Supplemental Table 1: Behavioral interventions to reduce violent behavior among people with mental illness

Citation	Study Design & Participants	Behavioral Interventions	Findings	
Experimental Studies				
Cullen, et al. Journal of Consulting and Clinical Psychology 80: 1114-1120, 2012.	Randomized controlled trial of non-actively psychotic inpatients with a primary psychotic disorder and a history of violence	Reasoning and Rehabilitation program, which uses cognitive skills training that focuses on problem-solving vs. treatment as usual	Effective in reducing measures of verbal aggression during treatment period and 12 months later; half of the participants dropped out of the treatment group.	
Haddock, et al. British Journal of Psychiatry 194: 152-157, 2009.	Randomized controlled trial of a mixed inpatient/outpatient population with a diagnosis of schizophrenia or schizoaffective disorder and a history of violent behavior	CBT intervention that included strategies to increase engagement, reduce impact of psychotic symptoms, and reduce anger vs. social activity therapy for a 6-month period	CBT intervention showed greater efficacy in reducing violent/aggressive incidents during the treatment and follow-up period when compared to social anxiety therapy	
Smith, et al. Psychiatric Rehabilitation Journal 33: 207-218, 2010.	Observational study of predominantly male participants with a history of dual diagnosis and not guilt by reason of insanity (NGRI) status (crimes included murder, manslaughter, violent assault, and aggression) who were discharged from a state forensic hospital to a residential treatment program	Arkansas Partnership Program which provided rehabilitative programs with decreasing restrictions as patients improve	Almost all participants had no re-arrests during 7-year follow-up period	
Review Articles				
Ball. Psychiatric Quarterly 64: 359-369, 1993.	Focuses on behavioral techniques used in inpatient and community settings	Reviewed behavioral strategies	Emphasized importance of behavioral analysis prior to determining intervention. Described various interventions including environmental changes, relaxation, and social skills training	
Buckley, et al. Psychiatric Clinics of North America 26: 231-272, 2003.	Focuses on patients with schizophrenia who are violent in a variety of settings including inpatient, emergency room, and community settings	Reviewed psychopharmacologic and behavioral interventions	Emphasized importance of creating a behavioral plan. Recommended use of seclusion and restraint as treatment of last resort	
Corrigan, et al. Hospital and Community Psychiatry 44: 125-133, 1993.	Describes interventions targeting psychiatric inpatients	Reviewed psychopharmacologic and behavioral interventions	Inpatient techniques such as a token economy and decelerative techniques were recommended.	
Harris and Rice. Psychiatric Services 48: 1168-1176, 1997.	Targets patients (including severely mentall ill) with a history of violence in inpatient and outpatient settings	Reviewed methods for violent risk assessment and management	Emphasized importance of improving various levels of control (e.g., situational, interpersonal). Despite lack of well-controlled studies, described empiric support for contingency management and behavioral modification	
Littrell and Littrell. Journal of Psychosocial Nursing 36: 18-24, 1998.	Provides recommendations for a nursing audience who work with patients (including the severely mentally ill) in both inpatient and community settings	Provided conceptual framework and guidelines for psychiatric nursing staff	Encouraged general principles for violence management (direct communication, reducing sensory deficits, forming a patient-specific treatment plan, strength-based focus)	
Muralidharan and Fenton. Cochrane Database of Systematic Reviews: 1-17, 2012.	Describes behavioral interventions for patients with serious mental illness on acute inpatient units	Reviewed containment strategies	No definitive conclusions about containment strategies due to lack of randomized controlled trials	
Robinson, et al. Journal of the American Psychiatric Nurses Association 5: S9-S16, 1999.	Focuses on managing patients with schizophrenia in inpatient and outpatient settings	Reviewed psychosocial methods for managing aggressive behavior	Encouraged verbal de-escalation and optimizing physical environment prior to restraint	
Rocca, et al. Progress in Neuro-	Discusses interventions in inpatient and other psychiatric	Reviewed both risk assessment, and clinical management	Emphasized importance of starting with least coercive measures (e.g., verbal	

Psychopharmacology and Biological Psychiatry 30: 586-598, 2006.	emergency settings	(pharmacologic vs. behavioral)	interventions) before increasing intervention intensity (e.g., show of force)
Volavka. <i>Psychiatria</i> Danubina 25: 24-33, 2013.	Describes inpatient and community treatment interventions for violence in patients with schizophrenia or bipolar disorder	Reviews epidemiology and interventions to target violent behavior	Evidence that CBT that target factors that increase aggression risk in bipolar disorder (ex. treatment non-adherence) can be effective; also describe CBT intervention targeting schizophrenic patients that have reduced arrest rates
Wong et al. The Psychiatric Clinics of North America 11: 569-580, 1998.	Examines interventions for patients (including those with a history of serious mental illness) with a history of violence in settings such as hospital wards or residential units	Reviewed behavioral treatment	Classification of interventions methods as either acceleration (e.g., token economies, social skills training) or deceleration (e.g., social extinction, time out).