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STATE OF HAWAII
KA MOKU'ĀINA O HAWAI'I
DEPARTMENT OF HUMAN SERVICES
KA 'OIHANA MĀLAMA LAWELAWE KANAKA
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Honolulu, Hawaii 96809-0339

DR 22.060

December 30, 2022

The Honorable Ronald D. Kouchi, President
and Members of the Senate
Thirty-Second State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki, Speaker
and Members of the House of
Representatives
Thirty-Second State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

Enclosed is the following report submitted in response to Senate Resolution 4 Senate Draft 1 Requesting The Department Of Human Services To Study The Feasibility Of Increasing The Medicaid Reimbursement Rates For Community Care Foster Family Homes, Expanded Adult Residential Care Homes, And Other Types Of Home And Community Based Service Care Providers And Services.

In accordance with section 93-16, HRS, the report is available to review electronically at the Department's website, at https://humanservices.hawaii.gov/reports/legislative-reports/.

Sincerely,

Cathy Betts
Director

Enclosure
c: Governor's Office
Lieutenant Governor's Office
Department of Budget & Finance
Legislative Auditor
Legislative Reference Bureau Library (1 hard copy)
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REPORT TO THE THIRTY-SECOND HAWAII STATE LEGISLATURE 2023

Submitted In Response To Senate Resolution 4 Senate Draft 1 Requesting The Department Of Human Services To Study The Feasibility Of Increasing The Medicaid Reimbursement Rates For Community Care Foster Family Homes, Expanded Adult Residential Care Homes, And Other Types Of Home And Community Based Service Care Providers And Services

DEPARTMENT OF HUMAN SERVICES
MED-QUEST Division
December 2022

Senate Resolution 4 Senate Draft 1 requested the Department of Human Services (DHS) to

(1) Review the existing payment model for Medicaid reimbursement for patients who require nursing home-level of care in the community;
(2) Study the feasibility of increasing the Medicaid reimbursement rates for CCFFH, E—ARCH, and other types of Home and Community Based Service (HCBS) care providers and services; and
(3) Determine the overall effect of increasing the Medicaid reimbursement rates for CCFFH, E—ARCH, and other types of HCBS care providers and services.

Interest in strengthening long-term care services and supports is of broad interest nationally and in Hawaii. Recently, a Council of State Governments Task Force on Effective & Sustainable Long-Term Care with Hawaii representation included a work group focused on sustainable funding. DHS Med-QUEST Division (MQD) co-led the group, which authored a short briefing paper with national, local, and state recommendations. One of the recommendations included a rate study for HCBS services (see attached).

MQD completed a study of Home and Community Based rates paid for Community Care Foster Family Homes (CCFFHs), Expanded – Adult Residential Care Homes (E-ARCH), and other HCBS services. DHS MQD contracted Milliman, an actuarial firm, for a wide range of services and to do the study. The study commenced in July 2022, and MQD issued the final report on December 30, 2022 (see attached).

The study included Community Residential providers: CCFFHs and E-ARCHs, In-Home Services, and Case Management Services. The attached report contains complete descriptions of the various providers and services.

A key part of this rate study included stakeholder outreach and engagement with HCBS providers and their associations, collecting provider cost and wage survey data, and getting provider feedback on draft rate calculations. Not surprisingly, the provider surveys showed significant wage pressure given the current labor market. The rate study methodology used wage and salary data for direct care staff and supervisors, employee-related expenses, transportation and administration, program support, overhead, and Bureau of Labor and Industry Wage Indices to pay for employee benefits such as health insurance.

The rate study provides three scenarios (low, medium, and high) based on different wage or caseload/staffing assumptions. A low scenario includes the lowest wage or highest caseload assumptions to calculate the lowest rates; a medium scenario includes middle wage or caseload assumptions. A high scenario includes the highest wages or lowest caseload assumptions to calculate the highest rates (e.g., adjusting wages would create a low scenario with wage assumptions set at the 25th percentile, the medium scenario with wage assumptions set at the 50th percentile, and a high scenario with wage assumptions set at the 75th percentile). Modeled comparison rates under all rate scenarios exceed the 2021 baseline MQD rates.

The tables below provide the rate scenarios for the low, medium, and high options for CCFFHs and E-ARCHs. Although the Level 1 Low Rate Scenario is relatively modest, around 5%, all other scenarios show significant increases, particularly for the more complex, high acuity Level 2 residents.

E-ARCH Type I / CCFFH Cost-Share Residential Rate Scenarios

MODELED COMPARISON PER DIEM RATE SCENARIOS							
COST-SHARE RESIDENTIAL RATE COHORT	**CURRENT RATES (2022)**	**LOW**	**EST. % CHANGE LOW**	**MEDIUM**	**EST. % CHANGE MEDIUM**	**HIGH**	**EST. % CHANGE HIGH**
Level 1– Oahu	$56.50	$59.41	5.2%	$71.95	27.3%	$73.80	30.6%
Level 2– Oahu	$72.58	$95.65	31.8%	$116.24	60.2%	$119.39	64.5%
Level 1 – Neighbor Island	$61.50	$64.41	4.7%	$76.95	25.1%	$78.80	28.1%
Level 2 – Neighbor Island	$72.58	$100.65	38.7%	$121.24	67.0%	$124.39	71.4%

The estimated spend and the general/federal fund estimates show that for CCFFHs/E-ARCHs that an increase in spending of $13.5M ($7.91M A funds), $27.9M ($16.34M A funds) and $30.1M ($17.63M A funds) for the low, medium, and high rate scenarios, respectively.

The full HCBS Rate study report also includes the low, medium, and high rate scenarios for various In-home and case management services. In-home services reflected the most significant differential from current rates to the rate study scenarios, while case management services had the least. The estimated payment increases range from $23.8M ($13.9M A fund) to $40.4M ($23.7M A funds) for In-home services to $500k ($290k) to $2.3M ($1.35M A funds) for case management services.

The cost to increase all the HCBS Rate study services would range from $38M ($22M A funds) to $73M ($43M A funds). Although Med-QUEST has already incorporated a rate increase of 5-8% (about $7.55M) for these HCBS providers in their current capitation payments for QUEST Integration health plans, the estimated spend needed does not incorporate those increases. The increases are not incorporated because the rate increases use the American Rescue Plan Act Home and Community Based investment dollars, which are time-limited. Therefore, to sustain the increases over time, the Legislature would need to appropriate the total General Fund/Federal Fund amounts.

Estimated Modeled Comparison Rate Impact (in millions)

Scenarios	Low		Medium		High	
SERVICE CATEGORY	Estimated Payment Change	Estimated General Fund	Estimated Payment Change	Estimated General Fund	Estimated Payment Change	Estimated General Fund
Residential services	$13.50	$7.91	$27.90	$16.34	$30.10	$17.63
In-home services	$23.80	$13.94	$34.70	$20.32	$40.40	$23.66
Case management services	$0.50	$0.29	$1.30	$0.76	$2.30	$1.35
Total Rate Study Services	**$37.90**	**$22.19**	**$64.00**	**$37.48**	**$72.90**	**$42.69**

Long-Term Care (LTC) Reimbursement Working Group Recommendations

Long-term care comprises a broad continuum of long-term services and supports (LTSS) that includes institutional care provided in settings such as nursing facilities, alternative residential settings, and home- or community-based supports. This lattermost category is called home- and community-based services (HCBS) and includes services such as adult day health, adult day care, and personal attendant care.

The primary task of the LTC Reimbursement Working Group was to make recommendations to the federal and Hawaii state government on ways to enhance, improve, and streamline reimbursement for long-term care that would increase the access to and quality of those services. The group met formally on September 23, 2022, and informally at other times to review and finalize the following recommendations that cover the full continuum of LTSS.

Federal Recommendations

Prevent Dramatic Cuts to Medicare Rates for Post-Acute Care Providers

Medicare is an important payer for nursing facilities and home health agencies. However, in its 2023 proposed rules for Skilled Nursing Facilities (SNFs) and Home Health Agencies (HHAs), CMS planned to make dramatic cuts to Medicare reimbursements for both settings of care. In its proposals from earlier this year, CMS recommended slashing $320 million and $810 million, respectively, to nursing homes and home health agencies.

Large reductions in payment at a time when many providers are experiencing both increased costs for providing care and decreased revenues due to the pandemic threaten patient access by harming the financial sustainability of providers. Although CMS reversed course in its final rule for SNFs and instead increased payments by $904 million, the final rule for HHAs has not yet been announced and has created uncertainty for the industry.

Ensuring that reimbursement covers the cost of care as well as incentivizes quality and value is essential to protecting patient access to services, especially in rural or underserved areas like the neighbor islands where access to care is already limited. Any changes to Medicare policies and reimbursements should be carefully implemented to avoid large, one-time cuts to providers and ensure that facilities are given enough lead time to adapt to program changes. In fact, Medicare should be considering how to better support the healthcare industry and patients by appropriately reimbursing providers and ensuring that payments are keeping up with the costs of inflation.

Adopt Federal Legislative Proposals to Improve the Long-Term Care Industry

The American Health Care Association and National Center for Assisted Living (AHCA/NCAL) supports a portfolio of federal legislative proposals known as the *Care for Our Seniors Act*. These changes would incentivize better patient care quality, revitalize the long-term care workforce, enhance industry oversight, and modernize the resident experience by making needed regulatory reforms, reinvesting in elder care, and redesigning programs that reward providers for delivering high-quality care.

Although components of the *Care for Our Seniors Act* have been introduced at various times since they were first recommended, none have been passed into law. Adopting these proposals – particularly

around workforce and staffing needs, which are currently the most acute issues for long-term care providers – would go a long way to ensuring that the nation's long-term care system remains robust enough to meet the needs of an aging population while also reducing the expense of providing and accessing care.

In addition to its many challenges, the pandemic has also created many opportunities. Across the country, thousands of people stepped up to serve as temporary nurse aides during the pandemic, introducing many into the healthcare field and the rewarding, meaningful work that it offers. However, with the expiration of certain pandemic flexibilities, these workers are not able to apply this on-the-job experience to parts of their licensure requirements. The *Building America's Health Care Workforce Act* was introduced in the House to create a clearer pathway to fulfilling careers in healthcare and would go a long way to ameliorating some of the workforce challenges facing SNFs.

Expand the Involvement of the Federal Government in Covering Long-Term Care Services and Supports

The demand for long-term care will only increase as the nation's population ages. However, the accessibility of and options to pay for this category of services is not uniform. The state where a person resides, their own financial circumstances, and the variability of a person's needs as they age affect their eligibility, coverage, and access to LTSS. Consequently, many people must piece these disparate pieces together themselves, often leaving at least some of their needs unmet.

Further, Medicaid is the largest payer of LTSS in the country. However, Medicaid eligibility is tied to income and the individual's level of care needs. Although Medicare provides health coverage for older adults, it plays a relatively limited role in funding LTSS. Congress should consider how the federal government can expand access to LTSS to ensure that access to LTSS is not primarily dependent on meeting Medicaid income eligibility criteria.

In 2011, with the passage of the Affordable Care Act, the federal government recognized the need for reform when the Community Living Assistance Services and Supports (CLASS) Act was created to provide coverage for a variety of long-term services and supports that a person might need such as home care, adult day care, or stays in a nursing home. However, the CLASS Act was repealed in 2013. Unfortunately, in the time since, nothing has emerged from the federal government as an alternative despite the growing need. The federal government should examine ways to create a sustainable, uniform way of paying for long-term care services that also address the institutional bias towards nursing facilities by investing in HCBS. This could include expanding the role of Medicare in providing LTSS (especially for dually eligible beneficiaries) or by creating a new program such as a full-cost buy-in option for Medicaid HCBS for those who do not otherwise meet Medicaid financial eligibility criteria.

The federal government should also consider, through Medicare or another financing program, covering a wider range of home- and community-based services. Increasingly, seniors want to age in place and people with disabilities want opportunities to live, work, and play in their communities. More investment is needed to make that a reality. Reimbursement for those critical home and personal care services will be needed along with a concentrated effort to build out the necessary workforce to provide those services. Also, policy changes in Medicaid to move HCBS from waivered services to be, at a minimum, optional Medicaid benefits would also support the provision of LTSS across the continuum.

State Recommendations

Conduct a Medicaid Rate Survey

The pandemic dramatically impacted healthcare and long-term care delivery systems. Many of these changes – particularly as they relate to patient preferences, facility staffing practices, and technology utilization – will persist long after the pandemic abates. Accordingly, now is an opportune time to revisit prior thinking about long-term care reimbursement and investigate ways that it can be reimagined to promote patient care quality, support livable wages for staff, and maximize efficiency.

Med-QUEST should undertake rate studies to better understand how the pandemic has shaped long-term care providers. These studies should consider how patient preferences have shifted away from institutional settings and to home- and community-based ones; how patient needs evolve with the aging population; the growing complexity of patient care; and what can be done to align reimbursement with long-term trends in Hawaii. Specific attention is also necessary on programs that reward high-quality care; incentivize accepting and caring for Medicaid beneficiaries (especially those with complex needs); pay wages necessary for the recruitment and retention of staff across the LTC continuum; and consider the need to update the aging physical infrastructure of many of the state's facilities.

It is also important to focus on HCBS providers who serve groups with high utilization of services and who have gone the longest without a rate update such as case management agencies, community care foster family homes, and adult day health and day care centers. CMS is also changing payment methods for nursing facilities. State Medicaid agencies will need to adopt new reimbursement methodologies that align with the new federal payment system. These all create opportunities to revise how providers of long-term care are reimbursed to better meet current and future needs.

Finally, there are no current assisted living facility (ALF) providers in the state who accept Medicaid in part because of the low reimbursement rate and different market forces for assisted living settings. Med-QUEST and the Healthcare Association of Hawaii are currently researching changes to Medicaid payment rates to potentially incentivize ALF providers to take Medicaid patients and determine how best to include ALFs in any long-term strategic plan.

Examine Ways to Improve Access for Patients with Complex Medical Needs

Caring for patients with complex medical needs has always been challenging, especially during the pandemic. Of particular concern, as noted earlier, is the rising need for behavioral health treatment as an additional patient need – especially among persons who are aged or living with a disability. Part of ensuring that patients with complex medical needs receive the care that they need is ensuring that provider reimbursement better reflects the more resource-intensive nature of offering this category of care and aligning incentives for providing this care.

To address the issue of complex care, Med-QUEST is working with providers and other community stakeholders to research innovative payment methodologies that incentivize providing services for these individuals and rewarding the value and quality of the care that is provided. Also being discussed are increasing payments for services that require more resource-intensive care. This includes modifying subacute care rates that will pay long-term care providers like nursing facilities at higher rates if they take on patients with more complex needs such as patients who have behavioral health needs, who need specialized bariatric care, or who are currently unhoused. Similarly, enhanced provider education

and training to be able to meet the unique needs of these beneficiary groups is necessary to ensure that patients are cared for appropriately and that their challenges are being addressed. Med-QUEST should continue its dialogue with payers and providers on the ways to best ensure that future rates target and treat individuals with complex medical needs.

Reauthorize and Maximize the Nursing Facility Sustainability Program

First established in 2012, the Nursing Facility Sustainability Program is a program that assesses fees on SNFs to draw down matching federal funds that are then returned to SNFs to help make up for the difference in reimbursement between Medicare and Medicaid. This program utilizes no state funds and – in the decade since its inception – has been critical to protecting Medicaid patients' access to skilled nursing services and maintaining the sustainability of the state's healthcare system.

In the upcoming legislative session, the Nursing Facility Sustainability Program will need to be reauthorized. As part of its deliberations, the Hawaii State Legislature should consider permanently authorizing the program and making other changes that would maximize the amount of federal funds that the program can draw down.

Explore Ways to Strengthen Hawaii's Informal Caregiving System

Hawaii has a strong tradition of informal caregiving through family, friends, and neighbors. This practice has been recognized and augmented through a variety of programs such as the Community Living Program and Kupuna Caregivers Program. The former enables recipients to self-direct their own care by hiring care workers – most commonly friends or family members – to provide the lower-level care that they need to avoid institutionalization. The Kupuna Caregivers Program enables unpaid primary caregivers to continue their employment by offering a variety of long-term supports and services to seniors while their caregivers are working. These modest investments ensure that frail older adults are well cared for in their communities, saving the healthcare system in avoidable downstream costs. Consequently, policymakers should explore opportunities to build upon the network of caregiving that already exists in many communities, strengthen the existing programs, and educate the public about the availability of these as alternatives to more costly forms of care delivery.

MILLIMAN REPORT

Home and Community-Based Services (HCBS) Rate Study Report

Commissioned by the State of Hawai`i Med-QUEST Division

December 30, 2022

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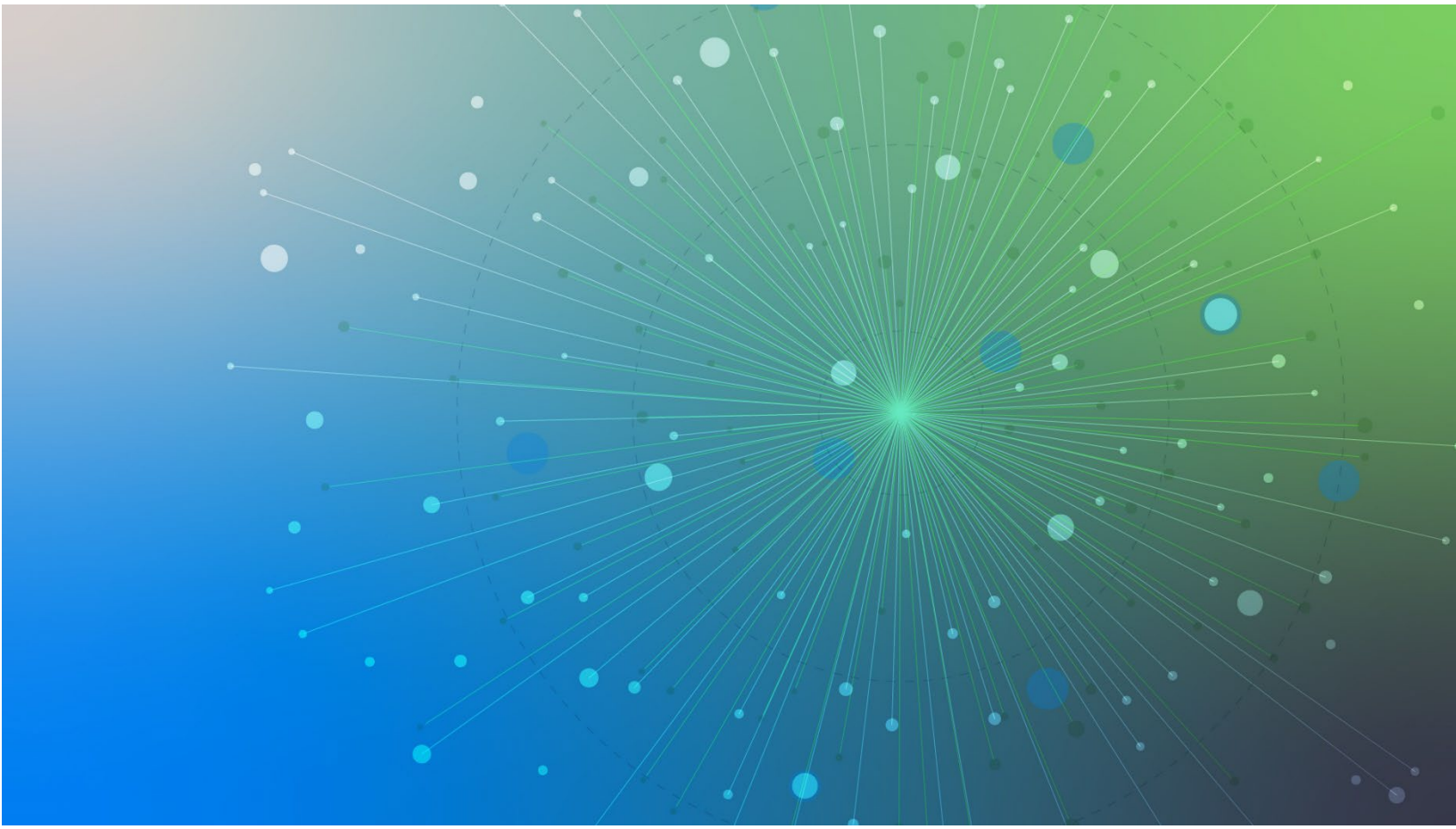

Milliman

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Executive Summary

OVERVIEW

The Hawai`i Department of Human Services – Med-QUEST Division (MQD) engaged Milliman Inc. (Milliman) to develop a Medicaid Home and Community-Based Services (HCBS) rate study. This rate study includes the development of benchmark "comparison rates" for select services that providers and QUEST Integration (QI) Medicaid Managed Care Organizations (MCOs) could consider when negotiating contracts, and that the State and other stakeholders can use when evaluating changes to overall funding. This rate study also establishes payment methodologies under an Independent Rate Model (IRM) that can be leveraged across other HCBS rates going forward. *Note that before implementing the comparison rates developed in this rate study, there are a number of implementation steps that must be considered as described in this report.*

MQD commissioned this HCBS rate study in response to the following initiatives:

- In 2022, the State of Hawai`i legislature passed Senate Resolution #4, which requests "the Department of Human Services to study the feasibility of increases the Medicaid reimbursement rates for Community Care foster family homes, expanded adult residential care homes, and other home and community care provider services."[1]
- MQD's HCBS spending plan under the American Rescue Plan Act of 2021 (ARPA), which specifies the "initiative will include a rate study to identify baseline rates and establish competitive rate methodologies."[2]

This initial phase of the HCBS rate study focuses on the following key services selected by MQD that were included in MQD's ARPA spending plan and other highly utilized QI HCBS services:

- Residential services:
  - Community Care Foster Family Home (CCFFH)
  - Expanded Adult Residential Care Home (E-ARCH Type 1)
- In-home services:
  - Homemaker/Companion/Chore (PA1)
  - Personal Care/Personal Assistance/Attendant Care (PA2)
  - Private Duty Nursing Registered Nurse (RN) and Licensed Practical Nurse (LPN)
- Case management services:
  - Community Care Management Agency (CCMA)

Self-directed personal assistance rates have already been updated independent of this rate study. For the other QI HCBS services not listed above, MQD proposes to develop comparison rates in a future HCBS rate study phase that leverages the rate methodologies developed in this initial rate study.

As a key part of this rate study, we have conducted stakeholder outreach and engagement with HCBS providers and their associations, collected provider cost and wage survey data, and presented draft rate calculations for provider feedback. The feedback from discussions with HCBS provider stakeholders included the following main themes:

- HCBS providers face significant wage pressures for registered nurses (RNs) and certified nursing assistants (CNAs) and are competing with facilities and private pay services for the same labor force
- In-home care agencies face significant wage pressures from hotels and the tourism industry for personal assistance service staff
- Residential provider substitute caregiver compensation varies significantly, with some substitute caregivers that are paid and some unpaid (with some providers relying upon friends and family)
- Case management provider reimbursement levels are not sufficient for all providers to be able to employ RNs, and most providers primarily rely upon contracted RNs

[1] https://www.capitol.hawaii.gov/sessions/session2022/bills/SR4_SD1_.PDF

[2] https://www.medicaid.gov/sites/default/files/2021-10/hi-spending-plan-for-implementation.pdf

- Reimbursement levels generally do not enable providers to offer benefits, including health insurance, to employees
- Providers strongly support formalized enhanced "level 3" rates for individuals with high behavioral needs and some providers have already negotiated enhanced "level 3" rates with MCOs

To incorporate provider feedback and to support the rate development process, Milliman leveraged the IRM framework. The assumptions within the IRM were informed by stakeholder feedback, independent research, provider survey responses, and policy decisions by MQD. The modeled comparison rates under the IRM include the following key components as outlined in Figure 1 (see the *Methodology and Data Relied Upon* section of this report for more details):

Figure 1: Independent Rate Model Components

IRM COMPONENT	DESCRIPTION
Direct Care Staff and Supervisor Salaries and Wages	Includes labor-related costs for direct care staff and supervisors, for both employee wages and salaries and contractor rates
Employee Related Expenses (ERE)	Includes payroll-related taxes and fees and employee benefits
Transportation	Includes vehicle operating expenses
Administration, Program Support, Overhead	Includes program operating expenses, including management, accounting, legal, information technology, etc., excluding room and board (per CMS requirements and consistent with MQD's approved 1115 demonstration)[3]

The IRM components listed above provide a consistent framework across services, while still allowing for customization for each service to determine the appropriate reimbursement level and service delivery incentives. The labor cost assumptions in the IRM provide clear and transparent expectations for the assumed direct care professional wages and benefits levels for providers to follow. The IRM also provides MQD with a mechanism for future rate updates and for developing rates for new services and/or service definitions (e.g., in the event MQD establishes a new level 3 care definition).

MODELED COMPARISON RATES AND ESTIMATED IMPACT

To support budget estimates and potential new state general fund requirements for the State's consideration, MQD requested a range of modeled comparison rate scenarios. Per MQD's direction we have modeled three rate scenarios for each service ("Low", "Medium", and "High") under different direct care staff wage and caseload assumptions. A low scenario includes the lowest wage or highest caseload assumptions to calculate the lowest rates, a medium scenario includes middle wage or caseload assumptions, and a high scenario includes the highest wages or lowest caseload assumptions to calculate the highest rates (e.g., adjusting wages would create a low scenario with wage assumptions set at the 25th percentile, medium scenario with wage assumptions set at the 50th percentile, and a high scenario with wage assumptions set at the 75th percentile). Modeled comparison rates under all rate scenarios exceed rates published in MQD's QI memos and average calendar year (CY) 2021 service rates paid by MCOs to providers, and therefore are anticipated to result in expenditure increases if utilized by MCOs.

Figure 2 below provides a summary of modeled comparison rate scenarios for CCFFH and E-ARCH Type 1 providers for cost-share residents. Residential service rates continue to include the current $5 per day rate increase between Oahu and the Neighbor Islands. For detailed rate calculations, see **Appendix A** of this report.

[3] https://medquest.hawaii.gov/content/dam/formsanddocuments/med-quest/hawaii-state-plan/Hawaii_QUEST_Integration_1115_Demonstration_Extension_Approval_Package.pdf

Figure 2: E-ARCH Type I / CCFFH Cost-Share Residential Rate Scenarios

COST-SHARE RESIDENTIAL RATE COHORT	CURRENT MQD QI MEMO PER DIEM RATES (2022)	MODELED COMPARISON PER DIEM RATE SCENARIOS					
		LOW	EST. % CHANGE LOW	MEDIUM	EST. % CHANGE MEDIUM	HIGH	EST. % CHANGE HIGH
Level 1–- Oahu	$56.50	$59.41	5.2%	$71.95	27.3%	$73.80	30.6%
Level 2–- Oahu	$72.58	$95.65	31.8%	$116.24	60.2%	$119.39	64.5%
Level 1 – Neighbor Island	$61.50	$64.41	4.7%	$76.95	25.1%	$78.80	28.1%
Level 2 – Neighbor Island	$72.58	$100.65	38.7%	$121.24	67.0%	$124.39	71.4%

Figure 3 below provides a summary of modeled comparison rates scenarios for in-home services. For detailed rate calculations, see **Appendix A** of this report.

Figure 3: In-Home Services Rate Scenarios

IN-HOME SERVICE	AVERAGE PAYMENT PER 15-MINUTE UNIT (2021)	MODELED COMPARISON RATE SCENARIOS – 15 MINUTE UNIT					
		LOW	EST. % CHANGE LOW	MEDIUM	EST. % CHANGE MEDIUM	HIGH	EST. % CHANGE HIGH
Personal Assistance – Level 1	$5.56	$8.75	57.4%	$10.26	84.5%	$11.04	98.6%
Personal Assistance/Attendant Care – Level 2	$6.70	$11.42	70.4%	$13.39	99.9%	$14.10	110.4%
Private Duty Nursing/Attendant Care – LPN	$11.00	$14.08	28.0%	$14.43	31.2%	$15.77	43.4%
Private Duty Nursing/Attendant Care – RN	$14.77	$22.07	49.4%	$26.83	81.7%	$31.16	111.0%

Figure 4 below provides a summary of modeled comparison rates scenarios for CCMA rate scenarios. For detailed rate calculations, see **Appendix A** of this report.

Figure 4: CCMA Services Rate Scenarios

SERVICE DESCRIPTION	AVERAGE PAYMENT PER DIEM (2021)	MODELED COMPARISON PER DIEM RATE SCENARIOS					
		LOW	EST. % CHANGE LOW	MEDIUM	EST. % CHANGE MEDIUM	HIGH	EST. % CHANGE HIGH
Case management	$13.15	$ 13.88	5.6%	$ 15.06	14.5%	$ 16.48	25.3%

Based on the above modeled rates and CY 2021 service utilization, we estimate total modeled payments will be approximately $37.9 million to $72.9 million above CY 2021 expenditure levels, depending on the selected rate scenario. Estimated payment impacts do not consider rate increases that have been provided by MCOs since CY 2021, which MQD expects to make as a result of capitation rate increases for HCBS and effective January 1, 2023. These January 2023 capitation rate increases were based on an 8.6% increase above 2021 expenditures, projected to be approximately $4.25 million. When considering state general fund requirements for potential HCBS rate increases, MQD should consider these HCBS reimbursement changes since 2021.

Actual QI HCBS payments made by MCOs to providers will differ from the simulated payments in this modeling. Reasons for differences include but are not limited to future changes in enrollment, utilization, service mix, negotiated rates between MCOs and providers, and other factors.

Figure 5 below provides a summary of modeled payment increases under the modeled rate scenarios, by service category:

Figure 5: Estimated Modeled Comparison Rate Impact

		"LOW" SCENARIO ($ MILLIONS)		"MEDIUM" SCENARIO ($ MILLIONS)		"HIGH" SCENARIO ($ MILLIONS)	
SERVICE CATEGORY	CY 2021 PAYMENTS ($ MILLIONS)	ESTIMATED PAYMENTS	ESTIMATED PAYMENT CHANGE	ESTIMATED PAYMENTS	ESTIMATED PAYMENT CHANGE	ESTIMATED PAYMENTS	ESTIMATED PAYMENT CHANGE
Residential services	$39.5	$53.0	$13.5	$67.4	$27.9	$69.6	$30.1
In-home services	$38.4	$62.2	$23.8	$73.1	$34.7	$78.8	$40.4
Case management services	$9.3	$9.8	$0.5	$10.6	$1.3	$11.6	$2.3
Total Rate Study Services	**$87.1**	**$125.0**	**$37.9**	**$151.1**	**$64.0**	**$160.0**	**$72.9**

Note that the modeled payment impact for residential service as shown above is based on MQD's published QI memo rates and does not reflect negotiated rates between MCOs and providers (such as negotiated Level 3 rates) or the impact of cost-share population spend-down. Estimated payment impacts for in-home services and case management services reflect actual MCO expenditures.

Estimated payment increases under the modeled rate scenarios reflect reimbursement levels that enable competitive wages for direct care staff, health benefits for employees, and reimbursement for all service-related time (including both direct and indirect time). To replicate current reimbursement levels under the IRM, we would need to adjust the rate assumptions to reflect lower wages, limited health employee benefits, and potentially uncompensated direct service time, which is consistent with provider feedback and survey data on current HCBS provider business practices.

IMPLEMENTATION CONSIDERATIONS

If the State decides to move forward with the comparison rates developed in this rate study, it will need to consider the following key implementation steps:

- Obtain additional state general funds for rate increases
- Discuss new rate methodologies and modeled rates with Medicaid MCOs
- Update managed care capitation rates and include in a new rate certification for CMS approval
- Distribute QI memos with MQD's selected comparison rates for each service
- Discuss with HCBS providers the assumptions on direct care staff wages, employee benefits, and staffing ratios/caseloads built into the modeled comparison rates

Introduction and Background

The State of Hawai`i Med-QUEST Division (MQD) engaged Milliman Inc. (Milliman) to develop a Medicaid Home and Community-Based Services (HCBS) rate study. This rate study includes the development of benchmark "comparison rates" for select services that providers and QUEST Integration (QI) Medicaid Managed Care Organizations (MCOs) can use when negotiating contracts, and that the State and other stakeholders can use when evaluating changes to overall funding. This rate study also establishes payment methodologies under an Independent Rate Model (IRM) that can be leveraged across other HCBS rates going forward, as described in detail in the *Methodology and Data Relied Upon* section of this report. *Note that before implementing the comparison rates developed in this rate study, there are a number of implementation steps that must be considered as described in this report.*

MQD commissioned this HCBS rate study in response to the following initiatives:

- The State of Hawai`i legislature in 2022 passed Senate Resolution #4, which requests "the Department of Human Services to study the feasibility of increases the Medicaid reimbursement rates for Community Care foster family homes, expanded adult residential are homes, and other of home and community care provider and services."[4]
- MQD's HCBS spending plan under the American Rescue Plan Act of 2021 (ARPA), which specifies the "initiative will include a rate study to identify baseline rates and establish competitive rate methodologies", and involves the following HCBS Medicaid funding increases: [5]
  - *Reimbursing Self-Directed Workers at a Competitive Wage:* Increasing funding for self-direction will compete more effectively in the marketplace (particularly with tourism industry)
  - *Reimbursing Community Case Management Agencies (CCMAs) at a Competitive Wage:* Residential CCMA rate has remained the same over the past decade, while the acuity and complexity of the members being served have increased (particularly related to behavioral health)
  - *Reimbursing Residential Alternatives (Adult Foster Homes/Expanded Care Homes/Assisted Living) at a Competitive Wage:* Residential rates need to be competitive to entice caregivers to accept complex behavior/medical members, to attract new caregivers, to retain existing caregivers, or to slow the retirement of aging caregivers
  - *Building Capacity in Residential Alternatives to Serve Challenging Members:* Hawai`i needs to build provider capacity and willingness to accept the growing number of members with complex behavioral, and medical needs into HCBS residential settings
  - *Building Case Management Capacity Related to Challenging Members:* Case management agencies that visit and care for members with complex behavioral and physical need added capacity to handle complex members[6]

Per MQD's Section 1115 Waiver Demonstration, "MQD provides HCBS services via the Demonstration to two populations: (1) individuals who meet an institutional level of care requirement and (2) individuals who are assessed to be "at risk" of deteriorating to the institutional level of care."[7] This initial HCBS rate study focused on the following QI HCBS services selected by MQD that were included in the MQD ARPA spending plan and other highly utilized services:

- Residential Services:
  - Community Care Foster Family Home (CCFFH)
  - Expanded Adult Residential Care Home (E-ARCH Type 1)

[4] https://www.capitol.hawaii.gov/sessions/session2022/bills/SR4_SD1_.PDF

[5] https://www.medicaid.gov/sites/default/files/2021-10/hi-spending-plan-for-implementation.pdf

[6] https://www.medicaid.gov/sites/default/files/2021-10/hi-spending-plan-for-implementation.pdf

[7] https://medquest.hawaii.gov/content/dam/formsanddocuments/med-quest/hawaii-state-plan/HI_Medicaid_1115_Evaluation_Design_Final_Approved_10-15-2020.pdf

- In-home services:
  - Homemaker/Companion/Chore (PA1)
  - Personal Care/Personal Assistance/Attendant Care (PA2)
  - Private Duty Nursing Registered Nurse (RN) and Licensed Practical Nurse (LPN)
- Case management services:
  - Community Care Management Agency (CCMA)

Self-directed personal assistance rates have already been updated independent of this rate study. For the other QI HCBS services not listed above, MQD proposes to develop comparison rates in a future HCBS rate study phase that leverages the rate methodologies developed in this initial rate study.

To support budget estimates and potential new state general fund requirements for the State's consideration, MQD requested a range of modeled comparison rate scenarios under the IRM approach. Per MQD's direction, we have modeled three rate scenarios for each service ("Low", "Medium", and "High") under different direct care staff wage and caseload assumptions. See the *Methodology and Data Relied Upon* section of this report for more details on the IRM development and payment impact modeling process.

The modeled comparison rates from this rate study do not constitute a requirement or commitment that MCOs or other payors adjust current payment arrangements to match these benchmarks, but rather they are informational for potential adoption by providers, MCOs, and other stakeholders during the rate negotiation process. Of particular note:

- MQD is not currently considering the adoption of comparison rates developed in this rate study as an MQD fee-for-service fee schedule or a § 438.6(c) state directed payment under managed care.
- Expected funding increases resulting from the modeled comparison rates in this rate study would not be incorporated into the managed care capitation rates until additional state general funds could be identified.
- The current capitation rate development process considers, among other data points, provider utilization and provider payments reported by MCOs as observed in the encounter data. To the extent that MCOs and providers negotiate their contracted rates through reliance on the comparison rates, capitation rates for future periods will include consideration of such changes through the annual rebasing of capitation rate development and as such changes emerge.
- MQD does not plan to reprice individual claims using the comparison rates when determining capitation rates to be paid to the MCOs.

Results

The results of this HCBS rate study are summarized below. ***Note that before implementing the comparison rates developed in this rate study, there are a number of implementation steps that must be considered as described in this report. Actual QI HCBS payments made by MCOs to providers will differ from the simulated payments in this modeling. Reasons for differences include but are not limited to future changes in enrollment, utilization, service mix, negotiated rates between MCOs and providers, and other factors.***

STAKEHOLDER FEEDBACK

As a key part of the HCBS rate study, we have conducted stakeholder outreach and engagement with HCBS providers and their associations, collected provider cost and wage survey data, and presented draft rate calculations for provider feedback. In addition to provider meetings, MQD created an HCBS project website[8] to post project related materials and both MQD and Millman had a specific email inbox to collect stakeholder feedback. The goal of the stakeholder engagement process was to establish an appropriate balance between building consensus among key stakeholders and achieving MQD financing and policy goals. The stakeholder engagement conducted for this rate study is summarized in Figure 6 below.

Figure 6: Rate Study Stakeholder Engagement

STAKEHOLDER ENGAGEMENT/MEETINGS	DESCRIPTION
Regular MQD Status Meetings	Milliman participated in scheduled meetings with MQD representatives. MQD and Milliman met bi-weekly at the onset of the project and met weekly over the last several months of the project. During these meetings, we discussed: ▪ Stakeholder engagement preparation ▪ Research findings ▪ Preliminary analyses, including draft comparison rates, wage changes, and self-directed rates Provider feedback from the provider workgroup sessions
Public Kick-off Meeting	MQD invited HCBS providers and MCOs to attend a project kickoff meeting with MQD and Milliman representatives regarding the comparison rate development process and its scope. Stakeholders were encouraged to provide feedback during the meeting and at any time in the future via e-mail. Stakeholders interested in joining service specific provider workgroups were invited to contact MQD.
First and Second Stakeholder Meetings	MQD and Milliman representatives held stakeholder meetings with the above mentioned three provider workgroups: CCMAs, in-home providers, and residential facilities. The primary goals of the provider workgroup meetings were to discuss the costs related to service delivery, the service requirements, and to review preliminary comparison rate assumptions and rates specific to each service type and gather feedback.

[8] "HCBS Rate Study" tab on the MQD webpage https://medquest.hawaii.gov/en/plans-providers/fee-for-service/fee-schedules.html.

STAKEHOLDER ENGAGEMENT/MEETINGS	DESCRIPTION
First Stakeholder Meeting Themes	Major themes from the first **CCMA** stakeholder meeting, included: ▪ Most case managers are contracted registered nurses (RNs) ▪ Social workers are helpful for more complex cases for comprehensive care but cannot fulfill the ongoing nurse delegation requirement ▪ CCMAs face significant wage pressures for RNs and are competing with facilities for the same labor force ▪ Most of the on-call nurse delegation is performed by the owners of the CCMA Major themes from the first **in-home service provider** stakeholder meeting, included: ▪ Some in-home service providers deliver a mix of PA1, PA2, and private duty nursing, while others only do one ▪ The direct services professionals PA1 and homemaker workers typically do not have a bachelor's degree but require training ▪ Agencies face significant wage pressures from hotels for PA1 services and nursing facilities and private pay services for PA2 services. ▪ PA2 services require a nurse supervisor for each case; RNs are typically a mix of part time and full-time employees Major themes from the first **residential provider** stakeholder meeting, included: ▪ Caregivers are primarily Certified Nursing Assistants (CNAs) ▪ The proportion of primary caregiver direct care hours (and use of substitute caregivers) varies across providers and depends on if the owner has additional employment outside of the residence ▪ Substitute caregiver compensation varies with some substitute caregivers that are paid and some unpaid ▪ Strong support for enhanced rate for level "3" for high behavioral problems ▪ Transportation typically provided using primary caregiver's own vehicle; trips can range from 2-3 times per week
Second Stakeholder Meeting Themes	During the second stakeholder meeting IRM components and assumptions and draft comparison rates were shared with the stakeholders for feedback. Major themes from the second **CCMA** stakeholder meeting, included: ▪ Discussion around the service definition and alignment with the rate ▪ Caseload sizes vary as it relates to the levels of need ▪ Future consideration for a rate that varies by level, particular for a new level 3 Major themes from the second **in-home service provider** stakeholder meeting, included: ▪ Draft rates are closer to private pay rates than current MCO rates and developmental disability services are comparable, but have more behavioral health service requirements ▪ Rates need to support shorter visits, which require higher pay due to variable scheduling ▪ Draft rates demonstrate "respect" for the workforce, which is challenging to recruit and retain due to workforce competition in hospitals and nursing facilities Major themes from the second **residential provider** stakeholder meeting, included: ▪ Proposed direct service hours are generally appropriate, but vary based upon the needs of an individual

MODELED COMPARISON RATES AND ESTIMATED IMPACT

To incorporate provider feedback and to support the rate development process, Milliman leveraged their IRM framework. The assumptions within the IRM were informed by stakeholder feedback, independent research, provider survey responses, and policy decisions by MQD (see the *Methodology and Data Relied Upon* section of this report for more details on the IRM key rate components). The IRM rate approach provides a consistent framework across services, while still allowing for customization for each service to determine the appropriate reimbursement level and service delivery incentives. The labor cost assumptions in the IRM provide clear and transparent expectations for the assumed direct care professional wages and benefits levels for providers to follow. The IRM also provides MQD with a mechanism for future rate updates and for developing rates for new services and/or service definitions (e.g., in the event MQD establishes a new level 3 care definition).

To support budget estimates and potential new state general fund requirements for the State's consideration, MQD requested a range of modeled comparison rate scenarios. Per MQD's direction we have modeled three rate scenarios for each service ("Low", "Medium", and "High") under different direct care staff wage and caseload assumptions. A low scenario includes the lowest wage or highest caseload assumptions to calculate the lowest rates, a medium scenario includes middle wage or caseload assumptions, and a high scenario includes the highest wages or lowest caseload assumptions to calculate the highest rates (e.g., adjusting wages would create a low scenario with wage assumptions set at the 25th percentile, medium scenario with wage assumptions set at the 50th percentile, and a high scenario with wage assumptions set at the 75th percentile). Modeled comparison rates under all rate scenarios exceed rates published in MQD's QI memos and average service rates paid by MCOs to providers, and therefore are anticipated to result in expenditure increases if utilized by MCOs for payment.

Figure 7 below provides a summary of modeled comparison rate scenarios for CCFFH and E-ARCH Type 1 providers for cost-share residents. Residential service rates continue to include the current $5 per day rate increase between Oahu and the Neighbor Islands. For detailed rate calculations, see **Appendix A** of this report.

Figure 7: E-ARCH Type I / CCFFH Cost-Share Residential Rate Scenarios

		MODELED COMPARISON PER DIEM RATE SCENARIOS					
COST-SHARE RESIDENTIAL RATE COHORT	CURRENT MQD QI MEMO PER DIEM RATES (2022)	LOW	EST. % CHANGE LOW	MEDIUM	EST. % CHANGE MEDIUM	HIGH	EST. % CHANGE HIGH
Level 1–- Oahu	$56.50	$59.41	5.2%	$71.95	27.3%	$73.80	30.6%
Level 2–- Oahu	$72.58	$95.65	31.8%	$116.24	60.2%	$119.39	64.5%
Level 1 – Neighbor Island	$61.50	$64.41	4.7%	$76.95	25.1%	$78.80	28.1%
Level 2 – Neighbor Island	$72.58	$100.65	38.7%	$121.24	67.0%	$124.39	71.4%

Figure 8 below provides a summary of modeled comparison rates scenarios for in-home services. For detailed rate calculations, see **Appendix A** of this report.

Figure 8: In-Home Services Rate Scenarios

		MODELED COMPARISON RATE SCENARIOS – 15 MINUTE UNIT					
IN-HOME SERVICE	AVERAGE PAYMENT PER 15-MINUTE UNIT (2021)	LOW	EST. % CHANGE LOW	MEDIUM	EST. % CHANGE MEDIUM	HIGH	EST. % CHANGE HIGH
Personal Assistance – Level 1	$5.56	$8.75	57.4%	$10.26	84.5%	$11.04	98.6%
Personal Assistance/Attendant Care – Level 2	$6.70	$11.42	70.4%	$13.39	99.9%	$14.10	110.4%
Private Duty Nursing/Attendant Care – LPN	$11.00	$14.08	28.0%	$14.43	31.2%	$15.77	43.4%
Private Duty Nursing/Attendant Care – RN	$14.77	$22.07	49.4%	$26.83	81.7%	$31.16	111.0%

Figure 9 below provides a summary of modeled comparison rates scenarios for CCMA rate scenarios. For detailed rate calculations, see **Appendix A** of this report.

Figure 9: CCMA Services Rate Scenarios

		MODELED COMPARISON PER DIEM RATE SCENARIOS					
SERVICE DESCRIPTION	AVERAGE PAYMENT PER DIEM (2021)	LOW	EST. % CHANGE LOW	MEDIUM	EST. % CHANGE MEDIUM	HIGH	EST. % CHANGE HIGH
Case management	$13.15	$ 13.88	5.6%	$ 15.06	14.5%	$ 16.48	25.3%

Based on the above modeled rates and Calendar Year (CY) 2021 service utilization, we estimate total modeled payments (total computable, including the state share and non-federal share) will be approximately $37.9 million to $72.9 million above CY 2021 expenditure levels for all three service categories combined, depending on the selected rate scenario. Actual QI HCBS payments made by MCOs to providers will differ from the simulated payments in this modeling. Reasons for differences include but are not limited to future changes in enrollment, utilization, service mix, negotiated rates between MCOs and providers, and other factors.

These estimates are based on CY 2021 Medicaid MCO utilization. To establish 2021 baseline data, we multiplied the CY 2021 units against the average amount paid per unit for in-home and case management services, and for residential services we multiplied CY 2021 days by the CY 2021 residential QI memo rates. We compared the CY 2021 baseline data against the calculated rate scenarios to create three estimated payment impacts. Estimated payment impacts do not consider rate increases that have been provided by MCOs since CY 2021, which MQD expects to make as a result of capitation rate increases for HCBS and effective January 1, 2023. These January 2023 capitation rate increases were based on an 8.6% increase above 2021 expenditures, projected to be approximately $4.25 million. When considering state general fund requirements for potential HCBS rate increases, MQD should consider these HCBS reimbursement changes since 2021.

Figure 10 below provides a summary of modeled payment increases under modeled rate scenarios, by service category:

Figure 10: Estimated Modeled Comparison Rate Impact

		"LOW" SCENARIO ($ MILLIONS)		"MEDIUM" SCENARIO ($ MILLIONS)		"HIGH" SCENARIO ($ MILLIONS)	
SERVICE CATEGORY	CY 2021 PAYMENTS ($ MILLIONS)	ESTIMATED PAYMENTS	ESTIMATED PAYMENT CHANGE	ESTIMATED PAYMENTS	ESTIMATED PAYMENT CHANGE	ESTIMATED PAYMENTS	ESTIMATED PAYMENT CHANGE
Residential services	$39.5	$53.0	$13.5	$67.4	$27.9	$69.6	$30.1
In-home services	$38.4	$62.2	$23.8	$73.1	$34.7	$78.8	$40.4
Case management services	$9.3	$9.8	$0.5	$10.6	$1.3	$11.6	$2.3
Total Rate Study Services	**$87.1**	**$125.0**	**$37.9**	**$151.1**	**$64.0**	**$160.0**	**$72.9**

Note that the modeled payment impact for residential service as shown above is based on MQD's published QI memo rates and does not reflect negotiated rates between MCOs and providers (and therefore does not reflect the impact of negotiated Level 3 rates). Estimated payment impacts for in-home services and case management services reflect actual CY 2021 MCO expenditures.

Estimated payment increases under the modeled rate scenarios reflect reimbursement levels that enable competitive wages for direct care staff, health benefits for employees, and reimbursement for all service-related time (including both direct and indirect time). To replicate current reimbursement levels under the IRM, we would need to adjust the rate assumptions to reflect lower wages, limited health employee benefits, and potentially uncompensated direct service time, which is consistent with provider feedback and survey data on current HCBS provider business practices.

IMPLEMENTATION CONSIDERATIONS

If the State decides to move forward with the comparison rates developed in this rate study, it will need to consider the following key implementation steps:

- Obtain additional state general funds for rate increases
- Discuss new rate methodologies and modeled rates with Medicaid MCOs
- Update managed care capitation rates and include in a new rate certification for CMS approval
- Distribute QI memos with MQD's selected comparison rates for each service
- Discuss with HCBS providers the assumptions on direct care staff wages, employee benefits, and staffing ratios/caseloads built into the modeled comparison rates

Methodology and Data Relied Upon

The comparison rate modeling approach relied upon for this rate study was the IRM, which approximates the average costs that a reasonably efficient HCBS provider would be expected to incur while delivering these services. As denoted by its description – ***independent*** rate model – this approach builds rates from the ground up, by determining the costs related to the individual components shown below and summing the component amounts to derive a comparison rate for each service.

The IRM approach can be distinguished from other provider payment methodologies in that it estimates what the costs for each service could be given the resources (salaries and other expenses) reasonably expected to be required, on average, while delivering the services. This approach relies on multiple independent data sources to develop rate model assumptions to construct the comparison rates. By contrast, many cost-based methods rely primarily on the actual reported historical costs incurred while delivering services, which can be affected by operating or service delivery decisions made by providers, and can be limited by current reimbursement level. These operating or service delivery decisions may be inconsistent with program service delivery standards or be caused by program funding limitations that do not necessarily consider the average resource requirements associated with providing these services or include incentives for direct care staff retention. Figure 9 provides an overview of the key components and elements of the IRM approach. The IRM approach constructs a rate for each service as the sum of the costs associated with each of the components shown in Figure 11.

Figure 11: INDEPENDENT RATE MODEL COMPONENTS

COMPONENT	ELEMENTS	SUB-ELEMENTS	CLARIFYING NOTES
Clinical Staff and Supervisor Salaries and Wages	Service-related Time	Direct Time	Corresponding time unit, or staffing requirement assumptions where not defined Adjusted for staffing ratios for some services (i.e., more than one person served concurrently, e.g., in group counseling sessions or for residential services).
		Indirect Time	Service-necessary planning, note taking and preparation time
		Transportation Time	Travel time related to providing service
		PTO/Training/ Conference Time	Paid vacation, holiday, sick, training, non-productive, and conference time; also considers additional training time attributable to employee turnover
		Supervisor Time	Accounted for using a span of control variable
	Wage Rates	Can Vary for Overtime	Wage rates vary depending on types of direct service employees, which have been assigned to provider groups
Employee Related Expenses (ERE)	Payroll-related Taxes and Fees	Federal Insurance Contributions Act (FICA), Federal Unemployment Tax Act (FUTA), State Unemployment Insurance (SUI), Workers Compensation	Applicable to all employees, and varies by wage level assumption
	Employee Benefits	Health, Dental, Vision, Life and Disability Insurance, and Retirement Benefits	Amounts may vary by provider group
Transportation	Vehicle Operating Expenses	Includes all Ownership and Maintenance-Related Expenses	Varies by service with costs estimated based on the IRS reimbursement rate.
Administration, Program Support, Overhead	All other business-related costs	Includes program operating expenses, including management, accounting, legal, information technology, etc.	Excludes room and board expenses.

Rate Model Components

This subsection provides a description of the key rate components listed in Figure 11, which are:

- Direct care staff and supervisor salary and wages
- Employee related expenses
- Administration, program support, overhead
- Transportation
- Residential hours

We provide a summary of the potential fiscal impact using CY 2021 utilization data. The calculated rates are listed in Appendix A.

Direct Care Staff and Supervisor Salary and Wages

The direct care staff salary and wage components are typically the largest component of rates, comprising the labor-related cost, or the product of the time and expected wage rates for the direct care staff who deliver each of the services. This component includes costs associated with the direct care staff expected to deliver the services and their immediate supervisors.

Direct Care Staff and Supervisor Time Assumptions

In the IRM approach, direct care staff time is categorized as direct time, indirect time, floating staff time, and supervisor time. Adjustments for paid time off (PTO), holidays, and training time are also incorporated. There are also other time assumptions that are services specific. All assumptions were reviewed with stakeholders for feedback. Figure 12 provides a description of each of these sub-elements and related adjustments.

Figure 12: SUMMARY OF SUB-ELEMENTS RELATED TO DIRECT CARE STAFF AND SUPERVISOR TIME

TIME

SUB-ELEMENT	DEFINITION	ASSUMPTIONS
Direct Care Staff Direct Time	▪ Amount of time incurred by direct staff that can be billed for services provided to individuals. ▪ For example, a service billed as a 15-minute unit assumes that the direct care staff direct time is approximately 15 minutes, an assumption that is consistent with service billing guidelines. Examples of the most common unit types, which vary by service, are a set number of minutes per service unit (e.g., 15-minute, 30-minute), per encounter, per day, or per month.	▪ In-home services are assumed to have 15-minutes of direct service time. ▪ For service units that are not defined by a time unit (e.g., per encounter or per diem) direct time assumptions were developed for each procedure code. ▪ Assumptions included in the IRM were reviewed with stakeholders.
Direct Care Staff Indirect Time	▪ Time that must be spent by non-supervisory direct care staff to provide the service, but is not spent "person facing", and does not result in a billable unit of service. ▪ Time incurred for necessary activities such as planning, summarizing notes, updating records, and other non-billable but appropriate time not otherwise included in direct care staff direct time.	▪ Indirect time assumptions are assumed at 2 minutes per 15 minutes of direct service time for in-home services. ▪ Assumptions included in the IRM were reviewed with stakeholders.
On-Call Staff Time	▪ Time that is allocated for "on-call" services that are outside of normal working hours.	▪ For CCMA services there is 0.1 full time equivalent (FTE) added to the IRM to account for on-call requirements. ▪ CCMA stakeholders provided feedback about the after-hour calls from hospitals and residential providers, which supported this rate assumption. ▪ Assumptions included in the IRM were reviewed with stakeholders.

TIME SUB-ELEMENT	DEFINITION	ASSUMPTIONS
PTO Adjustment Factor	▪ Accounts for additional time that must be covered over the course of a year by other staff, thereby representing additional direct care staff time per unit. ▪ Annual time related paid vacation, holiday, and sick time. ▪ Annual training and/or conference time expected to be incurred by direct care staff and supervisors. ▪ Increased for an estimate that considers the amount of one-time training/onboarding and the frequency of this type of training time that can be attributable to employee turnover.	▪ Varies by provider type. ▪ Appendix B provides the PTO and training assumptions by provider type. ▪ Assumptions included in the IRM were reviewed with stakeholders.
Supervisor Time	▪ For the services included in this analysis, staff providing services to individuals require supervision. ▪ Supervisors, commonly referred to as front line supervisors, are typically more experienced or higher credentialed provider types responsible for the direct oversight and supervision of those employees that are directly providing the services to individuals. ▪ Supervision of direct care staff does not result in a separate billable unit of service. ▪ Some providers may not have second-line supervisors while other organizations may operate a two-tiered supervision approach to support direct care staff directly providing services. ▪ Supervisor responsibilities may vary, but primarily are providing direct supervising, hiring, training and discipline of the direct care staff, whose primary responsibilities are providing services. Supervisor responsibilities may also include program planning and evaluation, advocacy, working with families, and working with community members. ▪ Supervisor time is determined through application of a “span of control” assumption, which is a measure of how many clinical staff a supervisor can supervise	▪ For in-home services, a supervisor span of control assumption of 1:10 was used, meaning that on average, every 10 hours of clinical staff time will require one hour of a supervisor’s time. ▪ The span of control included in the rate models is inclusive of both first- and second- line supervisory staff. ▪ Assumptions included in the IRM were reviewed with stakeholders.
Holiday Adjustment Factor	▪ For certain services, such as residential services that are staffed using a 24/7 staffing model, there is an expectation that that the “typical” staffing model should include some incremental payment for holiday pay.	▪ Holiday pay – a “time and a half” assumption is applied to the underlying average hourly wage for staff for the applicable time. ▪ Residential services - “time and a half” assumption is applied to 2.7% of the total PTO-adjusted time required for the services, which is based on an assumed 10 federal holidays per year. ▪ Assumptions included in the IRM were reviewed with stakeholders.
Caseload Size	▪ Used when the expected costs of services are more reasonably determined on a monthly basis, with resulting accumulated monthly expenses converted to a service unit value based on assumptions related to the average number of individuals served and/or units provided during the month.	▪ CCMA services assume an average caseload size of 35, which was supported by stakeholder feedback during the first stakeholder meeting. ▪ Assumptions included in the IRM were reviewed with stakeholders.

Wage Rate Assumptions for Direct Care Staff and Supervisors

The direct care staff hourly wage for each provider type was developed using May 2021 wage data from the Bureau of Labor Statistics (BLS) for Hawai`i, published in March 2022 (the most recent BLS wage data currently available). BLS wage data was relied upon because they are publicly available, updated on an annual basis, collected in a consistent and statistically credible manner, and provide the most detailed wage information which allows for wage assumptions to vary by region, by wage percentile, and by provider type.

The selection of the BLS wage percentile and annual trend factor was informed by the emerging workforce-specific wage trend, stakeholder feedback, and MQD's intent to maintain a strong workforce in Medicaid to carry out HCBS services in today's inflationary and workforce shortage environment. Figure 13 to the right highlights themes related to wage levels from stakeholder feedback.

Figure 13: High Level Themes Regarding Wage Levels from Stakeholder Feedback:

- Significant pressure on wages due to:
  - Competition from other programs and private sector
  - Employee expectations
  - Workforce shortages that predated COVID
- Difficulty in retaining employees at all levels due to:
  - Impact of COVID on workforce participation
  - Intensity of work in community-based care
  - Limited staffing pipeline between HCBS providers and schools
  - Ability to obtain higher wages with other employers
- Staff are increasingly less experienced due to difficulty in retaining more experienced staff.

Calendar Year 2023 wage levels for purposes of rate calculation were developed using the following steps:

- Obtain the most recent BLS wage data (May 2021) by occupational code and geographic region.
- For each provider type, identify similar BLS occupational categories and their related hourly wages.
- Apply an annual trend factor of 4.22% to the base wage rates, which resulted in an overall 9.39% increase in wages from May 2021 to July 2023.[9]
- Calculate the proposed CY 2023 statewide hourly wage rate for each provider type using the trended wage[s] at 50th percentile for non-supervisor workers.

Figure 14 below summarizes the wage assumptions underlying the rate model along with the wages reported in the provider surveys. The proposed model wages were informed by both the BLS wage data, the provider survey results, stakeholder feedback, and input from MQD. A summary of the wage assumptions included in each rate scenario is provided in Appendix C.

FIGURE 14: WAGE ASSUMPTIONS

		BLS WAGE PERCENTILES			
PROVIDER TYPE	BLS OCCUPATION CODES AND TITLES	25th PERCENTILE	50th PERCENTILE	75th PERCENTILE	PROVIDER SURVEY MEDIAN WAGE
Case Manager	21-1022 - Healthcare Social Workers (25%) / 29-1141 - Registered Nurses (75%)	$ 45.06	$ 53.96	$ 60.65	$41.44
In-Home Attendant	31-1120 - Home Health and Personal Care Aides (75%) / 37-2012 - Maids and Housekeeping Cleaners (25%)	$ 16.12	$ 17.59	$ 19.28	$13.13
Registered Nurse	29-1141 - Registered Nurses	$ 49.48	$ 58.40	$ 66.67	$35.00
Licensed Practical Nurse	29-2061 - Licensed Practical and Licensed Vocational Nurses	$ 24.66	$ 27.23	$ 31.67	$27.08
Nurse Aide	31-1131 - Nursing Assistants	$ 15.45	$ 19.46	$ 20.05	$15.00

[9] The trend factor is based on the Federal Reserve Economic Data (FRED) for Average Hourly Earnings of All Employees, Education and Health Services, and trend adjustments were applied from the BLS reporting period of May 2021, to October 2022. The annualized trend rate utilized for this analysis was 4.22%, which is the geometric mean annualized wage growth rates of FRED data from August 2021 through August 2022 and December 2017 through March 2020 (prior to the public health emergency).

Employee Related Expenses (ERE)

This component captures the ERE expected to be incurred for direct care staff and supervisors for each service. ERE percentages were calculated based on the expected level of ERE as a percentage of direct care staff and supervisor salaries and wages for a given wage region. ERE expenses are calculated as the product of the calculated direct care staff and supervisor salary and wage (described above) and an ERE percentage, which varies by provider group.

Employee related expenses include:

- Employer entity's portion of payroll taxes, employee medical and other insurance benefits
- Employer portion of retirement expenses incurred on behalf of direct care staff and supervisors

A significant portion of the ERE is driven by the cost of health insurance and retirement benefits the employer provides to its employees. MQD recommended a robust ERE to incentivize providers to offer benefits and to support the retention of a skilled workforce. Figure 15 provides a summary of the employee-related assumptions and their related sources. Insurance and retirement costs were sourced from BLS data for the health care and social assistance[10] civilian worker classification.

Figure 15: Employee Related Expense assumptions

COMPONENTS	ASSUMPTIONS FOR CY2023	SOURCE
Employee Social Security Withholding	6.2% Wage Base Limit: $156,000 (as projected by SSA under intermediate scenario)	Internal Revenue Service. Topic No. 751 Social Security and Medicare Withholding Rates. Retrieved from https://www.irs.gov/taxtopics/tc751 Social Security Administration. 2021 Old-Age, Survivors, and Disability Insurance (OASDI) Trustee Report. Retrieved from https://www.ssa.gov/OACT/TR/2021/V_C_prog.html#1047210
Employer Medicare Withholding	1.45%	Journal of Accountancy. Social Security wage base, COLA set for 2022. Retrieved from https://www.journalofaccountancy.com/news/2021/oct/ssa-2022-tax-wage-base-benefit-cola.html
FUTA Tax	$420, 6% of first $7,000	Internal Revenue Service. Topic No. 759 Form 940 – Employer's Annual Federal Unemployment (FUTA) Tax Return – Filing and Deposit Requirements. Retrieved from https://www.irs.gov/taxtopics/tc759
SUI Tax	5.80% Wage Base Limit: $51,600	State of Hawai`i Department of Labor and Industrial Relations – Tax Rate Schedule and Weekly Benefit Amount https://labor.hawaii.gov/ui/tax-rate-schedule-and-weekly-benefit-amount/
Workers Compensation	1.5%	U.S. Bureau of Labor Statistics. National Compensation Survey, September 2021, Employer Costs for Employee Compensation, Historical Listing. Table 12. Private Industry Workers, by Census Region and Division (Pacific Division). Page 491. Retrieved from https://www.bls.gov/web/ecec/ececqrtn.pdf
Insurance Benefits	$7,548 per year ($3.47 base hourly cost for the health care and social assistance industry group multiplied by 2,080 hours, trended from June 2022 to July 2023)	U.S. Bureau of Labor Statistics. (June 2022). Economic News Release, Table 2. Employer Costs for Employee Compensation for civilian workers by occupational and industry group. Retrieved from https://www.bls.gov/news.release/pdf/ecec.pdf
Retirement Percent	3.7%	U.S. Bureau of Labor Statistics. (June 2022). Economic News Release, Table 2. Employer Costs for Employee Compensation for civilian workers by occupational and industry group. Retrieved from https://www.bls.gov/news.release/pdf/ecec.pdf

The detailed calculations related to the ERE percentage are shown by provider group in Appendix D.

[10] Bureau of Labor Statistics. (September 2022). Employer Costs for Employee Compensation – June 2022. Retrieved from: https://www.bls.gov/news.release/pdf/ecec.pdf

Administration / Program Support / Overhead

An adjustment to account for the cost of administration, program support, and overhead of the provider is built into each of the rate models.[11] The assumption of 20.0% of the total expenses was used for all services, excluding PA1 in-home services. PA1 in-home services uses an assumption of 22.0% to account for supplies that stakeholders reported are often paid for by the provider. A portion of the administrative adjustment assumption is to account for the oversight and time associated with electronic visit verification (EVV). This component is intended to account for the following types of costs:

- **Administrative-related expenses -** Generally, administrative-related expenses would include all expenses incurred by the provider entity necessary to support the provision of services but not directly related to providing services to individuals. These expenses exclude transportation, wages, and employee-related expenses for direct care, and may include, but are not limited to:
  - Salaries and wages, and related employee benefits for employees or contractors that are not direct service workers or first- and second- line supervisors of direct service workers
  - Liability and other insurance
  - Licenses and taxes
  - Legal and audit fees
  - Accounting and payroll services
  - Billing and collection services
  - Bank service charges and fees
  - Information technology
  - Telephone and other communication expenses
  - Office and other supplies including postage
  - Accreditation expenses, dues, memberships, and subscriptions
  - Meeting and administrative travel related expenses
  - Training and employee development expenses, including related travel
  - Human resources, including background checks and other recruiting expenses
  - Community education
  - Marketing/advertising
  - Interest expense and financing fees
  - Facility and equipment expense and related utilities
  - Vehicle and other transportation expenses not related to transporting individuals receiving services or transporting employees to provide services to individuals
  - Board of director-related expenses
  - Translation services
  - EVV administration and oversight
- **Program support costs -** include supplies, materials, and equipment necessary to support service delivery

[11] Overhead percentages reported within the provider survey had wide variation (ranging from 27.5% to 100%) and were determined not to be statistically valid.

The IRM administration, program support, and overhead adjustment considers each of these expenses and is applied as the percent of the final rate that is allocated for these administrative activities.

Transportation

An adjustment to account for the cost of transportation is assumed within the residential and CCMA rate model frameworks. The CCMA rate assumes 400 miles in each month, or approximately 11 miles per person per month with a caseload of 35. Residential stakeholders provided feedback that they deliver infrequent transportation into the community or to doctor's appointments. The residential services rate model framework assumes one 5-mile trip per person per day. Mileage is reimbursed at the Internal Revenue Service standard mileage rate for the final 6 months of 2022 of 62.5 cents per mile.[12]

Stakeholders of in-home services did not indicate that travel was a significant cost of providing services.

Residential Hours

The costs of residential services can vary based on the needs of the individual and staffing needed to support each resident. The IRM supports a rate framework for a residential setting where more than one individual is served, where clinical staff are expected to be on-site for scheduled periods, there is an expectation to provide service coverage on a 24/7 basis, such as the CCFFHs and E-ARCHs of Hawai`i. Residential stakeholders and the provider survey results confirmed that many residential services are provided by nurse aides (NAs) or certified nurse aides (CNAs). There is wide variation in how substitute caregivers are paid for their time, with some substitute caregivers providing their services in-kind or through non-cash reimbursement arrangements. The provider survey results showed combined CNA/NA average direct care time (e.g., face-to-face care) of 36 hours for Level 1 and 42 hours for Level 2 in a three-bed residence. To support a stable staffing model and people with higher acuity, the proposed IRM assumes 42 hours of care for Level 1 and 69 hours for Level 2 in a three-bed residence.

Estimated Payment Impact

We estimated payments under each modeled comparison rate scenario by multiplying modeled rates by the service units in the CY 2021 Medicaid managed care encounter data received from the MCOs via a special feeds extract. We compared modeled comparison rate payments to 2021 baseline payments as follows:

- For in-home and case management services, we summed the reported MCO paid amounts in the CY 2021 Medicaid managed care encounter data.
- For residential services, we multiplied the CY 2021 Medicaid days by CY 2021 QI memo residential rates downloaded from the MQD website.[13] The CY 2021 QI memo rate cohorts were assigned to CY 2021 encounter data based on the reported HCPCS and modifier; in some instances the reported HCPCS and modifier was not included in the QI memo and a rate cohort had to be assumed. This rate cohort crosswalking process was reviewed by MQD for reasonableness.

[12] https://www.irs.gov/newsroom/irs-increases-mileage-rate-for-remainder-of-2022

[13] https://medquest.hawaii.gov/content/dam/formsanddocuments/provider-memos/qi-memos/qi-memos-2021/QI-2104A.pdf

Caveats and Limitations

This report is intended for the use of the State of Hawai`i Med-QUEST (MQD) in support of its 2022 Home and Community-Based Services (HCBS) rate study and is not appropriate for other purposes. The terms of Milliman's contract with Med-QUEST signed on July 1, 2020 apply to this this report and its use.

We understand this report will be shared publicly with Hawai`i HCBS stakeholders, including HCBS providers, Medicaid MCOs, and the Hawai`i State Legislature. To the extent that information contained in this report is provided to any approved third parties, the report should be distributed in its entirety. Any user of the data must possess a certain level of expertise to not misinterpret the information presented.

Milliman makes no representations or warranties regarding the contents of this report to third parties. Likewise, third parties are instructed that they are to place no reliance upon this report prepared for MQD by Milliman that would result in the creation of any duty or liability under any theory of law by Milliman or its employees to third parties. Other parties receiving this report must rely upon their own experts in drawing any conclusions about the rates, assumptions, and trends.

Future alignment of the projected rate and actual HCBS provider experience will depend on the extent to which future experience conforms to the assumptions reflected in the independent rate model. It is certain that actual experience will not conform exactly to the assumptions used in the rate development due to differences in HCBS labor costs, provider efficiency, and many other factors. Actual amounts will differ from projected amounts to the extent that actual experience is higher or lower than expected.

Milliman has developed certain models to estimate the values included in this report. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose. The models rely on data and information as input to the models. We have relied upon certain data and information provided by MQD and other sources and accepted it without audit. To the extent that the data and information provided is not accurate, or is not complete, the values provided in this report may likewise be inaccurate or incomplete. The models, including all input, calculations, and output may not be appropriate for any other purpose.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Justin Birrell and Rachel Kullman are members of the American Academy of Actuaries and meets the qualification standards for performing the analyses in this report.

Appendix A -
Modeled Comparison Rates

Service Information

Service Description: Case management
Reporting Units: Daily

Ref.	Description	Case Manager	Case Manager - On Call	Total	Notes
A	Hourly wage	$ 53.96	$ 53.96		Based on separate wage build
B	Number of employees	1.00	0.10		
C	**Total wages expense per month**	**$ 9,353**	**$ 935**	**$ 10,288**	C = A * B * 2,080 / 12
D	Employee related expense (ERE) percentage	22.6%	22.6%		Based on separate ERE build
E	**Total ERE expense per month**	**$ 2,115**	**$ 212**	**$ 2,327**	E = C * D
F	Estimated miles driven per month			400	Based on separate travel build
G	Federal reimbursement rate			$ 0.625	
H	**Transportation fleet costs per month**			**$ 250.00**	H = F * G
I	Administration / Program Support / Overhead			20.0%	Portion of monthly costs
J	**Monthly Administrative Expenses**			**$ 3,216.31**	J = I * (C + E + H) / (1 - I)
K	**Monthly Costs**			**$ 16,081.56**	K = C + E + H + J
L	Number of clients per team			35.00	
M	**Daily Rate**			**$ 459.47**	**M = K / L**
N	**Daily Rate**			**$ 15.06**	**N = M / 30.5 days**

Summary of CCMA Rates

Scenario	Service Description	Caseload Size	Direct Service Employee Salaries & Wages	Employee Related Expenses	Transportation & Fleet Vehicle Expenses	Administration, Program Support & Overhead	Total Rate (Monthly)	Total Rate (Daily)
Low	Community Care Management Agency (CCMA)	38	$ 293.96	$ 66.48	$ 7.14	$ 91.89	$ 423.20	$ 13.88
Medium	Community Care Management Agency (CCMA)	35	$ 293.96	$ 66.48	$ 7.14	$ 91.89	$ 459.47	$ 15.06
High	Community Care Management Agency (CCMA)	32	$ 293.96	$ 66.48	$ 7.14	$ 91.89	$ 502.55	$ 16.48

Service Information

Service Description: CCFFH/E-EARCH I - Level 1
Reporting Units: Per Diem

		Primary Caregiver	Substitute Caregiver	Total	Notes
A	**Total weekly hours**	**28**	**14**	**42**	Informed by survey data
B	Number of individuals served			3	The assumed number of clients in the facility
C	PTO/training/conference time adjustment factor	11.1%	11.1%		Based on separate PTO build
D	Adjusted total hours of time per week	31.09	15.55		D = A * (1 + C)
E	Hourly wage	$ 19.46	$ 19.46		Based on separate wage build
F	Percent of hours that are third shift	0%	0%		F = ((C * 5 + * 2) * 8) / A)
G	Total wages expense per week	$ 605	$ 303		G = D * (E + F * $0) || Third shift workers get paid an extra $2/hour
H	Holidays/premium pay days worked per year		10.00		
I	Percent of non-holiday hours paid at time and a half		0.0%		
J	Percent of total hours paid at time and a half	0%	2.7%		J = ((365.25 - H) * I + H) / 365.25
K	**Total direct care wage adjusted for overtime and holidays per week**	**$ 605.00**	**$ 306.23**	**$ 911.24**	K = G + A * J * (E + F * $2) * 0.5)
L	Employee related expense (ERE) percentage	38.3%			Based on separate ERE build
M	**Total ERE expense per week**	**$ 231.94**		**$ 231.94**	M = K * L
N	Estimated miles driven per week			105	15 miles per day
O	Federal reimbursement rate			$ 0.625	
P	**Transportation costs per week**			**$ 65.63**	P = N * O
Q	Subtotal before administration / overhead / program support			**$ 1,208.80**	Q = (K + M + P)
R	Administration / program support / overhead percentage			20.0%	
S	**Administration / overhead / program support cost per week**			**$302.20**	S = (Q * R) / (1 - R)
T	**Total cost per week**			**$1,511.00**	T = Q + S
U	Units per week			7.00	
V	**Preliminary Per Diem Rate**			**$71.95**	**V = T / U / B**

Reflects Cost Share rates for Oahu; excludes room and board costs.

SUMMARY OF RESIDENTIAL RATES - LEVEL 1

SCENARIO	SERVICE DESCRIPTION	PRIMARY CAREGIVER WAGE PERCENTILE	SUBSTITUTE CAREGIVER WAGE PERCENTILE	DIRECT SERVICE EMPLOYEE SALARIES & WAGES	EMPLOYEE RELATED EXPENSES	ADMINISTRATION, PROGRAM SUPPORT & OVERHEAD	TOTAL RATE (WEEKLY)	TOTAL RATE (DAILY) - OAHU	TOTAL RATE (DAILY) - NEIGHBOR ISLAND
Low	Residential Services (E-ARCH Type I/CCFFH) - Level 1	25th Percentile	25th Percentile	$ 34.46	$ 9.94	$ 15.01	$ 1,247.65	$ 59.41	$ 64.41
Medium	Residential Services (E-ARCH Type I/CCFFH) - Level 1	50th Percentile	50th Percentile	$ 43.39	$ 11.04	$ 17.52	$ 1,511.00	$ 71.95	$ 76.95
High	Residential Services (E-ARCH Type I/CCFFH) - Level 1	75th Percentile	75th Percentile	$ 44.71	$ 11.21	$ 17.89	$ 1,549.86	$ 73.80	$ 78.80

Service Information

Service Description: CCFFH/E-EARCH I - Level 2
Reporting Units: Per Diem

		Primary Caregiver	Substitute Caregiver	Total	Notes
A	**Total weekly hours**	**47**	**22**	**69**	Informed by survey data
B	Number of individuals served			3	The assumed number of clients in the facility
C	PTO/training/conference time adjustment factor	11.1%	11.1%		Based on separate PTO build
D	Adjusted total hours of time per week	51.97	24.88		D = A * (1 + C)
E	Hourly wage	$ 19.46	$ 19.46		Based on separate wage build
F	Percent of hours that are third shift	0%	0%		F = ((C * 5 + * 2) * 8) / A)
G	Total wages expense per week	$ 1,011	$ 484		G = D * (E + F * $0) || Third shift workers get paid an extra $2/hour
H	Holidays/premium pay days worked per year		10.00		
I	Percent of non-holiday hours paid at time and a half		0.0%		
J	Percent of total hours paid at time and a half	0%	2.7%		J = ((365.25 - H) * I + H) / 365.25
K	**Total direct care wage adjusted for overtime and holidays per week**	**$ 1,011.22**	**$ 489.97**	**$ 1,501.19**	K = G + A * J * (E + F * $2) * 0.5)
L	Employee related expense (ERE) percentage	38.3%			Based on separate ERE build
M	**Total ERE expense per week**	**$ 387.68**		**$ 387.68**	M = K * L
N	Estimated miles driven per week			105	15 miles per day
O	Federal reimbursement rate			$ 0.625	
P	**Transportation costs per week**			**$ 65.63**	P = N * O
Q	Subtotal before administration / overhead / program support			**$ 1,954.49**	Q = (K + M + P)
R	Administration / program support / overhead percentage			20.0%	
S	**Administration / overhead / program support cost per week**			**$488.62**	S = (Q * R) / (1 - R)
T	**Total cost per week**			**$2,443.12**	T = Q + S
U	Units per week			7.00	
V	**Preliminary Per Diem Rate**			**$116.34**	**V = T / U / B**

Reflects Cost Share rates for Oahu; excludes room and board costs.

SUMMARY OF RESIDENTIAL RATES - LEVEL 2

SCENARIO	SERVICE DESCRIPTION	PRIMARY CAREGIVER WAGE PERCENTILE	SUBSTITUTE CAREGIVER WAGE PERCENTILE	DIRECT SERVICE EMPLOYEE SALARIES & WAGES	EMPLOYEE RELATED EXPENSES	ADMINISTRATION, PROGRAM SUPPORT & OVERHEAD	TOTAL RATE (WEEKLY)	TOTAL RATE (DAILY) - OAHU	TOTAL RATE (DAILY) - NEIGHBOR ISLAND
Low	Residential Services (E-ARCH Type I/CCFFH) - Level 2	25th Percentile	25th Percentile	$ 56.78	$ 16.61	$ 22.25	$ 1,549.86	$ 95.65	$ 100.65
Medium	Residential Services (E-ARCH Type I/CCFFH) - Level 2	50th Percentile	50th Percentile	$ 71.49	$ 18.46	$ 26.39	$ 2,443.12	$ 116.34	$ 121.34
High	Residential Services (E-ARCH Type I/CCFFH) - Level 2	75th Percentile	75th Percentile	$ 73.66	$ 18.73	$ 27.00	$ 2,507.23	$ 119.39	$ 124.39

Service Information

Service Description: Personal Assistance - Level 1
Reporting Units: 15 minutes

Ref.	Description	Clinician: In-Home Attendant	Supervisor: In-Home Attendant	Total	Notes
A	Average minutes of direct time per unit	15.00			
B	Average minutes of indirect time per unit	2.00			
C	Average minutes of transportation time per unit	-			Based on separate travel build
D	**Total minutes per unit**	**17.00**			D = A + B + C
E	Staffing Ratio	1.00			
F	Supervisor span of control		10.00		10 employees assumed to be managed by 1 supervisor
G	Supervisor time per unit		1.70		G = D / E / F
H	PTO/training/conference time adjustment factor	11.1%	11.1%		Based on separate PTO build
I	**Adjusted Total minutes per unit**	**18.88**	**1.89**		I = D / E * (1 + H) || I = G * (1 + H)
J	Hourly wage	$ 16.12	$ 17.59		Based on separate wage build
K	**Total wages expense per unit**	**$ 5.07**	**$ 0.55**	**$ 5.62**	K = J * I / 60
L	Employee related expense (ERE) percentage	42.4%	40.4%		Based on separate ERE build
M	**Total ERE expense per unit**	**$ 2.15**	**$ 0.22**	**$ 2.37**	M = K * L
N	Administration / program support / overhead			20.0%	Portion of total rate
O	Administration expenses - EVV			2.0%	Portion of total rate
P	**Administration Expenses**			**$ 2.26**	P = (N + O) * (K + M) / (1 - (N + O))
Q	**Rate Per 15 minutes**			**$10.26**	**Q = K + M + P**

Summary of PA1 Rates

Scenario	Service Description	Clinician: In-Home Attendant Wage Percentile	Supervisor: In-Home Attendant Wage Percentile	Direct Service Employee Salaries & Wages	Indirect Service Employee Salaries & Wages	Employee Related Expenses	Administration, Program Support & Overhead	Total Rate
Low	Personal Assistance - Level 1	10th Percentile	25th Percentile	$ 4.09	$ 0.55	$ 2.19	$ 1.92	$ 8.75
Medium	Personal Assistance - Level 1	25th Percentile	50th Percentile	$ 4.96	$ 0.66	$ 2.37	$ 2.26	$ 10.26
High	Personal Assistance - Level 1	50th Percentile	75th Percentile	$ 5.42	$ 0.72	$ 2.47	$ 2.43	$ 11.04

Service Information

Service Description: Personal Assistance - Level 2
Reporting Units: 15 minutes

Ref.	Description	Clinician: Nurse Aide	Supervisor: Registered Nurse	Total	Notes
A	Average minutes of direct time per unit	15.00			
B	Average minutes of indirect time per unit	2.00			
C	Average minutes of transportation time per unit	-			Based on separate travel build
D	**Total minutes per unit**	**17.00**			D = A + B + C
E	Staffing Ratio	1.00			
F	Supervisor span of control		10.00		10 employees assumed to be managed by 1 supervisor
G	Supervisor time per unit		1.70		G = D / E / F
H	PTO/training/conference time adjustment factor	11.1%	11.1%		Based on separate PTO build
I	**Adjusted Total minutes per unit**	**18.88**	**1.89**		I = D / E * (1 + H) || I = G * (1 + H)
J	Hourly wage	$ 19.46	$ 58.40		Based on separate wage build
K	**Total wages expense per unit**	**$ 6.12**	**$ 1.84**	**$ 7.96**	K = J * I / 60
L	Employee related expense (ERE) percentage	38.3%	21.9%		Based on separate ERE build
M	**Total ERE expense per unit**	**$ 2.35**	**$ 0.40**	**$ 2.75**	M = K * L
N	Administration / program support / overhead			18.0%	Portion of total rate
O	Administration expenses - EVV			2.0%	Portion of total rate
P	**Administration Expenses**			**$ 2.68**	P = (N + O) * (K + M) / (1 - (N + O))
Q	**Rate Per 15 minutes**			**$13.39**	**Q = K + M + P**

Summary of PA2 Rates

Scenario	Service Description	Clinician: Nurse Aide Wage Percentile	Supervisor: Registered Nurse Wage Percentile	Direct Service Employee Salaries & Wages	Indirect Service Employee Salaries & Wages	Employee Related Expenses	Administration, Program Support & Overhead	Total Rate
Low	Personal Assistance - Level 2	10th Percentile	25th Percentile	$ 5.85	$ 0.78	$ 2.50	$ 2.28	$ 11.42
Medium	Personal Assistance - Level 2	25th Percentile	50th Percentile	$ 7.02	$ 0.94	$ 2.75	$ 2.68	$ 13.39
High	Personal Assistance - Level 2	50th Percentile	75th Percentile	$ 7.46	$ 0.99	$ 2.82	$ 2.82	$ 14.10

Service Information

Service Description: Nursing care in home LPN
Reporting Units: 15 minutes

Ref.	Description	Clinician: Licensed Practical Nurse	Supervisor: Licensed Practical Nurse	Total	Notes
A	Average minutes of direct time per unit	15.00			
B	Average minutes of indirect time per unit	2.00			
C	Average minutes of transportation time per unit	-			Based on separate travel build
D	**Total minutes per unit**	**17.00**			D = A + B + C
E	Staffing Ratio	1.00			
F	Supervisor span of control		10.00		10 employees assumed to be managed by 1 supervisor
G	Supervisor time per unit		1.70		G = D / E / F
H	PTO/training/conference time adjustment factor	11.1%	11.1%		Based on separate PTO build
I	**Adjusted Total minutes per unit**	**18.88**	**1.89**		I = D / E * (1 + H) || I = G * (1 + H)
J	Hourly wage	$ 24.66	$ 27.23		Based on separate wage build
K	**Total wages expense per unit**	**$ 7.76**	**$ 0.86**	**$ 8.62**	K = J * I / 60
L	Employee related expense (ERE) percentage	34.2%	32.2%		Based on separate ERE build
M	**Total ERE expense per unit**	**$ 2.65**	**$ 0.28**	**$ 2.93**	M = K * L
N	Administration / program support / overhead			18.0%	Portion of total rate
O	Administration expenses - EVV			2.0%	Portion of total rate
P	**Administration Expenses**			**$ 2.89**	P = (N + O) * (K + M) / (1 - (N + O))
Q	**Rate Per 15 minutes**			**$14.43**	**Q = K + M + P**

Summary of Private Duty Nursing - LPN Rates

Scenario	Service Description	Clinician: Licensed Practical Nurse Wage Percentile	Supervisor: Licensed Practical Nurse Wage Percentile	Direct Service Employee Salaries & Wages	Indirect Service Employee Salaries & Wages	Employee Related Expenses	Administration, Program Support & Overhead	Total Rate
Low	Private Duty Nursing - LPN	10th Percentile	25th Percentile	$ 7.39	$ 0.99	$ 2.89	$ 2.82	$ 14.08
Medium	Private Duty Nursing - LPN	25th Percentile	50th Percentile	$ 7.60	$ 1.01	$ 2.93	$ 2.89	$ 14.43
High	Private Duty Nursing - LPN	50th Percentile	75th Percentile	$ 8.44	$ 1.13	$ 3.05	$ 3.15	$ 15.77

Service Information

Service Description: Nursing care in home RN
Reporting Units: 15 minutes

Ref.	Description	Clinician: Registered Nurse	Supervisor: Registered Nurse	Total	Notes
A	Average minutes of direct time per unit	15.00			
B	Average minutes of indirect time per unit	2.00			
C	Average minutes of transportation time per unit	-			Based on separate travel build
D	**Total minutes per unit**	**17.00**			D = A + B + C
E	Staffing Ratio	1.00			
F	Supervisor span of control		10.00		10 employees assumed to be managed by 1 supervisor
G	Supervisor time per unit		1.70		G = D / E / F
H	PTO/training/conference time adjustment factor	11.1%	11.1%		Based on separate PTO build
I	**Adjusted Total minutes per unit**	**18.88**	**1.89**		I = D / E * (1 + H) || I = G * (1 + H)
J	Hourly wage	$ 49.48	$ 58.40		Based on separate wage build
K	**Total wages expense per unit**	**$ 15.57**	**$ 1.84**	**$ 17.41**	K = J * I / 60
L	Employee related expense (ERE) percentage	23.5%	21.9%		Based on separate ERE build
M	**Total ERE expense per unit**	**$ 3.66**	**$ 0.40**	**$ 4.06**	M = K * L
N	Administration / program support / overhead			18.0%	Portion of total rate
O	Administration expenses - EVV			2.0%	Portion of total rate
P	**Administration Expenses**			**$ 5.37**	P = (N + O) * (K + M) / (1 - (N + O))
Q	**Rate Per 15 minutes**			**$26.83**	**Q = K + M + P**

Summary of Private Duty Nursing - RN Rates

Scenario	Service Description	Clinician: Registered Nurse Wage Percentile	Supervisor: Registered Nurse Wage Percentile	Direct Service Employee Salaries & Wages	Indirect Service Employee Salaries & Wages	Employee Related Expenses	Administration, Program Support & Overhead	Total Rate
Low	Private Duty Nursing - RN	10th Percentile	25th Percentile	$ 12.38	$ 1.65	$ 3.63	$ 4.41	$ 22.07
Medium	Private Duty Nursing - RN	25th Percentile	50th Percentile	$ 15.36	$ 2.05	$ 4.06	$ 5.37	$ 26.83
High	Private Duty Nursing - RN	50th Percentile	75th Percentile	$ 18.07	$ 2.41	$ 4.45	$ 6.23	$ 31.16

Appendix B -
Non-Client Facing Time

State of Hawai'i
Department of Human Services
HCBS Rate Analysis – Phase 1
Appendix B - PTO, Training Time, and Non-Productive Time Factor by Provider Group

	A	B	C	D	E	F	G	H	I	J	K	L
Provider Type	**Total Hours**	**Paid Holidays and PTO per year**	**On-going training/ conference time hours per year**	**Total**	**Training hours/inefficient time for each new hire**	**Turnover percentage**	**New hire training hours per year**	**Hours of replacement for non-productive time**	**Annual productive time**	**PTO / training / conference time adjustment factor**	**Additional non-productive time**	**Adjustment factor using additional non-productive time**
				B + C			**E * F**	**D + G**	**A - H**	**A / I - 1**		**A / (I * (1 - K)) - 1**
Case Manager	2,080	160	40	200	20	35%	7	207	1,873	**11.1%**	20.0%	**38.8%**
In-Home Attendant	2,080	160	40	200	20	35%	7	207	1,873	**11.1%**	20.0%	**38.8%**
Registered Nurse	2,080	160	40	200	20	35%	7	207	1,873	**11.1%**	20.0%	**38.8%**
Licensed Practical Nurse	2,080	160	40	200	20	35%	7	207	1,873	**11.1%**	20.0%	**38.8%**
Nurse Aide	2,080	160	40	200	20	35%	7	207	1,873	**11.1%**	20.0%	**38.8%**

Appendix C –
BLS Wages

State of Hawai'i Department of Human Services HCBS Rate Analysis – Phase 1 Appendix C - Wages by Provider Type From May 2021 BLS and Trended to July 2023					
	BLS Hourly Wage Percentiles				
Provider Type	**10th Percentile**	**25th Percentile**	**50th Percentile**	**75th Percentile**	**90th Percentile**
Case Manager	$ 35.97	$ 45.06	$ 53.96	$ 60.65	$ 64.14
In-Home Attendant	$ 13.11	$ 16.12	$ 17.59	$ 19.28	$ 20.93
Registered Nurse	$ 39.64	$ 49.48	$ 58.40	$ 66.67	$ 68.18
Licensed Practical Nurse	$ 24.15	$ 24.66	$ 27.23	$ 31.67	$ 32.43
Nurse Aide	$ 15.25	$ 15.45	$ 19.46	$ 20.05	$ 24.99

Appendix D –
ERE Buildup

State of Hawai'i
Department of Human Services
HCBS Rate Analysis – Phase 1
Appendix D - Employee Related Expense Buildup (Using 50th Percentile Wage Assumptions)

	A	B	C	D	E	F	G	H	I	J	K	L
Provider Type	**Trended Wage (High-Cost)**	**Annual Employee Salary**	**Medicare**	**Social Security**	**FUTA**	**SUI**	**Workers Comp**	**Insurance**	**Retirement**	**ERE per Employee**	**ERE Percentage**	**Annual Salary and ERE**
Notes	**Trended from 5/1/2021 to 7/1/2023 at a rate of 9.39%**	**A * 2,080**	**B * 1.45%**	**B * 6.2% up to $156,000 estimated taxable limit**	**6% of first $7,000 earned**	**B * 5.80% up to $51,600 estimated taxable limit**	**B * 1.5%**		**B * 3.7%**	**Sum of C through I**	**J / B**	**B * (1 + K)**
Case Manager	$53.96	$112,238	$1,627	$6,959	$420	$2,993	$1,684	$7,548	$4,153	**$25,383**	**22.6%**	**$137,621**
In-Home Attendant	17.59	36,592	531	2,269	420	2,122	549	7,548	1,354	**14,792**	**40.4%**	**51,384**
Registered Nurse	58.40	121,480	1,761	7,532	420	2,993	1,822	7,548	4,495	**26,570**	**21.9%**	**148,050**
Licensed Practical Nurse	27.23	56,645	821	3,512	420	2,993	850	7,548	2,096	**18,239**	**32.2%**	**74,884**
Nurse Aide	19.46	40,470	587	2,509	420	2,347	607	7,548	1,497	**15,515**	**38.3%**	**55,986**

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