

MONITORING OF QUALITY INDICATORS IN LONG-TERM CARE FACILITIES FOR OLDER ADULTS

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1. INTRODUCTION

This guide was developed to support care delivery in Long-Term Care Facilities for Older Adults (LTCFs), providing technical and scientific support aimed at improving the quality of care provided to institutionalized older adults.

LTCFs should provide not only housing but also comprehensive and specialized healthcare adapted to the specific needs of this population. Nurses' role in this context is strategic and multifaceted and is essential for care management, promotion of quality of life, preservation of dignity, prevention of health problems, and promotion of residents' autonomy. Their role extends beyond the provision of physical and emotional care, contributing to quality of life while ensuring dignity, safety, and social integration^(1,2).

The Collegiate Board Resolution (RDC) No. 502/2021⁽³⁾ regulates the operation of LTCFs, establishing quality and safety standards. The regulation defines requirements for physical infrastructure, professional qualifications, care procedures, and residents' rights, including hygiene, nutrition, staffing, and healthcare. This regulation represents an advance in standardization and oversight, ensuring appropriate environments through regular inspections and minimum requirements, thereby strengthening transparency and the trust of users and family members⁽⁴⁾.

Expanding the range of indicators contributes to the systematic assessment of care management. Sensitive and comprehensive monitoring makes it possible to identify nonconformities, recognize good practices, and allocate resources efficiently, ensuring that LTCFs become environments that promote residents' well-being and autonomy.

This material is intended to serve as a practical support tool to assist decision-making, improve work processes, and strengthen the multidisciplinary team's role within LTCFs. By promoting evidence-based and person-centered care for older adults, it reaffirms the commitment to excellence in care delivery and care management.

This guide constitutes the supplementary material to the article “Correlation between quality indicators in long-term care facilities for older adults: implementation study,” bringing together the 21 indicators effectively monitored in the study: 6 (six) mandatory indicators, in accordance with RDC No. 502/2021 of the Brazilian Health Regulatory Agency (Anvisa), and 15 (fifteen) complementary indicators identified through a systematic literature review and discussion within a multidisciplinary team.

2. DEVELOPMENT – INDICATORS

The complementary indicators were developed based on a systematic literature review conducted according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines⁽⁵⁾ in the SCOPUS, Web of Science (WOS), PubMed, and CINAHL databases, including studies published between 2020 and 2025. After application of the eligibility criteria, 22 studies were included in the analysis (detailed search strategies are provided in APPENDIX A). The quality of the evidence was assessed according to the GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach⁽⁶⁾, with most included studies classified as having moderate to high quality.

Collegiate Board Resolution (RDC) No. 502/2021 currently establishes 6 (six) mandatory monitoring indicators for Long-Term Care Facilities for Older Adults (LTCFs): mortality, acute diarrheal disease, scabies, dehydration, pressure injury, and malnutrition. Building on this regulatory framework, the systematic review and discussion with the care team added fifteen other indicators addressing the clinical, functional, and psychosocial dimensions of care: urinary tract infection (including diaper use and incontinence-associated dermatitis), constipation, falls, functionality, cognition, skin tears, medication deprescribing, changes in food consistency, behavioral changes, respiratory tract infections, pain, oral care, absence of family visits, nonparticipation in activities, and pediculosis—for a total of 21 monitored indicators. These are detailed below, together with their respective definitions, measurement methods, monitoring frequency, and suggested interventions.

2.1 Mandatory Indicators (RDC No. 502/2021)

1. Mortality

Mortality rate among older adult residents.

Measurement: (Number of deaths among older adult residents during the month / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Analysis of causes; frequent and avoidable hospitalizations; inclusion and provision of palliative care; and clinical protocols for geriatric emergencies.

2. Acute Diarrheal Disease

Incidence rate of acute diarrheal disease among older adult residents. This syndrome is caused by several etiological agents (bacteria, viruses, and parasites), with the predominant manifestation being an increased number of bowel movements with watery or poorly formed stools, frequently accompanied by vomiting, fever, and abdominal pain. In some cases, mucus and blood may be present. It is generally self-limiting, lasting between 2 and 14 days, but may progress to severe forms with dehydration and electrolyte disturbances, particularly when associated with preexisting malnutrition.

Measurement: (Number of new cases of acute diarrheal disease among older adult residents during the month / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Hand hygiene; water and food safety measures; treatment of the underlying cause.

3. Scabies

Incidence rate of scabies among older adult residents. A parasitic skin infestation caused by a mite whose penetration produces vesicular or papular lesions or small burrows in which eggs are deposited. Preferred sites include the interdigital areas, wrists, axillae, periumbilical region, intergluteal cleft, and genitals; in older adults, the scalp, palms, and soles may also be affected. Pruritus is intense and typically more severe at night.

Measurement: (Number of new cases of scabies among older adult residents during the month / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Isolation of cases; laundering and cleaning of clothing and the environment.

4. Dehydration

Incidence rate of dehydration among older adult residents. A deficiency of body water and electrolytes resulting from losses exceeding intake, which may be caused by reduced intake (anorexia, coma, fluid restriction), increased gastrointestinal losses (vomiting and diarrhea), increased urinary losses (osmotic diuresis, diuretics, renal failure), or cutaneous and respiratory losses (burns, heat exposure).

Measurement: (Number of older adults who experienced dehydration / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Encouragement of fluid intake; monitoring and clinical assessment.

5. Pressure Injury

Prevalence rate of pressure injury among older adult residents.

Measurement: (Number of older adult residents with pressure ulcers during the month / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Skin assessment; repositioning; appropriate mattress; nutritional assessment.

6. Malnutrition

Prevalence rate of malnutrition. A condition caused by inadequate nutrient intake or digestion resulting from an unbalanced diet, digestive or absorption problems, or conditions that prevent adequate biological utilization of the food consumed.

Measurement: (Number of older adult residents diagnosed with malnutrition during the month / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Nutritional assessment; individualized dietary plan; diet supervision.

2.2 Indicators

7. Urinary Tract Infection (UTI), Diaper Use, and Incontinence-Associated Dermatitis (IAD)

An infection prevalent among institutionalized older adults, particularly among those using invasive devices such as urinary catheters and adult diapers, associated with care safety and adherence to prevention protocols. Associated with this indicator are diaper use and the

occurrence of Incontinence-Associated Dermatitis (IAD)—an inflammatory skin condition caused by prolonged contact with urine and/or feces, common among older adults with incontinence—as they share the same risk factors (incontinence, prolonged exposure to moisture, and inadequate intimate hygiene) and prevention strategies.

Measurement: UTI: $(\text{Number of older adults who developed a UTI} / \text{Number of older adult residents during the month}) \times 100$. Concurrently monitor the proportion of older adults using diapers (using the AUFA Scale – Diaper Use Assessment Scale) and the incidence of new cases of IAD (per 100 residents/month).

Frequency: Monthly (UTI); Weekly (diaper use and IAD)

Suggested interventions: Intimate hygiene protocols, with staff training in proper cleansing, safe management of urinary catheters, and timely changing of diapers/absorbent products; increased fluid intake through regular provision of fluids and monitoring of daily consumption; frequent assessment of skin in areas exposed to moisture and use of protective barriers (creams and films).

8. Constipation

A clinical condition characterized by reduced or absent bowel movements, reflecting the quality of nutritional care and medication management.

Measurement: Percentage of residents with controlled constipation, based on the Bristol Stool Scale and self-reported symptoms.

Frequency: Weekly

Suggested interventions: Increased dietary fiber through the inclusion of fruits, vegetables, and whole grains; promotion of adequate hydration with daily monitoring of fluid intake.

9. Falls

Adverse events associated with a high risk of fractures, hospitalizations, and functional decline. This indicator is linked to the effectiveness of preventive programs.

Measurement: $(\text{Number of older adults who experienced falls} / \text{Number of older adult residents during the month}) \times 100$

Frequency: Monthly

Suggested interventions: Fall risk assessment using validated scales; environmental modifications, including installation of grab bars, adequate lighting, and removal of obstacles.

10. Functionality

Refers to the older adult's ability to perform activities of daily living (ADLs), serving as a key parameter for assessing autonomy and the effectiveness of rehabilitative interventions.

Measurement: Change in scores on validated functional scales, such as the Barthel, Lawton, and Katz scales.

Frequency: Semester

Suggested interventions: Physical therapy and occupational therapy programs involving strength, balance, and coordination exercises; environmental adaptations with assistive devices and appropriate furniture.

11. Cognition

A central domain of geriatric assessment, focusing on the early detection of neurocognitive deficits and management of dementia syndromes.

Measurement: Change in scores on standardized cognitive tests, such as the Mini-Mental State Examination (MMSE) or MoCA and, when neither is applicable, the Clinical Dementia Rating (CDR).

Frequency: Semester

Suggested interventions: Cognitive stimulation workshops involving memory games, reading, and reasoning activities; staff training in communication techniques adapted for dementia and cognitive impairment.

12. Skin Tears

Skin injuries resulting from friction against surfaces, frequently occurring among residents with reduced mobility and those who are bedridden, due to trauma or shear.

Measurement: Incidence of new skin tears per 100 residents/month.

Frequency: Weekly

Suggested interventions: Daily skin assessment with documentation and preventive monitoring of at-risk areas; use of protective barriers such as creams and protective films.

13. Medication Deprescribing

A clinical strategy aimed at the safe discontinuation of unnecessary medications and prevention of medicalization, including the review of medications that are inappropriate for older adults.

Measurement: Proportion of residents with at least one medication deprescribed according to clinical guidelines.

Frequency: Monthly

Suggested interventions: Periodic prescription review; multidisciplinary team discussions involving all professionals.

14. Change in Food Consistency

An indicator of nutritional adequacy and food safety. It refers to modification of food consistency (pureed, liquid, or minced) based on nutritional, medical, or speech-language pathology indications, aiming to address swallowing difficulties, dysphagia, digestive disorders, or neurocognitive conditions that affect eating behavior, and preceding the risk of aspiration.

Measurement: Number and proportion (%) of institutionalized older adults with a change in food consistency documented in their medical records.

Frequency: Monthly

Suggested interventions: Periodic speech-language pathology and nutritional assessment; implementation of dysphagia protocols; individualized dietary adaptation; staff training on the safe provision of food; monitoring of food acceptance; prevention of aspiration.

15. Behavioral Changes

An indicator of mental and cognitive health. It refers to changes in usual behavior, including mood changes, apathy, aggression, and/or agitation, frequently associated with dementia or other neuropsychiatric conditions.

Measurement: Number and frequency of episodes identified through multidisciplinary assessment, using validated instruments such as the Neuropsychiatric Inventory (NPI), with documentation in the medical record.

Frequency: Monthly

Suggested interventions: Continuous multidisciplinary assessment; use of nonpharmacological approaches (cognitive stimulation, therapeutic activities); medication review; staff training in the management of behavioral symptoms.

16. Respiratory Tract Infections

A condition prevalent in institutional settings and a significant cause of morbidity and mortality among older adults. This indicator makes it possible to assess outbreak control and the effectiveness of immunization measures.

Measurement: (Number of older adults who developed acute respiratory infections / Number of older adult residents during the month) $\times$ 100

Frequency: Monthly

Suggested interventions: Rigorous hand and high-touch surface hygiene protocols, with appropriate use of Personal Protective Equipment; annual vaccination, with an internal campaign and a target coverage of $\geq 90\%$.

17. Pain

A frequently underreported symptom among institutionalized older adults, making appropriate management essential to promote comfort and well-being.

Measurement: Percentage of residents with controlled pain according to standardized clinical scales and self-report.

Frequency: Weekly

Suggested interventions: Systematic pain assessment using scales adapted for residents with and without preserved cognition; therapeutic adjustment according to response, with pharmacological and nonpharmacological interventions.

18. Oral Care

The state of well-being of the mouth and associated structures, aimed at promoting functional autonomy, overall well-being, and the prevention of local and systemic health problems.

Measurement: (Residents assessed during the semester / Number of residents) $\times 100$

Frequency: semester

Suggested interventions: Regular dental visits with periodic clinical assessment and documentation of findings; staff training in oral hygiene, including supervised toothbrushing techniques and the use of oral antiseptics.

19. Absence of Family Visits

An indicator of social support and family connectedness. It refers to the absence of family visits to institutionalized older adults, affecting emotional and social aspects and quality of life.

Measurement: Number and proportion (%) of older adults who did not receive visits during the month, according to visitor entry and exit records.

Frequency: Monthly

Suggested interventions: Encouragement of family participation; flexible visiting hours; use of technologies for remote contact (video calls); family–institution integration activities; psychosocial follow-up of older adults without a support network.

20. Nonparticipation in Activities

An indicator of social engagement and functionality. It refers to older adults' nonadherence to activities proposed by the multidisciplinary team and may be related to the degree of dependence, cognitive decline, depressive symptoms, or lack of interest.

Measurement: Number and proportion (%) of older adults who did not participate in any scheduled activity during the month, correlated with their level of dependence and documentation of attempts at individual adaptation.

Frequency: Monthly

Suggested interventions: Planning of individualized activities; adaptation according to physical and cognitive limitations; encouragement of active participation; assessment of reasons for refusal (pain, depression, isolation); involvement of the multidisciplinary team.

21. Pediculosis

An indicator of hygiene conditions and infection control. It refers to infestation by ectoparasites (*Pediculus humanus capitis*), primarily affecting the scalp and potentially causing intense pruritus and secondary complications when untreated.

Measurement: Number of diagnosed cases of pediculosis among institutionalized older adults during the period.

Frequency: Monthly

Suggested interventions: Periodic scalp inspection; immediate treatment of identified cases; guidance on personal hygiene; laundering of clothing and bed linens; control measures to prevent institutional spread.

2.3 Other Indicators Identified in the Review

In addition to the 21 indicators detailed above, the systematic review underlying this guide also identified the indicators avoidable hospitalizations, palliative care, and vaccination as intervention components that are intrinsically incorporated into the indicators, as well as professional training, which is incorporated into the consolidation of all indicators, since improvement cannot be achieved without it. Therefore, these four indicators were not included in the systematic monitoring instrument presented in this guide but constitute equally relevant aspects that are part of the institution's care policy and the comprehensive care plan for older adults. Their consideration in care delivery and management planning is therefore recommended.

3. IMPLEMENTATION STAGES

The guide should be used as a model for the continuous improvement of care, aiming to provide quality care centered on the institutionalized older adult. The stages for its implementation are presented in Table 1.

Table 1 – Stages for implementing LTCF indicators. Rio de Janeiro, RJ, Brazil, 2026

No.	Stage	Description	✓
1	Initial Planning	Define the team responsible for monitoring, identify available resources, and establish the frequency and methodology of assessment.	
2	Indicator Selection	Prioritize the most relevant indicators, considering clinical impact, institutional needs, and feasibility of measurement.	
3	Implementation	Apply validated data collection instruments and ensure standardized and consistent data recording in the system, ensuring data reliability.	
4	Monitoring	Conduct periodic multidisciplinary meetings for critical analysis of results, identification of deviations, and evidence-based decision-making.	
5	Intervention	Develop and implement action plans aimed at continuous improvement based on the collected data, professional training on the indicators, and best clinical practices.	

Source: Prepared by the authors, 2026.

Assessing the quality of care provided in Long-Term Care Facilities for Older Adults requires systematic monitoring of clinical, functional, and organizational indicators, which provide objective information for evaluating care effectiveness and planning interventions. The suggested monitoring flow (Stage 4) is presented in Table 2 and visually illustrated in Figure 1.

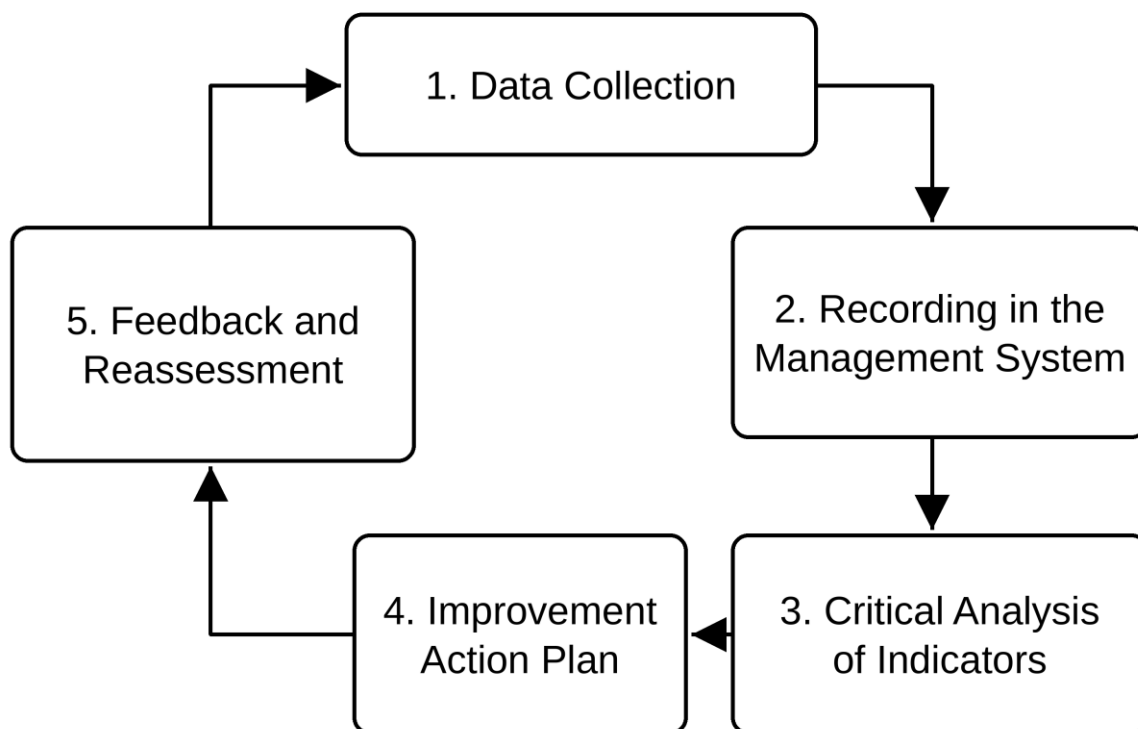
Table 2 – Indicator monitoring flow. Rio de Janeiro, RJ, Brazil, 2026

No.	Stage	Action	✓	Notes
1	Data Collection	Collect information through clinical records, systematic observations, laboratory tests, and interviews with residents and staff.		
2	Recording in the Management System	Enter the collected data into digital management platforms, ensuring organization, security, and traceability of information.		
3	Critical Analysis of Indicators	Assess indicator performance against established targets, identifying deviations, trends, and areas requiring attention.		
4	Improvement Action Plan	Develop corrective and preventive strategies, defining targets, timelines, and responsibilities to promote continuous improvement in the quality of care.		

No.	Stage	Action	✓	Notes
5	Feedback and Reassessment	Communicate results to the team, engage professionals, and periodically reassess the effectiveness of the interventions implemented.		

Source: Prepared by the authors, 2026.

Figure 1 – Indicator monitoring flow. Rio de Janeiro, RJ, Brazil, 2026



Source: Prepared by the authors, 2026.

INDICATOR MONITORING CHECKLIST

A checklist for the continuous monitoring of the 21 quality indicators, aligned with individual and collective needs, was developed.

Table 3 – Continuous monitoring of quality indicators. Rio de Janeiro, RJ, Brazil, 2026

No	Indicator	Frequency	Measurement (Formula)	%	Suggested Interventions	✓	Reassessment
1	Mortality	Monthly	(Number of deaths among older adult residents during the month / Number of older adult residents during the month) $\times$ 100	____ %	Analysis of causes; review of palliative care and clinical protocols.		____/____/____
2	Acute Diarrheal Disease	Monthly	(Number of new cases of acute diarrheal disease among older adult residents during the month / Number of older adult residents during the month) $\times$ 100	____ %	Hand hygiene; water and food safety; treatment of the underlying cause.		____/____/____
3	Scabies	Monthly	(Number of new cases of scabies among older adult residents during the month / Number of older adult residents during the month) $\times$ 100	____ %	Isolation of cases; cleaning of clothing and the environment.		____/____/____
4	Dehydration	Monthly	(Number of older adults who experienced dehydration / Number of older adult residents during the month) $\times$ 100	____ %	Encouragement of fluid intake; clinical monitoring.		____/____/____
5	Pressure Injury	Monthly	(Number of older adult residents with pressure ulcers during the month / Number of older adult residents during the month) $\times$ 100	____ %	Skin assessment; repositioning; appropriate mattress.		____/____/____
6	Malnutrition	Monthly	(Number of older adult residents diagnosed with malnutrition during the month / Number of older adult residents during the month) $\times$ 100	____ %	Nutritional assessment; individualized dietary plan.		____/____/____

No	Indicator	Frequency	Measurement (Formula)	%	Suggested Interventions	✓	Reassessment
7	Urinary Tract Infection (UTI), Diaper Use, and Incontinence-Associated Dermatitis (IAD)	Monthly (UTI); Weekly (diaper use and IAD)	UTI: (Number of older adults who developed a UTI / Number of older adult residents during the month) × 100. Concurrently monitor the proportion of older adults using diapers (AUFA Scale) and the incidence of new cases of IAD (per 100 residents/month).	____ %	Intimate hygiene protocols, with staff training in proper cleansing, safe management of urinary catheters, and timely changing of diapers/absorbent products; increased fluid intake through regular provision of fluids and monitoring of daily consumption; frequent skin assessment in areas exposed to moisture and use of protective barriers (creams and films).		____/____/____
8	Constipation	Weekly	Percentage of residents with controlled constipation, based on the Bristol Stool Scale and self-reported symptoms.	____ %	Increased dietary fiber through the inclusion of fruits, vegetables, and whole grains; promotion of adequate hydration with daily monitoring of fluid intake.		____/____/____
9	Falls	Monthly	(Number of older adults who experienced falls / Number of older adult residents during the month) × 100	____ %	Fall risk assessment using validated scales; environmental modifications, including installation of grab bars, adequate lighting, and removal of obstacles.		____/____/____
10	Functionality	Quarterly	Change in scores on validated functional scales, such as the Barthel, Lawton, and Katz scales.	____ %	Physical therapy and occupational therapy programs involving strength, balance, and coordination exercises; environmental adaptations with assistive devices and appropriate furniture.		____/____/____
11	Cognition	Every six months	Change in scores on standardized cognitive tests, such as the Mini-Mental State Examination (MMSE) or MoCA and, when neither is applicable, the Clinical Dementia Rating (CDR).	____ %	Cognitive stimulation workshops involving memory games, reading, and reasoning activities; staff training in communication techniques adapted for dementia and cognitive impairment.		____/____/____
12	Skin Tears	Weekly	Incidence of new skin tears per 100 residents/month.	____ %	Daily skin assessment with documentation and preventive monitoring of at-risk areas; use of protective barriers such as creams and protective films.		____/____/____
13	Medication Deprescribing	Monthly	Proportion of residents with at least one medication deprescribed according to clinical guidelines.	____ %	Periodic prescription review; multidisciplinary team discussion involving all professionals.		____/____/____

No	Indicator	Frequency	Measurement (Formula)	%	Suggested Interventions	✓	Reassessment
14	Change in Food Consistency	Monthly	Number and proportion (%) of institutionalized older adults with a change in food consistency documented in their medical records.	____ %	Periodic speech-language pathology and nutritional assessment; implementation of dysphagia protocols; individualized dietary adaptation; staff training on the safe provision of food; monitoring of food acceptance.		____/____/____
15	Behavioral Changes	Monthly	Number and frequency of episodes identified through multidisciplinary assessment, using validated instruments such as the Neuropsychiatric Inventory (NPI), with documentation in the medical record.	____ %	Continuous multidisciplinary assessment; use of nonpharmacological approaches (cognitive stimulation, therapeutic activities); medication review; staff training in the management of behavioral symptoms.		____/____/____
16	Respiratory Tract Infections	Monthly	(Number of older adults who developed acute respiratory infections / Number of older adult residents during the month) $\times$ 100	____ %	Rigorous hand and high-touch surface hygiene protocols, with appropriate use of Personal Protective Equipment; annual vaccination, with an internal campaign and a target coverage of $\geq 90\%$.		____/____/____
17	Pain	Weekly	Percentage of residents with controlled pain according to standardized clinical scales and self-report.	____ %	Systematic pain assessment using scales adapted for residents with and without preserved cognition; therapeutic adjustment according to response, with pharmacological and nonpharmacological interventions.		____/____/____
18	Oral Care	Semester	(Residents assessed during the semester / Number of residents) $\times$ 100	____ %	Regular dental visits with periodic clinical assessment and documentation of findings; staff training in oral hygiene, including supervised toothbrushing techniques and the use of oral antiseptics.		____/____/____
19	Absence of Family Visits	Monthly	Number and proportion (%) of older adults who did not receive visits during the month, according to visitor entry and exit records.	____ %	Encouragement of family participation; flexible visiting hours; use of technologies for remote contact (video calls); family–institution integration activities; psychosocial follow-up of older adults without a support network.		____/____/____
20	Nonparticipation in Activities	Monthly	Number and proportion (%) of older adults who did not participate in any scheduled activity during the month, correlated with their level of dependence and documentation of attempts at individual adaptation.	____ %	Planning of individualized activities; adaptation according to physical and cognitive limitations; encouragement of active participation; assessment of reasons for refusal (pain, depression, isolation); involvement of the multidisciplinary team.		____/____/____

No	Indicator	Frequency	Measurement (Formula)	%	Suggested Interventions	✓	Reassessment
21	Pediculosis	Monthly	Number of diagnosed cases of pediculosis among institutionalized older adults during the period.	____ %	Periodic scalp inspection; immediate treatment of identified cases; guidance on personal hygiene; laundering of clothing and bed linens; control measures to prevent institutional spread.		____/____/____

Source: Prepared by the authors, 2026.

Legend: % = percentage of cases during the period; ✓ = assessment and suggested interventions completed.

PERSONS RESPONSIBLE FOR MONITORING

Objective: To clearly organize and record the professionals responsible for each indicator, as well as the monitoring or reassessment dates, enabling systematic follow-up, traceability of actions, and easy identification of those responsible for interventions and adjustments to the care provided to institutionalized older adults.

Table 4 – Professionals responsible for monitoring each indicator over time. Rio de Janeiro, RJ, Brazil, 2026

No.	Indicator	Person Responsible	Start Date	End Date	Notes
1	Mortality		/ /	/ /	
2	Acute Diarrheal Disease		/ /	/ /	
3	Scabies		/ /	/ /	
4	Dehydration		/ /	/ /	
5	Pressure Injury		/ /	/ /	
6	Malnutrition		/ /	/ /	
7	Urinary Tract Infection (UTI), Diaper Use, and Incontinence-Associated Dermatitis (IAD)		/ /	/ /	
8	Constipation		/ /	/ /	
9	Falls		/ /	/ /	
10	Functionality		/ /	/ /	
11	Cognition		/ /	/ /	
12	Skin Tears		/ /	/ /	
13	Medication Deprescribing		/ /	/ /	
14	Change in Food Consistency		/ /	/ /	
15	Behavioral Changes		/ /	/ /	
16	Respiratory Tract Infections		/ /	/ /	
17	Pain		/ /	/ /	
18	Oral Care		/ /	/ /	
19	Absence of Family Visits		/ /	/ /	
20	Nonparticipation in Activities		/ /	/ /	
21	Pediculosis		/ /	/ /	

DATA AVAILABILITY

The data used to support the conclusions of this study are included in the original article.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest related to this study.

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APPENDIX A – SEARCH STRATEGIES AND EVIDENCE FROM THE SYSTEMATIC REVIEW

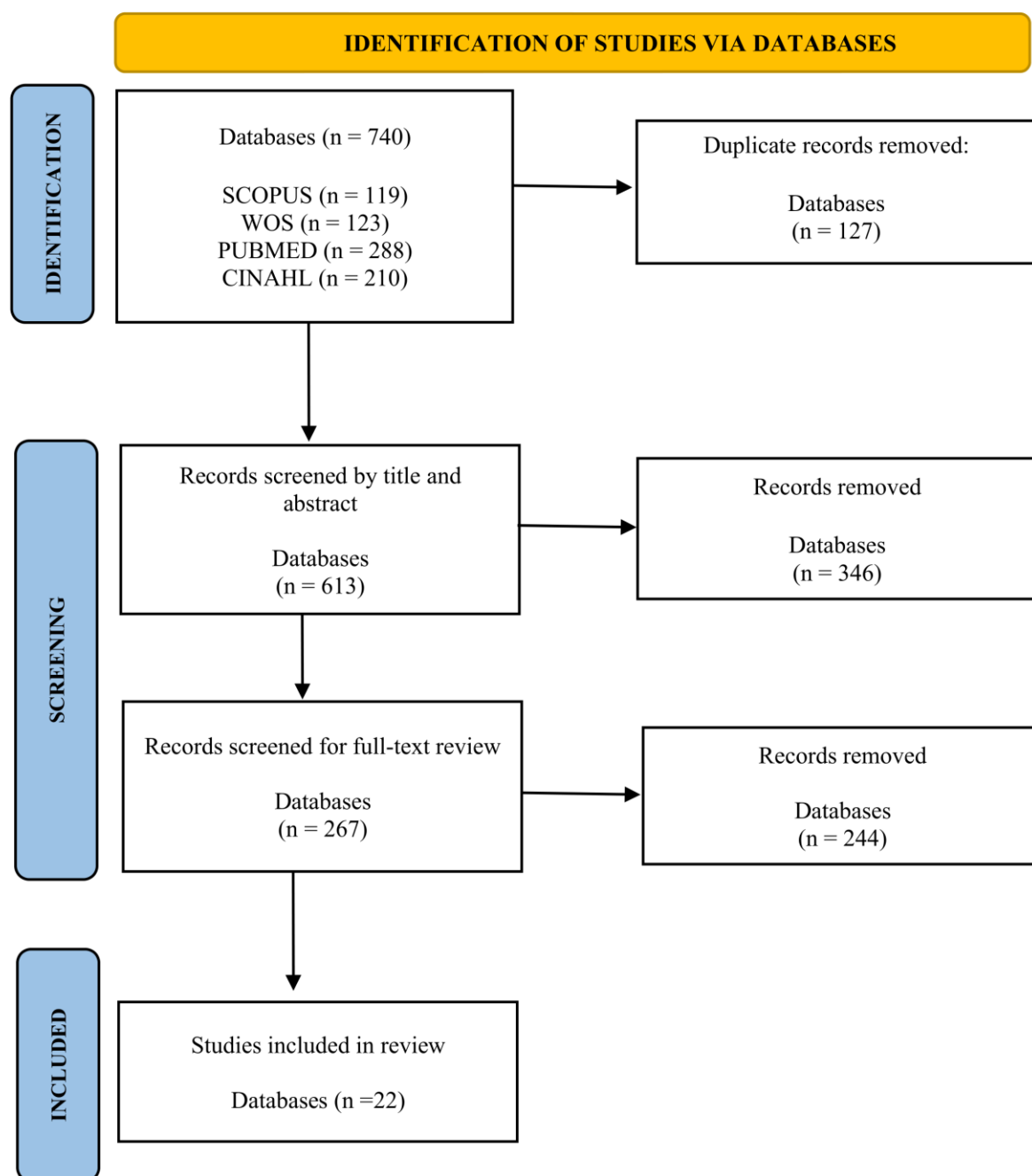
Table 5 presents the search strategy used in the systematic review that supported the development of the indicators included in this guide, while Figure 2 presents the PRISMA flow diagram.

Table 5 – Search strategies used in the databases. Rio de Janeiro, RJ, Brazil, 2026

Databases	Search strategies	N
SCOPUS	TITLE-ABS("Homes for the Aged" OR "Nursing Home*" OR "Long-Term Care" OR "Aged Home*" OR "Elderly Home*" OR "Senior Home*" OR "Old People's Home*" OR "Residential Aged Care Facilit*") AND TITLE("Quality Indicator*" OR "Quality of Health Care" OR "Quality of Healthcare" OR "Quality Care" OR "Healthcare Quality Indicator*" OR "Quality Metric*" OR "Health Metric*" OR "Service Indicator*" OR "Quality Control" OR "Quality Improvement") AND PUBYEAR > 2019 AND PUBYEAR < 2026 AND (LIMIT-TO(DOCTYPE, "ar") OR LIMIT-TO(DOCTYPE, "re")) AND (LIMITTO(LANGUAGE, "English") OR LIMIT-TO(LANGUAGE, "Portuguese")) OR LIMIT-TO(LANGUAGE, "Spanish"))	119
WOS	TS=("Homes for the Aged" OR "Nursing Home*" OR "Long-Term Care" OR "Aged Home*" OR "Elderly Home*" OR "Senior Home*" OR "Old People's Home*" OR "Residential Aged Care Facilit*") AND TI=("Quality Indicator*" OR "Quality of Health Care" OR "Quality of Healthcare" OR "Quality Care" OR "Healthcare Quality Indicator*" OR "Quality Metric*" OR "Health Metric*" OR "Service Indicator*" OR "Quality Control" OR "Quality Improvement")	123
PUBMED	((("Homes for the Aged"[Title/Abstract] OR "Nursing Home*" [Title/Abstract] OR "Long-Term Care"[Title/Abstract] OR "Aged Home*" [Title/Abstract] OR "Elderly Home*" [Title/Abstract] OR "Senior Home*" [Title/Abstract] OR "Old People's Home*" [Title/Abstract] OR "Residential Aged Care Facilit*" [Title/Abstract]) AND ("Quality Indicator*" [Title/Abstract] OR "Quality of Health Care" [Title/Abstract] OR "Quality of Healthcare" [Title/Abstract] OR "Quality Care" [Title/Abstract] OR "Healthcare Quality Indicator*" [Title/Abstract] OR "Quality Metric*" [Title/Abstract] OR "Health Metric*" [Title/Abstract] OR "Service Indicator*" [Title/Abstract] OR "Quality Control" [Title/Abstract] OR "Quality Improvement" [Title/Abstract]))	288
CINAHL	((TI "Homes for the Aged" OR TI "Nursing Home*" OR TI "Long-Term Care" OR TI "Aged Home*" OR TI "Elderly Home*" OR TI "Senior Home*" OR TI "Old People's Home*" OR TI "Residential Aged Care Facilit*") AND (TI "Quality Indicator*" OR TI "Quality of Health Care" OR TI "Quality of Healthcare" OR TI "Quality Care" OR TI "Healthcare Quality Indicator*" OR TI "Quality Metric*" OR TI "Health Metric*" OR TI "Service Indicator*" OR TI "Quality Control" OR TI "Quality Improvement"))	210

Source: Prepared by the authors, 2026.

Figure 2 – PRISMA flowchart of the study selection process. Rio de Janeiro, RJ, Brazil, 2026



Source: Prepared by the authors, 2026.

Table 6 presents the classification of the articles according to the quality of the evidence.

Table 6 – Components and classifications of quality assessment according to the GRADE method. Rio de Janeiro, RJ, Brazil, 2026

Study (Year, Country)	Design	Risk of bias	Quality of evidence
Damery et al., 2021 (England)	Intervention study (QI program)	Moderate	Moderate
Tuuliainen et al., 2020 (Finland)	Observational (association)	Low to Moderate	Moderate
Espejo-Antúnez et al., 2020 (Spain)	Randomized controlled trial (RCT)	Low	High
Baixinho et al., 2022 (Portugal)	Cross-sectional observational	Moderate	Moderate
Basso et al., 2024 (Italy)	Systematic review and meta-analysis	Low	High
Lee et al., 2020 (Australia)	Systematic review and meta-analysis	Low	High
Lovatti-González et al., 2025 (Spain)	Guidelines / Recommendation	Moderate	Low to Moderate
Silva et al., 2021 (Brazil)	Observational study (case-control)	Low to Moderate	Moderate
Almeida da Silva et al., 2024 (Brazil)	Quasi-experimental study	Moderate	Moderate
Hormazábal-Salgado et al., 2024 (Chile)	Scoping review	Low to Moderate	Low to Moderate
Deprez J et al., 2024 (Germany)	Systematic review	Low	High
Sjölund et al., 2021 (Sweden)	Observational study	Low to Moderate	Moderate
Tavares et al., 2023 (Brazil)	Integrative review	Low to Moderate	Low to Moderate
Hastaoglu and Mollaoglu, 2022 (Turkey)	Quasi-experimental trial	Moderate	Moderate
Park et al., 2021 (South Korea)	Non-randomized prospective study	Moderate	Moderate
Justo-Henriques et al., 2023 (Portugal)	Prospective study	Moderate	Moderate
Lartigau et al., 2022 (France)	Observational study / case	Low to Moderate	Low to Moderate
Álvarez et al., 2025 (Spain)	Observational study	Low to Moderate	Moderate
Peral Bolaños et al., 2024 (Spain)	Pharmacological intervention study	Moderate	Moderate
Goutan-Roura et al., 2025 (Spain/Portugal)	Cross-sectional study	Low to Moderate	Moderate
Portman et al., 2025 (USA)	Intervention study	Moderate	Moderate
Ho MH et al., 2020 (Taiwan)	Quasi-experimental trial	Moderate	Moderate

Source: Prepared by the authors, 2026.

Tables 7 and 8 present the analyses of the articles that supported the proposed indicators.

Table 7 – Methodological characteristics, interventions, and results of studies on health indicators in institutionalized older populations. Rio de Janeiro, RJ, Brazil, 2026

Indicator	Study (Year, Country)	Objective	Variable / Scale	Intervention	Result
Professional Training	Damery et al., 2021 (England)	To evaluate the effect of a training and support program for care home teams on care processes and safety across 29 nursing homes	Patient safety measures, care processes, preventable adverse events	Intensive training and extended support for nursing home teams	Results indicate that safety climate scores increased by 1.4 points. Significant reductions were observed in falls ($p=0.0006$), pressure injuries ($p=0.014$), and urinary tract infections ($p=0.001$). Interview participants reported improvements in teamwork, work practices, information sharing, and knowledge and skills.
Oral Health	Tuuliainen et al., 2020 (Finland)	To investigate the associations of frailty status with oral hygiene habits and oral cleanliness, accounting for the effects of a preventive oral health intervention among home care clients aged 75 and older. A total of 231 home care clients completed the ACGA at baseline, along with an interview and a clinical oral examination	Interviews and clinical oral examinations at baseline and after a 6-month follow-up. Frailty status was assessed using the Abbreviated Comprehensive Geriatric Assessment (ACGA) scale	Cross-sectional observational study	Multivariate analysis showed that frailty at baseline was statistically significantly associated with a lower frequency of tooth brushing and denture cleaning ($OR=0.4$, 95% CI = 0.1–0.9 and $OR=0.3$, 95% CI = 0.1–0.8, respectively) at baseline, but not after follow-up. Adherence to the intervention group was associated with improved oral cleanliness at follow-up. However, among frail participants, tooth brushing frequency remained significantly lower and oral hygiene poorer than among the non-frail group.

Indicator	Study (Year, Country)	Objective	Variable / Scale	Intervention	Result
Falls	Espejo-Antúnez et al., 2020 (Spain)	To evaluate the efficacy of a proprioceptive exercise program on functional mobility, musculoskeletal endurance, dynamic and static balance, gait, and fall risk in 148 institutionalized older adults	Timed Up and Go (TUG), Cooper test, Tinetti scale, single-leg stance, and the Morse Fall Scale (MFS)	Single-blind, randomized controlled trial	A proprioceptive exercise program demonstrated significant improvements compared to the control group in areas such as functional mobility, musculoskeletal endurance, balance, gait, and fall risk among institutionalized older adults. Between-group differences were achieved for TUG scores ($d = 0.76$), Tinetti scores ($d = 1.12$), single-leg stance test scores ($d = 0.77$), and MFS scores ($d = 0.85$).
Falls	Baixinho et al., 2022 (Portugal)	To determine the frequency of falls and their recurrence among institutionalized older adults, and to associate the occurrence of falls in institutionalized adults with or without cognitive impairment with communication and safety practices in 204 institutionalized older adults	Mini-Mental State Examination (MMSE) and the Scale of Practices and Behaviors for Institutionalized Older Adults for Fall Prevention (EPICIPQ)	Quantitative, correlational, and longitudinal study	The prevalence of falls was 41.6%, with 38.3% of these events being recurrent. Risk management practices and behaviors for falls varied according to the older adults' cognitive state, except for those with cognitive decline who had experienced a fall by the 12-month follow-up assessment, who presented lower mean values for safety practices.
Avoidable Hospitalizations	Basso et al., 2024 (Italy)	To synthesize evidence evaluating the efficacy of quality improvement interventions in reducing hospital service utilization from nursing homes	Quality improvement interventions using a continuous, data-driven approach to assess solutions aimed at reducing hospital service utilization	Systematic review and meta-analysis of randomized controlled trials	Screening of 14,076 records led to the inclusion of 22 studies describing 29 quality improvement interventions from 6 countries across 964 nursing homes. The study provided preliminary evidence supporting the implementation of quality improvement interventions aimed at reducing hospital admissions.
Avoidable Hospitalizations	Lee et al., 2020 (Australia)	To synthesize available evidence from twenty studies examining non-pharmacological interventions to prevent hospital or nursing home admissions for community-dwelling older adults with dementia	Risk ratio (RR) or rate ratios (RaR) with 95%confidence intervals were used to pool hospital and nursing home admission results	Multidisciplinary non-pharmacological interventions	Community care coordination reduced the rate of nursing home admissions (2 studies, $n = 303$ people with dementia and 86 patient-caregiver dyads, pooled $RaR = 0.66$, 95% CI [0.45, 0.97], $I^2 = 0\%$, $p = .45$). Standalone psychoeducational interventions and multifactorial interventions consisting of assessment and treatment clinics indicated no effect on hospital or nursing home admissions.

Indicator	Study (Year, Country)	Objective	Variable / Scale	Intervention	Result
Respiratory Infections	Lovatti-González et al., 2025 (Spain)	To provide practical, evidence-based recommendations to improve the prevention and treatment of these infections in a particularly vulnerable setting	Epidemiological shifts following the COVID-19 pandemic, current vaccination strategies, and updated therapeutic approaches	Review of clinical guidelines and recommendations	This article reviews, in a question-and-answer format, the latest evidence on the epidemiology, prevention, and treatment of the most relevant respiratory infections in nursing homes: influenza, SARS-CoV-2, respiratory syncytial virus, and <i>Streptococcus pneumoniae</i> .
Urinary Tract Infection (UTI)	Silva et al., 2021 (Brazil)	To analyze factors associated with the occurrence of urinary tract infections in 116 institutionalized older adults	Urine culture, clinical evaluation, and chart review	Cross-sectional observational study	Factors associated with urinary tract infection ($p < 0.05$) were: female sex; wheelchair use; diaper use; diuretic use; dermatitis; urinary and fecal incontinence; type 1 diabetes; benign prostatic hyperplasia; and dehydration. The latter, being a modifiable factor, increased the odds of developing urinary tract infections by 40 times among institutionalized older adults, demanding heightened attention from the health team.
Urinary Tract Infection (UTI)	Almeida da Silva et al., 2024 (Brazil)	To analyze the effectiveness of an educational intervention conducted with 20 individuals (7 nurses and 13 formal caregivers) for the prevention of urinary tract infections in institutionalized older adults	A questionnaire was applied during the pre-intervention phase, followed by professional training, and finally, reapplication of the questionnaire 6 months post-intervention	Quasi-experimental study	The educational intervention was effective in preventing urinary tract infections in older adults. The increase in knowledge acquired by nurses and caregivers was associated with a reduction in infection rates and an improvement in the most prevalent modifiable factors for the development of this type of pathology. The prevalence of urinary tract infection was 33.62% in the pre-intervention period and 20% in the post-intervention period.
Palliative Care	Hormazábal-Salgado et al., 2024 (Chile)	To review the use, barriers, and effectiveness of advance directives in older adults with dementia (broad population)	Use of advance directives, perceived barriers	Scoping review of current practices	Practice recommendations include engaging decision-makers, promoting educational interventions, exploring how directives are used and implemented, and fostering the active involvement of social workers within the healthcare team.

Indicator	Study (Year, Country)	Objective	Variable / Scale	Intervention	Result
Incontinence-Associated Dermatitis	Deprez J et al., 2024 (Germany)	To identify and analyze prognostic factors contributing to the development of incontinence-associated dermatitis in patients with urinary and/or fecal incontinence, with emphasis on vulnerable populations such as institutionalized older adults	Assessment of risk factors for incontinence-associated dermatitis, including moisture exposure, diaper use, reduced mobility, nutritional status, comorbidities, and the incidence/prevalence of dermatitis	Not applicable (systematic review)	The review identified that factors such as prolonged moisture exposure caused by urinary or fecal incontinence, continuous use of disposable diapers, reduced patient mobility, poor nutritional status, and the presence of chronic diseases significantly increase the risk of developing incontinence-associated dermatitis. It highlights the importance of preventive interventions, such as proper skin care, constant monitoring, and training programs for healthcare professionals to reduce dermatitis incidence and improve patient quality of life.
Pain	Sjölund et al., 2021 (Sweden)	To describe and compare the prevalence of pain among nursing home residents using different pain assessment methods in relation to cognitive status, and to examine associations between pain and quality of life or well-being. Participants were residents of 213 nursing homes, and data were collected via interviews using standardized protocols	Katz Index of ADL, Mini-Mental State Examination, Quality of Life in Late-Stage Dementia Scale, WHO-5 Well-Being Index, Numerical Rating Scale, and Dolopius-2 Scale	Cross-sectional study	The study shows that estimating pain in nursing home residents is difficult and remains a challenging issue to resolve. Self-reported pain should primarily be used to assess pain, and a multi-component observational pain scale should be applied when residents are cognitively impaired. Both self-reported pain and multi-component observation also support the well-known link between pain and quality of life. Single-item proxy assessments should only be used in exceptional cases.
Friction Injury	Tavares et al., 2023 (Brazil)	To review nursing practices for the prevention of skin lesions in older adults	Care practices and skin prevention	Integrative literature review	Highlights the importance of training and specific protocols for preventing cutaneous lesions, promoting more effective care for older adults.

Indicator	Study (Year, Country)	Objective	Variable / Scale	Intervention	Result
Functionality	Hastaoglu and Mollaoglu, 2022 (Turkey)	To examine the effect of education on independence levels and life satisfaction in activities of daily living (ADL) among older adults	Katz Index of Activities of Daily Living, Life Satisfaction Scale	Prospective trial with 80 older adults	A linear relationship exists between independence in maintaining ADLs and life satisfaction in older adults; as the level of independence increases, life satisfaction increases accordingly. In the study, there was a significant relationship between ADLs and life satisfaction before and after education, and high-level education positively affected activity levels and life satisfaction.
Functionality	Park et al., 2021 (South Korea)	To evaluate the long-term association between a multi-component intervention program and disability in socioeconomically vulnerable older adults	The number of dependencies in 17 basic and instrumental activities of daily living was measured every 3 months for 30 months. Poisson regression was used to model the number of dependencies, adjusting for confounding bias and higher dropout rates among those with greater disability	Non-randomized prospective intervention trial	A 24-week multi-component intervention was associated with a slower progression of disability; however, the diminishing association from 24 months onward suggests that re-evaluation and further intervention may be necessary. Due to the lack of randomization, our findings should be interpreted with caution.
Cognition	Justo-Henriques et al., 2023 (Portugal)	To determine the efficacy of 47-week individual cognitive stimulation (ICS) interventions on cognition, mood, instrumental activities of daily living, and quality of life in older adults with neurocognitive disorders across 59 older adults	Mini-Mental State Examination, Montreal Cognitive Assessment, neuropsychological tests	Unilateral, randomized, parallel two-arm RCT	The results showed a significant intervention effect on the MMSE, MoCA, and GDS-15. Individual cognitive stimulation may have beneficial effects on cognitive function and mood in older adults with cognitive impairment.
Vaccination	Lartigau et al., 2022 (France)	To evaluate the incidence of SARS-CoV-2 infection following vaccination in 152 older nursing home residents	Incidence of post-vaccination infection (SARS-CoV-2 PCR test)	Cross-sectional study	Lower incidence of post-vaccination infection. These results support the administration of additional vaccine doses in this population.
Vaccination	Álvarez et al., 2025 (Spain)	To describe pneumococcal vaccination coverage and administration periods in institutionalized patients, and to analyze the potential association of different variables with vaccination status	A logistic regression model was used to evaluate the association of age, sex, and the Barthel Index with vaccination status	Retrospective observational study	Pneumococcal vaccination coverage was 81.10%. Adequate vaccination was associated with older age and a higher level of dependency. Strategies should be implemented to increase vaccination rates among institutionalized patients and adults in the general population.

Indicator	Study (Year, Country)	Objective	Variable / Scale	Intervention	Result
Medication Deprescribing	Peral Bolaños et al., 2024 (Spain)	To describe Drug-Related Problems (DRP) and their resolution following a pharmacological review in 295 institutionalized older patients under polypharmacy	Medication reviews performed by the pharmacist and agreed upon during face-to-face meetings between the primary care physician, the nursing home physician, and the pharmacist	Descriptive and retrospective cohort study	Intervention by the multidisciplinary team, wherein the pharmacist conducts a medication review, successfully decreased the number of prescribed medications. Consequently, this reduces polypharmacy and its associated risks.
Medication Deprescribing	Goutan-Roura et al., 2025 (Spain/Portugal)	To identify potentially inappropriate medications, polypharmacy, and increased anticholinergic burden among older adults' prescriptions, as well as their associated factors	Medication prescriptions, 2023 Beers criteria, and the Anticholinergic Risk Scale	Multicenter cross-sectional observational study	The prevalence of potentially inappropriate medications, polypharmacy, and increased anticholinergic burden was very high (84%, 69%, and 63%, respectively) in this nursing home resident sample. Increased anticholinergic burden and polypharmacy were significantly associated with potentially inappropriate medications (PIMs). Anticholinergic drugs should be carefully evaluated and gradually withdrawn when unnecessary. Balancing treatment with other biopsychosocial interventions can help reduce polypharmacy.
Constipation	Portman et al., 2025 (United States)	To evaluate the effect of academic detailing for nurses on constipation management in 60 community-dwelling older adults	Bowel movement frequency, stool consistency scale, laxative use	Educational program for nurses	Significant increase in bowel movement frequency (from 2.3 to 4.1 bowel movements per week), improvement in stool consistency, and a 38% reduction in laxative use among the 60 older adults.
Constipation	Ho MH et al., 2020 (Taiwan)	To investigate the efficacy of acupressure point stimulation on bowel function in 60 older adults residing in long-term care institutions	Weekly bowel movement frequency, stool consistency scale, constipation severity scale	Digital pressure on specific acupressure points daily for 4 weeks	Mean increase of 2 bowel movements per week, significant improvement in stool consistency, and reduction in constipation severity scores in 60 older adults, demonstrating the technique's efficacy.

Source: Prepared by the authors, 2026.

Table 8 – Quality indicators in healthcare for older adults: references and countries of origin. Rio de Janeiro, RJ, Brazil, 2026

Indicator	Conceptual Measure	Operational Measure	Interventions	References
Avoidable Hospitalizations	Admissions that could be prevented through timely and effective actions in the long-term care facility (LTCF), such as early identification of health issues and prevention of clinical complications.	Rate of avoidable hospitalizations per 100 residents/month.	Quality improvement focusing on the reduction of adverse events and hospitalizations; clinical protocols.	Basso et al., 2024; Lee et al., 2020
Respiratory Tract Infections	Older adults with respiratory tract infections. This indicator allows for the evaluation of outbreak control and the effectiveness of immunization actions.	Number of cases per 100 residents/month.	Control of multidrug-resistant infections; systematic vaccination; hand hygiene; correct use of PPE; isolation and monitoring.	Lovatti-González et al., 2025
Urinary Tract Infection (UTI)	Older adults with urinary tract infections. A prevalent infection in older adults using invasive devices such as urinary catheters.	Number of cases per 100 residents/month.	Judicious use of urinary catheters; proper hygiene; staff training; adherence to protocols; antibiotic deprescribing.	Silva et al., 2021; Almeida da Silva et al., 2024
Oral Health	State of well-being of the mouth and associated structures to promote functional autonomy, general well-being, and prevention of local and systemic conditions.	Proportion of residents with dental evaluations.	Oral hygiene education; regular evaluation; support from the oral health team; use of adapted techniques and appropriate prostheses.	Tuulainen et al., 2020
Constipation	Clinical condition characterized by a decrease or absence of eliminations, reflecting the quality of nutritional care and medication management.	Frequency of constipation based on standardized clinical criteria.	Dietary adjustment (fiber); adequate hydration; mobilization; review and adjustment of constipating medications; pharmacological intervention when necessary.	Portman et al., 2025; Ho MH et al., 2020
Falls	Adverse events with a high risk of fractures, hospitalizations, and functional decline. A critical indicator of safety and the effectiveness of preventive interventions.	Rate of falls per 100 residents/month.	Environmental assessment; strengthening and balance exercises; medication review; assistive devices; staff training.	Espejo-Antúnez et al., 2020; Baixinho et al., 2022
Medication Deprescribing	Clinical strategy aimed at the safe discontinuation of unnecessary drugs and the prevention of overmedication.	Proportion of residents with a deprescribed medication.	Periodic medication review; multidisciplinary involvement; protocols for deprescribing; education and feedback to staff and patients.	Peral Bolaños et al., 2024; Goutan-Roura et al., 2025
Pain	A frequently underreported symptom, essential for promoting comfort and well-being.	Percentage of residents with controlled pain, measured using validated scales.	Continuous pain assessment; pharmacological management combined with physical therapies; staff training in pain management.	Sjölund et al., 2021
Functionality	Reflects the ability to perform Activities of Daily Living and maintain independence.	Functional cognitive assessment using scales (Barthel, Katz, Lawton).	Rehabilitation programs; functional exercises; cognitive stimulation; occupational support; multidisciplinary interventions.	Hastaoglu and Mollaoglu, 2022; Park et al., 2021*
Cognition	Evaluates mental processing (memory, orientation) and dementia management.	Cognitive assessment using scales (MMSE or equivalent tests) and early detection of neurocognitive deficits.	Cognitive training and stimulation; proper medication management; psychosocial support; family involvement.	Justo-Henriques et al., 2023; Park et al., 2021*
Palliative Care	Involves symptom relief, emotional support, and advance care planning.	Assessment of the implementation of palliative care.	Advance care planning; communication training; multidisciplinary support; symptom management and comfort.	Hormazábal-Salgado et al., 2024

Indicator	Conceptual Measure	Operational Measure	Interventions	References
Professional Training	A frequently underreported symptom in institutionalized older adults, with its proper management being essential for promoting comfort and well-being.	Assessment of knowledge and changes in clinical indicators.	Continuing education programs; simulations; structured feedback; use of communication tools (e.g., SBAR); performance monitoring.	Damery et al., 2021
Friction Injury	Skin lesions resulting from friction, affecting skin integrity.	Prevalence of friction injury episodes and lesion severity.	Use of barrier creams or sprays; frequent repositioning; skin hydration; regular skin assessment; staff training.	Tavares et al., 2023
Incontinence-Associated Dermatitis (IAD)	Reflects prolonged exposure to moisture, carrying a risk of skin damage and infection.	Prevalence of incontinence episodes and associated lesions.	Changing clothes, diapers, and pads whenever necessary; hygiene care; use of protective barriers; constant monitoring; education of staff and family members.	Deprez J et al., 2024
Vaccination	Indicator of prevention and care safety for older adults.	Percentage of vaccination coverage among residents and staff, according to updated records.	Systematic campaigns; coverage monitoring; electronic registry; education of residents and family members; periodic audits.	Lartigau et al., 2022; Álvarez et al., 2025

*Due to their applicability, some articles were used in more than one indicator.

Source: Prepared by the authors, 2026.

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