



ACADEMY OF  
CONSULTATION-LIAISON  
PSYCHIATRY

# **ACLP Interdisciplinary Inpatient Collaborative Care Guide**

*Interdisciplinary Education Subcommittee*

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**Academy of Consultation-Liaison Psychiatry Interdisciplinary Inpatient Collaborative Care Guide**

Developed by the ACLP Interdisciplinary Education Subcommittee.

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**Purpose:** Consultation-liaison psychiatrists are now more than ever relying on collaboration from an interdisciplinary team to improve patient outcomes. As such, they are often expected to serve a leadership role within their team that includes education. The articles and chapters included in this guide are meant to serve as supplemental material in teaching interdisciplinary team members about common inpatient psychiatry consultation topics. These resources were compiled by the Academy of Consultation Liaison Psychiatry (ACLP) Interdisciplinary Education Subcommittee and peer reviewed by the ACLP Education Committee.

**How to Use the Guide:** Each topic (section) contains articles and/or book chapters that were selected based on relevance to inpatient psychiatric consultation and when possible, accessibility (e.g., available for free). Articles and chapters that were more process-oriented (“how”) rather than content-oriented (“what”) were prioritized. This was done to ensure the guide was more practical than theoretical for teaching interdisciplinary team members. Links to professional organizations and websites were also included in some sections; such information could be useful for an interdisciplinary team member to educate patients and families. Articles and chapters were also rated in terms of degree of difficulty in the hopes this would guide interdisciplinary team members in the ones they selected to read based on their level of expertise and years of training. You will find a link under each reference that either connects you to the full article/chapter or the abstract if a free copy is not available. Note that articles from the journal *Psychosomatics* can be accessed by any member of the ACLP by first logging on to the ACLP website with their user ID and password, followed by selecting the “News and Publications” column and then selecting the link for *Psychosomatics*.

**Disclosures:** No relevant (direct or indirect) financial relationship exists between the authors of this guide and any for-profit company which could be considered a conflict of interest.

**Comments:** This guide is a work in progress and we welcome feedback! Please send correspondence to [michael.maksimowski@gmail.com](mailto:michael.maksimowski@gmail.com).



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## SECTION 1: CAPACITY

Dastidar, J. G., & Odden, A. (2011). How do I determine if my patient has decision-making capacity? *The Hospitalist*, 15(8), 24-31.

Full article: <https://www.the-hospitalist.org/hospitalist/article/124731/how-do-i-determine-if-my-patient-has-decision-making-capacity>

*BEGINNER. The authors give a very clear explanation of how to assess for capacity that can be shared with non-psychiatrists so that they can participate in capacity assessments. The article is very useful for services where psychiatrists are short staffed as it emphasizes that hospitalists can often determine capacity independent of a psychiatric consultant.*

Appelbaum, P. S. (2007). Assessment of patients' competence to consent to treatment. *New England Journal of Medicine*, 357(18), 1834-1840.

Full article: <https://www.nejm.org/doi/full/10.1056/NEJMcp074045>

*INTERMEDIATE. The article begins by discussing the importance of assessing capacity and risk factors for lacking capacity for medical decision making. Criteria are detailed for assessing capacity along with task, approach, and questions for clinical assessment. The author states that psychiatric consultation should be considered for assessment of capacity in complex cases and/or when there is a history of mental illness. Approaches for next steps are discussed when a patient is deemed not to have capacity for a medical decision.*

Cheung, E. H., Heldt, J., Strouse, T., & Schneider, P. (2017). The Medical Incapacity Hold: A Policy on the Involuntary Medical Hospitalization of Patients Who Lack Decisional Capacity. *Psychosomatics*, 59(2), 169-176.

Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318217301950>

*ADVANCED. The article begins with discussing the dilemma of using an involuntary psychiatric hold (civil commitment) to hold patients that lack the capacity to leave against medical advice, despite a substantial number of cases in which the patient does not have a psychiatric illness. Medical and legal concerns are reviewed in light of this situation. It is suggested that hospital policies and procedures, including a "medical incapacity hold," must be in place to detain medically hospitalized patients that lack capacity for medical decision-making.*

Kontos, N., Freudenreich, O., & Querques, J. (2013). Beyond capacity: identifying ethical dilemmas underlying capacity evaluation requests. *Psychosomatics*, 54(2), 103-110.

Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318212001119>

*ADVANCED. The authors suggest that capacity evaluation requests have become a euphemism for physicians' frustrations in managing patients who are not progressing smoothly in their care. Ethical dilemmas are discussed that pit autonomy against beneficence, nonmaleficence, and justice. In each dilemma, the capacity evaluation is not necessarily unwarranted but nonetheless triggered due to a clash between autonomy and paternalism. The authors argue that CL psychiatrists should utilize "principlism" in each case*

## **SECTION 2: CATATONIA**

Rosebush, P. I., & Mazurek, M. F. (2009). Catatonia and its treatment. *Schizophrenia bulletin*, 36(2), 239-242.

Full article: <https://academic.oup.com/schizophreniabulletin/article/36/2/239/1902903>

*BEGINNER.* The authors review the prevalence of catatonia in different psychiatric populations. They then discuss reasons as to why catatonia in patients with schizophrenia are more difficult to treat. Approaches to assessing and treating a patient with catatonia are detailed, including a guide for lorazepam challenge.

Bhati, M. T., Datto, C. J., & O'Reardon, J. P. (2007). Clinical manifestations, diagnosis, and empirical treatments for catatonia. *Psychiatry (Edgmont)*, 4(3), 46.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2922358/>

*INTERMEDIATE.* The authors give a comprehensive overview of the history and clinical features of catatonia. A differential diagnosis of conditions that mimic catatonia is included. They then discuss treatment options for catatonia, including benzodiazepines, ECT, or a combination of both.

Levenson, J. L. (2009). Medical aspects of catatonia. *Primary psychiatry*, 16(3), 23-6.

Full article: [https://primarypsychiatry.com/wp-content/uploads/import/0309PP\\_Levenson.pdf](https://primarypsychiatry.com/wp-content/uploads/import/0309PP_Levenson.pdf)

*INTERMEDIATE.* The author reviews medical disorders that can mimic catatonia as well as medical complications arising from catatonia.

Benarous X, Raffin M, Ferrafiat V, et al (2018). Catatonia in children and adolescents: New Perspectives.

*Schizophrenia Research*, 200, 56-67.

Abstract: <https://www.ncbi.nlm.nih.gov/pubmed/28754582>

*ADVANCED.* The authors review the literature on child and adolescent catatonia, emphasizing the symptoms, associated disorders and treatment approaches specific to this age group.



### **SECTION 3: DEMENTIA WITH BEHAVIORAL DISTURBANCES**

Caregiver's Guide to Understanding Dementia Behaviors

[www.caregiver.org/caregivers-guide-understanding-dementia-behaviors](http://www.caregiver.org/caregivers-guide-understanding-dementia-behaviors)

*DESCRIPTION: This webpage, written by the Family Caregiver Alliance (FCA), is geared towards family and friends to help with understanding dementia and providing tips for communication and handling behavioral disturbances.*

Treatments for Behavior

<https://www.alz.org/alzheimers-dementia/treatments/treatments-for-behavior>

*DESCRIPTION: This webpage, written by the Alzheimer's Association, is geared to caregivers to explain what drives behavioral problems in those with dementia, what coping strategies are available, and what non-pharmacological and pharmacological treatments are available.*

Reus, V. I., Fochtman, L. J., Eyler, A. E., Hilty, D. M., Horvitz-Lennon, M., Jibson, M. D., ... & Wills, C. D. (2016). The American Psychiatric Association practice guideline on the use of antipsychotics to treat agitation or psychosis in patients with dementia. *American Journal of Psychiatry*, 173(5), 543-546.

Full article: <https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2015.173501>

*BEGINNER. The APA practice guidelines advocate that antipsychotics should only be used as a last resort (i.e., symptoms are severe, dangerous, or cause significant distress to the patient). They provide guidelines that include the use of both non-pharmacological and pharmacological options for managing behavioral disturbances, including how long a patient should be trialed on an antipsychotic and when a patient should attempt to be tapered off an antipsychotic.*

Nasreddine, Z. S., Phillips, N. A., Bédirian, V., Charbonneau, S., Whitehead, V., Collin, I., ... & Chertkow, H. (2005). The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. *Journal of the American Geriatrics Society*, 53(4), 695-699.

Abstract: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1532-5415.2005.53221.x>

*BEGINNER: This article compares the MoCA to the MMSE to assess mild cognitive impairment (MCI). The MoCA was found to be superior to the MMSE in terms of sensitivity and specificity for detecting MCI.*

Link to MoCA: <https://www.mocatest.org/splash/>

Desai, A. K., Schwartz, L., & Grossberg, G. T. (2012). Behavioral disturbance in dementia. *Current psychiatry reports*, 14(4), 298-309.

Abstract: <https://link.springer.com/article/10.1007/s11920-012-0288-5>

*INTERMEDIATE. This article categorizes behavioral disturbances into four categories: mood changes, sleep changes, psychosis, and agitation. The authors argue that behavioral disturbances can be managed and often prevented by treating reversible factors, reducing polypharmacy, and restricting pharmacological interventions to short-term treatment of emergencies.*

P Cardinali, D., M Furio, A., & I Brusco, L. (2010). Clinical aspects of melatonin intervention in Alzheimer's disease progression. *Current Neuropharmacology*, 8(3), 218-227.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3001215/>

*INTERMEDIATE: This article reviews potential benefits of melatonin intervention in patients with mild cognitive impairment and Alzheimer's disease. Table 1 provides a summary of clinical studies on melatonin efficacy in AD. Melatonin replacement has been shown to be effective to treat sundowning and other sleep wake disorders in AD patients. The authors suggest that the antioxidant, mitochondrial and antiamyloidogenic effects of melatonin may support its application as a useful ad-on therapeutic tool in MCI, and possibly, AD.*

Wang, L. Y., Shofer, J. B., Rohde, K., Hart, K. L., Hoff, D. J., McFall, Y. H., ... & Peskind, E. R. (2009). Prazosin for the treatment of behavioral symptoms in patients with Alzheimer disease with agitation and aggression. *The American Journal of Geriatric Psychiatry*, 17(9), 744-751.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2842091/>

M. Greve, D. Desjarlais., I. Ahmed. Case Report: Successful treatment of agitation and aggression with prazosin in an elderly patient with dementia and comorbid heart disease. *Journal of Clinical Gerontology and Geriatrics*.

Volume 7, Issue 3. September 2016 Pages 109-111



Full article: <https://www.sciencedirect.com/science/article/pii/S2210833515000623>

*BEGINNER: These two articles provide some support for consideration of trial of prazosin to help with severe agitation and aggression seen in advanced dementia, not otherwise responding to other pharmacological trials (SSRIs, antipsychotics, mood stabilizers, etc).*



## SECTION 4: DELIRIUM

Loneragan, E., Luxenberg, J., Areosa Sastre, A., & Wyller, T. B. (2009). Benzodiazepines for delirium. *Cochrane Database Syst Rev*, 4.

Full article: <http://cochranelibrary-wiley.com/doi/10.1002/14651858.CD006379.pub3/abstract;jsessionid=48B970B0548A624C152DEAF50D38BCA4.f01t03>

*BEGINNER: A systematic review found only a handful of randomized trials investigating benzodiazepines for the management of agitation. No trial showed superiority of benzodiazepines over placebo, antipsychotics, or dexmedetomidine. It was concluded that benzodiazepines cannot be recommended for management of non-alcohol withdrawal delirium.*

Campbell, N., Boustani, M. A., Ayub, A., Fox, G. C., Munger, S. L., Ott, C., ... & Singh, R. (2009). Pharmacological management of delirium in hospitalized adults—a systematic evidence review. *Journal of general internal medicine*, 24(7), 848-853.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2695535/>

*INTERMEDIATE. The authors review several online databases for randomized control trials that have assessed pharmacological treatment for managing delirium, including antipsychotics, cholinergic enhancers, antiepileptic agents, an anesthetic, injectable sedatives, and a benzodiazepine. Second generation antipsychotics were no better at managing delirium compared to haloperidol. Cholinesterase inhibitors were not effective at preventing delirium. They suggest that benzodiazepines should not be used in the management of delirium unless there is concern for alcohol withdrawal delirium*

Stern, T. A., Celano, C. M., Gross, A. F., Huffman, J. C., Freudenreich, O., Kontos, N., ... Thompson, B. T. (2010). The Assessment and Management of Agitation and Delirium in the General Hospital. *Primary Care Companion to The Journal of Clinical Psychiatry*, 12(1), PCC.09r00938.

Full article: <http://doi.org/10.4088/PCC.09r00938yel>

*BEGINNER: Case vignette and discussion provides overview of risk factors and differential diagnosis for delirium, assessment, and treatment of agitation and delirium in the medically ill.*



## **SECTION 5: DEMORALIZATION**

Tang, P. L., Wang, H. H., & Chou, F. H. (2015). A systematic review and meta-analysis of demoralization and depression in patients with cancer. *Psychosomatics*, 56(6), 634-643.

Abstract: <https://doi.org/10.1016/j.psych.2015.06.005>

*INTERMEDIATE: The authors explore factors affecting demoralization in patients with cancer. A meta-analysis of data from several different countries found a significant correlation between depression and demoralization symptoms. The authors recommended assessing suicide risk in patients with demoralization symptoms whether or not they meet criteria for a depressive disorder.*

Slavney, P. R. (1999). Diagnosing demoralization in consultation psychiatry. *Psychosomatics*, 40(4), 325-329.

Abstract: [https://doi.org/10.1016/S0033-3182\(99\)71227-2](https://doi.org/10.1016/S0033-3182(99)71227-2)

*INTERMEDIATE: The author first defines demoralization as separate from an adjustment disorder in that it should be viewed as a normal phenomena (like grief) and not necessarily construed as pathological. Two case reports are used to illustrate how demoralization may surface during the course of illness or treatment. Dr. Slavney suggests that the CL psychiatrist can serve a purpose in explaining and validating demoralization to both the patient and primary provider.*

Robinson, S., Kissane, D. W., Brooker, J., & Burney, S. (2015). A systematic review of the demoralization syndrome in individuals with progressive disease and cancer: a decade of research. *Journal of pain and symptom management*, 49(3), 595-610.

Full article: [https://www.jpsmjournal.com/article/S0885-3924\(14\)00407-2/fulltext](https://www.jpsmjournal.com/article/S0885-3924(14)00407-2/fulltext)

*INTERMEDIATE: Review of 25 studies (33 articles) with a total of 4545 participants. The authors found that demoralization is common in patients with progressive disease and cancer, and clinically significant in 13-18%. Factors consistently associated with demoralization included: poorly controlled physical symptoms, inadequately treated depression and anxiety, reduced social functioning, unemployment, and single status. Clinical recognition of demoralization can help lead to more focused interventions.*

## CHAPTER 6: THE DIFFICULT PATIENT

Groves, J. Taking care of the hateful patient. *TV. Engl J Med.* 1978; 298: 883, 7.

Full article:

[https://www.researchgate.net/profile/James\\_Groves4/publication/22508638\\_Taking\\_Care\\_of\\_the\\_Hateful\\_Patient/links/55ddc21b08ae79830bb5769f/Taking-Care-of-the-Hateful-Patient.pdf](https://www.researchgate.net/profile/James_Groves4/publication/22508638_Taking_Care_of_the_Hateful_Patient/links/55ddc21b08ae79830bb5769f/Taking-Care-of-the-Hateful-Patient.pdf)

*INTERMEDIATE.* This is a classic article which summarized 4 stereotypes of patients that often elicit aversion, fear, despair, and even malice in their encounters with physicians. Learning the nature of each stereotype provides insight into the countertransference we often have towards these types of patients, which can then be used to inform on their psychology. Groves teaches us that what is most important in our care of patients is not necessarily how we feel about them, but rather how we behave towards them.

Lokko, H. N., & Stern, T. A. (2015). Confrontations with difficult patients: the good, the bad, and the ugly. *Psychosomatics*, 56(5), 556-560.

Abstract: [https://www.psychosomaticsjournal.com/article/S0033-3182\(15\)00077-8/fulltext](https://www.psychosomaticsjournal.com/article/S0033-3182(15)00077-8/fulltext)

*INTERMEDIATE.* The authors use a case vignette to illustrate the difficulties and importance of confronting difficult patients in the hospital setting. Examples include those with nonadherence to treatment and factitious disorder. Confrontations with patients can carry several advantages (foster trust, improve doctor-patient relationship, promote team cohesion, improve health outcomes). The authors recommend using a motivational interviewing approach as well as several guidelines.

Beach, S. R., Taylor, J. B., & Kontos, N. (2017). Teaching Psychiatric Trainees to “Think Dirty”: Uncovering Hidden Motivations and Deception. *Psychosomatics*, 58(5), 474-482.

Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318217301135>

*ADVANCED:* Despite frequent exposure to patients that manipulate, deceive, and withhold information, trainees receive little training in identifying and using such elements in their formulations. The authors suggest the use of a curriculum that includes didactic sessions, process rounds, and clinical experience to teach trainees how to manage such patients. Hidden motivations behind forms of deception are also discussed. The article is catered towards teaching psychiatry residents but aspects could be easily applied to members of an interdisciplinary team. The authors argue that teaching providers to “think dirty” reduces burnout and improves patient care.

## **SECTION 7A: CARDIOVASCULAR DISEASE**

Yost, G., Bhat, G., Mahoney, E., & Tatoes, A. (2017). Reduced anxiety and depression in patients with advanced heart failure after left ventricular assist device implantation. *Psychosomatics*, 58(4), 406-414.

Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318217300397>

*INTERMEDIATE: This prospective study looked at depression and anxiety scores before and after LVAD implantation. Participants scored mild in depression and anxiety on Beck inventories prior to implantation. Scores significantly improved after implantation. The authors opined that improvements in acute heart failure symptoms, functional capacity, and quality of life were causative factors for this finding.*

O'Connor, C. M., Jiang, W., Kuchibhatla, M., Mehta, R. H., Clary, G. L., Cuffe, M. S., ... & Krishnan, R. R. (2008). Antidepressant use, depression, and survival in patients with heart failure. *Archives of Internal Medicine*, 168(20), 2232-2237.

Full article: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/414601>

*INTERMEDIATE: This observational prospective study of over 1000 patients with heart failure assessed long-term mortality with antidepressant use. After adjusting for depression, multivariate analysis did not show a significant association between antidepressant use and reduced survival. Having depression, however, was significantly associated with reduced survival. The authors concluded that survival was neither positively nor negatively associated with depression in individuals with heart failure.*

Baumeister, H., Hutter, N., & Bengel, J. (2011). Psychological and pharmacological interventions for depression in patients with coronary artery disease. *Cochrane Database Syst Rev*, 9.

Full article:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008012.pub3/epdf/full>

*INTERMEDIATE: This systematic review looked at psychological and pharmacological interventions for depression in patients with coronary artery disease (CAD). A review of 16 randomized control trials found a slight but significant benefit of psychological and SSRI intervention on depression outcomes, but not cardiac events, quality of life, or mortality.*

Thombs, B. D., De Jonge, P., Coyne, J. C., Whooley, M. A., Frasure-Smith, N., Mitchell, A. J., ... & Soderlund, K. (2008). Depression screening and patient outcomes in cardiovascular care: a systematic review. *Jama*, 300(18), 2161-2171.

Full article: <https://jamanetwork.com/journals/jama/fullarticle/182852>

*INTERMEDIATE: This systematic review looked at 11 depression screening accuracy studies as well as 6 depression treatment studies in patients with cardiovascular disease. Depression with medications and/or cognitive behavioral therapy resulted in modest improvements in depression outcomes, but no significant change in cardiovascular outcomes. The studies showed that depression screening tools had a median sensitivity of 84% and median specificity of 79%, suggesting that they are reasonably accurate in patients with cardiovascular disease, but that positive screens should be followed up by a clinical interview. The authors concluded that there was insufficient evidence for or against routine screening for depression in patients with cardiovascular disease.*

## **SECTION 7B: GASTROINTESTINAL DISEASE**

Filipovic, B. R., & Filipovic, B. F. (2014). Psychiatric comorbidity in the treatment of patients with inflammatory bowel disease. *World journal of gastroenterology: WJG*, 20(13), 3552.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3974522/>

*INTERMEDIATE: Patients with ulcerative colitis and Crohn's disease are often plagued with numerous psychological symptoms. The authors discuss anatomical bases for psychiatric changes in patients with IBD and prevalence of psychiatric disorders. Recommendations for psychiatric treatment are discussed, with consideration of how certain psychotropic medications can worsen IBD symptoms. Psychotherapeutic approaches are also detailed, including the importance of collaboration with the patient's gastroenterologist.*

Mikocka-Walus, A. A., Turnbull, D. A., Moulding, N. T., Wilson, I. G., Andrews, J. M., & Holtmann, G. J. (2006). Antidepressants and inflammatory bowel disease: a systematic review. *Clinical Practice and Epidemiology in Mental Health*, 2(1), 24.

Full article: <https://cpementalhealth.biomedcentral.com/articles/10.1186/1745-0179-2-24>

*INTERMEDIATE: This literature review recognized that there is often a psychopathological impact in IBD patients, with common symptoms of depression and anxiety which may affect the success of gastroenterological therapy. However, in considering psychiatric intervention, it was cautioned for providers to be aware of the possibility of side effects of antidepressant therapy which could exacerbate GI issues such as more frequent liquid stools. In a systematic review of 12 relevant publications exploring the effect of antidepressants (paroxetine, bupropion, amitriptyline, phenelzine, and mirtazapine), 10 articles suggested that paroxetine, bupropion, and phenelzine seemed to be effective for treating both psychological and somatic symptoms in patients suffering from IBD. Amitriptyline was found ineffective for treating somatic symptoms of IBD and mirtazapine was not recommended for IBD patients.*

Xie, C., Tang, Y., Wang, Y., Yu, T., Wang, Y., Jiang, L., & Lin, L. (2015). Efficacy and safety of antidepressants for the treatment of irritable bowel syndrome: a meta-analysis. *PLoS One*, 10(8), e0127815.

Full article: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0127815>

This meta-analysis argues for TCAs over SSRIs for irritable bowel syndrome, suggesting that TCAs can improve the global symptoms and that there is no strong evidence to confirm the effectiveness of SSRIs in the treatment of IBS; The authors state that long-term RCTs are needed to assess the efficacy of SSRIs for this purpose. Although it is not recommended to use SSRIs to treat IBS routinely based on the current evidence, it is a safe practice and does not increase the risk of side effects. Therefore, after an individualized assessment, clinicians are encouraged to use antidepressants in scenarios where patients have failed to respond to conventional therapies for IBS and also have psychiatric comorbidities.

**SECTION 7C: HEPATIC DISEASE**

Zimbrea, P. C., & Schilsky, M. L. (2014). Psychiatric aspects of Wilson disease: a review. *General Hospital Psychiatry, 36*(1), 53-62.

Abstract: <https://www.sciencedirect.com/science/article/pii/S0163834313002454>

*ADVANCED: This systematic review looked at the prevalence of psychiatric symptoms in patients with Wilson's disease. Findings revealed that psychiatric symptoms often manifest for months or years before formal diagnosis is made. Mood and psychotic disorders were found to vary in patients with Wilson's disease. A brief section is devoted towards the end of the article in regards to treatment of psychiatric symptoms in patients with Wilson's disease.*



## **SECTION 7D: STROKE**

Robinson, R. G., & Jorge, R. E. (2015). Post-stroke depression: a review. *American Journal of Psychiatry*, 173(3), 221-231.

Full article: <https://ajp.psychiatryonline.org/doi/pdf/10.1176/appi.ajp.2015.15030363>

*INTERMEDIATE: This systematic review found that 29-52% of patients will develop depression within 5 years after a stroke. Risk factors for developing post-stroke depression (PSD) include: personal and family history of depression or anxiety, certain genotypes, left frontal or left basal ganglia strokes, functional and cognitive impairment, and lack of social support. Demographic factors or other medical conditions were not found to be significant risk factors. PSD is associated with increased cardiovascular mortality. Multiple studies have shown a positive association between SSRIs and functional/cognitive recovery, independent of their effect on depression. Almost all randomized control trials of antidepressants have shown significant improvements in depression scores compared to placebo, but can be associated with increased risk of post-stroke hemorrhaging, myocardial infarction, and falls.*



## **SECTION 7E: TRAUMATIC BRAIN INJURY**

For patients and caregivers:

<https://www.brainline.org>

*DESCRIPTION: A website that provides information about treating and living with TBI. Sections are devoted to patients, caregivers, professionals, and special populations (military, children). The website also includes resource directories.*

Bryant, R. A., O'donnell, M. L., Creamer, M., McFarlane, A. C., Clark, C. R., & Silove, D. (2010). The psychiatric sequelae of traumatic injury. *American Journal of Psychiatry*, 167(3), 312-320.

Full article: <https://ajp.psychiatryonline.org/doi/pdf/10.1176/appi.ajp.2009.09050617>

*INTERMEDIATE: This prospective study looked at prevalence rates of psychiatric disorders at 3 and 12 months after mild TBI. About a quarter (23%) of individuals studied developed a psychiatric disorder after TBI, the most common being MDD, GAD, PTSD, social phobia, and agoraphobia. Participants were more likely to develop a psychiatric disorder at 12 months if there was evidence of functional impairment at 3 months.*

Scholten, A. C., Haagsma, J. A., Cnossen, M. C., Olf, M., Van Beeck, E. F., & Polinder, S. (2016). Prevalence of and risk factors for anxiety and depressive disorders after traumatic brain injury: a systematic review. *Journal of neurotrauma*, 33(22), 1969-1994.

Abstract: <https://www.liebertpub.com/doi/abs/10.1089/neu.2015.4252>

*INTERMEDIATE: This systematic review found 22 articles looking at prevalence rates of depressive and anxiety disorder after TBI. Prevalence rates increased slightly after TBI within the first year, but increased dramatically in the long-term, suggesting persistence of symptoms over time. Risk factors for developing a depressive or anxiety disorder post-TBI included female sex, unemployment, and prior psychiatric history. Early identification and treatment was recommended to improve recovery and quality of life.*

## **SECTION 7F: PREGNANT AND BREASTFEEDING WOMEN**

Resources for Patients and Providers:

LactMed: <https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm>

*DESCRIPTION: An online peer-reviewed database of drugs that breastfeeding mothers may be taking, including levels in breast milk and infant blood.*

MGH Center for Women's Mental Health: <https://womensmentalhealth.org/>

*DESCRIPTION: This website includes resources on outpatient and inpatient treatment for pregnant women and mothers. It also includes fact sheets about psychiatric disorders common in pregnancy and the postpartum period.*

Mother to Baby: <http://www.movertobaby.org>

*DESCRIPTION: A collection of evidence-based information for parents, providers, and the general public about medications and other exposures during pregnancy and breastfeeding.*

Yonkers, K. A., Wisner, K. L., Stewart, D. E., Oberlander, T. F., Dell, D. L., Stotland, N., ... Lockwood, C. (2009). The management of depression during pregnancy: a report from the American Psychiatric Association and the American College of Obstetricians and Gynecologists. *Obstetrics and Gynecology*, 114(3), 703–713.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3094693/>

*INTERMEDIATE: Representatives from the American Psychiatric Association, the American College of Obstetricians and Gynecologists and a consulting developmental pediatrician collaborated to review articles on fetal and neonatal outcomes associated with depression and antidepressant treatment during childbearing. Both depressive symptoms and antidepressant exposure are associated with fetal growth changes and shorter gestations, but the majority of studies that evaluated antidepressant risks were unable to control for the possible effects of a depressive disorder. No association was found between SSRI exposure and specific morphological teratogenic risks. Limited information is available about the effects of SSRI exposure in-utero. The article provides guidance on diagnosing and managing depressive disorders during pregnancy.*

McLafferty, L. P., Becker, M., Dresner, N., Meltzer-Brody, S., Gopalan, P., Glance, J., ... & Worley, L. L. (2016). Guidelines for the management of pregnant women with substance use disorders. *Psychosomatics*, 57(2), 115-130.

Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318215002066>

*INTERMEDIATE: This article provides an up-to-date summary of recommendations in the approach and management of substance use disorders in pregnant women. The article starts with an overview of the epidemiology and maternal/fetal risks of specific substances. The article also includes a review of ethical and legal challenges, identification of barriers to care (history of trauma/abuse, avoidance of or poor access to prenatal care, fear of legal consequences, countertransference), and benefits of collaborative care.*



## SECTION 7G: ALCOHOL WITHDRAWAL

Mayo-Smith, M. F., Beecher, L. H., Fischer, T. L., Gorelick, D. A., Guillaume, J. L., Hill, A., ... & Melbourne, J. (2004). Management of alcohol withdrawal delirium: an evidence-based practice guideline. *Archives of internal medicine*, 164(13), 1405-1412.

Full article:

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/217165?wvsessionid=wv56d9b07d086f407da95d3a979c54b0a8#supplemental-tab>

*INTERMEDIATE: This meta-analysis looked at 43 articles related to management of alcohol withdrawal delirium (AWD). Sedative-hypnotic use is more effective at reducing mortality from and duration of AWD. No significant differences were found between sedative-hypnotic agents. Doses of sedative-hypnotics for adequate control of AWD varied widely across studies. Barbiturates were found to be similar in efficacy to benzodiazepines; The former is recommended for management of patients with inadequate control of symptoms on benzodiazepines. Thiamine repletion is recommended in all patients with alcohol abuse to prevent development of Wernicke Korsakoff Syndrome.*

Mirijello, A., D'Angelo, C., Ferrulli, A., Vassallo, G., Antonelli, M., Caputo, F., ... & Addolorato, G. (2015). Identification and management of alcohol withdrawal syndrome. *Drugs*, 75(4), 353-365.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4978420/>

*INTERMEDIATE: This review of alcohol withdrawal syndrome discusses pathophysiology, identification of symptoms, and evidence-based treatments. It also includes commonly used scales to assess severity of alcohol withdrawal symptoms. Off-label treatments are also mentioned.*



## **SECTION 8: SOMATIC SYMPTOM AND RELATED DISORDERS**

Gross A.F., Lokko H.N., Huffman J.C., Stern T.A. Gross, Anne F., et al.. "Approach to the Patient with Multiple Unexplained Somatic Symptoms." Principles and Practice of Hospital Medicine, 2e McKean SC, Ross JJ, Dressler DD, Scheurer DB. McKean S.C., Ross J.J., Dressler D.D., Scheurer D.B. Eds. Sylvia C. McKean, et al.

Preview: <https://accessmedicine.mhmedical.com/content.aspx?bookid=1872&Sectionid=146988611>

*INTERMEDIATE: This chapter begins by discussing the differential psychiatric diagnoses that can be attributed to unexplained physical symptoms. A helpful algorithm is also included to illustrate diagnostic considerations. The presentation, evaluation, and treatment of each diagnosis (factitious disorder, malingering, conversion disorder, illness anxiety disorder, somatic symptom disorder, and body dysmorphic disorder) is also summarized.*

Creed, F., & Guthrie, E. (1993). Techniques for interviewing the somatising patient. *The British Journal of Psychiatry*, 162(4), 467-471.

Full article: <https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/techniques-for-interviewing-the-somatising-patient/AF5DF8D9ACE5E39FF466AE5E1B42210E>

*INTERMEDIATE: The authors emphasize that CL psychiatrists need to take a well-organized approach to patients with unexplained medical symptoms, as many of these patients will be defensive and hostile to discussing their situation. Collateral from a relative or friend and collaboration with the referring provider is deemed essential. The authors also discuss several therapeutic approaches one can take depending on the orientation of the CL psychiatrist and the nature of the patient's problems.*

McKee, K., Glass, S., Adams, C., Stephen, C. D., King, F., Parlman, K., ... & Kontos, N. (2018). The inpatient assessment and management of motor functional neurological disorders: An interdisciplinary perspective. *Psychosomatics*, 59, 358-368,

Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318217302682>

*INTERMEDIATE: The authors provide an overview of functional neurological disorder (FND), highlight clinical characteristics that are suggestive of FND, and summarize predisposing, precipitating, and perpetuating factors common in individuals with FNDs. The article provides techniques on how to present a diagnosis of FND to a patient and acute management, which could include medication adjustments and/or physical therapy consultation.*

Malas N, Ortiz-Aguayo R, Giles L, Ibeziako P (2017). Pediatric Somatic Symptom Disorders. *Curr Psychiatry Rep*. Feb;19(2):11.

Full text: <https://www.ncbi.nlm.nih.gov/pubmed/28188588>

*BEGINNING. Introductory review to somatic symptom and related disorders affecting children and adolescents, including presentation, epidemiology, evaluation and management.*

For Patients, Families, and Caregivers:

<https://keltymentalhealth.ca/somatization>

*DESCRIPTION: BC Children's has created an excellent website to help educate families re: somatization, including several videos and a children's book.*

## **SECTION 9: TRANSPLANT EVALUATIONS**

Owen, J. E., Bonds, C. L., & Wellisch, D. K. (2006). Psychiatric evaluations of heart transplant candidates: predicting post-transplant hospitalizations, rejection episodes, and survival. *Psychosomatics*, 47(3), 213-222.  
Abstract: <https://www.sciencedirect.com/science/article/pii/S0033318206711537>

*ADVANCED: This study assessed psychosocial risk factors in predicting adverse post-transplant outcomes, defining well-known relative and absolute contraindications to transplantation. The authors followed 108 patients for almost 3 years post-heart transplant. Variables predictive of shortened survival times post-transplant included history of substance use, past suicide attempt, and poor adherence to recommended medical regimens. Depression was found to be a significant predictor of mortality and past suicide attempt was a significant predictor of infection post-transplant. While transplant evaluations should not use the results from this study to modify policies related to heart-transplant candidacy, they are nevertheless factors that should be identified and treated early in the transplant process.*

Faeder, S., Moschenross, D., Rosenberger, E., Dew, M. A., & DiMartini, A. (2015). Psychiatric aspects of organ transplantation and donation. *Current opinion in psychiatry*, 28(5), 357.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4623706/>

*INTERMEDIATE: This article provides a thorough overview of psychiatric disorders and symptoms to consider when evaluating patients for organ transplantation and donation. A review of the literature suggests that patients with serious mental illness and addiction histories can have similar outcomes to those without such disorders with appropriate pre-transplant evaluation and treatment. The article also addresses common issues that can arise in transplant donors, such as poor retention of information to make an informed decision to donate and increased risk of psychiatric symptoms post-transplant. Psychiatrists have an important role to play in identifying and managing psychiatric issues pre- and post-transplant.*

**SECTION 10: EATING DISORDERS**

Yager, J., & Andersen, A. E. (2005). Anorexia nervosa. *New England Journal of Medicine*, 353(14), 1481-1488.

Abstract: <https://www.nejm.org/doi/full/10.1056/nejmcp050187>

*INTERMEDIATE: The article begins with an overview of diagnostic criteria and medical complications. Strategies for assessing and managing patients with anorexia nervosa are then discussed, including refeeding, hospitalization in specialized hospital units, recommended laboratory testing, and specific psychiatric interventions.*



## SECTION 11: AUTOIMMUNE ENCEPHALITIS

For family and caregivers:

The Autoimmune Encephalitis Alliance

<https://aealliance.org>

*DESCRIPTION: The Autoimmune Encephalitis Alliance was started by families and patients affected by autoimmune encephalitis. Founded in 2012, the AE Alliance is a 501c3 non-profit organization based in North Carolina. This webpage provides information and a supportive community for patients, families, caregivers and providers.*

Kruse, J. L., Jeffrey, J. K., Davis, M. C., Dearlove, J., IsHak, W. W., & Brooks, J. O. (2014). Anti-N-methyl-D-aspartate receptor encephalitis: a targeted review of clinical presentation, diagnosis, and approaches to psychopharmacologic management. *Annals of clinical psychiatry*, 26(1), e1-e9.

Abstract: <https://www.ncbi.nlm.nih.gov/pubmed/24501734>

*INTERMEDIATE: This review article provides an overview of anti-NMDAR encephalitis, and includes two case reports. The focus is on pharmacologic treatment strategies. Psychotropic medications and dose ranges considered for symptomatic treatment of psychosis, agitation, dystonia, insomnia or catatonia in patients with anti-NMDAR encephalitis are summarized in Table 4.*

Lancaster, E. (2016). The Diagnosis and Treatment of Autoimmune Encephalitis. *Journal of Clinical Neurology* (Seoul, Korea), 12(1), 1–13.

Full article: <http://doi.org/10.3988/jcn.2016.12.1.1>

*INTERMEDIATE: This article provides an overview of different types of autoimmune encephalitis which is helpful when considering differential diagnoses, work-up and treatment recommendations for patients with suspected autoimmune encephalitis.*

Chapman and Vause. Anti-NMDA Receptor Encephalitis: Diagnosis, Psychiatric Presentation and Treatment. *The American Journal of Psychiatry*. Volume 168 Issue 3, March 2011, pp 245-251

Full article: <https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2010.10020181>

*INTERMEDIATE: This article reviews a case of autoimmune encephalitis in an adolescent in order to illustrate the differential diagnosis, key clinical concepts, and treatment.*

Mooneyhan G, Gallentine W, & Van Mater, H (2018). Evaluation and management of autoimmune encephalitis: a clinical overview for the practicing child psychiatrist. *Child Adolesc Psychiatric Clin N Am*, 27, 37-52.

Abstract: <https://www.ncbi.nlm.nih.gov/pubmed/29157501>

*INTERMEDIATE: This article provides an overview of the presentations, treatment, and management of autoimmune encephalitis most likely to be seen by child psychiatry.*

## **SECTION 12: SIDE EFFECTS OF PSYCHIATRIC MEDICATIONS**

### **12A: AKATHISIA**

Forcen, F. E. (2015). Akathisia: Is restlessness a primary condition or an adverse drug effect? Keep a discerning eye out for this adverse effect of antipsychotics and other drugs. *Current Psychiatry*, 14(1), 14-19.

Abstract:

<http://go.galegroup.com/ps/anonymous?id=GALE%7CA403918011&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=15378276&p=AONE&sw=w>

### **12B: HYPONATREMIA**

De Picker, L., Van Den Eede, F., Dumont, G., Moorkens, G., & Sabbe, B. G. (2014). Antidepressants and the risk of hyponatremia: a class-by-class review of literature. *Psychosomatics*, 55(6), 536-547.

Full article: <https://www.sciencedirect.com/science/article/pii/S0033318214000152?via%3Dihub>

### **12C: SEROTONIN SYNDROME**

Buckley, N. A., Dawson, A. H., & Isbister, G. K. (2014). Serotonin syndrome. *Bmj*, 348, g1626.

Full article: <https://www.bmj.com/bmj/section-pdf/752708?path=/bmj/348/7947/Practice.full.pdf>

### **12D: NEUROLEPTIC MALIGNANT SYNDROME**

Strawn, J. R., Keck Jr, MD, P. E., & Caroff, S. N. (2007). Neuroleptic malignant syndrome. *American Journal of Psychiatry*, 164(6), 870-876.

Full article: <https://ajp.psychiatryonline.org/doi/full/10.1176/ajp.2007.164.6.870>



### SECTION 13. PEDIATRIC

DeMaso, D. R., Martini, D. R., & Cahen, L. A. (2009). Practice parameter for the psychiatric assessment and management of physically ill children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(2), 213-233.

Full article: [https://www.jaacap.org/article/S0890-8567\(09\)60019-8/fulltext](https://www.jaacap.org/article/S0890-8567(09)60019-8/fulltext)

*INTERMEDIATE: This article summarizes the epidemiology, clinical presentations, assessment, and treatment of psychiatric symptoms and disorders in physically ill children and adolescents. Social and environmental influences are also reviewed in relevance to patient outcome and practice recommendations are made.*

Ballard, E. D., Raza, H., & Rosenstein, D. L. (2007). Pediatric psychosomatic medicine: an annotated bibliography. *Psychosomatics*, 48(3), 195-204.

Abstract: <https://www.ncbi.nlm.nih.gov/pubmed/17478587>

*ADVANCED: This article includes summaries of references for various topics within pediatric psychosomatic medicine. It will be particularly useful as a guide for the CL psychiatry team that is predominantly or exclusively following child and adolescent patients.*

Pao M, Ballard E, & Rosenstein D (2007). Growing up in the hospital. *JAMA*, 297(24), 2752-2755.

Full article: <https://jamanetwork.com/journals/jama/fullarticle/207587>

*BEGINNER: This commentary reviews the impact that chronic illness and hospitalization has on a child's development and family interactions, with helpful recommendations regarding interventions to improve the hospitalization and support chronically ill children and their families.*

Patel AK, Bell MJ, Traube C (2017). Delirium in Pediatric Critical Care. *Pediatr Clin North Am*. Oct;64(5):1117-1132.

Abstract: <https://www.ncbi.nlm.nih.gov/pubmed/28941539>

*INTERMEDIATE. Review article discussing the overall prevalence and risk factors for pediatric delirium, along with recently validated screening tools, and suggestions for management.*

Gangopadhyay M, Smith H, Pao M, et al. (2017). Development of the Vanderbilt Assessment for Delirium in Infants and Children to standardize pediatric delirium assessment by psychiatrists. *Psychosomatics*, 58(4), 355-363.

Full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5482775>

*BEGINNER. Description of a tool to provide a standardized framework for the assessment of delirium in infants and young children.*