

In Lieu of Services in CalAIM: A Summary of the Evidence-Base on Cost-Effectiveness and Medical Appropriateness of ILOS

Introduction

A key feature of California Advancing and Innovating Medi-Cal (CalAIM) is the introduction of a new menu of health-related in lieu of services (ILOS). ILOS are medically appropriate and cost-effective alternatives to services or settings covered under the State Plan.¹ The Department of Health Care Services (DHCS) has preapproved a list of 14 ILOS that managed care plans (MCPs) are strongly encouraged to offer.

Based on California's experience with Home and Community-Based Services (HCBS) Waivers, the Whole Person Care (WPC) Pilots, stakeholder input, and experiences elsewhere in the nation, these preapproved ILOS are designed to be highly valuable to Members with some of the most complex health issues, including conditions caused or exacerbated by lack of food, housing, or other social drivers of health. In addition, Medicaid long has recognized the value of and supported many similar services under the state's HCBS Waivers, and now there is the opportunity to provide them to additional high-need individuals via ILOS.

Consistent with federal regulations, DHCS has determined the preapproved ILOS to be cost-effective and medically appropriate substitutes for covered Medi-Cal services or settings, such as hospital care, nursing facility care, and emergency department (ED) use. Specifically, DHCS assessed the cost-effectiveness and medical appropriateness of each ILOS using the experiences noted above, extensive stakeholder engagement, and a thorough literature review of the impacts of each ILOS on health care utilization and outcomes. These studies, which include evaluations of similar state and community-based programs, pre-post comparative studies, and randomized control trials, represent a substantial body of evidence for the cost-effectiveness and medical appropriateness of the state's preapproved ILOS. DHCS then carefully established ILOS eligibility criteria to reflect the populations for whom ILOS are likely to be cost-effective and medically appropriate.

Prior to electing an ILOS, each MCP also should make its own determination as to whether an ILOS represents a medically appropriate and cost-effective alternative to one or more State Plan services or settings. MCPs must apply a consistent methodology—regardless of whether it is based on a population- or an individual-level assessment—to determine cost-effectiveness to all potentially eligible beneficiaries within a particular county, and cannot limit the ILOS only to individuals who previously were enrolled in the Health Home Program or a WPC Pilot.

¹ 42 CFR 438.3(e)(2).

Select highlights and key findings of DHCS' research on the measurable impacts ILOS may have on health care costs, utilization, and health outcomes are summarized below.

Housing Services

California faces an ongoing housing shortage and a growing homeless population. An estimated 161,548 people in California were experiencing homelessness on any given night in January 2020, a 6.8% increase (one of the largest increases) from January 2019.² Homelessness can exacerbate existing chronic health conditions and create new health problems, stemming from exposure to communicable diseases and lack of access to clean drinking water, adequate food, and proper sanitation, among other factors. This is reflected in the higher rates of diabetes, hypertension, and HIV, for example, among the homeless population in comparison with the general U.S. population.³ Data from the National Hospital Ambulatory Medical Care Surveys between 2015 and 2018 shows a rate of 203 ED visits per 100 homeless persons compared with 42 ED visits per 100 non-homeless persons.⁴ By transitioning eligible individuals who would otherwise be homeless into permanent housing and helping them sustain that housing, select ILOS can improve health outcomes and reduce the inefficient use of costly, unnecessary medical care (e.g., avoidable readmissions). For example, one study found the readmission rates of homeless patients is 27.3% (versus 17.5%), after adjusting for patient characteristics, discharge disposition, and length of stay.⁵ In addition to reducing unnecessary Medicaid spending, DHCS' preapproved ILOS support the state's commitment to addressing the homelessness crisis by providing access to and coordination of housing services for eligible populations through the following services:

- **Housing Transition Navigation Services** to assist members with finding and obtaining housing;
- **Housing Deposits** to assist with identifying, coordinating, securing, and/or funding one-time services and modifications necessary to enable a person to establish a basic household; and
- **Housing Tenancy and Sustaining Services** to support members in maintaining safe and stable tenancy once housing is secured.

DHCS' research findings identified the following potential benefits of providing comprehensive housing supports to defined populations:

- Providing rental subsidies and wraparound housing navigation supports to high-cost Medicaid members who were homeless or living in institutional settings

² [The 2020 Annual Homeless Assessment Report \(AHAR\) to Congress.](#)

³ [Homelessness & Health: What's the Connection?](#)

⁴ [QuickStats: Rate of Emergency Department \(ED\) Visits by Homeless Status and Geographic Region — National Hospital Ambulatory Medical Care Survey, United States, 2015–2018.](#)

⁵ [Hospital Readmission and Emergency Department Revisits of Homeless Patients Treated at Homeless-Serving Hospitals in the USA: Observational Study.](#)

yielded aggregate reductions in inpatient days (40%), ED visits (26%), and inpatient psychiatric admissions (27%) in New York State. Savings for the enrollees in the top decile of costs/utilization prior to the intervention totaled \$23,000–\$52,000, depending on the housing services that were provided.⁶

- Los Angeles' Housing for Health Program, which includes rental subsidies and case management for individuals who were experiencing homelessness and were frequent utilizers of county health care services, reduced ED visits (67.5%), inpatient days (76.7%), and use of crisis stabilization services (59.5%).⁷ Further, individuals who received support through this program reported significant improvements in mental health functioning.
- Chicago's Housing for Health initiative evaluated the impact of providing intensive case management and housing navigation for HIV-positive homeless inpatients versus usual care (referral to overnight shelters or interim housing) on the strength of their immune systems. Results demonstrated a greater proportion of individuals in the intervention group were alive and had intact immunity and lower viral loads than those receiving usual care.⁸

These studies illustrate some of the ways in which safe and stable housing for homeless populations can reduce their health care utilization and costs over time. While DHCS' housing-related services are not designed to pay for ongoing rental subsidies, they are based on earlier successful WPC Pilot initiatives to connect people to housing and to help them remain housed with the support of rental assistance from Supplemental Security Income, Department of Housing and Urban Development programs, or other non-Medicaid sources.

Short-Term 'Episodic' Supports and Housing

In addition to the ILOS aimed at assisting individuals in securing and retaining long-term, permanent housing, the list of preapproved ILOS includes several services targeted at individuals requiring additional support to recover from illness, injury, or other conditions. The following services allow participants to recover in a lower-cost, patient-centered, community-based setting that meets their needs, avoiding unnecessarily long stays in hospitals and other forms of institutional care.

- **Recuperative Care (Medical Respite)** to provide short-term integrated and clinical care for individuals who no longer require hospitalization but still need to heal from an injury or illness (including behavioral health conditions);
- **Short-term Post Hospitalization Services** to provide beneficiaries who do not have a residence and who have high medical or behavioral health needs with the

⁶ [Housing is Healthcare: Supportive Housing Evaluation.](#)

⁷ [Evaluation of Housing for Health Permanent Supportive Housing Program.](#)

⁸ [The Health Impact of Supportive Housing for HIV-Positive Homeless Patients: A Randomized Controlled Trial.](#)

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opportunity to continue their medical/psychiatric/substance use disorder recovery immediately after exiting an institutional setting; and

- **Sobering Centers**, an alternative for individuals who are found to be publicly intoxicated or otherwise under the influence of drugs, to enable them to avoid an unnecessary ED visit while still providing a medically safe place for them as the effects of the substance(s) wear off.

DHCS' research findings identified the following potential benefits of providing short-term, episodic supports:

- The Begin at Home Program in Seattle, Washington, is a medical respite program with permanent housing and on-site medical care with connections to ancillary services, such as assistance with obtaining income and food assistance benefits for people with long-term homelessness coupled with chronic medical conditions and/or chemical dependency. Average hospital days for the participant group was 4.24 versus 5.88 for the nonparticipant group of individuals who were chronically homeless. Reduction in health care costs per participant was \$62,504 per person per year, versus \$25,925 in the comparison group (a difference of \$36,579).⁹
- Another recuperative care program using a motel model with nursing-level care demonstrated an aggregate cost savings between \$18,000 and \$48,000 per day for a pilot with 23 individuals. Further, the recuperative care program had a positive impact on participants' well-being by connecting 65% of recipients to needed housing resources upon discharge.¹⁰
- One program that enrolled homeless individuals who were in an inpatient stay with chronic medical conditions with both interim medical respite post-discharge followed by short-term post-hospitalization housing demonstrated \$6,307 in annual cost savings per person.¹¹
- San Francisco's sobering center tracked referrals over a three-year period: 35% were referred by emergency medical services and 12% were referred by the ED, both of which could be viewed as proxies for avoided hospital admissions. Further, of all sobering center visits over the three-year evaluation period, only 4.4% required a secondary transfer to an ED.¹²

Provision of short-term episodic supports can reduce costs and improve health by providing a safe and stable environment where individuals can recover instead of one

⁹ [A Pilot Study of the Impact of Housing First—Supported Housing for Intensive Users of Medical Hospitalization and Sobering Services.](#)

¹⁰ [Program evaluation of a recuperative care pilot project.](#)

¹¹ [Comparative Cost Analysis of Housing and Case Management Program for Chronically Ill Homeless Adults Compared to Usual Care.](#)

¹² [EMS Can Safely Transport Intoxicated Patients to a Sobering Center as an Alternate Destination.](#)

that would prolong recovery, worsen a condition, or simply be far more costly than an alternative setting or service appropriate for their medical condition.

Home Modification Supports

Many hospitalizations and other health care services can be avoided by altering an individual's home to be a safer, more supportive environment that promotes health and well-being. For example, a comprehensive study on ED visits and hospitalizations using data from the U.S. National Health Interview Survey Files found that among fall victims, 33.7% required an ED visit and 19.4% required hospitalization.¹³ Poor housing conditions can exacerbate chronic medical conditions, and conditions such as asthma can sometimes only be effectively addressed through the removal or reduction of indoor triggers.¹⁴

Building on medically appropriate services already provided through HCBS Waivers, the preapproved list of ILOS offers high-risk individuals, who may otherwise remain in/enter a nursing facility, the chance to live in a home that is safe and conducive to maintaining or improving their health and well-being through the following services:

- **Environmental Accessibility Adaptations (Home Modifications)** to provide the physical adaptations to a home that are necessary to ensure the health, welfare, and safety of the individual, or to enable the individual to function with greater independence in the home; and
- **Asthma Remediation** to provide the physical modifications to a home environment that are necessary to ensure the health, welfare, and safety of the individual, or to enable the individual to function in the home, and without which acute asthma episodes could result in the need for emergency services and/or hospitalization. Examples include mold removal/remediation, ventilation improvements, and installation of dehumidifiers and air filters.

DHCS' research findings identified the following impacts of ensuring that a living environment promotes health:

- Community Aging in Place – Advancing Better Living for Elders (CAPABLE), a Center for Medicare and Medicaid Services Innovation program that provided home repairs/adaptive modifications and resulted in a Medicare savings of \$922 per member per month (PMPM) for up to two years and additional savings of \$867 PMPM in Medicaid for up to a year.¹⁵
- A pilot project by the Georgia Department of Public Health that provided African American children enrolled in Medicaid and Children's Medical Services with

¹³ [Fall-related emergency department visits and hospitalizations among community-dwelling older adults: examination of health problems and injury characteristics.](#)

¹⁴ [Asthma and the Home Environment.](#)

¹⁵ [CAPABLE Bundle Payment Model: Community Aging in Place—Advancing Better Living for Elders.](#)

educational sessions and home asthma trigger remediation reported reductions in inpatient hospitalizations (69%) and ED visits (71%) over a 12-month period.¹⁶ Further, it also resulted in significant reductions in the number of missed school days (31%).

- A study that provided households with children with asthma-related hospitalization or two asthma-related ED visits in the prior 12 months with an asthma trigger home remediation intervention (e.g., mold or pest abatement, installing or repairing heating or ventilation, or removing old carpeting) yielded the following results:
 - Reduction in hospital cases with asthma-related charges before and after intervention from 37 cases to 12.
 - Reduction in ED visits by 85%.
 - The following improvements in health status:
 - Reduction in asthma symptoms in the prior 14 days (from 4.50 to 3.36).
 - Reduction in the number of times per week an inhaler was used (from 5.96 to 2.96).
 - Reduction in the number of asthma attacks in the prior year (from 11.57 to 6.68).

Home repairs, home modifications, remediation to improve chronic conditions like asthma, and other home adaptations can support individuals in maintaining or improving their health status and contribute to fewer costly ED visits and inpatient stays.

Nursing Facility Transition/Diversion Supports and Ongoing Support for Community Living

Supports for individuals who are transitioning between care settings are critical to ensuring their health and safety during this vulnerable period. One study found that 23% of Medicare patients discharged from a hospital to a skilled nursing facility (SNF) after an acute medical illness had to be readmitted within 30 days.¹⁷ As is true with hospital transitions, individuals transitioning from a SNF to a home or assisted-living facility may also experience worsening health outcomes or require readmission to a costly hospital or SNF setting when they don't receive adequate transition planning, patient education, and care coordination.

ILOS is part of DHCS' plan to build infrastructure over time to provide managed long-term care supports statewide by 2027 for integrated care and home and community based services in order to meet the needs of aging beneficiaries and individuals at risk for institutionalization:

¹⁶ [A Multicomponent, Multi-Trigger Intervention to Enhance Asthma Control in High-Risk African American Children.](#)

¹⁷ [Care Transitions Between Hospitals and Skilled Nursing Facilities: Perspectives of Sending and Receiving Providers.](#)

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- **Community Transition Services/Nursing Facility Transition to a Home** to assist individuals who are transitioning from a licensed facility to a living arrangement in a private residence;
- **Nursing Facility Transition/Diversion to Assisted-Living Facility, such as Residential Care Facilities for Elderly and Adult Residential Facilities**, to support individuals who have a choice of residing in an assisted-living setting as an alternative to long-term placement in a nursing facility;
- **Personal Care and Homemaker Services** to assist individuals with activities of daily living such as bathing or feeding, and instrumental activities of daily living such as meal preparation or money management; and
- **Respite Services** (*for caregivers*) to provide coverage when caregivers of participants who require intermittent temporary supervision must be absent.

DHCS' research findings identified the following potential benefits of providing support for individuals transitioning from a nursing facility to a lower level of care and living successfully in a community setting:

- One literature review of Medicare-reimbursed hospitalization data found the average post-acute care fee-for-service cost was on average \$5,384 lower for individuals discharged from a hospital to home compared with those discharged to a SNF, as was the average total Medicare payment (\$4,514) within the first 60 days after admission, after adjusting for confounders, including comorbidities and Medicare spend.¹⁸
- Amedisys, a home health and hospice organization, found its home health plan of care initiative—which included the use of a care transition coordinator, engagement with the caregiver/family and physician, and medication management—decreased the 12-month average readmission rate from 17% to 12% in the last six months of the study across all participants referred by an on-site hospital care transition coordinator.¹⁹
- A study of outcomes and cost savings of participants in the Area Agency on Aging Personal Care and Homemaking programs in Michigan found that personal care services cost \$18,000 a year versus \$69,715 a year in nursing facilities and \$39,372 in annual assisted living costs. Further, individuals receiving personal care services were more likely to continue living in their home (76%) than those who did not (56%) and had lower mortality rates (352 per 1,000 for those receiving the intervention versus 477 per 1,000 for those who were not).

Support for individuals transitioning out of nursing facilities may reduce avoidable readmissions, improve care coordination, and enhance patient satisfaction/well-being.

¹⁸ [Patient Outcomes After Hospital Discharge to Home with Home Health Care vs to a Skilled Nursing Facility.](#)

¹⁹ [Improving Patient Outcomes with Better Care Transitions: The Role for Home Health.](#)

In addition, these services are aligned with and advance California's State Plan on Aging.²⁰

Medically Tailored Meals/Medically Supportive Food

Food insecurity and/or food that is not tailored to reflect an individual's medical condition can contribute to poor health outcomes and high health care expenditures. Using data from the National Health Interview Survey, researchers conducted a longitudinal retrospective cohort study and found average annualized health care expenditure was \$1,863 greater for individuals assessed as food insecure relative to those not found to be food insecure, after adjusting for age, gender, race/ethnicity, education, income, insurance, and residence area.²¹ These higher health care costs can be linked to a greater number of ED visits, hospitalizations, and days hospitalized.²²

This ILOS provides essential nutritional support to individuals facing food insecurity and/or requiring specialized diets due to their condition:

- **Medically Tailored Meals/Medically Supportive Food** to provide individuals with meals following discharge from a hospital or nursing home or medically tailored meals to meet the unique dietary needs of those with chronic diseases.

The literature shows the benefits of providing meal delivery services to individuals who have been recently discharged from a hospital and/or suffer from chronic conditions.

Key findings include the following:

- Reduction in ED visits
 - 22% aggregate reduction in ED visits across 13 Meals on Wheels programs, a nationwide community-based network providing seniors with meals and quick safety checks.²³
 - 58% reduction in ED visits for participants of Project Open Hand, a pilot program providing individuals with type 2 diabetes, HIV, and comorbidity provided with medically tailored meals.²⁴
- Reduction in inpatient hospitalizations
 - 23% reduction in inpatient hospitalizations across 13 Meals on Wheels programs.²⁵
 - 63% reduction in inpatient hospitalizations for individuals participating in Project Open Hand.²⁶

²⁰ [California State Plan on Aging 2017 - 2021.](#)

²¹ [Food Insecurity and Health Care Expenditures in the United States, 2011–2013.](#)

²² [Food Insecurity, Healthcare Utilization, and High Cost: A Longitudinal Cohort Study.](#)

²³ [A New Data Resource to Examine Meals on Wheels Clients' Health Care Utilization and Costs.](#)

²⁴ [How Medically Tailored Meals Can Improve Healthcare Outcomes and Lower Cost.](#)

²⁵ [A New Data Resource to Examine Meals on Wheels Clients' Health Care Utilization and Costs.](#)

²⁶ [How Medically Tailored Meals Can Improve Healthcare Outcomes and Lower Cost.](#)

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- Reduction in readmissions
 - 59% reduction in 30-day readmissions rate for individuals provided with medically tailored meals post-discharge from heart failure hospitalization.²⁷
 - 38% reduction in 30-day readmissions rate for high-risk Medicare patients enrolled in the Community-based Care Transition Program at the Maine Medical Center who were provided with delivered meals.²⁸
- Improved health outcomes and well-being
 - 17% reduction in patients with poor diabetes control (HbA1c > 9%) for patients provided diabetes-appropriate food through a pilot food bank diabetes intervention program.²⁹
 - 79% of individuals receiving daily home delivered meals who had fallen in the past, did not fall again during the study period, compared to 46% in the control group.³⁰

Conclusion

A growing recognition that social and economic drivers of health affect health outcomes, utilization, and costs in significant ways is prompting states, health plans, providers, and communities to consider how to address these factors in order to improve health in a sustainable, cost-effective manner. California took the lead in this area when it established the WPC Pilots in its Medi-Cal 2020 waiver. The research presented in this executive summary and supplemental compendium demonstrates that the DHCS preapproved ILOS are both cost-effective and medically appropriate when offered to a targeted group of Medicaid members.

²⁷ [Home-Delivered Meals Postdischarge From Heart Failure Hospitalization.](#)

²⁸ [Simply Delivered Meals: A Tale of Collaboration.](#)

²⁹ [A Pilot Food Bank Intervention Featuring Diabetes-Appropriate Food Improved Glycemic Control Among Clients In Three States.](#)

³⁰ [More Than a Meal: Results From a Pilot Randomized Control Trial of Home-Delivered Meal Programs.](#)