



AAVBC

AMERICAN ACADEMY OF VALUE BASED CARE

Schizophrenia

Quick Reference Guide

2026

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1 CLINICAL SNAPSHOT

Definition: Schizophrenia is a chronic, severe brain disorder characterized by abnormal interpretation of reality through hallucinations, delusions, and disorganized thinking. DSM-5-TR diagnosis requires **≥2 of five symptom criteria** (delusions, hallucinations, disorganized speech, disorganized/catatonic behavior, negative symptoms) for **≥1 month** plus **continuous signs for ≥6 months and functional impairment in ≥1 major life area**. Three distinct symptom domains operate simultaneously: **positive** (psychotic), **negative** (diminished expression, avolition, anhedonia), and **cognitive** (executive dysfunction, working memory deficits) — each requires different interventions and carries different prognoses.^{1,2}

ICD-10 Codes:

F20.0 (paranoid), **F20.1** (disorganized/hebephrenic), **F20.2** (catatonic), **F20.3** (undifferentiated), **F20.5** (residual), **F20.81** (schizophreniform), **F20.89** (other), and **F20.9** (unspecified) — **all map to the same HCC 151 (Schizophrenia)**. Schizoaffective disorder (**F25.0 bipolar type, F25.1 depressive type**) also maps to HCC 151 but requires both psychotic AND mood disorder criteria met concurrently throughout the illness. **F20.9** overuse is the most common coding error. Document SDOH co-codes when present: **Z59.0** (homelessness), **Z59.41** (food insecurity), **Z60.2** (social isolation).

Prevalence and Burden: Schizophrenia spectrum disorders affect approximately **3.1 million adults** in the United States (**age-adjusted prevalence 1.17%**), with the most recent nationally representative study — the Mental and Substance Use Disorders Prevalence Study (MDPS, 2020–2022) — reporting a **past-year prevalence of 1.2%** (95% CI 0.9–1.8%) and **lifetime prevalence of 1.8%** (95% CI 1.3–2.5%), two to four times higher than previously estimated.^{3,4} Globally, **24 million people (~1 in 300) are living with schizophrenia**, with typical onset in late adolescence or early adulthood and prevalence peaking at age 40. Mortality and **cardiovascular burden define the clinical urgency**. People with schizophrenia die on average **15–25 years earlier** than the general population, with **all-cause mortality risk 2.52-fold higher** (95% CI 2.38–2.68) versus the general population.^{5,6} Cardiovascular disease is the leading cause of death: a meta-analysis of >3 million individuals with schizophrenia and 100 million controls found **64% higher coronary artery disease incidence, 110% higher congestive heart failure, and 85% higher cardiovascular-related death** relative to the general population. Schizophrenia is associated with a **2- to 4-fold higher rate of diabetes, dyslipidemia, metabolic syndrome, and hypertension**, with **smoking prevalence reaching up to 80%**.^{6,7}

HCC/RAF V28 Mapping

ICD-10 CODE(S)	HCC CATEGORY (V28)	RAF (CNA)	DOCUMENTATION REQUIREMENT
F20.0–F20.5, F20.81, F20.89, F20.9 (schizophrenia)	HCC 151 — Schizophrenia	0.511	Active diagnosis confirmed yearly at visit; symptom pattern documented (positive, negative, cognitive); Document a qualified provider's diagnosis of paranoid schizophrenia, specific symptoms (delusions, auditory hallucinations), current status (active vs. remission), and active antipsychotic regimen

ICD-10 CODE(S)	HCC CATEGORY (V28)	RAF (CNA)	DOCUMENTATION REQUIREMENT
F25.0 (Schizoaffective disorder, bipolar), F25.1 (schizoaffective disorder, depressive)	HCC 151 — Schizophrenia	0.511	Both psychotic AND mood disorder criteria met concurrently throughout the illness — NOT schizophrenia with mood fluctuations; documentation must show concurrent symptom presence explicitly
F32.1, F32.2, F33.1, F33.2 (MDD moderate/severe without psychosis)	HCC 155 — Major Depression/Moderate or Severe/without Psychosis	0.299	Severity documented; PHQ-9 score recorded; not 'mood issues' or F32.9 (unspecified) — those do not reflect HCC 155

ABBREVIATIONS: BPSD = behavioral and psychological symptoms of dementia; CAD = coronary artery disease; CHF = congestive heart failure; CMS = Centers for Medicare & Medicaid Services; CNA = Community Non-Dual Eligible, Aged; CVD = cardiovascular disease; DSM-5-TR = Diagnostic and Statistical Manual, 5th edition Text Revision; HCC = Hierarchical Condition Category; HF = heart failure; HFpEF = heart failure with preserved ejection fraction; HFrEF = heart failure with reduced ejection fraction; MA = Medicare Advantage; MDD = major depressive disorder; MDQ = Mood Disorder Questionnaire; MoCA = Montreal Cognitive Assessment; PHQ-9 = Patient Health Questionnaire-9; RAF = Risk Adjustment Factor; SDOH = social determinants of health; SMI = serious mental illness; TRS = treatment-resistant schizophrenia; V28 = CMS-HCC Model Version 28. * Annual value illustrative at ~\$10,402/year base × 1.067 normalization. RAF differential in schizophrenia care is realized through HCC 151 PLUS active coding of comorbidities (HCC 125/155/37/226) — not subcode specificity within F20.x

RAF values represent the Community Non-Dual Eligible Aged (CNA) coefficient from the 2026 CMS-HCC model; values vary across patient populations based on eligibility and care setting

Risk-Adjusted Care Resources per Patient/Year

Risk-adjusted care resource allocation — MA base rate (\$10,402.34) × RAF coefficient

Schizophrenia
\$5.3K

HCC 151 · RAF 0.511

**Major Depression/Moderate or Severe/
without Psychosis**
\$3K

HCC 155 · RAF 0.299

Annual risk value illustrative at base rate ~\$10,402/year; actual plan payment varies by county and contract year, RAF values represent the Community Non-Dual Eligible Aged (CNA) coefficient from the 2026 CMS-HCC model; values vary across patient populations based on eligibility and care setting

2 RECOGNITION AND DIAGNOSIS

Screenings and Surveillance Covered Under Medicare Part B (Adult and Geriatric)

TEST/SERVICE	FREQUENCY	CPT/ HCPCS	CLINICAL INDICATION
Fasting glucose/ HbA1c	Baseline, 12 weeks post-antipsychotic initiation, then annually	82947/ 83036	Diabetes screening for all antipsychotic-treated patients per ADA 2026 — satisfies HEDIS SSD/ SMD simultaneously ⁸
Lipid panel	Baseline, 12 weeks, then annually (or per CVD risk)	80061	CVD risk monitoring; proactive statin initiation per dyslipidemia guideline — not deferred to psychiatry
CBC with differential	Per Clozapine REMS schedule (weekly × 6 mo → biweekly → monthly)	85025	Clozapine ANC monitoring — required before each dispensing for life of treatment
ECG	Baseline for QTc- prolonging agents; as clinically indicated	93000	Ziprasidone, thioridazine, high-dose antipsychotics, polypharmacy with CYP3A4 inhibitors
Annual Wellness Visit (initial/ subsequent)	Annually	G0438/ G0439	Structured opportunity to document F20.x (HCC 151), comorbidities, metabolic screen, MoCA, SDOH Z-codes, advance care planning
Cognitive assessment/care planning (Medicare cognitive impairment assessment)	At least annually if cognitive concern	99483	Comprehensive assessment with care plan; MoCA cut-off ≤25 recommended for schizophrenia populations
Collaborative Care Management — initial month	≥70 minutes in first calendar month	99492	Psychiatric CoCM; MBC with validated scales required; reimbursed by Medicare
Collaborative Care Management — subsequent months	≥60 minutes per subsequent month	99493 (+99494 add-on)	Behavioral health care manager + psychiatric consultant model; strongest evidence base for integrated care

TEST/SERVICE	FREQUENCY	CPT/ HCPCS	CLINICAL INDICATION
LAI administration — aripiprazole (Abilify Maintena)	Monthly or every 2 months	J0401 + 96372	Drug + IM injection administration; warm-handoff initiation pre-discharge
LAI administration — paliperidone palmitate	Monthly (PP1M), Q3M (PP3M), or Q6M (PP6M)	J2426 + 96372	PP3M/PP6M more cost-effective than PP1M due to lower admin burden and improved adherence

ABBREVIATIONS: ADA = American Diabetes Association; ANC = absolute neutrophil count; AWV = Annual Wellness Visit; CBC = complete blood count; CoCM = Collaborative Care Model; CPT = Current Procedural Terminology; CVD = cardiovascular disease; CYP3A4 = cytochrome P450 3A4; ECG = electrocardiogram; HCPCS = Healthcare Common Procedure Coding System; HEDIS = Healthcare Effectiveness Data and Information Set; IM = intramuscular; LAI = long-acting injectable antipsychotic; MBC = measurement-based care; MoCA = Montreal Cognitive Assessment; PP = paliperidone palmitate; QTc = corrected QT interval; REMS = Risk Evaluation and Mitigation Strategy; SDOH = social determinants of health; SMD = Diabetes Monitoring for People with Diabetes and Schizophrenia (HEDIS); SSD = Diabetes Screening for People with Schizophrenia or Bipolar Disorder (HEDIS)

Subtle Early Signs in Older Adults (>65)

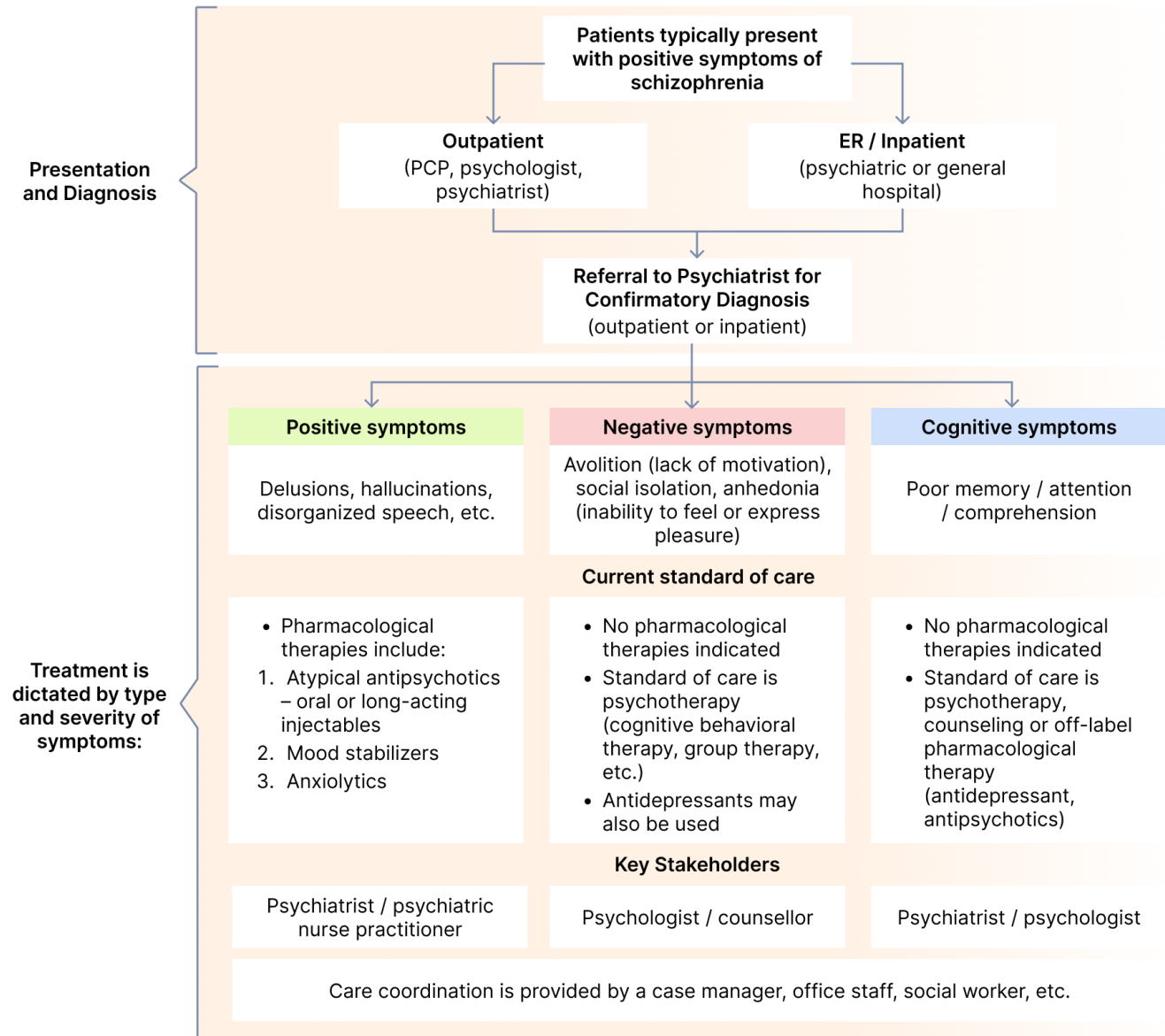
SIGN/SYMPTOM	WHY IT MATTERS — SCREEN OR EVALUATE
Social withdrawal, attenuated perceptual disturbances, decline in functioning	Prodromal phase precedes frank psychosis by months to years; PCPs play a vital role in early identification and referral. PQ-B distress score ≥ 27 in integrated primary-care behavioral health: sensitivity 71.2%, specificity 57% ⁹
New-onset psychosis after age 60 (VLOSLP)	Very-late-onset schizophrenia-like psychosis disproportionately affects women; a sizable proportion go on to develop dementia — initial 'schizophrenia' diagnosis may be prodromal dementia, Lewy body disease, or argyrophilic grain disease. Cognitive screen and broad medical workup required before attributing to primary psychotic disorder
Flat affect, avolition, anhedonia, alogia	Negative symptoms — frequently misattributed to apathy, depression, or 'laziness'. Rarely respond adequately to antipsychotics alone ; require psychosocial rehabilitation and structured supports
Cognitive complaints: memory, processing speed, executive function	Cognitive impairment is a core feature predating psychosis onset; it reaches 77.7% prevalence in elderly schizophrenia patients in one study. MoCA cut-off ≤ 25 (rather than standard < 26) recommended; pair with DSST for accuracy 86.7% ¹⁰
Anosognosia — impaired awareness of illness	Affects ~60% of persons with schizophrenia; neurobiologically mediated (left-hemisphere frontotemporoparietal), NOT volitional . Patient self-report of symptoms or cognitive problems is unreliable; require structured screening and informant input ¹¹
New diagnosis of metabolic syndrome, T2DM, or HFpEF in antipsychotic-treated patient	Second-generation antipsychotics (particularly olanzapine and clozapine) significantly increase metabolic risk. Schizophrenia carries 2- to 4-fold higher rates of diabetes, dyslipidemia, metabolic syndrome, and hypertension ⁶

SIGN/SYMPTOM	WHY IT MATTERS — SCREEN OR EVALUATE
Frequent ED visits or readmissions in patient labeled 'medication non-responder'	Often 'pseudo-resistance' — medications appear ineffective only because they are not being taken (anosognosia or unrecognized side effects). Trigger for LAI initiation rather than escalation of oral therapy ¹²
Catatonic features: stupor, waxy flexibility, mutism, negativism, posturing	Bush-Francis Catatonia Rating Scale: first 14 items as screening (score ≥ 2 suggests catatonia). Initiate lorazepam 1–2 mg IV/IM challenge ; hold dopamine antagonists; urgent psychiatry referral ¹³

ABBREVIATIONS: BPSD = behavioral and psychological symptoms of dementia; DSST = Digit Symbol Substitution Test; ED = emergency department; HFpEF = heart failure with preserved ejection fraction; LAI = long-acting injectable antipsychotic; MoCA = Montreal Cognitive Assessment; PCP = primary care physician (or in respiratory context, *Pneumocystis jirovecii* pneumonia — not used here); PQ-B = Prodromal Questionnaire – Brief; T2DM = type 2 diabetes mellitus; VLOSLP = very-late-onset schizophrenia-like psychosis

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Standard of Care Pathway



Risk Factors

FACTOR	RISK SIGNAL	CLINICAL NOTES
Age ≥ 65 with schizophrenia	42.5% of VA schizophrenia patients are ≥ 65 ¹³	Heterogeneous mix of early-onset survivors, late-onset, and VLOSLP — requires geriatric-tailored care plan; structured cognitive screening (MoCA) at AWV rather than symptom-triggered

FACTOR	RISK SIGNAL	CLINICAL NOTES
Polypharmacy ≥5 medications	89.3% of elderly schizophrenia patients exposed to ≥5 drugs ; RR 2.1 (99% CI 2.1–2.2) for polypharmacy-10+ with ≥3 comorbidities ¹³	Trigger for full Beers/DDI review; deprescribe NSAIDs, benzodiazepines, anticholinergics; align with HEDIS MRP; non-antipsychotic drugs drove the rise in polypharmacy
Tardive dyskinesia risk in older patients	25–30% annualized incidence in elderly after 1 year cumulative antipsychotic exposure ¹⁴	AIMS screening every 3 months in older patients on high-EPS-risk agents (vs. every 6–12 months in younger adults) ; VMAT2 inhibitors (valbenazine, deutetrabenazine) FDA-approved for TD
Smoking prevalence up to 80% in schizophrenia	Prevalence 64–79% (vs. ~21% general population); 5.3× higher than average population ¹⁵	Aggressive smoking-cessation support; varenicline or bupropion (caution: seizure threshold at clozapine >600 mg); annual influenza and PCV20/21 vaccination; 60% of excess mortality in SMI is smoking-related
Cardiovascular comorbidity (HTN, CAD, DM)	2–4× higher rate of diabetes, dyslipidemia, metabolic syndrome, and hypertension vs. general population ¹	10-year cardiac event risk consistently higher ; cardiovascular risk factors accumulate more rapidly; metabolic monitoring per ADA/APA consensus at baseline, 12 weeks, then annually
Living alone with anosognosia	RR 1.30 (95% CI 1.15–1.46) for incident dementia when living alone (meta-analysis, 12 studies)	Structured cognitive screening at AWW rather than symptom-triggered; engage family, peer supports, or community health worker as informant where possible
Depression and anxiety	78.1% of older adults with schizophrenia have subsyndromal or syndromal depressive symptoms (47.5% syndromal, 30.6% subsyndromal); prevalence of depressive symptoms 48.5% in elderly chronic schizophrenia (vs. 17.3% controls, p 0.001); anxiety prevalence ~30% ; co-occurrence ~26% ^{16,17}	Depression often misattributed to negative symptoms and left untreated; PHQ-9/GAD-7 at every visit ; depression associated with worse cognitive function and ADL impairment
Comorbid substance use disorder (any SUD)	~50% lifetime prevalence of comorbid SUD in schizophrenia; tobacco, cannabis, and alcohol most common ¹⁵	Integrated treatment (mental health + SUD) more effective than sequential; AUDIT-C at every visit; SUD often underdiagnosed due to diagnostic overshadowing; comorbid SUD associated with Increase in hospitalization and mortality

FACTOR	RISK SIGNAL	CLINICAL NOTES
PTSD and trauma history	PTSD prevalence in schizophrenia ~29% (weighted average); range 0–57% across studies; ~40% meet criteria for complex PTSD (cPTSD); trauma exposure >70–80% lifetime; PTSD associated with more severe positive symptoms , worse functioning, and increased depression ^{18,19}	PTSD rarely assessed in schizophrenia due to diagnostic overshadowing ; overlapping symptoms complicate diagnosis; trauma-focused CBT adapted for SMI shows promise; systematic trauma screening recommended
Social isolation and loneliness	Loneliness prevalence 75.9% in schizophrenia ²⁰	Social exclusion is an under-recognized contributor to premature mortality ; economic inactivity and lack of qualifications account for 16–35% of SMI mortality; engage peer supports, community health workers; screen SDOH at every visit
Cognitive impairment and dementia	Dementia prevalence at age 66: 27.9% in schizophrenia vs. 1.3% without SMI; 72% of schizophrenia patients have moderate-severe cognitive impairment at autopsy ^{21,22}	Cognitive decline may reflect decreased cognitive reserve + aging rather than Alzheimer neuropathology (only 9% met AD criteria at autopsy); MoCA screening at AWV; MMSE may overestimate dementia prevalence due to baseline cognitive deficits
Family history/ Genetics	Lifetime risk in the general population is about 1%, having a first-degree relative (parent or sibling) with the disorder increases your chances to roughly 10% ¹³	Conduct comprehensive family history assessment

ABBREVIATIONS: ACB = Anticholinergic Cognitive Burden; ADA = American Diabetes Association; ADL = activities of daily living; AIMS = Abnormal Involuntary Movement Scale; APA = American Psychiatric Association; AUDIT-C = Alcohol Use Disorders Identification Test-Concise; AWV = Annual Wellness Visit; CAD = coronary artery disease; CBT = cognitive behavioral therapy; CI = confidence interval; cPTSD = complex post-traumatic stress disorder; DDI = drug-drug interaction; DM = diabetes mellitus; EPS = extrapyramidal symptoms; FDA = U.S. Food and Drug Administration; GAD-7 = Generalized Anxiety Disorder-7; HEDIS = Healthcare Effectiveness Data and Information Set; HTN = hypertension; MoCA = Montreal Cognitive Assessment; MRP = Medication Reconciliation Post-Discharge; NSAIDs = nonsteroidal anti-inflammatory drugs; OR = odds ratio; PCV = pneumococcal conjugate vaccine; PHQ-9 = Patient Health Questionnaire-9; PTSD = post-traumatic stress disorder; RR = relative risk; SDOH = social determinants of health; SGA = second-generation antipsychotic; SMI = serious mental illness; SUD = substance use disorder; TD = tardive dyskinesia; VA = U.S. Department of Veterans Affairs; VLOSLP = very-late-onset schizophrenia-like psychosis; VMAT2 = vesicular monoamine transporter 2

Diagnostic Thresholds

The diagnostic workup for schizophrenia is primarily clinical — there are no biomarkers or neuroimaging tests that confirm the diagnosis.^{1,23}

Workup centers on three pillars:

- **Establishing that DSM-5 criteria are met**

- **Exclusion of medical and substance-induced causes of psychosis**
- **Obtaining a pre-treatment metabolic and safety baseline before initiating antipsychotic therapy (see screening section above)** **DSM-5 Diagnostic Criteria:** The diagnosis requires at least two of five symptom domains present for a clinically significant portion of a 1-month period, with at least one being a core positive symptom (delusions, hallucinations, or disorganized speech). The remaining two domains are grossly disorganized/catatonic behavior and negative symptoms. **Functional decline must be present, and continuous signs must persist for ≥6 months** (including prodromal/residual phases). Schizoaffective disorder, mood disorders with psychotic features, substance-induced psychosis, and psychosis due to a medical condition must be excluded²⁴

PARAMETER	THRESHOLD	CLINICAL INTERPRETATION
DSM-5 Criterion A (active-phase symptoms)²⁴	≥2 of 5 for ≥1 month, ≥1 of which is delusions, hallucinations, or disorganized speech	Required for schizophrenia diagnosis; cannot be substance- or medical-condition-induced (Criterion E)
DSM-5 Criterion C (duration)²⁴	Continuous signs ≥6 months	Distinguishes schizophrenia from schizophreniform disorder (F20.81, 1–6 months) — F20.81 still maps to HCC 151
MoCA (cognitive screen in schizophrenia)²⁵	Cut-off ≤25	Recommended over standard <26 for schizophrenia populations; AUC 0.82 mild and 0.81 severe cognitive impairment; classification accuracy 86.7% when paired with DSST
PQ-B (prodromal screening)⁹	Distress score ≥27	Validated in integrated primary-care behavioral health; sensitivity 71.2%, specificity 57.0% for psychosis spectrum disorders
Bush-Francis Catatonia Rating Scale (screening)²⁶	First 14 items, score ≥2 suggests catatonia	Initiate lorazepam 1–2 mg IV/IM challenge; hold dopamine antagonists; urgent psychiatry referral
Treatment-resistant schizophrenia (TRS) definition¹³	Failure of ≥2 adequate antipsychotic trials, ≥6 weeks each at adequate dose	Clozapine indicated — the only antipsychotic with TRS evidence; recommended by 15/15 CPGs reviewed
Antipsychotic adherence (HEDIS SAA)²⁷	PDC ≥80% for ≥80% of measurement year	National Medicaid benchmark ~60%; only 62.3% of schizophrenia patients achieved high adherence in one large study; consider long acting injectable (LAI)
Viral suppression analog — not applicable to schizophrenia (no analogue)²⁸	Symptom remission per CGI-S ≤2 (borderline mentally ill)	No virologic equivalent; symptom remission per validated scale (CGI-S, PANSS) is the closest clinical analog; document at each MBC encounter

PARAMETER	THRESHOLD	CLINICAL INTERPRETATION
AIMS (tardive dyskinesia screen)¹	Any new abnormal involuntary movement	Every 6–12 months on antipsychotics ; every 3 months in older patients on high-EPS-risk agents
Clozapine ANC (REMS monitoring)²⁹	≥1500/μL (≥1000/μL with benign ethnic neutropenia)	Weekly × 6 months → biweekly months 6–12 → monthly thereafter ; required before each dispensing

ABBREVIATIONS: AIMS = Abnormal Involuntary Movement Scale; ANC = absolute neutrophil count; AUC = area under the curve; CGI-S = Clinical Global Impression – Severity; DSM-5 = Diagnostic and Statistical Manual, 5th edition; DSST = Digit Symbol Substitution Test; EPS = extrapyramidal symptoms; HEDIS = Healthcare Effectiveness Data and Information Set; MBC = measurement-based care; MoCA = Montreal Cognitive Assessment; PANSS = Positive and Negative Syndrome Scale; PDC = proportion of days covered; PQ-B = Prodromal Questionnaire – Brief; REMS = Risk Evaluation and Mitigation Strategy; SAA = Adherence to Antipsychotic Medications for Schizophrenia (HEDIS); TRS = treatment-resistant schizophrenia

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

DSM-5: Diagnostic Workup

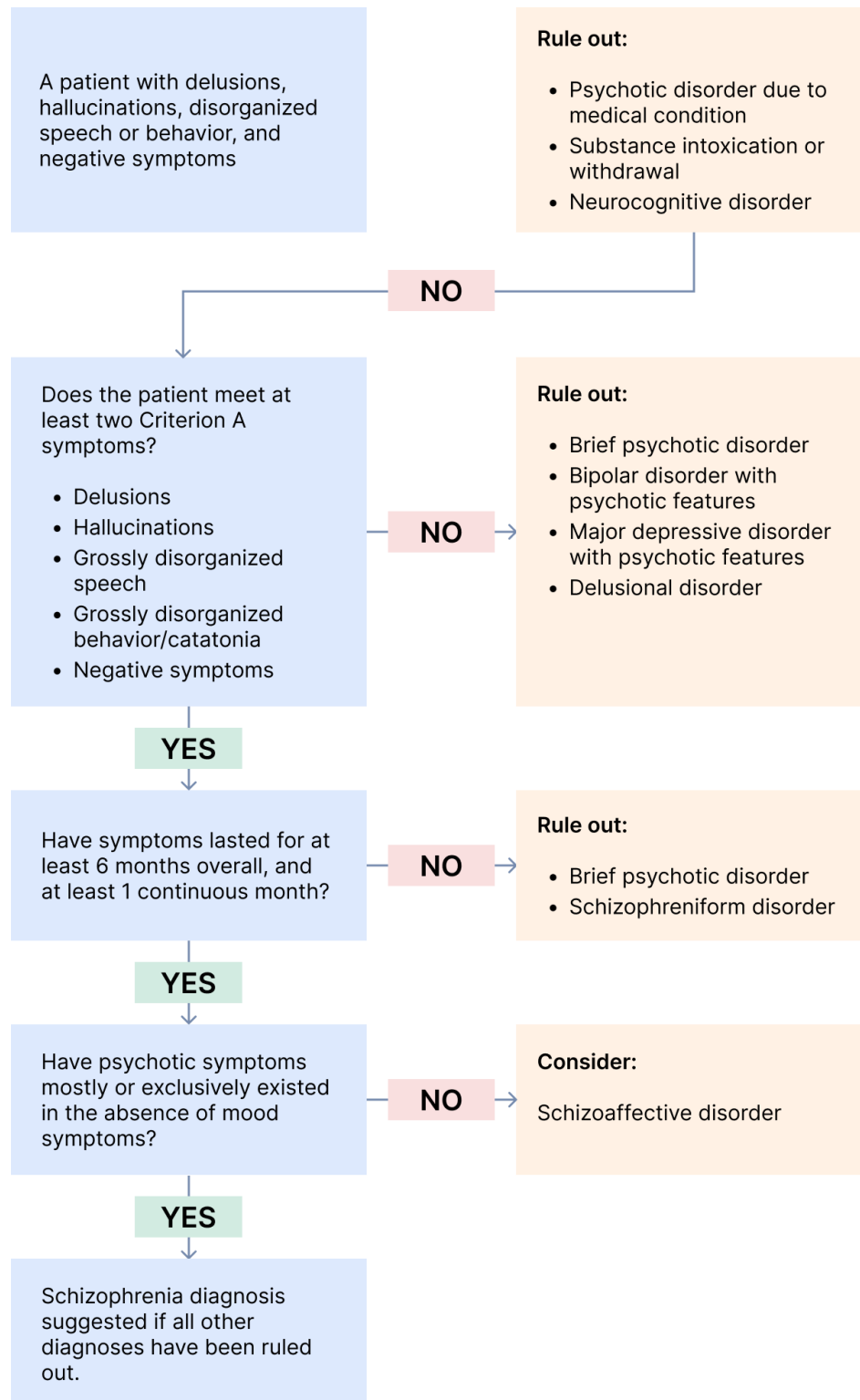


Figure 2. For criterion A: At least one symptom must be delusions, hallucinations, or disorganized speech.

Clues to Dig Deeper

CLINICAL CLUE	WHY IT MATTERS	NEXT DIAGNOSTIC STEP
Patient on antipsychotic with no metabolic screen in past 12 months	Only ~55% of antipsychotic-treated SMI patients receive diabetes screening ³⁰	Order fasting glucose or HbA1c plus lipid panel; satisfies HEDIS SSD/SMD/SMC simultaneously
Patient on olanzapine + new diabetes diagnosis	Olanzapine carries highest metabolic risk among SGAs³⁰	Consider antipsychotic switch to lower-metabolic-risk agent (aripiprazole, lurasidone, ziprasidone); intensify glycemic management; code E11.21/22 if complications
Persistent positive symptoms after ≥2 antipsychotic trials at adequate dose	Treatment-resistant schizophrenia — clozapine is the only antipsychotic with evidence²⁹	Expedited psychiatry referral for clozapine evaluation; PCP can co-manage ongoing REMS / metabolic monitoring
Older patient labeled 'apathetic' or 'lazy'	Likely negative symptoms misattributed	Re-evaluate symptom pattern; consider negative symptom or cognitive impairment; refer for psychosocial rehabilitation
Recent psychiatric hospitalization, no 7-day follow-up scheduled	HEDIS FUH 30-day national Medicaid benchmark ~61% ; 7-day measure drives Star Ratings ²⁷	Schedule before discharge; document explicitly in visit note; consider LAI initiation pre-discharge for warm handoff

ABBREVIATIONS: AWV = Annual Wellness Visit; BPSD = behavioral and psychological symptoms of dementia; CMS = Centers for Medicare & Medicaid Services; CPG = clinical practice guideline; E11 = ICD-10 chapter for type 2 diabetes mellitus; FUH = Follow-Up After Hospitalization for Mental Illness (HEDIS); HbA1c = glycated hemoglobin; HCC = Hierarchical Condition Category; HEDIS = Healthcare Effectiveness Data and Information Set; LAI = long-acting injectable antipsychotic; PCP = primary care physician; REMS = Risk Evaluation and Mitigation Strategy; SAA = Adherence to Antipsychotic Medications for Schizophrenia (HEDIS); SGA = second-generation antipsychotic; SMD = Diabetes Monitoring for People with Diabetes and Schizophrenia (HEDIS); SMC = Cardiovascular Monitoring for People with CVD and Schizophrenia (HEDIS); SMI = serious mental illness; SSD = Diabetes Screening for People with Schizophrenia or Bipolar Disorder (HEDIS); TRS = treatment-resistant schizophrenia

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Common Oversights

OVERSIGHT	CLINICAL CONSEQUENCE
No metabolic screen at baseline or 12 weeks post-antipsychotic initiation	Misses 25-year mortality gap intervention; misses HEDIS SSD/SMD/SMC measures; ~55% national screening rate represents the gap ³⁰

OVERSIGHT	CLINICAL CONSEQUENCE
Attributing negative symptoms to depression, apathy, or 'laziness'	Misses psychosocial rehabilitation referral; misframes patient capacity
Attributing medication non-adherence to patient choice or lack of insight	Misses anosognosia (60% prevalence, neurobiologically mediated) and unrecognized side effects (sedation, metabolic, sexual dysfunction, akathisia); misframes adherence as compliance issue ¹¹
No cognitive screen at AWV in patient ≥50 with schizophrenia	27.9% of Medicare schizophrenia patients have dementia at age 66, 70.2% at age 80; over half of PCPs do not consistently evaluate cognitive symptoms ³¹
No statin in antipsychotic-treated patient with CVD risk	25-year mortality gap is CVD-driven; statin should be proactive , not deferred to psychiatry
Documenting 'patient stable' without active monitoring plan	Stability requires consistent monitoring ; lapse risks relapse
LAI antipsychotic deferred to 'last resort' after multiple oral failures	Proactive LAI use recommended ; LAIs reduce hospitalization, improve adherence, reduce mortality ³²
7-day follow-up after psychiatric discharge not scheduled	30-day post-discharge is highest-risk relapse window ³³

ABBREVIATIONS: AWV = Annual Wellness Visit; BPSD = behavioral and psychological symptoms of dementia; CMS = Centers for Medicare & Medicaid Services; CVD = cardiovascular disease; FUH = Follow-Up After Hospitalization for Mental Illness; HCC = Hierarchical Condition Category; HEDIS = Healthcare Effectiveness Data and Information Set; LAI = long-acting injectable antipsychotic; LTC = long-term care; OR = odds ratio; PCP = primary care physician; RAF = Risk Adjustment Factor; SMD = Diabetes Monitoring (HEDIS); SMC = Cardiovascular Monitoring (HEDIS); SSD = Diabetes Screening (HEDIS); VBC = value-based care

Key Differentials in Older Adults

CLINICAL PRESENTATION	DIFFERENTIAL	KEY DISTINCTION
New-onset psychosis after age 60	VLOSLP vs. dementia with psychotic features; delirium; Lewy body disease; substance-induced; anti-NMDAR encephalitis	Comprehensive medical workup mandatory: toxicology, infection, metabolic, neuroimaging; cognitive screen; rule out reversible causes before primary psychotic diagnosis ²⁴

CLINICAL PRESENTATION	DIFFERENTIAL	KEY DISTINCTION
Cognitive decline in patient with schizophrenia	Core cognitive symptoms of schizophrenia (stable) vs. progressive dementia (Alzheimer's, vascular, Lewy body); anticholinergic toxicity; depression-related pseudodementia	MoCA trend over time; 27.9% dementia at age 66, 70.2% at age 80 — high progression rates; reverse anticholinergic burden first; informant input where available ²¹
Flat affect, social withdrawal, low motivation	Negative symptoms of schizophrenia vs. major depressive disorder (with or without psychotic features); antipsychotic sedation; medication side effect	PHQ-9 + clinical history; depression onset and pattern; symptom predates antipsychotic exposure suggests negative symptoms; sedation timing post-dose suggests medication effect ³⁴
Schizophrenia vs schizoaffective disorder	F20.x: psychotic symptoms with mood symptoms only during exacerbations ; F25.x: both psychotic AND mood criteria met concurrently throughout illness	Check documentation of concurrent mood episodes vs sequential mood fluctuations
Schizophrenia vs bipolar with psychotic features	F20.x: persistent psychosis with negative symptoms F31.x with psychotic features: psychosis only during mood episodes	Accurate diagnosis affects both clinical management and coding
Schizophrenia vs substance-induced psychosis	F19.x or F12.x (cannabis-induced) — psychosis resolves with substance discontinuation and abstinence	Heavy cannabis use for psychosis — assess timeline of use vs symptom onset ; documented sobriety with persistent symptoms supports primary schizophrenia
Catatonia vs neuroleptic malignant syndrome	Catatonia: stupor, waxy flexibility, mutism; can occur in schizophrenia (F20.2) . NMS: rigidity + hyperthermia + autonomic instability + altered consciousness + CK $\geq 4 \times$ ULN ²⁶	Both can co-occur (malignant catatonia); NMS = immediate ED transfer; catatonia without malignant features = lorazepam challenge + hold antipsychotics + urgent psychiatry

ABBREVIATIONS: CK = creatine kinase; F19/F12 = ICD-10 substance use codes (cannabis: F12); F20/F25/F31 = ICD-10 chapters for schizophrenia, schizoaffective, bipolar; HCC = Hierarchical Condition Category; MoCA = Montreal Cognitive Assessment; NMDAR = N-methyl-D-aspartate receptor; NMS = neuroleptic malignant syndrome; OR = odds ratio; PHQ-9 = Patient Health Questionnaire-9; ULN = upper limit of normal; VLOSLP = very-late-onset schizophrenia-like psychosis

Comorbidity Screening

DOMAIN	RECOMMENDED SCREEN	FREQUENCY/NOTES
Metabolic	Weight, BMI, waist circumference, BP, fasting glucose/HbA1c, lipid panel	Baseline, 12 weeks post-antipsychotic initiation, then annually; satisfies HEDIS SSD/SMD/SMC simultaneously¹
Cardiovascular	10-year ASCVD risk; lipid panel; consider statin therapy	Annually; 25-year mortality gap is CVD-driven; statin should be proactive — not deferred ⁶
Cognitive	MoCA cut-off ≤ 25 ; pair with DSST for higher accuracy	Annually at AWV after age 50, or sooner if functional decline
Mental health	PHQ-9, GAD-7; CGI-S as global severity at each visit	PHQ-9 annually; CGI-S at each MBC encounter; document severity when MDD present
Tardive dyskinesia	AIMS (Abnormal Involuntary Movement Scale) exam	Every 6–12 months; every 3 months in older patients on high-EPS-risk agents
Substance use	AUDIT-C, DAST; cannabis screen	Annually; aggressive cessation counseling³⁵
Falls/frailty	Fall history, gait observation; consider Fried Frailty or VACS Index ≥ 65	At every visit; minimize sedating and anticholinergic agents³⁶
SDOH	Standardized SDOH tool (PRAPARE or AHC HRSN screening)	Annually or more frequently in SPMI
Cancer screening	CRC, breast, cervical, lung (if smoker), prostate per USPSTF and age ^{37,38}	Standard age- and risk-based; do not defer because of psychiatric diagnosis; cancer is a significant comorbid mortality contributor
Vaccinations	Annual influenza; PCV20/21; RSV (≥ 60); shingles (RZV); COVID-19 per CDC	Higher pneumococcal, influenza, COVID-19 risk in schizophrenia given smoking and institutional exposure; document at AWV

ABBREVIATIONS: AHC HRSN = Accountable Health Communities Health-Related Social Needs; AIMS = Abnormal Involuntary Movement Scale; ASCVD = atherosclerotic cardiovascular disease; AUDIT-C = Alcohol Use Disorders Identification Test – Concise; AWV = Annual Wellness Visit; BMI = body mass index; BP = blood pressure; CGI-S = Clinical Global Impression – Severity; CRC = colorectal cancer; DAST = Drug Abuse Screening Test; DSST = Digit Symbol Substitution Test; EPS = extrapyramidal symptoms; eRR = exposure relative risk; GAD-7 = Generalized Anxiety Disorder-7; HCC = Hierarchical Condition Category; HEDIS = Healthcare Effectiveness Data and Information Set; MBC = measurement-based care; MDD = major depressive disorder; MoCA = Montreal Cognitive Assessment; OR = odds ratio; PCV = pneumococcal conjugate vaccine; PHQ-9 = Patient Health Questionnaire-9; PRAPARE = Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences; RSV = respiratory syncytial virus; RZV = recombinant zoster vaccine; SDOH = social determinants of health; SMC/SMD/SSD = HEDIS measures; SPMI = serious and persistent mental illness; USPSTF = US Preventive Services Task Force; VACS = Veterans Aging Cohort Study

Schizophrenia Staging and Severity

STAGE	CLINICAL FEATURES	KEY ASSESSMENT TOOLS	MANAGEMENT PRIORITIES
Premorbid	No overt psychotic symptoms ; subtle neurodevelopmental markers — language/ motor delays, attentional problems, mild social impairment; typically birth through adolescence ³⁹	No validated screening tool for general population ; family history assessment; developmental milestone review	Awareness only — no diagnostic criteria exist for this stage; primary prevention research ongoing; no indication for antipsychotic treatment
Prodromal/ Clinical High Risk (CHR)	Attenuated psychotic symptoms , brief limited intermittent psychotic symptoms or genetic risk + functional decline; social withdrawal, declining academic/occupational performance, odd beliefs, perceptual anomalies ⁴⁰	SIPS/SOPS (North America); ; PQ-B (self-report screener, distress score ≥ 27); COGDIS basic symptoms criteria	Coordinated specialty care (CSC) referral; CBTp; family psychoeducation; avoid premature antipsychotic initiation ; monitor for conversion
First Episode Psychosis (FEP)	Meets DSM-5 criteria: ≥ 2 of delusions,* hallucinations,* disorganized speech,* disorganized/catatonic behavior, negative symptoms (≥ 1 must be from first three)* for ≥ 1 month; functional decline; first 2–5 years = "critical period" ⁴¹	PANSS-30 or PANSS-6; CGI-S (1–7 scale); BPRS; MoCA (cognitive baseline); Andreasen remission criteria (8 PANSS items ≤ 3 for ≥ 6 months)	CSC (psychiatry + therapy + case management + supported employment/education); low-dose SGA monotherapy; LAI consideration ; substance use assessment; DUP minimization
Early Stabilization (Years 2–5)	Symptom response to initial treatment ; risk of relapse highest in first 2 years; negative symptoms may emerge as predominant; cognitive deficits stabilize or worsen	PANSS (serial); CGI-S/CGI-I; GAF/SOFAS for functioning; metabolic monitoring (weight, glucose, lipids at baseline, 12 weeks, then annually)	Maintenance antipsychotic therapy ; LAI if adherence concerns; relapse prevention plan; CBTp continuation; IPS supported employment; family psychoeducation; metabolic syndrome management ⁴²

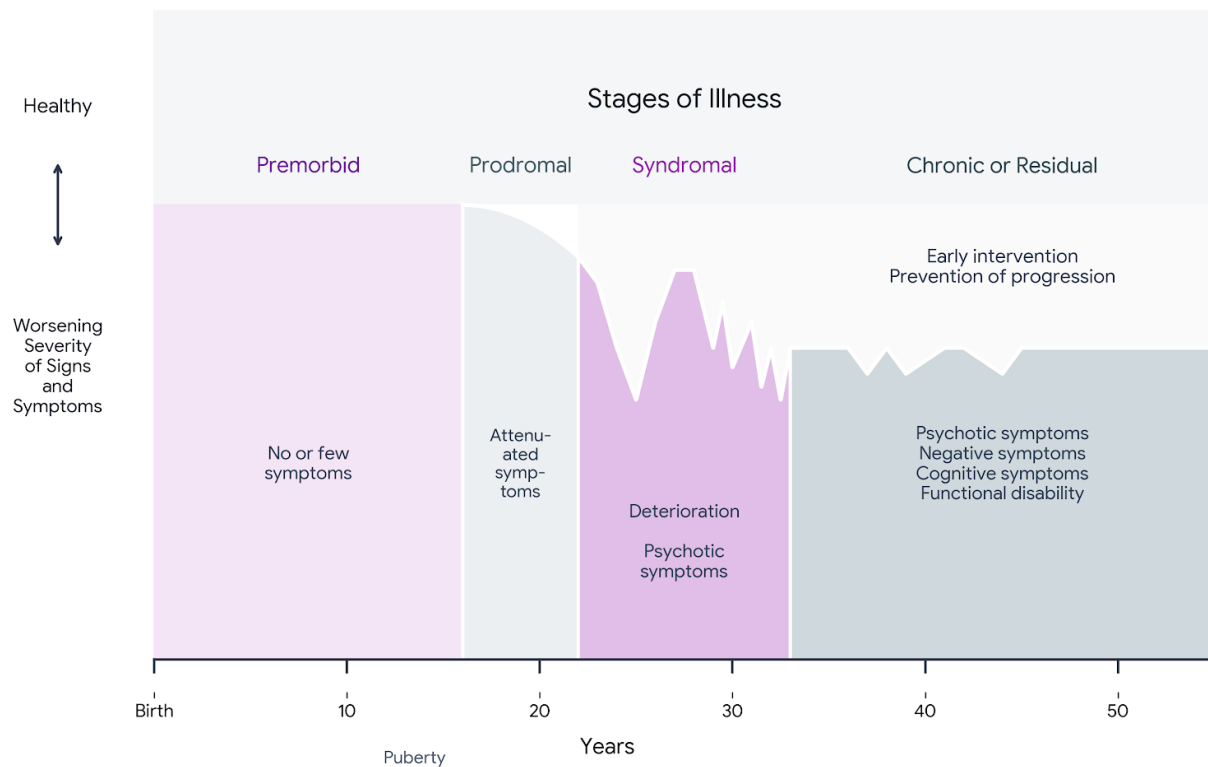
STAGE	CLINICAL FEATURES	KEY ASSESSMENT TOOLS	MANAGEMENT PRIORITIES
Chronic/Stable (Maintenance)	Persistent positive symptoms (often attenuated), prominent negative symptoms , cognitive impairment, functional disability; CGI-S typically 2–4 in well-managed patients ¹	CGI-S (target ≤ 3); PANSS-6 or PANSS-30; SANS (negative symptoms); MoCA (annual cognitive screen, cut-off ≤ 25); AIMS (tardive dyskinesia every 6–12 months; every 3 months in elderly); PHQ-9/GAD-7	Maintenance SGA (oral or LAI) ; metabolic comorbidity management; SDOH intervention; smoking cessation; Beers Criteria review in elderly; advance care planning ⁴³
Treatment-Resistant Schizophrenia (TRS)	At least moderate symptoms persisting after ≥ 2 adequate antipsychotic trials (≥ 6 weeks each at adequate dose with confirmed adherence); TRRIP criteria: PANSS moderate severity + functional impairment on validated scale ⁴⁴	PANSS ($\geq$ moderate on key items); SOFAS (functional impairment); antipsychotic plasma levels (confirm adherence on ≥ 1 occasion; optimal: ≥ 2 occasions); TRRIP minimum vs. optimal criteria	Clozapine initiation — FDA-approved for TRS since 1989; target plasma level ≥ 350 ng/mL; mandatory ANC monitoring (weekly $\times 18$ –26 weeks, then per protocol); CBTp adjunct; ECT for clozapine-refractory positive symptoms
Very Late-Onset Schizophrenia-Like Psychosis (VLOSLP, onset ≥ 60)	Predominantly persecutory delusions $\pm$ multimodal hallucinations ; preserved premorbid functioning; negative symptoms less prominent than early-onset; sensory impairment and social isolation as risk factors ⁴⁵	Clinical interview + PANSS; cognitive screening (MoCA) to exclude dementia; neuroimaging to exclude organic causes; sensory assessment (hearing, vision)	Low-dose SGA (amisulpride has limited trial evidence); avoid high anticholinergic burden; address sensory impairment and social isolation; geriatric assessment; fall risk evaluation
Schizophrenia severity (visit-level)	Global clinical impression rated at each measurement-based care (MBC) encounter; single clinician-rated item capturing overall illness severity across all symptom domains	CGI-S (1–7 scale): 1 = normal 2 = borderline 3 = mildly ill 4 = moderately ill 5 = markedly ill 6 = severely ill 7 = among the most extremely ill	Rate at every visit ; correlates significantly with PANSS total ($r = 0.55$ – 0.86 depending on domain); a 1-point CGI-S change corresponds to $\sim 20\%$ PANSS change; high inter-rater reliability ($r = 0.92$)

STAGE	CLINICAL FEATURES	KEY ASSESSMENT TOOLS	MANAGEMENT PRIORITIES
Cognitive impairment severity in schizophrenia	Cognitive deficit is a core feature (~1 SD below peers globally); processing speed (symbol coding) is the most impaired domain (~1.5 SD below controls); impairment is stable across the post-diagnosis lifespan	MoCA + DSST: MoCA ≤ 25 = moderate–severe cognitive impairment; MoCA ≤ 27 = mild impairment; DSST cut-off ≤ 59 ; combined MoCA + DSST achieves 86.7% classification accuracy vs. comprehensive MCCB battery ⁴⁶	Screen with MoCA at AWW and annually; add DSST for enhanced accuracy

ABBREVIATIONS: AIMS = Abnormal Involuntary Movement Scale; APS = attenuated psychotic symptoms; AWW = Annual Wellness Visit; BACS = Brief Assessment of Cognition in Schizophrenia; BLIPS = brief limited intermittent psychotic symptoms; BPRS = Brief Psychiatric Rating Scale; CAARMS = Comprehensive Assessment of At-Risk Mental States; CBTp = cognitive behavioral therapy for psychosis; CGI-I = Clinical Global Impression – Improvement; CGI-S = Clinical Global Impression – Severity; CGI-SCH = Clinical Global Impression – Schizophrenia; CHR = clinical high risk; COGDIS = Cognitive Disturbances; CSC = coordinated specialty care; DSST = Digit Symbol Substitution Test; DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; DUP = duration of untreated psychosis; ECT = electroconvulsive therapy; FEP = first episode psychosis; GAD-7 = Generalized Anxiety Disorder-7; GAF = Global Assessment of Functioning; GRADE = Grading of Recommendations, Assessment, Development and Evaluations; GRD = genetic risk and deterioration; HEDIS = Healthcare Effectiveness Data and Information Set; IPS = Individual Placement and Support; LAI = long-acting injectable; MBC = measurement-based care; MCCB = MATRICS Consensus Cognitive Battery; MoCA = Montreal Cognitive Assessment; PANSS = Positive and Negative Syndrome Scale; PANSS-6 = Positive and Negative Syndrome Scale – 6 item; PHQ-9 = Patient Health Questionnaire-9; PQ-B = Prodromal Questionnaire – Brief; ROC = receiver operating characteristic; SAA = Adherence to Antipsychotic Medications for Individuals with Schizophrenia (HEDIS); SANS = Scale for the Assessment of Negative Symptoms; SD = standard deviation; SDOH = social determinants of health; SGA = second-generation antipsychotic; SIPS/SOPS = Structured Interview for Psychosis-Risk Syndromes/Scale of Psychosis-Risk Symptoms; SMD = Diabetes Monitoring for People with Diabetes and Schizophrenia (HEDIS); SOFAS = Social and Occupational Functioning Assessment Scale; SSD = Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (HEDIS); TRS = treatment-resistant schizophrenia; TRRIIP = Treatment Response and Resistance in Psychosis; UHR = ultra-high risk; UPSA-B = UCSD Performance-Based Skills Assessment – Brief; VLOSLP = very-late-onset schizophrenia-like psychosis; VMAT2 = vesicular monoamine transporter 2

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Stages of Schizophrenia



CLINICAL PEARL: EARLY DETECTION AND TREATMENT

Detection and treatment in the early stages of illness, ideally close to the onset of the first episode of psychosis, shorten the duration of psychotic episodes, reduce recurrences, and limit the progressive decline in general functional capacity that occurs in the syndromal stage and leads to the chronic effects of the disease.

**RED FLAG — EMERGENCY**

- **Neuroleptic malignant syndrome (NMS)** — rigidity + hyperthermia ($>38^{\circ}\text{C}$) + altered consciousness + autonomic instability after dopamine-blocking exposure; $\text{CK} \geq 4 \times \text{ULN}$. Immediate cessation of antipsychotic, supportive care, dantrolene/bromocriptine; significant mortality if untreated²⁴
- **Malignant catatonia** — catatonic features (stupor, rigidity, mutism) with fever, autonomic instability, and elevated CK; overlaps with NMS; emergent benzodiazepine challenge and consider ECT²⁶
- **Active suicidal ideation with plan/intent or recent attempt** — 4–10% of persons with schizophrenia die by suicide; highest in males early in illness course²⁴
- **Command hallucinations to harm self or others with imminent risk** — emergent psychiatric evaluation; consider involuntary commitment per state statute
- **Acute delirium superimposed on psychosis** — requires comprehensive medical evaluation (toxicology, infection workup, neuroimaging) before behavioral health referral; do NOT assume primary psychiatric cause

**RED FLAG — URGENT (24–72 HOURS)**

- **Serious homicidal ideation or aggressive/violent behavior** — urgent psychiatry consultation; safety planning; consider **hospitalization**
- **Catatonia without malignant features** — stupor, waxy flexibility, negativism, posturing; lorazepam 1–2 mg IV/IM challenge; **HOLD dopamine antagonists; urgent psychiatry consultation**
- **Grossly disorganized behavior impairing safety or basic self-care** — urgent assessment; consider **hospitalization** or assertive **community treatment activation**
- **New-onset psychosis in patient ≥ 65** — rule out delirium, dementia with psychotic features, substance-induced psychosis, autoimmune encephalitis (anti-NMDAR) BEFORE attributing to primary psychotic disorder
- **Suspected treatment-resistant schizophrenia** — persistent positive symptoms despite ≥ 2 adequate antipsychotic trials → **expedited psychiatry referral for clozapine evaluation**
- **Suspected tardive dyskinesia (new involuntary movements >4 weeks)** — psychiatry referral for medication adjustment and VMAT2 inhibitor (valbenazine, deutetrabenazine) consideration

3 MEAT DOCUMENTATION ESSENTIALS

Case Vignette: 73-year-old man, F20.0 (paranoid schizophrenia) diagnosed age 22, currently on aripiprazole LAI monthly, CGI-S = 2 (borderline ill). Presents for blood pressure follow-up. Encounter note: 'F20.0 — paranoid schizophrenia, well-controlled on aripiprazole LAI 400 mg IM monthly (next dose 6/15). CGI-S = 2. MoCA 24/30 (stable from last yr). PHQ-9 = 4. Fasting glucose 102, HbA1c 5.9, LDL 118 — initiating atorvastatin 20 mg per dyslipidemia guideline. AIMS exam: no abnormal movements. Beers review: no PIM. SDOH: stable housing, food-secure. Advance directive on file. Plan: continue LAI, BP recheck 4 wk, repeat HbA1c/lipids in 12 mo, MoCA next AWW.'

MONITOR: "PANSS-6 = 18 (moderate); PHQ-9 = 14; GAD-7 = 8; AUDIT-C = 5 (positive). Metabolic (HEDIS SSD): fasting glucose 112, HbA1c 6.1%, LDL 142, TG 198, HDL 38; BMI 34.2; BP 138/88; weight +4 lbs. AIMS = 2 (minimal dyskinesia). Smoking: active, 20 pack-years; cessation counseling provided. Functional status: independent basic ADLs, impaired IADLs."

EVALUATE: "Paliperidone palmitate 234 mg IM monthly — adherent per injection log. Labs (date): CBC, CMP, fasting glucose/lipids, prolactin 48 (elevated), TSH 2.1 (normal), UDS negative, ECG QTc 438 ms. MoCA = 21/30 (mild cognitive impairment). AUDIT full score = 12 (hazardous drinking). PHQ-9 depression independent of negative symptoms (tearfulness, guilt, sleep disturbance beyond baseline)."

ASSESS: "Schizophrenia, multiple episodes, partial remission (**F20.9, HCC 57**). Associated: prediabetes (**R73.03**); dyslipidemia (**E78.5**); obesity class I (**E66.01**); nicotine dependence (**F17.210**); alcohol use disorder, moderate (**F10.20**); comorbid MDD, recurrent, moderate (**F33.1**); drug-induced hyperprolactinemia (**E22.1**). Columbia Suicide Severity Rating Scale: negative."

TREAT: "Continue paliperidone palmitate 234 mg IM q28d; if symptomatic hyperprolactinemia persists, consider aripiprazole LAI switch. Metabolic: start metformin 500 mg BID; dietary counseling; repeat labs 3 months; evaluate statin. Depression: start sertraline 50 mg daily; PHQ-9 every visit. SUD: brief intervention; integrated MH+SUD referral; AUDIT-C every visit. Smoking: offer varenicline 1 mg BID (safe per EAGLES). Psychosocial: CBTp, supported employment, cognitive remediation (MoCA 21). Surveillance: metabolic labs q3mo → annually; AIMS q6mo; PANSS-6 every visit. Catatonia vigilance: Bush-Francis screening if acute behavioral change; if ≥2, lorazepam challenge + hold antipsychotics + urgent psychiatry. ACP documented (CPT 99497): Surrogate named, psychiatric advance directive completed."

Clinical Documentation Elements

- **Specify F20.x subtype where documentation supports:** **F20.0** (paranoid), **F20.1** (disorganized), **F20.2** (catatonic), **F20.3** (undifferentiated), **F20.5** (residual), **F20.81** (schizophreniform), **F20.89** (other) — **F20.9** (unspecified) is overused
- **Distinguish F20.x from F25.x explicitly:** Schizoaffective disorder requires both psychotic AND mood disorder criteria met concurrently throughout the illness — document concurrent symptom presence, not sequential mood fluctuations **Document active symptoms at the visit, not just diagnosis code:** 'F20.0 active — persistent paranoid delusions managed on aripiprazole 30 mg, CGI-S = 3, AIMS negative, PHQ-9 = 5' rather than 'schizophrenia stable'
- **Document the antipsychotic regimen by name, dose, route, and class:** 'Aripiprazole monohydrate LAI (Abilify Maintena) 400 mg IM monthly — SGA, partial D2 agonist' supports clinical clarity, DDI reasoning, and HEDIS MRP

- **Document comorbidities at every encounter:** Document comorbidities at every encounter: Dementia severity — mild (**F03.A0, HCC 127**), moderate (**F03.B0, HCC 126**), severe (**F03.C0, HCC 125**); MDD severity — mild (**F33.0**), moderate (**F33.1**), severe without psychosis (**F33.2**), severe with psychosis (**F33.3**); Bipolar without psychosis — current episode manic without psychotic features (**F31.1x**), current episode depressed without psychosis (**F31.4**), current episode mixed without psychosis (**F31.63**); Diabetes complications — with nephropathy (**E11.21**), with neuropathy (**E11.40–E11.49**), with retinopathy (**E11.31x–E11.35x**), with peripheral angiopathy (**E11.51**); Heart failure — systolic/HFrEF (**I50.20–I50.23**), diastolic/HFpEF (**I50.30–I50.33**), combined (**I50.40–I50.43**); COPD — unspecified (**J44.9**), with acute exacerbation (**J44.1**), with lower respiratory infection (**J44.0**) — each must be coded to highest specificity at every visit when active
- **Document SDOH using Z-codes when present:** **Z59.0** (homelessness), **Z59.41** (food insecurity), **Z60.2** (social isolation), **Z63.x** (relationship problems) — supports risk adjustment AND MA supplemental benefit access (SSBCI)
- **Document person-first language throughout:** 'Person with schizophrenia,' NOT 'schizophrenic'

Reframing Common Documentation Shortcuts

INSTEAD OF...	DOCUMENT...
'Schizophrenia — F20.9'	' F20.0 — paranoid schizophrenia ; persistent paranoid delusions, persistent auditory hallucinations; managed on aripiprazole 30 mg daily — CGI-S = 3, AIMS negative
'Patient is stable'	' F20.0 active — CGI-S = 2 (borderline ill) ; no acute positive symptoms; negative symptoms mild (PANSS-N = 11); MoCA 26/30; PHQ-9 = 4; continues LAI'
'Non-adherent to medications'	'Non-adherence driven by (1) anosognosia (60% prevalence, neurobiologically mediated); (2) reported akathisia and weight gain on olanzapine; plan: switch to aripiprazole LAI for guaranteed delivery and lower metabolic burden'
'Depression — F32.9'	' F32.1 — Major depressive disorder , moderate; PHQ-9 = 14; initiating sertraline; concurrent F20.0 well-controlled on aripiprazole'
'On statin'	'Atorvastatin 40 mg daily per dyslipidemia guideline; ASCVD 10-yr risk 14%; targeting LDL <70 mg/dL given schizophrenia 25-year mortality gap'
'Antipsychotic continued'	'Aripiprazole LAI (Abilify Maintena) 400 mg IM monthly continued — initiated post-discharge 6/2024 for warm handoff per VBC LAI indication; PDC 100%; CGI-S 2'
'Lives at home'	'SDOH screen positive: food insecurity (Z59.41) and social isolation (Z60.2); enrolled in MA SSBCI grocery benefit + community paramedic outreach; CHW visit weekly'

INSTEAD OF...	DOCUMENT...
'Patient has dementia'	'F03.91 dementia, unspecified, with behavioral disturbance — MoCA 18/30. Predates Alzheimer pattern. Schizophrenia history since age 24 — F20.5 residual phase. Both coded today; HCC 125 and HCC 151 documented'

ABBREVIATIONS: AIMS = Abnormal Involuntary Movement Scale; ASCVD = atherosclerotic cardiovascular disease; CHW = community health worker; CGI-S = Clinical Global Impression – Severity; F20/F25/F32/F03 = ICD-10 chapters for schizophrenia, schizoaffective, depression, dementia; HCC = Hierarchical Condition Category; LAI = long-acting injectable antipsychotic; LDL = low-density lipoprotein cholesterol; MA = Medicare Advantage; MoCA = Montreal Cognitive Assessment; PANSS-N = Positive and Negative Syndrome Scale – Negative subscale; PDC = proportion of days covered; PHQ-9 = Patient Health Questionnaire-9; SDOH = social determinants of health; SGA = second-generation antipsychotic; SSBCI = Special Supplemental Benefits for the Chronically Ill; VBC = value-based care; Z59/Z60 = ICD-10 chapters for social determinants

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DOCUMENTATION

Document the following **education topics**, the patient and caregiver(s)/care-partner(s) present, materials provided, and patient/care-giver understanding verified via the teach-back method:

- **Metabolic Risk and Antipsychotic Side-Effect Tracking:** Document counseling on antipsychotic-induced metabolic shifts (weight gain, insulin resistance, dyslipidemia). Explicitly note side-effect reporting (e.g., sedation, weight changes), the shared clinical decision to adjust therapy or cross-taper, and the scheduling of baseline or annual fasting glucose/HbA1c and lipid monitoring
- **Relapse Prevention and Prodromal Awareness:** Document engagement with both the patient and care-partner regarding the core warning signs of an impending psychotic decompensation. Verify their ability to recognize and report acute behavioral markers, specifically sleep disturbances, social withdrawal, and hyper-suspiciousness
- **Smoking Cessation (The 5 A's Framework):** Document the patient's current tobacco status and the delivery of behavioral counseling. Outline the pharmacotherapy offered (e.g., varenicline or bupropion), noting mandatory safety guardrails such as avoiding or exercising extreme caution with bupropion at clozapine doses exceeding 600 mg due to seizure risks
- **Integrated Psychosocial and Care Team Engagement:** Document referrals, appointment scheduling, and patient/caregiver participation in multi-disciplinary support loops. This includes tracking active engagement with behavioral health care managers, peer recovery coaches, community programs (such as NAMI), or intensive case management teams

TREATMENT AND REFERRAL QUICK GUIDE

First-line schizophrenia treatment is second-generation antipsychotic (SGA) monotherapy per APA 2020 Recommendation 1A; SGAs preferred over first generation antipsychotics (FGAs) due to lower extrapyramidal risk. Elderly patients (≥ 65) should start at 50% of standard adult dose with slow titration — no specific elderly RCTs exist for most SGAs (expert consensus per VA/DoD 2023).^{13,47}

Therapy Escalation Criteria

TRIGGER	ACTION
New diagnosis of schizophrenia or first-episode psychosis	Start SGA monotherapy at 50% adult dose in patients ≥ 65 ; titrate slowly; refer for coordinated specialty care (CSC) where available; consider proactive LAI initiation
Inadequate response after 4–6 weeks at adequate dose	Verify adherence (consider LAI switch) ; re-assess diagnosis (rule out substance use, mood disorder, medical condition); consider SGA switch if confirmed inadequate response
Failure of ≥ 2 adequate antipsychotic trials	Treatment-resistant schizophrenia; consider ECT ; expedited psychiatry referral; PCP can co-manage REMS/metabolic monitoring
Discharge from psychiatric hospitalization	Schedule 7-day follow-up before discharge (HEDIS FUH); consider LAI initiation pre-discharge for warm handoff (30-day window is highest-risk relapse period)
Unstable housing, anosognosia, or justice system involvement	LAI antipsychotic — proactive initiation ; ensure continuous medication delivery rather than awaiting oral failure
Frequent ED utilization labeled 'medication non-responder'	Often 'pseudo-resistance' — verify adherence (LAI switch) ; review for unrecognized side effects; consider behavioral health crisis stabilization referral
New or worsening metabolic syndrome on olanzapine or clozapine	Switch to lower-metabolic-risk SGA (aripiprazole, lurasidone, ziprasidone, brexpiprazole, cariprazine) where clinically appropriate; intensify metabolic management directly
Catatonic features (Bush-Francis ≥ 2)	Lorazepam 1–2 mg IV/IM challenge; HOLD dopamine antagonists ; urgent psychiatry consultation; if fever or autonomic instability, treat as malignant catatonia (emergency)
Suspected NMS (rigidity + fever + altered consciousness)	Immediate ED transfer ; discontinue antipsychotic; supportive care; dantrolene/bromocriptine; high mortality if untreated
AIMS positive (new abnormal involuntary movements >4 weeks)	Psychiatry referral for VMAT2 inhibitor (valbenazine, deutetrabenazine); medication adjustment to minimize EPS-risk agents

ABBREVIATIONS: AIMS = Abnormal Involuntary Movement Scale; APA = American Psychiatric Association; CSC = coordinated specialty care; ED = emergency department; EPS = extrapyramidal symptoms; FGA = first-generation antipsychotic; FUH = Follow-Up After Hospitalization for Mental Illness (HEDIS); IV/IM = intravenous/intramuscular; LAI = long-acting injectable antipsychotic; NMS = neuroleptic malignant syndrome; PCP = primary care physician; REMS = Risk Evaluation and Mitigation Strategy; SGA = second-generation antipsychotic; TRS = treatment-resistant schizophrenia; VBC = value-based care; VMAT2 = vesicular monoamine transporter 2

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Antipsychotic Treatment Pathway

To systematically navigate the distinct clinical stages of schizophrenia and address treatment resistance, clinicians utilize a structured antipsychotic treatment pathway designed to optimize efficacy while mitigating metabolic risks.^{13,47–49}

AGENT/REGIMEN	KEY CONSIDERATIONS FOR PATIENTS ≥65
Aripiprazole (SGA, partial D2 agonist)	Lower metabolic risk ; preferred in patients with metabolic syndrome; LAI available (Abilify Maintena, Aristada); partial D2 agonism — minimal akathisia at lower doses
Lurasidone (SGA)	Lower metabolic burden ; renal dose adjustment if CrCl <50; food requirement reduces missed doses if structured
Risperidone (SGA)	Moderate metabolic risk ; hyperprolactinemia risk; LAI available (Risperdal Consta Q2W) — useful for stable patients
Paliperidone (SGA)	LAI longer intervals improve adherence and cost-effectiveness ; well-studied in Medicare patients
Olanzapine (SGA, higher metabolic risk)	Highest metabolic risk among commonly-used SGAs ; reserve for patients without metabolic syndrome or after other SGAs failed; LAI (Zyprexa Relprevv) carries post-injection delirium/sedation syndrome risk
Clozapine (SGA, TRS only)	ONLY antipsychotic with TRS evidence ; mandatory REMS — ANC weekly × 6 mo → biweekly → monthly; monitor myocarditis (first 2 mo), metabolic parameters, seizure risk >600 mg/d
LAI antipsychotic Paliperidone PP1M/PP3M/PP6M; aripiprazole monthly or Q2M; risperidone LAI Q2W	Hospitalization OR 0.62 (95% CI 0.54–0.71); adherence OR 1.89 for PDC ≥80%; all-cause mortality OR 0.79; Medicare-specific HR 0.76–0.88 for psychiatric hospitalization
Cost-smart oral generic (risperidone, quetiapine, olanzapine, aripiprazole; haloperidol if FGA tolerated)	Risperidone \$4–22/month; aripiprazole generic \$10–140/month; consider generic FGAs only if SGA intolerant given EPS risk in elderly
Cost-smart LAI (Haloperidol decanoate (Q4W); fluphenazine decanoate (Q2–4W); risperidone LAI Q2W)	First-generation LAIs lowest acquisition cost; risperidone LAI most cost-effective SGA option; PP3M/PP6M more cost-effective than PP1M due to lower admin burden and improved adherence

ABBREVIATIONS: ANC = absolute neutrophil count; CrCl = creatinine clearance; D2 = dopamine-2 receptor; EPS = extrapyramidal symptoms; FGA = first-generation antipsychotic; HR = hazard ratio; LAI = long-acting injectable antipsychotic; OR = odds ratio; PDC = proportion of days covered; PO = per os (by mouth); PP1M / PP3M / PP6M = paliperidone palmitate monthly, every 3 months, every 6 months; Q2M/Q2W/Q3M/Q4W/Q6M = every 2 months/2 weeks/3 months/4 weeks/6 months; REMS = Risk Evaluation and Mitigation Strategy; SGA = second-generation antipsychotic; TRS = treatment-resistant schizophrenia; VBC = value-based care

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Clinical Treatment Pathway Summary

TREATMENT STEP	CLINICAL ACTION AND EVIDENCE
Step 1: First-Line SGA Monotherapy	Second-generation antipsychotics (aripiprazole, risperidone, lurasidone, brexpiprazole, cariprazine, ziprasidone preferred; olanzapine/quetiapine effective but higher metabolic risk). Start at 50% dose in patients ≥ 65. APA 2020 Recommendation 1A. Baseline + 12-week + annual metabolic monitoring required (ADA 2026) ⁸
Step 2: Optimization — Switch or LAI	If inadequate response or adherence concerns: switch SGA or initiate LAI . LAI agents: paliperidone palmitate (monthly or Q3M), aripiprazole (monthly or Q2M), risperidone LAI (Q2W), olanzapine pamoate (Q2-4W). LAI s reduce hospitalization, improve adherence, and reduce all-cause mortality
Step 3: Treatment-Resistant Schizophrenia — Clozapine	After failure of ≥ 2 adequate antipsychotic trials (≥ 6 weeks each). Clozapine is the only antipsychotic with TRS evidence — recommended by 15/15 CPGs. Start 12.5 mg/day, titrate to 300-450 mg/day. Mandatory ANC monitoring via REMS. Psychiatry consultation required for initiation
Step 4: Clozapine Non-Response — Augmentation/ECT	Clozapine augmentation with another antipsychotic (limited evidence) or electroconvulsive therapy (ECT) as adjunct. Expert consensus/low-quality evidence. VA/DoD 2023 found insufficient evidence for specific augmentation strategies. Adding ECT to clozapine is often considered the gold standard for ultra-treatment-resistant cases . ECT provides rapid symptom reduction . It often targets associated affective/depressive symptoms, suicidality, or neuroleptic malignant syndrome

*Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions



CLINICAL PEARL: PROACTIVE LONG-ACTING INJECTABLE (LAI) ANTIPSYCHOTIC INITIATION AS A FIRST-LINE STRATEGY, NOT A LAST RESORT

LAI antipsychotics reduce relapse, hospitalization, and healthcare resource utilization compared to oral formulations, **with evidence supporting their use as early as the first episode of psychosis**. Despite this, clinicians continue to reserve LAIs for patients who have already demonstrated non-adherence and experienced multiple relapses, missing the critical early-illness window where treatment optimization has the greatest impact on long-term trajectory. Injections can last 1, 3, or 6 months.⁵⁰

LAIs also help address anosognosia indirectly but powerfully — not by treating the neurobiological insight deficit itself, but by bypassing the adherence failure that anosognosia can cause.

Anosognosia affects approximately 50–80% of individuals with schizophrenia and is the single strongest predictor of medication non-adherence.^{51,52} Unlike denial (a psychological defense), anosognosia is a neurobiological phenomenon linked to frontal lobe dysfunction — it does not resolve with education alone. LAIs ensure continuous therapeutic drug levels regardless of the patient's insight status, which is why the VA/DoD 2023 guideline and expert consensus panels recommend LAI initiation proactively in patients with poor insight rather than waiting for repeated non-adherence and relapse.



CLINICAL PEARL: SECOND-GENERATION ANTIPSYCHOTICS TOLERABILITY

At **higher doses**, second-generation antipsychotics lose much of their tolerability advantage over first-generation agents. While SGAs were developed to reduce extrapyramidal and metabolic risk, these adverse effects are dose-dependent — **at elevated doses, SGAs produce metabolic syndrome and tardive dyskinesia rates that approach those of FGAs**. Dose optimization rather than dose escalation is the preferred strategy, particularly in patients ≥ 65 where starting at 50% of the standard adult dose is recommended.

Adverse Events

The following table outlines the potential adverse effects of antipsychotics which should be determined in the context of patient-specific factors.⁴⁹ FDA-approved LAI antipsychotics include second-generation agents — paliperidone palmitate (monthly, every 3 months, or every 6 months), aripiprazole monohydrate (monthly or every 2 months), aripiprazole lauroxil (every 4–8 weeks), risperidone microspheres (every 2 weeks), risperidone subcutaneous (monthly or every 2 months), and olanzapine pamoate (every 2–4 weeks) — and first-generation agents haloperidol decanoate (every 4 weeks) and fluphenazine decanoate (every 2–4 weeks).

MEDICATION	COMMON ADVERSE EFFECTS	SERIOUS ADVERSE EFFECTS	COMMENTS
First-Generation Antipsychotics			
chlorpromazine	Dry mouth, elevated prolactin levels, extrapyramidal symptoms, glucose intolerance, postural hypotension, somnolence, weight gain	Neuroleptic malignant syndrome, tardive dyskinesia	Has the most anticholinergic effects of the first-generation antipsychotics
fluphenazine	Akathisia, parkinsonism, dystonia, hyperprolactinemia	Neuroleptic malignant syndrome, tardive dyskinesia	—
haloperidol	Dry mouth, extrapyramidal symptoms, galactorrhea, hyperprolactinemia, hypotension, somnolence, tachycardia	Neuroleptic malignant syndrome, tardive dyskinesia, prolonged QT syndrome	
loxapine	Dry mouth, extrapyramidal symptoms, galactorrhea, hyperprolactinemia, hypotension, somnolence, tachycardia	Neuroleptic malignant syndrome, tardive dyskinesia	

MEDICATION	COMMON ADVERSE EFFECTS	SERIOUS ADVERSE EFFECTS	COMMENTS
perphenazine	Dry mouth, extrapyramidal symptoms, galactorrhea, hyperprolactinemia, hypotension, somnolence, tachycardia	Neuroleptic malignant syndrome, tardive dyskinesia	
Second-Generation Antipsychotics			
aripiprazole (Abilify)	Anxiety, constipation, dizziness, headache, insomnia	Agranulocytosis, neuroleptic malignant syndrome, tardive dyskinesia	May reduce hyperprolactinemia when used with other antipsychotics; does not impact lipids as much as other second-generation antipsychotics
brexpiprazole (Rexulti)	Hyperlipidemia, weight gain, akathisia, somnolence	QT prolongation	—
cariprazine (Vraylar)	Hyperprolactinemia, weight gain, somnolence	QT prolongation	
clozapine (Clozaril)	Hyperlipidemia, diabetes mellitus, orthostasis, seizures	Agranulocytosis (CBC weekly for 6 months, then every 2 weeks for 6 months, then monthly), seizures, tardive dyskinesia, myocarditis	Primarily for treatment of severe refractory schizophrenia
lurasidone (Latuda)	Hyperlipidemia, diabetes, parkinsonism, somnolence, nausea	Neuroleptic malignant syndrome, tardive dyskinesia, QT prolongation	—
olanzapine (Zyprexa)	Weight gain, hyperlipidemia, diabetes, akathisia, hyperprolactinemia, postural hypotension	Neuroleptic malignant syndrome, tardive dyskinesia	Do not use with benzodiazepines; smokers may require ~30% dose increase due to increased metabolism; increased incidence of weight gain compared with other second-generation antipsychotics
paliperidone ER (Invega)	Hyperprolactinemia, hyperlipidemia, weight gain, priapism	Neuroleptic malignant syndrome, tardive dyskinesia	Active metabolite of risperidone

MEDICATION	COMMON ADVERSE EFFECTS	SERIOUS ADVERSE EFFECTS	COMMENTS
quetiapine (Seroquel)	Hyperlipidemia, agitation, dizziness, dry mouth, hypotension, somnolence, weight gain	Agranulocytosis, neuroleptic malignant syndrome, tardive dyskinesia	Elevated discontinuation rate compared with other second-generation antipsychotics
risperidone (Risperdal)	Anxiety, hyperprolactinemia, hypotension, insomnia, metabolic changes, nausea, weight gain	Agranulocytosis, neuroleptic malignant syndrome, tardive dyskinesia	Higher incidence of increased prolactin levels and extrapyramidal effects than other second-generation antipsychotics
ziprasidone (Geodon)	Agitation, hypotension, metabolic changes, nausea, somnolence, tachycardia, weight gain	Agranulocytosis, neuroleptic malignant syndrome, tardive dyskinesia	Least amount of weight gain compared with other atypical antipsychotics
*Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interaction			

Non-Pharmacologic Care and Supportive Interventions

To drive meaningful improvement in long-term functional recovery, pharmacotherapy protocols can be paired directly with structured non-pharmacologic care and supportive interventions.^{13,47,49}

DOMAIN	INTERVENTION	RATIONALE
Coordinated Specialty Care (CSC)	First-episode psychosis team — psychiatry + therapy + case management + supported education/employment	APA 2020 strong recommendation; alters illness trajectory in first-episode patients
Cognitive Behavioral Therapy for Psychosis (CBTp)	Structured therapy targeting positive symptoms, distress, and self-stigma	APA 2020 recommends alongside pharmacotherapy at all stages; PCP documents referral and engagement
Family Psychoeducation	Structured education for family members; communication and crisis-planning skills	Reduces relapse rates; PCP connects patients and families to NAMI or local programs
Supported Employment (IPS Model)	Individual Placement and Support — competitive employment with rapid placement and ongoing support	Relevant for functional recovery metrics; APA 2020 strong recommendation
Assertive Community Treatment (ACT)	Multidisciplinary team for high-need patients (frequent hospitalizers, homeless, justice-involved)	Reduces readmissions

DOMAIN	INTERVENTION	RATIONALE
Collaborative Care Model (CoCM)	Embedded behavioral health care manager + psychiatric teleconsultant in primary care	Medicare-reimbursed CPT 99492–99494; strongest evidence base for integrated care; satisfies MBC requirement
Critical Time Intervention (CTI)	Time-limited intensive case management for 9 months post-discharge with decreasing intensity	Reduces 30-day readmission ; pairs well with HEDIS FUH 7-day visit requirement
Substance Use Therapy	Integrated dual-disorder treatment (IDDT) combining motivational interviewing (MI), contingency management, and CBT for co-occurring substance use disorders	Substance use occurs in up to 50% of patients with schizophrenia ; dual-diagnosis therapy prevents symptom exacerbation, reduces hospitalization, and dramatically increases medication adherence
Social Worker Care Coordination	Licensed Clinical Social Work (LCSW) navigation, crisis intervention, benefit optimization, and legal/advocacy support (including guardianship/payee setup)	Essential for managing high-complexity psychosocial crises; maximizes D-SNP or Medicaid long-term services and supports (LTSS) and builds the necessary protective structural framework around the patient
Smoking Cessation	Behavioral counseling + pharmacotherapy (varenicline or bupropion-caution); avoid bupropion at clozapine doses >600 mg	Smoking prevalence up to 80% in schizophrenia; drives COPD, lung cancer, ASCVD mortality
SDOH Outreach	Annual standardized screening (PRAPARE or AHC HRSN); connect to MA SSBCI benefits — food, transportation, utility, in-home support	Food insecurity OR 3.37, transportation OR 2.56 in SPMI vs non-SMI; 46% of D-SNP enrollees in plans offering SDOH benefits by 2024
Advance Care Planning	Healthcare proxy; advance directive; goals of care discussion at AWW	HEDIS COA element; respects patient autonomy across psychiatric and medical care

ABBREVIATIONS: AA = Alcoholics Anonymous; ACT = Assertive Community Treatment; AHC = Accountable Health Communities; APA = American Psychiatric Association; ASCVD = atherosclerotic cardiovascular disease; AWW = Annual Wellness Visit; CBT = cognitive behavioral therapy; CBTp = cognitive behavioral therapy for psychosis; CoCM = Collaborative Care Model; COA = Care for Older Adults; COPD = chronic obstructive pulmonary disease; CPT = Current Procedural Terminology; CSC = Coordinated Specialty Care; CTI = Critical Time Intervention; D-SNP = Dual Eligible Special Needs Plan; FUH = Follow-Up After Hospitalization for Mental Illness; HCC = hierarchical condition category; HEDIS = Healthcare Effectiveness Data and Information Set; HRSN = health-related social need; IDDT = Integrated Dual Disorder Treatment; IPS = Individual Placement and Support; LCSW = Licensed Clinical Social Worker; LTSS = long-term services and supports; MA = Medicare Advantage; MBC = measurement-based care; MI = motivational interviewing; NAMI = National Alliance on Mental Illness; PRAPARE = Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences; SDOH = social determinants of health; SMART = Self-Management and Recovery Training; SMI = serious mental illness; SPMI = serious and persistent mental illness; SSBCI = Special Supplemental Benefits for the Chronically Ill

Medication Safety and Key Interactions

While establishing an effective therapeutic regimen is critical, maintaining long-term treatment durability requires vigilant oversight of medication safety and key interactions.^{13,49,53}

DRUG/CLASS	INTERACTION/TOXICITY	CLINICAL ACTION
Olanzapine, clozapine	Highest metabolic risk: weight gain, T2DM, dyslipidemia	Prefer aripiprazole, lurasidone, ziprasidone in metabolic syndrome; if continued, intensify metabolic management and consider switch
Ziprasidone, thioridazine, high-dose antipsychotics	QTc prolongation, especially with polypharmacy	Baseline ECG; periodic monitoring; avoid co-administration with other QTc-prolonging agents (ondansetron, methadone, fluoroquinolones, citalopram >20 mg)
First-generation antipsychotics (haloperidol, fluphenazine)	High extrapyramidal and tardive dyskinesia risk; cost-smart but tolerability-limited	AIMS every 3 months in elderly on FGAs; lower starting doses (haloperidol 0.5–1 mg in elderly); reserve for SGA-intolerant patients or LAI cost-smart contexts
Anticholinergics (benztropine, trihexyphenidyl, diphenhydramine)	Anticholinergic OR 2.51 for neurocognitive impairment in older patients; Beers PIM	Review and minimize; treat EPS by reducing antipsychotic dose or switching to lower-EPS agent rather than adding anticholinergic
Benzodiazepines (lorazepam, diazepam, alprazolam)	Beers PIM; falls, cognitive impairment; respiratory depression in clozapine combination	Taper and discontinue; substitute CBT-I, SSRI for anxiety; lorazepam reserved for catatonia or NMS emergencies
Clozapine + ciprofloxacin or fluvoxamine	CYP1A2 inhibition → clozapine toxicity (seizures, hypotension)	Avoid combination; if necessary, reduce clozapine dose 50% and monitor levels
Tricyclic antidepressants	Anticholinergic burden, QTc prolongation	Avoid in elderly with schizophrenia; use sertraline, escitalopram, or mirtazapine for comorbid depression

ABBREVIATIONS: ASCVD = atherosclerotic cardiovascular disease; CBT-I = cognitive behavioral therapy for insomnia; CKD = chronic kidney disease; CYP1A2 = cytochrome P450 1A2; ECG = electrocardiogram; EPS = extrapyramidal symptoms; FGA = first-generation antipsychotic; GI = gastrointestinal; NMS = neuroleptic malignant syndrome; NSAID = nonsteroidal anti-inflammatory drug; OR = odds ratio; PIM = potentially inappropriate medication (Beers); QTc = corrected QT interval; SGA = second-generation antipsychotic; SSRI = selective serotonin reuptake inhibitor; T2DM = type 2 diabetes mellitus

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

When to Refer

TRIGGER	REFER TO	PURPOSE
First-episode psychosis or new schizophrenia diagnosis	Coordinated specialty care (CSC) or community mental health center	Multidisciplinary care model; alters illness trajectory; supports family engagement
Suspected TRS (failure of ≥ 2 antipsychotic trials)	Psychiatry — for clozapine evaluation	Clozapine initiation; REMS enrollment; PCP can co-manage ongoing monitoring
Catatonic features or NMS suspicion	Emergency department (NMS); urgent psychiatry (catatonia without fever)	NMS = emergency (mortality risk) ; catatonia = lorazepam challenge + hold dopamine antagonists
Active suicidality or homicidality	Emergency department or crisis stabilization	4–10% lifetime suicide in schizophrenia; immediate safety assessment and intervention ²⁴
Cognitive decline in patient with schizophrenia	Neuropsychology or geriatric psychiatry	27.9% dementia at age 66; differentiate core cognitive symptoms from progressive dementia; reverse anticholinergic burden first ²¹
High-need patient with frequent hospitalizations, homelessness, or justice involvement	Assertive Community Treatment (ACT) team	Multidisciplinary outreach; reduces readmissions ; addresses SDOH
Tardive dyskinesia (AIMS positive >4 weeks)	Psychiatry for VMAT2 inhibitor consideration	Valbenazine or deutetrabenazine; medication regimen adjustment
Pregnancy or pre-conception in patient with schizophrenia	Psychiatry + maternal-fetal medicine	Regimen optimization; avoid valproate, carbamazepine, certain antipsychotics in pregnancy; perinatal care planning
Substance use disorder co-occurring with schizophrenia	Dual-diagnosis behavioral health program	Integrated care; MAT for opioid use disorder; AUDIT-positive patients benefit from naltrexone or acamprosate
SDOH crisis (homelessness, food, transportation)	MA case manager and community resources (SAMHSA, Ryan-White-style program for SPMI where available)	SSBCI benefits; CCBHC; supported housing; food/produce delivery; non-medical transportation

ABBREVIATIONS: ACT = Assertive Community Treatment; AIMS = Abnormal Involuntary Movement Scale; AUDIT = Alcohol Use Disorders Identification Test; CCBHC = Certified Community Behavioral Health Center; CSC = coordinated specialty care; MA = Medicare Advantage; MAT = medication-assisted therapy; NMS = neuroleptic malignant syndrome; PCP = primary care physician; SAMHSA = Substance Abuse and Mental Health Services Administration; SDOH = social determinants of health; SPMI = serious and persistent mental illness; SSBCI = Special Supplemental Benefits for the Chronically Ill; TRS = treatment-resistant schizophrenia; VMAT2 = vesicular monoamine transporter 2

Follow-Up Timing

STATUS	VISIT FREQUENCY ^{1,13}	LABS/MONITORING
New diagnosis/starting antipsychotic	2–4 weeks, then 1, 3, 6 months	Weight and BP every visit × 6 months; fasting glucose/HbA1c + lipid at 12 weeks; CGI-S at each visit; AIMS at 12 weeks; PHQ-9 monthly
Stable on oral antipsychotic	Every 1–3 months	Weight/BP quarterly; HbA1c + lipid annually; AIMS every 6–12 months; PHQ-9, GAD-7 annually; CGI-S each visit
Stable on LAI antipsychotic	At each LAI administration (monthly, Q2W, Q2M, Q3M, or Q6M)	Weight/BP at each visit; metabolic panel annually; AIMS every 6 months (3 in elderly); PHQ-9 annually; CGI-S each visit
Post-psychiatric-hospitalization (HEDIS FUH window)	7 days AND 30 days post-discharge	Schedule 7-day visit BEFORE discharge; medication reconciliation; verify LAI delivery if initiated pre-discharge; PHQ-9 and CGI-S; SDOH outreach
On clozapine	Weekly × 6 months → biweekly months 6–12 → monthly thereafter	ANC at each dispensing per REMS; metabolic panel quarterly first year then annually; myocarditis monitoring first 2 months; seizure assessment at doses >600 mg/d
Age ≥65 with schizophrenia	Quarterly to monthly per stability	AWV annually with MoCA, SDOH, advance care planning; Beers/ anticholinergic review every 3 months; fall risk at each visit; comprehensive geriatric assessment annually
Treatment-resistant schizophrenia (on clozapine)	Monthly (after stabilization)	REMS ANC; metabolic; cognitive screening; full comorbidity sweep; psychiatry co-management; CGI-I trend
Annual Wellness Visit (any patient with schizophrenia)	Annually	PHQ-9; GAD-7; MoCA; SDOH screen; AIMS; metabolic panel; SDOH Z-codes; advance directive review

ABBREVIATIONS: AIMS = Abnormal Involuntary Movement Scale; ANC = absolute neutrophil count; AWV = Annual Wellness Visit; BP = blood pressure; CGI-I = Clinical Global Impression – Improvement; CGI-S = Clinical Global Impression – Severity; FUH = Follow-Up After Hospitalization for Mental Illness (HEDIS); GAD-7 = Generalized Anxiety Disorder-7; HbA1c = glycated hemoglobin; HCC = Hierarchical Condition Category; HEDIS = Healthcare Effectiveness Data and Information Set; LAI = long-acting injectable antipsychotic; MoCA = Montreal Cognitive Assessment; PHQ-9 = Patient Health Questionnaire-9; Q2M/Q2W/Q3M/Q6M = every 2 months/2 weeks/3 months/6 months; REMS = Risk Evaluation and Mitigation Strategy; SDOH = social determinants of health

Comorbidity Management

COMORBIDITY	PCP ACTION ⁶
Cardiovascular disease	10-year ASCVD risk; initiate statin per dyslipidemia guideline; BP target <130/80; aspirin per primary/secondary prevention
Diabetes/metabolic syndrome	Annual HbA1c; lipid; consider GLP-1 RA or SGLT2i in patients with established CVD or CKD. Act on the results proactively with statin and antihypertensive therapy, without deferring to psychiatry
Major depressive disorder	PHQ-9 annually; initiate sertraline, escitalopram, or mirtazapine; refer behavioral health
Dementia	Annual MoCA at AWV; differentiate core cognitive symptoms from progressive dementia; reverse anticholinergic burden first
COPD	Spirometry-confirmed; do not attribute dyspnea to deconditioning or sedation; smoking cessation; inhaler optimization
Substance use (cannabis, alcohol, tobacco)	AUDIT-C, DAST; integrated MAT for OUD; varenicline first-line smoking cessation; avoid bupropion at clozapine >600 mg/d
Osteoporosis	DXA for men ≥50, postmenopausal women; calcium/vitamin D; bisphosphonate if T-score ≤-2.5
Falls/frailty	Fall history each visit; gait observation; minimize sedating and anticholinergic agents; PT referral
Anxiety/insomnia	CBT-I first-line; SSRI for GAD; AVOID benzodiazepines (Beers PIM)
SDOH (housing, food, transportation, isolation)	Annual screening; connect to MA SSBCI benefits; document Z-codes (Z59.0, Z59.41, Z60.2)

ABBREVIATIONS: ASCVD = atherosclerotic cardiovascular disease; AUDIT-C = Alcohol Use Disorders Identification Test – Concise; AWV = Annual Wellness Visit; BP = blood pressure; CBT-I = cognitive behavioral therapy for insomnia; CKD = chronic kidney disease; COA = Care for Older Adults (HEDIS); COPD = chronic obstructive pulmonary disease; CVD = cardiovascular disease; DAST = Drug Abuse Screening Test; D-SNP = Dual-Eligible Special Needs Plan; DXA = dual-energy X-ray absorptiometry; eRR = exposure relative risk; GAD = generalized anxiety disorder; GLP-1 RA = glucagon-like peptide-1 receptor agonist; HbA1c = glycated hemoglobin; HCC = Hierarchical Condition Category; HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MAT = medication-assisted therapy; MoCA = Montreal Cognitive Assessment; MRP = Medication Reconciliation Post-Discharge; OR = odds ratio; OUD = opioid use disorder; PCP = primary care physician; PHQ-9 = Patient Health Questionnaire-9; PIM = potentially inappropriate medication; PT = physical therapy; RAF = Risk Adjustment Factor; SGLT2i = sodium-glucose cotransporter-2 inhibitor; SMC = Cardiovascular Monitoring for People with CVD and Schizophrenia (HEDIS); SMD = Diabetes Monitoring for People with Diabetes and Schizophrenia (HEDIS); SPMI = serious and persistent mental illness; SSBCI = Special Supplemental Benefits for the Chronically Ill; SSD = Diabetes Screening for People with Schizophrenia or Bipolar Disorder (HEDIS); SSRI = selective serotonin reuptake inhibitor; VBC = value-based care

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**



AAVBC PERSPECTIVE: THE MORTALITY GAP IS WHAT MATTERS MOST IN PRIMARY CARE

Public health data and systematic reviews generally place the **premature mortality gap for individuals with schizophrenia between 15 to 25 years earlier than the general population.**⁵⁴ This

gap is **not due to psychosis**, but rather from **cardiovascular disease** driven by antipsychotic metabolic side effects, smoking, poverty, and inadequate preventive care. **Key statistics:**

- Individuals with schizophrenia are more than **twice as likely** to suffer from CVD as the general public⁶
- **Antipsychotic Metabolic Side Effects:** Second-generation (atypical) antipsychotics (while vital for controlling psychosis) commonly cause profound weight gain, insulin resistance, dyslipidemia, and type 2 diabetes. **Over half of patients on long-term treatment meet the criteria for metabolic syndrome**
- **High Smoking Prevalence:** Nicotine dependence is extraordinarily high in this population, with **smoking rates reaching 50% to 80%** (compared to roughly 11-15% of the general adult population). Smoking drastically accelerates arterial plaque buildup and multiplies cardiac risk⁶
- **Inadequate Preventive Care:** Studies show that patients with schizophrenia are under-screened and systematically under-treated for basic physical ailments. For example, data shows that after having a myocardial infarction, **a patient with schizophrenia is half as likely to receive life-saving cardiac procedures** (like angioplasty or bypass) or see a cardiologist compared to someone without a psychiatric diagnosis

AAVBC strongly recommends proactive prevention and early management of comorbidities in schizophrenia through systematic assessment, timely referral, and structured patient education — rather than reactive treatment after complications have developed.

Cost-Smart Options

BRAND (EST. COST/MO) ⁴⁹	GENERIC/ ALTERNATIVE (EST. COST/MO)	EST. MO. SAVINGS	COST-SMART TIP
Abilify (aripiprazole) (~\$580/mo)	Generic aripiprazole (~\$10–140/mo)	~\$440–570/ mo	Lowest metabolic risk among SGAs; preferred first-line in metabolic syndrome; wide generic price variability by pharmacy type — independent pharmacies average \$415 less than chains
Risperdal (risperidone) (~\$250/mo)	Generic risperidone (~\$3–22/mo)	~\$230–247/ mo	Cost-effective first-line SGA ; higher prolactin and EPS risk than aripiprazole; among the most efficacious SGAs in network meta-analysis
Zyprexa (olanzapine) (~\$460/mo)	Generic olanzapine (~\$5–15/mo)	~\$445–455/ mo	Highest metabolic risk (most weight gain among 18 SGAs); reserve for patients without metabolic syndrome or after other SGAs failed

BRAND (EST. COST/MO) ⁴⁹	GENERIC/ ALTERNATIVE (EST. COST/MO)	EST. MO. SAVINGS	COST-SMART TIP
Seroquel (quetiapine) (~\$200–500/mo)	Generic quetiapine (~\$4–7/mo)	~\$195–495/mo	Higher discontinuation rate ; significant sedation and metabolic effects; dose increase ~30% needed in smokers (CYP1A2)
Geodon (ziprasidone) (~\$600/mo)	Generic ziprasidone (~\$8–30/mo)	~\$570–590/mo	Least weight gain among SGAs; QTc monitoring required; baseline ECG recommended
Clozaril (clozapine) (~\$65/10 tabs)	Generic clozapine (~\$7/10 tabs)	~\$58/10 tabs	Only antipsychotic with TRS evidence (recommended by 15/15 CPGs); mandatory REMS ANC monitoring; reserve for treatment-resistant schizophrenia
Rexulti (brexpiprazole) (~\$1,300/mo)	No generic available	—	Brand-only; lower metabolic risk; also FDA-approved for agitation in Alzheimer dementia
Vraylar (cariprazine) (~\$1,300/mo)	No generic available	—	Brand-only; partial D2/D3 agonist; evidence for negative symptoms; long half-life (~2–4 weeks)
Latuda (lurasidone) (~\$1,400/mo)	Generic lurasidone (recently available, ~\$30–100/mo)	~\$1,300/mo	Lowest lifetime metabolic adverse event costs among SGAs in cost-effectiveness modeling; must take with food (≥350 kcal); renal dose adjustment if CrCl 50
Cobenfy (xanomeline-trospium) (~\$1,850/mo est.)	No generic available	—	First non-dopaminergic antipsychotic (muscarinic M1/M4 agonist); no clinically meaningful weight gain, EPS, or prolactin elevation; GI side effects (nausea, constipation) most common; FDA approved 2024

***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions** *Estimated lowest GoodRx price for treatment (varies per patient) unless otherwise noted. Actual cost will vary with insurance and by region. Generic price listed first; brand name price in parentheses

Patient Education and Adherence

DOMAIN	EDUCATION CONTENT	CLINICAL NOTES
Diagnosis understanding	Explain schizophrenia as a chronic brain disorder with treatable symptoms; distinguish positive symptoms (hallucinations, delusions) from negative symptoms (withdrawal, flat affect) and cognitive symptoms; use plain, non-stigmatizing language; clarify that schizophrenia is not "split personality"	Psychoeducation reduces relapse risk; timely and well-balanced psychoeducation improves coping and engagement with treatment; family psychoeducation alone reduced relapse from 37% to 10% vs. TAU (OR 0.18) ⁵⁵
Antipsychotic medication adherence	Explain purpose of medication (symptom control, relapse prevention); discuss that stopping medication is the most common cause of relapse; review dosing schedule, what to do if a dose is missed; discuss LAI option as an alternative to daily pills for patients who prefer it or have adherence challenges	Nonadherence significantly increases hospitalization and relapse risk; LAIs improve adherence and reduce hospitalizations vs. oral antipsychotics; PDC ≥ 0.80 is the HEDIS SAA threshold; self-management education (≥ 10 sessions) improves adherence ¹
Side effect recognition and reporting	Educate on metabolic effects (weight gain, elevated glucose, lipid changes — especially with olanzapine/clozapine); extrapyramidal symptoms (stiffness, tremor, restlessness/akathisia); tardive dyskinesia (involuntary facial/tongue movements — report immediately); sexual side effects (prolactin elevation); sedation and orthostatic hypotension (rise slowly)	Metabolic monitoring: weight, fasting glucose/HbA1c, lipid panel at baseline, 12–16 weeks, then annually per ADA 2026; AIMS screening every 6–12 months (every 3 months in elderly on high-EPS agents); sexual side effects are a common cause of nonadherence — address proactively ^{1,56}
Early warning signs of relapse	Teach patient and family/caregivers to recognize personal relapse signatures: sleep disruption, increased suspiciousness, social withdrawal, mood changes, stopping medication, increased irritability; develop a written relapse prevention plan with specific action steps	Sleep, mood, and suspiciousness are the strongest predictors of worsening symptoms; dual-informant (patient + caregiver) monitoring improves detection ⁵⁷
Crisis warning signs — when to call 911	Seek immediate emergency care for: command hallucinations to harm self or others; serious suicidal ideation with plan or intent; self-harm or preparatory behavior; inability to eat, drink, or care for self; catatonia (staring, mutism, rigidity); severe disorganization preventing basic functioning	VA/DoD 2023 indications for urgent specialty care: serious homicidal/suicidal ideation, command hallucinations impairing safety, catatonia, grossly disorganized behavior, serious self-neglect; signs of delirium require medical evaluation before psychiatric referral ¹³

DOMAIN	EDUCATION CONTENT	CLINICAL NOTES
Substance use avoidance	Counsel on risks of alcohol, cannabis, and stimulant use — these worsen psychotic symptoms, impair medication effectiveness, and increase hospitalization	Lifetime SUD prevalence 41.7% in schizophrenia; nicotine prevalence 70–90%; tobacco accounts for ~53% of deaths in schizophrenia; individualized face-to-face cessation interventions improve quit rates; cannabis is associated with worsening psychotic symptoms ⁵⁸
Metabolic health and lifestyle	Encourage regular physical activity, balanced diet, weight monitoring; explain that antipsychotic medications increase cardiovascular risk; discuss metformin if weight gain occurs; reinforce importance of attending metabolic lab monitoring appointments	Cardiovascular disease is the leading cause of excess mortality in schizophrenia; nonpharmacologic lifestyle interventions reduce metabolic changes ⁶
LAI injection schedule adherence	For patients on LAI: explain the importance of keeping injection appointments; review the specific dosing window (e.g., aripiprazole monohydrate ± 7 days; paliperidone palmitate +14 days); set up reminder systems (phone calls, texts); involve family/caregivers in appointment tracking	If dosing windows are exceeded, catch-up protocols may require supplemental oral antipsychotics for a bridge period or restarting initiation loading regimens entirely; proactive reminder systems and caregiver involvement improve LAI adherence ⁵⁹
Crisis card/ medication wallet card	Provide a wallet-sized card listing: diagnosis, current medications, allergies, emergency contacts, prescribing psychiatrist contact, and advance directive status; recommend MedicAlert bracelet for patients on clozapine (agranulocytosis risk) or with history of NMS	Crisis cards serve both practical (information during incapacity) and psychological functions (improved attitude toward illness and treatment) ⁶⁰
Family/caregiver psychoeducation	Educate family on illness course, medication importance, communication strategies, crisis planning, connect to NAMI or local family support programs; address caregiver burnout	Family psychoeducation is the most efficacious family intervention for relapse prevention ⁶¹
SDOH and community resources	Screen for housing instability, food insecurity, transportation barriers, social isolation, and financial strain at every visit; connect to MA SSBCI benefits, Area Agency on Aging, peer recovery support, supported employment	Document and food insecurity transportation problems, housing instability, and financial strain and connect patient to resources if possible ⁶²

DOMAIN	EDUCATION CONTENT	CLINICAL NOTES
ABBREVIATIONS: ACP = advance care planning; ADA = American Diabetes Association; AIMS = Abnormal Involuntary Movement Scale; AIS = Adult Immunization Status (HEDIS); ASCVD = atherosclerotic cardiovascular disease; AUDIT-C = Alcohol Use Disorders Identification Test – Concise; AWV = Annual Wellness Visit; CGA = comprehensive geriatric assessment; CMS = Centers for Medicare & Medicaid Services; COA = Care for Older Adults (HEDIS); COPD = chronic obstructive pulmonary disease; CPT = Current Procedural Terminology; CTI = Critical Time Intervention; DAE = Use of High-Risk Medications in Older Adults (HEDIS); DMS-E = Utilization of the PHQ-9 to Monitor Depression Symptoms (HEDIS); EPS = extrapyramidal symptoms; ESRD = end-stage renal disease; FUH = Follow-Up After Hospitalization for Mental Illness (HEDIS); GAD-7 = Generalized Anxiety Disorder-7; HbA1c = glycated hemoglobin; HEDIS = Healthcare Effectiveness Data and Information Set; HZV = herpes zoster virus; IET = Initiation and Engagement of Substance Use Disorder Treatment (HEDIS); LAI = long-acting injectable antipsychotic; LDL-C = low-density lipoprotein cholesterol; MA = Medicare Advantage; MIPS = Merit-based Incentive Payment System; MoCA = Montreal Cognitive Assessment; MRP = Medication Reconciliation Post-Discharge (HEDIS); NAMI = National Alliance on Mental Illness; NMS = neuroleptic malignant syndrome; OR = odds ratio; PCV = pneumococcal conjugate vaccine; PCR = Plan All-Cause Readmissions (HEDIS/CMS Star); PDC = proportion of days covered; PHQ-9 = Patient Health Questionnaire-9; PIM = potentially inappropriate medication; SAA = Adherence to Antipsychotic Medications for Individuals with Schizophrenia (HEDIS); SDOH = social determinants of health; SGA = second-generation antipsychotic; SMC = Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia (HEDIS); SMD = Diabetes Monitoring for People with Diabetes and Schizophrenia (HEDIS); SMI = serious mental illness; SSD = Diabetes Screening for People with Schizophrenia or Bipolar Disorder (HEDIS); SSBCI = Special Supplemental Benefits for the Chronically Ill; SUD = substance use disorder; TAU = treatment as usual; Td/Tdap = tetanus-diphtheria/tetanus-diphtheria-pertussis; TRC = Transitions of Care (HEDIS); TSC-E = Tobacco Use Screening and Cessation Intervention (HEDIS); USPSTF = United States Preventive Services Task Force; VA/DoD = Department of Veterans Affairs/Department of Defense; VMAT2 = vesicular monoamine transporter 2		

Quality Metrics Tie-In

MEASURE (MY2026)	STANDARD	APPLICABILITY TO SCHIZOPHRENIA
HEDIS SAA: Adherence to Antipsychotic Medications for Individuals with Schizophrenia	Denominator: enrollees ≥ 18 with schizophrenia (F20.x) and ≥ 2 antipsychotic dispensing events; Numerator: PDC $\geq 80\%$ for antipsychotic medications during measurement year Exclusions: hospice, dementia with antipsychotic use for behavioral symptoms, < 2 antipsychotic fills, and frailty (ages 66–80 with frailty + advanced illness; ages ≥ 81 with frailty alone)	Core schizophrenia-specific measure and CMS Star Rating component; national Medicaid benchmark ~60% adherence rate; LAI antipsychotics improve PDC and directly support this measure; document PDC, LAI injection dates, and next-dose schedule at every encounter²⁷
HEDIS SSD: Diabetes Screening for People with Schizophrenia Using Antipsychotic Medications	Denominator: enrollees 18–64 with schizophrenia dispensed an antipsychotic; Numerator: glucose or HbA1c test during measurement year; Exclusions: hospice	Type 2 diabetes incidence is 1.5–2.5× higher in individuals with schizophrenia; SGAs (especially olanzapine, clozapine) drive metabolic dysregulation; national Medicaid benchmark ~79–89% screening rate; document fasting glucose or HbA1c annually and at 12 weeks post-antipsychotic initiation^{1,49}

MEASURE (MY2026)	STANDARD	APPLICABILITY TO SCHIZOPHRENIA
HEDIS SMD: Diabetes Monitoring for People with Diabetes and Schizophrenia	Denominator: enrollees 18–64 with schizophrenia or bipolar disorder AND diabetes who are on antipsychotics Numerator: HbA1c AND LDL-C test during measurement year; Exclusions: hospice	Monitors ongoing metabolic management in patients with established diabetes; national Medicaid benchmark ~69–81%; corticosteroid-induced hyperglycemia and antipsychotic metabolic effects require close glucose and lipid surveillance; document HbA1c and lipid panel results at each visit ²⁷
HEDIS SMC: Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia	Denominator: enrollees 18–64 with schizophrenia or bipolar disorder AND cardiovascular disease on antipsychotics Numerator: LDL-C test during measurement year; Exclusions: hospice	Patients with SMI die 15–20 years earlier than the general population, primarily from cardiovascular disease; 47% lower likelihood of undergoing invasive coronary procedures in SMI; national Medicaid benchmark ~79–88%; document LDL-C, statin therapy, and ASCVD risk assessment ²⁷
HEDIS FUH: Follow-Up After Hospitalization for Mental Illness	Denominator: enrollees ≥6 with inpatient discharge for mental illness Numerator: outpatient mental health visit within 7 days (FUH-7) or 30 days (FUH-30) of discharge; Exclusions: hospice, transfers, planned readmissions	Suicide risk is highest in the first week post-discharge (2,950 per 100,000 person-years); 7-day follow-up associated with greater medication adherence and lower readmission; national Medicaid benchmark only ~34% at 30 days for SMI; schedule PCP or psychiatry visit before discharge; Critical Time Intervention reduces 30-day readmission ⁶³
HEDIS COA: Care for Older Adults	Denominator: MA/SNP enrollees ≥66, continuously enrolled Numerator: 2 sub-measures documented annually: (1) functional status assessment, (2) medication review Exclusions: hospice, ESRD	42.5% of VA schizophrenia patients are ≥65 ; polypharmacy is universal in elderly schizophrenia (antipsychotics + antihypertensives + statins + antidiabetics); medication review should reconcile anticholinergic burden (OR 2.51 for neurocognitive impairment), Beers PIMs, and fall-risk agents; functional status assessment satisfied by MoCA + G8/CGA; advance care planning (CPT 99497) during stable disease ⁴³
HEDIS DAE: Use of High-Risk Medications in Older Adults	Denominator: enrollees ≥67; Numerator: received ≥1 high-risk medication per Beers Criteria (lower is better) Exclusions: hospice	Anticholinergic antipsychotics, benzodiazepines, and first-generation agents are high-risk in elderly schizophrenia ; prefer aripiprazole, lurasidone, brexpiprazole, cariprazine (lower anticholinergic and sedation burden); document Beers review at each visit; AIMS every 3 months in older patients on high-EPS agents ⁴³

MEASURE (MY2026)	STANDARD	APPLICABILITY TO SCHIZOPHRENIA
HEDIS TRC/MRP: Transitions of Care — Medication Reconciliation Post-Discharge	Denominator: enrollees ≥ 18 with inpatient discharge Numerator: medication reconciliation within 30 days of discharge Exclusions: hospice	Schizophrenia patients have high readmission rates; post-discharge medication reconciliation is critical for antipsychotic continuity, LAI scheduling, metabolic medication management, and crisis-trigger avoidance; pairs with FUH-7 for comprehensive transitional care ⁶⁴
HEDIS TSC-E: Tobacco Use Screening and Cessation Intervention	Denominator 1: enrollees ≥ 12 ; Denominator 2: positive tobacco users Numerator 1: screened with documented tobacco status; Numerator 2: received cessation counseling or pharmacotherapy; Exclusions: death, hospice	Smoking prevalence up to 80% in schizophrenia; primary driver of COPD, lung cancer, and ASCVD mortality contributing to 15–20 year life expectancy gap; document tobacco status at every visit; varenicline or bupropion (caution at clozapine doses >600 mg due to seizure threshold); USPSTF Grade A recommendation ⁶
HEDIS DMS-E: Utilization of the PHQ-9 to Monitor Depression Symptoms	Denominator: enrollees ≥ 12 with diagnosis of major depression or dysthymia AND elevated PHQ-9 ≥ 10 Numerator: follow-up PHQ-9 documented within 4–8 months of index elevated score Exclusions: hospice	46.9% depressive symptoms and 62.5% anxiety at schizophrenia diagnosis; comorbid depression worsens functional outcomes and medication non-adherence; PHQ-9 at every visit; follow-up PHQ-9 within 4–8 months if ≥ 10 ; coordinate with psychiatry for treatment adjustment ⁶⁵
HEDIS PCR (CMS Star): Plan All-Cause Readmissions	Denominator: enrollees ≥ 18 with acute inpatient discharge; Numerator: unplanned readmission within 30 days (lower is better) Exclusions: planned readmissions, hospice, psychiatric (note: psychiatric exclusion varies by program)	Schizophrenia 30-day readmission rates are among the highest of all conditions; primary drivers include medication non-adherence, substance use relapse, homelessness, and untreated medical comorbidities; LAI initiation before discharge, 7-day follow-up, and CTI reduce readmission risk ⁶⁶
MIPS #134: Preventive Care and Screening — Screening for Depression and Follow-Up Plan	Denominator: patients ≥ 12 seen for qualifying visit Numerator: screened for depression using standardized tool (PHQ-9) with documented follow-up plan if positive; Exclusions: active depression diagnosis with documented treatment	Depression comorbidity in schizophrenia is underdiagnosed; PHQ-9 ≥ 10 triggers follow-up plan (pharmacotherapy, referral, or additional evaluation); satisfies MIPS quality reporting and aligns with HEDIS DMS-E ⁶⁷

MEASURE (MY2026)	STANDARD	APPLICABILITY TO SCHIZOPHRENIA
MIPS #130: Documentation of Current Medications in the Medical Record	Denominator: patients ≥ 18 with qualifying visit Numerator: current medications documented or notation that no medications are prescribed; Exclusions: none	Polypharmacy in schizophrenia requires meticulous medication reconciliation; document antipsychotic (name, dose, route, frequency, PDC), metabolic medications, and crisis-trigger avoidance list at every encounter ⁶⁸
MIPS #431: Preventive Care and Screening — Unhealthy Alcohol Use	Denominator: patients ≥ 18 with qualifying visit Numerator: screened for unhealthy alcohol use using validated tool (AUDIT-C) with brief counseling if positive Exclusions: none	Substance use disorders are significantly associated with antipsychotic medication non-adherence in schizophrenia; AUDIT-C at every visit; brief intervention + referral within 2 months of positive screen; aligns with HEDIS IET ⁵⁸

CODING REMINDERS AND CASE EXAMPLES

Coding Specificity

CODING DECISION	GUIDANCE
F20.x subcode selection (the F20.9 trap)	Specify subtype: F20.0 (paranoid) , F20.1 (disorganized) , F20.2 (catatonic) , F20.3 (undifferentiated) , F20.5 (residual) , F20.81 (schizophreniform) , F20.89 (other) . All map to HCC 151) — F20.9 (unspecified) overuse is the most common coding error. Review clinical notes to assign the most specific subcode supported by documentation ²¹
Schizoaffective disorder (F25.x) vs schizophrenia (F20.x)	F25.0 (bipolar type) and F25.1 (depressive type) require both psychotic AND mood disorder criteria met concurrently throughout the illness — not just during exacerbations. Both still map to HCC 151 but the diagnosis must be clinically accurate. Document concurrent symptom presence explicitly; do not default to F25.x to avoid diagnostic uncertainty
Schizophrenia in long-term care	CMS audits specifically target schizophrenia diagnoses in nursing facilities used to justify antipsychotic prescribing for behavioral symptoms of dementia. Documentation must support persistent psychotic symptoms (hallucinations, delusions, disorganized behavior) with onset predating dementia. Residents with schizophrenia, Tourette syndrome, or Huntington's disease are EXEMPT from the CMS antipsychotic quality indicator

CODING DECISION	GUIDANCE
Schizophrenia with comorbid dementia	Both can be coded together: F20.5 (residual schizophrenia, HCC 151) + F03.91 (dementia with behavioral disturbance, HCC 125/126/127 by severity) . The patient with longstanding schizophrenia who develops dementia in late life carries both diagnoses. Document chronologic onset to support both
Depression severity (HCC 155)	F32.1 (moderate) and F32.2 (severe), F33.1/F33.2 (recurrent) → HCC 155 RAF 0.299. F32.9 (unspecified) does NOT map to HCC 155. PHQ-9 score should be documented to justify severity
Diabetes complications	E11.21 (with nephropathy), E11.22 (with CKD), E11.40 (with neuropathy) → HCC 37 RAF 0.166; E11.9 (without complications) misses HCC 37 entirely. Antipsychotic-associated diabetes increasingly common — code complications explicitly when present
Schizophrenia not on the claim at unrelated-encounter visits	Schizophrenia is chronic — code F20.x at every visit , not just behavioral health visits. Frequently missed when patient is seen for hip pain, pneumonia, or annual flu shot. Annual documentation required for continuous HCC 151 risk adjustment
SDOH Z-codes	Z59.0 (homelessness), Z59.41 (food insecurity), Z60.2 (social isolation), Z63.x (relationship problems) — support BOTH risk adjustment AND MA supplemental benefit access. Document SDOH findings using these codes; do not relegate to non-claim documentation only

ABBREVIATIONS: CKD = chronic kidney disease; CMS = Centers for Medicare & Medicaid Services; CNA = Community Non-Dual Eligible, Aged segment of CMS-HCC V28; E11 = ICD-10 chapter for type 2 diabetes mellitus; F03/F20/F25/F32/F33 = ICD-10 chapters; HCC = Hierarchical Condition Category; MA = Medicare Advantage; PHQ-9 = Patient Health Questionnaire-9; RAF = Risk Adjustment Factor; SDOH = social determinants of health; Z59/Z60/Z63 = ICD-10 chapters for SDOH

Annual Clinical Review and Confirmation

- **Confirm and record F20.x subtype:** Review chart for the most specific schizophrenia subtype documented; code at AWV (G0438/G0439) for annual HCC 151 support; do not default to **F20.9** if **F20.0–F20.5** documentation is available
- **Document active symptom pattern at the visit:** CGI-S at each visit; PHQ-9, GAD-7 annually; MoCA annually for patients ≥50; AIMS exam at appropriate interval
- **Document the full comorbidity sweep:** Document the full comorbidity sweep at every encounter: dementia (**F03.A0/B0/C0**), MDD (**F32.0–F32.3, F33.0–F33.3**; HCC 155), bipolar (**F31.1x–F31.4, F31.81**), diabetes with complications (**E11.21–E11.52, E11.621** — avoid **E11.9**), heart failure (**I50.22/I50.32/I50.84** — avoid **I50.9**), COPD (**J44.0/J44.1**), SUD (**F10.20, F11.20, F12.20, F15.20, F17.210**)
- **Re-confirm antipsychotic regimen, statin status, and Beers review:** Document regimen by name, dose, route, and class; statin per ASCVD risk (do not defer to psychiatry); Beers/anticholinergic review with deprescribing actions documented; document AIMS result

Good Documentation is Comprehensive Coding

EHR SHORTCUT/RISK	PREFERRED DOCUMENTATION LANGUAGE
Coding F20.9 (schizophrenia, unspecified) when clinical subtype is established	" Paranoid schizophrenia (F20.0) , multiple episodes, currently in partial remission; diagnosed age 22; AChR subtype confirmed by longitudinal symptom pattern per DSM-5-TR course specifiers" — use the most specific subtype code available (F20.0 paranoid , F20.1 disorganized , F20.2 catatonic , F20.3 undifferentiated , F20.5 residual)
Using F20.81 (schizophreniform disorder) after illness duration exceeds 6 months	F20.81 is reserved for psychotic episodes lasting 1–6 months ; once duration exceeds 6 months, reclassify to the appropriate F20.x schizophrenia code. " Paranoid schizophrenia (F20.0) , first episode, currently in acute episode — duration now 8 months, reclassified from schizophreniform (F20.81) "
Documenting "schizophrenia, stable" without validated severity measure	" Paranoid schizophrenia (F20.0) , CGI-S = 2 (borderline ill); PANSS-6 negative subscale mild; MG-ADL equivalent: MoCA 25/30 (stable); PDC 100% on aripiprazole LAI 400 mg IM monthly" — measurement-based care (MBC) documentation with CGI-S at every visit supports HEDIS SAA and value-based reporting
Not coding tardive dyskinesia when AIMS is positive	" Tardive dyskinesia (G24.01) , AIMS total score 8 (mild orofacial); onset after 3+ years of antipsychotic exposure; currently monitoring — VMAT2 inhibitor discussion deferred per patient preference" — G24.01 must be coded as an active diagnosis when AIMS confirms involuntary movements meeting DSM-5-TR criteria (≥4 weeks duration)
Coding "psychosis NOS" (F29) in a patient with confirmed schizophrenia	Reserve F29 only for undiagnosed or diagnostically uncertain psychotic presentations. " Paranoid schizophrenia (F20.0) , continuous course, AChR-positive — NOT psychotic disorder NOS" — F29 suppresses HCC mapping and flattens clinical specificity
Not documenting metabolic monitoring on antipsychotic therapy	"Metabolic surveillance on aripiprazole LAI: fasting glucose 102 mg/dL, HbA1c 5.9%, LDL 118 mg/dL, BMI 28.4, waist circumference 38 in, BP 132/78 — initiating atorvastatin 20 mg per ASCVD risk; HEDIS SSD diabetes screening completed [date]"
"On antipsychotic" without specifying agent, route, dose, adherence, or LAI schedule	"Aripiprazole LAI (Abilify Maintena) 400 mg IM monthly; last injection [date]; next due [date]; PDC 100% (HEDIS SAA); no missed doses in 12 months; AIMS [date]: no abnormal movements"
Not coding comorbid tobacco use disorder	" Nicotine dependence, cigarettes (F17.210) ; 1 PPD × 40 years; varenicline discussed — patient declined; brief counseling provided (G0436); annual LDCT screening eligible per USPSTF" — tobacco use disorder is an independent HCC-relevant and HEDIS-relevant diagnosis

EHR SHORTCUT/RISK	PREFERRED DOCUMENTATION LANGUAGE
Documenting "depression" without linking to schizophrenia comorbidity or using validated scale	"Major depressive disorder, recurrent, moderate (F33.1), comorbid with paranoid schizophrenia (F20.0); PHQ-9 = 12 today (baseline 18); on sertraline 100 mg/day; GAD-7 = 8; coordinate with psychiatry" — code each separately with validated scores
Using Z87.x ("history of") for active schizophrenia in remission	Active schizophrenia in remission is still coded F20.x with course specifier "in full remission" — do NOT use Z87.x , which zeroes out HCC. "Paranoid schizophrenia (F20.0), multiple episodes, currently in full remission; on maintenance aripiprazole LAI"
Not documenting cognitive impairment in schizophrenia	"Cognitive deficit associated with schizophrenia: MoCA 24/30 (cut-off ≤25); DSST 52 (cut-off ≤59); attention and concentration deficit (R41.840); trend stable from prior year; no functional decline" — cognitive impairment is a core feature and should be coded and tracked longitudinally

ABBREVIATIONS: AChR = acetylcholine receptor; AIMS = Abnormal Involuntary Movement Scale; ASCVD = atherosclerotic cardiovascular disease; BMI = body mass index; BP = blood pressure; CGI-S = Clinical Global Impression – Severity scale; DSM-5-TR = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision; DSST = Digit Symbol Substitution Test; GAD-7 = Generalized Anxiety Disorder 7-item scale; HbA1c = hemoglobin A1c; HCC = hierarchical condition category; HEDIS = Healthcare Effectiveness Data and Information Set; IM = intramuscular; LAI = long-acting injectable; LDL = low-density lipoprotein; LDCT = low-dose computed tomography; MBC = measurement-based care; MoCA = Montreal Cognitive Assessment; NOS = not otherwise specified; PANSS = Positive and Negative Syndrome Scale; PDC = proportion of days covered; PHQ-9 = Patient Health Questionnaire 9-item; PPD = packs per day; SAA = Adherence to Antipsychotic Medications for Individuals with Schizophrenia (HEDIS measure); SSD = Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (HEDIS measure); USPSTF = United States Preventive Services Task Force; VMAT2 = vesicular monoamine transporter 2

EHR Workflow Tips

TAG	TIP
SMARTPHRASE	.SCHIZ_VISIT — auto-populates: F20.x with subtype justification ; CGI-S today; current antipsychotic regimen with name/dose/route/class; AIMS result with date; PHQ-9 score; MoCA score; Beers review attestation; comorbidity sweep
FILTER	Build a registry: all patients with F20.x or F25.x not seen in ≥9 months → outreach for AWV; no metabolic panel in past 12 months → flag for HEDIS SSD/SMD/SMC recovery; recently hospitalized → schedule 7-day visit pre-discharge for FUH measure
PROBLEM LIST	Pin F20.x (with subtype) at top with year of onset; pin all active HCC-relevant comorbidities; remove generic 'schizophrenia' that defaults to F20.9
ANNUAL DX	AWV order set should auto-attest: F20.x , depression severity, dementia severity, diabetes with complications, heart failure, COPD, substance use disorder, SDOH Z-codes — each as a one-click acknowledgement
ORDER SET	'Schizophrenia AWV' set: fasting glucose/HbA1c, lipid panel, weight, BP, waist circumference, MoCA, PHQ-9, GAD-7, AIMS, statin (if ASCVD risk ≥10%); vaccination check; SDOH screen

TAG	TIP
REFERRAL	Embedded one-click: psychiatry/CSC; CoCM; ACT for high-need; geriatric psychiatry for cognitive concerns; PT for falls; ophthalmology if on long-term chlorpromazine/thioridazine

ABBREVIATIONS: ACT = Assertive Community Treatment; AIMS = Abnormal Involuntary Movement Scale; ASCVD = atherosclerotic cardiovascular disease; AWV = Annual Wellness Visit; BP = blood pressure; CGI-S = Clinical Global Impression – Severity; CoCM = Collaborative Care Model; COPD = chronic obstructive pulmonary disease; CSC = coordinated specialty care; EHR = electronic health record; F20/F25 = ICD-10 chapters for schizophrenia/schizoaffective; FUH = Follow-Up After Hospitalization for Mental Illness (HEDIS); GAD-7 = Generalized Anxiety Disorder-7; HbA1c = glycated hemoglobin; HCC = Hierarchical Condition Category; HEDIS = Healthcare Effectiveness Data and Information Set; MoCA = Montreal Cognitive Assessment; PHQ-9 = Patient Health Questionnaire-9; PT = physical therapy; SDOH = social determinants of health; SMC/SMD/SSD = HEDIS measures

Brief Case Examples

SUCCESS: COMPREHENSIVE DOCUMENTATION

SCENARIO: A 73-year-old man with paranoid schizophrenia (**F20.0**) diagnosed at age 22, stable on aripiprazole LAI 400 mg IM monthly for 8 years, presents for his Annual Wellness Visit. History of one prior psychiatric hospitalization (2017).

Documentation: "**F20.0 — paranoid schizophrenia**, active, multiple episodes, currently in partial remission. CGI-S = 2 (borderline ill); no acute positive symptoms; PANSS-negative subscale mild. Aripiprazole LAI (Abilify Maintena) 400 mg IM monthly — last injection [date]; next dose 6/15/2026; PDC 100% (HEDIS SAA satisfied). AIMS today: no abnormal movements (**G24.01** excluded). **MoCA 25/30** (stable from prior year; cut-off ≤25 — borderline, trend longitudinally). **PHQ-9 = 5 (no major depression)**. **E11.22 — T2DM with CKD stage 3a**; HbA1c 7.0%; metformin 1000 mg BID + empagliflozin 10 mg daily; nephrology co-management; HEDIS SSD diabetes screening completed [date]; HEDIS SMD diabetes monitoring (HbA1c + LDL-C) completed [date]. **I25.10 — ASCVD without angina**; atorvastatin 40 mg daily; LDL 118 → titrate to 80 mg per ACC/AHA; HEDIS SMC cardiovascular monitoring (LDL-C) completed [date]. **J44.9 — COPD**, moderate; ICS-LABA; spirometry [date]; influenza and PCV20 current. **F17.211 — nicotine dependence**, cigarettes, in remission; 40 pack-years; cessation maintained since 2019; HEDIS TSC-E tobacco screening documented. Beers Criteria review: no potentially inappropriate medications identified (HEDIS DAE). **SDOH:** stable housing, food-secure, Medicaid transport benefit active; PRAPARE screening completed [date]. Advance directive on file; healthcare proxy designated; CPT 99497 advance care planning documented (HEDIS ACP + COA sub-measure satisfied). Functional status assessment completed per HEDIS COA. **Plan: continue aripiprazole LAI monthly**; titrate atorvastatin to 80 mg; repeat HbA1c and lipid panel in 12 months; MoCA at next AWV; AIMS in 6 months; PHQ-9/GAD-7 annually; nephrology follow-up for CKD 3a; return 3 months or sooner for new psychotic symptoms, medication side effects, or functional decline."

Outcome: Schizophrenia HCC documented with explicit **F20.0 (active, not Z87.x "history of")**; T2DM with CKD (**E11.22**) coded as a single combination code reflecting metabolic-renal complexity; ASCVD (**I25.10**) and COPD (**J44.9**) coded as distinct active comorbidities; nicotine dependence in remission (**F17.211**) documented separately from COPD. **Every MEAT element present:** Monitor — CGI-S, MoCA, AIMS, PHQ-9, metabolic panel, PDC tracked at each encounter; Evaluate — metabolic surveillance (fasting glucose, HbA1c, LDL-C, eGFR), cognitive screening, SDOH, Beers review, functional status; Assess — schizophrenia severity and stability, comorbidity burden, polypharmacy risk, SDOH adequacy; Treat — aripiprazole LAI continued with documented adherence, statin titrated, antidiabetic regimen maintained, smoking cessation reinforced, advance care planning completed. **HEDIS measures met at this single encounter:** SAA (antipsychotic adherence PDC ≥80%), SSD (diabetes screening), SMD (diabetes monitoring), SMC (cardiovascular monitoring), TSC-E (tobacco screening), DAE (high-risk medication

review), COA (functional status + medication review + pain assessment + advance care planning), ACP (advance directive documented).

P PITFALL: INSUFFICIENT DOCUMENTATION

Patient: 68-year-old woman with schizophrenia diagnosed 1985, prior hospitalization 2009, currently on olanzapine 20 mg, last seen 18 months ago.

Documentation as written: "Schizophrenia — **F20.9**. Mild depression — **F32.9**. Reduced renal function. On olanzapine. Smokes 1 pack/day. Lives alone. BP 152/94. Weight up 18 lbs in 2 yr. Last HbA1c 2 yr ago = 6.8."

Consequence: **F20.9** (unspecified) instead of **F20.0** (paranoid) — when the clinical subtype has been established over 39 years of illness, **unspecified coding suppresses diagnostic specificity and may affect HCC mapping accuracy**. The DSM-5-TR course specifiers (multiple episodes, currently in partial remission) should be documented. **F32.9** (unspecified depressive episode) instead of **F33.1** (recurrent MDD, moderate) — a single-episode code in a patient with chronic schizophrenia and likely recurrent depressive episodes understates severity. Validated scoring (PHQ-9) is absent from this note. "Reduced renal function" unstaged — without eGFR and CKD stage documentation (e.g., **N18.31** for CKD 3a), **the renal diagnosis cannot be mapped to the appropriate HCC**. Olanzapine 20 mg without metabolic surveillance — olanzapine produces significantly more weight gain, cholesterol elevation, and glucose increase than all other SGAs except clozapine. The 18-lb weight gain over 2 years is consistent with olanzapine-driven metabolic dysregulation. No fasting glucose, HbA1c, or lipid panel has been performed in over 12 months, **missing HEDIS SSD** (diabetes screening benchmark ~79–92%), **SMD** (diabetes monitoring), and **SMC** (cardiovascular monitoring).

RAF Impact: Missed HCC documentation for recurrent major depression, CKD, and ASCVD at this encounter; HEDIS SSD/SMD/SMC/SAA/COA all unmet; olanzapine-driven metabolic deterioration without surveillance predicts future hospitalization for diabetic complication or cardiovascular event.

Fix — Re-documented encounter: "**F20.0** — paranoid schizophrenia, multiple episodes, currently in partial remission; CGI-S = 3 (mildly ill); persistent paranoid ideation without acute positive symptoms. **F33.1** — recurrent MDD, moderate; PHQ-9 = 13; initiating sertraline 50 mg daily. **N18.31** — CKD stage 3a (eGFR 51); nephrology referral placed. Switching olanzapine 20 mg → aripiprazole 15 mg PO daily (add-on taper strategy per evidence for lower hazard of discontinuation vs. direct switch). Initiating atorvastatin 40 mg per ASCVD risk (10-year risk calculated). **F17.210** — nicotine dependence, cigarettes, uncomplicated; 1 PPD × 40 years; varenicline discussed, patient considering; brief counseling provided (G0436). MoCA today 22/30 — initiating annual cognitive monitoring; DSST 48 (below cut-off ≤59). AIMS today: no abnormal movements (**G24.01** excluded). Metabolic panel completed: fasting glucose 118 mg/dL, HbA1c 6.8%, LDL 142 mg/dL, BMI 33.2 — HEDIS SSD, SMD, SMC satisfied. Beers review: no PIMs identified (HEDIS DAE). SDOH: **Z60.2** (living alone); referred for community health worker outreach and MA SSBCI grocery benefit; PRAPARE screening completed. Advance directive on file; **CPT 99497** documented (HEDIS ACP + COA). Plan: aripiprazole cross-titration over 4 weeks with olanzapine taper; atorvastatin 40 mg daily; sertraline 50 mg daily; repeat HbA1c/lipids in 12 weeks; MoCA at next AWW; AIMS in 6 months; PHQ-9 in 4–8 weeks; 30-day return for antipsychotic switch follow-up.

REFERENCES

1. Marder SR, Cannon TD. Schizophrenia. Ropper AH, ed. *N Engl J Med*. 2019;381(18):1753-1761. doi:10.1056/NEJMr1808803
2. Muchtar E, Blauwet LA, Gertz MA. Restrictive Cardiomyopathy: Genetics, Pathogenesis, Clinical Manifestations, Diagnosis, and Therapy. *Circ Res*. 2017;121(7):819-837. doi:10.1161/CIRCRESAHA.117.310982

3. Ringeisen H, Edlund M, Guyer H, et al. Prevalence of Past-Year Mental and Substance Use Disorders, 2021-2022. *Psychiatr Serv Wash DC*. 2025;76(8):720-728. doi:10.1176/appi.ps.20240329
4. Krasa HB, Baumgardner JR, Brewer IP, et al. National and State Societal Costs of Schizophrenia in the US in 2024. *JAMA Psychiatry*. 2026;83(4):341. doi:10.1001/jamapsychiatry.2025.4383
5. Correll CU, Solmi M, Croatto G, et al. Mortality in people with schizophrenia: a systematic review and meta-analysis of relative risk and aggravating or attenuating factors. *World Psychiatry Off J World Psychiatr Assoc WPA*. 2022;21(2):248-271. doi:10.1002/wps.20994
6. Goldfarb M, De Hert M, Detraux J, et al. Severe mental illness and cardiovascular disease: JACC state-of-the-art review. *J Am Coll Cardiol*. 2022;80(9):918-933.
7. Mitchell AJ, Vancampfort D, Sweers K, van Winkel R, Yu W, De Hert M. Prevalence of metabolic syndrome and metabolic abnormalities in schizophrenia and related disorders--a systematic review and meta-analysis. *Schizophr Bull*. 2013;39(2):306-318. doi:10.1093/schbul/sbr148
8. American Diabetes Association Professional Practice Committee for Diabetes*, Bajaj M, McCoy RG, et al. Summary of Revisions: Standards of Care in Diabetes—2026. *Diabetes Care*. 2026;49(Supplement_1):S6-S12. doi:10.2337/dc26-SREV
9. Savill M, Loewy RL, Niendam TA, et al. The diagnostic accuracy of screening for psychosis spectrum disorders in behavioral health clinics integrated into primary care. *Schizophr Res*. 2024;266:190-196. doi:10.1016/j.schres.2024.02.007
10. Liu G, Zhang X, Huo X, Li W. Prevalence, Influencing Factors, and Clinical Characteristics of Cognitive Impairment in Elderly Patients With Schizophrenia. *Front Psychiatry*. 2022;13:910814. doi:10.3389/fpsy.2022.910814
11. Gerretsen P, Menon M, Chakravarty MM, et al. Illness denial in schizophrenia spectrum disorders: A function of left hemisphere dominance. *Hum Brain Mapp*. 2015;36(1):213-225. doi:10.1002/hbm.22624
12. Correll CU, Lauriello J. Using Long-acting Injectable Antipsychotics to Enhance the Potential for Recovery in Schizophrenia. *J Clin Psychiatry*. 2020;81(4). doi:10.4088/JCP.MS19053AH5C
13. First-Episode M of, Psychosis and Schizophrenia Work Group. VA/DoD Clinical Practice Guideline. Published online 2023.
14. Owen MJ, Sawa A, Mortensen PB. Schizophrenia. *Lancet Lond Engl*. 2016;388(10039):86-97. doi:10.1016/S0140-6736(15)01121-6
15. Jauhar S, Johnstone M, McKenna PJ. Schizophrenia. *Lancet Lond Engl*. 2022;399(10323):473-486. doi:10.1016/S0140-6736(21)01730-X
16. Chen Y, Li W. Prevalence, Influencing Factors, and Cognitive Characteristics of Depressive Symptoms in Elderly Patients with Schizophrenia. *Neuropsychiatr Dis Treat*. 2021;17:3645-3654. doi:10.2147/NDT.S341297
17. Hoertel N, Jaffré C, Pascal de Raykeer R, et al. Subsyndromal and syndromal depressive symptoms among older adults with schizophrenia spectrum disorder: Prevalence and associated factors in a multicenter study. *J Affect Disord*. 2019;251:60-70. doi:10.1016/j.jad.2019.03.007
18. Peleikis DE, Varga M, Sundet K, Lorentzen S, Agartz I, Andreassen OA. Schizophrenia patients with and without Post-traumatic Stress Disorder (PTSD) have different mood symptom levels but same cognitive functioning. *Acta Psychiatr Scand*. 2013;127(6):455-463. doi:10.1111/acps.12041

19. Panayi P, Berry K, Sellwood W, Campodonico C, Bentall RP, Varese F. The Role and Clinical Correlates of Complex Post-traumatic Stress Disorder in People With Psychosis. *Front Psychol*. 2022;13:791996. doi:10.3389/fpsyg.2022.791996
20. Badcock JC, Shah S, Mackinnon A, et al. Loneliness in psychotic disorders and its association with cognitive function and symptom profile. *Schizophr Res*. 2015;169(1-3):268-273. doi:10.1016/j.schres.2015.10.027
21. Stroup TS, Olfson M, Huang C, et al. Age-Specific Prevalence and Incidence of Dementia Diagnoses Among Older US Adults With Schizophrenia. *JAMA Psychiatry*. 2021;78(6):632. doi:10.1001/jamapsychiatry.2021.0042
22. Pathak US, Mehralizade A, Goldberg TE, Zoghbi AW. Dementia in Severe Schizophrenia. *JAMA Psychiatry*. 2026;83(6):590. doi:10.1001/jamapsychiatry.2026.0171
23. Lieberman JA, First MB. Psychotic Disorders. Ropper AH, ed. *N Engl J Med*. 2018;379(3):270-280. doi:10.1056/NEJMr1801490
24. Edition F. Diagnostic and statistical manual of mental disorders. *Am Psychiatr Assoc*. 2013;21(21):591-643.
25. Gil-Berrozpe GJ, Sánchez-Torres AM, García de Jalón E, et al. Utility of the MoCA for cognitive impairment screening in long-term psychosis patients. *Schizophr Res*. 2020;216:429-434. doi:10.1016/j.schres.2019.10.054
26. Heckers S, Walther S. Catatonia. Ropper AH, ed. *N Engl J Med*. 2023;389(19):1797-1802. doi:10.1056/NEJMr2116304
27. Ng-Mak D, Rajagopalan K. Examining quality of care for individuals treated for mental health using the HEDIS mental health quality measures. *Curr Med Res Opin*. 2019;35(1):87-95. doi:10.1080/03007995.2018.1532883
28. Andreasen NC, Carpenter WT, Kane JM, Lasser RA, Marder SR, Weinberger DR. Remission in schizophrenia: proposed criteria and rationale for consensus. *Am J Psychiatry*. 2005;162(3):441-449. doi:10.1176/appi.ajp.162.3.441
29. Gurrera RJ, Gearin PF, Love J, et al. Recognition and management of clozapine adverse effects: A systematic review and qualitative synthesis. *Acta Psychiatr Scand*. 2022;145(5):423-441. doi:10.1111/acps.13406
30. Mangurian C, Schillinger D, Newcomer JW, et al. Diabetes Screening among Antipsychotic-Treated Adults with Severe Mental Illness in an Integrated Delivery System: A Retrospective Cohort Study. *J Gen Intern Med*. 2018;33(1):79-86. doi:10.1007/s11606-017-4205-9
31. Agüera-Ortiz L, Aragonés E, Buch-Vicente B, Mendive JM, Peña M, Vieta E. Cognitive symptoms in schizophrenia: an analysis of awareness, assessment, and management practices among psychiatrists and primary care physicians. *Front Psychiatry*. 2025;16:1567410. doi:10.3389/fpsyg.2025.1567410
32. Arango C, Fagiolini A, Gorwood P, et al. Delphi panel to obtain clinical consensus about using long-acting injectable antipsychotics to treat first-episode and early-phase schizophrenia: treatment goals and approaches to functional recovery. *BMC Psychiatry*. 2023;23(1):453. doi:10.1186/s12888-023-04928-0
33. Che SE, Gwon YG, Kim KH. Follow-Up Timing After Discharge and Suicide Risk Among Patients Hospitalized With Psychiatric Illness. *JAMA Netw Open*. 2023;6(10):e2336767. doi:10.1001/jamanetworkopen.2023.36767
34. Galderisi S, Mucci A, Buchanan RW, Arango C. Negative symptoms of schizophrenia: new developments and unanswered research questions. *Lancet Psychiatry*. 2018;5(8):664-677. doi:10.1016/S2215-0366(18)30050-6
35. Hua LL, Alderman EM, Chung RJ, et al. Collaborative care in the identification and management of psychosis in adolescents and young adults. *Pediatrics*. 2021;147(6):e2021051486.

36. Tsai MT, Lee SM, Chen HK, Wu BJ. Association between frailty and its individual components with the risk of falls in patients with schizophrenia spectrum disorders. *Schizophr Res*. 2018;197:138-143. doi:10.1016/j.schres.2018.01.023
37. US Preventive Services Task Force, Davidson KW, Barry MJ, et al. Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2021;325(19):1965. doi:10.1001/jama.2021.6238
38. US Preventive Services Task Force, Nicholson WK, Silverstein M, et al. Screening for Breast Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2024;331(22):1918. doi:10.1001/jama.2024.5534
39. American Academy of Child and Adolescent Psychiatry. Practice parameter for the assessment and treatment of children and adolescents with schizophrenia. American Academy of Child and Adolescent Psychiatry. *J Am Acad Child Adolesc Psychiatry*. 2001;40(7 Suppl):4S-23S. doi:10.1097/00004583-200107001-00002
40. Fusar-Poli P, Borgwardt S, Bechdolf A, et al. The Psychosis High-Risk State: A Comprehensive State-of-the-Art Review. *JAMA Psychiatry*. 2013;70(1):107. doi:10.1001/jamapsychiatry.2013.269
41. Wunderink L, Nieboer RM, Wiersma D, Sytema S, Nienhuis FJ. Recovery in Remitted First-Episode Psychosis at 7 Years of Follow-up of an Early Dose Reduction/Discontinuation or Maintenance Treatment Strategy: Long-term Follow-up of a 2-Year Randomized Clinical Trial. *JAMA Psychiatry*. 2013;70(9):913. doi:10.1001/jamapsychiatry.2013.19
42. Gaebel W, Stricker J, Riesbeck M. The long-term antipsychotic treatment of schizophrenia: A selective review of clinical guidelines and clinical case examples. *Schizophr Res*. 2020;225:4-14. doi:10.1016/j.schres.2019.10.049
43. 2023 American Geriatrics Society Beers Criteria® Update Expert Panel. American Geriatrics Society 2023 updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *J Am Geriatr Soc*. 2023;71(7):2052-2081.
44. Howes OD, Murray RM. Schizophrenia: an integrated sociodevelopmental-cognitive model. *Lancet Lond Engl*. 2014;383(9929):1677-1687. doi:10.1016/S0140-6736(13)62036-X
45. Howard R, Cort E, Bradley R, et al. Antipsychotic treatment of very late-onset schizophrenia-like psychosis (ATLAS): a randomised, controlled, double-blind trial. *Lancet Psychiatry*. 2018;5(7):553-563. doi:10.1016/S2215-0366(18)30141-X
46. Bowie CR, Harvey PD. Cognitive deficits and functional outcome in schizophrenia. *Neuropsychiatr Dis Treat*. 2006;2(4):531-536. doi:10.2147/ndt.2006.2.4.531
47. Keepers GA, Fochtmann LJ, Anzia JM, et al. The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia. *Focus*. 2020;18(4):493-497.
48. Gören JL, Meterko M, Williams S, et al. Antipsychotic prescribing pathways, polypharmacy, and clozapine use in treatment of schizophrenia. *Psychiatr Serv*. 2013;64(6):527-533.
49. Crawford P, Go KV. Schizophrenia. *Am Fam Physician*. 2022;106(4):388-396.
50. Kane JM, Schooler NR, Marcy P, et al. Effect of Long-Acting Injectable Antipsychotics vs Usual Care on Time to First Hospitalization in Early-Phase Schizophrenia: A Randomized Clinical Trial. *JAMA Psychiatry*. 2020;77(12):1217. doi:10.1001/jamapsychiatry.2020.2076
51. Buckley PF, Miller BJ, Lehrer DS, Castle DJ. Psychiatric comorbidities and schizophrenia. *Schizophr Bull*. 2009;35(2):383-402.

52. Rose B, Harvey PD. Anosognosia in schizophrenia. *CNS Spectr*. 2024;30(1):e24. doi:10.1017/S1092852924002323
53. 2023 American Geriatrics Society Beers Criteria® Update Expert Panel. American Geriatrics Society 2023 updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *J Am Geriatr Soc*. 2023;71(7):2052-2081.
54. Gatov E, Rosella L, Chiu M, Kurdyak PA. Trends in standardized mortality among individuals with schizophrenia, 1993–2012: a population-based, repeated cross-sectional study. *Cmaj*. 2017;189(37):E1177-E1187.
55. Xia J, Merinder LB, Belgamwar MR. Psychoeducation for schizophrenia. Cochrane Schizophrenia Group, ed. *Cochrane Database Syst Rev*. 2011;2013(1). doi:10.1002/14651858.CD002831.pub2
56. American Diabetes Association. Standards of medical care in diabetes—2011. *Diabetes Care*. 2011;34(Supplement_1):S11-S61.
57. Gleeson JF, McGuckian TB, Fernandez DK, et al. Systematic review of early warning signs of relapse and behavioural antecedents of symptom worsening in people living with schizophrenia spectrum disorders. *Clin Psychol Rev*. 2024;107:102357. doi:10.1016/j.cpr.2023.102357
58. Salahuddin NH, Herlitzius E, Schütz A, et al. Psychological and Psychosocial Interventions for People With Schizophrenia and Co-Occurring Substance Use Disorders: A Systematic Review and Meta-Analysis. *JAMA Psychiatry*. 2026;83(4):353. doi:10.1001/jamapsychiatry.2025.4390
59. Saklad SR. Solutions to common issues in the use of LAIs. *CNS Spectr*. 2025;30(S1):S45-S50. doi:10.1017/S1092852925100552
60. Sutherby K, Szmukler GI, Halpern A, et al. A study of "crisis cards" in a community psychiatric service. *Acta Psychiatr Scand*. 1999;100(1):56-61. doi:10.1111/j.1600-0447.1999.tb10914.x
61. Rodolico A, Bighelli I, Avanzato C, et al. Family interventions for relapse prevention in schizophrenia: a systematic review and network meta-analysis. *Lancet Psychiatry*. 2022;9(3):211-221. doi:10.1016/S2215-0366(21)00437-5
62. Eder M, Henninger M, Durbin S, et al. Screening and Interventions for Social Risk Factors: Technical Brief to Support the US Preventive Services Task Force. *JAMA*. 2021;326(14):1416. doi:10.1001/jama.2021.12825
63. Che SE, Gwon YG, Kim KH. Follow-Up Timing After Discharge and Suicide Risk Among Patients Hospitalized With Psychiatric Illness. *JAMA Netw Open*. 2023;6(10):e2336767. doi:10.1001/jamanetworkopen.2023.36767
64. Mancini V, Latreche C, Fanshawe JB, et al. Anticholinergic Burden and Cognitive Function in Psychosis: A Systematic Review and Meta-Analysis. *Am J Psychiatry*. 2025;182(4):349-359. doi:10.1176/appi.ajp.20240260
65. Xi S, Shen M, Wang Y, et al. Depressive symptoms, anxiety symptoms, and their co-occurrence among people living with schizophrenia in China: Prevalence and correlates. *J Clin Psychol*. 2021;77(10):2137-2146. doi:10.1002/jclp.23141
66. Thaman P, Kulig CE, Greer D. Efficacy of Long-Acting Injectable Antipsychotics Versus Oral Antipsychotics in Preventing Psychiatric Rehospitalizations. *J Clin Psychopharmacol*. 2024;44(2):96-99. doi:10.1097/JCP.0000000000001810
67. Dondé C, Vignaud P, Poulet E, Brunelin J, Haesebaert F. Management of depression in patients with schizophrenia spectrum disorders: a critical review of international guidelines. *Acta Psychiatr Scand*. 2018;138(4):289-299. doi:10.1111/acps.12939

68. Bighelli I, Rodolico A, Siafis S, et al. Antipsychotic polypharmacy reduction versus polypharmacy continuation for people with schizophrenia. *Cochrane Database Syst Rev.* 2022;2022(8):CD014383.

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