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Psychosocial Factors Associated With Readmission and Post-Discharge Outcomes in Chronic Obstructive Pulmonary Disease: A Scoping Review

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Background: Hospital readmission remains a major challenge in the management of chronic obstructive pulmonary disease (COPD). While clinical predictors have been extensively investigated, evidence regarding psychosocial factors associated with readmission and other post-discharge outcomes remains fragmented.

Aims: To map the available evidence on psychosocial factors associated with hospital readmission and related post-discharge outcomes among patients with COPD.

Methods: A scoping review was conducted following the Joanna Briggs Institute methodology and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR). Literature searches were performed in PubMed, Scopus, Web of Science, and CINAHL for English-language studies published between January 2000 and March 2026.

Result: Twenty-two studies were included. Four domains of psychosocial factors were identified: emotional, cognitive, behavioral, and social/contextual. Depression and anxiety were the most frequently investigated factors and showed the most consistent association with hospital readmission. Low social support, living alone, socioeconomic disadvantage, and functional dependency were also associated with an increased risk of hospital readmission and other adverse post-discharge outcomes. Behavioral factors, including poor self-efficacy, coping, and self-management, were less frequently investigated but appeared relevant. Cognitive factors, particularly low health literacy and poor discharge readiness, were the least explored.

Conclusion: Existing evidence suggests that psychosocial factors are important considerations for reducing hospital readmission and improving other post-discharge outcomes in patients with COPD. However, further research is needed to strengthen the evidence on cognitive and behavioral factors and to support comprehensive discharge planning.

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INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a progressive respiratory condition characterized by persistent airflow limitation, chronic respiratory symptoms, and recurrent exacerbations that contribute substantially to morbidity, mortality, and healthcare utilization worldwide. Despite advances in pharmacological treatment and long-term disease management, COPD remains a leading cause of hospitalization and death, particularly among older adults and individuals with multiple comorbidities. Acute exacerbations frequently require hospital admission and are associated with accelerated disease progression, impaired quality of life, increased healthcare costs, and a greater likelihood of subsequent readmission and other adverse post-discharge outcomes (Global Initiative for Chronic Obstructive Lung Disease [GOLD], 2025).

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Hospital readmission after discharge is increasingly used as an indicator of healthcare quality because it reflects not only disease severity but also the effectiveness of discharge planning, continuity of care, and transitional care. Approximately one in five patients hospitalized for COPD experiences an unplanned readmission within 30 days, creating substantial clinical and economic burdens (Alqahtani et al., 2021; Baydar Toprak et al., 2024). Readmission, however, represents only one component of recovery after hospitalization. Discharge readiness, successful self-management, symptom control, recurrent exacerbations, treatment adherence, and adaptation during the transition from hospital to home are also important indicators of whether transitional care has been effective.

Previous studies have predominantly emphasized clinical and physiological predictors of COPD readmission, including airflow limitation, exacerbation history, comorbidities, advanced age, prolonged length of stay, and previous hospitalization. Although these factors contribute to risk, they do not fully explain why patients with similar clinical profiles follow different recovery trajectories after discharge. This variation suggests that recovery is shaped not only by physiological status but also by the patient's psychological condition, understanding of the illness, capacity to perform self-management behaviors, and social environment.

Psychosocial factors have therefore received increasing attention. Broadly, psychosocial factors reflect the interaction of psychological characteristics and social conditions that may influence health, health behaviors, and adaptation to illness. In chronic disease research, these factors include both psychological risks and psychosocial resources, such as depression, anxiety, emotional distress, illness perception, self-efficacy, health literacy, coping, adherence, motivation, discharge readiness, and social support (Thomas et al., 2020). These constructs may influence health outcomes through interconnected pathways involving illness perception, self-efficacy, health literacy, self-management capacity, and interactions with the social environment (Van Wilder et al., 2022). This multidimensional conceptualization informed the Concept component of the Population-Concept-Context (PCC) framework and guided the search strategy for the present review.

Despite growing interest, the psychosocial evidence remains fragmented. Studies have examined different constructs using heterogeneous designs, instruments, follow-up periods, and outcome definitions, which limits direct comparison. Previous reviews have largely summarized clinical and healthcare-system predictors of COPD readmission, while the breadth, distribution, and potential mechanisms of psychosocial factors have not been comprehensively mapped. Unlike those reviews, the present review integrates psychosocial evidence across four domains: emotional, cognitive, behavioral, and social/contextual and translates the mapped evidence into a transitional-care framework oriented toward patients, families, caregivers, and community care. Given this heterogeneity, a scoping review was considered the most appropriate approach. This review therefore aimed to map the available evidence on psychosocial factors associated with hospital readmission and related post-discharge outcomes among adults with COPD, identify the constructs and measurement approaches that have been investigated, synthesize patterns across the four domains, and identify knowledge gaps relevant to future research, discharge planning, and transitional care.

METHOD

A scoping review was conducted in accordance with the Joanna Briggs Institute methodology and reported following the Preferred Reporting Items for Systematic Reviews and Meta-analyses Extension for Scoping Reviews (PRISMA-ScR) (Peters et al., 2020; Tricco et al., 2018). Eligibility criteria were developed using the Population-Concept-Context framework. The population comprised primary studies involving adults aged 18 years or older with a diagnosis of COPD who had been hospitalized for an acute exacerbation or another COPD-related condition. The concept of interest was psychosocial factors associated with hospital readmission or related post-discharge outcomes. Psychosocial factors were defined broadly as emotional, cognitive, behavioral, and social/contextual constructs that may influence health behaviors, adaptation to illness, healthcare utilization, and clinical outcomes. The context was the transition period after hospital discharge, regardless of healthcare setting or country.

Studies were eligible when they involved adults with COPD; investigated at least one psychosocial factor in relation to hospital readmission, rehospitalization, recurrent hospitalization, exacerbation, discharge readiness, recovery, relapse, self-management, or another relevant post-discharge outcome; used a primary research design, including cohort, case-control, cross-sectional, qualitative, mixed-methods, randomized, or quasi-experimental approaches; were published in a peer-reviewed English-language journal between January 2000 and March 2026; and provided sufficient information for data charting. Studies were excluded when COPD-specific findings could not be separated from mixed populations, only clinical or physiological predictors were examined, the publication was a review, editorial, protocol, case report, or conference abstract without full text, or the full text was unavailable.

A comprehensive search strategy was developed in accordance with PRISMA-S to support transparency and reproducibility (Rethlefsen et al., 2021). PubMed, Scopus, Web of Science, and CINAHL were searched because these databases cover biomedical, nursing, psychological, and health-services research. Controlled vocabulary and free-text terms were combined across four concept groups: COPD, hospital readmission and related post-discharge outcomes, psychosocial factors, and discharge or transitional care. Search syntax was adapted for each database, and searches were limited to peer-reviewed English-language studies published from January 2000 through March 2026. The final electronic search was conducted on 15 March 2026. Reference lists of included studies and relevant reviews were also screened manually. Full database-specific search strategies are provided in Appendix Table A1.

After duplicate records had been removed using Mendeley Desktop (Elsevier, Amsterdam, the Netherlands), two reviewers (IAS and YDS) independently screened titles and abstracts against the eligibility criteria. Potentially eligible reports were retrieved for independent full-text assessment by the same reviewers. Disagreements were resolved through discussion until consensus was reached. When necessary, AG and AP were consulted, and the final study selection was reviewed by the senior authors. The selection process was documented in a PRISMA flow diagram.

Data were extracted independently by IAS and YDS using a standardized data-charting form developed in accordance with the JBI Manual for Evidence Synthesis. Extracted variables included author, publication year, country, study design, sample characteristics, psychosocial constructs, outcome definitions, follow-up periods, measurement instruments, and findings relevant to the review objectives. Discrepancies were resolved by consensus. Methodological quality was assessed independently using the appropriate JBI Critical Appraisal Checklist for each study design. No study was excluded solely on the basis of quality because the purpose of the review was to map the available evidence; appraisal findings were instead used to contextualize the strength and limitations of the evidence.

Data synthesis followed the scoping-review framework proposed by Arksey and O'Malley, refined by Levac et al., and updated in the JBI Manual for Evidence Synthesis (Arksey & O'Malley, 2005; Levac et al., 2010; Peters et al., 2020). Study characteristics and findings were summarized descriptively and synthesized narratively. Psychosocial factors were iteratively grouped into four conceptually derived domains: emotional, cognitive, behavioral, and social/contextual. Synthesis focused on patterns of association, potential explanatory mechanisms, similarities and differences across studies, measurement approaches, and areas in which evidence was limited. A quantitative meta-analysis was not undertaken because of substantial heterogeneity in study design, participant characteristics, psychosocial constructs, instruments, follow-up periods, and outcome definitions. The review was limited to peer-reviewed English-language publications from January 2000 to March 2026.

RESULTS AND DISCUSSION

Results

A total of 612 records were identified through database searches in PubMed, Scopus, Web of Science, and CINAHL. After duplicate records ($n = 224$) and records excluded by automation tools ($n = 36$) were removed, 434 records remained for title and abstract screening. Of these, 278 records were excluded because they did not meet the predefined eligibility criteria. The remaining 156

1 reports were sought for retrieval; 80 could not be retrieved because an eligible full-text publication could not be obtained or accessed. Consequently, 76 full-text articles were assessed for eligibility.

Following full-text assessment, 54 articles were excluded because they did not meet the eligibility criteria, including review articles, studies involving non-COPD populations, studies that did not investigate psychosocial factors, studies that did not report hospital readmission or related post-discharge outcomes, and non-original research. Ultimately, 22 studies were included in the final evidence synthesis because they met the predefined eligibility criteria and investigated psychosocial factors associated with hospital readmission and related post-discharge outcomes among patients with COPD. The study selection process is presented in Figure 1.

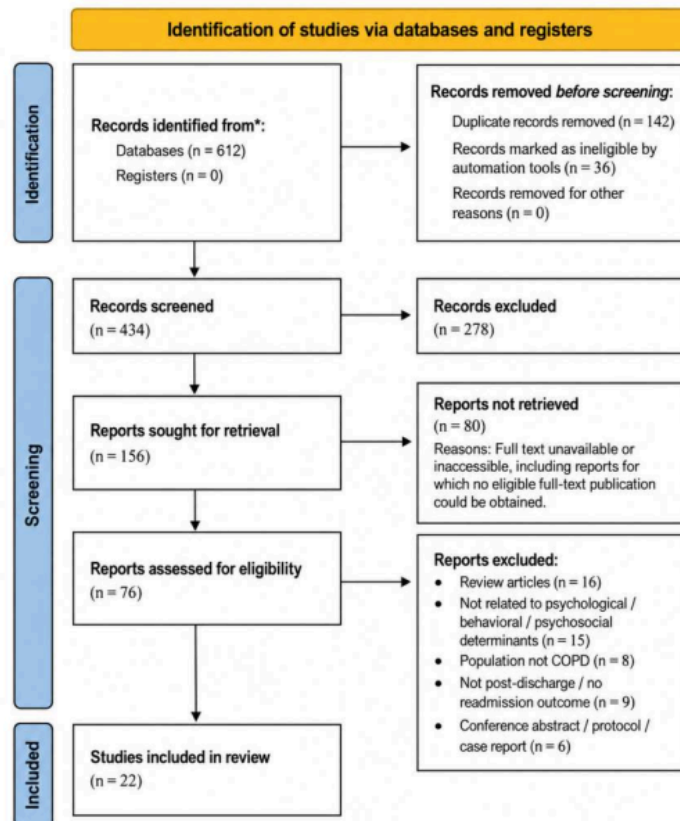


Figure 1. PRISMA 2020 Flow Diagram of the Study Selection Process

The characteristics of the 22 included studies are presented in Table 1. Overall, the included studies demonstrated substantial methodological diversity, supporting the use of a scoping review to comprehensively map psychosocial factors associated with hospital readmission and related post-discharge outcomes in patients with COPD. Most studies used observational designs, particularly prospective and retrospective cohort studies, which were suitable for examining associations between psychological factors and readmission outcomes over time (Gudmundsson et al., 2005; Xu et al., 2008; Coventry et al., 2011; Martínez-Gestoso et al., 2022; Singh et al., 2016; Fernández-García et al., 2020; Huang et al., 2021; Esteban et al., 2023; Wijekulasuriya et al., 2024). Several studies also used database-based retrospective analyses with large samples, allowing evaluation of psychosocial comorbidities at the population level (Singh et al., 2016; Lau et al., 2017; Goto et al., 2020; Bell et al., 2024).

In addition to quantitative studies, qualitative and mixed-method approaches were included to explore patient experiences during the post-discharge transition period, particularly related to coping, support, and self-management (Tang & Lee, 2017; Larsen et al., 2025; Chen et al., 2025). Cross-sectional studies were also used to examine discharge readiness and psychosocial conditions associated with post-hospital outcomes (Suwan et al., 2018; Wu et al., 2023). One randomized pilot trial evaluated a self-management intervention delivered at discharge, reflecting growing interest in psychosocial and behavioral interventions to reduce readmission (Heglund et al., 2020).

Sample sizes varied widely, ranging from small qualitative samples to large administrative datasets involving hundreds of thousands of hospitalizations, indicating differences in study aims and levels of evidence (Singh et al., 2016; Lau et al., 2017; Wijekulasuriya et al., 2024). Most studies included adults hospitalized for acute exacerbation of COPD, with readmission defined within 30 days, 90 days, or up to 12 months, reflecting common clinical indicators of transitional care outcomes (Coventry et al., 2011; Iyer et al., 2016; Fernández-García et al., 2020; Esteban et al., 2023).

Across studies, psychosocial determinants were broadly defined and included emotional disorders such as anxiety and depression, behavioral factors such as self-efficacy and coping, and social factors including support, education, socioeconomic status, and health literacy (Gudmundsson et al., 2005; Coventry et al., 2011; Singh et al., 2016; Suwan et al., 2018; Goto et al., 2020; Esteban et al., 2023; Baydar Toprak et al., 2024; Lott et al., 2024). These variables were commonly measured using validated instruments such as the Hospital Anxiety and Depression Scale (HADS), St. George's Respiratory Questionnaire (SGRQ), COPD Assessment Test (CAT), discharge readiness scales, and structured interviews, although the choice of instrument differed across studies.

Table 1. Summary characteristics of the included studies (n = 22)

Characteristic	Summary	Interpretive significance
Publication period and volume	Twenty-two studies published from 2005 to 2025.	The evidence spans two decades, but research activity increased after 2016.
Geographic coverage	Studies were conducted in Europe, North America, Asia, and Australia, including multicountry and national cohorts.	Findings are internationally relevant, although healthcare-system differences may affect transferability.
Study designs	Prospective/observational cohort (n = 9); retrospective/database (n = 6); cross-sectional (n = 2); intervention (n = 2); qualitative (n = 3).	The evidence is dominated by observational research; causal and implementation evidence remains limited.
Sample size	From 22 participants to more than 500,000 hospital admissions.	Large databases support population-level associations, while smaller studies provide contextual and experiential detail.
Outcome window	Thirty-day, 60- or 90-day, 3-month, and 12-month readmission; hospitalization/exacerbation; discharge readiness; adherence; self-management; post-discharge transition.	Outcome heterogeneity limits direct comparison and prevents pooled effect estimation.
Most studied factors	Depression, anxiety, psychological distress, social support, living arrangement, and socioeconomic vulnerability.	Emotional and social factors have the strongest and most consistent evidence base.
Less studied factors	Health literacy, illness perception, discharge readiness, self-efficacy, coping, adherence, and self-management ability.	Cognitive and behavioral pathways are clinically plausible but remain undermeasured.
Common instruments/data sources	HADS, GAD-7, GDS-15, SGRQ, CAT, readiness scales, structured interviews, medical records, and administrative diagnostic codes.	Differences in measurement methods contribute to heterogeneity and may influence which factors appear most prominent.
Overall evidence pattern	Emotional distress and social vulnerability were repeatedly associated with adverse outcomes; cognitive and behavioral factors showed promising but less consistent evidence.	The pattern suggests both genuine clinical relevance and a measurement/research-priority imbalance.

Table 2. Mapping of psychosocial factors associated with readmission and post-discharge outcomes in patients with COPD

Domain	Determinant	No. of studies	Study design	Outcome examined	Overall pattern of findings	Evidence consistency
Emotional factors	Depression	8	Cohort, database, observational	30-day readmission, hospitalization, exacerbation	Higher depression associated with increased risk of readmission	High
	Anxiety	6	Cohort, observational	Readmission, exacerbation	Anxiety linked to higher relapse and admission	Moderate-High
	Psychological distress	3	Cohort, qualitative	Admission, relapse	Emotional distress affects symptom management	Moderate
	Fear / uncertainty	2	Qualitative	Post-discharge relapse	Fear influences help-seeking behavior	Low-Moderate
Cognitive factors	Health literacy	2	Cross-sectional	Readmission	Low literacy associated with poor self-management	Moderate
	Illness perception	2	Qualitative / survey	Relapse, admission	Misunderstanding disease → delayed care	Moderate
	Discharge readiness	2	Survey	30-day readmission	Low readiness → higher readmission	Moderate
	Knowledge of COPD	1	Survey	Readmission	Limited knowledge affects adherence	Low
Behavioral factors	Self-efficacy	3	Cohort / intervention	Readmission	Low self-efficacy increases risk	Moderate
	Self-management ability	2	Intervention / cohort	Readmission	Better self-management reduces readmission	Moderate
	Coping strategy	2	Qualitative	Relapse	Poor coping → delayed response	Low-Moderate
	Treatment adherence	2	Cohort	Admission	Poor adherence linked to readmission	Moderate
Social / contextual factors	Social support	4	Cohort / survey	Readmission	Low support increases risk	High
	Living alone	3	Cohort / database	Readmission	Living alone associated with rehospitalization	Moderate-High
	Socioeconomic status	3	Database / cohort	Readmission	Low SES linked to higher readmission	Moderate
	Need for assistance	2	Cohort	Readmission	Functional dependency increases risk	Moderate
	Caregiver availability	1	Survey	Readmission	Lack of caregiver increases risk	Low

Note. Evidence-consistency ratings summarize the direction and replication of findings, not pooled effect size. High indicates a consistent direction in at least 75% of four or more studies; Moderate-High indicates a generally consistent direction across at least three studies, with some null or heterogeneous findings; Moderate indicates support from at least two studies but appreciable heterogeneity in design, measure, outcome, or direction; Low-Moderate indicates limited evidence from two studies and/or mixed findings; and Low indicates evidence from a single study. Methodological quality was considered separately in the JBI appraisal and was not used to calculate these descriptive ratings.

Quality of Study

Methodological quality of the included studies was assessed using the Joanna Briggs Institute (JBI) critical appraisal tools appropriate for each study design. The purpose of this appraisal was not to exclude studies, but to provide additional context for interpreting the strength and limitations of the evidence, as recommended for scoping reviews with heterogeneous designs (Levac et al., 2010; Peters et al., 2020). A total of 22 studies were appraised, including prospective cohort studies, retrospective cohort studies, cross-sectional studies, randomized or quasi-experimental studies, and qualitative studies. Overall, most cohort studies showed moderate to high methodological quality, particularly in relation to clearly defined populations, appropriate outcome measurement, and adequate follow-up. However, several studies had limitations related to confounding control, retrospective data sources, or small sample size. Qualitative studies generally demonstrated good methodological rigor, although transferability was sometimes limited due to small samples. Cross-sectional studies showed moderate quality, mainly because causal relationships between psychosocial factors and readmission could not be established. Importantly, no study was excluded based on quality assessment, because the aim of the scoping review was to map the available evidence rather than to determine effect size or effectiveness.

Mapping of Psychosocial Factors

The included studies examined psychosocial factors across four major domains: emotional, cognitive, behavioral, and social/contextual factors. Emotional disorders were the most frequently studied determinants, particularly depression and anxiety, followed by social and contextual factors such as social support and living situation. Behavioral determinants, including self-efficacy and self-management, were examined in a smaller number of studies, while cognitive determinants such as health literacy and discharge readiness were the least frequently investigated. Overall, the evidence suggests that emotional and social factors have been the primary focus of previous research, whereas cognitive and behavioral determinants remain underexplored.

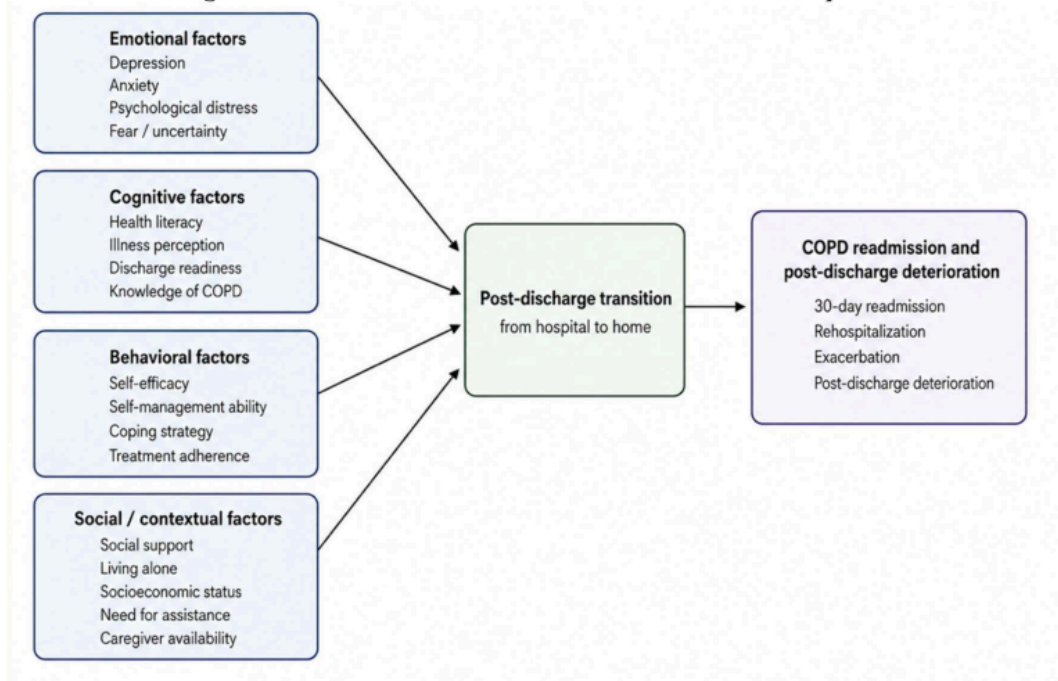


Figure 2. Evidence Mapping and Conceptual Framework

Emotional Disorders

Emotional disorders were the most frequently examined psychosocial factors. Depression and anxiety were assessed in the majority of studies using validated instruments such as HADS, GDS, and clinical diagnostic codes. Several cohort and database studies reported that depression and anxiety were associated with increased risk of readmission, hospitalization, or exacerbation (Gudmundsson et al., 2005; Xu et al., 2008; Coventry et al., 2011; Singh et al., 2016; Huang et al., 2021; Baydar Toprak et al., 2024). These findings were consistent across different follow-up periods, including 30-day, 90-day, and 12-month outcomes.

Cognitive Factors

Cognitive factors were less frequently studied but included health literacy, illness perception, and discharge readiness. Qualitative and cross-sectional studies reported that limited understanding of the disease and low confidence in self-management were associated with poor transition after discharge and increased risk of relapse (Suwan et al., 2018; Wu et al., 2023; Larsen et al., 2025; Chen et al., 2025).

Behavioral Factors

Behavioral factors included self-efficacy, coping strategies, adherence, and self-management ability. Interventional and observational studies suggested that higher self-efficacy and better self-management were associated with improved adherence and lower risk of readmission (Hegelund et al., 2020; Li et al., 2024). Qualitative studies also indicated that coping ability influenced patients' responses to worsening symptoms after discharge (Tang & Lee, 2017).

Social / Contextual Factors

Social and contextual factors were examined in several studies and included social support, socioeconomic status, living arrangements, and need for assistance. Lower socioeconomic status, lack of support, and functional dependency were associated with higher risk of readmission in both cohort and database studies (Coventry et al., 2011; Singh et al., 2016; Goto et al., 2020; Esteban et al., 2023; Bell et al., 2024; Wijekulasuriya et al., 2024).

Variation In Outcome Definitions And Evidence Gaps

The included studies used different definitions of early readmission, including 30-day, 90-day, 3-month, and 12-month outcomes. Some studies examined hospitalization or exacerbation instead of readmission. Differences in measurement tools and follow-up periods limited direct comparison between studies. Few studies examined cognitive determinants, and only a limited number evaluated behavioral interventions. Most studies focused on emotional disorders, while social and contextual factors were less consistently measured. In addition, the definition of readmission varied widely, highlighting the need for more standardized research.

Discussion

This scoping review explored the available evidence on psychosocial factors associated with COPD readmission and post-discharge deterioration. Overall, the findings show that readmission after hospitalization cannot be explained only by clinical severity. Emotional, social, cognitive, and behavioral conditions present at discharge may influence whether patients remain stable at home or require rehospitalization. Their recurrence across heterogeneous designs suggests that the transition after discharge is both a medical process and a psychological and social adjustment.

Among the identified factors, emotional factors were studied more often than cognitive and behavioral factors, and the associations with readmission were more consistent. Several reasons may explain this pattern. Anxiety and depression are common and easily recognized in patients with COPD because repeated breathlessness, fear of worsening symptoms, and loss of independence can affect emotional well-being. These conditions are also easier to measure using established instruments such as HADS, GAD-7, and GDS-15, or psychiatric diagnostic codes in large databases. In contrast, illness perception, health literacy, discharge readiness, self-efficacy, coping, and self-management are more dependent on the patient's situation and are measured using a wider range of instruments. They were also often examined in smaller cross-sectional, qualitative, or intervention studies. Thus, the greater attention given to emotional factors does not necessarily mean that cognitive and behavioral factors are less important. It may also reflect differences in research priorities and the availability of standard measurement tools.

The findings suggest several possible ways in which emotional distress may contribute to readmission. Breathlessness and anxiety may reinforce each other. Dyspnea can cause fear, panic, and close attention to every change in breathing, while anxiety may make breathlessness feel more severe and reduce confidence in managing symptoms at home. Some patients may seek emergency care quickly because they fear suffocation, whereas others may delay seeking help because they are

afraid or avoid dealing with worsening symptoms. Depression may reduce motivation, physical activity, participation in pulmonary rehabilitation, regular medication use, and symptom monitoring. These possible pathways are consistent with the repeated associations of depression and anxiety with hospitalization, exacerbation, and readmission across cohort and database studies (Gudmundsson et al., 2005; Xu et al., 2008; Coventry et al., 2011; Singh et al., 2016; Huang et al., 2021; Baydar Toprak et al., 2024). However, most included studies were observational, so these mechanisms should be interpreted as possible explanations rather than confirmed causal pathways.

Cognitive and behavioral factors may influence whether patients can turn discharge instructions into appropriate actions at home. Limited health literacy, incorrect understanding of the illness, and low readiness for discharge may lead to confusion about inhaler use, rescue medication, warning signs, follow-up plans, or whom to contact when symptoms worsen. Low self-efficacy may cause patients to feel unable to manage breathlessness, while ineffective coping may make it difficult to follow an action plan during stressful situations. In contrast, individualized education, active patient involvement, and greater confidence may support treatment adherence and earlier responses to worsening symptoms. This pattern was reported in intervention and qualitative studies addressing action plans, self-efficacy, coping, health literacy, and self-management (Hegelund et al., 2020; Li et al., 2024; Tang & Lee, 2017; Larsen et al., 2025; Chen et al., 2025). These findings suggest that cognitive and behavioral factors may be useful targets for discharge education and transitional-care interventions.

Social and contextual factors affect whether self-management is possible in daily life. Patients who live alone, have limited caregiver support, lack financial resources, need help with daily activities, or face transportation and healthcare-access barriers may have difficulty obtaining medication, attending follow-up visits, preparing meals, monitoring symptoms, or seeking care promptly. Social difficulties may also increase emotional distress. Education may be less effective when no caregiver is available to reinforce instructions or assist with treatment at home. The reported associations of socioeconomic disadvantage, limited support, functional dependency, and living conditions with readmission help explain why patients with similar clinical conditions may experience different outcomes after discharge (Coventry et al., 2011; Singh et al., 2016; Goto et al., 2020; Esteban et al., 2023; Bell et al., 2024; Wijekulasuriya et al., 2024).

The four psychosocial domains may also influence one another. For example, a patient with severe breathlessness may become anxious, misunderstand changes in symptoms, lose confidence in self-management, and depend on a caregiver who is not always available. In this situation, emotional distress may strengthen cognitive, behavioral, and social barriers. In contrast, adequate social support may reduce anxiety, help patients understand discharge instructions, support medication use, and make early follow-up easier. This interaction suggests that assessing only one psychosocial factor may miss other important problems. A brief assessment covering several domains may therefore provide a more complete picture of the patient's needs before discharge.

From a public health perspective, these findings highlight that COPD readmission may also reflect gaps in continuity of care across hospital, household, and primary healthcare settings. Patients may be discharged after their acute condition has stabilized while still requiring assistance with medication management, inhaler use, symptom monitoring, daily activities, follow-up visits, and recognition of warning signs. When these continuing care needs are not adequately supported because family members are unavailable or unprepared, caregiver capacity is limited, or follow-up from primary healthcare and community services is insufficient, clinical deterioration may remain unrecognized until the patient returns to the emergency department or requires readmission. Therefore, reducing readmission requires not only hospital-based treatment but also community-oriented strategies, including caregiver education, clear referral and information transfer to primary healthcare services, early post-discharge follow-up, and education on symptom recognition, medication adherence, inhaler use, and appropriate help-seeking. These measures may strengthen the capacity of patients and families to manage COPD at home, reduce avoidable healthcare utilization, and lessen the practical, emotional, and financial burden of repeated hospitalization. They may also help address disparities among patients who have limited social support or difficulty accessing post-discharge care. However, because most included studies did not directly evaluate community-based programs or population-level outcomes, these public health

impacts should be considered potential implications that require further implementation and evaluation.

These findings and their potential public health implications should, however, be interpreted carefully. The included studies used different follow-up periods, with readmission measured from 30 days to 12 months. Some studies examined hospitalization, exacerbation, discharge readiness, adherence, or the transition home rather than readmission itself. Psychosocial factors were measured using validated scales, diagnostic codes, surveys, and interviews, which limits direct comparison. Many observational studies also could not fully separate psychosocial factors from disease severity, previous hospital use, and comorbidities. Therefore, this review identifies repeated patterns and possible mechanisms, but it cannot confirm that psychosocial factors directly cause readmission. Future studies should use clearer and more consistent outcome definitions, assess several psychosocial domains at discharge, and test whether targeted interventions can reduce preventable readmissions.

Implications

From a clinical perspective, The findings can be translated into a structured psychosocial discharge pathway rather than remaining as descriptive evidence. Screening should occur when the patient is clinically stable, ideally within 24-48 hours before discharge, and should cover four domains: emotional distress; understanding and readiness; self-management confidence and coping; and social support or practical barriers. Health facilities may use HADS or another locally approved brief instrument for emotional symptoms, combined with short questions about living arrangements, caregiver availability, access to medication and transportation, confidence in using inhalers, understanding of the action plan, and perceived readiness to return home. Screening should not be used as a stand-alone score; positive findings should trigger a documented response.

A tiered response can then be incorporated into discharge planning. Patients with emotional distress may require counseling, mental-health referral, or closer follow-up. Patients with limited understanding or low confidence should receive individualized education using teach-back, repeated inhaler demonstration, and a written action plan that specifies daily treatment, warning signs, and when and where to seek help. Patients with social vulnerability should be referred to nursing case management or social services, and caregivers should be included in education whenever possible. Medication reconciliation, assessment of affordability, and confirmation of equipment or oxygen availability should be completed before discharge.

Transitional care should continue after the patient leaves the hospital. A nurse-led telephone or telehealth contact within 48-72 hours can reassess symptoms, medication access, inhaler use, emotional distress, and understanding of the action plan. A clinic, home-care, or telehealth review within 7-14 days can reinforce education, resolve barriers, and escalate care before deterioration requires emergency treatment. Higher-risk patients should receive more intensive contact, while lower-risk patients may follow the standard pathway. Implementation can be monitored through process indicators such as the proportion screened, proportion with a documented individualized action plan, caregiver involvement, completion of early follow-up, referral uptake, and 30-day readmission.

Table 3 presents an author-proposed operational model derived from the qualitative synthesis of the 22 included studies; it is not a set of variables measured uniformly by those studies. The model can be adapted to local staffing and resources and links each assessment domain to a specific action, thereby preventing psychosocial screening from becoming a documentation exercise without clinical follow-through.

Table 3. Proposed operational psychosocial discharge and transitional-care pathway for patients with COPD

Stage	Assessment or action	Positive finding/trigger	Required response
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Stage	Assessment or action	Positive finding/trigger	Required response
Pre-discharge screening(24-48 h)	Emotional symptoms; understanding and readiness; self-efficacy/coping; support, living arrangement, transport, medication access, and caregiver availability.	Clinically relevant distress, poor teach-back, low confidence, living alone without support, or unresolved access barrier.	Document risk domain(s), notify the responsible clinician or case manager, and initiate a tailored plan before discharge.
Tailored discharge bundle	Medication reconciliation, inhaler demonstration, teach-back, written action plan, caregiver education, and referral planning.	Any identified cognitive, behavioral, emotional, or social vulnerability.	Repeat education until teach-back is adequate; involve caregiver; arrange mental-health, social-work, rehabilitation, or home-care support as indicated.
Early transition contact(48-72 h)	Telephone/telehealth review of symptoms, medication access, inhaler use, action-plan comprehension, coping, and support.	Worsening symptoms, treatment problem, confusion, distress, or unmet social need.	Escalate to same-day clinical advice, expedited clinic review, emergency evaluation, or additional home/community support.
Follow-up review(7-14 d)	Clinic, home-care, or telehealth reassessment of recovery, adherence, confidence, emotional symptoms, and barriers.	Persistent vulnerability or repeated acute-care use.	Intensify case management, pulmonary rehabilitation, mental-health care, or multidisciplinary follow-up.
Quality monitoring	Track screening completion, action-plan documentation, referral completion, early contact, follow-up attendance, and 30-day readmission.	Low pathway completion or continued high readmission.	Audit barriers, revise workflow, and provide staff feedback and training.

Research Contribution

This review provides an integrated evidence map of emotional, cognitive, behavioral, and social/contextual factors associated with readmission and related post-discharge outcomes in COPD. Beyond identifying which factors have been studied, it clarifies that emotional dominance in the literature reflects both clinical relevance and greater measurement availability, while cognitive and behavioral pathways remain comparatively underexamined. The proposed operational pathway translates the evidence into discharge assessment, tailored education, referral, and early transitional follow-up. At the community level, this evidence map may also inform the development of family- and caregiver-centered education, primary healthcare follow-up, and community nursing programs for patients who continue to require support after hospital discharge.

38 Limitations

Several limitations of this review should be acknowledged. The included studies differed in design, outcome definition, and measurement methods, which limits direct comparison. Only English-language articles were included, and some relevant studies may have been missed. In addition, psychosocial variables were not the main focus of many studies, so the available evidence may not fully reflect their importance. Quality appraisal was performed to provide context, but studies were not excluded based on quality because the purpose of this scoping review was to map

the literature rather than to evaluate effectiveness. Therefore, some findings should be interpreted cautiously, especially those based on small samples or retrospective data.

Suggestions

Future research should include prospective studies that assess psychological and social conditions at discharge and follow patients during the transition period. Studies testing interventions aimed at improving self-management, confidence, or discharge readiness may also help clarify whether these factors can reduce readmission risk.

CONCLUSION

Psychosocial factors are repeatedly associated with COPD readmission and post-discharge deterioration, particularly emotional distress and social vulnerability. Readmission risk may arise through interacting mechanisms involving symptom perception, motivation, comprehension, self-management, help-seeking, and practical support. Integrating brief multidomain screening with tailored education, referral, caregiver involvement, and early follow-up may therefore strengthen transitional care. Coordination with primary healthcare and community nursing may also help patients manage COPD safely at home, although community-level outcomes have not been directly established. Because most evidence is observational, prospective intervention and implementation studies are needed to test whether these strategies reduce preventable readmission.

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AUTHOR CONTRIBUTION STATEMENT

IAS and AA contributed to the conception and design of the review. IAS and YDS conducted the literature search, study selection, data extraction, and critical appraisal. IAS, YDS, AA, and APP contributed to the analysis and interpretation of findings. IAS drafted the manuscript. YS, AA, and APP critically revised and edited the manuscript. All authors approved the final manuscript.

AI DISCLOSURE STATEMENT

The authors used OpenAI ChatGPT during the preparation of this work for language refinement and formatting assistance. After using the tool, the authors thoroughly reviewed and edited the content as needed and take full responsibility for the content of the publication.

CONFLICTS OF INTEREST

All authors declare no conflict of interest. The authors confirm that no financial, institutional, or personal relationships influenced the conduct of this review, the interpretation of the evidence, the preparation of the manuscript, or its submission for publication.

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