

Test Bank for Psychopharmacology Algorithms 2nd Osser

Psychopharmacology Algorithms

ISBN 9781975240189 | Chapter 1: On the Value of Evidence-Based Psychopharmacology Algorithms

Total Questions: 150

Multiple Choice

Q1.

According to Sackett and colleagues, evidence-based medicine is best defined as:

- A) integrating clinical expertise with the best available external clinical evidence from systematic research ✓ Correct**
- B) following expert opinion regardless of research quality
- C) using only randomized trials and excluding clinical judgment
- D) prioritizing patient preference over scientific evidence in all cases

Rationale: The chapter cites Sackett's definition as integrating clinical expertise with the best available external evidence from systematic research.

Q2.

In the chapter, a "slip" refers to:

- A) a deliberate violation of treatment standards
- B) an unintentional mistake ✓ Correct**
- C) a diagnostic disagreement between clinicians
- D) a medication interaction caused by polypharmacy

Rationale: The text explicitly describes slips as unintentional mistakes.

Q3.

Before applying psychopharmacology evidence, the clinician must first make a:

- A) billing-based diagnosis
- B) criteria-based Diagnostic and Statistical Manual diagnosis ✓ Correct**
- C) provisional diagnosis based only on chief complaint
- D) neuroimaging-based diagnosis

Rationale: The chapter states that psychopharmacology evidence is derived from patients diagnosed using criteria-based DSM methods.

Q4.

Which element is specifically identified as part of the diagnostic process needed for evidence-based psychopharmacology?

- A) Insurance formulary tier placement
- B) Subtypes, specifiers, and comorbidity ✓ Correct**
- C) Family preference for treatment setting
- D) Geographic variation in prescribing

Rationale: The text notes that subtypes, specifiers, and comorbidity must be identified because they may affect treatment preference.

Q5.

A detailed treatment history is explored primarily to:

- A) increase the use of new medications
- B) avoid repeating ineffective or harmful prior approaches ✓ Correct**
- C) replace the need for diagnostic assessment
- D) document malpractice risk only

Rationale: The chapter emphasizes reviewing adequacy and outcomes of prior trials to avoid repeating ineffective or harmful treatments.

Q6.

The chapter describes the idealized evidence-based approach in psychopharmacology as impractical mainly because it:

- A) requires no diagnostic system
- B) takes too little time to be useful
- C) takes too much time and uses cognitive processes unfamiliar to some clinicians ✓ Correct**
- D) depends entirely on pharmaceutical representatives

Rationale: The text states that EBM is often impractical because it is time-consuming and cognitively demanding.

Q7.

Reflexive decisions in clinical care are decisions made:

- A) after formal comparison of all alternatives
- B) without consciously considering any alternative ✓ Correct**
- C) only after consultation with a specialist
- D) through computerized decision support

Rationale: The chapter defines reflexive decisions as those made without consciously considering alternatives.

Q8.

The availability heuristic is described as:

- A) preferring treatments with the lowest cost
- B) following the most recent guideline update
- C) grabbing the first idea that comes to mind ✓ Correct**
- D) choosing the option with the strongest safety data

Rationale: The text defines the availability heuristic as taking the first idea that comes to mind.

Q9.

The affective heuristic refers to the tendency for:

- A) statistical evidence to outweigh experience
- B) emotionally charged experiences to exert disproportionate influence on decisions ✓ Correct**
- C) computerized systems to replace clinical judgment
- D) diagnostic criteria to determine treatment automatically

Rationale: The chapter explains that affect-laden experiences can become more influential than scientific evidence.

Q10.

The chapter uses Stevens-Johnson syndrome from lamotrigine as an example of:

- A) publication bias
- B) novelty preference bias
- C) the affective heuristic ✓ Correct**
- D) the familiarity effect

Rationale: A memorable severe adverse event is presented as an example of affective heuristic influencing prescribing.

Q11.

The historical training model said to have dominated medicine for thousands of years is the:

- A) competency-based model
- B) algorithmic model
- C) apprentice model ✓ Correct**
- D) simulation model

Rationale: The text explicitly states that the apprentice model dominated medical training historically.

Q12.

Groopman's comparison to airline pilots is used to emphasize that clinicians should:

- A) learn primarily from personal mistakes
- B) avoid evidence-based protocols
- C) make the right decisions every time rather than rely on learning from errors ✓ Correct**
- D) defer all decisions to supervisors

Rationale: The analogy argues against a system built on mistakes followed by corrective action.

Q13.

In the chapter, "rules of thumb" are presented as:

- A) formal methods of systematic review
- B) rapidly applied heuristics used in routine practice ✓ Correct**
- C) mandatory legal standards for prescribing
- D) validated substitutes for algorithms

Rationale: The text describes practice as often centered on quickly applied and confidently used rules of thumb.

Q14.

Michael O'Donnell's quoted criticism of clinical experience suggests that it may lead to:

- A) greater objectivity over time
- B) uniform adherence to evidence-based practice
- C) repeating the same mistakes with increasing confidence ✓ Correct**
- D) reduced reliance on personal bias

Rationale: The chapter quotes O'Donnell as warning that experience can mean making the same mistakes repeatedly with more confidence.

Q15.

Risk-taking tendency is described in the chapter as a personality trait that is:

- A) entirely environmentally determined
- B) strongly heritable ✓ Correct**
- C) unrelated to prescribing behavior
- D) limited to surgeons

Rationale: The text states that risk-taking tendency is strongly heritable, citing twin data.

Q16.

The medication specifically discussed as being under-prescribed in some clearly indicated cases is:

- A) fluoxetine
- B) lithium
- C) lamotrigine
- D) clozapine ✓ Correct**

Rationale: The chapter identifies clozapine as under-prescribed, partly because of fear of its risks and required monitoring.

Q17.

One reason scientifically validated treatment approaches may not be adopted is that they:

- A) are always less effective than usual care
- B) require more time than physicians believe they can provide ✓ Correct**
- C) cannot be standardized
- D) eliminate the need for patient involvement

Rationale: The chapter notes that physicians may avoid time-consuming evidence-based approaches even when validated.

Q18.

The phrase "small Ns" in relation to clinical experience refers to:

- A) small numbers of patients in one clinician's experience ✓ Correct**
- B) small numbers of medications on a formulary
- C) small numbers of diagnostic categories in psychiatry
- D) small numbers of guideline authors

Rationale: The text criticizes experience-based practice because a clinician's sample of prior patients is usually small.

Q19.

Sampling differences, as described in the chapter, mean that:

- A) research samples always match clinical populations
- B) the current patient may differ substantially from remembered prior patients ✓ Correct**
- C) guidelines exclude comorbidity by definition
- D) computer systems cannot assist prescribing

Rationale: The chapter notes that the patient now being treated may not resemble previously seen patients.

Q20.

Drug companies are said to influence prescribing by taking advantage of which bias?

- A) Anchoring bias only
- B) Novelty preference bias ✓ Correct**
- C) Outcome bias only
- D) Zero-risk bias

Rationale: The text specifically lists novelty preference bias among the biases used by pharmaceutical marketing.

Q21.

Which additional bias is explicitly mentioned as being exploited by pharmaceutical marketing?

- A) Familiarity effect ✓ Correct**
- B) Confirmation bias
- C) Framing effect
- D) Sunk cost bias

Rationale: The chapter names the familiarity effect as another bias shaping medication decision-making.

Q22.

Industry-supported psychopharmacology studies are described as often encouraging excessive valuation of:

- A) older generic medications
- B) nonpharmacologic treatments
- C) new expensive products ✓ Correct**
- D) electroconvulsive therapy

Rationale: The text states that study design, interpretation, and publication may encourage excessive valuation of new expensive products.

Q23.

Psychopharmacologic studies are commonly criticized in the chapter for being conducted in patients who are:

- A) medically complex and highly representative of usual practice
- B) otherwise healthy and uncomplicated ✓ Correct**
- C) always treatment resistant
- D) uniformly elderly and medically fragile

Rationale: The chapter notes that many studies enroll healthier, less complicated patients than those seen in routine practice.

Q24.

A key skill required of evidence-based practitioners, according to the chapter, is the ability to:

- A) avoid reading original studies
- B) detect flaws and biases in studies ✓ Correct**
- C) ignore publication methods
- D) prioritize novelty over validity

Rationale: Because studies may contain biases and limitations, clinicians must be able to recognize them.

Q25.

The proposed solution for teaching and learning psychopharmacology is the use of:

- A) pharmaceutical detailing programs
- B) psychopharmacology algorithms informed by evidence ✓ Correct**
- C) case reports as the primary standard
- D) personalized medicine without population evidence

Rationale: The chapter proposes evidence-informed psychopharmacology algorithms as a practical solution.

Q26.

Evidence-informed psychopharmacology algorithms should be developed and updated by consensus among:

- A) hospital administrators with purchasing authority
- B) respected evidence-based medicine experts distanced from drug-company support ✓ Correct**
- C) industry-sponsored speakers only
- D) individual prescribers working independently

Rationale: The text recommends consensus development by respected EBM experts who are separated from drug-company support.

Q27.

The algorithms are intended to provide a coherent blueprint for practice across:

- A) only initial treatment decisions
- B) only inpatient psychiatric care
- C) cases of progressive complexity from initial treatment through very treatment-resistant scenarios ✓ Correct**
- D) only medication adverse-event management

Rationale: The chapter says algorithms should guide care from initial treatment to very treatment-resistant cases.

Q28.

In the chapter, algorithms are said to provide a "scaffolding structure" for:

- A) billing documentation only
- B) organizing data relevant to specific kinds of patients ✓ Correct**
- C) eliminating all need for clinical judgment
- D) replacing diagnostic assessment with flowcharts

Rationale: The text states that algorithms help organize clinically relevant data for particular patient types.

Q29.

The Institute of Medicine standards discussed in the chapter include guideline authors having:

- A) extensive financial ties to manufacturers
- B) few to no conflicts of interest ✓ Correct**
- C) exclusive experience in private practice
- D) authority to mandate treatment adherence

Rationale: One IOM-related trustworthiness criterion mentioned is that authors should have few to no conflicts of interest.

Q30.

A trustworthy guideline should provide:

- A) recommendations without rationale to simplify use
- B) explanations of the reasoning behind each recommendation ✓ Correct**
- C) only summary flowcharts and no full text
- D) recommendations based solely on expert seniority

Rationale: The chapter lists explicit explanation of reasoning as a quality criterion for valid guidelines.

Q31.

Before publication, valid algorithms or guidelines should undergo:

- A) marketing review by pharmaceutical representatives
- B) rigorous external review ✓ Correct**
- C) review only by the original authors
- D) approval only by local hospital committees

Rationale: The text includes rigorous external review before publication as an important standard.

Q32.

According to the chapter, algorithms should be updated:

- A) only when a major safety warning appears
- B) every ten years
- C) frequently ✓ Correct**
- D) only after legal review

Rationale: Frequent updating is explicitly listed as a quality criterion.

Q33.

When sequencing medication recommendations, the chapter states that evidence of safety is:

- A) less important than efficacy evidence
- B) important only for long-term treatment
- C) just as important as efficacy evidence ✓ Correct**
- D) relevant only for women of child-bearing potential

Rationale: The authors emphasize that both short- and long-term safety are as important as efficacy in sequencing recommendations.

Q34.

A valid algorithm should acknowledge other published algorithms with different conclusions and:

- A) dismiss them without discussion
- B) analyze the basis for the differences ✓ Correct**
- C) avoid mentioning them to reduce confusion
- D) adopt the majority opinion automatically

Rationale: The chapter recommends acknowledging differing algorithms and analyzing the reasons for disagreement.

Q35.

Which patient factor is specifically identified as requiring assessment in guideline recommendations?

- A) Preferred pharmacy chain
- B) Astrological sign
- C) Whether the patient is a woman of child-bearing potential ✓ Correct
- D) Handedness

Rationale: The text explicitly mentions considering the effect if the patient is a woman of child-bearing potential.

Q36.

The chapter emphasizes that algorithms should be viewed primarily as:

- A) absolute truth to be followed rigidly
- B) legal mandates superseding judgment
- C) aids to judgment ✓ Correct
- D) tools useful only for trainees

Rationale: The authors state that algorithms are aids to judgment rather than rigid rules.

Q37.

Evidence from fields such as engineering is cited to suggest that, compared with individual expert judgment, outcomes often favor:

- A) complete abandonment of structured methods
- B) algorithm adherence ✓ Correct
- C) intuitive decision-making alone
- D) random selection among reasonable options

Rationale: The chapter notes that comparisons in other fields have generally favored adherence to algorithms.

Q38.

A good algorithm should discuss alternatives at each node and explain why they are:

- A) always contraindicated
- B) not favored first-line but may be reasonable in some circumstances ✓ Correct
- C) superior to the preferred recommendation
- D) reserved only for research settings

Rationale: The text says good algorithms should present alternatives and explain why they are not first-line yet may still be reasonable.

Q39.

Standardized care driven by evidence-supported algorithms has produced good outcomes in illnesses such as:

- A) diabetes, pneumonia, and heart disease ✓ Correct
- B) appendicitis, epilepsy, and psoriasis only
- C) substance use disorders only
- D) migraine and insomnia only

Rationale: The chapter specifically names diabetes, pneumonia, and heart disease as areas with favorable algorithm-based outcomes.

Q40.

Bauer's review of studies up to the year 2000 found improved outcomes associated with guideline adherence in:

- A) 2 of 13 studies
- B) 6 of 13 studies ✓ Correct**
- C) 10 of 13 studies
- D) 13 of 13 studies

Rationale: The chapter reports Bauer found improved outcomes in 6 of 13 studies.

Q41.

In depression studies reviewed by Adli and colleagues, algorithm-treated patients initially:

- A) benefited more than the control group ✓ Correct**
- B) did worse than the control group at baseline
- C) showed no measurable difference from controls at any point
- D) had greater separation from treatment as usual over time in every study

Rationale: The review found an initial benefit for algorithm-treated patients relative to controls.

Q42.

The early benefits seen in some depression algorithm studies may have been due to:

- A) exclusive use of clozapine
- B) more intensive patient involvement with the project coordinator ✓ Correct**
- C) elimination of comorbidity from the sample
- D) longer follow-up than usual care

Rationale: The chapter suggests that added patient involvement with a project coordinator may explain early advantages.

Q43.

In schizophrenia studies, following algorithms was associated with small advantages including:

- A) increased antipsychotic polypharmacy
- B) reduced side effects and less polypharmacy ✓ Correct**
- C) higher rates of unmonitored clozapine use
- D) elimination of relapse

Rationale: The text notes small benefits such as reduced side effects and less antipsychotic polypharmacy.

Q44.

A major reason strong outcome differences were not seen in schizophrenia algorithm studies was that physicians rarely complied with the recommendation to use clozapine after:

- A) one inadequate antidepressant trial
- B) two adequate trials of antipsychotics ✓ Correct**
- C) three failed mood stabilizer trials
- D) any first psychotic episode

Rationale: The chapter identifies poor adherence to the clozapine-after-two-adequate-antipsychotic-trials recommendation as a key issue.

Q45.

The Texas and German algorithm groups found that barriers to adherence could be reduced by:

- A) eliminating leadership involvement
- B) regular intensive educational discussions about the guidelines ✓ Correct**
- C) avoiding discussion with patients
- D) shortening all guidelines to one-page summaries only

Rationale: The text states that regular intensive educational discussions, supported by leadership, helped overcome barriers.

Q46.

The chapter argues that evidence-based medicine and personalized medicine are:

- A) mutually exclusive approaches
- B) in conflict because one must replace the other
- C) not truly opposed, because subgroup markers can be incorporated into the diagnostic process before algorithm application ✓ Correct**
- D) equivalent only when no biomarkers exist

Rationale: The authors describe the EBM-versus-personalized-medicine conflict as a false dichotomy.

Q47.

An unsolved problem with using even good algorithms is that some clinicians may:

- A) avoid summary flowcharts entirely
- B) make hasty use of summary flowcharts without reading the full text ✓ Correct**
- C) be unable to access any recommendations electronically
- D) prefer external review over internal review

Rationale: The chapter warns that relying only on summary flowcharts can lead to inaccurate understanding and errors.

Q48.

The aphorism "caveat emptor" is used in the chapter to warn clinicians that some published algorithms may be:

- A) too detailed to implement safely
- B) oversimplified, biased, or flawed in reasoning ✓ Correct**
- C) legally binding once adopted
- D) superior to full-text guidelines in every setting

Rationale: The text cautions that some algorithms are oversimplified, biased, or based on poor reasoning.

Q49.

A particularly strong feature of the Harvard South Shore Psychopharmacology Algorithm Project is its use of:

- A) unblinded review by pharmaceutical consultants
- B) blinded peer review by up to five content experts selected by journal editors ✓ Correct**
- C) exclusive reliance on a single author's interpretation
- D) automatic revision without external input

Rationale: The chapter highlights blinded peer review by as many as five content experts as a major strength of the project.

Q50.

According to the chapter, algorithms will likely have greater practical value when their key advice is delivered:

- A) only in printed textbooks
- B) through pharmaceutical sample programs
- C) at the point of care within computerized medical record and order-entry systems ✓ Correct**
- D) only during annual continuing education meetings

Rationale: The authors state that point-of-care integration into computerized records and order-entry systems would enhance practical value.

Q51.

A psychiatrist is about to prescribe for a patient with suspected bipolar depression after only a brief symptom review. According to the chapter, which additional step is most essential before applying evidence-based psychopharmacology recommendations?

- A) Obtain a criteria-based DSM diagnosis including subtype, specifiers, and comorbidity ✓ Correct**
- B) Select the newest medication with the most recent marketing data
- C) Rely on the clinician's most memorable prior similar case
- D) Begin treatment first and refine diagnosis only if the patient fails to improve

Rationale: Psychopharmacology evidence is derived from carefully diagnosed DSM-defined populations, so accurate diagnosis with relevant modifiers is foundational.

Q52.

A clinician says, "I always avoid lamotrigine because I once saw Stevens-Johnson syndrome." Which decision-making error from the chapter best describes this reasoning?

- A) Anchoring bias
- B) Affective heuristic ✓ Correct**
- C) Base-rate correction
- D) Prospective framing

Rationale: The affective heuristic occurs when emotionally charged experiences outweigh scientific evidence in decision-making.

Q53.

During a busy clinic session, a prescriber immediately chooses the first antidepressant that comes to mind without considering alternatives. This most closely illustrates which concept?

- A) Availability heuristic ✓ Correct**
- B) External validity
- C) Shared decision-making
- D) Diagnostic refinement

Rationale: The availability heuristic refers to grabbing the first idea that comes to mind rather than systematically evaluating options.

Q54.

A department wants to reduce repeated prescribing errors caused by hurried, intuitive decisions. Based on the chapter, which intervention best addresses this problem operationally?

- A) Encourage each psychiatrist to rely more heavily on personal style
- B) Replace structured care with informal peer advice
- C) Implement evidence-informed psychopharmacology algorithms updated by expert consensus ✓ Correct**
- D) Limit medication choices to whatever samples are currently available

Rationale: The chapter proposes evidence-informed algorithms as a practical remedy for error-prone intuitive prescribing.

Q55.

A resident presents a treatment plan based mainly on "what usually works in my experience." Which critique from the chapter most directly challenges this approach?

- A) Clinical experience always overestimates adverse effects
- B) Personal experience often involves small samples and patients who may not match the current case ✓ Correct**
- C) Evidence-based medicine eliminates the need for diagnosis
- D) Rules of thumb are superior when trials are industry funded

Rationale: The chapter notes that clinical experience is limited by small Ns and sampling differences from the present patient.

Q56.

A quality committee is evaluating whether a psychopharmacology guideline is trustworthy for hospital use. Which feature most strongly supports validity according to the chapter and IOM-related standards?

- A) Authorship by a single highly experienced clinician
- B) Infrequent updates to preserve consistency
- C) Clear reasoning behind recommendations with rigorous external review ✓ Correct**
- D) Strong endorsement by pharmaceutical representatives

Rationale: Trustworthy guidelines should explain their reasoning and undergo rigorous external review.

Q57.

A psychiatrist refuses to use clozapine in any patient because of fear of severe adverse effects, even when clearly indicated and monitorable. The chapter uses this type of example primarily to illustrate that prescribing can be influenced by

- A) heritable risk-taking tendencies and clinician temperament ✓ Correct**
- B) patient placebo response alone
- C) the superiority of intuition over evidence
- D) the irrelevance of monitoring systems

Rationale: The text discusses risk-taking as a heritable trait that can shape how clinicians respond to medication risks such as clozapine.

Q58.

A new guideline recommends sequencing options partly on long-term metabolic and reproductive safety, not just symptom reduction. This reflects which principle emphasized in the chapter?

A) Safety evidence should be weighed as heavily as efficacy evidence in sequencing recommendations ✓ Correct

B) Only short-term efficacy trials should guide first-line treatment

C) Adverse effects should be considered only after treatment resistance develops

D) Safety concerns are secondary if expert opinion is strong

Rationale: The chapter states that both short- and long-term safety are as important as efficacy in medication sequencing.

Q59.

A clinician uses only a one-page flowchart from an algorithm and misses important nuances about exceptions and monitoring. According to the chapter, the main risk of this practice is

A) overly slow decision-making

B) grossly inaccurate understanding of recommendations leading to patient care errors ✓ Correct

C) improved personalization at the expense of evidence

D) reduced need for diagnostic assessment

Rationale: The chapter warns that hasty use of summary flowcharts without reading the full text can cause major misinterpretation and errors.

Q60.

A medical director asks why evidence-based medicine is often difficult to practice in psychopharmacology. Which answer best reflects the chapter?

A) Psychiatric disorders have no diagnostic standards

B) The process requires detailed diagnosis, treatment-history review, and literature appraisal that are time-consuming and cognitively demanding ✓ Correct

C) Medication studies are always directly applicable to all real-world patients

D) Evidence-based medicine prohibits clinical expertise

Rationale: The chapter describes EBM in psychopharmacology as laborious because it requires diagnosis, prior trial assessment, and literature interpretation.

Q61.

A psychiatrist is considering whether to repeat a medication the patient previously took. Before doing so, which step is emphasized in the chapter as necessary to avoid repeating ineffective or harmful care?

A) Check whether the drug is currently available as a sample

B) Explore the adequacy and outcomes of prior treatment trials in detail ✓ Correct

C) Ask whether a colleague prefers the medication

D) Use the same medication if it is commonly used in the community

Rationale: A detailed review of prior treatment adequacy and outcomes helps prevent repeating failed or harmful interventions.

Q62.

A health system develops an algorithm written by experts who receive substantial support from the manufacturer of a newly approved antipsychotic. Which concern from the chapter is most relevant?

- A) The algorithm may lack applicability because it is too old
- B) Conflicts of interest can undermine guideline trustworthiness ✓ Correct**
- C) Algorithms should always prioritize novelty in treatment selection
- D) Industry involvement guarantees comprehensive review of alternatives

Rationale: The chapter highlights minimal conflicts of interest as a key criterion for valid clinical algorithms.

Q63.

In a schizophrenia service, clinicians assigned to an algorithm arm still rarely prescribe clozapine after two adequate antipsychotic trials. Based on the chapter, what is the most likely consequence for study findings?

- A) The algorithm arm will show dramatically superior outcomes
- B) Outcome differences versus usual care may remain modest because the most impactful recommendation was not followed ✓ Correct**
- C) Polypharmacy will necessarily increase in the algorithm arm
- D) The study will become invalid because clozapine is never first line

Rationale: The chapter suggests weak outcome differences may occur when clinicians fail to implement the algorithm recommendation most likely to improve outcomes.

Q64.

A faculty member argues that algorithms should be followed rigidly because they represent the best evidence. Which response is most consistent with the chapter?

- A) Algorithms should replace clinician judgment in every case
- B) Algorithms are aids to judgment and may be inappropriate for some individual patients ✓ Correct**
- C) Algorithms are useful only for research and not clinical care
- D) Algorithms are inferior to expert intuition in most fields

Rationale: The chapter explicitly states that algorithms are aids to judgment rather than absolute rules.

Q65.

A prescriber favors a newly marketed antidepressant because it seems innovative and heavily promoted, despite limited comparative evidence. Which bias discussed in the chapter is most applicable?

- A) Novelty preference bias ✓ Correct**
- B) Regression dilution
- C) Spectrum bias
- D) Observer-expectancy correction

Rationale: The chapter notes that drug companies can exploit novelty preference bias to shape prescribing away from EBM.

Q66.

A hospital is deciding whether to invest in regular multidisciplinary meetings to reinforce guideline use. Which finding from the chapter most supports this operational choice?

- A) Educational discussions can help overcome barriers to algorithm adherence ✓ Correct**
- B) Guidelines work only when used without discussion
- C) Leadership support reduces the need for patient engagement
- D) Education is unnecessary once a flowchart is distributed

Rationale: The chapter reports that regular intensive educational discussions, supported by leadership, can improve implementation.

Q67.

A clinician says, "Personalized medicine makes algorithms obsolete because evidence only gives average results." Which rebuttal best matches the chapter?

- A) Personalized medicine and evidence-based algorithms are compatible because validated subgroup markers can be incorporated into the diagnostic process before algorithm application ✓ Correct**
- B) Personalized medicine is relevant only to surgical specialties
- C) Algorithms should ignore biomarkers to preserve simplicity
- D) Average trial results are always more accurate than subgroup-specific information

Rationale: The chapter describes the EBM-versus-personalized-medicine conflict as a false dichotomy because subgroup markers can be integrated into algorithms.

Q68.

A guideline panel is comparing two published psychopharmacology algorithms that reach different conclusions. According to the chapter, what should a high-quality algorithm do?

- A) Ignore competing algorithms to avoid confusing clinicians
- B) Acknowledge differing algorithms and analyze the reasons for disagreement ✓ Correct**
- C) Choose the shorter algorithm regardless of evidence base
- D) Default to whichever algorithm recommends newer medications

Rationale: The chapter recommends acknowledging other algorithms, analyzing differences, and attempting to resolve them.

Q69.

A psychiatrist assumes a current patient will respond like a vaguely remembered prior patient with a similar complaint. Which limitation of experience-based practice is most directly illustrated?

- A) Lead-time bias
- B) Sampling differences between past patients and the present case ✓ Correct**
- C) Ecological validity of randomized trials
- D) Interrater reliability of diagnosis

Rationale: The chapter warns that the current patient may not resemble the dimly remembered patients from past experience.

Q70.

A training program wants to teach psychopharmacology in a way that reduces errors from the old apprentice model. Which educational strategy is most aligned with the chapter?

- A) Emphasize learning mainly through personal mistakes over time
- B) Use evidence-informed algorithms as scaffolding for organizing patient-specific data and treatment sequencing ✓ Correct**
- C) Teach residents to avoid literature interpretation because it is impractical
- D) Base prescribing decisions on whichever attending is most charismatic

Rationale: The chapter presents algorithms as scaffolding that organizes relevant data and supports better psychopharmacology teaching and practice.

Q71.

Which definition best reflects evidence-based medicine as cited in the chapter?

- A) Applying only randomized trials while excluding clinical expertise
- B) Integrating clinical expertise with the best available external clinical evidence from systematic research ✓ Correct**
- C) Using expert opinion whenever evidence is incomplete
- D) Following standardized protocols without patient-specific judgment

Rationale: The chapter quotes Sackett's definition of EBM as integrating clinical expertise with the best external evidence.

Q72.

A clinician decides quickly without consciously considering alternatives because the clinic is overbooked. In the chapter, this is described most broadly as

- A) reflexive decision-making ✓ Correct**
- B) shared formulation
- C) comparative effectiveness review
- D) prospective meta-analysis

Rationale: The chapter describes hurried decisions made without considering alternatives as reflexive decisions.

Q73.

A guideline development group includes recommendations for women of child-bearing potential and for patients with psychiatric and medical comorbidity. Why is this important according to the chapter?

- A) Because comorbidity and reproductive considerations can alter appropriate treatment recommendations ✓ Correct**
- B) Because these factors matter only when evidence is absent
- C) Because they simplify all algorithms into one pathway
- D) Because they eliminate the need for external review

Rationale: The chapter states that medical and psychiatric comorbidity, including child-bearing potential, should be assessed and addressed in recommendations.

Q74.

A psychiatrist says, "I know the trials support this medication, but I still don't believe the low adverse-event rate because of one terrible case I saw." Which statement from the chapter best explains the problem?

A) Single dramatic experiences can overpower statistical evidence through the affective heuristic ✓ Correct

B) Rare adverse events are always underreported and should outweigh all trial data

C) Guidelines prohibit use of medications with any serious adverse event history

D) External evidence is less valid than any individual case memory

Rationale: The chapter uses this exact pattern to illustrate how affect-laden experiences can dominate evidence-based reasoning.

Q75.

A health system wants algorithm recommendations delivered during order entry rather than as a paper manual. According to the chapter, the main expected advantage is

A) elimination of the need for clinician judgment

B) point-of-care access to important advice that differs from usual practice and may improve results ✓ Correct

C) replacement of diagnosis with automated prescribing

D) reduction of all medication adverse effects

Rationale: The chapter argues that algorithms become more practical when key recommendations are delivered at the point of care within computerized systems.

Q76.

A researcher notes that many psychopharmacology trials involve short durations and relatively healthy, uncomplicated participants. What concern does the chapter connect to this pattern?

A) The evidence may have limited applicability to real-world complex psychiatric patients ✓ Correct

B) The studies are automatically invalid

C) The findings become more generalizable to suicidal and medically comorbid patients

D) Short studies are preferred because they eliminate publication bias

Rationale: The chapter notes that trial populations often do not represent the more complex patients seen in routine practice.

Q77.

A clinic compares algorithm-based care with treatment as usual and finds only small differences. Which explanation is most consistent with the chapter?

A) Algorithms never improve psychiatric outcomes

B) Usual-care clinicians often follow many algorithm recommendations anyway, reducing detectable differences ✓ Correct

C) Outcome differences occur only in inpatient settings

D) The algorithm likely emphasized diagnosis too strongly

Rationale: The chapter explains that controlled studies may show modest effects because usual-care clinicians often implement many of the same recommendations.

Q78.

A clinician reviewing a new medication asks whether to change practice immediately or wait. According to the chapter, what role do algorithms serve in this situation?

- A) They prohibit consideration of new evidence until a decade has passed
- B) They provide a structured decision node where new information can be compared with existing knowledge and possibly await consensus update ✓ Correct**
- C) They require automatic substitution of any newly approved drug
- D) They replace the need to assess whether the patient is typical for that node

Rationale: The chapter describes algorithms as scaffolding that allows new evidence to be compared with existing knowledge at a specific decision point.

Q79.

A resident argues that the traditional art of medicine is sufficient because personal confidence improves with years of practice. Which quotation-like critique from the chapter best counters this view?

- A) Experience may lead to making the same mistakes repeatedly with increasing confidence ✓ Correct**
- B) Confidence is the strongest predictor of treatment success
- C) Art and evidence are mutually exclusive in psychiatry
- D) Experienced clinicians should avoid guidelines to preserve autonomy

Rationale: The chapter cites the criticism that experience can mean repeating the same mistakes with increasing confidence over years.

Q80.

When evaluating a psychopharmacology algorithm for adoption, which characteristic would be least supportive of quality according to the chapter?

- A) Frequent updates
- B) Blinded peer review by multiple content experts
- C) Explanations for each recommendation
- D) Reliance primarily on summary flowcharts without detailed rationale ✓ Correct**

Rationale: The chapter warns against oversimplified algorithm use and values detailed reasoning, review, and updating.

Q81.

A patient with treatment-resistant schizophrenia has failed two adequate antipsychotic trials. The psychiatrist continues trying multiple other antipsychotics because clozapine monitoring is inconvenient. Which chapter theme does this scenario best illustrate?

- A) Evidence-based recommendations may be ignored when they require more time or effort than usual practice ✓ Correct**
- B) Monitoring burdens prove the recommendation is invalid
- C) Polypharmacy after two failures is the preferred algorithmic step
- D) Treatment resistance eliminates the usefulness of guidelines

Rationale: The chapter notes that clinicians may avoid well-evidenced but time-consuming treatments such as clozapine.

Q82.

A clinic director wants to know why pharmaceutical promotion can distort prescribing even among experienced clinicians. Which answer best reflects the chapter?

A) Promotional education is often quick and easy but may be neither objective nor comprehensive ✓ Correct

B) Industry support eliminates all publication bias through larger samples

C) Drug representatives usually provide more balanced reviews than systematic reviews

D) Free samples improve evidence quality

Rationale: The chapter states that company-provided education is convenient but may lack objectivity and comprehensiveness.

Q83.

A prescriber chooses a medication because it has been used often in the clinic and therefore feels comfortable, despite stronger evidence for another option. Which bias from the chapter is most relevant?

A) Familiarity effect ✓ Correct

B) Incorporation bias

C) Ascertainment bias

D) Verification bias

Rationale: The chapter identifies the familiarity effect as a prescribing bias that can be exploited and can divert care from evidence-based choices.

Q84.

Why does the chapter argue that clinicians using evidence-based psychopharmacology must be sophisticated in appraising studies?

A) Because all psychiatric studies are fraudulent

B) Because study design, interpretation, and publication may contain flaws and biases that can lead to false conclusions ✓ Correct

C) Because only meta-analyses are relevant to prescribing

D) Because external evidence should always be rejected in complex patients

Rationale: The chapter emphasizes the need to detect study flaws and biases so clinicians do not draw false conclusions.

Q85.

A guideline states not only what is preferred first line but also what alternatives might be reasonable and why they are not favored initially. Why is this feature valuable according to the chapter?

A) It supports flexible application of the algorithm to individual patient circumstances ✓ Correct

B) It makes the algorithm legally binding

C) It proves all options are equally effective

D) It removes the need for informed consent discussions

Rationale: The chapter says good algorithms discuss alternatives and why they are not first-line, allowing reasonable adaptation to specific circumstances.

Q86.

A healthcare leader asks whether algorithm-driven care has helped in other medical illnesses. Which response is most supported by the chapter?

A) Standardized evidence-supported algorithmic care has produced good outcomes in conditions such as diabetes, pneumonia, and heart disease ✓ Correct

B) Algorithms have only been useful in psychiatry

C) Medical algorithms improve efficiency but not outcomes

D) There is no evidence outside psychiatry regarding algorithm use

Rationale: The chapter cites favorable outcomes from standardized algorithm-supported care in several nonpsychiatric illnesses.

Q87.

A clinician dismisses an algorithm because one expert once made a brilliant off-algorithm choice that worked. According to the chapter, what is the better interpretation?

A) Expert deviation is usually superior to algorithms

B) Although brilliant deviations occasionally occur, deviations more often result in error than better outcomes ✓ Correct

C) Any deviation from an algorithm invalidates the algorithm

D) Algorithms should be used only by nonexperts

Rationale: The chapter notes that while occasional brilliant deviations occur, expert departures from algorithms more commonly produce errors.

Q88.

A residency seminar discusses why the apprentice model may be insufficient for modern prescribing safety. Which analogy from the chapter best captures this concern?

A) We want airline pilots to learn from their mistakes in real flights

B) We do not want airline pilots to learn from mistakes; we want correct decisions every time ✓ Correct

C) Psychopharmacology is too simple to require structured methods

D) Medical errors are inevitable and therefore not a training target

Rationale: The chapter uses the airline pilot analogy to argue against relying on learning through mistakes.

Q89.

A hospital implements an algorithm but sees poor uptake. Which additional strategy from the chapter is likely to improve adherence?

A) Remove all educational sessions to save time

B) Use regular intensive educational discussions supported by leadership ✓ Correct

C) Allow only drug-representative in-services

D) Require clinicians to use only the summary page

Rationale: The chapter indicates that intensive educational discussions with leadership support can overcome implementation barriers.

Q90.

Which statement best summarizes the chapter's view of the relationship between algorithms and individualized care?

- A) Algorithms eliminate the need to consider patient-specific factors
- B) Algorithms should be rigidly followed to ensure standardization
- C) Algorithms provide evidence-based structure while allowing clinician judgment about fit for the individual patient ✓ Correct**
- D) Individualized care is possible only without guidelines

Rationale: The chapter presents algorithms as structured aids that must still be judged for suitability in each patient.

Q91.

A psychiatrist says, "I don't have time to search and critically interpret the literature for every patient." According to the chapter, psychopharmacology algorithms are valuable primarily because they

- A) replace all need for evidence appraisal permanently
- B) distill and synthesize available research into a coherent blueprint for practice ✓ Correct**
- C) guarantee perfect outcomes in resistant cases
- D) focus only on newly marketed medications

Rationale: The chapter proposes algorithms as practical syntheses of evidence that organize research into usable clinical guidance.

Q92.

A committee is reviewing the Harvard South Shore Psychopharmacology Algorithm Project. Which feature does the chapter identify as its strongest quality?

- A) Exclusive reliance on one author's expert opinion
- B) Use of blinded peer review by multiple content experts examining facts, reasoning, and literature analysis ✓ Correct**
- C) Annual endorsement by pharmaceutical sponsors
- D) Preference for short flowcharts over full-text explanations

Rationale: The chapter highlights blinded peer review by up to five content experts as the project's strongest feature.

Q93.

A clinician reviewing evidence notices that many industry-supported studies emphasize newer expensive products. According to the chapter, this concern arises partly because industry can influence

- A) study design, interpretation, and publication ✓ Correct**
- B) DSM diagnostic criteria only
- C) patient genetic risk exclusively
- D) the heritability of clinician temperament

Rationale: The chapter states that pharmaceutical firms may influence study design, interpretation, and publication in ways favoring newer products.

Q94.

A psychiatrist wants to use an algorithm but also wants to remain current with emerging biomarkers that predict treatment response. Which approach best fits the chapter?

- A) Reject algorithms because biomarkers and evidence-based care are incompatible
- B) Incorporate validated biomarkers into diagnosis, then apply the algorithm to the subgroup for whom they are relevant ✓ Correct**
- C) Use biomarkers only when they contradict all published evidence
- D) Apply the same recommendation regardless of biomarker findings

Rationale: The chapter explains that personalized markers can be incorporated into the diagnostic process before algorithm application.

Q95.

In a controlled study of depression algorithms, patients in the algorithm arm improve earlier than the control group, but long-term separation narrows. The chapter suggests one possible reason is

- A) algorithm care prevents relapse only in psychotic depression
- B) initially more intensive patient involvement with a project coordinator in the algorithm group ✓ Correct**
- C) usual care always becomes superior over time
- D) early improvement proves the medication sequence was incorrect

Rationale: The chapter notes that early benefits in depression studies may reflect greater patient involvement with project coordinators.

Q96.

A prescriber says, "I prefer what I know works for me rather than spending extra time on the evidence-supported option." Which barrier to guideline use from the chapter is most directly reflected?

- A) Validated evidence-based treatments may require more time than clinicians are willing to provide ✓ Correct**
- B) Guidelines are useful only in primary care
- C) Evidence-based options are always more expensive
- D) Time pressure affects only diagnostic assessment, not treatment choice

Rationale: The chapter states that clinicians may avoid scientifically validated approaches when they are more time-consuming than usual practice.

Q97.

A hospital wants to build computerized prescribing support for psychiatry. According to the chapter, why might this be particularly helpful?

- A) Computerized expert systems are already universal in psychiatric practice
- B) Point-of-care algorithm support could improve outcomes by delivering evidence-based recommendations during prescribing ✓ Correct**
- C) Computer systems remove the need for monitoring high-risk drugs
- D) Electronic tools are mainly useful for billing rather than clinical decisions

Rationale: The chapter suggests that computerized algorithm applications at the point of care could improve psychopharmacology outcomes.

Q98.

A guideline author proposes omitting discussion of adverse effects to keep the document concise and efficacy-focused. Which response is most consistent with the chapter?

- A) This is acceptable if the medication is first line
- B) This weakens the guideline because safety, both short and long term, is central to sequencing recommendations ✓ Correct**
- C) Adverse effects should be addressed only in appendices after publication
- D) Safety is less important than consensus

Rationale: The chapter emphasizes that safety evidence is as important as efficacy in determining recommendation order.

Q99.

Which scenario best exemplifies bias-driven judgment as described under reflexive decisions in the chapter?

- A) A clinician systematically compares alternatives before choosing a drug
- B) A clinician chooses a treatment out of overconfidence rooted in a personal bias ✓ Correct**
- C) A clinician delays treatment until a full external review is completed
- D) A clinician updates practice after reading a rigorous consensus revision

Rationale: Bias-driven judgments are reflexive decisions motivated by overconfidence based on some bias.

Q100.

A mental health service is choosing between relying on individual expert discretion alone and adopting an evidence-based algorithm with room for case-specific exceptions. Based on the chapter, which recommendation is most justified?

- A) Rely solely on individual discretion because expert judgment generally outperforms algorithms
- B) Adopt the algorithm as the default framework while permitting justified deviations for individual patients ✓ Correct**
- C) Avoid algorithms because psychiatric evidence is too heterogeneous to be useful
- D) Use only the flowchart summary to maximize efficiency

Rationale: The chapter supports algorithm adherence as generally superior while maintaining that algorithms are aids to judgment and may be deviated from when appropriate.

Q101.

A department is deciding whether to replace largely intuition-based prescribing habits with an evidence-based psychopharmacology algorithm. Which rationale from the chapter most strongly supports the change?

- A) Algorithms preserve the traditional apprentice model while reducing documentation burden
- B) Algorithms reduce reliance on heuristic and bias-driven decisions by synthesizing evidence into structured choices ✓ Correct**
- C) Algorithms eliminate the need for diagnostic assessment before treatment selection
- D) Algorithms ensure that every patient receives a novel medication when standard treatment fails

Rationale: The chapter argues that algorithms help counter common cognitive errors by organizing evidence into a coherent decision structure.

Q102.

A psychiatrist says, "I had one patient develop Stevens-Johnson syndrome on lamotrigine, so I avoid it in nearly all bipolar depression cases despite the literature." This statement best illustrates which error source discussed in the chapter?

A) Affective heuristic ✓ Correct

B) Base-rate correction

C) Diagnostic parsimony

D) Spectrum bias

Rationale: The affective heuristic occurs when emotionally charged experiences outweigh scientific evidence in decision-making.

Q103.

Which scenario best exemplifies the availability heuristic in psychopharmacologic decision-making?

A) A clinician revises treatment after reviewing a new meta-analysis and safety data

B) A clinician chooses the first medication that comes to mind because of a recent memorable case ✓ Correct

C) A clinician delays treatment to obtain a more precise DSM-based diagnosis

D) A clinician consults peers to compare competing guideline recommendations

Rationale: The availability heuristic is selecting an option based on the most readily recalled example rather than a systematic review of evidence.

Q104.

In the chapter, the impracticality of ideal evidence-based medicine in routine psychopharmacology is attributed primarily to what combination of barriers?

A) Lack of any diagnostic standards and absence of drug trials

B) Excessive patient preference variability and universal insurer restrictions

C) Time demands plus cognitive tasks that may be unfamiliar to clinicians ✓ Correct

D) Inability to identify any comorbidity relevant to treatment choice

Rationale: The authors emphasize that full EBM requires time-intensive diagnostic, historical, and literature-interpretation work that is difficult in daily practice.

Q105.

A psychopharmacology algorithm is most appropriately described as which of the following?

A) A rigid rule set that replaces clinical judgment in all cases

B) A consensus-based synthesis of evidence organized into sequenced treatment recommendations ✓ Correct

C) A pharmaceutical marketing tool that simplifies adoption of new agents

D) A legal standard that defines malpractice thresholds in psychiatry

Rationale: The chapter presents algorithms as evidence-informed syntheses that organize research into a practical blueprint for care.

Q106.

Which feature would most strongly increase the trustworthiness of a psychopharmacology guideline according to the chapter's discussion of Institute of Medicine standards?

- A) Single-author development by a recognized expert with extensive industry ties
- B) Publication of summary flowcharts without detailed reasoning to improve speed of use
- C) Frequent updating, external review, and minimal conflicts of interest among authors ✓ Correct**
- D) Restriction of recommendations to efficacy outcomes only

Rationale: The chapter highlights low conflict of interest, rigorous external review, and frequent updates as key markers of guideline validity.

Q107.

A clinic director wants to evaluate whether a guideline is sufficiently robust for clinical use. Which additional criterion beyond standard efficacy evidence do the authors explicitly argue should shape medication sequencing?

- A) Regional formulary popularity
- B) Short- and long-term safety evidence ✓ Correct**
- C) Prescriber seniority
- D) Patient internet ratings of medications

Rationale: The authors state that both short- and long-term safety should be weighted as heavily as efficacy in sequencing recommendations.

Q108.

A resident asks why detailed assessment of prior treatment trials is essential before applying evidence-based psychopharmacology. What is the best answer based on the chapter?

- A) It is mainly needed to satisfy billing requirements for higher-level visits
- B) It prevents repeating interventions that were previously ineffective or harmful ✓ Correct**
- C) It substitutes for a formal DSM-based diagnosis when records are incomplete
- D) It is only relevant in research settings, not clinical care

Rationale: The chapter stresses careful treatment history review to avoid reusing ineffective or adverse prior treatments.

Q109.

Which criticism of relying primarily on personal clinical experience is most consistent with the authors' argument?

- A) Clinical experience is always statistically invalid because it excludes biological markers
- B) Clinical experience generally involves small sample sizes and patients who may not resemble the current case ✓ Correct**
- C) Clinical experience cannot identify medication side effects
- D) Clinical experience is useful only for psychotherapy decisions, not medication decisions

Rationale: The authors note that personal experience is limited by small Ns and sampling differences between past and current patients.

Q110.

A health system is designing a decision support tool for psychiatry. According to the chapter, when would algorithms likely become more practically valuable?

A) When embedded at the point of care within computerized records and order-entry systems ✓ Correct

B) When converted into paper pocket cards with no supporting text

C) When limited to first-line medication lists without rationale

D) When used only after all standard treatments have failed

Rationale: The chapter suggests practical value will increase when key algorithm advice is delivered at the point of care through computerized systems.

Q111.

A psychiatrist underuses clozapine because of fear of adverse effects despite clear indications, while another uses it freely but neglects monitoring. The chapter uses this contrast mainly to illustrate that prescribing behavior can be influenced by what factor?

A) Heritable variation in risk-taking tendency ✓ Correct

B) Uniform adherence to safety protocols

C) Diagnostic uncertainty alone

D) Exclusive reliance on patient preference

Rationale: The authors cite risk-taking as a strongly heritable trait that may shape clinicians' responses to medication risk.

Q112.

Which statement best captures the chapter's position on the relationship between evidence-based medicine and personalized medicine?

A) They are incompatible because average trial results cannot inform individual care

B) Personalized medicine makes diagnostic classification unnecessary before treatment

C) They are complementary because validated subgroup markers can be incorporated into the diagnostic process before applying algorithms ✓ Correct

D) Evidence-based medicine should be abandoned once any biomarker is proposed

Rationale: The chapter rejects a false dichotomy and argues that validated personalized markers can be integrated into evidence-based algorithms.

Q113.

A faculty group is comparing two guideline-development proposals. Proposal A includes explicit reasoning for each recommendation and discusses competing published algorithms; Proposal B lists recommendations only. Based on the chapter, why is Proposal A superior?

A) It reduces the need for external review

B) It allows users to evaluate the basis for recommendations and differences from alternative approaches ✓ Correct

C) It guarantees stronger efficacy outcomes than Proposal B

D) It removes the need to update recommendations frequently

Rationale: The authors emphasize transparency of reasoning and analysis of differing published algorithms as markers of stronger guidance.

Q114.

Which conclusion about psychopharmacology algorithm studies in psychiatry is most accurate according to the chapter?

- A) They consistently show large and durable superiority over treatment as usual
- B) They show no measurable benefit in any psychiatric disorder studied
- C) They have generally shown modest benefits, with some early advantages and small gains in schizophrenia ✓ Correct**
- D) They are methodologically invalid because no controlled studies have been attempted

Rationale: The chapter characterizes the psychiatric evidence base as limited and modest, with early benefits in depression studies and small advantages in schizophrenia.

Q115.

Why do the authors suggest outcome differences between algorithm-guided care and treatment as usual may appear weaker than expected in controlled studies?

- A) Algorithm groups are prohibited from using adjunctive treatments
- B) Control clinicians often follow many algorithm recommendations anyway, reducing detectable contrast ✓ Correct**
- C) Algorithm studies only enroll treatment-resistant patients
- D) Treatment-as-usual groups receive more intensive educational support

Rationale: The chapter notes that treatment-as-usual clinicians commonly implement many algorithm elements, blunting group differences.

Q116.

In the schizophrenia studies discussed, what was identified as a likely reason for the lack of robust outcome differences?

- A) Algorithm groups had higher rates of diagnostic misclassification
- B) Physicians often failed to follow the key recommendation to use clozapine after two adequate antipsychotic trials ✓ Correct**
- C) Control groups used clozapine far more often than algorithm groups
- D) The studies excluded all patients with side effects

Rationale: The authors specifically highlight poor adherence to the clozapine recommendation as a major reason strong benefits were not observed.

Q117.

A psychiatric service introduces an evidence-based algorithm but sees little uptake. According to the chapter, which intervention is most likely to improve implementation?

- A) Reducing all recommendations to a one-page flowchart and removing discussion
- B) Regular intensive educational discussions supported by hospital and clinic leadership ✓ Correct**
- C) Delegating all prescribing to trainees to increase guideline familiarity
- D) Using only industry-sponsored educational sessions to speed dissemination

Rationale: The chapter reports that intensive educational discussions with leadership support can overcome barriers to algorithm implementation.

Q118.

Which concern about pharmaceutical influence is most aligned with the authors' critique of the psychopharmacology evidence base?

- A) Industry studies are typically too long and too representative of complex clinical populations
- B) Industry influence may shape study design, interpretation, and publication in ways that overvalue new expensive products ✓ Correct**
- C) Industry support eliminates novelty preference bias among prescribers
- D) Industry-sponsored trials usually prioritize long-term safety over efficacy marketing claims

Rationale: The chapter argues that pharmaceutical firms can bias design and publication to encourage excessive valuation of newer costly medications.

Q119.

A clinician relies on a brief summary flowchart without reading the full algorithm text and then misapplies a recommendation. What broader problem are the authors warning about?

- A) The impossibility of using algorithms in psychiatry
- B) The risk that superficial consultation of algorithms can produce serious errors if nuances are ignored ✓ Correct**
- C) The legal inadmissibility of flowcharts in clinical settings
- D) The requirement that all algorithms be memorized before use

Rationale: The chapter cautions that hasty use of summary flowcharts without understanding the reasoning can lead to significant patient care errors.

Q120.

Which statement best reflects the chapter's view of algorithm use versus expert judgment?

- A) Expert judgment is consistently superior because it can capture nuances algorithms miss
- B) Algorithms should replace all individualized clinical decisions
- C) Evidence from other fields suggests algorithm adherence often outperforms individual expert judgment, though algorithms remain aids rather than absolute rules ✓ Correct**
- D) There is no basis for comparing algorithmic and expert decisions

Rationale: The authors note that algorithm-based decisions often outperform individual judgment, while still emphasizing that algorithms are aids to judgment.

Q121.

A psychiatrist says, "I do what has worked in my hands for years; studies in ideal patients are irrelevant." Which is the strongest chapter-based critique of this stance?

- A) It ignores that evidence from carefully diagnosed studies may still require critical appraisal and structured adaptation rather than wholesale rejection ✓ Correct**
- B) It is acceptable because clinical experience is the preferred basis of evidence-based medicine
- C) It is justified whenever the clinician has treated more than 100 patients
- D) It is only problematic if the clinician prescribes off-label medications

Rationale: The chapter acknowledges limitations of trial generalizability but argues for critical synthesis of evidence rather than reliance solely on experience.

Q122.

Which of the following would be the best evidence that a published psychopharmacology algorithm has attempted to minimize bias?

- A) Its authors are frequent speakers for multiple manufacturers of included medications
- B) It cites only short-term efficacy trials involving uncomplicated patients
- C) It is developed by experts distanced from drug-company support and revised through consensus ✓ Correct**
- D) It avoids discussing conflicting guidelines to preserve clarity

Rationale: The chapter recommends consensus development by respected EBM experts who have distanced themselves from pharmaceutical support.

Q123.

A clinician asks why a criteria-based DSM diagnosis must precede evidence-based psychopharmacology decisions. Which answer best fits the chapter?

- A) Because psychopharmacology evidence is largely derived from studies using carefully defined diagnostic criteria, including subtypes and comorbidity ✓ Correct**
- B) Because DSM diagnosis guarantees the same treatment response across patients
- C) Because diagnosis matters only for reimbursement, not treatment selection
- D) Because algorithms are designed to avoid considering specifiers and comorbidities

Rationale: The chapter states that research evidence is built on carefully diagnosed populations, making accurate diagnosis essential for applying that evidence.

Q124.

A guideline panel is debating whether to include recommendations for women of child-bearing potential and for psychiatric and medical comorbidity. According to the chapter, what is the best recommendation?

- A) Exclude these issues to preserve algorithm simplicity
- B) Address them explicitly because comorbidity and reproductive considerations should inform recommendations ✓ Correct**
- C) Mention them only in appendices unrelated to treatment sequencing
- D) Defer them entirely to personalized medicine and omit them from evidence-based guidance

Rationale: The authors explicitly state that psychiatric and medical comorbidity, including child-bearing potential, should be assessed and addressed.

Q125.

Which teaching strategy is most consistent with the chapter's proposed role of algorithms in psychopharmacology education?

- A) Using algorithms as scaffolding structures that organize relevant data for progressively complex cases ✓ Correct**
- B) Replacing all literature appraisal training with memorization of medication lists
- C) Teaching only adverse-effect management and omitting treatment sequencing
- D) Encouraging learners to disregard consensus updates in favor of personal style

Rationale: The chapter describes algorithms as scaffolding structures for organizing data across increasing levels of case complexity.

Q126.

A clinician deviates from a well-constructed algorithm because of a strong intuition and obtains a poor outcome. According to the chapter, how should this event be interpreted?

- A) As evidence that algorithms are too rigid for psychiatric care
- B) As consistent with findings that deviations from algorithms more often produce errors than brilliant exceptions ✓ Correct**
- C) As proof that treatment-as-usual is superior to structured care
- D) As unrelated to decision process because outcomes are random

Rationale: The chapter notes that although occasional brilliant deviations occur, departures from good algorithms more often lead to error.

Q127.

What is the most important reason the chapter gives for not following algorithms rigidly?

- A) Algorithms are intended as aids to judgment and may not fit every individual patient ✓ Correct**
- B) Algorithms are primarily legal documents rather than clinical tools
- C) Algorithms are based only on expert opinion and not evidence
- D) Algorithms are useful only in research trials and not clinical settings

Rationale: The authors emphasize that algorithms support but do not replace individualized clinical judgment.

Q128.

A hospital wants to reduce polypharmacy and side effects in schizophrenia care. Based on the chapter, what can reasonably be expected from algorithm implementation?

- A) Guaranteed elimination of all antipsychotic polypharmacy
- B) Small advantages, including reduced side effects and less antipsychotic polypharmacy ✓ Correct**
- C) No change because algorithms affect only depression treatment
- D) Large outcome gains independent of clinician adherence

Rationale: The schizophrenia studies cited found small benefits such as less polypharmacy and fewer side effects with algorithm use.

Q129.

Which observation best supports the chapter's claim that medicine's cultural reliance on the "art" of practice can perpetuate mistakes?

- A) Experienced clinicians always outperform structured decision tools
- B) Rules of thumb may allow clinicians to repeat the same errors with increasing confidence over time ✓ Correct**
- C) Apprenticeship models eliminate the need for corrective action plans
- D) Personal intuition becomes more accurate than evidence after enough years in practice

Rationale: The chapter quotes the idea that clinical experience can mean making the same mistakes repeatedly with increasing confidence.

Q130.

A psychiatry chair wants to know whether evidence-based psychopharmacology can be practiced by simply reading individual articles as needed. Based on the chapter, what is the best response?

- A) Yes; single-article reading is sufficient because study quality is usually uniform
- B) No; clinicians must also critically detect study flaws and biases before drawing conclusions ✓ Correct**
- C) Yes; publication in a peer-reviewed journal guarantees applicability to typical patients
- D) No; evidence-based medicine rejects all published trials influenced by industry

Rationale: The chapter stresses that practitioners must be sophisticated in identifying study flaws and biases to avoid false conclusions.

Q131.

Which study characteristic most undermines confidence in direct applicability of much psychopharmacology evidence to routine practice, according to the chapter?

- A) Trials often include highly complex, medically ill, and suicidal patients typical of practice
- B) Trials are commonly short and conducted in otherwise healthy, uncomplicated patients unlike many real-world cases ✓ Correct**
- C) Trials generally prioritize long-term functional outcomes over symptom scales
- D) Trials are designed mainly by independent public agencies with minimal commercial influence

Rationale: The authors criticize the evidence base because many studies are short and enroll uncomplicated patients unrepresentative of routine psychiatric practice.

Q132.

A new antidepressant enters the market with limited data. According to the chapter's model, how should a clinician ideally incorporate this development?

- A) Adopt it immediately because novelty is usually a marker of superior efficacy
- B) Reject it categorically until ten years of postmarketing data exist
- C) Compare the new information with existing knowledge at the relevant algorithm node and decide whether practice should change or await consensus update ✓ Correct**
- D) Use it only if provided as free samples by representatives

Rationale: The chapter explains that new studies or medications should be weighed against existing knowledge at the relevant decision point, possibly pending expert consensus updates.

Q133.

Which statement best characterizes the chapter's interpretation of early benefits seen in depression algorithm studies?

- A) They prove that algorithms produce steadily widening superiority over time
- B) They may partly reflect more intensive patient involvement with a project coordinator rather than the algorithm alone ✓ Correct**
- C) They show that treatment-as-usual quickly surpasses algorithm-guided care
- D) They demonstrate that medication selection is irrelevant compared with psychotherapy

Rationale: The chapter suggests early advantages may have been due in part to greater patient involvement in the algorithm group.

Q134.

A clinician uses a familiar medication despite stronger evidence for another option because the familiar drug has been prescribed often in the past. Which bias named in the chapter is most directly implicated?

A) Familiarity effect ✓ Correct

B) Anchoring adjustment

C) Outcome neglect

D) Verification bias

Rationale: The chapter specifically identifies the familiarity effect as a bias that can shape prescribing away from evidence-based choices.

Q135.

Which recommendation would best address the chapter's concern about oversimplified or biased published algorithms?

A) Use any algorithm that contains a flowchart, regardless of development process

B) Apply caveat emptor and evaluate the algorithm's reasoning, review process, conflicts of interest, and updates ✓ Correct

C) Prefer algorithms sponsored by manufacturers because they are easier to disseminate

D) Rely only on local tradition to judge algorithm quality

Rationale: The chapter warns that some algorithms are flawed and advises careful scrutiny of their quality and trustworthiness.

Q136.

A chief medical officer asks why the production of evidence syntheses and algorithms should be recognized as its own methodology and field. What is the strongest chapter-based justification?

A) Because individual clinicians no longer need any role in treatment decisions

B) Because healthcare needs rigorous syntheses that deliver usable clinical evidence where it is needed ✓ Correct

C) Because systematic reviews have replaced all other forms of research

D) Because algorithm writing is mainly a billing and compliance function

Rationale: The chapter cites experts who argue that healthcare urgently needs high-quality syntheses and that producing them is a distinct methodology.

Q137.

A psychiatrist says, "If a guideline recommendation takes more time than what I already do, I probably won't use it." This attitude reflects which implementation barrier highlighted in the chapter?

A) Clinicians may avoid scientifically validated but time-consuming approaches even when evidence supports them ✓ Correct

B) Clinicians universally prefer long-term safety monitoring over convenience

C) Guidelines are rejected mainly because they are too inexpensive to implement

D) The primary obstacle is lack of any available evidence on medication efficacy

Rationale: The chapter notes that physicians may not provide time-consuming treatments even when they are scientifically validated and well evidenced.

Q138.

A training program wants to reduce reflexive prescribing decisions. Which educational focus would be most aligned with the chapter's analysis of decision errors?

- A) Strengthening rapid first-impression treatment selection
- B) Teaching recognition of biases such as overconfidence, availability, and affective heuristics ✓ Correct**
- C) Encouraging trainees to rely primarily on memorable adverse events
- D) Minimizing discussion of diagnostic criteria to save time

Rationale: The chapter identifies several cognitive biases that contribute to quick but error-prone prescribing decisions.

Q139.

Which of the following best explains why the chapter does not regard personalized medicine as a reason to abandon algorithms?

- A) Because biomarkers are considered too unreliable ever to influence psychopharmacology
- B) Because subgroup-specific tests, once validated, can be incorporated before algorithm application ✓ Correct**
- C) Because personalized medicine applies only to nonpsychiatric disorders
- D) Because algorithms should ignore patient heterogeneity and focus on population averages alone

Rationale: The authors argue that validated subgroup markers can be added to the diagnostic process and then integrated with algorithmic treatment selection.

Q140.

A hospital compares two algorithm programs. Program X uses blinded peer review by multiple content experts and revises recommendations until consensus or stronger argumentation is achieved; Program Y does not. Based on the chapter, what is the main advantage of Program X?

- A) It ensures all recommendations will match usual prescribing patterns
- B) It strengthens the credibility of the facts, analysis, and reasoning underlying recommendations ✓ Correct**
- C) It removes the need for future updates
- D) It guarantees superiority over all competing guidelines

Rationale: The chapter describes blinded peer review and iterative consensus-building as major strengths that enhance algorithm credibility.

Q141.

A psychiatrist argues that because controlled algorithm studies have shown only modest benefits, algorithms have no value. Which response is most consistent with the chapter?

- A) Modest findings may reflect poor adherence to the most consequential recommendations and contamination by usual-care overlap, not lack of value ✓ Correct**
- B) Any intervention without large effect sizes should be abandoned immediately
- C) Algorithms are useful only when they produce dramatic superiority in every trial
- D) Psychiatry should return entirely to apprenticeship-based prescribing

Rationale: The chapter explains that modest study results may stem from incomplete adherence and limited contrast between algorithm and usual-care arms.

Q142.

Which situation best demonstrates bias-driven judgment as described in the chapter?

- A) A clinician consciously compares several options before selecting one with the best evidence
- B) A clinician makes a hurried decision without considering alternatives because of overconfidence rooted in a bias ✓ Correct**
- C) A clinician obtains collateral history before changing treatment
- D) A clinician waits for expert consensus before adopting a controversial practice

Rationale: Bias-driven judgment is a reflexive decision made without adequate consideration of alternatives and fueled by overconfidence.

Q143.

A guideline panel wants to improve real-world utility of its recommendations. Which design characteristic from the chapter would most directly support this goal?

- A) Provide preferred practices from initial treatment through highly treatment-resistant scenarios of progressive complexity ✓ Correct**
- B) Limit guidance to uncomplicated first-episode cases only
- C) Avoid discussing alternatives so users are not confused
- D) Exclude monitoring and safety considerations to shorten the document

Rationale: The chapter recommends that algorithms specify preferred practice across progressively complex cases, including treatment-resistant situations.

Q144.

Which recommendation would most directly help clinicians avoid false conclusions from the literature according to the chapter?

- A) Prioritize studies with the newest medications regardless of design quality
- B) Develop sophistication in detecting study flaws and biases during evidence appraisal ✓ Correct**
- C) Focus only on abstracts because full articles introduce unnecessary complexity
- D) Ignore publication context if the results are statistically significant

Rationale: The authors emphasize that EBM practitioners must be skilled at identifying flaws and biases in studies.

Q145.

A service line is deciding whether to invest in computerized psychiatric decision support. Which argument from the chapter is strongest?

- A) Computerized expert systems are already universal in psychiatric practice
- B) Point-of-care algorithm-based applications could improve outcomes by providing key recommendations during prescribing ✓ Correct**
- C) Computerized systems eliminate the need for clinician judgment and patient discussion
- D) Psychiatry is too simple to benefit from tools used in other complex fields

Rationale: The chapter argues that embedding algorithm advice in computerized point-of-care systems could improve psychopharmacology practice and outcomes.

Q146.

A clinician says, "I only need the flowchart; the reasoning behind recommendations is unnecessary." Why is this view problematic according to the chapter?

- A) Because all flowcharts are legally protected and cannot be used clinically alone
- B) Because understanding the nuanced reasoning is necessary to avoid gross misinterpretation and patient care errors ✓ Correct**
- C) Because reasoning matters only for trainees, not attending physicians
- D) Because summary tools should never accompany guidelines

Rationale: The chapter warns that relying only on summary flowcharts without reading the full rationale can lead to major errors.

Q147.

Which of the following most accurately reflects the chapter's account of how busy physicians often make treatment plans?

- A) By performing exhaustive literature reviews before every decision
- B) By conducting limited reviews focused on a few salient symptoms or historical details until a plan seems to fall into place ✓ Correct**
- C) By routinely consulting multidisciplinary committees before prescribing
- D) By applying personalized biomarkers in all patients before diagnosis

Rationale: The chapter describes busy physicians as narrowing attention to selected details, after which the treatment plan appears to emerge quickly.

Q148.

A quality-improvement team wants to explain why an evidence-based algorithm can still permit individualized care. Which explanation is best?

- A) Algorithms are intentionally vague so that any treatment choice fits them
- B) Algorithms discuss alternatives at decision nodes and indicate why they are not first-line but may be reasonable in some circumstances ✓ Correct**
- C) Algorithms require deviation whenever a patient has comorbidity
- D) Algorithms are designed only for research volunteers, not individual patients

Rationale: The chapter states that good algorithms present alternatives and explain when nonpreferred options may still be appropriate.

Q149.

A psychiatrist is reviewing why adherence to an algorithm did not improve outcomes in a local schizophrenia program. Which factor should be investigated first based on the chapter's analysis of prior studies?

- A) Whether clinicians followed the high-impact recommendation to use clozapine after two adequate antipsychotic trials ✓ Correct**
- B) Whether clinicians prescribed enough free samples to increase adherence
- C) Whether all patients received the same antipsychotic regardless of response
- D) Whether biomarkers replaced DSM diagnosis in most cases

Rationale: The chapter identifies failure to implement the clozapine step as a likely explanation for weak outcome differences in schizophrenia algorithm studies.

Q150.

A residency program asks for the most defensible overall conclusion from the chapter regarding evidence-based psychopharmacology algorithms. Which is best?

- A)** They should replace clinician judgment because the evidence base is complete and universally applicable
- B)** They are of limited value because psychiatric evidence is too flawed to synthesize meaningfully
- C) They are useful, evidence-informed aids that can reduce bias and structure care, but they must be critically appraised, updated, and applied with judgment ✓ Correct**
- D)** They are mainly educational devices with no plausible role in clinical practice improvement

Rationale: The chapter supports algorithms as practical, evidence-informed aids that improve structured decision-making while requiring critical appraisal and individualized application.