

Assessing Oregon's Hospital Discharge Processes and Experiences – Challenges and Opportunities

ATI Advisory Presentation to the Joint Task Force on Hospital Discharge Challenges – May 2024

ATI Advisory



CONTINUING THE CONVERSATION: HOW ATI ANALYSES TODAY FIT WITHIN BROADER HB3396 CONVERSATIONS

April

Assessment of Provider & Workforce Capacity

Themes discussed:

- Investing in and cultivating the post-acute care workforce
- Supporting existing post-acute care providers through policy, programming, and payment flexibilities
- Expanding the types of providers and supports available post-hospitalization to alleviate pressures on common post-acute care provider types

May

Assessment of Hospital Discharge Needs, Processes and Outcomes

Themes to be discussed:

- Pain-points within the hospital discharge process, leveraging Oregon administrative data
- Process-related opportunities to promote more timely discharges (e.g., escalation protocol concepts)

June

Analysis of Benefits, Coverage, and Payment Policy for Post-Acute Care

Themes to be discussed:

- Payment model features and add-on payments that can be designed to address individuals who are particularly hard to place in post-acute care settings
- New and/or expanded benefits and coverage opportunities that may promote successful transitions out of hospitals (e.g., expanded PHEC benefit, presumptive eligibility for LTSS)



ATI's focus today

- Qualifying and Quantifying Trends in Average Hospital Lengths of Stay and Complex Care Diagnostic Cohorts
- Understanding Wage and Employment Trends Among Oregon's AAA/APD Case Manager Workforce
- Opportunities to Promote More Timely Hospital Discharges for Individuals with Complex Care Needs
- Appendix: Data Sources and Methods

Qualifying and Quantifying Trends in Average Hospital Length of Stay and Complex Care Diagnostic Cohorts

HOSPITAL LENGTH OF STAY TRENDS SHOULD BE CONTEXTUALIZED AGAINST STRUCTURAL AND PROCESS-RELATED CHALLENGES WITHIN OREGON'S DELIVERY SYSTEM

Structural

- Nationally, Oregon has the 2nd lowest hospital beds per capita (1.6 per 1,000)*
- Compounding this challenge, total patient days in Oregon are increasing (+20% from 2017-2022)**
- As total patient days increase, hospital bed staffing capacity remains below licensed hospital bed capacity (78%)**
 - This varies regionally, ranging from 69% (Region 6) to 98% (Region 9)

Statewide
n=6.3K/8.1K

Reg 6 n=51/74;
Reg 9 n=215/219

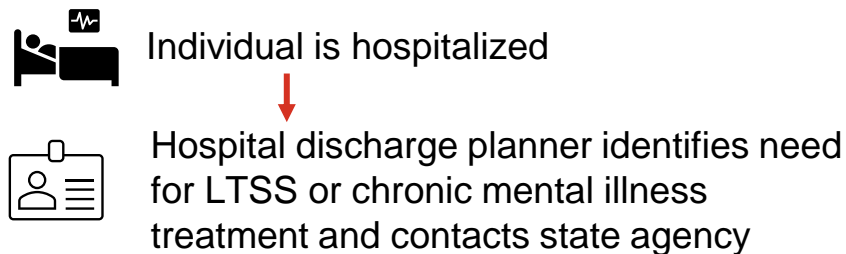
Process

- Process barriers impede timely and appropriate hospital discharges to post-acute care. These include:
 - **Time-intensive financial eligibility assessments, and siloed coverage and assessment processes** for physical and mental health needs
 - **A lack of alignment and clarity between hospitals and state agencies** on steps and communication during the discharge and eligibility assessment process
 - **Increasingly complex care needs and associated intensity of services** required from case workers and post-discharge providers

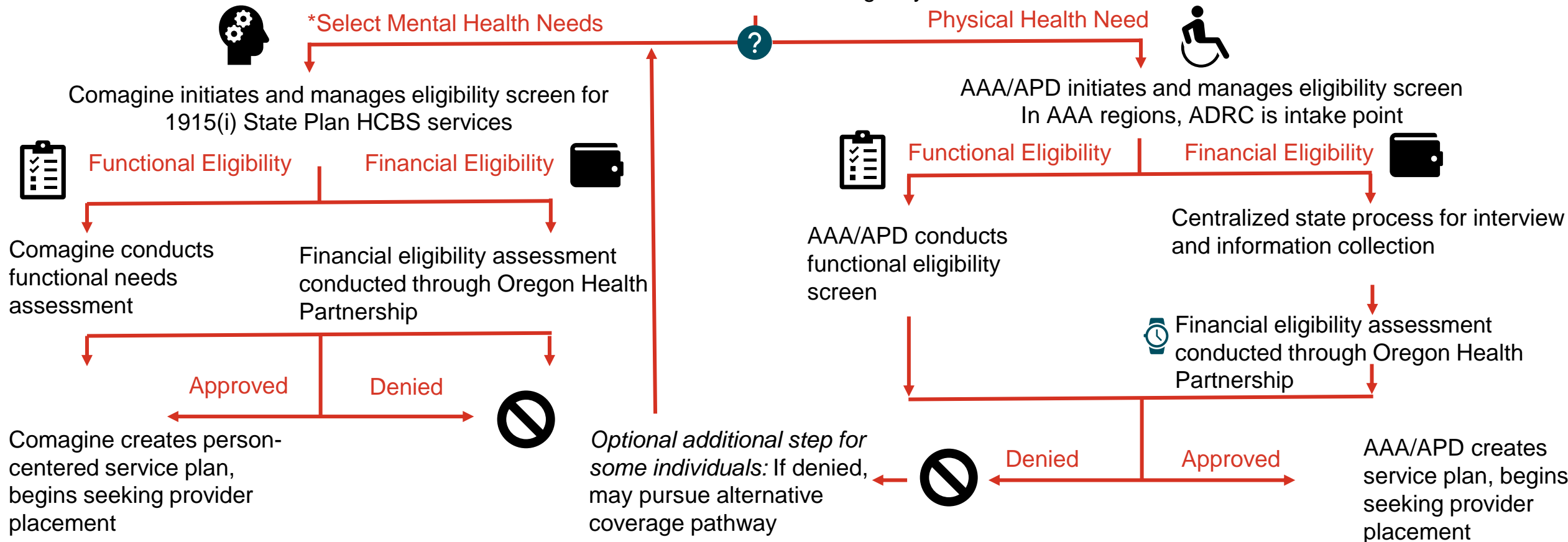
Source: *KFF analysis of the 2022 America Hospital Association Annual Survey; **ATI analysis of licensed and staffed hospital bed data provided by the Oregon Health Authority's (OHA) Oregon Capacity System (OCS). Staffing capacity is the total count of unblocked and occupied beds, which includes in-use and available beds as reported in 2024Q1. Licensed bed counts are reported as of December 31, 2023. Pioneer Memorial, Curry General and Portland VA hospitals manually report staffed bed and thus counts of *all* beds are not available for these facilities. Additionally, there are data discrepancies for a small number of hospitals where total licensed bed counts were lower than total staffed bed counts, due to inconsistencies in how staffed beds are defined across these hospitals.

ASSESSMENT PROCESSES FOR COMPLEX CARE NEEDS ARE TIME AND RESOURCE INTENSIVE, OFTEN SPAN MULTIPLE AGENCIES, AND CAN DELAY APPROPRIATE POST-DISCHARGE PLACEMENT

*Mental health services are also available through community mental health programs, which are not reflected here.



ATI's analysis of hospital length of stay trends should be contextualized against these complex, and time-intensive discharge processes.



Important Limitations in Medical Claims Analyses:

- ATI used Oregon's All Payer All Claims (APAC) database to assess trends in average hospital lengths of stay in Oregon from 2017-2022.
- The APAC includes adjudicated healthcare administrative claims submitted by providers for 95%+ of insured Oregonians across all payers, including Commercial, Medicare and Medicaid.



Limited to insured Oregonians only.



Dependent on professional ICD coding; some diagnoses may be missed, different professional types may have different coding patterns, and not all coding may be accurate.



Excludes services rendered that are not tied to medical claims submitted to and reimbursable by third-party payers. Medicaid LTSS services processed and paid for by ODHS-APD are also excluded from the APAC database.

KEY FINDINGS FROM ATI'S APAC ANALYSIS ON HOSPITAL LENGTH OF STAY TRENDS

Key Findings (full results are presented across subsequent slides)

The APAC includes adjudicated administrative healthcare claims of 95+% of insured Oregonians from 2017 to 2022.



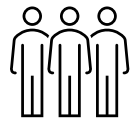
Average hospital lengths of stay in Oregon are increasing, compounding hospital capacity constraints.

Total patient hospital days and average hospital length of stays steadily increased (ALOS: +27%, total patient hospital days: +20%) while total discharge volume decreased by 10% from 2017 to 2022.



More than half (58%) of all hospital discharges were from individuals with at least one complex care diagnoses in 2022.

Obesity was the most prevalent diagnosis, representing 30% of all discharges in 2022, followed by SMI, representing 27% of all discharges.



Insured hospitalized individuals with complex care diagnoses vary in utilization, demographics and coverage types.

Over half (52%) with SMI are older than 65 years old. Individuals with housing insecurity had the highest ER visits (4.8 visits per year). Individuals with frailty had the highest readmission rate (29%), and individuals with ADRD are most likely to be dually eligible (8%) for Medicare and Medicaid.



Individuals with complex care diagnoses are experiencing a greater percentage change in ALOS than the statewide average.

Frail¹ individuals experienced an increase in their ALOS by 48% from 2017 to 2022, compared to the statewide average at 27%. These frail individuals had the longest ALOS (5.8 days), followed by individuals experiencing housing insecurity (5.4 days) in 2022.






Insured individuals with complex care diagnoses are discharged to settings that may not support their needs.

While individuals discharged to SNF experienced the greatest increase in ALOS (+49%), the proportions of discharge destinations vary by diagnoses. Individuals with SMI, SUD, obesity or housing insecurity are most likely to be discharged to home or self-care (59+%), compared to individuals with frailty (31%) or ADRD (35%).

AVERAGE HOSPITAL LENGTHS OF STAY IN OREGON ARE INCREASING ACROSS THE BOARD, COMPOUNDING HOSPITAL CAPACITY CONSTRAINTS

→ **Hospital discharge volume** decreased by 10% from 2017 to 2022, while **ALOS** and **total patient hospital days** steadily increased in the same time (ALOS: +27%; total patient hospital days: +20%)

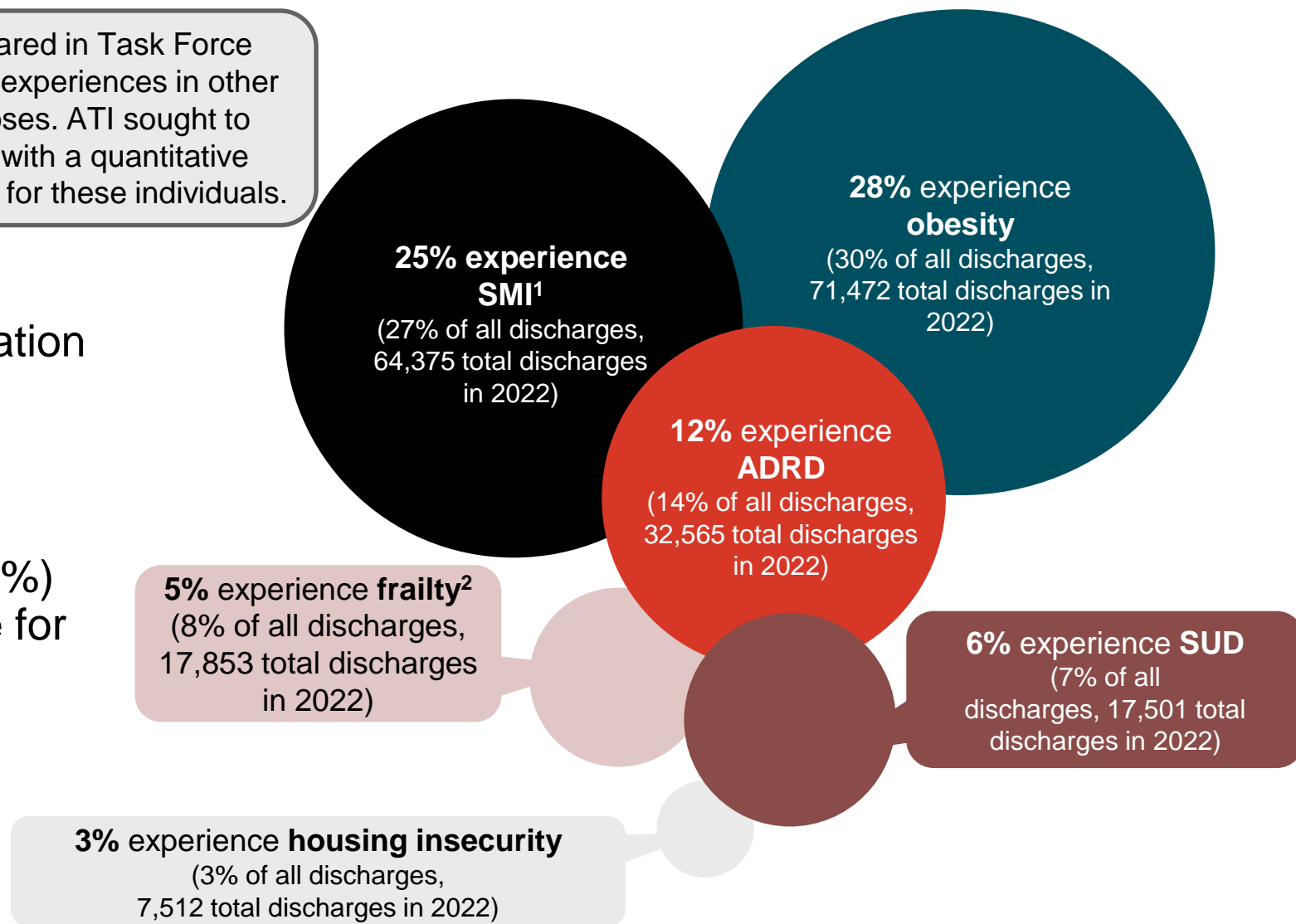
Region	Insurance Coverage	Hospital Types
<p>▲ <i>ALOS increased across all of Oregon's hospital regions.</i></p>	<p>▲ <i>ALOS increased across insurance coverage types.</i></p>	<p>▲ <i>ALOS increased across hospital types.</i></p>
 <p>Region 1 experienced the greatest increase in ALOS (37%); region 5 experienced the smallest increase (6%).</p>	 <p>Individuals with commercial coverage experienced the greatest increase in ALOS (45%); individuals with dual Medicare-Medicaid coverage had the highest ALOS each year (2022: 4.7 days).</p>	 <p>DRG hospitals¹ and hospitals without psychiatric beds experienced the greatest increase in ALOS (+28%).</p>

INDIVIDUALS WITH COMPLEX CARE NEEDS COMPRISE A SIGNIFICANT PROPORTION OF ALL HOSPITAL DISCHARGES AMONG INSURED OREGONIANS WITH 1+ HOSPITALIZATION

Stakeholder experiences and perspectives shared in Task Force meetings to-date, key informant interviews, and experiences in other states informed selected complex care diagnoses. ATI sought to complement qualitative stakeholder feedback with a quantitative understanding of hospital discharge experiences for these individuals.

→ Among the **177,339** insured Oregonians with 1+ hospitalization in 2022, there were a total of **236,591** hospital discharges.

→ In 2022, **more than half (58.2%)** of all hospital discharges were for individuals with at least one complex care diagnosis.










ATI QUANTIFIED KEY DEMOGRAPHICS AMONG INDIVIDUALS WITH 1+ HOSPITALIZATION ACROSS COMPLEX CARE NEEDS IDENTIFIED BY THE TASK FORCE, INTERVIEWS, SURVEY, AND WORK TO-DATE

- Insured individuals with complex care diagnostics vary in coverage type, age, and health care utilization.
- Highlights from each cohort include:








See the [Appendix](#) for a more detailed demographic and utilization profile across each cohort, as compared to the statewide profile.

Key Takeaways Among Insured Oregonians with 1+ Hospitalization, 2022

 Statewide	 SMI	 SUD	 Housing Insecurity	 Frailty ³	 ADRD	 Obesity
31% are Medicaid-covered	Over half (52%) with SMI are older than 65 years old	Nearly half (46%) with SUD are Medicare-covered (excludes dual eligibles)	Individuals with housing insecurity had the highest ER visits ¹ (4.8 visits, compared to statewide 1.7 visits)	Frail individuals had the highest readmission rate ² (29%, compared to statewide 13%)	Individuals with ADRD (8%) are most likely to be dually eligible for Medicare and Medicaid, as compared to other diagnostic cohorts	Individuals with obesity closely resemble the State average statistics.








INDIVIDUALS WITH SELECT COMPLEX CARE DIAGNOSES ARE EXPERIENCING A GREATER % ALOS CHANGE THAN THE STATEWIDE AVERAGE

→ **Average hospital lengths of stay (ALOS)** among insured Oregonians with complex care diagnoses **increased by 18% to as much as 48%** between 2017-2022, while statewide ALOS among insured Oregonians increased 27% during this period.

 Statewide	 SMI	 SUD	 Housing Insecurity	 Frailty ¹	 ADRD	 Obesity
<i>Changes in ALOS from 2017 to 2022</i>						
▲ 27%	▲ 30%	▲ 28%	▲ 18%	▲ 48%	▲ 38%	▲ 29%
<i>Average Hospital Length of Stay in 2022</i>						
3.9 days	4.5 days	4.5 days	5.4 days	5.8 days	5.3 days	3.9 days

INDIVIDUALS WITH COMPLEX CARE DIAGNOSES ARE DISCHARGED TO SETTINGS THAT MAY NOT SUPPORT THEIR NEEDS, OR TO THE COMMUNITY WITHOUT CONTINUING CARE IN PLACE

- Individuals with SMI, SUD, and housing insecurity are **most likely to be discharged to home or self care (59%+)**, compared to other complex care diagnoses.
- Notably, insured Oregonians with complex care diagnoses discharged to **SNFs have experienced the greatest increase in average hospital length of stay from 2017 to 2022 (+49%)**.

% Change in ALOS from 2017-2022 by Discharge Destination for all Individuals	Discharge Destination	 Statewide	 SMI	 SUD	 Housing Insecurity	 Frailty ¹	 ADRD	 Obesity
		The percent of total discharges by insured Oregonians with 1+ hospitalization to select settings, by complex care diagnoses (2022)						
▲ 19%	Home or Self-Care	63%	59%	63%	73%	31%	35%	64%
▲ 49%	SNF	10%	13%	8%	6%	27%	20%	11%
▲ 41%	Home Health	13%	14%	14%	8%	23%	19%	13%
▲ 34%	Other ²	15%	14%	14%	12%	19%	26%	12%

ALOS – Average hospital length of stay, which ATI calculates as the geometric mean of hospital lengths of stay in a given calendar year.

ADRD – Alzheimer’s Disease and Related Dementias; SMI – Serious Mental Illness; SNF – Skilled Nursing Facility; SUD – Substance Use Disorder

1. Frailty is limited to individuals age 65 years or older, as validated in the Kim Frailty Index; 2. Locations not listed above, including swing bed stays, hospice, long-term care hospitals, psychiatric hospital/unit, or another hospital. This does not include non-Medicare certified nursing facilities, of which ODHS-APD processes and pays claims for these settings.

Source: ATI analysis of Oregon All-Payer All-Claims data, 2017-2022; see the [Appendix](#) section (Page 36) for more detailed APAC methods, definitions and total volume counts by discharge settings.

Understanding Wage and Employment Trends Among Oregon's AAA/APD Case Manager Workforce

AREA AGENCY ON AGING (AAA) AND AGING AND DISABILITY (APD) CASE MANAGER ANALYSIS: HIGH-LEVEL METHODS

- ATI's analysis is limited to “Type B” case managers who are involved in screening and connecting individuals with LTSS services. The goal is to understand the experiences of those who help connect those with non-mental illness LTSS needs to post-acute care.
- Data availability varies by organization:

Organization	Total Employed	Employees Leaving	Tenure	Vacancies	Wages
Northwest Senior and Disability Services (NWSDS) AAA	✓	<i>Voluntary Only</i>	✓	✓	✓
Multnomah AAA	✓	✓	✓	✓	✓
Oregon Cascades West Council of Governments (OCWCOG) AAA	✓	✓	✓	✓	✓
Lane County AAA					<i>Partial Data</i>
APD	✓	✓	✓	✓	✓

KEY FINDINGS FROM ATI'S AAA/APD CASE MANAGER ANALYSIS

Key Findings

Case manager experiences and trends vary by region and role



The average tenure of case managers leaving their position is increasing.

In 2020, the average person leaving has 6.2 years of experience in the organization but in 2023, the average person leaving had 10.8 years of experience.



The percentage of case managers voluntarily leaving their position is trending upward.

While the percentage of case managers voluntarily leaving their position peaked in 2022 (7% per quarter) when case managers returned to in-person work, rates have not fully returned to pre-pandemic levels (approximately 4% per quarter).



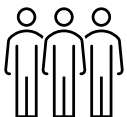
The percentage of budgeted position vacant trended upward, peaking in 2022.

While percentages of budget positions vacant is similar across regions, it is highest among case managers who conduct LTSS financial eligibility assessments of hospital patients who are ready for discharge to post-acute care settings. However, unfilled budgeted positions are not a full measure of case manager staffing needs.



Case manager wages have been falling behind inflation.

From 2021 to 2023, wages grew 5% for case managers, 7% for all Oregonian workers, 12% for all community and social service occupations. During that time, inflation increased 12%.



While the number of case managers had remained relatively consistent over time, current measures of caseload do not reflect case managers experience.

The total number of case managers employed grew 11% from 2019 to 2023. While caseload grew similarly, caseload data underrepresent actual workload; it does not reflect an increasing complexity of cases and excludes cases not receiving paid care, which are often highly complex.

REGIONAL KEY TAKEAWAYS

1 & 3: Northwest Senior and Disability Services (NWSDS) AAA

- Highest proportion of case managers who conduct LTSS financial eligibility assessments of hospital patients who are ready for discharge to post-acute care settings (43% compared to average 38%)
- Highest number of budgeted positions vacant in 2023 (10% compared to average 8%)

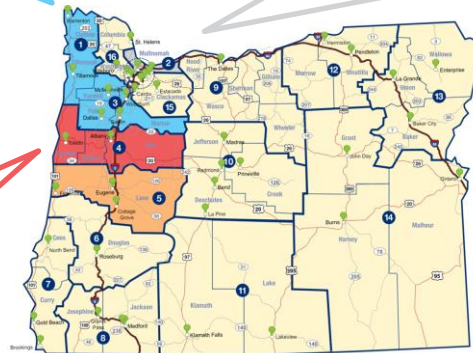
ATI Provider Survey Connection¹: Providers in Region 1 most often reported that slow or no responses from state or local LTSS screening & placement staff was often/always a barrier (37%) to timely admission (statewide: 24%)

4: Oregon Cascades West Council of Governments (OCWCOG) AAA

- High proportion of case managers who conduct LTSS service eligibility, planning, and monitoring.
- Highest average hourly wage (\$30.32 compared to \$28.38 in 2023)

2: Multnomah County (AAA)

- High proportion of case managers, who do diversion transition work or pre-admission screening (20% compared to average 11%)
- Highest percentage of individuals leaving their position, peaking in 2022 (10% per every quarter compared to average 7% in 2022).



6 – 15: Aging and People with Disabilities (APD)

- Second highest percentage of individuals leaving their position, peaking in 2022 (10% per every quarter compared to average 7% in 2022).
- Lowest average hourly wage (\$27.59 compared to \$28.38 in 2023)

5: Lane Council of Governments AAA

Note, limited data reported

Opportunities to Promote More Timely Hospital Discharges for Individuals with Complex Care Needs

Creating Clear Communication, Responsibilities and Processes

Streamlining
Eligibility
Assessments for
1915(i) and LTSS

Documenting and
Increasing Case
Worker Capacity

PAC/LTC Provider
Placement Capacity
(to be discussed in June)

Hospitals

State
Agencies

CCOs/
D-SNPs

PAC and
LTC
Providers

Primary
Care and
Social
Service
Providers

Creating Clear Communication, Responsibilities and Processes

STAKEHOLDER ALIGNMENT AND COMMUNICATION CHALLENGES COULD BE ADDRESSED THROUGH AN ESCALATION PROTOCOL OR OTHER PROCESS TO CREATE SHARED UNDERSTANDING

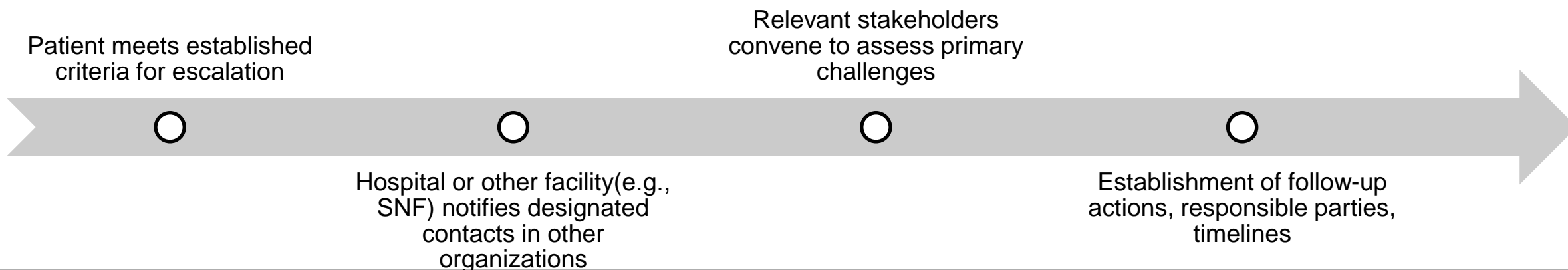
Opportunity for Improvement	Perspective
Shared understanding of alignment between needs and post-discharge care settings	Stakeholders expressed misalignment of hospital, agency, and PAC/LTC provider understanding of various care settings' capabilities in relation to complex care needs.
More responsive scheduling and contacts between hospital and eligibility assessment lead	In some instances, the day-to-day logistics of scheduling interviews or otherwise communicate information leads to substantial delays.
Expectation-setting on timeline and updates	Priorities for assessment and placement may not be aligned and hospitals sometimes lack insight into the steps and timeline of the assessment process.
Clarification of available services and roles and responsibilities for eligibility assessments and case management	Hospital discharge planners as well as state agencies communicated lack of awareness surrounding the benefits and eligibility process for individuals with chronic mental illness and long-term services and supports needs.

COMPONENTS OF THE PROPOSED ESCALATION PROTOCOL INCLUDE CLEARLY DEFINED ROLES, PROCESSES, AND COMMUNICATION ACROSS STAKEHOLDERS

Possible Protocol Characteristics

Patient Population	Triggers for Use	Stakeholders Engaged	Components
<ul style="list-style-type: none"> → Patients who will be discharged from an acute-care hospital or other facility and have a barrier to such discharge 	<ul style="list-style-type: none"> → Patient meets one or more identified discharge barriers → Barrier examples: requires guardianship, eligibility assessment delay, has been waiting for discharge for a defined number of days 	<ul style="list-style-type: none"> → Hospitals → State agencies → Post-acute and long-term care providers → Social service providers → Residential treatment centers for adult mental health and/or substance use 	<ul style="list-style-type: none"> → Criteria for escalation → Single designated contact within each stakeholder organization → Case conference/convening with hospital/facility, state agencies and relevant stakeholders → Clear roles and responsibilities of relevant stakeholders → Process for establishing follow-up actions

Possible Protocol Steps



STATES AND STAKEHOLDERS ARE RECOMMENDING AND TESTING A RANGE OF RELATED SOLUTIONS, BUT NO CLEAR STANDARD EXISTS



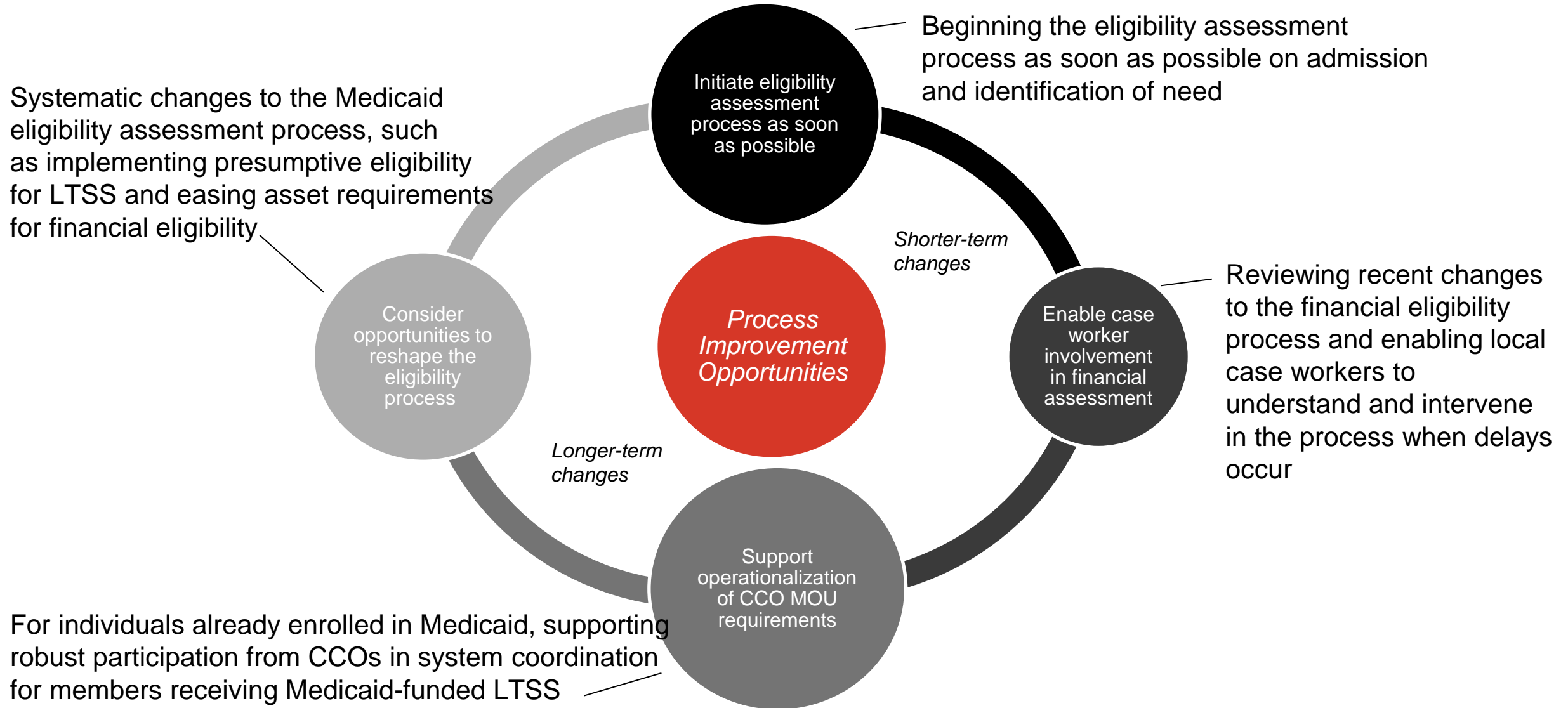
	Washington ^{1,2}	Massachusetts ⁴
Convener(s)	→ State	→ State
Action	→ Implementation	→ Implementation
Program/ Recommendation	→ Variety of supports, including case management, for discharges and placement of people who are unhoused, have mental health or substance use issues, require guardianship services, do not have access to traditional health insurance, or have specialized medical care needs	→ Discharge Support Team/Line, supporting with long-term care and housing discharge challenges → Patient criteria not defined, but focus on patients with skilled nursing needs and who are homeless or housing unstable
Process	→ Health Care Authority and Department of Social and Health Services work with hospitals and MCOs to find suitable community placements	→ State-produced guidance and resources for hospitals → “Last resort” option to contact state Discharge Support team through a standardized intake form

Oregon Local Innovation Spotlight:

→ Asante and APD representatives from two counties convened complex case team meetings twice a week to work through challenges

Streamlining 1915(i) and LTSS Eligibility Assessment

CHANGES TO THE ELIGIBILITY ASSESSMENT PROCESS COULD REDUCE DELAYS – SOME CAN BE ADVANCED TODAY WITHIN EXISTING AUTHORITY, WHILE OTHERS REQUIRE NEW AUTHORITY AND/OR CROSS-AGENCY INVESTMENT



Case Management Workforce Capacity

CASE LOAD DATA DOES NOT REFLECT THE VOLUME OF NEED OR CHALLENGES FOR CASE WORKERS, CHANGES COULD LAY THE GROUNDWORK FOR IMPROVED CAPACITY

1

The current caseload methodology does not reflect the true volume of case work

- Including individuals without a paid provider and incorporating complexity of cases would better reflect actual volume of work

2

Case work is emotionally intensive and current pay or benefits may be insufficient incentives to attract and retain staff

- Ensuring caseloads are manageable and exploring other opportunities to reduce worker burden could speed up the assessment process

“I saw something that said caseload per manager is 66 and I felt sick to my stomach. It is actually 100 to 110. It was brutal in underrepresenting [the true caseload.]”

- Key Informant Interviewee

Oregon Local Innovation Spotlight

The Lane Council of Governments AAA (Region 5) has created a dedicated Complex Case Team for Senior and Disability Services. This team consists of case managers with expertise in complex cases who are dedicated to a smaller but more complicated case load. This alleviates pressure on other case managers.

ATI Provider Survey Connection:

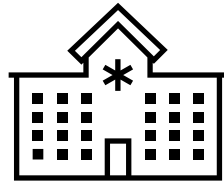
21% of providers¹ (n=24) in Region 5 reported difficulties with state screening, LTSS placements, compared to 35% statewide² (n=200). Providers surveyed across other regions (1,2,3 & 7) reported difficulty at 32%-41%.

ATI survey results cannot be directly attributed to LCOG AAA efforts, but instead can be used to inform future efforts to assess LCOG's approach.

Looking Ahead: Continuing the Conversation on Provider Placement Capacity

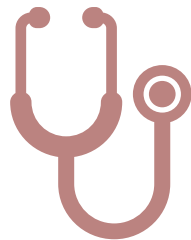
COVERAGE AND PAYMENT-RELATED OPPORTUNITIES TO TIMELY PROVIDER IDENTIFICATION AND PLACEMENT WILL BE DISCUSSED IN JUNE

Throughout ATI's work to-date, payment and regulatory constraints were consistently identified as challenges to placing individuals with complex care needs. These issues and opportunities will be explored in more detail in the next phase of ATI's work.



The current coverage and benefits structure creates care silos that are not well suited to individuals with complex care needs

Current payment rates contribute to providers declining individuals with complex care needs



Benefit-specific licensing contributes to the lack of providers with complex care expertise

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Appendix

Overview of Methods and Key Definitions in ATI's All Payer All Claims Reporting Program Analysis

DATA SOURCE AND METHODS

	Oregon All-Payer All-Claims (APAC) Database
Data Description	Established in 2009, the APAC database contains administrative healthcare claims data that includes utilization and costs for Oregon’s insured populations, including Commercial, Medicaid and Medicare payers. Claims data includes medical, dental, pharmacy and enrollment data.
Time Period	2017 – 2022
Analytical Method	Average hospital lengths of stay are calculated using the geometric mean of hospital lengths of stay in a given calendar year.
Inclusion Criteria	ATI’s analysis includes all inpatient hospital stays among Oregon residents, except admissions related to pregnancy and neonatal care.
Complex Care Patient Diagnostic Cohorts	ATI identifies and discusses findings across 6 complex care patient diagnostic cohorts: <i>SMI</i> , <i>SUD</i> , <i>Housing Insecurity</i> , <i>ADRD</i> , <i>Obesity</i> , and <i>Frailty</i> . <i>SMI</i> , <i>SUD</i> , <i>Housing Insecurity</i> , <i>ADRD</i> , and <i>Obesity</i> are identified through ICD10 diagnosis codes available in the APAC. <i>Frailty</i> is identified using the claims-based Kim Frailty Index where ICD10 diagnosis codes and procedures codes are used. The Kim Frailty Index is validated only to individuals older than 65 years old, and thus the definition of frailty is limited to individuals older than 65 years old.
Limitations	Subgroups of self-insured individuals are not available in the APAC. Additionally, there are biases and data limitations embedded in healthcare administrative claims. APAC should not be considered as a comprehensive picture of medical records, but as one part of the overall picture of Oregon’s healthcare system. APAC does not include the uninsured population in Oregon. As of 2021, 4.6% of Oregon residents were uninsured. ¹

KEY TERMS AND DEFINITIONS USED IN ATI'S APAC ANALYSIS

Complex Care Diagnoses

Serious Mental Illness (SMI)

Diagnosis indicated anywhere in Medicare, Medicaid, or Commercial medical claims.

Substance Use Disorder (SUD)

Diagnosis indicated anywhere in Medicare, Medicaid, or Commercial medical claims.

Housing Insecurity

Diagnosis indicated anywhere in Medicare, Medicaid, or Commercial medical claims.

Housing insecurity definitions widely vary and no standardized measure exists. ATI's study relied on imperfect and underutilized *ICD-10 Z59*-codes that are likely to capture the most extreme experience of housing insecurity: homelessness. Despite these limitations, *ICD-10 Z*-codes remain an important metric for identifying nonmedical factors that may influence an individual's health status.

Frailty

Kim Frailty Index, which uses diagnoses and procedures available in medical claims.

The Kim Frailty Index has only been validated for individuals 65 years and older. Thus, the application of the Kim Frailty Index is limited to individuals 65 years and older. Individuals who are identified as "moderately" or "severely" frail from the Kim Frailty Index are identified as *frail* as indicated by having a Kim Frailty score greater or equal to 0.35.

Alzheimer's Disease and Related Dementias (ADRD)

Diagnosis indicated anywhere in Medicare, Medicaid, or Commercial medical claims.








Obesity

Diagnosis indicated anywhere in Medicare, Medicaid, or Commercial medical claims.

KEY TERMS AND DEFINITIONS USED IN APAC ANALYSIS

Hospital Types	Average Hospital Length of Stay (ALOS)	ALOS is calculated using <i>geometric mean of length of stay</i> , which is less sensitive to extreme outliers.
	Diagnostic-Related Group (DRG)	Generally large and urban hospitals that receive standard Medicare DRG-based reimbursement.
	Type A	Small hospitals that are located more than 30 miles from another hospital.
	Type B	Small hospitals that are located within 30 miles of another hospital.
	Psychiatric Hospital/Unit	Inpatient acute hospital with inpatient psychiatric units. This is not mutually exclusive from other hospital types (DRG, Type A & Type B).
Discharge Locations	Home or Self Care	Any non-Medicare, Medicaid, or Commercially funded location, for example, private housing or senior living communities; individuals may have access to long term services and supports not captured in the APAC. This also includes individuals who voluntarily discontinued care against medical advice.
	Skilled Nursing Facility	Medicare-certified skilled nursing facilities. This does not include hospital swing beds used for SNF stays.
	Home Health	Medicare, CCO and/or commercially-funded home health provided by a home health agency. This does not include ODHS-APD-funded in-home care or personal care services.
	Other	Locations not listed above, including swing bed stays, hospice, long-term care hospitals, psychiatric hospital/unit, or another hospital. This does not include non-Medicare certified nursing facilities, of which ODHS-APD processes and pays claims for these settings.

ATI QUANTIFIED KEY DEMOGRAPHICS AMONG INDIVIDUALS WITH 1+ HOSPITALIZATION ACROSS COMPLEX CARE NEEDS IDENTIFIED BY THE TASK FORCE, INTERVIEWS, SURVEY, AND WORK TO-DATE

Group with 1+ Hospitalization	Percent Dual (Medicare-Medicaid)	Most Common Coverage	Average Length of Stay (days)	Average ER Admissions ¹	30 Day Readmission Rate ²	Percent Younger than Age 65	Takeaway
State Average 	4%	Medicare-Only (49%)	3.9	1.7	13%	46%	31% of individuals with 1+ hospitalization have Medicaid
SMI 	5%	Medicare-Only (51%)	4.5	2.3	16%	48%	Over half of individuals with SMI are older than 65
SUD 	2%	Medicare-Only (46%)	4.5	2.2	19%	56%	Among individuals with SUD, only 28% have Medicaid
Housing Insecurity 	5%	Medicaid-Only (55%)	5.4	4.8	20%	71%	Housing insecure individuals are ER superusers
Frailty 	7%	Medicare-Only (80%)	5.8	2.1	29%	NA ³	Frail individuals have the highest readmission rate
ADRD 	8%	Medicare-Only (77%)	5.3	1.8	18%	8%	Many individuals with ADRC are dually eligible for Medicare and Medicaid
Obesity 	4%	Medicare-Only (48%)	3.9	1.9	15%	50%	Individuals discharged with obesity closely resemble the State average statistics








SMI: Serious Mental Illness, **SUD:** Substance Use Disorder, **ADRD:** Alzheimer's Disease and Related Dementias

1. Among individuals with at least one hospital admission; 2. The rate includes hospital stays in December with less than 30-day window post-discharge. 3. Frailty is limited to individuals age 65 years or older, as validated in the Kim Frailty Index.

Source: ATI analysis of Oregon All-Payer All-Claims data, 2022; see the [Appendix](#) section for more detailed APAC methods and definitions.

INDIVIDUALS WITH COMPLEX CARE DIAGNOSES ARE DISCHARGED TO SETTINGS THAT MAY NOT SUPPORT THEIR NEEDS, OR TO THE COMMUNITY WITHOUT CONTINUING CARE IN PLACE

- Individuals with SMI, SUD, and housing insecurity are **most likely to be discharged to home or self care** (59%+), compared to other complex care diagnoses.
- The total volume of discharges to home or self-care among individuals with housing insecurity is relatively small, compared to other complex care diagnoses, but this **represents only insured Oregonians** with housing insecurity that was properly coded in APAC, and may underestimate the true prevalence.

% Change in ALOS from 2017-2022 by Discharge Destination for all Individuals	Discharge Destination	 Statewide	 SMI	 SUD	 Housing Insecurity	 Frailty ¹	 ADRD	 Obesity
		<i>The count of total discharges by insured Oregonians with 1+ hospitalization to select settings, by complex care diagnoses (2022)</i>						
▲ 19%	Home or Self-Care	129,193	35,947	10,484	5,248	5,565	11,541	41,752
▲ 49%	SNF	19,573	7,909	1,353	427	4,900	6,555	6,928
▲ 41%	Home Health	26,408	8,407	2,289	605	4,069	6,113	8,760
▲ 34%	Other ²	30,380	8,559	2,395	888	3,319	8,348	7,494

ALOS – Average hospital length of stay, which ATI calculates as the geometric mean of hospital lengths of stay in a given calendar year.

ADRD – Alzheimer’s Disease and Related Dementias; SMI – Serious Mental Illness; SNF – Skilled Nursing Facility; SUD – Substance Use Disorder

1. Frailty is limited to individuals age 65 years or older, as validated in the Kim Frailty Index; 2. Locations not listed above, including swing bed stays, hospice, long-term care hospitals, psychiatric hospital/unit, or another hospital. This does not include non-Medicare certified nursing facilities, of which ODHS-APD processes and pays claims for these settings.

Source: ATI analysis of Oregon All-Payer All-Claims data, 2017-2022;