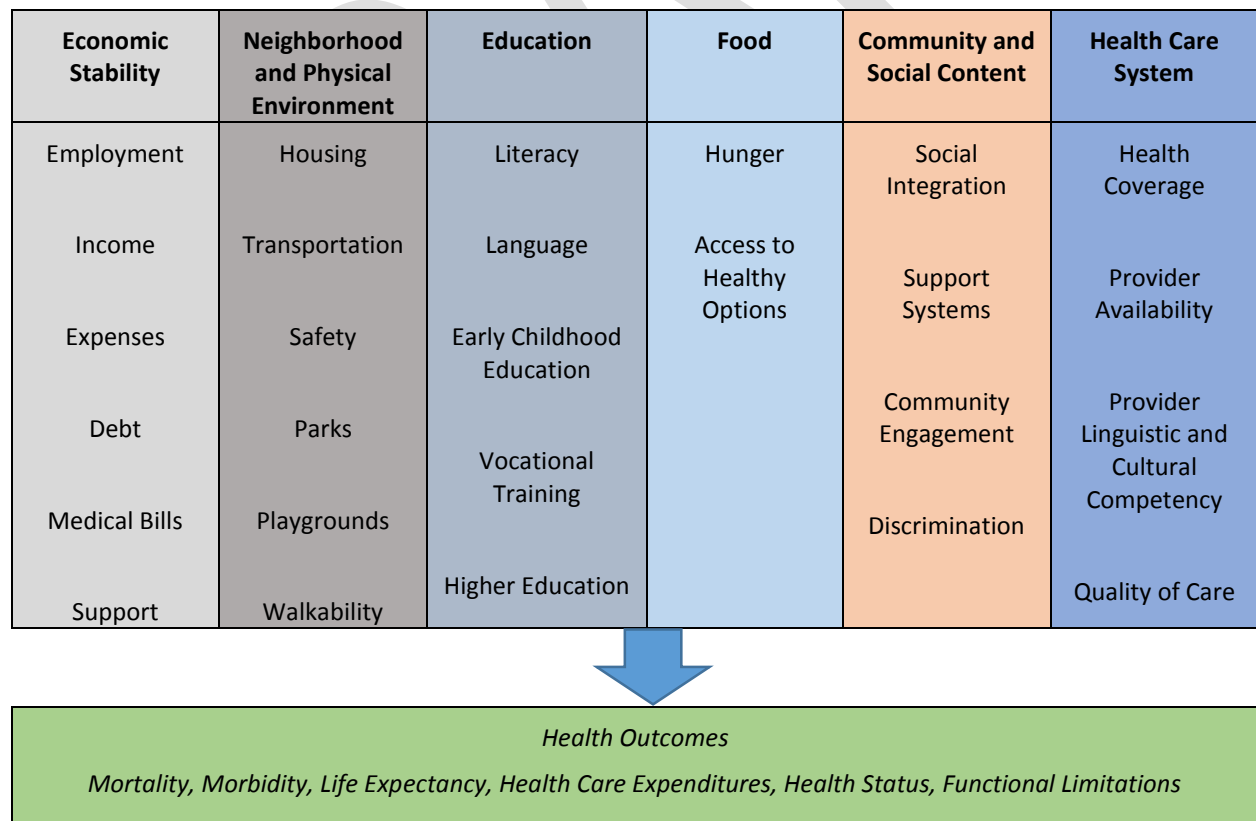
There is great potential for improving outcomes and saving money in healthcare reform, but efforts will not fully achieve the Triple Aim if they are not well targeted or if they are included as incremental or "add-on" steps in the context of a fragmented health care system with perverse financial incentives. The system-wide initiatives that are chosen to be a part of HOPE will integrate the system and focus on adaptive solutions rather than technical fixes. From a systemic, transformative lens, we will address quality of care, improve collaboration and coordination, and reform how services are paid for, resulting in achieving the Triple Aim goals of improved health outcomes, improved care and sustainable costs. This will require strong partnerships across agencies, the delivery system, payers and social/human service providers. Additionally, HOPE initiatives will help lay the foundation for potential future comprehensive multi-payer initiatives (e.g. Medicare/Medicaid). In order for comprehensive healthcare delivery system transformations to occur, it is imperative that multiple payers and delivery systems work together to accomplish the goals.

6. Leverage and Support Community Initiatives.

While taking a systemic, transformative approach is necessary for innovation, those changes are rooted in local, community efforts. Community care includes viewing the community in context of the environment, local initiatives and engagement with the community, and a recognition that where we live, work, play and pray has an impact on health and well-being. The island geography of our state has given rise to great diversity at the local community level of social capital and health assets as well as unique needs. It is essential that HOPE build on and support culturally appropriate and effective initiatives, improve health equity, and reduce health and geographic disparities.

Hawai'i has a long tradition of developing innovative health programs and policies at the local level. Many health plans, providers and community organizations are developing innovative programs and initiatives, and MQD will leverage these initiatives in HOPE in order to advance innovation and avoid duplication of effort. Examples of some of the community initiatives that support HOPE goals includes the Blue Zones project,^{xxx} MAHIE 2020,^{xxxi} Community First,^{xxxii} and the United Health Care Services' Accountable Health Communities Model.^{xxxiii} Additionally, many community health centers in Hawai'i have invested in serving their communities in new and innovative ways such as supporting local job skills development and facilitating access to culturally relevant fresh food and meals.

Figure 3. Social Determinants of Health/Health-Related Services^{xxxiv}



Strategies and Foundational Building Blocks

In order to accomplish the vision and goals, HOPE activities are organized along two major axes: (1) four strategic focus areas, which include multiple targeted initiatives to promote integrated health systems and payment reforms, and (2) three foundational building blocks, which directly support the four strategies and also enhance overall system performance.

The first two strategies reflect the short and long term investments needed to accomplish the Triple Aim. The first strategy is focused on investing in primary care, health promotion, and prevention early in one’s life and over one’s life. The second strategy is focused on people with the highest, most complex health and social needs because they use a majority of health care resources, and there is potential for a strong return on investment. The health and well-being of individuals with complex needs must be addressed in order to begin to bend the cost curve, and the savings accrued will be used to support the sustainability of HOPE initiatives including investments in primary care, children, and health-related services.

The third strategy reflects the need to pay for care differently. The focus is to move away from rewarding volume toward accountability for overall cost and quality that is essential for supporting the integrated delivery system reforms identified in the first two strategies. The fourth strategy reflects MQD’s commitment to invest in community care, support community initiatives, and develop initiatives that link integrated health systems with community resources in order to improve population health.

The foundational building blocks of health information technology, workforce development and performance management and evaluation are critical to the success of the four strategies. Each strategy requires development to enhance system performance in each of the foundational building blocks on the provider level, MCO level, and at the Med-QUEST administrative level.

Figure 4: HOPE Project Summary

HOPE PROJECT SUMMARY				
Goals	Healthy Families and Healthy Communities and Achieving the Triple Aim – Better Health, Better Care, Sustainable Costs			
Strategies	1. Invest in primary care, prevention, and health promotion	2. Improve outcomes for High-Need, High-Cost Individuals	3. Payment Reform and Alignment	4. Support locally driven initiatives to improve population health
Foundational Building Blocks	1. Use health information technology to drive transformation			
	2. Increase workforce capacity			
	3. Performance measurement and evaluation			

STRATEGY #1: INVEST IN PRIMARY CARE, PREVENTION AND HEALTH PROMOTION

In order to achieve HOPE goals, Hawai'i needs to close the gaps between prevention, primary care, and physical and behavioral health care. The goal is to improve health overall by building healthy communities and individuals through prevention, health promotion, and early mitigation of disease throughout the life course. MQD plans to achieve this with four priority initiatives: (1) Invest in Primary Care, (2) Promote Behavioral Health Integration, (3) Support Children's Behavioral Health, and (4) Promote Oral Health and Dental Care.

PRIORITY INITIATIVE: INVEST IN PRIMARY CARE

Primary care is in a critically important position in the health care delivery system because of its focus on prevention and early mitigation of diseases throughout the life course. Primary care teams are often patients' first point of contact with the health delivery system, and make decisions that have a major impact on quality of care and total health care spending. Greater use of primary care has been associated with lower costs, higher patient satisfaction, fewer hospitalizations and emergency departments visit, and lower mortality.^{xxxv} Further, underinvestment in primary care is one of four fundamental reasons that the U.S. health system ranks last among high-income countries.^{xxxvi}

Despite the strong evidence that primary care is critical to achieving the Triple Aim, primary care faces many challenges. Fragmented systems and policies make it difficult to coordinate care with specialists and social service organizations, burdensome administrative requirements result in primary care providers not spending enough time with patients, and reimbursement encourages primary care practices to adopt volume-based (as opposed to outcome-based) business and care models. These and other factors contribute to low job satisfaction and burnout, patients not getting the care they need, unsustainable increases in health expenditures, and consequently, is stifling the development of innovative approaches to primary care delivery.

MQD is committed to investing in primary care and is exploring the following innovations:

- Increase the proportion of health care spending on primary care in order to promote the health system's orientation toward high-value care. The spending rate includes clinician incomes, performance payments, case-management activities, and health information technologies.
- Promote primary care and pay for value. Hawai'i will request to advance the use of value-based payments to MCOs. MQD will request to provide new performance incentive payments to primary care providers.
- Continue to maintain an increase in reimbursement to primary care providers and obstetricians (aka the "PCP bump"), even though the enhanced match rate that initially supported the increase are no longer available.
- Cover additional evidence-based practices that further integrate physical and behavioral health services such as the Collaborative Care Model.

- Promote best practices that address the needs of High-Need, High-Cost individuals (i.e. care coordination, palliative care, Dr. Ornish’s Program for Reversing Heart Disease).
- Promote education opportunities for primary care teams such as Project Extension for Community Healthcare Outcomes (ECHO) and care collaboratives.
- Work with stakeholders to identify and facilitate shared workforce resources, including but not limited to, community health workers, care managers, and care coordinators, especially for neighbor islands.
- Promote increased investments in health related and flexible services.
- MCOs will be encouraged to invest in health-related social needs and services that improve quality and outcomes, and MCOs that reduce costs through the use of these services can receive financial incentives to offset those cost reductions.

PRIORITY INITIATIVE: PROMOTE BEHAVIORAL HEALTH INTEGRATION ACROSS THE CONTINUUM

Behavioral health integration has been a priority for MQD for the past few years and will continue to be a top priority. The rationale for this includes:

- Medicaid pays for 26% of all spending on behavioral health in the country.^{xxxvii}
- Individuals with a behavioral health conditions cost nearly four times more than individuals without behavioral health conditions.^{xxxviii}
- One in five Medicaid enrollees have a behavioral health condition, but account for almost half of total Medicaid expenditures.^{xxxix}
- Disparities: Those with serious mental illness die on average 25 years earlier than those without, largely because of preventable chronic physical illness.^{xi}
- There is a large body of evidence showing that patients fare best when their physical and behavioral health needs are addressed in tandem.^{xii}
- Integrated care better aligns system incentives and increases health plan or provider accountability for managing a more complete range of services, which is important for a population with high comorbidity rates.^{xiii}

The overarching goals are to integrate behavioral health (mental health and substance use) with physical health at the primary care level, through the continuum to the most intensive level for individuals with complex conditions and health-related social needs (the later will be addressed in strategy #2). Other goals include integrating care with value-based payment structures, and screening, diagnosing, and treating conditions as early as possible. To achieve these goals, MQD is exploring the

following options:

- Identification of activities and processes necessary to achieve a foundational level of behavioral health integration emphasizing best practices that are scalable.
- Payment to primary care providers and members of the multidisciplinary team for providing integrated services using the Collaborative Care Model and other evidence-based integration models.
- Address gaps in provider education and curriculum by promoting psychiatric hotline services (aka “curbside consults”), and continuing education opportunities such as Project ECHO.
- Development of health homes that integrate behavioral health with primary care for children and families, adults, and aged individuals.
- Developing payment models that reward health plans and providers for integrating care at the most intensive level for individuals with complex conditions and health-related social needs.
- Identify specific populations (i.e. racial/ethnic, geographic, etc.) that have experienced disproportionately poor health outcomes and develop a plan to improve outcomes and achieve health equity.
- Continue to promote Screening, Brief Intervention, and Referral to Treatment (SBIRT) at the primary care level to address substance misuse and abuse, motivational interviewing, Housing First for the chronic homeless, and transitions of care models.
- Expand behavioral health services integration through partnerships with primary care providers, corrections, and other community-based organizations.

PRIORITY INITIATIVE: SUPPORT CHILDREN’S BEHAVIORAL HEALTH

Children’s Behavioral Health will include all of the activities listed in the behavioral health integration project, and will include additional activities:

- Promotion of the importance of screening young children for developmental and behavioral health conditions, including social-emotional development.
- Promoting and piloting home-visiting for vulnerable families and children who experienced multiple adverse childhood experiences (ACE).
- Continue to work with the Department of Education and the DOH including the Early Intervention Section, Children with Special Health Care Needs Branch, the Communicable Disease and Public Health Nursing Division, and the Child and Adolescent Mental Health Division to coordinate services with the health care delivery system.

PRIORITY INITIATIVE: PROMOTE ORAL HEALTH AND DENTAL CARE

Improving oral health is an important step in achieving whole-person health, with research increasingly identifying links between poor oral health and physical health. These include premature birth and multiple chronic health conditions where recent studies found that treating gum disease can lead to

lower health care costs and fewer hospitalizations for pregnant women and people with type 2 diabetes, coronary heart disease, and cerebral vascular disease.^{xliii} Unfortunately, Hawai'i has received a failing grade in three recent oral health report cards for children, and some of the factors that contribute to Hawai'i's oral health challenges include that the State has no public water fluoridation and that dental benefits have not been covered for adults in the Medicaid program (other than emergency care) since 2009.^{xliiv} The goals are to improve oral health for pregnant women, children, and individuals with chronic conditions, and in order to achieve this, MQD is exploring the following:

- Restore the Medicaid adult dental benefit;
- Promoting good oral health to pregnant women and individuals with chronic conditions;
- Continue to promote access to children's early dental care; and
- Continue to explore and maximize oral health options using available community resources such as dental hygiene schools.

STRATEGY #2: IMPROVE OUTCOMES FOR INDIVIDUALS WITH HIGH-NEEDS AND HIGH-COSTS

The top one percent of patients account for more than 20 percent of health care expenditures, and the top five percent account for nearly half of the nation's spending on health care.^{xliv} These trends are also evident in Hawai'i. Improving care management for this population while balancing quality and associated costs will require engagement from payers, providers, patients, community leaders, and other stakeholders. This is a priority because this is a vulnerable population with complex medical, behavioral, and social needs, and there is a potential for a return on investment that may help offset upfront costs of new interventions that improve outcomes.

Recent research on High-Need, High-Cost (HNHC) individuals has identified key characteristics and care recommendations that may improve outcomes. They include^{xlvi}:

- **HNHC individuals have higher medical, social and behavioral health needs, and addressing their medical needs alone will not improve outcomes.** Therefore, it is critical that care models address the medical, social, and behavioral factors in play for a given patient.
- The HNHC population is diverse and segmenting patients based on factors that drive health care need is essential for targeting care, improving outcomes, and lowering costs.
- Policy action and care models should focus on accelerating three program attributes:
 - Managing transitions of care (i.e. from hospital to home) that are commonly risky for patients with complex conditions.
 - Extend primary care teams by integrating social services with primary care.
 - Attributes of successful interdisciplinary, person-centered primary care include careful segmentation and targeting of interventions to persons most likely to benefit, close communication and coordination among members of the interdisciplinary care team,

strong information technology support, and promotion of patient and caregiver engagement in the process.

- Policy action should also focus on addressing the existing constraints and complexities preventing the integration of medical, behavioral, and social services and the way the MQD finances this model.

The goals are to improve outcomes and decrease costs, and in order to achieve this, MQD is exploring the following:

- Work with the MCOs to develop a taxonomy that aligns HNHC individuals with care models that target their specific needs.
- Modify MCO contracts to better enable MCOs to assess behavioral health factors, social risk factors, and the functional limitations of HNHC individuals using evidence-based surveys and tools. This builds on the supportive housing for chronically homeless population 1115 waiver amendment that is currently under consideration with CMS.
- Promote and accelerate the implementation of evidence-based practices *at the point of care* that specifically targets HNHC individuals, including but not limited to, the Chronic Care Model, Collaborative Care Model, Dr. Ornish's Program for Reversing Heart Disease, coordinated care models, and other evidence-based practices that improve outcomes and decrease costs.
- Identify specific populations (i.e. racial/ethnic, geographic, etc.) that have experienced disproportionately poor health outcomes and develop a plan to improve health outcomes and achieve health equity.
- Implement value-based purchasing strategies that incentivize quality, whole-person care, including intensive care management that addresses health-related social needs.
- Implement health homes and value-based purchasing strategies for health homes that aligns with federal initiatives such as the Comprehensive Primary Care Initiative.
- Establish a small set of proven quality measures appropriate for assessing outcomes, including return on investment, and continuously improving programs for HNHC individuals at the provider level and health plan level.
- Further develop the Managed Long Term Services and Supports (MLTSS) program including identifying specific metrics and outcomes in managed care contracts.
- Explore “default enrollment” of dually eligible Medicare/Medicaid members and align Dual Eligible Special Needs Plans (D-SNP) to support continuity and alignment of care.
- Explore paramedicine programs that target HNHC individuals.
- Implementing programs that support palliative care and quality of life at the end of life. In addition, promote the utilization of Physician Orders for Life-Sustaining Treatment Paradigm Forms (POLST), which is an approach to end-of-life planning that elicits, documents and honors patient treatment wishes.

STRATEGY #3: PAYMENT REFORM AND ALIGNMENT

The Way Health Care is Delivered and Paid for Today is Unsustainable

The United States has the most expensive health system in the world. Health spending constitutes more than 18% of the economy, compared with 10% in the average industrialized nation. One of the reason the United States spends so much on health care is because of higher prices compared to other countries. The high cost would be justified if Americans received the highest-quality care and achieved the best health care outcomes. However, evidence suggests that the health care system doesn't produce higher quality care, and even lags in basic population health metrics such as infant mortality, care coordination, patient safety, and access.^{xlvii}

The Problem with the Way Health Care is Financed

There is emerging consensus among providers, payers, patients, purchasers, and other stakeholders that efforts to deliver affordable quality health care in the United States have been stymied to a large extent by a payment system that rewards providers for volume as opposed to quality.^{xlviii} Health care reform efforts that attempt to reconfigure payments to incentivize value, and ensure that valuable activities such as preventive health services and care coordination are compensated appropriately, will better enable providers to invest in care delivery systems that are more focused on patient needs and goals. **Although changes in the payment system are necessary, they are insufficient on their own unless they are aligned with delivery system transformations** which ensure the delivery of high quality care, and that health care costs reflect appropriate and necessary spending for individuals, government, employers, and other stakeholders.

Financial and Quality Alignment across Payers is Critical

New payment models require providers to make fundamental changes in the way care is provided, and the transition to new way of providing care may be costly and administratively difficult even though new payment models are more efficient over time. In order to accelerate this transition, a critical mass of public and private payers must adopt aligned approaches and send a clear and consistent message that payers are committed to a person-centered health system that delivers the best health care possible. **Aligned payment approaches and performance metrics from a critical mass of payers would enable providers to establish an infrastructure that would increase the likelihood of success for innovative delivery systems over the long run.**

Key Definitions

Value-based purchasing (VBP) is generally considered any activity MQD undertakes to hold a provider or a managed care organization accountable for both the costs and quality of care they provide or pay for.

Alternative payment models (APM) or methodologies often define a strategy that changes the way MQD providers are paid, moving away from fee-for-service payment which rewards volume, to methods of payment that incentivize value.

Population-based payment models target expenditures that are established for a population (Total Cost of Care) and a provider or groups of providers are held responsible for quality and cost based on that targeted expenditure.

MQD's Road Map to Payment Reform

MQD's Value-Based Purchasing (VBP) Road Map lays out the way MQD will fundamentally change how health care is provided by implementing new models of care that drive toward population-based care. The goal is to improve the health of Medicaid beneficiaries by providing access to integrated physical and behavioral health care services in coordinated systems, with value-based payment structures. To achieve this, MQD needs to pay for care differently and is exploring the initiatives listed below.

PRIORITY INITIATIVE: VALUE-BASED PURCHASING

The collaborative effort to reshape the health delivery system in Hawai'i over the last four years has led to important gains and laid the groundwork for the next level of reform, and MQD is taking this effort to the next level by exploring these activities:

- Evolve current MCO value-based purchasing requirements to reflect the Health Care Payment Learning and Action Network APM Framework (see Table 2), and require the MCOs to move toward more sophisticated VBP purchasing over the life of the contract with primary care providers, hospitals, specialist, LTSS providers, and other provider types.
- Evolve pay-for-performance model to reward MCOs for providing high quality care and access to services and move it towards more outcome-based performance and population metrics. Use funds that are not awarded to support innovations identified in HOPE.
- Research other managed care VBP models such as accountable care organizations, global payments, and other health models.
- Partner and engage with stakeholders to design and develop multi-payer models for services such as acute and outpatient care.
- Incorporate health-related social needs into provider and insurance payments.
- Develop APMs for Federally Qualified Health Centers and promising practices in primary care.
- Development payment models that decrease cost variation by including total cost of care.
- Enhance rate setting methodology and new contracting strategies by allowing MCOs and providers the use of health-related services, including flexible services^{xix} and community benefit initiatives aimed at addressing the social determinants of health.
- Develop a plan to decrease unnecessary care, meaning patient care was received with no benefit in specific clinical scenarios. In 2014, more than \$500 million was spent in 2014 on 44 "low-value" health services.¹

Table 2: HCP LAN Updated APM Framework^{li}

Category 1	Category 2 Fee-for-Service – Link to Quality and Value	Category 3 APMs Built on Fee-for-Service Architecture	Category 4 Population-Based Payment
Fee-for-Service – No link to Quality and Value	A	A	A
	Foundational Payments for Infrastructure & Operations (e.g. care coordination fees and payments for HIT investments)	APMs with Shared Savings (e.g. shared savings with upside risk only)	Condition-Specific Population-Based Payment (e.g. per member per month payments, payments for specialty services, such as oncology or mental health)
	B	B	B
	Pay for Reporting (e.g. bonuses for reporting data or penalties for not reporting data)	APMs with Shared Savings and Downside Risk (e.g. episode-based payments for procedures and comprehensive payments with upside and downside risk)	Comprehensive Population-Based Payment (e.g. global budgets or full/percent of premium payments)
	C		C
	Pay-for-Performance (e.g. bonuses for quality performance)		Integrated Finance & Delivery System (e.g. global budgets or full/percent of premium payments integrated systems)
		3N Risk Based Payments NOT Linked to Quality	4N Capitated Payments NOT Linked to Quality

STRATEGY #4: SUPPORT COMMUNITY DRIVEN INITIATIVES TO IMPROVE POPULATION HEALTH

The fourth strategy reflects MQD's commitment to invest in communities by supporting community initiatives, and develop initiatives that link integrated health systems with community resources in order to improve population health. MQD embraces the paradigm shift that emphasizes the role and influence of local initiatives and community partners in shaping a health system responsive to local population health and health care delivery needs while addressing health-related social needs. As noted in our framework principles, while taking on systemic change, the actual innovations are implemented at the local level, meeting local community needs. Taken together population health outcomes improve.

As a part of HOPE, MQD will work with various strategic partners across the spectrum to evolve the health care delivery system from the local level to the top. Improvements in population health at the local and regional levels require aligned state policies, alignment at the health plan level and a collaborative and supportive approach to local initiatives, actionable data, transformation support and investment funding. The goal is to support and/or develop partnerships that will design new models to increase integration, collaboration and alignment among MCOs, local hospitals, community-based organizations, housing authorities, county government and public health agencies, affordable housing providers, corrections, behavioral health and substance use disorder providers.

Hawai'i has a long tradition of developing innovative health programs and policies at the local level, and MQD will leverage these initiatives in HOPE in order to advance innovation and avoid duplication. More specifically, MQD is exploring the following activities:

- Work with the relevant entities that currently have responsibility for regional/community health assessments to develop a regional health assessment that identifies and aligns community health improvement priorities and key strategies. The assessment will likely satisfy non-profit community benefit needs assessment requirements.
- Convene and participate in forums that foster needed strategic focus on community health transformation and collaborations across sectors including health care delivery, public health, behavioral health, education, human services, and community-based organizations.
- Support community and local initiatives by streamlining administrative functions and reducing waste and duplicative services. Some of the current administrative complexities are due to misalignment of health plans and local community efforts/providers.
- Develop strategies to evolve health plan and community relationships.
- Seek opportunities and venues that will allow communities to:
 - Act as a forum for harmonizing payment models, performance measures and investments.
 - Act as a forum to identify and develop cross sector investments that may yield created saving or efficiencies for other sectors.
 - Accelerate implementation of new integrated delivery and payment models.

Foundational Building Blocks

The building blocks listed below address fundamental capabilities and supports that must be in place to

realize the Triple Aim, and for reform to succeed on a system-wide basis.

FOUNDATIONAL BUILDING BLOCK #1: HEALTH INFORMATION TECHNOLOGY USE DATA AND ANALYTICS TO DRIVE TRANSFORMATION AND IMPROVE CARE

Access to data and analytics is critical to providing and measuring quality care, and implementing payment reform. MQD is exploring the following:

- Continue to support health information exchange so providers have secured access to appropriate clinical patient information to improve the speed, quality, safety and cost of care;
- Work to increase access to a person's own health record, as well as their health data to encourage personal responsibility and engagement in their own care.
- Increase the number of LTSS and behavioral health providers utilizing electronic records and information exchange.
- Develop capacity to collect, analyze and use clinical and cost data to support patient-centered system development and to track trends;
- Develop capacity to collect, analyze, and integrate claims data, clinical data, and data on social determinants, and provide timely, actionable information to health plans, providers, and consumers. Increase interconnectivity between electronic health records, disease registries, public health registries, actionable reports for providers, and data repositories for analytics;
- Address the governance, legal, policy and technical issues that impede the adoption of exchanging health information among providers;
- Promote common performance measurement reporting among health plans and providers;
- Support data integration across homeless systems as well as health surveillance, personal health records, social determinants and vital records; and
- Support DHS' Enterprise and Integrated eligibility system and DHS programs.
- Reduce administrative burden.
- Develop payment models for total cost of care based on data and analytics listed above.

FOUNDATIONAL BUILDING BLOCK #2: INCREASE WORKFORCE CAPACITY AND FLEXIBILITY

Hawai'i faces significant shortages and distribution challenges in its health care workforce which impact access to care, delivery of care, and ultimately health outcomes. Additionally, the healthcare industry is transitioning from acute care to ambulatory care and including community health workers and behavioral health peers as a part of multidisciplinary teams. The goal is to develop delivery and payment models that drive the ability to use clinical and other personnel in the most efficient and effective manner to ensure broad access to high-quality services. MQD is exploring the following activities:

- Promoting the inclusion of community health workers and peer-support specialists in

multidisciplinary team based care.

- Encourage and incentivize behavioral health integration into primary care.
- Promote and support residency programs that train new generations of health professionals in whole person, whole family care, team based models, and behavioral health.
- Help promote and build primary care capacity for behavioral health by supporting the Collaborative Care Model, Project ECHO, and other care/capacity building models.
- Promote evidence-based, best practices for recruiting and retaining workforce.

FOUNDATIONAL BUILDING BLOCK #3: PERFORMANCE MEASUREMENT AND EVALUATION

MQD will work with stakeholders to develop a standardized, statewide approach to measure and evaluate the quality and efficiency of care delivered through HOPE. The goal is to create a core set of industry-standard metrics that will serve as a common basis for measuring progress and impact of HOPE and facilitate continuous improvement throughout the initiative. MQD is exploring the following possibilities:

- MQD will develop a proposed dashboard that will include a set of metrics that measure the impact of HOPE.
- MQD will have an evaluation completed on all activities included in HOPE.
- MQD will work with stakeholders to develop a standardized, statewide approach to measure and evaluate the quality and efficiency of care delivered through HOPE.

SECTION IV: THE WAY FORWARD - A VISION FOR SUSTAINABILITY

As health care reform initiatives are taking place in Hawai'i as well as the nation, there are increasing concerns about the price tag and the sustainability of the innovations. That is why the initiatives outlined in HOPE have been carefully chosen and meet the following criteria:

- Build on successes of previous reform efforts;
- Leverage community initiatives and resources;
- Have a strong return on investment;
- Have the potential for federal matching dollars; and
- Have broad community support beyond Medicaid.

MQD is working with federal and local stakeholders to identify sustainable financing mechanisms. MQD will request approval from CMS for the 1115 demonstration waiver renewal which if approved will cover some of the initiatives outlined in HOPE (see below). However, not all HOPE initiatives are covered by the 1115 waiver demonstration, so MQD will work with CMS to identify other potential federal authorities and financing mechanisms such as state plan amendments and multi-payer waivers. In

addition, MQD may also look into other potential funding opportunities and collaborate with community leaders and providers to seek other funding sources.

WORKING WITH CMS: 1115 DEMONSTRATION WAIVER RENEWAL

In 2018, MQD will request a renewal of the QUEST 1115 Demonstration under the Section 1115(a) of the Social Security Act for a five-year period effective January 1, 2019 through December 31, 2023. The 1115 Demonstration renewal is a vehicle that states use to test new delivery and payment models. The waiver is a contract with the federal government and allows Hawai'i to receive a federal match for covered services and populations included in the waiver. It is important to note that waivers have to be budget neutral. This means that MQD cannot spend more than what would be spent without the waiver.

Building on the Success of QUEST and Previous Waiver Requests

MQD is committed to building on the gains it has made in partnership with CMS, and to renewing this demonstration so Hawai'i can take health system transformation to the next level through targeted modifications made when renewing the current Section 1115 demonstration waiver.

The waiver renewal will **preserve QUEST's core tenets**:

- Maintain the current populations covered by QUEST;
- Maintain the current comprehensive benefit package;
- Continue to deliver services through a managed care delivery system;
- Continue to integrate physical, behavioral and LTSS into one program;
- Maintain the Community Care Service (CCS) program, a specialized mental health plan; although seek to modify and broaden scope.
- Continue to not require premiums or other cost-sharing; and
- Continue to hold down costs to a sustainable rate of growth.

The waiver renewal goals and strategies will be the same as the goals and strategies identified in this document. Hawai'i will request additional flexibility to make the following **targeted changes** in the waiver renewal:

- Increase the proportion of health care spending on primary care in order to promote the health system's orientation toward high-value care.
- Continue to promote further developments in value-based purchasing and alternative payment methodologies.
- Promote best practices that address the needs of HHNC individuals (i.e. care coordination, palliative care, Dr. Ornish's Program for Reversing Health Disease).
- Promote primary care and pay for value. Hawai'i will request to advance the use of value-based payments to MCOs. MQD will request to provide new performance incentive payments to primary care providers. -

- Cover additional evidence-based services that further integrate physical and behavioral health services such as the Collaborative Care Model.
- Promote increased investments in health related and flexible services.
- MCOs will be encouraged to invest in services that improve quality and outcomes, and MCOs that reduce costs through the use of these services can receive financial incentives to offset those cost reductions.
- Support workforce development efforts such as Project ECHO, a teaching program for providers
- Restore the adult dental benefit.

Waiver Renewal Hypotheses

The waiver is a vehicle to test new delivery and payment innovations, and MQD will continue to test two overarching hypotheses about its demonstration. (Note that these hypotheses are preliminary and may change during the waiver renewal process.)

- Capitated managed care delivers high quality care, while also slowing the rate of health care expenditure growth; and
- Capitated managed care provides access to HCBS and facilitates rebalancing of provided LTSS.

In addition, MQD will test the following overarching hypotheses about the proposed changes:

- Further integration of physical, behavioral, and oral health care will result in reduced growth of encounter-based spending and improved quality of care, access to care, and health outcomes for QUEST members.
- Increased focus on social determinants of health will result in improved population health outcomes as evidenced by a variety of health indicators.
- A focus on health equity improvements for specific populations that have experienced disproportionately poor health outcomes will result in improved health outcomes, increased access to care, and a reduction in the gap between outcomes for populations of focus and those that historically experienced favorable health outcomes.
- Screening for health-related social needs and making referrals/connections to resources such as housing supports.
- Expansion and increased use of health-related social services will result in improved care delivery and member health and community-level health care quality improvements.
- Adoption and use of value-based payment arrangements will align MCO and their providers with health system transformation objectives and lead to improvements in quality, outcomes, and lowered expenditures.
- A move towards more outcomes-based measures that are tied to incentive programs will improve quality of care, advance state and MCO priorities (e.g. behavioral health and oral health integration, health equity), increased regional collaboration, and improve coordination with other systems (e.g. hospitals, early learning hubs).
- Emphasis on homeless prevention, care coordination and supportive housing services for vulnerable and at-risk adults and families will result in reduction in avoidable hospitalizations

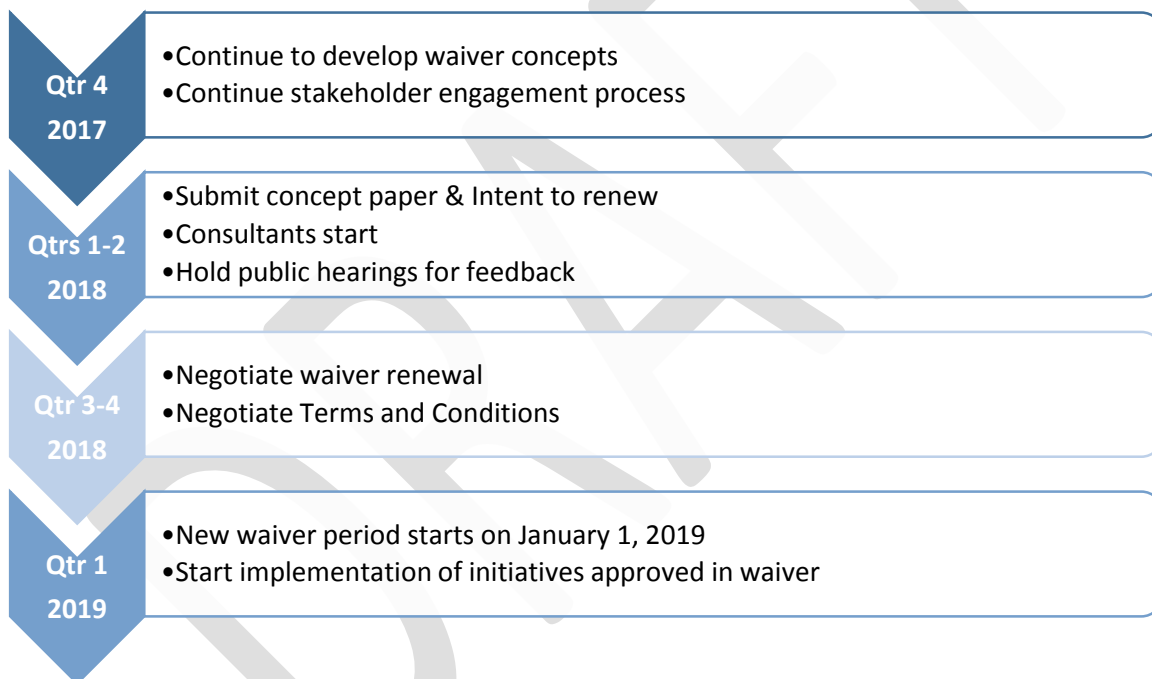
and unnecessary medical utilization (e.g. lower emergency department utilization), transitions to more appropriate community-based settings, increased access to social services, reduction in overall Medicaid costs, and improved regional infrastructure and multi-sector collaboration.

These hypothesis collectively are focused on improving the Triple Aim of better health, better care and sustainable costs – the primary focus of the demonstration renewal.

Next Steps for the Waiver Process

Med-QUEST plans to hire consultants to help with the waiver renewal process. The process will begin in the fourth quarter of 2017 and is expected to be completed by January 2019. The implementation phase is expected to begin in July 2019 and should be completed by 2022.

Figure 5. Waiver Renewal Timeline



ⁱ The Kaiser Commission on Medicaid and the Uninsured. “Issue Brief - Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity.” November 2015.

ⁱⁱ The Kaiser Commission on Medicaid and the Uninsured. “Issue Brief - Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity.” November 2015.

ⁱⁱⁱ The Kaiser Commission on Medicaid and the Uninsured. “Issue Brief - Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity.” November 2015.

^{iv} America’s Health Rankings. (2016) State Data: Hawaii. <http://www.americashealthrankings.org/explore/2015-annual-report/measure/Overall/state/HI>

-
- ^v Leins, Casey. The 10 Healthiest States. US News and World Report, June 14, 2017. <https://www.usnews.com/news/best-states/rankings/health-care/public-health>
- ^{vi} America's Health Rankings. (2016) State Data: Hawaii. <http://www.americashealthrankings.org/explore/2015-annual-report/measure/Overall/state/HI>
- ^{vii} Leins, Casey. The 10 Healthiest States. US News and World Report, June 14, 2017. <https://www.usnews.com/news/best-states/rankings/health-care/public-health>
- ^{viii} United Health Foundation. (2017). Hawaii. <http://www.americashealthrankings.org/HI>
- ^{ix} United Health Foundation. (2017). Hawaii. <http://www.americashealthrankings.org/HI>
- ^x Hawaii Health Data Warehouse. (2015). Behavioral risk factor surveillance survey (BRFSS). https://hhdw.org/wp-content/uploads/BRFSS_Depression_IND_00002_20111.pdf
- ^{xi} Eagle, N. 2012. "Hawai'i Youth Suicide Rate Doubles in 5 Years." *Hawai'i Civil Beat*. <http://www.civilbeat.com/2012/10/17476-hawaii-youth-suicide-rate-doubles-in-5-years/>
- ^{xii} Asian & Pacific Islander American Health Forum. 2010. "Native Hawaiian and Pacific Islander Health Disparities." http://www.apiahf.org/sites/default/files/NHPI_Report08a_2010.pdf.
- ^{xiii} The Hawaii Department of Health. http://www.hawaiihealthmatters.org/content/sites/hawaii/2015_Hawaii_Drug_Overdose_Death_Special_Emphasis_Report_2015.pdf
- ^{xiv} The Hawaii Department of Health. http://www.hawaiihealthmatters.org/content/sites/hawaii/2015_Hawaii_Drug_Overdose_Death_Special_Emphasis_Report_2015.pdf
- ^{xv} Delafield, R., & Wright, T. E. (2016). Insights in Public Health: Substance Use in Pregnant Women in Hawai'i: Extending Our Capacity and Compassion. *Hawai'i Journal of Medicine & Public Health*, 75(11), 348–352.
- ^{xvi} The National Campaign to Prevent Teen Pregnancy and Unplanned Pregnancy. "Teen Pregnancy Comparison, 2013." <https://thenationalcampaign.org/data/compare/1678> [Accessed 10/25/17]
- ^{xvii} Kaiser Family Foundation. State Health Facts. <https://www.kff.org/other/state-indicator/health-care-expendituresbystateofresidenceinmillions/?currentTimeframe=0&selectedRows=%7B%22states%22:%7B%22hawaii%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7Dv>
- ^{xviii} According to the Hawaii Department of Commerce and Consumer Affairs Insurance Division.
- ^{xix} According to the Hawaii Department of Commerce and Consumer Affairs Insurance Division.
- ^{xx} According to the Hawaii Department of Commerce and Consumer Affairs Insurance Division.
- ^{xxi} The Centers for Medicare and Medicaid. 2016 National Health Expenditure Data. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/highlights.pdf>
- ^{xxii} The Centers for Medicare and Medicaid Services. NHE Fact Sheet. <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html>
- ^{xxiii} The Kaiser Family Foundation. "Family Health Premiums Rise 4 Percent to Average of \$15,745 in 2012, National Benchmark Employer Survey Finds." <https://www.kff.org/private-insurance/press-release/family-health-premiums-rise-4-percent-to/>
- ^{xxiv} The Kaiser Family Foundation. "2017 Employer Health Benefits Survey." <https://www.kff.org/report-section/ehbs-2017-summary-of-findings/>
- ^{xxv} The National State Budget Officers November 2017 Expenditure Report. <https://www.nasbo.org/mainsite/reports-data/state-expenditure-report>
- ^{xxvi} The National State Budget Officers November 2017 Expenditure Report. <https://www.nasbo.org/mainsite/reports-data/state-expenditure-report>
- ^{xxvii} <https://www.macpac.gov/medicaid-101/spending/>
- ^{xxviii} The Kaiser Commission on Medicaid and the Uninsured. "Issue Brief - Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity." November 2015.
- ^{xxix} World Health Organization. 2005. "Preventing Chronic Diseases: A Vital Investment."

xxx <https://hawaii.bluezonesproject.com/>

xxxii <https://hmsa.com/Media/Default/documents/annual-reports/annual-report-2015.pdf>

xxxiii <http://www.communityfirsthawaii.org/>

xxxiii <https://innovation.cms.gov/initiatives/ahcm>

xxxiv The Kaiser Commission on Medicaid and the Uninsured. "Issue Brief - Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity." November 2015.

xxxv Christopher K. Koller, M.P.P.M., M.A.R., and Dhruv Khullar, M.D., M.P.P. N Engl J Med 2017; 377:1709-1711 November 2, 2017 DOI: 10.1045/NEJMp1709538

xxxvi Christopher F. Koller, M.P.P.M., M.A.R., and Dhruv Khullar, M.D., M.P.P. N Engl J Med 2017; 377:1709-1711 November 2, 2017 DOI: 10.1056/NEJMp1709538

xxxvii The Center for Health Care Strategies, Inc. "Moving Toward Value-Based Payment for Medicaid Behavioral Health Services." June 2017.

xxxviii The Center for Health Care Strategies, Inc. "Moving Toward Value-Based Payment for Medicaid Behavioral Health Services." June 2017.

xxxix MACPAC. Report to Congress on Medicaid and CHIP. "Chapter 4: Integration of Behavioral and Physical Health Services in Medicaid." March 2016.

xl MACPAC. Report to Congress on Medicaid and CHIP. "Chapter 4: Integration of Behavioral and Physical Health Services in Medicaid." March 2016.

xli The Commonwealth Fund. "State Strategies for Integrating Physical and Behavioral Health Services in a Changing Medicaid Environment." August 2014.

xlii The Commonwealth Fund. "State Strategies for Integrating Physical and Behavioral Health Services in a Changing Medicaid Environment." August 2014.

xliii Jeffcoat M. et. al. Impact of Periodontal Therapy on General Health: Evidence from Insurance Data for Five Systematic Conditions. (2014). American Journal of Preventive Medicine. 47(2).

xliv The Pew Center on the States, a division of the Pew Charitable Trusts. <http://www.pewtrusts.org/en/research-and-analysis/reports/0001/01/01/the-state-of-childrens-dental-health> [Accessed 11/07/17]

xliv The National Academy of Medicine. "Effective Care for High-Need Patients: Opportunities for improving Outcome, Value, and Health." 2017. <https://nam.edu/wp-content/uploads/2017/06/Effective-Care-for-High-Need-Patients-Executive-Summary.pdf> [Accessed 11/20/17]

xlvi The National Academy of Medicine. "Effective Care for High-Need Patients: Opportunities for improving Outcome, Value, and Health." 2017. <https://nam.edu/wp-content/uploads/2017/06/Effective-Care-for-High-Need-Patients-Executive-Summary.pdf> [Accessed 11/20/17]

xlvii The Commonwealth Fund. "The Road Not Taken: The Cost of 30 Years of Unsustainable health Spending Growth in the United States. March 2013.

xlviii Health Care Payment Learning and Action Network. "Alternative Payment Model (APM) Framework: Refreshed for 2017."

xliv Flexible services are cost-effective services offered instead of or as an adjunct to covered benefits (e.g. home modifications and healthy cooking classes). Community benefit initiatives are community-level – as opposed to member-specific – interventions, such as investments in provider capacity and care management capabilities. Both flexible services and community benefit initiatives (collectively referred to as "health related services") aim to address the social determinants of health.

^l Health Affairs Blog. "Tackling Low-Value Care: A New "Top Five" For Purchaser Action." <https://www.healthaffairs.org/doi/10.1377/hblog20171117.664355/full/> [Accessed 11/22/2017]

^{li}Health Care Payment Learning and Action Network (HCP LAN). "Alternative Payment Model Framework: Refreshed for 2017."