Health Care Market Oversight

Transaction 003
UnitedHealth Group – LHC Group
30-Day Review Summary Report

September 1, 2022

About this Report

This report summarizes analyses and findings from Oregon Health Authority's preliminary (30-day) review of the proposed material change transaction of UnitedHealth Group. It accompanies the Proposed Findings of Fact, Conclusions of Law, and Final Order ("Preliminary Review Order") issued by Oregon Health Authority on September 1, 2022. For legal requirements related to the proposed transaction, please reference the Preliminary Review Order: https://www.oregon.gov/oha/HPA/HP/HCMOPageDocs/2022-09-01-003-United-Health-LHC-Order.pdf.

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Executive Summary 3
Introduction 5
Proposed Transaction 6
Overview of Home Health & Hospice Care 12
OHA's Review 15
Findings 22
  Current Performance 36
  Potential Impacts of the Transaction 57
Conclusions......61
Acronyms, Abbreviations, & Glossary......63
Appendix A: Data Tables......65
Appendix B: Methodology......77
References......82

Executive Summary

The Health Care Market Oversight (HCMO) program reviews proposed heath care business deals to make sure they support statewide goals related to cost, equity, access, and quality. After completing a review, the Oregon Health Authority (OHA) issues a decision about whether a business deal, or transaction, involving a health care company should proceed. On August 2, 2022 OHA received a completed notice of material change transaction from UnitedHealth Group, describing plans to acquire LHC Group.

Proposed Transaction

UnitedHealth Group, through its Optum subsidiary, is seeking to acquire LHC Group, a national provider of home health and hospice services. UnitedHealth Group is one of the largest companies in the United States, operating the largest health insurance company in the country (UnitedHealthcare), as well as rapidly expanding health care provider, pharmacy, and technology services through Optum. LHC Group is a for-profit hospice and home health company that operates 953 service locations in 37 states. The Federal Trade Commission has requested additional information about the transaction from UnitedHealth Group and LHC Group.

OHA's Review

OHA conducted a 30-day preliminary review of the proposed transaction. During the review, OHA analyzed the current performance of LHC locations in Oregon and assessed the likely impact of the transaction across four domains: cost, access, quality, and equity. OHA held a 14-day public comment period but received no public comment submissions.

Key Findings

Cost

OHA does not anticipate that this transaction will have a significant impact on health care costs in Oregon. The transaction will not increase consolidation among providers of hospice or home health services in the state. UnitedHealth Group does not own or operate existing home health or hospice agencies in Oregon, and the transaction will not involve any increase in the combined entity's share of the market for licensed home health or hospice services in Oregon. Medicare is the dominant payer for hospice and home health services and has set rates for payments.

Access

OHA does not expect the ownership change of LHC to reduce access to care for hospice and home health services in Oregon. LHC does not have a dominant position in most geographic markets, and most service areas have alternative providers, except for northeast Oregon. UnitedHealth Group has stated that it plans to maintain the availability of services and will continue to accept patients that do not have UnitedHealthcare insurance. OHA will monitor access for patients with different types of insurance, particularly in northeast Oregon.

Quality

OHA has no significant concerns about quality impacts. UnitedHealth Group intends to implement value-based care models for LHC providers, which may result in better outcomes for patients. The Federal Trade Commission has requested information about this transaction related to staffing levels, and OHA will monitor the results of that investigation.

Equity

LHC patients generally reflect the demographics of the older adult residents in each hospice and home health agency's geographic service area. OHA identified broad equity concerns but does not have specific concerns about the impact of this transaction on health equity in Oregon. In follow-up reviews, OHA will monitor access to services for people in rural communities, outcomes for people of color, and equity-focused activities.

Conclusions and Decision

Based on preliminary review findings, **OHA approved this transaction on September 1, 2022**. (See Review Order 003 – UnitedHealth-LHC and Review Summary Report.) OHA made this decision based on the following criteria:

1. **The transaction is unlikely to substantially reduce access to affordable health care in Oregon.** The transaction will not impact the number of hospice or home health providers operating in Oregon and will not result in horizontal consolidation in the market for home health or hospice services. UnitedHealth Group has committed to continuing to maintain access to services and accepting patients with a variety of insurance types.
2. **The transaction is not likely to substantially alter the delivery of health care in Oregon.** In most regions, patients have options for home health and hospice services. UnitedHealth Group has stated intentions to expand value-based care models, which may result in better quality of care for patients.

OHA will monitor the impact of the transaction by conducting follow up analyses one year, two years, and five years after the business deal is completed. During these reviews, OHA will analyze the impact of the transaction on quality of care, access to care, affordability, and health equity, specifically following up on concerns or observations noted in the Key Findings. OHA will also assess whether UnitedHealth Group has kept to the commitments stated in its notice of transaction regarding cost, access, and quality of care.

Introduction

In 2021, the Oregon Legislature passed House Bill 2362, giving the Oregon Health Authority (OHA) the responsibility to review and decide whether some transactions involving health care entities should proceed. In March 2022, OHA launched the Health Care Market Oversight program (HCMO). This program reviews proposed health care transactions such as mergers, acquisitions, and affiliations to ensure they support statewide goals related to cost, equity, access, and quality.

The HCMO program is governed by Oregon Revised Statute 415.500 et seq. and Oregon Administrative Rules 409-070-0000 through -0085.

In the authorizing statute, the Oregon Legislature specified what types of proposed transactions are subject to review and the criteria OHA must use when analyzing a given proposed transaction. The Oregon Legislature also authorized OHA to decide the outcome of a proposed transaction. After analyzing a proposed transaction, OHA may approve, approve with conditions, or reject it.

The HCMO program fits within OHA's broader mission of ensuring all people and communities can achieve optimum physical, mental, and social well-being through partnerships, prevention, and access to quality, affordable health care.

On August 2, 2022, OHA confirmed receipt of a complete notice of material change transaction from UnitedHealth Group outlining the intent of UnitedHealth Group to acquire LHC Group.

The HCMO program staff reviewed the notice of material change transaction and determined, based on the included information, that the transaction is subject to review. The entities party to the transaction meet the revenue thresholds specified in Oregon Revised Statute 409-070-0015 and the proposed transaction is otherwise covered by the program in accordance with Oregon Revised Statute 409-070-0010. After receiving a complete notice of material change transaction, HCMO program staff began a preliminary review of the proposed transaction. Preliminary reviews must be completed within 30 days of OHA's confirmation of receipt of a complete notice. This report describes the transaction, OHA's approach to the review, its findings, and OHA's conclusions based on these findings.

Proposed Transaction

On August 2, 2022, OHA received a complete Notice of Material Change Transaction ("notice") from UnitedHealth Group, Inc. ("UHG" or "Entity"). The notice pertained to a transaction whereby UnitedHealth Group would acquire LHC Group, Inc ("LHC").

Entities Involved

The main entities involved in this transaction are UnitedHealth Group, Inc. (the buyer) and LHC Group, Inc. (the company being acquired).

UnitedHealth Group

UHG is a for-profit, publicly traded health care company based in Minnetonka, Minnesota and incorporated in Delaware. UHG is currently one of the largest companies in the United States, with 350,000 employees and $288 billion in revenue in 2021.[1] In the past 10 years, UHG has purchased more than 35 health care companies.[2] UHG offers a range of products and services through its two distinct business platforms: UnitedHealthcare and Optum.

UnitedHealthcare

UnitedHealthcare is the largest health insurance company in the United States.[3] UnitedHealthcare offers group and individual commercial insurance plans and Medicare Advantage plans. UnitedHealthcare participates in Medicaid, Children's Health Insurance Plan (CHIP), and/or Dual-Eligible Special Needs Plans (D-SNP) in 42 states and is a leading health plan for adults dually eligible for Medicaid and Medicare. (Oregon is one of 8 states where UnitedHealthcare does not participate in Medicaid.[4])

In Oregon, UnitedHealthcare offers commercial and Medicare Advantage plans, and has a sizable market share. The table below shows the number of people enrolled in UnitedHealthcare plans by insurance market as of Q1 2022 and UnitedHealthcare's percentage of total enrollees in each market.[5]

Table 1: Oregon enrollment in UnitedHealthcare plans as of Q1 2022

Market	Enrollment Count	Percent of Oregon Enrollment	Rank
Commercial	43,594	4%	6th
Self-insured	96,698	9%	2nd
Medicare Advantage	57,475	6%	3rd
Medicare Supplemental	60,558	7%	1st

Optum

Optum provides technology solutions, health care services, and pharmacy services. Optum's 2021 revenue was $155.6 billion.[6] Optum operates three business lines: Optum Health, Optum Insight, and Optum Rx.

Optum Health

Optum Health is UHG's health care provider business.

Optum Health provides care directly through local medical groups and ambulatory care systems, including primary, specialty, urgent and surgical care to 100 million consumers. This business also provides products and services that engage people in their health and help manage chronic, complex and behavioral health needs. Customers include employers, health systems, government and health plans.[7]

Optum Health providers contract with multiple health insurers, not just UnitedHealthcare. Optum Health's 2021 revenue was $54 billion. Optum Health operates physician groups, ambulatory surgical centers, and other providers in 15 states through more than 53,000 physicians.[8] Optum Health owns several provider organizations that serve patients in Oregon, including:

- **InterHospital Physicians Association dba Portland IPA**, an independent practice association representing approximately 3,400 primary care and specialty care physicians in the Portland metropolitan area.[9]
- **Oregon Healthcare Resources dba Oregon Medical Group**, a group of primary care providers, pediatricians, and specialists with clinics in Eugene, Springfield, and Lane County.[10]
- **Optum Care Portland dba GreenField Health System,** a membership-based primary care practice with two clinics in Portland.
- **Landmark Health**, a nationwide provider of in-home care for seniors offering services in the Tri-County area.[11]
- **Optum HouseCalls,** Optum's multi-state program offering annual in-home clinical assessments for health plan members.

Optum previously owned a provider of hospice services, Evercare Hospice and Palliative Care, which operated serval locations in Oregon. Optum purchased Evercare in 2014 but subsequently sold its Palliative and Hospice Care business to Compassus in 2016.[12] [13] Optum does not currently own or control any home health or hospice agencies operating in Oregon. Optum providers in Oregon are not licensed to provide hospice and home health services.

Optum Insight

Optum Insight focuses on technology and data solutions.

Optum Insight provides data, analytics, research, consulting, technology and managed services solutions to hospitals, physicians, health plans, governments and life sciences companies. This business helps customers reduce administrative costs, meet compliance mandates, improve clinical performance and transform operations.[14]

Optum Insight had 2021 revenue of $12 billion.

Optum Rx

Optum Rx operates a pharmacy benefits manager (PBM), retail mail pharmacy (Optum Specialty Pharmacy), and infusion pharmacies.

Optum Rx offers a full spectrum of pharmacy care services that are making drugs more affordable and creating a better experience for consumers, filling roughly 1.3 billion adjusted scripts annually. Optum Rx solutions are rooted in evidence-based clinical guidelines. This business makes health care more affordable by helping people find the medications they need at the lowest price, while helping benefit sponsors pay the lowest net cost.[15]

Optum Rx's 2021 revenue was $91 billion. In Oregon, Optum Rx operates an infusion pharmacy in Bend.

UHG/Optum Acquisitions

UHG and Optum have been involved in many health care mergers, acquisitions, and other transactions in the past five years. The table below includes a partial list of larger transactions since 2017, including recent deals yet to be finalized, and does not include many smaller transactions.

Table 2: Selected UnitedHealth Group/Optum acquisitions, 2017-2022

Company Name	Company Type	Year	Amount
Change Healthcare	Health technology	2022	$13 billion
LHC Group	Home health	2022	$5.4 billion
Refresh Mental Health	Mental health provider	2022	$1 billion
Kelsey-Sebold Clinic[16]	Provider group	2022	Undisclosed
Atrius Health[17]	Independent physician org	2021	$236 million
Landmark Health[18]	In-home medical group	2021	~ $3.5 billion
NaviHealth[19]	Post-acute care management technology	2020	$1 billion
AbleTo[20]	Virtual behavioral health	2020	$470 million
Diplomat[21]	Specialty and infusion pharmacy	2019	$300 million
DaVita Medical Group	Medical group	2019	$4.9 million
Advisory Board Company[22]	Research, technology, consulting	2017	$1.3 billion
Surgical Care Affiliates	Ambulatory surgical centers	2017	$2.3 billion

UHG's acquisition of Change Healthcare and LHC Group are both currently under investigation by federal antitrust agencies. The U.S. Justice Department has filed a suit to block the Change Healthcare deal.[23] The case was undergoing trial at the time of writing.[24] The Federal Trade Commission (FTC) is currently reviewing UHG's acquisition of LHC and has requested more information and documents regarding the transaction. The parties are working cooperatively with the FTC.[25]

UHG's acquisitions are part of an industry-wide trend of commercial insurers acquiring provider organizations. Other large insurers such as Aetna and Humana have also invested heavily in care delivery in recent years. According to industry analysts, the trend has been spurred in part by the growing Medicare Advantage market and medical loss ratio (MLR) requirements introduced through the Affordable Care Act (ACA).[26] Under these MLR requirements, Medicare Advantage health plans must spend 80-85% of premium revenues on quality improvement and health care services, which limits the health plan's profits. Health plans that own provider organizations may record profits from these businesses as costs to the Medicare Advantage business, effectively circumventing MLR requirements and boosting the parent company's profits. A recent analysis by USC-Brookings Schaeffer Initiative for Health Policy concluded:

"[…] for health plans serving most [Medicare Advantage] beneficiaries, related businesses offer an opportunity for pricing practices within the parent firm umbrella that can shield profits from the terms of MLR regulations." [27]

Insurers also see ownership of provider organizations as strategy for increasing their health plan enrollment. UHG's CEO reportedly commented to investors that Optum was patients' "front door" to the UnitedHealthcare brand.[28]

LHC Group

Founded in 1994, LHC is a publicly traded, for-profit company with 30,000 employees nationwide. LHC specializes in providing post-acute health care services through a nationwide network of nursing agencies, hospice agencies, community-based services agencies, and long-term acute care hospitals. As of June 30, 2022, LHC operates 953 service locations in 37 states through its subsidiaries, joint ventures, controlled affiliates, and management agreements. The company has five business segments: (1) home health services, (2) hospice services, (3) home and community-based services, (4) facility-based services primarily offered through long-term acute care hospitals, and (5) healthcare innovations services ("HCI"). [29]

Home health services is LHC's largest segment based on revenues. In 2021, LHC's annual net service revenue was $2.2 billion, of which home health accounted for $1.55 billion.[30] In comparison, revenues for the second largest segment, hospice services, were approximately one fifth of that at $311 million. In 2019, LHC reportedly held 4.43% of the national home health market, ranking in third place behind Kindred Healthcare (now owned by Humana) and Amedisys.[31] LHC partners with 435 health systems nationwide.[32]

LHC Acquisitions

In 2021, LHC Group acquired Brookdale Health Care Services/HCA.[33] This transaction included 23 home health, 11 hospice, and 13 therapy locations in 22 states, including one location in Oregon. Brookdale's home health business had previously been acquired by HCA earlier in 2021. In 2018, LHC Group merged with Almost Family, a home health company with locations in Oregon.[34]

Oregon Operations

LHC operates five home health agencies and five hospice agency locations in Oregon. LHC home health agencies in Oregon are:

- Assured Home Health, 925 Commercial St SE, Suite 310, Salem OR 97302
- Assured Home Health, 9320 SW Barbur Blvd, Suite 350, Portland OR 97219
- Brookdale Home Health Portland, 29757 SW Boones Ferry Rd, Wilsonville, OR 97070
- Three Rivers HomeCare, 555 NE F Street, Suite B, Grants Pass OR 97526
- Three Rivers HomeCare (doing business as Southern Oregon Home Health), 1340 Biddle Road, Suite 101, Medford OR 97504.

LHC hospice agencies in Oregon are:

- Brookdale Hospice, 29757 SW Boones Ferry Road, Suite B, Wilsonville OR 97070
- Heart 'n Home Hospice and Palliative Care, 3370 10th Street, Suite E, Baker City OR 97814
- Heart 'n Home Hospice and Palliative Care, 2104 Cove Avenue, Suite A, La Grande OR 97850
- Heart 'n Home Hospice and Palliative Care, 51681 Huntington Road, La Pine OR 97739

- Heart ‘n Home Hospice and Palliative Care, 745 NW Mt. Washington Dr, Suite 205, Bend OR 97703.

Transaction Terms

On March 28, 2022, LHC entered into an Agreement and Plan of Merger (“Merger Agreement”) with UHG and Lightning Merger Sub Inc. (“Merger Sub”), a wholly owned subsidiary of UHG. Under the Merger Agreement, Merger Sub would be merged with and into LHC, LHC will be the surviving corporation in the merger, and LHC would become a wholly owned subsidiary of UHG. Transaction terms are summarized as follows:

- At the Effective Time (as defined in the Merger Agreement), each share of LHC common stock issued and outstanding immediately prior to the Effective Time (excluding unvested restricted stock awards, excluded shares, and dissenting shares) will be automatically converted into the right to receive an amount in cash, without interest and subject to any applicable withholding taxes.
- UHG will pay a cash amount equal to $170.00 per share of this LHC common stock for a combined total of approximately $5.4 billion.
- Upon completion of the merger, LHC leadership will continue as part of Optum Health, UHG’s health care provider business.

LHC shareholders voted in favor of the transaction in June 2022.[35]

Rationale for the Transaction

In a press release announcing the transaction, UHG stated that the companies are combining to “further strengthen their shared ability to advance value-based care, especially in the comfort of a patient’s own home.”[36] Optum Health’s CEO cited LHC’s “sophisticated care coordination capabilities,” maintaining that the transaction would “greatly enhance the reach of Optum’s value-based capabilities along the full continuum of care.”[37]

Value-based care refers to how a service is paid for by a health insurance company. Traditionally, health care is paid on a per-service basis (e.g., for a given procedure, the health insurance company pays the doctor a set dollar amount. Value-based care is different because it could include quality metrics or health outcomes as a factor in payment amount. Some value-based care allows for more flexibility and incentives for health care providers to deliver patient-centered, whole person care.

The notice describes the objectives of the proposed transaction as follows:

> *“The combination of LHC Group with UnitedHealth Group's subsidiary, Optum Health, which works with over 100 health plans, unites two organizations dedicated to providing compassionate and comprehensive care to patients and their families. LHC Group's history of high-quality home and community-based care matched with Optum's extensive value-based care experience and resources will accelerate the combined companies' ability to deliver integrated care, improving outcomes and patient experiences.”*

Payers and providers in value-based care contracts are increasingly looking to move care out of more costly settings such as hospitals and other acute care facilities into the outpatient and home setting. Because Medicare Advantage plans are paid a set amount per enrollee (rather than a per-service rate), they have strong incentives to manage and coordinate care for their members to improve cost efficiency while maintaining quality. Ownership of provider organizations, such as home health and hospice agencies, that primarily serve people over 65 (and are therefore eligible

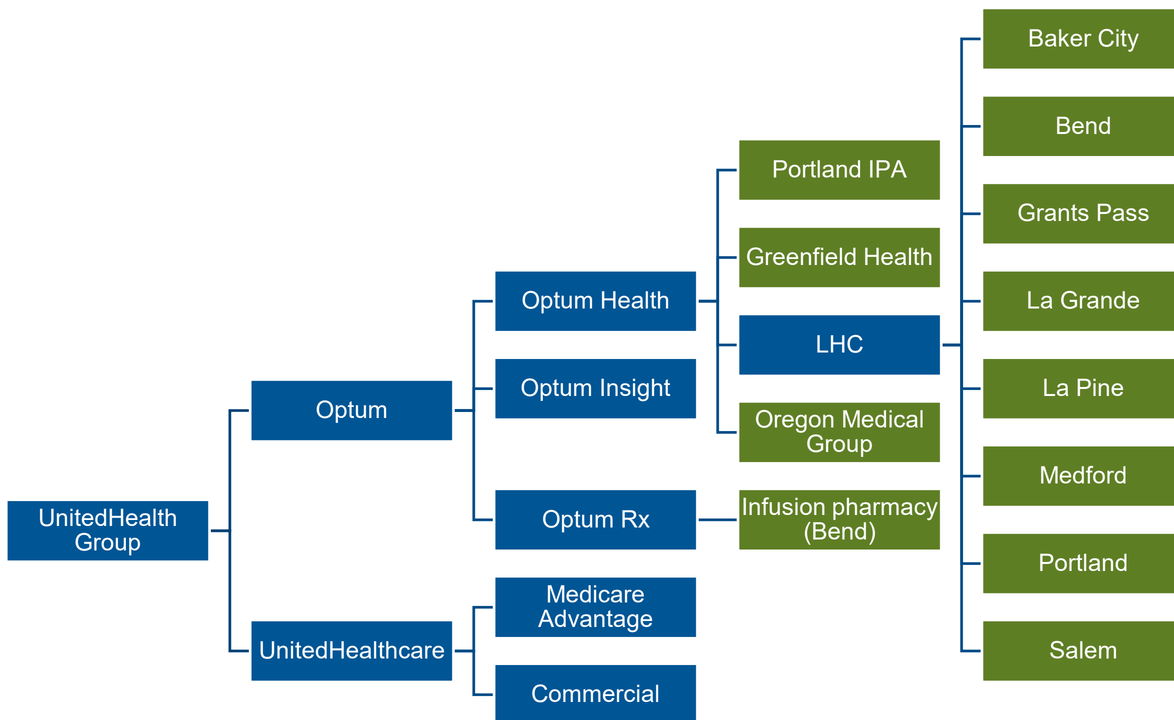
for Medicare) facilitates coordination of care across providers and management of chronic conditions. Industry analysts also anticipate that ownership of LHC will help UHG grow its Medicare Advantage enrollment.[38]

The transaction continues UHG's expansion into care delivery and follows Humana's recent acquisition of Kindred at Home, another leading national provider of home health services.[39] Interest and investment in home-based care is growing as the U.S. population ages and demand for care increases. The trend toward home-based care has been further accelerated by the COVID-19 pandemic.[40]

Post-Transaction Plans

After the transaction, LHC Group will be integrated into Optum Health, a wholly owned subsidiary of UnitedHealth Group. LHC leadership will continue as part of Optum Health.

The high-level organizational chart below demonstrates where **Oregon** entities sit within UnitedHealth Group's **national** structure post-transaction. This diagram is not intended to represent all UHG entities.



Optum anticipates expanding access to LHC services to Optum Health patients. Optum's CEO reportedly made the following remarks in describing the acquisition:

> *Now, we'll be able to take the skills and offering of LHC Group and offer them to Optum Health patients much, much more broadly. […] We have over 4 million patients in value-based arrangements, and we're very excited to be able to offer the services of LHC Group to these individuals.*[41]

In response to a follow-up question from OHA, UHG confirmed that it does not have any plans to limit LHC's services to UnitedHealthcare members or to give UnitedHealthcare preferential access to LHC Group's services.

Overview of Home Health & Hospice Care

What is home health?

Home health includes a range of services to treat an illness, injury, or medical condition that are provided in a patient's place of residence. Services include skilled nursing care (such as medication management, pain management, injections or intravenous treatments, wound care and post-operative care), physical therapy, occupational therapy, speech therapy, and non-medical services such as social services or assistance with daily living.

Eligibility requirements for home health vary depending on insurance type. For Medicare, enrollees must need intermittent skilled care for an illness or injury and be "homebound," meaning they cannot leave their residence without considerable help. Patients in assisted living facilities (e.g., group homes and personal care homes) also qualify for home health.

Home health & skilled nursing

The term "home health" is often used interchangeably with "skilled nursing care." While both offer similar services delivered by similar providers, there are some important distinctions:

Home health refers to medical and non-medical care provided in a person's home (or place of residence) to treat an illness, medical condition, or injury. Services may aim to improve or maintain the patient's condition, maintain functionality, build self-sufficiency, or slow decline.

Skilled nursing refers to skilled medical care (for example, intravenous injections) provided by licensed health professionals, such as doctors, registered nurses, or physical therapists. Services may be provided a hospital, skilled nursing facility, nursing home, or in the home (in which case they are also considered "home health" care).

Who provides home health care?

The Center for Medicare and Medicaid Services (CMS) certifies home health agencies for all states and territories. Home health care services are provided by licensed medical professionals such as nurses, doctors, and technicians.

How do payments work for home health care?

Medicare currently pays for most home health care services nationwide, and there are two options for individuals eligible for Medicare: Original Medicare and Medicare Advantage. In 2022, 55% of individuals in Oregon eligible for Medicare were enrolled in a Medicare Advantage plan.[42] Medicare Advantage plans pay for home health care services differently than Original Medicare.

For patients with Original Medicare, home health agencies receive payment from the federal government. To obtain payment from Original Medicare, home health agencies must submit a certification by a physician or other clinician that the patient is eligible for home health care along with an assessment of the patient's condition and service needs. The certification is valid for 60 days, after which another assessment is required. There is no limit to the number of continuous 60-day certifications for home health eligible patients.

Original Medicare currently reimburses home health providers a predetermined national base amount for each 30-day period of care (reduced from 60 days as of January 2020). The base rate for a 30-day period of care, updated annually, was set to $2,013 in 2022.[43] Payments are adjusted based on patient severity (case mix) and geographic differences in wages. (Prior to 2020, the number of in-person therapy visits provided during the period of care was also factored into the

payment adjustment.) Agencies may receive extra ("outlier") payment for patients requiring unusually costly care.

Original Medicare does not require copayments or payments towards a deductible for home health services. Medicare Advantage plans, however, may require copayments depending on the plan.

For patients with Medicare Advantage, home health agencies receive payment from the applicable Medicare Advantage plan, which is a commercial insurer. Unlike Original Medicare, home health providers negotiate with Medicare Advantage plans to determine payment amounts. These payment amounts, however, are constrained by the fact that Medicare Advantage plans receive funding from the federal government at predetermined rates.

What is hospice?

Hospice services focus on comfort and quality of life for people with serious medical conditions who are approaching the end of their lives. Rather than attempting to cure a medical condition or slow its progress, hospice care aims to reduce pain and suffering and provide comfort and support patients and their caregivers.

People covered by Medicare who have a terminal illness and a life expectancy of six months or less are eligible for Medicare's hospice benefit. When a patient opts for hospice care, they stop all curative treatment for their terminal illness and instead receive care intended to relieve pain and provide comfort and support as they near end of life.

Hospice care encompasses a range of supportive services, including physician and nursing services, pain management, physical or occupational therapy, medical social services, spiritual and grief counseling, and home maintenance support. Services align with a plan of care that is designed collaboratively with the patient and caregiver(s).

Hospice services can be provided in a person's home, in other care settings (e.g., skilled nursing or assisted living facilities), in an inpatient hospital, or in a specially designated inpatient hospice facility. As a patient's illness progresses, they may need to transition to or from any of these settings, but the hospice staff can continue to provide supportive care.

Hospice & palliative care

The term "hospice" is often used interchangeably with "palliative care." While both offer similar services delivered by similar providers, there are some important distinctions:

Hospice care focuses on pain relief and comfort at the end of life. Hospice is provided for patients who forgo attempts to cure illness and who are expected to have six months or less to live. Hospice care can take place in home or at a facility.

Palliative care focuses on pain relief and comfort, regardless of life expectancy. Patients may receive palliative care along with treatment intended to cure serious illness. Palliative care can take place in home or at other care locations.

An episode of hospice care begins when a patient elects hospice care and ends when the patient dies, is discharged to another kind of care facility, or opts out of hospice care.

Palliative care is billed and delivered similarly to hospice care and is often offered by licensed hospice facilities but is not limited to patients with a 6-month life expectancy.

Who provides hospice care?

Hospice care engages an interdisciplinary team to meet the needs of patients, including doctors, nurses, social workers, counselors, hospice aides, and pastoral care providers.

Hospice agencies must meet specific requirements to receive Original Medicare payments from the federal government, as outlined in CMS regulations. The State of Oregon further requires hospice agencies to be licensed under ORS 443.850-443.869.

There are separate licensing and Medicare certification processes for agencies that provide home health care, but some hospice agencies will obtain both licenses and offer both home health and hospice services, given the overlap in types of care and required staff qualifications.

How do payments work for hospice services?

Each year the Centers for Medicare and Medicaid Services (CMS) sets reimbursement rates for hospice services for Original Medicare recipients. Rates are set nationally based on the intensity of services provided and adjusted to account for regional differences in staffing costs. CMS publishes their annual wage index adjustments for rural and urban regions across the country.[44]

Original Medicare pays a daily rate for each patient enrolled in hospice care. CMS also sets a per-person cap on annual payments; the proposed cap for fiscal year 2023 is $32,142. The daily rate varies based on level of care and services provided:

Table 3: CMS daily rates for hospice services

Level of Care	Payment*	Requirements
Routine Home Care	First 60 days (high RHC rate): $203 per day Subsequent days (low RHC rate): $161 per day	Paid each day patient is in routine hospice care, regardless of service delivery
Continuous Home Care	$61 per hour, maximum of $1,463 per day	Provided only in crisis to keep patient at home; must deliver 8 hours of services each 24-hour period
Inpatient Respite Care	$474 per day	Paid a maximum of consecutive 5 days, additional days paid at RHC rate; patient must be at a certified inpatient hospice facility, hospital, or skilled nursing facility
General Inpatient Care	$1,068 per day	Patient must receive care at a certified inpatient hospice facility, hospital, or skilled nursing facility

* FY2022 CMS Hospice Payment rates[45]

With Original Medicare, patients pay a coinsurance (maximum of $5) for drugs received in the home and 5% of inpatient respite care days (taken when caregivers require a rest from ongoing home care).

CMS is currently testing a value-based payment model for hospice services provided to Medicare Advantage beneficiaries.[46]

Patients without Medicare can have hospice services covered by Oregon’s Medicaid program or commercial health insurance. Benefit coverage for the patient and reimbursement rates to providers may vary by commercial plan but are likely indexed to the Medicare rate.

OHA's Review

OHA performed a preliminary review of the proposed transaction to assess its potential impact on Oregon's health care delivery system. The review explored impacts in four areas (domains): cost, access, quality, and equity. OHA's analysis followed the guidelines and methods set out in the HCMO Analytic Framework published January 31, 2022.[47] The framework is grounded in the goals, standards and criteria for transaction review and approval outlined in OAR 409-070-0000 through OAR 409-070-0085.

Analytic Approach

OHA's analysis assessed the current performance of LHC's home health and hospice agencies in each domain (cost, access, quality, and equity) and the likely impact of the proposed transaction on performance. OHA assessed key outcomes in each domain by analyzing relevant performance measures calculated from administrative claims and enrollment data or obtained from publicly available sources. Many of these analyses relied on identifying the LHC agencies in administrative claims data, defining the geographic service areas of LHC agencies, and identifying similar entities within each service area for comparison.

OHA was unable to individually identify all the LHC home health and hospice agency locations in administrative data and publicly available data sources. Several of the home health and hospice agencies operate under the same national provider identifier (NPI), state license, and CMS certification number (CCN), challenging OHA's ability to identify services rendered at the individual locations. As a result, OHA grouped LHC locations together when calculating performance measures and defining geographic service areas. Table 4 summarizes the groupings used for analysis.

Table 4: Grouping of LHC Home Health and Hospice Agencies in Oregon

Type	Agency Name, Location	Agency Group	Service Area
Home Health	Assured Home Health, Salem	Assured Home Health	Portland-Salem
	Assured Home Health, Portland		
	Brookdale Home Health Portland, Wilsonville	Brookdale Home Health	
	Three Rivers Home Care, Grants Pass	Three Rivers Home Care	Grants Pass-Medford
	Three Rivers Home Care, Medford (Southern Oregon Home Health)		
Hospice	Brookdale Hospice, Wilsonville	N/A*	N/A*
	Heart 'n Home Hospice & Palliative Care, Baker City	Heart 'n Home Baker City-La Grande	Baker City-La Grande
	Heart 'n Home Hospice & Palliative Care, La Grande		
	Heart 'n Home Hospice & Palliative Care, La Pine	Heart 'n Home Bend-La Pine	Bend-La Pine
	Heart 'n Home Hospice & Palliative Care, Bend		

**APAC data from Brookdale Hospice yielded too few episodes (43 in total) to conduct a complete analysis. Therefore, this report does not include any claims-based analysis for hospice services from this hospice agency.*

Primary Service Areas

OHA defined geographic service areas for the LHC agency groups using the primary service area (PSA) approach described in HCMO's Analytic Framework. This involved identifying the fewest number of contiguous zip codes of patient residence around the provider location(s) that accounted for 75% of the agency group's total episodes of care.

For this analysis, OHA used administrative claims and enrollment data submitted by insurance carriers operating in Oregon for the years 2017 - 2019, the period for which most recent and complete data was available. See Appendix B: Methodology for details on OHA's methodology and the All Payer All Claims (APAC) program.

PSAs were used for calculating market shares, to identify comparison entities, and to define regional populations for access, quality and equity analyses.

Comparison Entities

Performance of LHC hospice and home health agencies on measures in all four domains was compared to similar providers located within their respective PSAs. All providers in these comparison groups were also licensed in Oregon, certified with CMS, and delivered home health or hospice services at the same level of care as the LHC agencies.

For the Baker City-La Grande region, no other hospice agencies are located within the zip codes of Heart 'n Home's PSA, so performance of this agency was compared to the closest hospice agencies located outside the PSA within 115 miles, which includes several agencies located just over the borders of Idaho and Washington.

Market Shares & Competition

Prices and spending for health care services, the quality of services, as well as patients' ability to choose between providers for home health and hospice services, may be affected by the degree of competition between providers offering similar services within a geographic area. To assess competition, OHA calculated the "market share" (relative size) of each provider within the PSA. Market shares were calculated as the percentage of total home health or hospice episodes provided to PSA residents by licensed agencies physically located within the zip codes of the PSA. OHA also computed a composite measure of competition known as the Herfindahl-Hirschman Index (HHI). The HHI accounts for both the number of individual providers and their market shares, capturing overall "concentration" in the market. (See Appendix B for more information on OHA's methodology for calculating market shares and how market shares relate to the HHI.)

Domain Outcomes and Measures

The subsections below describe outcomes and measures under each domain.

Cost

Analyses under the cost domain explore how the transaction may affect the prices consumers and payers (e.g., insurers, employers, and governments) pay for health care services in Oregon and overall spending on health care services for Oregonians.

OHA used claims data for the period beginning January 1, 2017, and ending on December 31, 2019, to analyze payment per month of hospice or home health care. Analogous to a per member per month payment for hospice or home health, this is the total paid amount for episodes initiated during the year divided by the number of months provided during those episodes (total length of stay in days divided by 12). This measure seeks to normalize payments across providers that serve different volumes of patients and approximate other standard spending indicators. Standardized payment measures for hospice and home health care are not readily available (CMS data collection focuses on clinical quality measures and patient and caregiver satisfaction survey data).

The table below summarizes the measures OHA used to assess market shares, HHI, and spending. Spending measures were calculated relative to other licensed agencies located in the service area, except for Heart 'n Home Hospice & Palliative Care in Baker City-La Grande, for which the closest hospice agencies within a 115-mile radius served as the comparison group.

Payments for Hospice Care

Analysis of potential price impacts for hospice care is unique in that most services are paid for by Original Medicare, which sets the daily reimbursement rate for each patient enrolled in hospice based on the level of care provided. Annual reimbursement for a given patient is capped and patient out-of-pocket costs for hospice care are limited. Cost differences can vary by region primarily due to the wage index adjustment that Original Medicare applies to hospice payments. Consolidation in the hospice care market does not have the ability to impact pricing as it can in other health care markets less heavily dominated by regulated government payers, but clinical and billing practices at individual agencies can result in variations in costs for hospice services.

Each of these measures was calculated with three levels of comparison: Oregon statewide, Oregon LHC location groupings, and their respective PSAs.

Table 5: Cost Outcomes and Measures

Outcome	Assessment Method/Measure	Data
Market shares & HHI*	• Provider's share of total of hospice and home health episodes • HHI calculated as the squared sum of market shares	APAC claims, 2017-2019
Spending	• Median payment per month of hospice or home health care	APAC claims, 2017-2019
Payer mix	• Number of home health and hospice episodes by payer	APAC claims, 2017-2019

* *Market share and HHI findings are reported separately in the Market Shares & Competition section.*

Access

Analyses under the access domain explore how the transaction may affect the range of services available in the market, types of providers and provider-patient ratios, characteristics of the patient population, and any barriers to access, including transportation burdens and limitations by insurance type.

Consolidation and change of ownership in the health care market can impact the range and type of services offered in the service area. Changes in population demographics can alter demand for some services and shifts in the labor market can impact availability of specific provider types,

potentially affecting the financial viability and profitability of offering certain health care services in a region.

Access analyses therefore build on the findings in the cost domain around competition and assess the potential impact of the transaction on availability of services within a regional market.

Demographic information for patients with hospice and home health claims is only available for individuals with corresponding enrollment data (see Sources of Information section below).

Table 6: Access Outcomes and Measures

Outcome	Assessment Method/Measure	Data
Availability of services	• Number and type of hospice and home health episodes annually for Oregon LHC locations compared to respective service areas • Average and median length of stay in home health and hospice care • Median visits and hours of skilled nursing services for home health patients	APAC 2017-2019 claims; CMS data
	• Average daily census for hospice agencies • Proportion of hospice episodes by terminal illness type • Hospice days billed by level of care	CMS data; APAC 2017-2019 claims
Patient demographics*	• Number of home health and hospice patients by race, sex and age	APAC enrollment 2017-2019

** Patient demographics are reported in the Primary Service Areas section.*

Quality

Analyses in the quality domain explore how the transaction may affect patient outcomes and the experience of care. Consolidations and ownership changes in health care can impact clinical practice, including staffing ratios, time spent or number of visits with patients, timeliness of care, and the patient's experience of care, all of which can have adverse effects on patient outcomes.

Administrative data can elucidate some indicators of quality, but many quality indicators rely on other data sources, including clinical data from providers' electronic health records (EHR) or well-validated surveys administered to patients and caregivers. OHA utilized publicly available hospice and home health quality data from the Centers for Medicare and Medicaid Services (CMS) but recognizes the limitations of this data in assessing performance by specific hospice location or patient characteristics. (See the Sources of Information section below for further details on the CMS data.)

Table 7: Quality Outcomes and Measures

Outcome	Assessment Method/Measure	Data
Clinical processes	• Hospice Item Set (HIS) data on clinical process measures • Hospice Visits When Death Is Imminent	Clinical and claims data submitted to and reported by CMS
Patient outcomes	• Hospitalization rate while receiving home health services • ER admission rate while receiving home health services • Home health patient improvement measures • Home health team measures • CMS Home health Star quality rating	Clinical and claims data submitted to and reported by CMS
Patient experience	• Caregiver evaluation of home health and hospice staff and patient experience from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey	CAHPS Home Health and Hospice Survey results submitted to and reported by CMS

Equity

Analyses in the equity domain explore how the transaction may affect the entity's ability to assess for and equitably meet the needs of the population it serves. Consolidations and ownership changes in health care can disproportionately impact availability of health services for populations who already experience health inequities, including people of color, low-income communities, and residents of rural areas. Policy changes regarding payer mix can limit access for patients who are uninsured, underinsured, or insured by government programs like Medicaid and Medicare that reimburse for services at lower rates. Less profitable facilities in socioeconomically underserved areas are more likely to be shuttered, severing important provider-patient relationships and forcing patients to travel farther to seek care with new providers less connected to their community.

Equity-focused analysis considers the entity's ability to serve a patient population that is representative of the community in which they operate. OHA also looks for evidence that the entity is actively identifying and addressing inequities in access to or quality of care across their patient population, through community engagement or provision of equity-enhancing services (e.g., culturally- or linguistically appropriate services).

Comparison of patient population demographic characteristics is possible through administrative enrollment data, albeit with serious limitations in data completeness. CMS data on quality and patient experience is not publicly available by demographic characteristics. Information about health care entities' equity-related efforts is not readily available in administrative data and is limited to publicly available sources. Additional information was not requested of the entity for this preliminary review.

Sources of Information

In addition to the materials provided as part of the notice, OHA's analysis was informed by administrative claims data, other publicly available data, public comments on the proposed transaction, and other sources.

Data

All Payer All Claims (APAC) Database

OHA analyzed administrative claims and enrollment data from Oregon's All Payer All Claims (APAC) database. Since 2012, the APAC program has been gathering claims and enrollment data from commercial insurance carriers and government agencies offering Medicare and Medicaid coverage to at least 5,000 people residing in Oregon. Some smaller insurance companies and self-insured organizations not required to report data to government agencies are exempt, but more than 90% of the Oregon population is represented in the database. Reported data includes claims data for medical, dental and pharmacy encounters, along with demographic information such as patients' residence (zip code), age, race, ethnicity, sex, and languages spoken. For race, ethnicity and language in particular, data is unavailable or unreported for a large percentage of people (between 50% and 70%), but completeness of data varies by insurance type. Additionally, race and ethnicity data in APAC is not consistent with OHA's Race, Ethnicity, Language and Disability (REALD) standards and therefore does not reflect the diversity in race, ethnicity, and language needed to accurately identify health inequities.

Data is reported each quarter, reflecting enrollment and services delivered in the prior 12 months. Given the time it takes to fully process all claims, it is understood that claims from the last quarter of the reporting may not be complete. As the reporting period shifts forward three months for every submission, each quarter of data is ultimately submitted four times, ensuring that all claims are fully processed, and any deletions or corrections are captured. Given this allowance for claims lag and processing, a calendar year's data is not considered 'complete' until the October submission of data the following calendar year. So, 2021 APAC data would not be complete until October 2022. OHA typically receives an annual submission of enrollment and claims data from CMS that is also lagged for completeness. The 2020 CMS data was expected in spring 2022 but has not yet been received. Given the significance of Medicare as a payer for hospice services, analyses looked at APAC data for services received in the 2017 – 2019 period, the most recent three years of available data that included complete Medicare, Medicaid, and commercial data.

OHA counted all patients who received home health or hospice care from 2017 to 2019 to determine the patient population of Oregon LHC locations and the broader patient population served in their respective geographic service areas. To identify total patients, OHA used claims information for all individuals who received home health or hospice care. 31% of individuals with claims for hospice care do not have corresponding enrollment data in APAC and are therefore missing demographic and residence information. These individuals represent a significant portion of patient and service volume in hospice care, so their claims data were included in access and cost analyses. For analyses requiring demographic or residence information, OHA only included individuals for whom enrollment data was available.

CMS Quality Reporting

As the payer for the majority of hospice and home health episodes nationally and in Oregon, CMS is an important source of information about hospice and home health agencies and services. Certified hospice agencies are required to report data to the Hospice Quality Reporting Program, which looks at three key data sources to determine quality of hospice care:[48]

- Hospice Item Set: includes clinical information for all admissions into and discharges from hospice care during the reporting period; data supports performance evaluation on process and clinical measures
- CAHPS Hospice Survey: this hospice-specific survey is administered monthly from a third-party vendor to caregivers of hospice patients; data supports performance evaluation on quality and experience of care and is the foundation for CMS' Star Ratings for hospice agencies
- Administrative claims: submission of claims for billing purposes supplies CMS with administrative data that supports performance evaluation for certain process measures that point to quality of care (e.g., visits within the last days of life)

Similarly, CMS-certified home health agencies are required to report data to the Home Health Quality Reporting Program, which gathers information in three key areas:[49]

- Outcome measures: derived from clinical data submission to the Outcomes and Assessment Information Set (OASIS) and administrative claims
- Process measures: derived from clinical data submission to OASIS
- Patient experience measures: derived from the Home Health CAHPS

CMS makes many but not all of these data sources publicly available at the national and provider level, allowing for comparison of performance at the regional and statewide level as well.[50]

Public Comments

OHA solicited public comments on the proposed transaction during the preliminary review. On August 2, 2022 OHA posted a comment form to the Transaction Notices and Reviews page of the HCMO website and emailed subscribers to HCMO program updates to inform them about the opportunity to provide comment. OHA accepted comments through August 16, 2022, via the form and by email to hcmo.info@oha.oregon.gov. OHA received no public comments.

Other Sources

OHA considered additional publicly available sources of information regarding the proposed transaction, the entities involved, and recent developments in the home health and hospice sectors. Materials included press releases, health care industry reporting, financial reports filed with the Securities & Exchange Commission (SEC), websites of the entities involved in the transaction, and reports commissioned by the U.S. Congress and other relevant communications issued by the federal government. OHA also considered academic articles and research reports.

Findings

OHA analyzed data to understand current performance of LHC Group locations in Oregon and assessed the projected impact of the proposed transaction across four domains: access, cost, quality, and equity.

Primary Service Areas

To understand what geographic regions and populations LHC home health and hospice agencies primarily serve and to calculate market shares for LHC locations, OHA defined primary service areas (PSAs) for each agency group. (For details, please see the Analytic Approach section.) The following sections describe the PSAs for LHC home health and hospice agencies and present information on the population residing in those service areas.

Home Health

Assured Home Health and Brookdale Home Health both operate in the "Portland-Salem" PSA, whereas Three Rivers Home Care serves patients in the "Grants Pass-Medford" PSA. In the maps below, the PSA includes all shaded zip codes, with darker shades indicating more home health episodes provided to patients residing in that area.

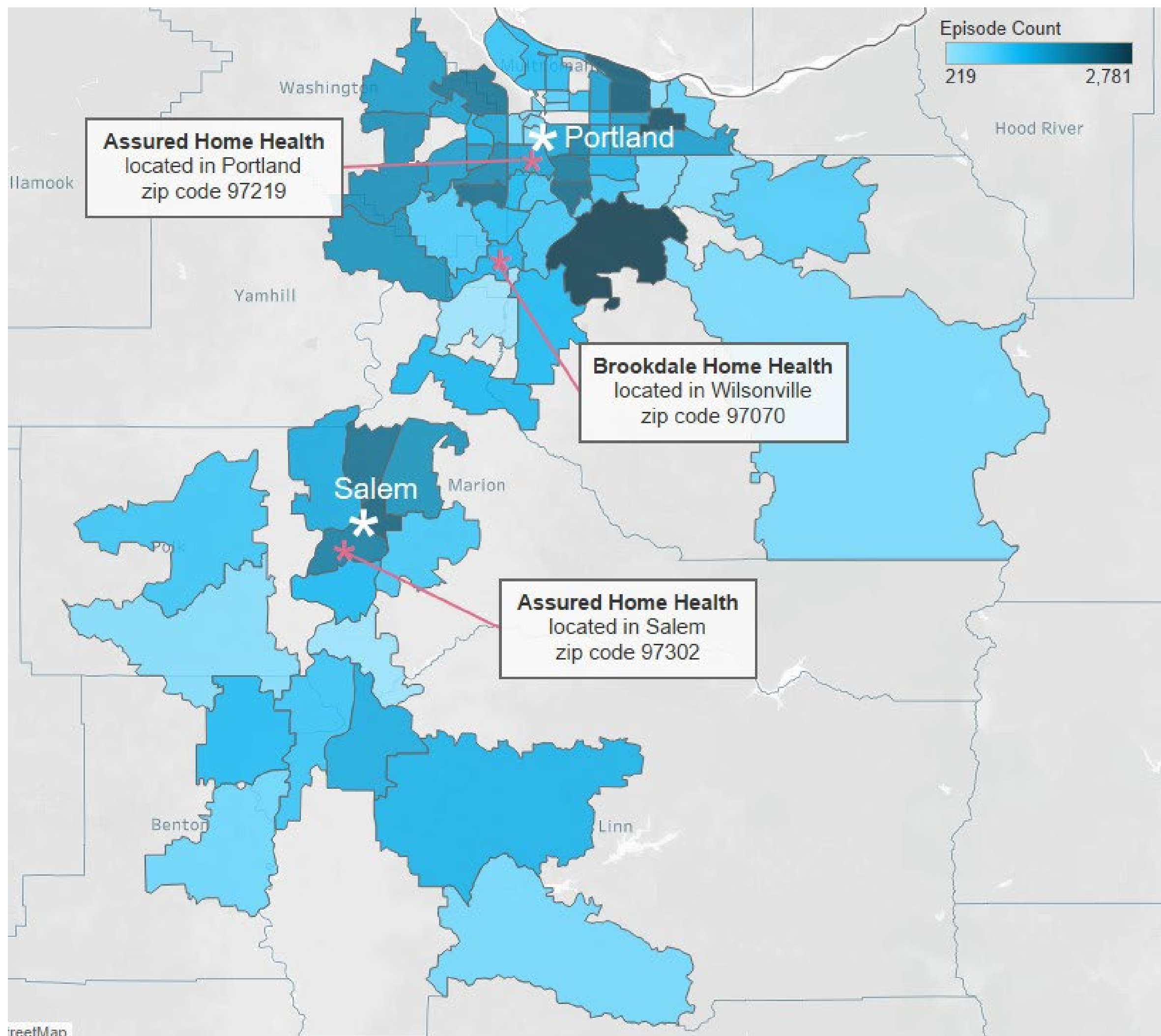
Portland-Salem

The Portland-Salem PSA includes areas of Multnomah, Washington, Clackamas, Yamhill, Marion, Polk, Benton and Linn counties. LHC home health agencies provided 4,894 episodes of care to 4,235 individuals residing in this region during the 2017 – 2019 period. Top five zip codes based on LHC agencies' home health episodes were in Gresham, Tigard, Wilsonville, and Troutdale.

Table 8: Top Zip Codes for LHC Home Health Patients in Portland-Salem PSA

Town	Zip Code	Episode Count
Gresham	97030	271
Tigard	97224	205
Wilsonville	97070	174
Troutdale	97060	136
Gresham	97080	132

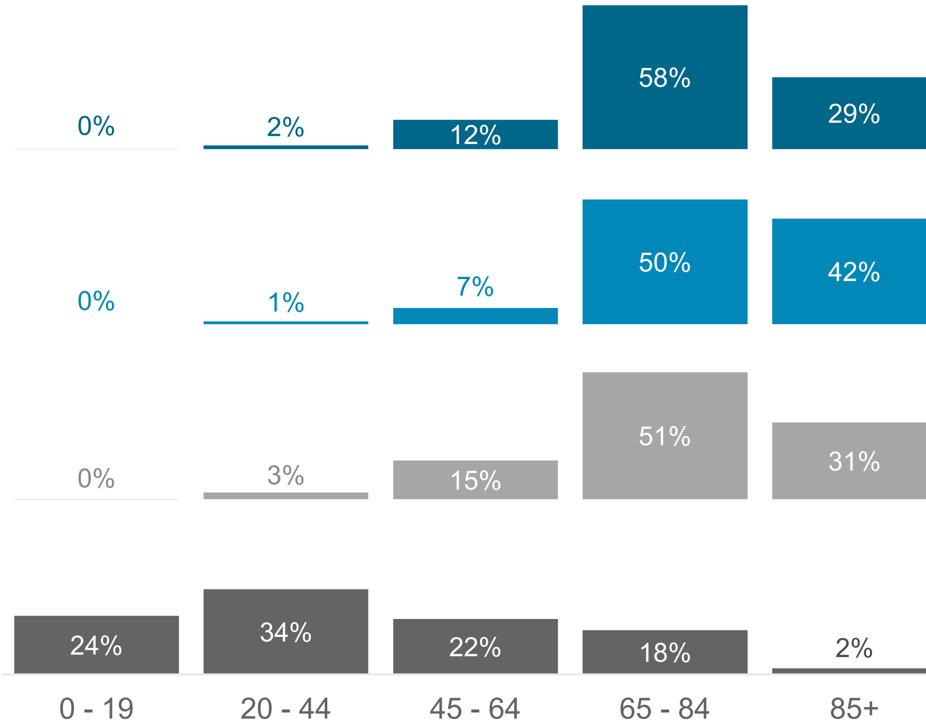
Portland-Salem Home Health Primary Service Area



The majority of residents in the Portland-Salem PSA are aged 20-44 (based on APAC enrollment for 2017-2019). Home health care patients, including patients of Brookdale Home Health and Assured Home Health, are generally older, with a majority aged between 65 and 84.

Population and patients age groups for the Portland-Salem PSA and LHC home health agencies

The largest age group in the **Portland-Salem area population** is 20 - 44 while the majority of home health patients in the **Portland-Salem PSA** and **Brookdale Home Health** and **Assured Home Health** agencies are over age 65.

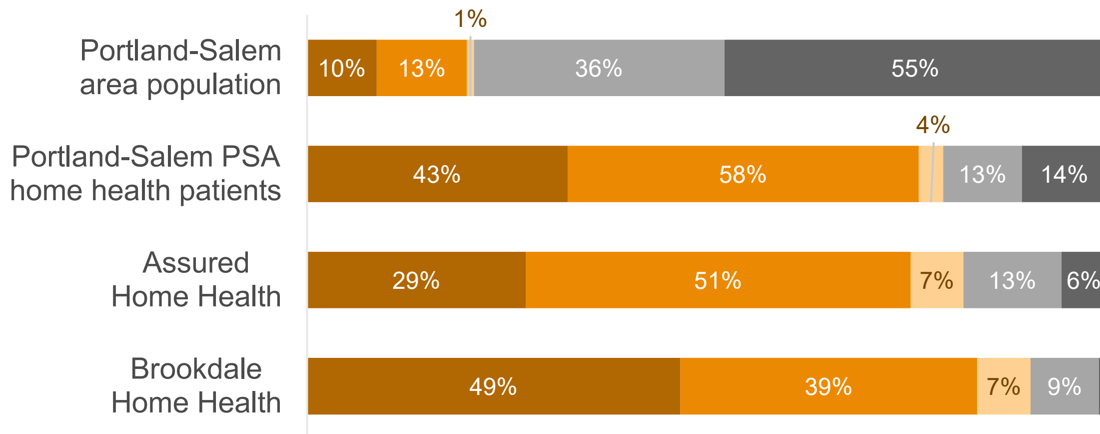


The type of health insurance coverage of home health patients also differs substantially from insurance type for the overall population living in Portland-Salem primary service area. Most PSA residents have commercial insurance or Oregon Health Plan (OHP) coverage, while most home health patients have Medicare Advantage or Original Medicare coverage.

Compared to the PSA, Assured Home Health patients are more likely to have Medicare Advantage, whereas Brookdale Home Health had a greater share of patients covered by Original Medicare. Both Assured and Brookdale served proportionally more patients enrolled in Medicare Advantage Special Needs coverage compared to Portland-Salem home health agencies overall.

Type of health insurance coverage for the Portland-Salem PSA

Most residents in the Portland-Salem area have **commercial insurance** or **OHP coverage** while most home health patients in the Portland-Salem PSA and Assured and Brookdale agencies have **Original Medicare** or **Medicare Advantage** insurance. Brookdale and Assured also have larger proportions of patients with a Medicare Advantage **Special Needs Plan** (SNP).



Grants Pass-Medford

The Grants Pass-Medford PSA includes areas of Josephine and Jackson counties. LHC home health agencies provided 2,485 episodes of care to 1,970 individuals residing in this region during the 2017 – 2019 period. Top five zip codes based on LHC agencies' home health episode counts were in Grants Pass, Medford, and Ashland.

Grants Pass-Medford Home Health Primary Service Area

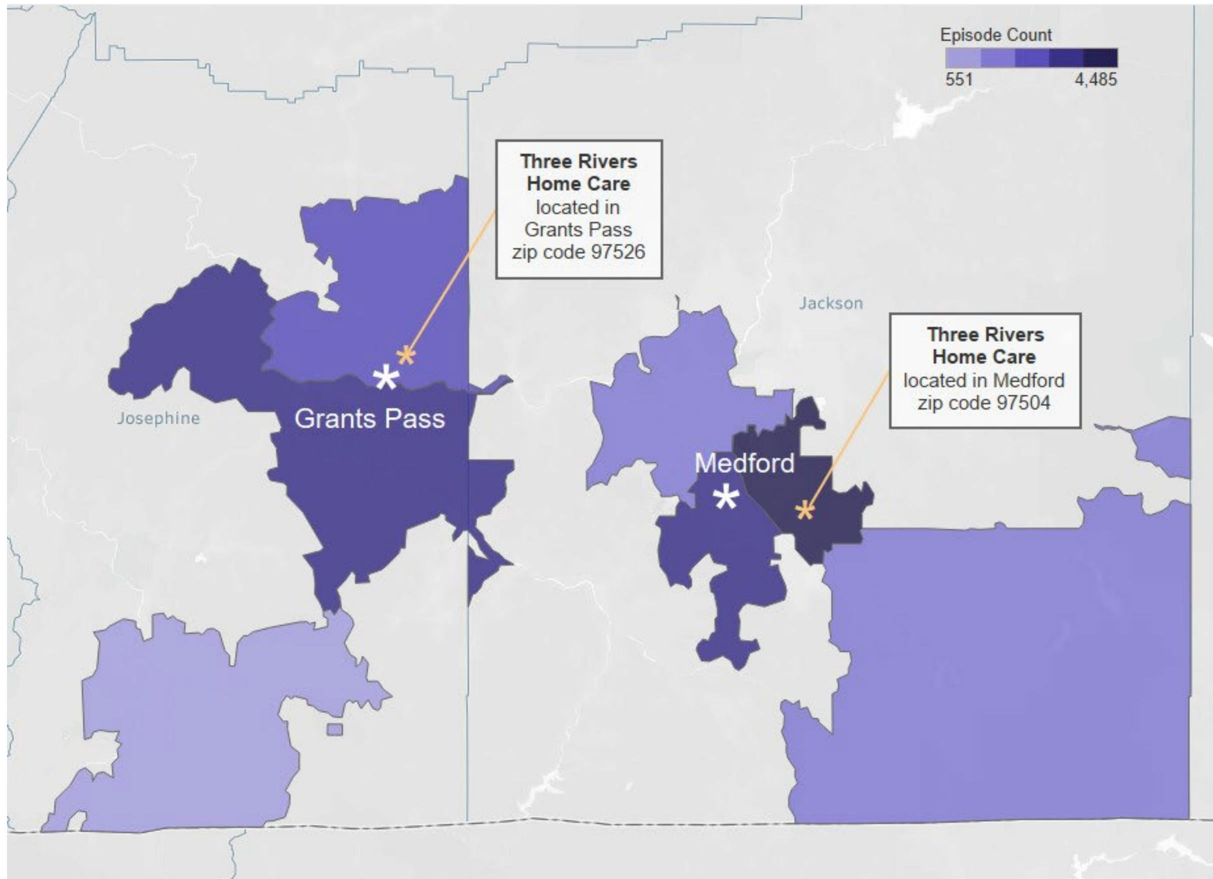


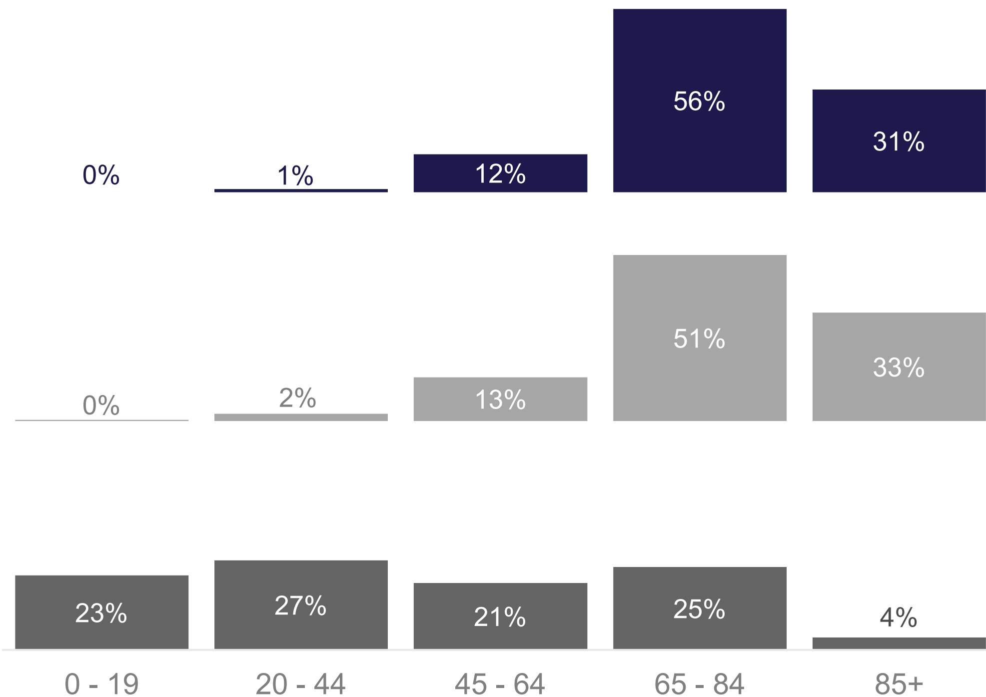
Table 9: Top Zip Codes for LHC Home Health Patients in Grants Pass-Medford PSA

Town	Zip Code	Episode Count
Grants Pass	97527	676
Grants Pass	97526	667
Medford	97504	439
Medford	97501	255
Ashland	97520	155

Residents in the Grants Pass-Medford PSA are fairly evenly distributed in the 0 - 84 age range. aged 20 - 44 (based on APAC enrollment for 2017 - 2019). Among home health care patients, including patients of Three Rivers Home Care, more than 85% are aged 65 and over.

Population and patients age groups for the Grants Pass-Medford PSA and LHC home health agencies

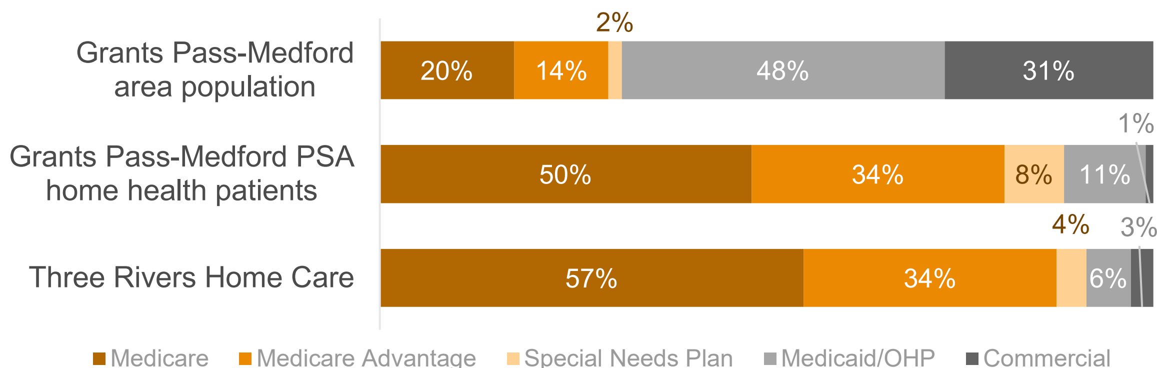
The **Grants Pass-Medford population** is fairly evenly distributed across the 0 - 84 age range but over 85% of home health patients in the **Grants Pass-Medford PSA** and **Three Rivers Home Care** agencies are over age 65.



Almost half of Grants Pass-Medford PSA residents have OHP coverage, with commercial insurance as the second most common form of coverage. Among home health patients, approximately 50% have Original Medicare coverage, followed by Medicare Advantage. Compared to the PSA, a greater share of Three Rivers Home Care's patients have Original Medicare coverage, and fewer are on SNPs or OHP.

Type of health insurance coverage for the Grants Pass-Medford PSA

Nearly half of residents in the Grants Pass-Medford area have **OHP coverage** while over half of home health patients in the Grants Pass-Medford PSA and Three Rivers agencies have **Original Medicare** insurance.



Hospice

LHC's hospice agencies operate in the "Baker City-La Grande" and "Bend-La Pine" PSAs. (As mentioned above, LHC also operates Brookdale Hospice in Wilsonville, but APAC data did not contain enough care episodes for this location to determine a PSA.) In the maps below, the PSA includes all shaded zip codes, with darker shades indicating more hospice episodes provided to patients residing in that area.

Bend-La Pine

The Bend-La Pine PSA includes areas of Deschutes, Jefferson, Crook and Klamath counties. LHC hospice agencies provided 309 episodes of care to 303 individuals residing in this region during the 2017 – 2019 period. Top five zip codes based on the number of LHC care episodes were in La Pine, Bend, and Redmond.

Bend-La Pine Hospice Primary Service Area

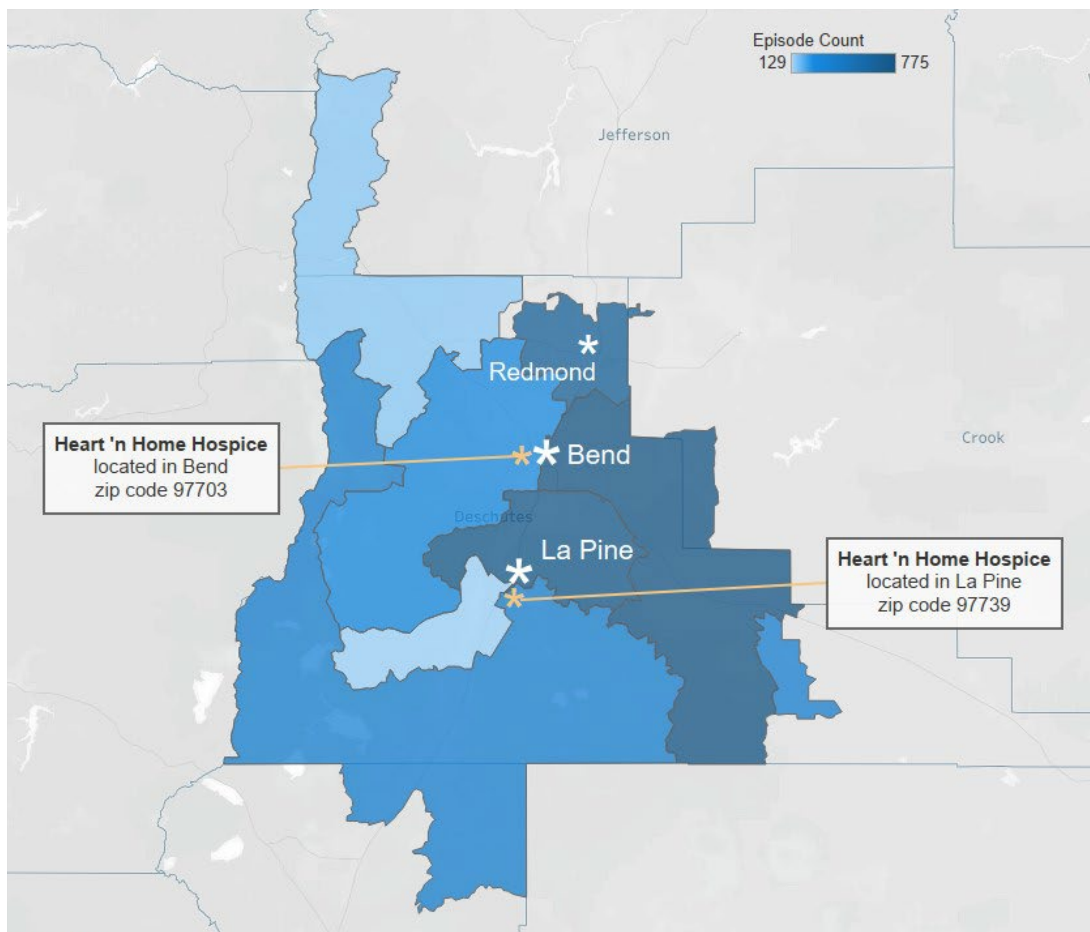


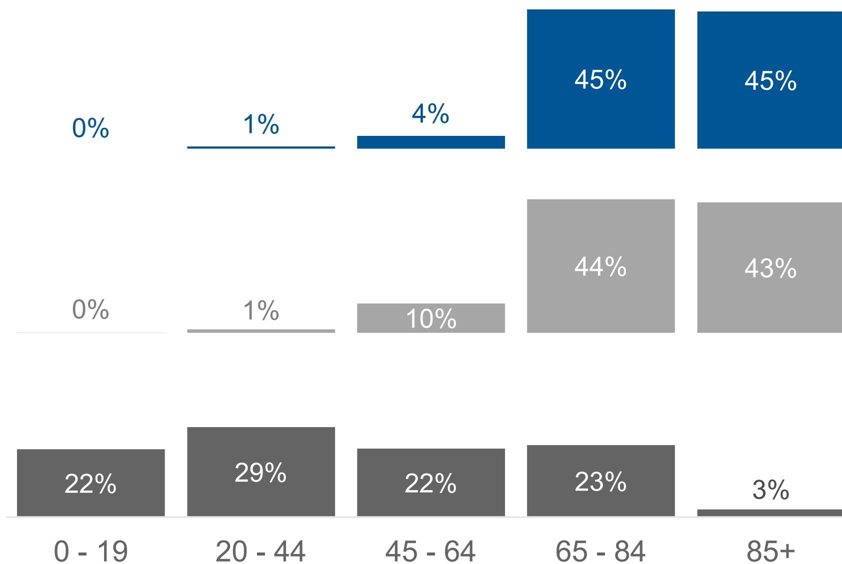
Table 10: Top Zip Codes for LHC Hospice Patients in Bend-La Pine PSA

Town	Zip Code	Episode Count
La Pine	97739	109
Bend	97702	71
Redmond	97756	43
Bend	97701	42
Bend	97703	19

The majority of residents in the Bend-La Pine PSA are aged 20 - 44 (based on APAC enrollment for 2017 - 2019). Hospice patients are almost exclusively aged 65 and up. At Heart 'n Home Bend-La Pine, 45% of patients are over the age of 84.

Population and patients age groups for the Bend-La Pine PSA and LHC hospice agencies

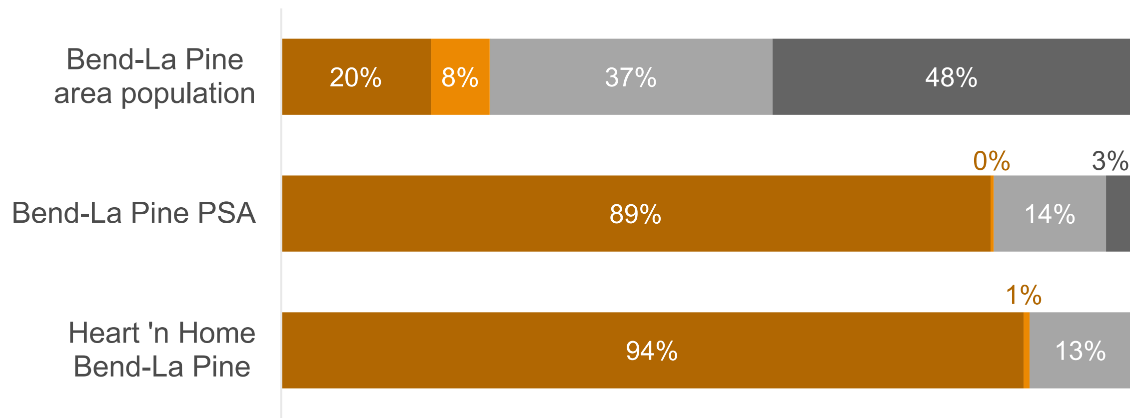
The largest age group in the **Bend-La Pine population** is 20 - 44 while nearly 90% of hospice patients in the **Bend-La Pine PSA** and at **Heart 'n Home Bend-La Pine** are over age 65.



Commercial insurance is the most common form of coverage across the PSA population, followed by OHP. Among hospice patients, the vast majority are enrolled in Original Medicare; 94% of patients at Heart 'n Home Bend-La Pine are covered by Original Medicare.

Type of health insurance coverage for the Bend-La Pine PSA

Nearly half of the population in the Bend-La Pine region has **commercial insurance.** Only 20% have **Original Medicare**, compared to approximately 90% of the hospice patients in the Bend-La Pine PSA and at Heart 'n Home Bend-La Pine.



Baker City-La Grande

The Baker City-La Grande PSA includes areas of Umatilla, Union, Wallowa, Grant, Baker and Malheur counties. LHC hospice agencies provided 1,010 episodes of care to 997 individuals residing in this region during the 2017 – 2019 period. The top five zip codes by LHC hospice episode count were in Baker City, La Grande, Ontario, Vale, and Nyssa.

Baker City-La Grande Hospice Primary Service Area

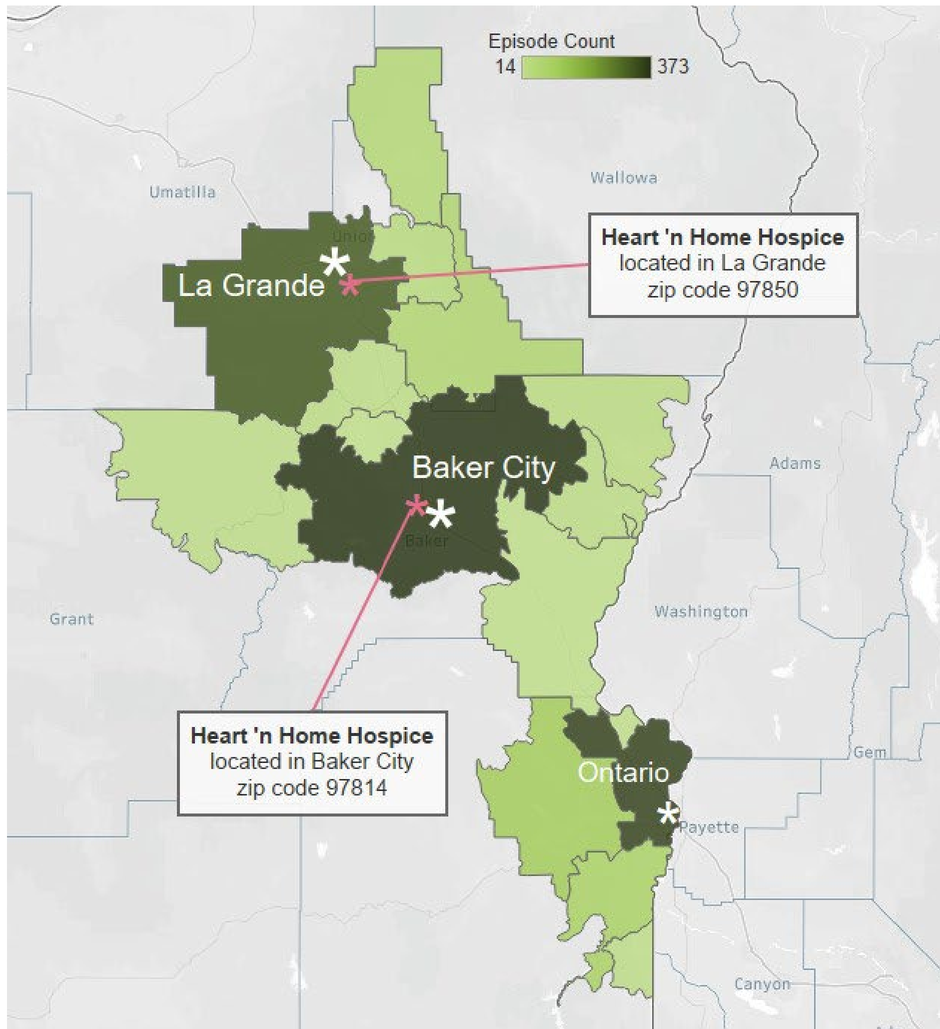


Table 11: Top Zip Codes for LHC Hospice Patients in Baker City-La Grande PSA

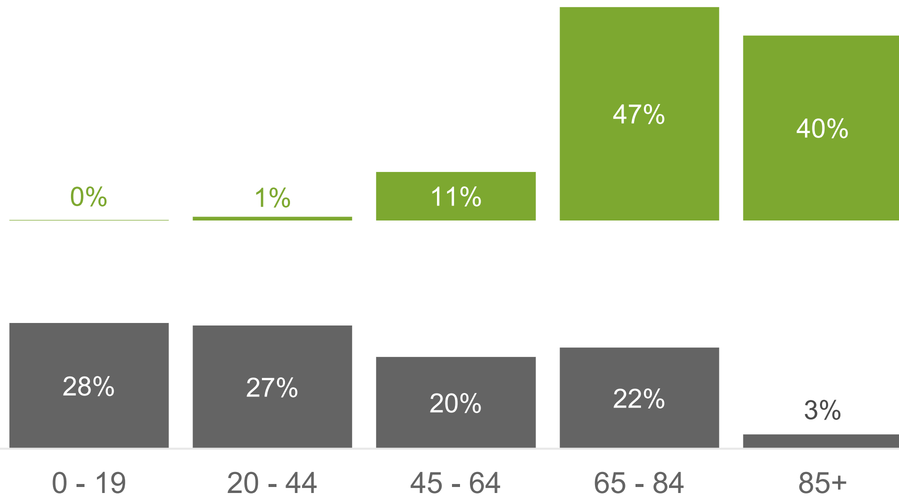
Town	Zip Code	Episode Count
Baker City	97814	342
La Grande	97850	185
Ontario	97914	181
Vale	97918	62
Nyssa	97913	44

Residents of the Baker City-La Grande PSA are fairly evenly distributed across the 0 - 84 age range, with only 3% aged 85 or older. Most hospice patients at Heart ‘n Home Baker City-La Grande are aged 65 and up, with 40% of patients over 85 years of age. (Heart ‘n Home is the only

hospice agency within the PSA; therefore, OHA could not use all PSA hospice patients as a comparison group.)

Population and patients age groups for the Baker City-La Grande PSA

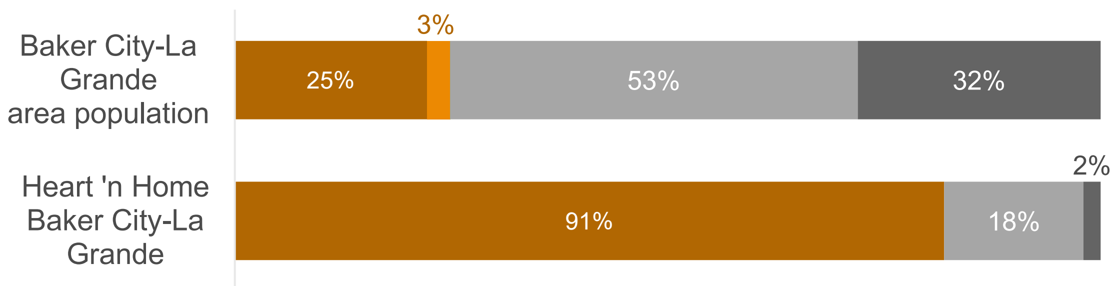
The **Baker City-La Grande population** is rather evenly distributed across the 0 - 84 age ranges but over 85% of patients at **Heart 'n Home Baker City-La Grande** are over age 65.



OHP is the most common form of health insurance coverage across the Baker City-La Grande PSA population, followed by commercial insurance and Original Medicare. More than 90% of patients at Heart 'n Home Baker City-La Grande are covered by Original Medicare.

Type of health insurance coverage for the Baker City-La Grande PSA

Most people living in the Baker City-La Grande PSA have **OHP coverage** or **commercial** insurance, while more than 90% of hospice patients at Heart 'n Home Baker City-La Grande have **Original Medicare** insurance. Few have **Medicare Advantage**.



Market Shares & Competition

To assess the degree of competition, OHA looked at the market shares of home health and hospice agencies in each PSA. OHA also calculated the HHI for each home health and hospice PSA. (The HHI is a composite measure of competition that factors in both the number of competitors in a market and their market share. See Appendix B for more information.)

Home Health

OHA calculated home health market shares as each provider's percentage of total home health episodes received by PSA residents. Calculations were based on APAC claims for the 2017 - 2019 period.

Portland-Salem

There are 22 licensed home health agencies operating in the Portland-Salem service area, including the two LHC agencies, suggesting that residents of the PSA have many options for obtaining home health care. For the analysis period, the largest provider had a 39% market share, and the second largest accounted for 11% of home health episodes. Assured Home Health and Brookdale Home Health held relatively small market shares, around 5% and 2%, respectively. An HHI of 1,909 indicates that the market for home health services in the Portland-Salem PSA is moderately concentrated.

Market share for the Portland-Salem PSA

Assured Home Health had 4.7% market share and **Brookdale Home Health** had 2.0% market share.

Grants Pass-Medford

The Grants Pass-Medford PSA has five home health providers. The largest provider held a 28% market share, while Three Rivers Home Care provided 15.5% of total home health episodes. An HHI of 2,135 indicates that the market for home health services in the Grants Pass-Medford PSA is also moderately concentrated.

Market share for the Grants Pass-Medford PSA

Three Rivers Home Care had the fourth largest market share in the Grants Pass-Medford primary service area.

Hospice

OHA calculated hospice market shares as each provider's percentage of total hospice episodes received by PSA residents.

Bend-La Pine

There are three hospice providers in the Bend-La Pine PSA, including Heart ‘n Home. For the analysis period, Heart ‘n Home held a 13% market share in the PSA. A HHI of 6,430 indicates that the market for home health services in the Grants Pass-Medford PSA is highly concentrated.

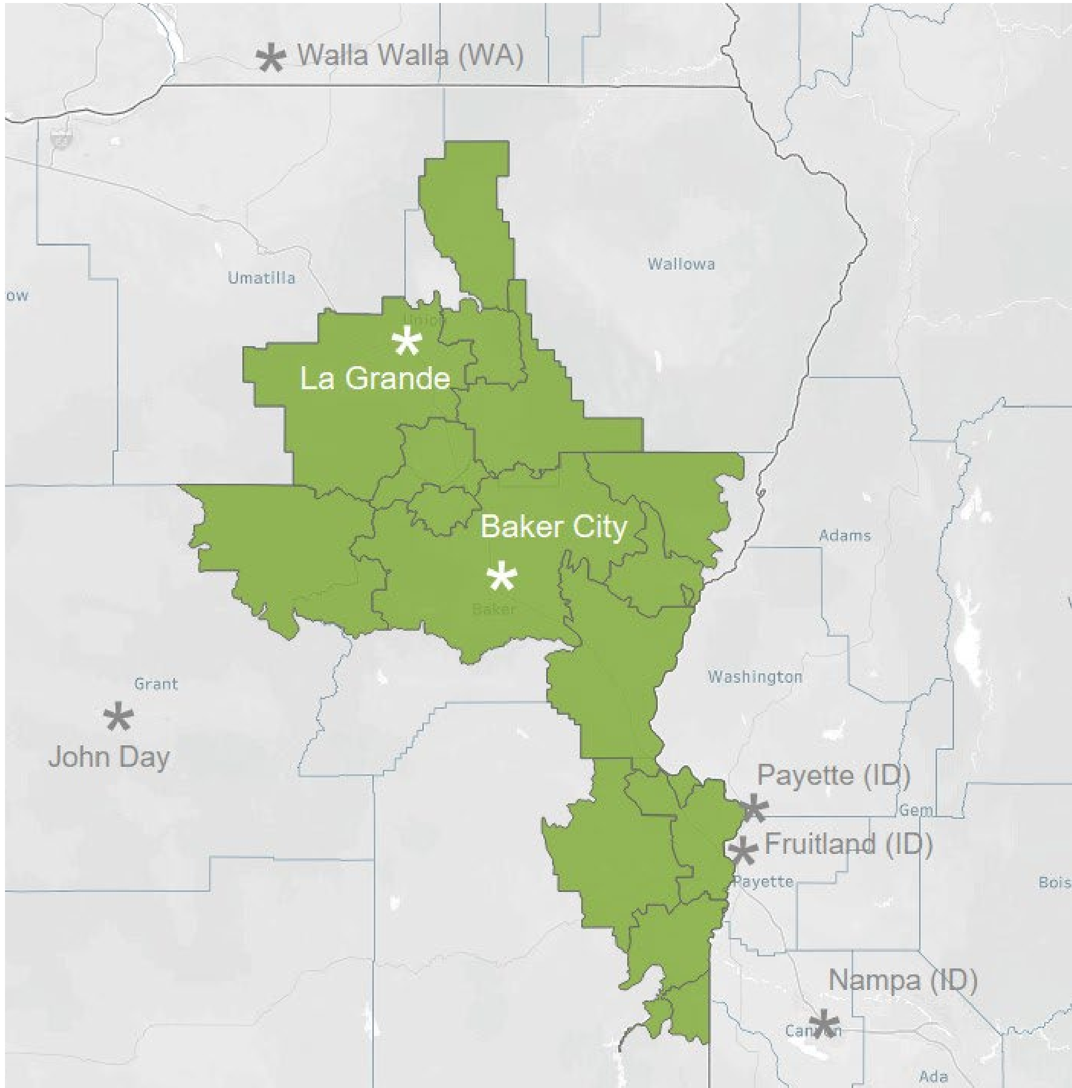
Market share for the Bend-La Pine PSA

Heart 'n Home Bend-La Pine had the second largest market share in the primary service area.

Baker City-La Grande

Since Heart ‘n Home is the sole hospice provider physically located within the Baker City-La Grande PSA, they have a monopoly in this region (market share equals 100%, yielding an HHI of 10,000). To create a comparison group similar to other PSAs, OHA identified the seven closest hospice agencies in Oregon, Idaho, and Washington, ranging from 70 to 112 driving miles from the La Grande and Baker City locations.

Closest hospice agencies to Heart ‘n Home locations in La Grande and Baker City



Compared to these closest locations, Heart ‘n Home delivered far more episodes of care to Oregon residents in the 2017 – 2019 period.[i]

Episode counts for LHC hospice agencies compared to closest providers

Heart 'n Home Baker City-La Grande provided far more episodes to Oregon residents than other hospice providers within 115 miles.

[i] Episodes counts are derived from APAC claims data, which primarily focuses on Oregon residents. Claims for out-of-state providers are incomplete.

Current Performance

To measure current performance of LHC home health and hospice agencies in Oregon, OHA used data for calendar years 2017, 2018, and 2019.

Access

Access analyses explored the contribution of LHC providers to the delivery of home health and hospice care in the service area. OHA looked at several claims-based measures of the quantity and type of home health and hospice services.

Home Health

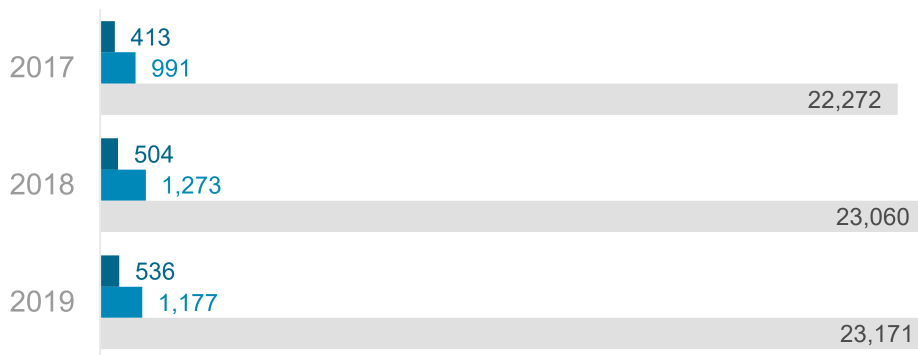
OHA assessed the number of home health episodes provided by LHC locations in 2017-2019, the average duration of episodes (length of stay), and the number of days of skilled nursing care.

Home Health Episodes

A count of total home health episodes indicates how many patients an agency is able to serve each year. In the Portland-Salem PSA, Brookdale Home Health provided approximately half the number of home health episodes (e.g., 536 in 2019) compared to Assured Home Health (e.g., 1,177 in 2019). Both agencies provided a small fraction of the total home health episodes across all home health agencies in the PSA (e.g., 23,171 in 2019).

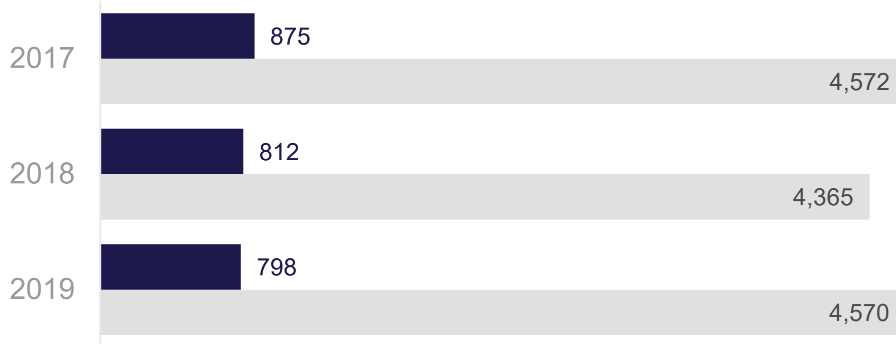
Home health services episodes for the Portland-Salem PSA

Home health service episodes provided by **Brookdale Senior Care** and **Assured Home Health** in Portland-Salem were stable and a small share of the primary service area



In the Grants Pass-Medford PSA, Three Rivers Home Health provided 798 home health episodes in 2019, a sizeable share (approximately 15%) of total home health episodes provided by all home health agencies in the PSA (5,368).

Home health service episodes for the Grants Pass-Medford PSA

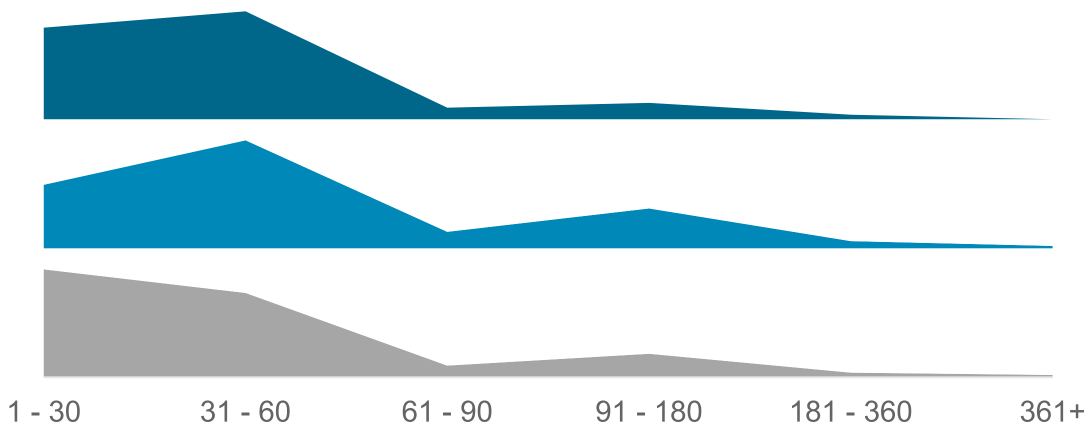


Length of Stay
A patient's length of stay in home health care (e.g., the number of days they receive care) depends on range of factors such as the severity of their condition and the level of family and social support available to them. During the 2017-2019 analysis period, Medicare reimbursed providers for home health services in 60-day increments. Original Medicare and Medicare Advantage plans do not place limitations on the number of days of home health care.

Episodes by length of stay for the Portland-Salem PSA
Brookdale Home Health and Assured Home Health both had a smaller proportion of short stays (1-30 days) and a greater proportion of stays lasting between 31 and 60 days compared to other home health providers in the Portland-Salem service area.

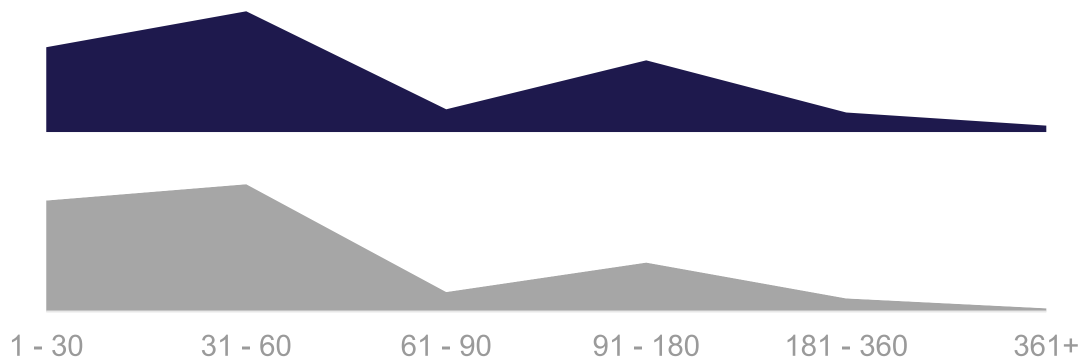
Close to one half (46%) of care episodes at Brookdale Home Health and Assured Home Health were between 30 and 60 days long, compared to 36% for the service area. Assured Home Health also had a greater proportion of stays over 90 days (21%) compared to Brookdale (9%) and the service area overall (13%).

Brookdale Home Health and **Assured Home Health** had fewer short episodes (1 - 30 days) and a greater proportion of longer stays (31 - 60 days and 91 - 180 days) than the **Portland-Salem PSA.**



Episodes by length of stay for the Grants Pass-Medford PSA
At Three Rivers Home Care, the majority (37%) of home health episodes lasted between 31 and 60 days. The distribution of stays mirrored that of other agencies in the Grants Pass-Medford PSA, although Three Rivers had a greater proportion of stays over 90 days (30% of episodes compared to 20% across other PSA providers).

Three Rivers Home Care had a greater proportion of episodes over 90 days than the **Grants Pass-Medford PSA.**



Nursing Care
Research has demonstrated a connection between skilled nursing visits and improved outcomes for home health patients, including reduced hospitalization[51] and increased participation in activities of daily living.[52] 73% of the home health episode billing statewide during the 2017-2019 analysis period did not include any skilled nursing services. Of those episodes that did indicate skilled nursing was provided, visit frequency ranged from once per month (11%) to daily (7%). Skilled nursing services can be billed on a per diem basis (minimum 8 hours of care), hourly or in 15-minute increments.

The table below compares median skilled nursing days and median skilled nursing hours per month of home health care across LHC agencies and their respective PSAs among patients whose billing indicated these services were provided.

Table 12: Median skilled nursing days and hours per month for LHC home health agencies and PSAs

	2017		2018		2019	
	Days	Hours	Days	Hours	Days	Hours
Portland-Salem PSA	*5*	*2*	*5*	*2*	*5*	*3*
Brookdale Home Health	5.3	5.4	3.6	2.7	3.3	2.7
Assured Home Health	4.2	2.7	4.0	3.0	3.3	2.5
Grants Pass-Medford PSA	*5*	*2*	*5*	*2*	*5*	*2*
Three Rivers Home Care	4.5	3.3	5.2	3.6	4.8	3.0

In both service areas, home health agencies provided a median of 5 days with skilled nursing visits per home health month across the analysis period. The median hours of care increased from 2 to 3 hours in 2019. At Brookdale Home Health, median days with skilled nursing care dropped sharply after 2017 and nursing hours were cut in half over the analysis period. Skilled nursing days at Three Rivers Home Health remained consistent with statewide and PSA trends, but these agencies initially provided more hours of service per month.

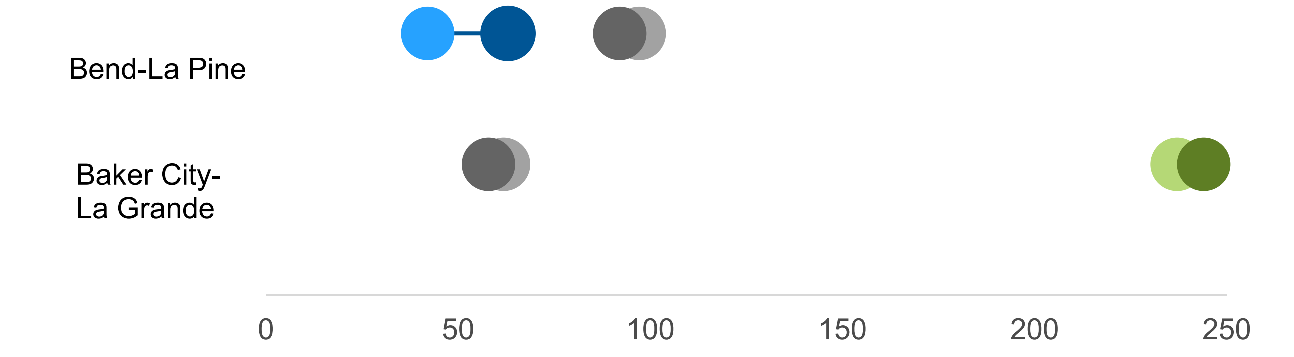
Hospice

To assess service volume and capacity of LHC hospice agencies, OHA looked at average daily census, number of hospice episodes, length of stay in hospice care, and the level of care provided.

Average Daily Census

Certified hospice agencies report an average daily census to CMS, reflecting the number of patients being served on any given day by the agency staff, indicating capacity. LHC agencies in Bend-La Pine and Baker City-La Grande reported increases in average daily census from 2018 to 2019, while capacity across other providers decreased slightly. Average daily census for Heart ‘n Home hovered at approximately 240 – considerably higher than the average across other nearby hospice agencies.

Change in average daily census for Bend-La Pine and Baker City-La Grande areas, 2018-2019

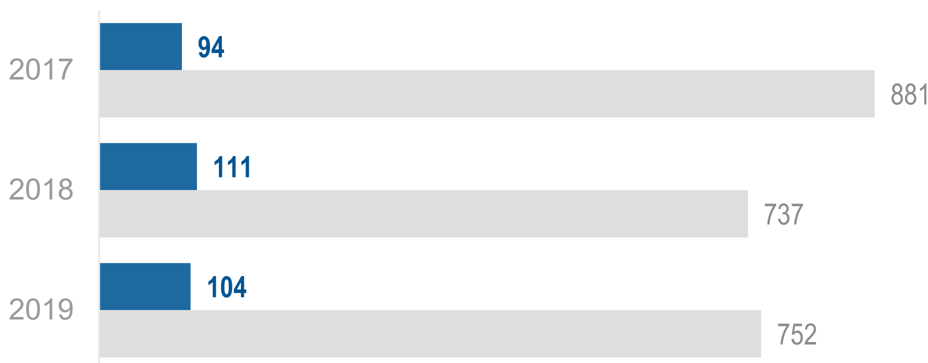


Hospice Episodes

A count of total episodes indicates how many patients a hospice agency can serve each year. Occasionally a patient may discharge from hospice care then re-elect for another hospice episode later in the year. Care that is re-initiated beyond 60 days of discharge is considered a new episode, both for CMS and this analysis. If a patient transfers from one hospice agency to another during the same open hospice period, CMS does not consider this a new episode. However, for purposes of analyzing cost and outcomes associated with specific providers, this is flagged as a new episode in OHA data.

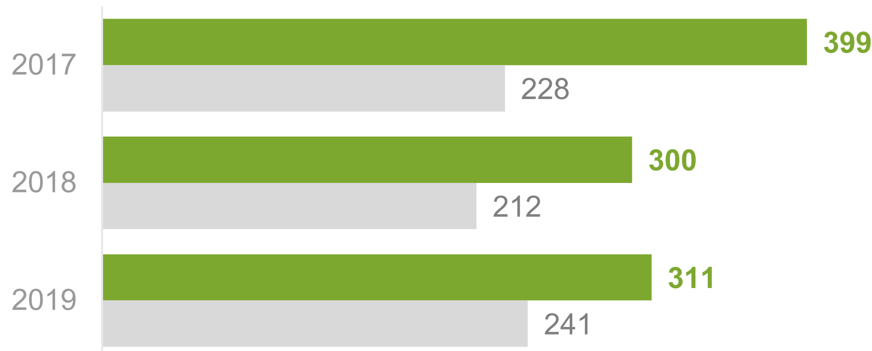
In the Bend-La Pine PSA, Heart ‘n Home provided 94 hospice episodes in 2017, increasing marginally to 104 in 2019. This represented approximately 12% of total hospice episodes across all agencies in the service area.

Hospice service episodes for the Bend-La Pine PSA



Heart ‘n Home hospice agencies in Baker City and La Grande accounted for a combined total of between 311 and 399 episodes in 2017-2019. LHC hospice agencies provided most of the total episodes in the area (56% in 2019).

Hospice service episodes for Baker City-La Grande and closest hospice agencies



Length of Stay

A hospice agency's capacity depends on how long each patient requires care, and at what level of intensity. Hospice providers that serve a greater proportion of patients requiring longer periods of intensive care may be limited in the overall volume of patients they are able to serve at any given time and over the course of a year.

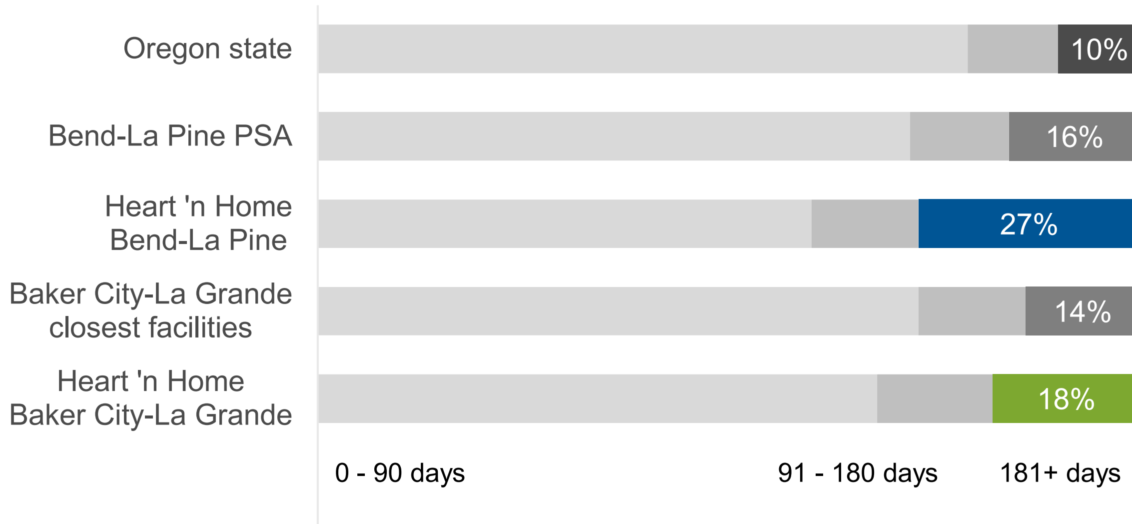
Some patients enter hospice care very late in the progression of their terminal illness and receive hospice services for a week or less. Other patients are referred to hospice early and remain in care much longer than 6 months. Some patients have long-term degenerative conditions that may require extensive periods of palliative care spanning a year or more. Across the 2017 – 2019 period, the average and median length of stay for hospice episodes at both LHC agencies were higher than their respective comparison regions and the state.

Table 13: Average length of stay for LHC hospice agencies and comparison agencies

	OR State	Bend-La Pine PSA	Heart 'n Home Bend-La Pine	Baker City-La Grande Closest Agencies	Heart 'n Home Baker City-La Grande
Average length of stay (days)	67	93	144	84	106
Median length of stay (days)	23	32	54	23	33

Higher average and median lengths of stay at LHC agencies were driven by a higher proportion of episodes over 180 days (6 months). Heart 'n Home Bend-La Pine had twice the proportion of visits over 1 year than other hospice agencies in the Bend-La Pine PSA (12% vs 6%).

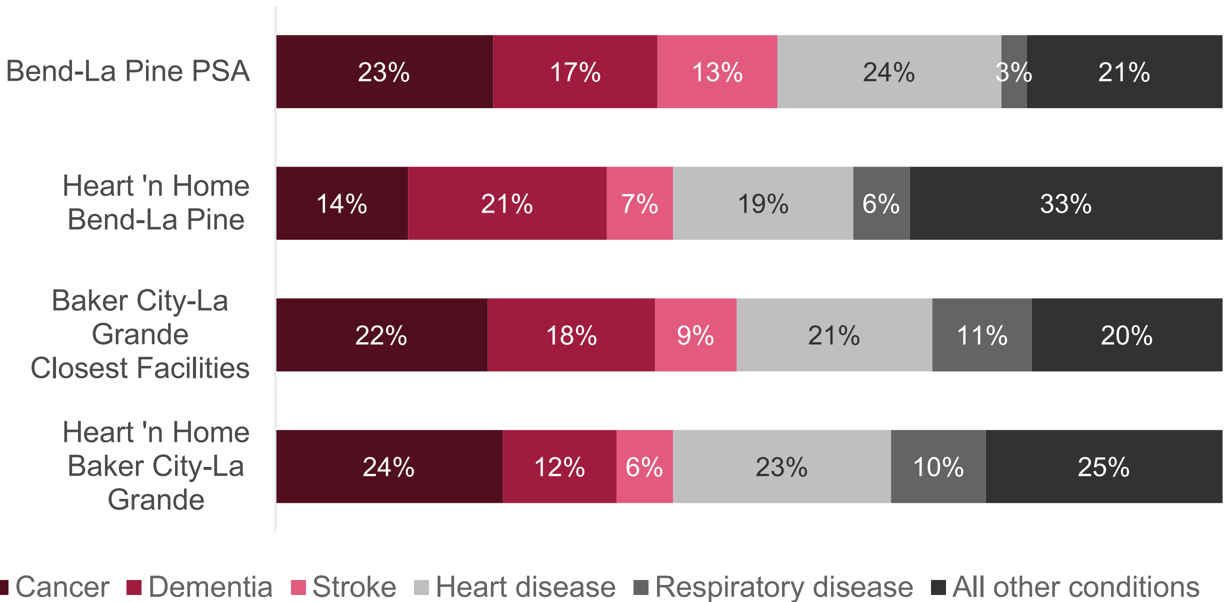
Episodes by length of stay for the Bend-La Pine and Baker City-La Grande



Length of stay in hospice care depends in part on the patient's terminal condition. Some forms of cancer progress quickly and hospice services are provided for a short duration. Other physical conditions (like respiratory disease) or cognitive disorders (e.g., dementia) can be physically and functionally debilitating but not fatal for much longer periods of time. Compared to other agencies in the PSA, higher proportions of patients at Heart 'n Home Bend-La Pine had conditions that typically require longer episodes of care, specifically dementia and respiratory disease.

Hospice diagnoses for Bend-La Pine and Baker City-La Grande PSAs

For most hospice providers, **cancer** and **heart disease** were the most common patient diagnoses in 2019. LHC hospice agencies in the Bend-La Pine region had relatively more patients with **dementia** compared to the PSA. Hospice agencies in or near the Baker City-La Grande region treated a higher proportion of patients with **respiratory disease**.



Level of Care

Medicare identifies four levels of hospice care: routine care, continuous care, general inpatient care, and respite care. Each care level is associated with a different daily payment rate to reflect the cost of delivering care. Statewide, 96% of hospice days were billed at the routine care rate during the analysis period. Less than 1% of hospice days were billed at each of the higher levels of care or reimbursement. Rates of continuous care at all Heart ‘n Home locations were half that of the state total (0.3% vs 0.6%), and inpatient and respite care were provided at even lower frequencies. General inpatient care was provided at a high rate by one hospice agency in the Bend-La Pine region, which may contribute to slightly higher costs of care calculated for that PSA.

Cost

OHA used 2017-2019 APAC claims to assess spending on home health and hospice services at LHC agencies during the years 2017 through 2019. OHA measured spending as the median payment per month of home health or hospice care and compared spending for LHC agencies to other similar providers.

Differences in spending across regions reflect regional adjustments to CMS reimbursement rates to account for differences in staffing costs (see the table below).

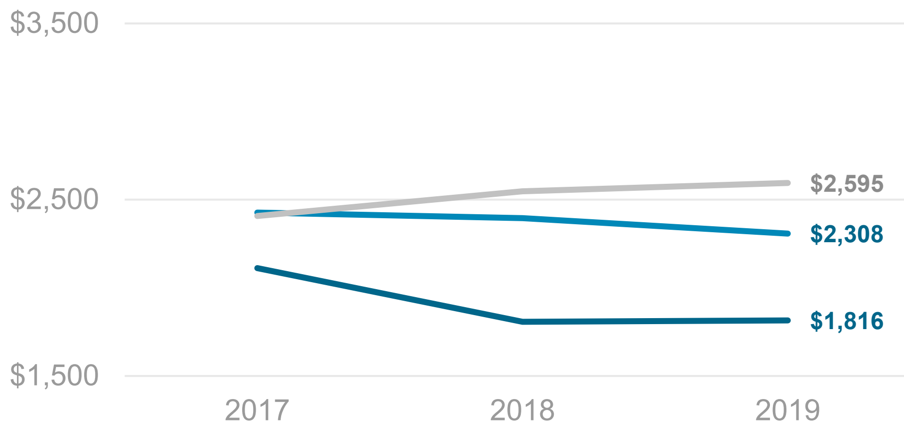
Table 14: CMS Wage Index

Region	Wage Index		
	2017	2018	2019
Portland-Vancouver-Hillsboro	1.2245	1.2065	1.2139
Salem	1.0513	1.0715	1.0756
Grants Pass	1.0628	0.9870	0.9997
Medford	1.1037	1.0580	1.0707

Home Health

Median payment per month of home health care was lower for both Assured Home Health and Brookdale Home Health in 2019, compared to other providers in the Portland-Salem service area. The difference in LHC providers' median payment compared to the PSA increased between 2017 and 2019.

Median payments per month of home health care in Portland-Salem



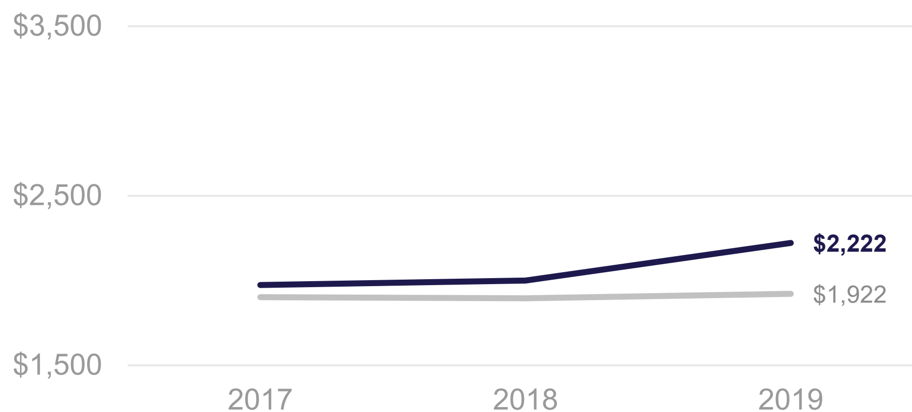
Payers and Lines of Business for home health in Portland-Salem

Patients with UHC plans comprised a relatively larger share of Brookdale Home Health and Assured Home Health patients, compared to other home health providers in the Portland-Salem PSA. Approximately 27% of Brookdale Home Health patients had UHC coverage, evenly split between Medicare Advantage plans and Special Needs Program insurance. For Assured Home

Health, 17% of patients had UHC coverage. These figures are larger than the 11% of individuals living in the Portland-Salem service area with UHC coverage. In terms of the statewide population of home health patients, UHC covers 8%. In other words, Assured Home Health and Brookdale Home Health agencies served a greater percentage of individuals covered by UHC.

Three Rivers Home Care had higher median payments across all three years compared to the Grants Pass-Medford service area, and the gap increased over time.

Median payments per month of home health care in Grants Pass-Medford



Payers and Lines of Business for home health in Grants Pass-Medford
Individuals covered by UHC plans comprised 2% of Three Rivers Home Care's patients, which is the same proportion of individuals living in the service area with UHC coverage. Three Rivers Home Care has a slightly larger percentage of patients with Original Medicare (57%) as compared to the Grants Pass-Medford home health service area (50%).

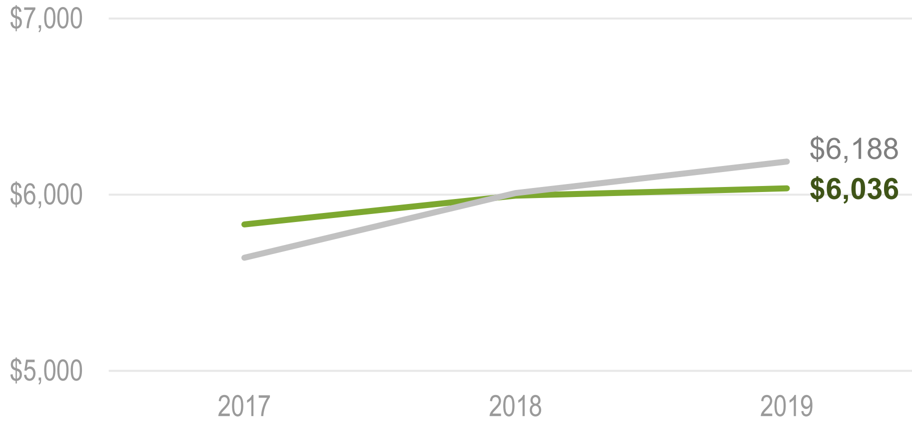
Hospice

Analysis of length of stay per hospice episode revealed observable differences in average and median lengths of stay by region and hospice agency, as well as the proportion of episodes extending beyond 6 months (see the Access section above). To understand patterns in payment by a standardized unit, OHA calculated payment per month of hospice care, analogous to a per member per month payment measure.

Payment amounts include palliative care services, which are delivered and billed identically to hospice services but are not subject to caps in Original Medicare reimbursement. Cost calculations of per episode and per month of hospice care may exceed payment limitations outlined in CMS regulations. Inclusion of palliative care in this analysis elucidates the full spectrum of payments earned by these hospice agencies.

Median payment per hospice month at Heart 'n Home locations in Baker City and La Grande were very similar to other nearby hospice providers.

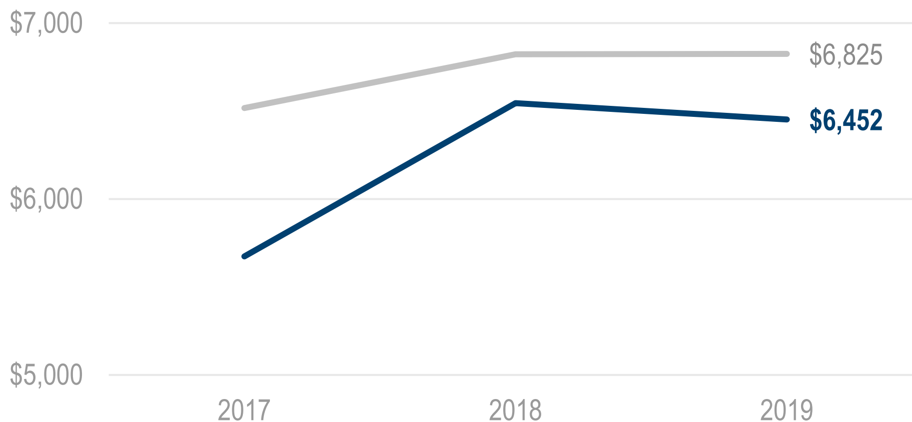
Median paid amounts per hospice month in Baker City-La Grande



Payers and Lines of Business for hospice care in Baker City-La Grande
Because Original Medicare pays for the vast majority of hospice care, there were no Heart ‘n Home patients in Baker City-La Grande who had UHC coverage.

Median payments at Heart ‘n Home locations in Bend-La Pine were below the PSA median across all three years and followed a similar trend.

Median paid amounts per hospice month in Bend-La Pine



Payers and Lines of Business for hospice care in Bend-La Pine
Because Original Medicare pays for the vast majority of hospice care, there were no Heart ‘n Home patients in Bend-La Pine who had UHC coverage.

Quality

To assess quality, OHA utilized claims data and existing CMS quality reporting for patient outcomes, clinical quality, and patient experience.

Home Health

Patient Outcomes

Data from CMS' OASIS dataset show performance on a range of outcome measures. The table below presents performance on home health patient outcomes measures by region and agency in 2019. Improvement in performance from 2017 to 2019 of more than 10 percentage points is indicated in dark green, lesser improvement in light green, consistent performance (within 2 percentage points) in gray, and poorer performance in pink (decreases of 10 percentage points or more in dark pink).

Color indicates how scores changed from 2017 to 2019	*Much better*	*Better*	*No change*	*Worse*	*Much worse*

The Portland-Salem PSA either improved or maintained outcomes in all areas, while the LHC home health agencies demonstrated poorer performance in a few areas, including emergency room care, wound healing and timely response to medication issues. Home health agencies in the Grants Pass-Medford PSA checked for vaccinations less frequently over this period while Three Rivers Home Care improved performance in this area, as well as in many patient outcome measures that notably surpassed performance of other home health agencies in the PSA.

Table 15: Home Health Patient Outcomes Measures, 2019

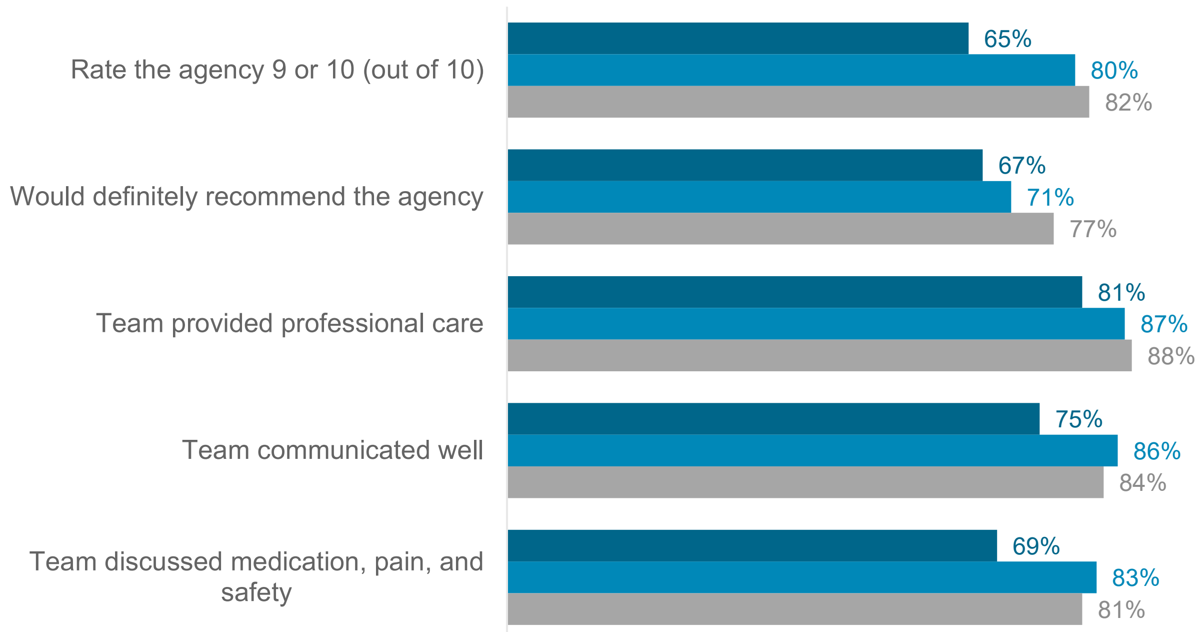
	Portland-Salem PSA	Assured Home Health	Brookdale Home Health	Grants Pass-Medford PSA	Three Rivers Home Care
Utilization Measures					
Hospital admission*	13%	13%	12%	15%	15%
Emergency Room care*	15%	18%	20%	18%	15%
Patient Outcome Measures					
Better at bathing	80%	94%	85%	81%	89%
Better at walking around	76%	88%	77%	77%	87%
Better getting in/out of bed	79%	89%	79%	82%	88%
Better at taking drugs orally	66%	87%	64%	73%	83%
Improved breathing	78%	92%	83%	82%	92%
Post-op wounds improved/healed	83%	95%	84%	96%	89%
New or worsened pressure ulcers*	0.1%	0.0%	0.0%	0.1%	0.1%
Home Health Team Measures					
Began care timely	91%	99%	91%	96%	98%
Checked for fall risk	100%	100%	100%	100%	100%
Checked for depression	94%	99%	98%	100%	99%
Checked for flu vaccine	81%	88%	95%	78%	72%
Checked for pneumococcal vaccine	87%	92%	97%	84%	82%
Taught patient/caregiver about drugs	99%	100%	100%	99%	100%
Timely response to medication issues	95%	87%	95%	98%	93%
For patients with diabetes: provided and taught about foot care	96%	99%	95%	98%	98%

*Lower is better

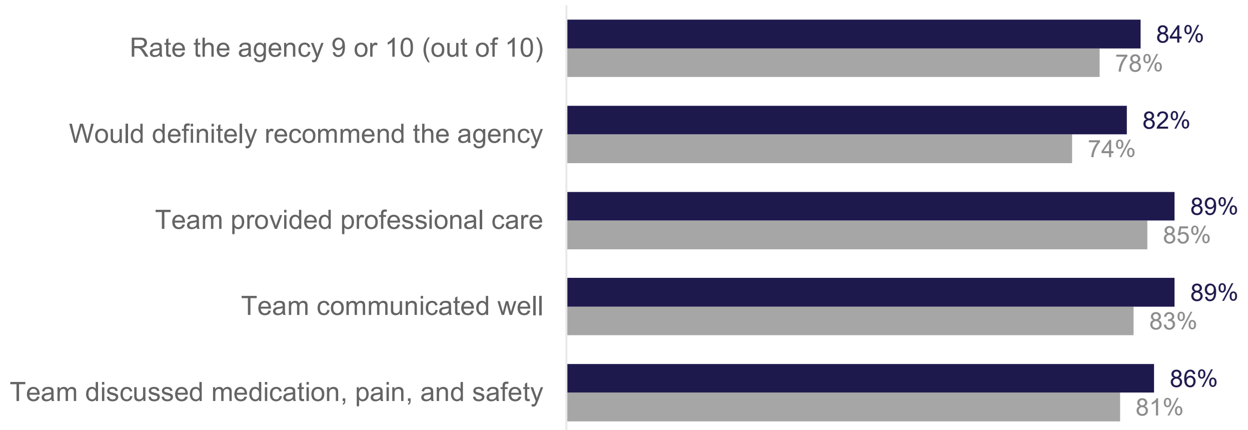
Patient Experience
Certified home health agencies are required to administer the home health-specific Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey through a third-party vendor each quarter. The survey captures caregiver evaluation of their experience with the home health team and how the staff cared for the patient. OHA assessed CAHPS Home Health Survey results for the 2019 calendar year.

Comparison of 2019 CAHPS scores for the Portland-Salem PSA
Brookdale Home Health and Assured Home Health had lower CAHPS scores in 2019 compared to other home health agencies in the Portland-Salem area. Brookdale scored significantly lower on overall rating and care team communication metrics.

Brookdale Home Health had lower CAHPS scores than **Assured Home Health** and the Portland-Salem **primary service area**.



Comparison of 2019 CAHPS scores for the Grants Pass-Medford PSA
Three Rivers Home Care had higher CAHPS scores than other home health agencies in the Grants Pass-Medford PSA in 2019.



Hospice

OHA assessed performance on measures of patient outcomes, clinical quality and patient experience reported by CMS for the LHC hospice agencies in Oregon, compared to regional PSA and statewide rates. Most recent data coinciding with this 2017 – 2019 analysis period was from 2018. Quality scores for Heart n' Home Baker-City LaGrande include Fruitland, ID location, as those scores are reported together by CMS.

Patient Outcomes
Certified hospice agencies submit clinical data from their medical records to CMS that support calculation of performance on clinical process and quality measures in the Hospice Item Set (HIS). The two clinical quality measures reported for 2018 were provision of a bowel regimen for patients receiving opioids for pain management and visits provided when death was imminent. In 2018, the latter measure specifically assessed the percent of patients who received at least one visit from a physician, registered nurse, nurse practitioner, or physician assistant in the last three days of life.

The main outcome of hospice care is patient death, but patients may end services when transferring to other levels of care (e.g., hospital or skilled nursing facility) or electing to end hospice care. The rate of live discharges from hospice is a quality concern for hospice agencies nationally, as it may indicate that patients may not require hospice-level care and unnecessary services are being billed to Medicare.

Around 80% of all hospice episodes in Oregon during this 2017 – 2019 period ended in patient death. Less than 1% of episodes ended with a discharge to other levels of care, indicating that nearly all hospice services appropriately followed patients as their medical needs escalated.

Clinical Quality
Certified hospice agencies report on clinical processes and supports provided to patients that impact patient outcomes and experience of care. The table below presents performance on these Hospice and Palliative Care Process measures by region and hospice agency in 2019. Improvement in performance from 2017 to 2019 of more than 10 percentage points is indicated in

dark green, lesser improvement in light green, consistent performance (within 2 percentage points) in white, and poorer performance in pink. Data for hospice visits in the last days of life was only reported for 2018.

Color indicates how scores changed from 2017 to 2019	*Much better*	*Better*	*No change*	*Worse*	*Much worse*

Table 16: Hospice Clinical Quality Measures, 2019

	Bend-La Pine PSA	Heart 'n Home Bend-La Pine	Baker City-La Grande Closest Providers	Heart 'n Home Baker City-La Grande
Care Process Measures				
Dyspnea Screening	99%	100%	100%	100%
Dyspnea Treatment	98%	100%	99%	100%
Pain Assessment	96%	100%	99%	100%
Pain Screening	99%	100%	99%	100%
Treatment Preferences	100%	99%	100%	100%
Composite Process Measure	90%	99%	95%	100%
Patient Support Measures				
Beliefs & Values Addressed	94%	99%	97%	100%
Bowel Regimen Upon Opioid Treatment	94%	100%	95%	100%
Hospice Visits in the Last Days of Life	96%	91%	85%	90%

Patient Experience

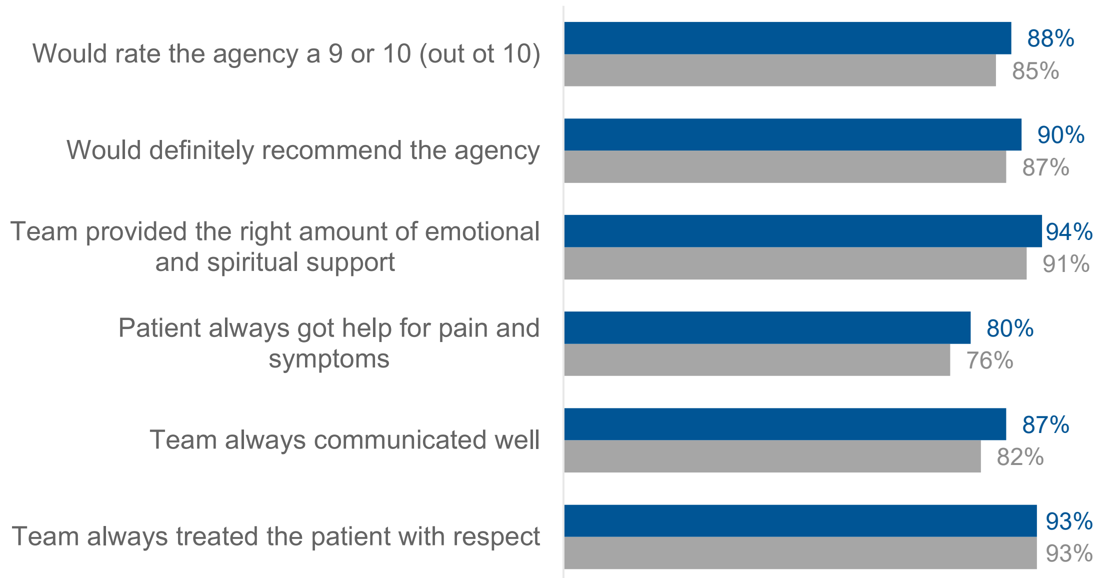
Certified hospice agencies are required to administer the hospice-specific Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey through a third-party vendor each quarter. The survey captures caregiver evaluation of their experience with the hospice team and how the staff cared for the patient.

Available CAHPS Hospice Survey results that correspond to this 2017 – 2019 analysis period cover calendar years 2017 and 2018 (reported together as a single reporting period) and the 2019 calendar year (reported as a single year reporting period).

Comparison of 2019 CAHPS scores for the Bend-La Pine PSA

Heart ‘n Home agencies in Bend and La Pine scored higher than other providers in the PSA across most CAHPS measures.

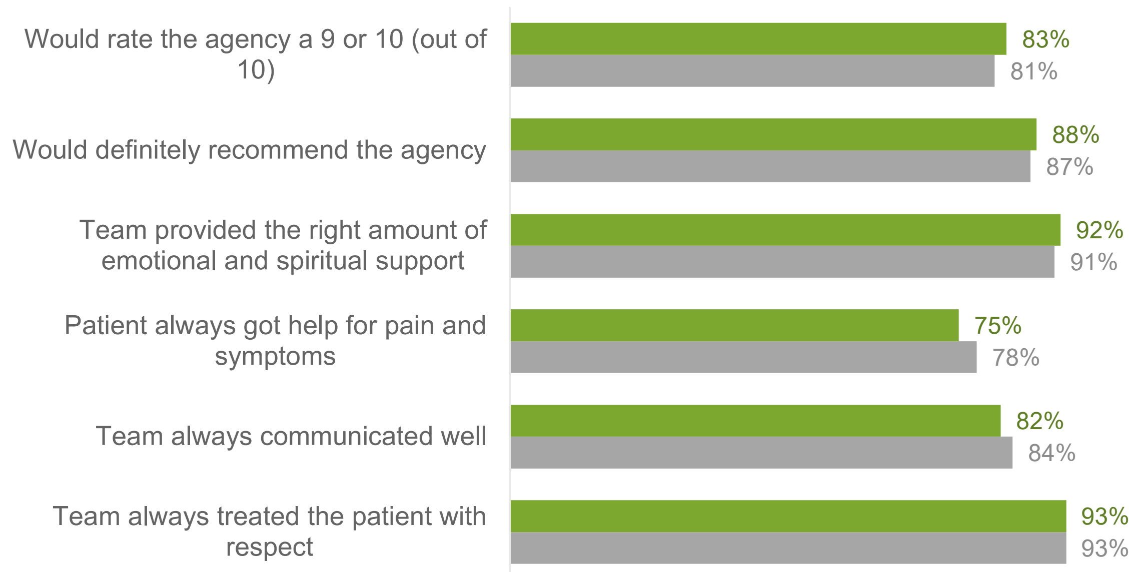
Heart n' Home hospice agencies outperformed the Bend-La Pine **primary service area** on most CAHPS measures.



Comparison of 2019 CAHPS scores for Baker City-La Grande

Overall, across measures, Heart 'n Home locations in Baker City and La Grande performed on par with other nearby hospice agencies in 2019.

Heart 'n Home agencies' CAHPS scores were comparable to those of other **nearby hospice agencies**.



Equity

To assess equity in patients' access to quality home health and hospice services, OHA considered several sources of information:

- Administrative data that connects attributes of service to patient demographics
- Administrative data that describes populations within a geographic region
- Clinical quality and patient experience data from the providers (available through CMS)
- Information included in the transacting entities' Notice of Material Change Transaction

Administrative data derived from insurance enrollment is more than 50% incomplete for patients receiving home health and hospice services during the 2017 – 2019 period, as well as for the broader population residing in the relevant geographic service areas. What data is available (primarily from members enrolled in Medicare and OHP) indicate that the vast majority of home health and hospice patients in Oregon are white, commensurate with the racial composition of the older adult population statewide. Home health and hospice patients at LHC locations are generally representative of the older populations (65+) residing in their primary service areas, suggesting there are not significant inequities in access to these services in those regions.

Collection of comprehensive and more detailed demographic information (such as race, ethnicity, language and disability according to REALD standards) on all patients with claims and insurance enrollees is inconsistent, and when information has not been reported on a high proportion of members within a community of interest, disaggregation would be inappropriate and could allow for inaccurate conclusions to be drawn.

Clinical process and patient outcomes data reported to CMS do not capture full patient demographic information (only age and sex are required elements), and publicly available data sources do not include individual patient information or disaggregation of patient outcomes by demographic characteristics. CAHPS survey administration does include respondent demographic information and survey vendor analysis typically includes presentation of results by demographic characteristics, but this data is not included in the files made publicly available by CMS.

Collection of patient demographic information by healthcare providers and insurance carriers does not yet consistently meet the standards of Race, Ethnicity, Language and Disability (REALD) and Sexual Orientation and Gender Identity (SOGI) reporting established by Oregon law. Consequently, OHA's ability to analyze existing quantitative data sources for disparities and health inequities experienced by older adults accessing home health and hospice services is currently limited. However, there is a growing body of research in this area and local communities' experiences with aging services and supports is effectively conveyed through advocacy groups and community-based organizations serving specific populations.

The notice provides the opportunity for entities to describe the benefits of the new arrangement to the affected community, specifically by: reducing growth in costs to patients; increasing access in medically underserved areas; or rectifying historical and contemporary health inequities. UnitedHealth and LHC provided the following response:

> *"As noted above, combining LHC Group's history of high-quality home and community-based care with Optum's extensive value-based care experience and resources will accelerate the combined companies' ability to deliver integrated care, improving outcomes and patient experiences."*

Combined, the limitations of these data sources challenge our ability to assess current status of equitable access to and experience of home health and hospice care at LHC agencies, but health inequities and disparities in outcomes are known to exist. To complete our understanding of differences in the experience of aging within the Oregon population, including persons receiving home health and hospice care, OHA turned to recent research and literature that has focused on disparities in experience and health outcomes.

Experience of Aging Among Older Adults

As presented earlier in this report, the vast majority of home health and hospice services are delivered to older adults aged 65 and up. This is currently a minority population in most areas of Oregon but a growing age group across the United States, projected to comprise nearly one-quarter of the total population by 2060.[53] Older adults have complex health needs and face unique challenges in maintaining health and wellbeing, including:

- Management of multiple chronic conditions
- Increasing prevalence of cognitive disorders, like dementia[54]
- Fall-related injury, hospitalization, and death
- High need for preventive care and screening, including vaccination (pneumonia is the leading cause of death in this age group)[55]
- Social isolation
- Other social determinants, including financial and housing insecurity[56]
- Need for caregiving and other supports

While some of these aspects of growing older in Oregon may be common to all populations, we know the experience of aging and receiving support differs across communities and geographical regions. Existing barriers to accessing health and support services are often exacerbated for older adults, and racial inequities compound over a lifetime to create a greater burden of advanced disease and disability among communities of color. Institutionalized racism and segregation of communities of color limit access to high-quality, affordable care and place a greater onus of caregiving on the family members and support networks of minority patients. Cultural values, family structures, and availability of clinical services and social supports play important roles in the experience of aging, particularly at end-of-life.

The population of older adults among minority groups was expected to increase 115% to 200% by 2030 (compared to a 60% increase among non-Hispanic whites), so understanding the unique needs of older adults of color will become increasingly important for our health care system and social institutions.[57]

Disparities by Race

National studies have demonstrated disparities in access to, the experience of, and caregiver satisfaction with hospice and palliative care across racial groups. Older of adults of color have been less likely to receive hospice services compared to older white adults. Some studies have cited differences in knowledge about advanced directives, cultural attitudes and religious beliefs around end-of-life care, and mistrust of the health care system as significant factors that influence the rate at which some demographic groups seek and receive hospice or palliative care. Other organizational barriers include absence of staff of color, interpreters, and community outreach to minority populations.

African American and Hispanic hospice patients have been shown to be more likely to be hospitalized during a palliative care episode and less likely to receive care that is consistent with

stated treatment preferences. Relatedly, caregivers of African American patients reported less satisfaction with communication with the hospice team. While most studies of patient experience and outcomes with palliative care include only Black, Hispanic, and White populations due to sample size limitations, differences in care have been documented for members of the Asian, Pacific Islander and Native American communities.[58]

Need for Culturally Appropriate Services

Historical inequities against the Native American population continues to challenge access to culturally appropriate services for the elderly. The population of older American Indian and Alaska Native adults has grown at twice the rate of the overall population and experienced a higher prevalence of functional disabilities and chronic conditions. The Indian Health Service (IHS) is a key federal agency responsible for delivering and funding health care services for Native Americans across the country, but their scope has only recently expanded to include coverage of hospice, home health, and other long-term care services and funding continues to be patchwork and insufficient.[59] Tribal Health Centers funded by the IHS and operated by federally recognized tribes continue to be important hubs for delivering culturally appropriate health care services, particularly to Native peoples residing in rural areas, but nearly 80% of individuals identifying as Native American in Oregon live outside tribal reservation lands.[60] . It is therefore increasingly important that all providers of aging support services, particularly home health and hospice, have the capacity and cultural competence to provide culturally and spiritually appropriate services to our aging Native population.

Disparities by Neighborhood and Geography

A wide-reaching study of over 3 million Medicare beneficiaries across the country examined the relationship between patient demographics, neighborhood composition, and access to high-quality home health agencies (average Quality of Patient Care Star rating of 3.5 or higher), shown to yield lower rates of adverse patient outcomes. The study observed that neighborhoods with higher proportions of Black, Hispanic and low-income residents often included a greater number of home health agencies, but these agencies tended to be of lower quality, rendering Black, Hispanic and low-income patients less likely to receive high-quality home health care. Neighborhood racial composition was shown to be a stronger determinant than individual racial identity or socioeconomic status in the probability of accessing services from a high-quality home health agency.[61]

Data from the National Health and Nutrition Examination Survey suggest that older adults in rural regions have a higher burden of chronic conditions and mental illness than their urban counterparts, and report higher needs around activities of daily living and social functioning.[62] These findings are corroborated by Long et al, who found that older adults in rural regions also report greater experience of social isolation and higher rates of social needs, including financial strain and poor housing quality.[63]

Disparities by Sex, Gender, and Sexual Orientation

The experience of aging also varies by sex, gender identity and sexual orientation. Research has shown a connection between feelings of loneliness and social isolation and increased mortality risk, including higher incidence of cardiovascular disease in older adults. Studies have shown that older heterosexual women often experience more social isolation than older men given they have a longer life expectancy than men and are more likely to be widowed and live alone.[64] Other studies have explored the differences between how men and women experience isolation and maintain social relationships, observing that women are more likely to report feelings of loneliness but have

closer connections to family, friends, and religious groups that provide protective supports against poor physical and psychological outcomes.[65]

Increasing attention is being paid to older lesbian, gay, bisexual, transgender and queer (LGBTQ) adults, recognizing the compounding impact of lifelong social stigma and discrimination as members of this community age. A review of the literature found that LGBTQ older adults experience poorer physical and mental health than heterosexual cisgender counterparts, partially because they have fewer options for culturally responsive health care and will often avoid or delay care or conceal their gender identity or sexual orientation from mainstream health care providers. Members of this community may continue to experience discrimination and isolation as they seek retirement housing and aging support services.[66]

Aging and Intersectionality

Research has begun to explore the intersectionality of social and demographic factors on wellbeing, health outcomes, and access to aging support services among older adults. Data from the National Social Life, Health and Aging Project study showed that older adults in rural regions were less likely to have social interactions on a regular basis, particularly men, who were therefore at a greater risk for poor health outcomes related to social isolation. Analysis suggested gender-specific interventions to help connect older rural residents to social activities and community supports.[67] A literature review of gerontological research identified differences in the experience of aging among the growing number of LGBTQ adults within communities of color and immigrant populations, including compounded stigma, social isolation, and mental wellness. Intersectional aging policies that take into account the full diversity of the older adult population are recommended to achieve optimal outcomes across all aging groups.[68]

Diverse Characteristics and Experience of Caregivers of Older Adults

The experience of aging is not isolated to the older adult, but rather intimately includes their family, friends, and social supports who act as caregivers, particularly as an older community member reaches end-of-life. According to the American Association for Retired Persons' (AARP's) 2020 report on Caregiving in the U.S., nearly 42 million American adults reported providing care to an adult aged 50 or older within their family of relatives or family of choice, a significant increase from 2015.[69] Some policies are facilitating provision of home- and community-based support services as an alternative to residential settings, but a lack of access to local, affordable clinical long-term care is a main driver behind increased caregiving to older adults. Caregivers range from peers of the care recipient (e.g., spouse, partner, sibling, neighbor, or friend) to children or grandchildren within the care recipient's familial or social network. Non-Hispanic white caregivers are most common (60%) but caregiving is reported among all racial and ethnic communities. College students, veterans, and members of the LGBTQ community each comprise ~10% of the caregiving population.[70]

While the act of caring for an older adult can be incredibly rewarding and purposeful, it can also be a source of mental stress and physical strain. Caregivers provide an average of 24 hours of care per week, supporting activities of daily living, helping with nursing tasks, navigating and coordinating across the health system, and creating social and emotional connection. Compared to 2015, a greater proportion of caregivers reported their own health as poor, with nearly a quarter citing that caregiving has made it difficult to attend to their own health needs. Caregiving also results in financial costs, with nearly half of caregivers reporting a financial impact. 60% of caregivers are employed but only 40% report having access to supportive benefits like sick leave or paid family leave to enable or facilitate their caregiving responsibilities.[71]

Studies have shown differences in the experience of caregivers among different racial groups. Latinx caregivers were most likely to be supporting family members and parents, while African American older adults were more likely to receive support from outside their family—Black LGBTQ older adults were most likely to receive support from members of their church or faith group. African American caregivers have reported less stress and greater feeling of reward related to caregiving compared to White counterparts.[72] Findings from the National Study of Caregiving in 2015 suggest that Black caregivers were more likely than White caregivers to provide over 40 hours a week of care and to be caring for a low-income adult with dementia.[73] Data from the 2017 National Health and Aging Trends Study and National Study of Caregiving corroborate a higher likelihood for Black caregivers to be supporting a Medicaid-enrolled care recipient, and to pay for care or medications out-of-pocket. These studies suggested Black caregivers found communications with providers more beneficial than White counterparts, while providers were less likely to ask Hispanic caregivers if they understood the recipient's treatments.[74]

Older adults in rural areas are more likely to be lower-income and have limited access to clinical support services, requiring family members to fill the gap with caregiving support. The percentage of care recipients residing in rural areas has remained roughly the same from 2015 to 2020 (~30%), but fewer caregivers report living in rural areas (12%), meaning many caregivers are relocating to support older adults in their lives. A greater percentage of caregivers in rural areas reported feeling they had no choice in taking on caregiving responsibilities, and greater difficulty in finding affordable services in their local area. Caregivers in rural areas also reported a greater number of comorbidities among the care recipients they served and increased engagement in medical or nursing tasks.[75]

Summary and Future Analyses

This collective body of focused research and reporting from policy and advocacy groups sheds light on the experiences of older adults beyond our current administrative data, and also highlights key elements for future monitoring and data collection.

We currently have little insight into how the LHC home health or hospice agencies provide culturally or linguistically appropriate services to populations shown to have differing needs and experiences with home health and hospice care. The notice highlights how the integration of LHC's home health and hospice care agencies with the spectrum of services and supports offered by its subsidiary Optum has the potential to improve patient outcomes generally, and Optum has demonstrated a commitment to health equity in their other provider networks[76], particularly for LGBTQ+ patients of color. However, the notice did not include any details on how UnitedHealth Group intends to enhance service delivery and supports at the LHC agencies specifically to meet the needs of an increasingly diverse aging population in Oregon.

To support the program's one-, two- and five-year post-transaction follow-up reports, as well as routine reports on the state of consolidation in health care in Oregon, the HCMO team will request from entities more information about their culturally appropriate service delivery, as well as additional data that directly connects patient outcomes and experience of care with all of the demographic characteristics highlighted in the recent research. As the APAC program continues to support the adoption of REALD and SOGI reporting among data submitters, OHA's ability to disaggregate costs, access, and experience and quality of care by important characteristics, including race, language and sexual orientation, will significantly improve and provide greater insight into the experiences of aging support services, like home health and hospice care, across our local communities.

Potential Impacts of the Transaction

To assess the potential impacts of the proposed transaction on Oregonians' equitable access to affordable health care, OHA considered the following factors:

- Terms of the proposed transaction and change in ownership structure associated with those terms.
- Characteristics of the market for hospice and home health services.
- The baseline (2017-2019) performance of the Oregon LHC locations.
- Statements made by entities about expected impacts of the transaction on access, quality, equity, and cost in the Notice of Material Change Transaction.
- Impact of the transaction on consolidation among providers of hospice and home health services in Oregon.
- Academic research and research reports on hospice and home health care.

The notice submitted by UnitedHealth Group includes multiple commitments to maintain the current level of services, quality, and cost. Many of the Entity's commitments are noted in the subsections below.

Public Comments

OHA did not receive any public input regarding this transaction.

Consolidation

The proposed transaction represents a vertical consolidation of UHG (Optum) with LHC. UHG and LHC offer different services and are not competitors in Oregon's health care market. The entities argue that by vertically integrating their businesses, they can better serve their customers (patients and members).

In contrast, horizontal transactions include competing entities that offer the same or similar services in a defined geographic market. As mentioned previously, UHG has confirmed that Optum does not currently own or control any licensed home health or hospice agencies operating in Oregon:

> *"Optum does not own, control, or have a controlling interest in any entity providing hospice services in Oregon. Optum also does not own, control, or have a controlling interest in any home health agency operating in Oregon."*
>
> *-Representative of UHG via email correspondence with OHA staff*

UHG's acquisition of LHC will not increase the combined entity's share of the market for home health or hospice services in Oregon. The transaction therefore does not increase horizontal consolidation among home health or hospice providers in the state.

OHA does not have significant concerns regarding vertical consolidation in this case. Given the commitments made by the parties to the transaction and the other findings outlined in this section, the increase in vertical consolidation is not likely to adversely affect Oregon residents.

OHA does not have concerns about consolidation.

Cost

The proposed transaction is not projected to have a significant impact on health care costs. With no increase in market share, the LHC agencies will not gain bargaining leverage when negotiating reimbursement rates as a result of the transaction.

Original Medicare pays for a significant share of LHC's services. Because Original Medicare sets payment rates based on a formula instead of direct negotiation with hospice and home health providers, this transaction is not projected to significantly impact health care costs for the Original Medicare program or its enrollees.

LHC providers also serve individuals with Medicare Advantage coverage. Assured Home Health in particular serves proportionally more individuals with Medicare Advantage coverage. The proposed transaction could marginally impact the costs Medicare Advantage plans pay, but due to the absence of horizontal consolidation, the transaction is unlikely to significantly increase these costs.

Additionally, transactions that vertically integrate entities, as is the case in this transaction, could affect costs in some scenarios. Vertical integration can result in anti-competitive behavior if the vertically integrated entity blocks competitors from accessing the services provided by the newly acquired entity ("vertical foreclosure"), which in this case is LHC's home health and hospice care services.

This transaction, although it results in a more vertically integrated entity, is not projected to increase costs. In response to follow-up questions from OHA, a representative from UHG stated:

> *"There are no plans to limit LHC's services to UHC members only, or to give UHC preferential access to LHC Group's services."*
>
> *-Representative of UHG via email correspondence with OHA staff*

Another potential cost-related impact relates to how insurers quantify the health risk of their patients, thereby influencing Original Medicare payments. The U.S. Department of Justice has on multiple occasions filed complaints against UHG alleging that they knowingly inflated the risk associated with their patients, thereby increasing payments from Medicare.[77] If, as a result of this transaction, the quantified health risk of LHC patients artificially increases, Original Medicare payments would increase, thereby increasing the total costs associated with treating LHC patients.

Similar to artificially inflating health risk scores, knowingly submitting false claims for hospice benefits also affects health care costs. In 2014, the U.S. Department of Justice intervened in false claims lawsuits against Evercare Hospice and Palliative Care, also known as Optum Palliative and Hospice Care, and for which UHG was a parent company. (UHG sold its Palliative and Hospice Care business in 2016.[78]) The lawsuit alleged that Evercare management pressured employees and physicians to admit into hospice care patients who were not terminally ill.[79] Providing unqualifying patients with services that Original Medicare pays for would impact health care costs.

If as a result of the proposed transaction, Optum or UHG engaged in artificially inflating home health or hospice patients' health risk scores or knowingly submitting false claims for hospice or home health services, OHA would have concerns related to the impact of the transaction on health care costs. However, given that these concerns are national in scope and involve the U.S. Department of Justice and Federal Trade Commission, OHA is not aware of any Oregon-specific concerns that would not already be addressed by any actions taken by federal agencies going forward.

OHA does not have concerns about cost impacts.
OHA will monitor for the abovementioned potential cost impacts in subsequent reports about this transaction.

Access

The Entity anticipates that the transaction will increase access to LHC's services in Oregon. Per the notice:

> *"The transaction will increase access to affordable health care in Oregon because LHC Group's services will remain available to its current patients and in addition Optum will offer LHC Group's services to Optum Health patients much more broadly."*

In all relevant service areas except one, there are numerous other providers of home health and hospice care, which means this transaction is unlikely to significantly affect access. The one exception is Baker City-La Grande in which LHC is the only hospice provider. Because UHG stated "*[t]here are no plans to limit LHC's services to UHC members only"* and *"LHC Group's services will remain available to its current patients",* OHA does not have significant concerns about access to care in LHC service areas.

As noted above, vertical transactions may create incentives for vertical foreclosure. The concern for this proposed transaction is related to the possibility that UHG may restrict access to LHC services for patients not covered by a UnitedHealthcare plan.

However, OHA does not have significant concerns about the impacts of the transaction because LHC does not have a dominant position in the home health or hospice markets (except Baker City-La Grande), and UnitedHealthcare's representative explicitly stated that there are no plans to limit LHC's services to UHC members only.

OHA does not have concerns about reductions in access to services.
OHA will monitor access issues, including the payer mix of LHC agencies and any preferential treatment of UHC members or access restrictions for non-UHC members.

Quality

As discussed above, there are many different quality indicators, and the LHC providers vary in their performance. Generally, the quality indicators for the home health and hospice agencies are mostly positive or within the state average.

The proposed transaction has the potential to increase quality due to enhanced care coordination and integration of health care services for patients. In the Notice of Material Change Transaction, the entity stated

> "*LHC Group's history of high-quality home and community-based care matched with Optum's extensive value-based care experience and resources will accelerate the combined companies' ability to deliver integrated care, improving outcomes and patient experiences."*

OHA does not have concerns about impacts on the quality of care.
OHA will continue monitoring the quality of care provided by the LHC agencies in future analyses and reports.

Equity

LHC's current patient populations generally reflect the demographics of the older adult residents of each hospice and home health agency's primary service area, suggesting equitable access to services. UHG intends to maintain existing LHC services and continue to serve LHC's current patient population. Maintaining status quo availability of services does not directly speak to the differing needs of the various communities in LHC's primary service areas, nor does it acknowledge the impact of inequities in access to or outcomes of care. It's unclear how change in ownership of the LHC agencies will alter how these providers address disparities in outcomes and strive to deliver more culturally appropriate care.

OHA identified broad equity concerns but does not have specific concerns about the impact of this transaction on health equity in Oregon.

In follow-up reviews, OHA will monitor impacts of the transaction on equitable access to affordable, high-quality home health and hospice services over time. OHA will request more information from UHG/Optum on their approach to addressing health inequity, as well as clinical quality and patient experience data that includes patient demographic characteristics.

Conclusions

Based on preliminary review findings, **OHA approved the transaction on September 1, 2022.** See Findings of Fact, Conclusions of Law, and Final Order in the Matter of the Proposed Material Change Transaction of UnitedHealth Group, Inc. (Transaction ID: 003), dated September 1, 2022.

The transaction was approved, per ORS 415.501(6)(b), because OHA determined the transaction will not have a negative impact on access to affordable health care in Oregon. Specifically, the transaction met the following criteria:

- **The transaction is not likely to substantially reduce access to affordable health care in Oregon.**
- **The transaction is not likely to substantially alter the delivery of health care in Oregon.**

These criteria are specified in administrative rules for the Health Care Market Oversight Program and are consistent with Oregon law. Below is a summary of the main reasons, based on the findings described in this report, why OHA considers each criterion satisfied.

Approval Criteria

The transaction is not likely to substantially reduce access to affordable health care.

In the submitted notice, UHG states that the transaction will increase access to affordable care. UHG states that it will continue to maintain availability of LHC Group's services to current patient populations and "will offer LHC Group's services to Optum Health patients much more broadly."

The transaction will not impact the number of hospice and home health providers operating in Oregon. UHG does not own or control other hospice or home health providers in Oregon, and the transaction will not result in horizontal consolidation in Oregon's market for licensed home health or hospice services.

UHG has stated that there are no plans to limit LHC's services to UnitedHealthcare members or to give preferential access to UHC members for LHC services.

The transaction is not likely to substantially alter the delivery of health care.

In most regions, patients have other options for home health and hospice services, and UHG has stated that it intends to maintain availability of services. The transaction does not have a stated intention to expand or eliminate services or locations. UHG has plans to expand the use of value-based care payment models for home health and hospice services, which may result in better outcomes and patient experiences.

Post-Transaction Monitoring

As required by statute, OHA will conduct follow-up analyses one, two, and five years after the transaction is complete.

OHA's monitoring will assess whether the UHG keeps the commitments included in the notice that the transaction will not affect Oregon residents' equitable access to affordable, high-quality hospice and home health services. OHA will broadly monitor changes in the measures of cost, quality, access, and equity presented in this report and may also assess other measures relevant to each domain. As part of the required monitoring activities, OHA may request additional information from the entities. OHA will publicly publish findings and conclusions from follow-up analyses.

Acronyms, Abbreviations, & Glossary

Acronyms & Abbreviations

ACA	Affordable Care Act
APAC	Oregon's All Payer All Claims database
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare and Medicaid Services
D-SNP/ SNP	Dual Eligible Special Needs Plan/ Special Needs Plan
FTC	Federal Trade Commission
HCMO	Health Care Market Oversight
HHI	Herfindahl-Hirschman Index
LHC	LHC Group
OAR	Oregon Administrative Rule
OHA	Oregon Health Authority
OHP	Oregon Health Plan
ORS	Oregon Revised Statute
PBM	Pharmacy Benefit Manager
PSA	Primary Service Area
UHC	UnitedHealthcare
UHG	UnitedHealth Group

Glossary

Market: A collection of buyers and sellers that enter into agreements to purchase and sell a product or service. Markets are typically defined in terms of product/service and geographic reach (e.g., local, state, national, international, global).

Market share: In this report, market share is the hospice agency's share of total of hospice episodes provided by licensed hospice agencies in the geographic service areas of Kindred Salem and Kindred Lake Oswego, respectively.

Competition: A situation in a market in which firms or sellers independently strive to attract buyers for their products or services by varying prices, product characteristics, promotion strategies, and distribution channels.

Concentration: A measure of the degree of competition in the market; highly concentrated markets are generally characterized by a smaller number of firms and higher market shares for individual firms.

Consolidation: The combination of two or business units or companies into a single, larger organization. Consolidation may occur through a merger, acquisition, joint venture, affiliation agreement, etc.

Health equity: OHA defines health equity as follows:

Oregon will have established a health system that creates health equity when all people can reach their full health potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, age, gender, gender identity, sexual orientation, social class, intersections among these communities or identities, or other socially determined circumstances. Achieving health equity requires the ongoing collaboration of all regions and sectors of the state, including tribal governments to address:

- The equitable distribution or redistribution of resources and power; and
- Recognizing, reconciling, and rectifying historical and contemporary injustices.

Home health episode: An episode of home health care begins when a patient elects home health care and ends when a patient no longer requires or qualifies for home health services, is discharged to another kind of care facility, or dies. This analysis also identified transitions from one hospice agency to another as separate episodes of care in order to capture services and costs associated with individual facilities.

Hospice episode: An episode of hospice care begins when a patient elects hospice care and ends when the patient dies, is discharged to another kind of care facility, or opts out of hospice care. This analysis also identified transitions from one hospice agency to another as separate episodes of care in order to capture services and costs associated with individual facilities.

Appendix A: Data Tables

Oregon statewide population and home health patient demographics and insurance coverage

Race	Statewide Population			Statewide 65+ population			Statewide home health patients		
	People	%	% of reported	People	%	% of reported	Episodes	%	% of reported
Unreported	2,850,650	67%		341,121	40%		58,442	31%	
Other	118,098	3%	9%	10,530	1%	2%	1,686	1%	1%
White	1,113,797	26%	81%	460,756	54%	91%	118,359	63%	91%
Asian	43,320	1%	3%	12,100	1%	2%	2,187	1%	2%
Native American/ Alaska Native	28,617	1%	2%	4,622	1%	1%	1,566	1%	1%
Black/ African American	65,415	2%	5%	19,587	2%	4%	5,925	3%	5%
Native Hawaiian/ Pacific Islander	7,575	0%	1%	346	0%	0%	168	0%	0%
Total	**4,227,472**			**849,062**			**188,188**		

Sex	Statewide Population			Statewide 65+ population			Statewide home health patients		
	People	%	% of reported	People	%	% of reported	Episodes	%	% of reported
Unreported	633,462	15%		76	0%		19	0%	
Female	1,867,359	44%	52%	457,762	54%		113,429	60%	
Male	1,726,651	41%	48%	391,224	46%		74,740	40%	
Total	**4,227,472**			**849,062**			**188,188**		

Age	Statewide Population			Statewide home health patients		
	People	%	% of reported	Episodes	%	% of reported
Unreported	632,577	15%		182	0%	
0 - 19	826,829	20%	23%	465	0%	
20 - 44	1,118,715	26%	31%	4,641	2%	
45 - 64	800,289	19%	22%	27,994	15%	
65 - 84	752,109	18%	21%	98,919	53%	
85+	96,953	2%	3%	55,987	30%	
Total	**4,227,472**			**188,188**		

Insurance	Statewide population		Statewide 65+ population		Statewide home health patients	
	People	%	People	%	Episodes	%
Original Medicare	612,473	15%	470,351	55%	78,224	42%
Medicare Advantage (MA)	511,447	12%	389,448	46%	75,146	41%
MA Special Needs Plan (SNP)	47,018	1%	27,823	3%	11,402	6%
OHP/Medicaid	1,652,428	39%	109,480	13%	20,469	11%
Commercial	2,019,559	48%	99,998	12%	8,708	5%
Multiple types of coverage	514,886	12%	195,648	23%	8,442	5%
UHC coverage	234,012	6%	84,380	10%	14,692	8%
UHC commercial	138,044	3%	4,746	0.6%	124	0.1%
UHC MA	94,778	2%	78,987	9%	13,662	7%
UHC SNP	2,104	0.1%	1,452	0.2%	906	0.5%
Total	**4,227,472**		**849,062**		**188,188**	

*Members may have multiple insurance types, so these categories are not mutually exclusive and do not sum to 100%

Home health Portland-Salem primary service area (PSA) population and LHC home health (HH) patients

Race	PSA population			PSA 65+ population			PSA HH patients			Assured HH patients			Brookdale HH patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	1,589,374	73%		193,736	52%		27,489	40%		784	23%		512	35%	
Other	64,577	3%	11%	3,965	1%	2%	506	1%	1%	27	1%	1%	15	1%	2%
White	432,898	20%	74%	158,492	42%	87%	36,055	53%	88%	2,423	70%	91%	868	60%	92%
Asian	33,797	2%	6%	9,395	3%	5%	1,407	2%	3%	56	2%	2%	17	1%	2%
Native American/ Alaska Native	8,961	0%	2%	1,132	0%	1%	358	1%	1%	26	1%	1%	<10	0%	0%
Black/ African American	42,101	2%	7%	8,820	2%	5%	2,579	4%	6%	124	4%	5%	37	3%	4%
Native Hawaiian/ Pacific Islander	5,323	0%	1%	218	0%	0%	109	0%	0%	<10	0%	0%	<10	0%	0%
Total	**2,177,031**			**375,758**			**68,503**			**3,441**			**1,453**		

Sex	PSA population			PSA 65+ population			PSA HH patients			Assured HH patients			Brookdale HH patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	317,712	15%		36	0%		<10	0%		0			0		
Female	42,024	61%		1,987	58%		981	68%		42,024	61%		1,987	58%	
Male	26,476	39%		1,454	42%		472	32%		26,476	39%		1,454	42%	
Total	**2,177,031**			**375,758**			**68,503**			**3,441**			**1,453**		

Age	PSA population			PSA HH patients			Assured HH patients			Brookdale HH patients		
	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	317,095	15%		<10	0%		<10	0%		0		
0 - 19	165	0%	24%	<10	0%		0			165	0%	
20 - 44	1,848	3%	34%	53	2%		18	1%		1,848	3%	
45 - 64	10,598	15%	22%	408	12%		95	7%		10,598	15%	
65 - 84	34,842	51%	18%	1,984	58%		725	50%		34,842	51%	
85+	21,045	31%	2%	994	29%		615	42%		21,045	31%	
Total	**2,177,031**			**68,503**			**3,441**			**1,453**		

Insurance	PSA population		PSA 65+ population		PSA HH patients		Assured HH patients		Brookdale HH patients	
	People	%	People	%	Episodes	%	Episodes	%	Episodes	%
Original Medicare	215,385	10%	162,260	43%	20,013	29%	1,700	49%	370	25%
Medicare Advantage (MA)	277,614	13%	217,905	58%	34,843	51%	1,347	39%	800	55%
MA Special Needs Plan (SNP)	25,108	1%	15,293	4%	4,644	7%	256	7%	205	14%
OHP/ Medicaid	781,552	36%	49,590	13%	8,909	13%	300	9%	25	2%
Commercial	1,187,799	55%	53,630	14%	4,392	6%	48	1%	103	7%
Multiple types of coverage	259,393	12%	95,872	26%	4,265	6%	210	6%	50	3%
UHC coverage	147,222	7%	51,547	14%	7,348	11%	582	17%	393	27%
UHC commercial	87,848	4%	2,406	0.6%	53	0.1%	0		0	
UHC MA	58,727	3%	48,802	13%	7,040	10%	570	17%	198	14%
UHC SNP	1,231	0.1%	862	0.2%	255	0.4%	12	0.4%	195	13%

Home health Grants Pass-Medford primary service area (PSA) population and LHC home health (HH) patients

Race	PSA population			PSA 65+ population			PSA HH patients			Three Rivers HH patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	149,213	60%		20,963	34%		4,123	31%		663	27%	
Other	6,187	2%	6%	914	1%	2%	183	1%	2%	30	1%	2%
White	87,388	35%	88%	37,116	61%	92%	8,642	64%	92%	1,688	68%	93%
Asian	1,073	0%	1%	302	0%	1%	32	0%	0%	<10	0%	0%
Native American/ Alaska Native	1,401	1%	1%	198	0%	0%	107	1%	1%	22	1%	1%
Black/ African American	3,025	1%	3%	1,615	3%	4%	410	3%	4%	74	3%	4%
Native Hawaiian/ Pacific Islander	406	0%	0%	18	0%	0%	10	0%	0%	0		
Total	**248,693**			**61,126**			**13,507**			**2,485**		

Sex	PSA population			PSA 65+ population			PSA HH patients			Three Rivers HH patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	39,110	16%		<10	0%		<10	0%		<10	0%	
Female	110,825	45%	53%	33,565	55%		8,162	60%		1,518	61%	
Male	98,758	40%	47%	27,555	45%		5,344	40%		966	39%	
Total	**248,693**			**61,126**			**13,507**			**2,485**		

Race	PSA population			PSA HH patients			Three Rivers HH patients		
	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	39,081	16%		0			0		
0 - 19	47,920	19%	23%	54	0%		0		
20 - 44	57,562	23%	27%	302	2%		23	1%	
45 - 64	43,004	17%	21%	1,817	13%		290	12%	
65 - 84	53,086	21%	25%	6,856	51%		1,393	56%	
85+	8,040	3%	4%	4,478	33%		779	31%	
Total	**248,693**			**13,507**			**2,485**		

Insurance	PSA population		PSA 65+ population		PSA HH patients		Three Rivers HH patients	
	People	%	People	%	Episodes	%	Episodes	%
Original Medicare	49,278	20%	38,196	62%	6,756	50%	1,418	57%
Medicare Advantage (MA)	35,946	14%	23,749	39%	4,622	34%	843	34%
MA Special Needs Plan (SNP)	4,083	2%	2,563	4%	1,065	8%	98	4%
OHP/ Medicaid	118,552	48%	7,722	13%	1,462	11%	147	6%
Commercial	77,651	31%	4,489	7%	175	1%	65	3%
Multiple types of coverage	30,114	12%	12,147	20%	559	4%	86	4%
UHC coverage	4,876	2%	1,193	2%	198	1%	42	2%
UHC commercial	3,771	2%	220	0.4%	1	0%	0	
UHC MA	1,121	0.5%	986	2%	197	1%	42	2%
UHC SNP	0		0		0		0	

Oregon statewide population and hospice patient* demographics and insurance coverage

*Demographic information reflected only for hospice patients with corresponding enrollment data

Race	Statewide Population			Statewide 65+ population			Statewide hospice patients		
	People	%	% of reported	People	%	% of reported	Episodes	%	% of reported
Unreported	2,850,650	67%		341,121	40%		5,982	13%	
Other	118,098	3%	9%	10,530	1%	2%	348	1%	1%
White	1,113,797	26%	81%	460,756	54%	91%	36,771	81%	93%
Asian	43,320	1%	3%	12,100	1%	2%	585	1%	1%
Native American/ Alaska Native	28,617	1%	2%	4,622	1%	1%	441	1%	1%
Black/ African American	65,415	2%	5%	19,587	2%	4%	1332	3%	3%
Native Hawaiian/ Pacific Islander	7,575	0%	1%	346	0%	0%	34	0%	0%
Total	**4,227,472**			**849,062**			**45,493**		

Sex	Statewide Population			Statewide 65+ population			Statewide hospice patients		
	People	%	% of reported	People	%	% of reported	Episodes	%	% of reported
Unreported	633,462	15%		76	0%		827	2%	
Female	1,867,359	44%	52%	457,762	54%		24,356	54%	
Male	1,726,651	41%	48%	391,224	46%		20,310	45%	
Total	**4,227,472**			**849,062**			**45,493**		

Age	Statewide Population			Statewide hospice patients		
	People	%	% of reported	Episodes	%	% of reported
Unreported	632,577	15%		1712	4%	
0 - 19	826,829	20%	23%	99	0%	0%
20 - 44	1,118,715	26%	31%	529	1%	1%
45 - 64	800,289	19%	22%	5,371	12%	12%
65 - 84	752,109	18%	21%	20,463	45%	47%
85+	96,953	2%	3%	17,319	38%	40%
Total	**4,227,472**			**45,493**		

Insurance	Statewide Population		Statewide 65+ population		Statewide hospice patients	
	People	%	People	%	Episodes	%
Original Medicare	612,473	15%	47,0351	55%	38,229	84%
Medicare Advantage (MA)	511,447	12%	389,448	46%	405	1%
MA Special Needs Plan (SNP)	47,018	1%	27,823	3%	28	0%
OHP/ Medicaid	1,652,428	39%	109,480	13%	9,552	21%
Commercial	,2019,559	48%	99,998	12%	1,603	4%
Multiple types of coverage	514,886	12%	195,648	23%	4,312	9%
UHC coverage	234,012	6%	84,380	10%	72	0%
UHC commercial	138,044	3%	4,746	0.6%	56	0.1%
UHC MA	94,778	2%	78,987	9%	8	0.0%
UHC SNP	2,104	0.1%	1,452	0.2%	8	0.0%

Hospice Bend-La Pine primary service area (PSA) population and LHC hospice patients

Race	PSA population			PSA 65+ population			PSA hospice patients			Heart ‘n Home Bend-La Pine hospice patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	118,773	62%		11,527	27%		242	9%		22	8%	
Other	3,125	2%	4%	229	1%	1%	10	0%	0%	3	1%	1%
White	65,448	34%	90%	29,727	69%	95%	2,241	87%	96%	227	87%	95%
Asian	620	0%	1%	123	0%	0%	11	0%	0%	0		
Native American/ Alaska Native	704	0%	1%	125	0%	0%	18	1%	1%	<10	1%	1%
Black/ African American	2,346	1%	3%	1,238	3%	4%	65	3%	3%	<10	3%	3%
Native Hawaiian/ Pacific Islander	144	0%	0%	<10	0%	0%	<10	0%	0%		0%	0%
Total	**191,160**			**42,975**			**2,588**			**262**		

Sex	PSA population			PSA 65+ population			PSA hospice patients			Heart ‘n Home Bend- La Pine hospice patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.	Episodes	%	% of rep.
Unreported	26,309	14%		<10	0%		44	2%		11	4%	
Female	85,042	44%	52%	22,594	53%		1,410	54%		138	53%	
Male	79,809	42%	48%	20,372	47%		1,134	44%		113	43%	
Total	**248,693**			**61,126**			**13,507**			**2,485**		

Age	PSA population			PSA hospice patients			Heart ‘n Home Bend-La Pine hospice patients		
	People	**%**	**% of rep.**	**Episodes**	**%**	**% of rep.**	**Episodes**	**%**	**% of rep.**
Unreported	26,279	14%		77	3%		13	5%	
0 - 19	36,532	19%	22%	<10	0%		0		
20 - 44	48,437	25%	29%	30	1%		<10	1%	
45 - 64	36,937	19%	22%	250	10%		11	4%	
65 - 84	38,693	20%	23%	1,128	44%		119	45%	
85+	4,282	2%	3%	1,100	43%		117	45%	
Total	**191,160**			**2,588**			**262**		

Race	PSA population		PSA 65+ population		PSA hospice patients		Heart ‘n Home Bend-La Pine hospice patients	
	People	**%**	**People**	**%**	**Episodes**	**%**	**Episodes**	**%**
Original Medicare	37973	20%	31414	73%	2301	89%	247	94%
Medicare Advantage (MA)	14827	8%	12079	28%	10	0%	2	1%
MA Special Needs Plan (SNP)	43	0%	24	0%	0	0%	0	
OHP/ Medicaid	71530	37%	3787	9%	364	14%	34	13%
Commercial	90915	48%	4460	10%	83	3%	0	
Multiple types of coverage	20522	11%	7164	17%	169	7%	21	8%
UHC coverage	6053	3%	1156	3%	3	0%	0	
UHC commercial	5040	2.6%	242	0.6%	3	0.1%		
UHC MA	1016	0.5%	916	2.1%	0			
UHC SNP	1	0.0%	1	0.0%	0			

Hospice Baker City-La Grande primary service area (PSA)* population and LHC hospice patients

*Since Heart ‘n Home Baker City-La Grande is the only hospice agency within the zip codes of its PSA, there is no broader PSA hospice patient population for comparison. Other analyses compare Heart ‘n Home Baker City-La Grande’s performance to the closest hospice agencies outside the PSA, but these providers serve a more geographically dispersed population that is inappropriate for these population-based demographic comparisons.

Race	PSA population			PSA 65+ population			Heart ‘n Home Baker City-La Grande hospice patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.
Unreported	36,317	50%		1,765	11%		69	7%	
Other	3,682	5%	10%	212	1%	2%	13	1%	1%
White	30,149	42%	84%	13,077	84%	94%	873	87%	94%
Asian	284	0%	1%	81	1%	1%	7	1%	1%
Native American/ Alaska Native	454	1%	1%	73	0%	1%	<10	1%	1%
Black/ African American	996	1%	3%	408	3%	3%	31	3%	3%
Native Hawaiian/ Pacific Islander	250	0%	1%	<10	0%	0%	0		
Total	**72,132**			**15,619**			**998**		

Sex	PSA population			PSA 65+ population			Heart ‘n Home Baker City-La Grande hospice patients		
	People	%	% of rep.	People	%	% of rep.	Episodes	%	% of rep.
Unreported	10,383	14%		1	0%		10	1%	
Female	32,105	45%	52%	8,103	52%		540	54%	
Male	29,644	41%	48%	7,515	48%		448	45%	
Total	**72,132**			**15,619**			**998**		

Age	PSA population			Heart ‘n Home Baker City-La Grande hospice patients		
	People	%	% of rep.	Episodes	%	% of rep.
Unreported	10,376	14%		13	1%	
0 - 19	17,017	24%	28%	<10	0%	
20 - 44	16,681	23%	27%	<10	1%	
45 - 64	12,439	17%	20%	106	11%	
65 - 84	13,679	19%	22%	466	47%	
85+	1,940	3%	3%	404	40%	
Total	**72,132**			**998**		

Insurance	PSA population		PSA 65+ population		Heart ‘n Home Baker City-La Grande hospice patients	
	People	%	People	%	Episodes	%
Original Medicare	18,153	25%	1,337	9%	912	91%
Medicare Advantage (MA)	2,165	3%	1,669	11%	0	
MA Special Needs Plan (SNP)	6	0%	6	0%	0	
OHP/ Medicaid	38,494	53%	2,360	15%	179	18%
Commercial	22,941	32%	1,337	9%	22	2%
Multiple types of coverage	8,665	12%	3,277	21%	114	11%
UHC coverage	1,190	2%	284	2%	0	
UHC commercial	938	1.3%	61	0.4%		
UHC MA	252	0.3%	223	1.4%		
UHC SNP	0		0			

Appendix B: Methodology

The methods described in this Appendix are consistent with HCMO's Analytic Framework.

Primary Service Area Calculation

OHA calculated the primary service area of the LHC home health and hospice agencies as follows:

- Associated each episode of home health or hospice care with the patient's zip code at the start of the episode
- Calculated 75% of total episodes
- Sorted zip codes in descending order by home health or hospice episode count
- Starting with the zip code with the highest episode count, built a geographic area of zip codes contiguous to the home health or hospice agency zip code that encompassed 75% of total episodes. Some zip codes with higher episode counts were not included in the PSA if they were not contiguous with other zip codes surrounding the home health or hospice agency.

Some zip codes adjacent to the PSA were not included if their episode count was low enough to place them below the 75% threshold.

Zip code reliability may vary. People move and zip codes may not be updated in billing data or zip codes may not reflect where a person actually resides; for example, a hospice patient may be staying with a close relative or friend while receiving services. Administrative enrollment data captures patient zip code at a point in time, often when coverage begins. As patients relocate, address or zip code information may not be updated with their insurance carrier in a timely manner, and updated data is not always incorporated into the data file submitted to APAC.

Patients with terminal illness often require additional support in concert with the hospice team, and patients frequently relocate to be with family members who can support them with their end-of-life care. When patients relocate for home health or hospice care, their original zip code of residence may be quite far from the hospice agency's primary service area, lending the appearance of a wide-reaching range in the data. The methodology of identifying the PSA through zip codes with the highest episode counts helps account for this anomaly in the data but OHA acknowledges limitations in the timeliness and accuracy of the information used in these analyses.

Identification of individual home health or hospice agency locations depends on the information provided by the transacting entities and how agencies are identified for billing purposes. For several of the LHC agencies, a single identifier (typically an NPI) was used for multiple physical locations, often operating under the same state license and CMS Certification Number. Without any additional location identifier, it is impossible to distinguish care provided at these separate locations, so both locations were used to create a broader primary service area. Any zip codes associated with patient episodes that were adjacent to either agency's physical zip code were included in the PSA.

Measure Specifications

Payment per month of home health or hospice care: Analogous to a per member per month payment for home health or hospice, total paid amount (as above) for episodes initiated during the year divided by the number of home health or hospice months provided during those episodes (total length of stay in days divided by 12); this helps normalize payments across providers that serve different volumes of patients and provide care across different lengths of stay.

CMS Clinical Quality measures:

Hospice: the seven individual clinical process measures and the Hospice Comprehensive Assessment measure (NQF #3235) evaluate a patient at admission to hospice care and screen for common conditions needing to be addressed by the hospice team

Treatment Preferences (NQF #1641): patient was asked about preferences regarding resuscitation, life support options and hospitalization

Beliefs & Values Addressed (NQF #1647): patient was asked about spiritual or existential concerns

Pain Screening (NQF #1634): patient was screened for pain within 2 days of admission

Pain Assessment (NQF #1637): patient was given a comprehensive assessment of severity of pain within 1 day of a positive pain screening

Dyspnea Screening (NQF #1639): patient was screened for shortness of breath within 2 days of admission

Dyspnea Treatment (NQF #1638): patient was treated for shortness of breath within 1 day of a positive dyspnea screening

Patients Treated with an Opioid Who Are Given a Bowel Regimen: patients started a bowel regimen (typically a stool softener to combat opioid-induced constipation) within 1 day of starting opioid treatment

Home health: Outcome measures derived from the OASIS dataset that describe a patient's experience during care and functional improvement as a result of home health care.[80] Process measures describe the patient's interaction with the home health team[81]

Acute care hospitalization (NQF #0171): percent of home health episodes in which a patient had an unplanned hospital admission within 60 days of initiating home health care

Emergency Department use (NQF #0173): percent of home health episodes in which a patient used the emergency department but was not admitted to the hospital within 60 days of initiating care

Improvement in bathing (NQF #0174): patient got better at bathing themselves

Improvement in ambulation-locomotion (NQF #0167): got better at moving and walking around

Improvement in bed transferring (NQF # 0175): patient got better at getting in and out of bed

Improvement in management of oral medications (NQF #0176): patient got better at taking their medications correctly by mouth

Improvement in dyspnea (not NQF-endorsed): patient experienced less shortness of breath

Improvement in status of surgical wounds (not NQF-endorsed): patient's surgical wounds healed or improved

Changes in skin integrity post-acute care: pressure ulcer or injury (not NQF-endorsed): patient has a bed sore or bruise at hospital discharge that worsens over the course of home health care (lower rates are better)

Timely start of care (not NQF-endorsed): episode began (or resumed) on the physician ordered Start of Care date, or within 48 hours of referral

Multifactor fall risk assessment for all ambulatory patients (NQF #0537): home health team performed a comprehensive assessment for risk of falling for patients able to walk around

Depression assessment (not NQF-endorsed): home health team administered a standard depression screening tool

Influenza vaccination received for current season (previously endorsed, NQF #0522): home health team checked for current vaccination status and administered flu vaccine if not already provided; in 2018 measure was removed from Home Health Quality of Patient Care Star rating but data continues to be collected and reported on the Home Health Compare website, supplemented by rates of vaccine offering and refusal, and vaccine contraindication.

Pneumococcal vaccination ever received (previously endorsed, NQF #0525): home health team determined whether the patient had ever received the pneumococcal polysaccharide vaccine to protect against pneumonia

Drug education on all medications provided to patient/caregiver (not NQF-endorsed): home health team informed patient and caregiver(s) about how to monitor for effectiveness of medications, recognize negative side effects and how to report issues

Drug regimen review conducted with follow-up for identified issues (not NQF-endorsed): home health team reviewed a patient's medications upon start or resumption of care and if issues were identified, a physician was contacted and recommended actions were taken by midnight of the next day

Diabetic foot care and patient/caregiver education implemented (previously endorsed, NQF #0519): a physician ordered diabetic foot care as part of a patient's treatment plan and the home health team provided foot care and educated both patient and caregiver during the home health episode

Home Health and Hospice Care, Episodes, and Licensing

For purposes of OHA's review, all care billed according to CMS' guidelines for home health or hospice care is considered 'home health care' or 'hospice care' and is included in this analysis. OHA defined 'home health service' as all services billed according to CMS' Medicare Claims Processing Manual for home health care (chapter 10), using Type of Bill (TOB) codes 320 – 329. 'Hospice services' were defined as all services billed according to CMS' Medicare Claims Processing Manual for hospice care (chapter 11) using Type of Bill codes 810 – 829.[82] Claims with TOB codes beginning with 81- were identified as non-hospital-based hospice services and claims with TOB beginning with 82- were identified as hospital-based hospice services.

For a Medicare beneficiary, an episode of hospice care begins with a Notice of Election, which waives their right to payment for curative treatment for their terminal illness or other medical conditions. The hospice benefit can be renewed for two 90-day periods, followed by unlimited 60-day periods as needed. Hospice care may be interrupted during these periods (e.g., a patient is

hospitalized or temporarily opts out of hospice care) but can be resumed within the approved time frame without requiring a new Notice of Election. A patient may transition to another hospice agency within an approved period, but this does not reset the timeframe. The new hospice provider is responsible for renewing the hospice benefit when the current 90- or 60-day period ends. A hospice episode ends and the hospice benefit terminates when a patient either expires, discharges to another kind of care facility, or permanently opts out of hospice care.

For a Medicare beneficiary, an episode of home health care begins with an initial visit in which OASIS data is collected and the Start of Care (SOC) assessment is typically performed, determining the patient's physical, functional, psychosocial, and cognitive status and identifying the needs of the patient and caregiver to be met by the home health team. Home health payments previously covered standard 30-day periods of care (now 60 days), with post-period adjustments for longer or shorter duration of services and higher or lower intensity of services. Home health care may be interrupted during these periods, due to hospitalization, emergency department care, or temporary election to discharge from services. Care can be resumed during the current 60-day period of care without requiring a new SOC assessment. If care begins beyond the current 60-day period, the home health agency must complete a Resumption of Care (ROC) assessment to capture any changes to the patient's status and needs from the home health team. A home health episode ends when: a patient's functionality improves and they no longer require services; they discharge permanently to another kind of care facility; they opt out of home health care; or they expire.

For purposes of OHA's analysis, focused on costs and market share of individual home health and hospice agencies, when a patient transitioned from one agency to another, this signaled the end of the initial episode, even though the Medicare benefit hospice or home health period was still open. All prior services and costs were associated with the initial agency and all subsequent care and costs were attributed to the second agency in a new episode of care. A small number of patients received care from more than two hospice or home health agencies.

Analysis of administrative claims data identifies a small portion of patients at licensed home health and hospice agencies in Oregon whose length of stay in care far exceeds 6 months (e.g., 2 or more years of continuous care). For hospice agencies, this is presumed to be episodes of palliative care, which deliver identical services and are billed using the same codes above but are not subject to the renewal requirements and payment caps CMS applies to services delivered under the elected hospice benefit. There is intermittent use of the diagnosis code Z51.5 to indicate 'an encounter for palliative care,' but this is not a reliable indicator to differentiate episodes of care at hospice agencies that are intended for end-of life from those episodes providing longer-term palliative support.

Home health and hospice agencies that operate multiple locations within a 60-mile radius may license all locations under a single application, connected to a single physical address. Oregon state licensing mirrors CMS certification, so data at the state and federal level is reported for the physical location indicated on the license or certification, but it is unclear whether this data is inclusive of service delivery at any other locations associated with the license. For purposes of this analysis, data was assumed to reflect care provided to patients at all agencies operating under the registered license.

Market Share

OHA assessed market shares based on the service volumes of home health and hospice agencies located in each PSA. Service volume was measured as the number of care episodes provided in

the 2017 – 2019 period. For example, OHA calculated market shares for hospice agency “A” as follows:

$$Hospice\ A\ Market\ Share = \frac{Number\ of\ episodes\ provided\ by\ Hospice\ A}{Total\ episodes\ provided\ by\ hospices\ in\ PSA}$$

As a sensitivity analysis, and to assess the significance of providers located outside the service area, OHA also calculated market shares as the percentage of total home health or hospice episodes provided to PSA residents (regardless of the location of the provider).

Herfindahl-Hirschman Index (HHI)

HHI is a standard metric used by courts, federal and state regulators, and researchers to measure competition. It is calculated based on the market shares of individual suppliers. Applied to health care services, market shares are often measured as each provider’s percentage of total health care services provided in the service area, or each provider’s percentage of total patients receiving those services.

The prices (or reimbursement rates) paid by commercial health insurance companies to providers for the services plan members receive are determined through negotiations between insurers and providers. When competition is limited, e.g., there are few alternative providers who can offer similar services, negotiated prices tend to be higher. In addition, providers that serve more patients (in proportion to the total number of patients in the service area) may be able to obtain higher reimbursement for a given service.

An HHI value of less than 1,500 indicates a competitive market; values between 1,500 and 2,500 suggest moderate market concentration; and values above 2,500 point to highly concentrated markets. If a single provider has a 100% share of the market, the HHI value is 10,000.

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