1. Case Management for alcohol dependence and harmful alcohol use (Randomized Controlled Trials (RCTs))

1.1 Comparison: Case Management vs. Treatment as Usual

Study	Comparisons	Outcomes	Baseline Drinking Information	Population Characteristics and Inclusion/Exclusion Criteria	Treatment Characteristics and Assessment points
Ahles 1983 (USA) Those who received the intensive aftercare procedure showed delayed relapse.	Intensive aftercare recruitment Regular clinic aftercare	Abstinence Aftercare attendance	80% admitted to levels of drinking within the abusive range.	Study population: n=50 male veterans. All subjects had participated in a 28-day, inpatient alcohol treatment program which emphasized a social learning approach and advocated an abstinence goal.	Assessed at 6 and 12 month follow-up Treatment program components included alcohol education, self-management training, instruction in problem solving skills, assertion training, leisure skills training, vocational counselling, and individual behaviour therapy. Standard aftercare arrangements (control): Importance of attending aftercare stressed but not enforced. Consisted of individual, problem oriented counselling. Significant others were encouraged to accompany the patients to aftercare sessions. Patients scheduled for 1 aftercare session on the day discharged from inpatient treatment. Subsequent sessions were scheduled during each aftercare visit, scheduled semi-monthly for 2 months and monthly for 4 months. Patients dropped from aftercare program after 3 consecutive missed appointments. Behavioural contracting group: Signed behavioural contract for aftercare attendance + calendar where aftercare sessions were scheduled for 6 months. Had to attend sessions regardless of drinking status, reschedule missed sessions, and keep a calendar. Contract was negotiated between the subject and a significant other. The significant other or the individual himself agreed to provide an incentive within one week of each kept appointment.
Conrad1998 (USA)	Case management in a residential care program Customary residential care program	Days drinking any alcohol in last 30 days Days any alcohol use	Days of alcohol use in past 30 days (mean): 18.4 for control group, 19.0 for experimental group	Study population: n=358, homeless treatment seeking male veterans addicted to alcohol and/or drugs. 25% had a concomitant psychiatric diagnosis. Referred from substance abuse and psychiatric inpatient units where they had spend 5 days prior in detox. 75% African American. 46.9% of sample alcohol dependent. 66% of sample dependent on multiple substances/alcohol.	Assessed at 3, 6, 9 months during enrolment and 12, 18, and 24 months faster completion of treatment. Experimental group (Case managed residential care) 1-6 months: VA hospital Case management - Assessment and evaluation - Service planning - Service linkage - Service monitoring - Residential housing - Treatment planning

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				Inclusion criteria: Homeless (no address for 30 days or more before entering study) DSM3-R criteria for alcohol./drug dependence, possible concurrent mental illness Exclusion criteria: organic mental illness, pending imprisonment, history of violence in past 3 years,	- Substance abuse counselling - sobriety monitoring - Relapse prevention training - Basic living skills training - Vocational services - Housing placement - Self-help services - Material assistance (i.e. bus fare) - Referral to multiple support services Experimental group: (Community living) (6-11 months) - Continued case management Control group (customary inpatient treatment (14-21 days): Inpatient wards - Substance abuse education - Group therapy - Self-help services - Recreational/occupational therapy - Medical and other health care - Material assistance (e.g. bus fare) - Referral to multiple support services Control group customary community care (12 months) VA and community outpatient settings - other services as needed - halfway houses
Cox1998 (USA)	Intensive case management Standard treatment	Days of drinking (any alcohol use) in last 30 days	Days of drinking (any alcohol use) in last 30 days: CM: 23.6(9.2) Control: 23 8(9.1)	Study population: n=298 homeless chronic public inebriates, taken from a pool of high frequency users of services at the detox center in Seattle who were homeless or at risk for homelessness. Inclusion criteria: high frequency detox use and homelessness. Clients had to speak English, and could not have been part of the pilot study. Exclusion criteria: not homeless not high frequency detox users.	Assessed in 6 month intervals up to 2 -year follow up Case management (n=150): long term open ended, outreach oriented serviced focused primarily on system advocacy and linage activities. Retention in program was regarded as more important than compliance, so provision of services not conditional on client behaviour and no requirement to maintain sobriety in order to continue the program. Standard treatment (control) (n=148): No case management, no further description of treatment and no access to Cox 1993 article with additional description.

McLellan 1999 (USA) Not an RCT; meta- analysed separately	Case management Treatment as Usual	Mean days of alcohol intoxication	Whole sample on average reported 13.4 years of problem alcohol use (12.1) Mean days of alcohol intoxicated (SD) CM: 1.2(2) No CM: 2.5(2)	2 waves of incoming participants in the study. Study population: 29% of sample reported chronic medical problem, 29% had prior psychiatric hospitalization, 17% attempted suicide, and 41% reported problems controlling violence tendencies. Inclusion criteria: Inclusion into the study based on completion of the ASI. Exclusion criteria: No exclusion criteria mentioned in the paper. N=8 treatment programs selected for inclusion in this study. 2 provided methadone maintenance treatment, while other 6 offered abstinence oriented care for combined problems of alcohol and other drugs around a 12-step approach to rehab.	Assessed at 6 month follow-up. 2 waves of incoming participants. Clinical case management (n=132 1st wave, n=52 2nd wave): Assigned a case manager who provided access to pre-contracted, support services (drug free housing, medical care, legal referral and parenting classes from community agencies). Patients received more alcohol, medical, employment and legal services than no CM patients. Designed from a strengths based approach and initially trained through 14 didactic and modelling sessions over 1 week period, followed by supervision by the target cities trainers 1 day/week for 3 months and monthly supervisory sessions throughout the project. CCM intended to be integrated into treatment programs. Responsible for evaluating the additional health, social and environmental problems of the patient and linking the patient with community service outside the program. No case management (n=219 1st wave, n=134 2nd wave): Patients received standard, group-based, abstinence oriented, outpatient drug abuse counselling, twice weekly
Patterson 1997 (UK) Not an RCT; meta- analysed separately	CPN aftercare Standard aftercare	Abstinence	Daily alcohol (units) (m, SD) CPN aftercare: 39.4(18.3) Standard aftercare: 42.9(16.6) Maximum abstinence (weeks): CPN aftercare: 30.9(86) Standard aftercare: 29.90(57.8)	Study population: n=127 white male alcoholics; all first admissions selected for inpatient treatment and who completed a 6 week inpatient stay. Inclusion criteria: Those who had a diagnosis of alcohol dependence syndrome, had completed 6 week inpatient treatment, & scored more than 15 on SADD questionnaire.	Assessed at 1,2,3,4,5 year posttreatment CPN aftercare (n=73): weekly visits lasting 1-2 hours for 6 weeks or longer at discretion of CPN, then monthly visits for cumulative total of 1 year. CPN visited patient at convenient location, leave a card and make repeated attempts to visit any patient who defaulted from this arrangement. Also make repeated phone calls or other available contact until contact was achieved. CPN also tried to work with spouse or other important family member. Any family therapy initiated during inpatient treatment was continued by CPN, advice and support also offered on an individual basis to family members during visits. Standard "hospital aftercare" (n=54): offered review appointments at the hospital every 6 weeks following discharge. Reviews carried out by a member of nursing staff at alcohol treatment unit. Also given hospital telephone number and advised to contact should they require help, and emergency additional appointment would be arranged no hospital site. Spouse or other important family members would be seen at their request but not routinely included in review process.

2 Studies not included in meta-analyses but described in evidence summary

Study Characteristics & Reason for Exclusion	Treatment Characteristics
CHUTUAPE2001(USA) 1. Standard Referral 2. Standard Referral with an incentive 3. Staff escort from assisted withdrawal program to aftercare, with an incentive Reasons for Exclusion from Meta-Analysis No available outcomes for inclusion in meta-analyses	Baseline characteristics Patients reported 15.2 days (13.3 SD) of heavy alcohol use (i.e. consumed alcohol until its effects were experienced in the previous 30 days prior to entertain the chemical dependency unit Treatment Characteristics Standard referral (n=62): On the day prior to discharge (Day 3) participants received referral instructions. Were told that they should go directly to the aftercare program on the day that they were discharged from the CDU (i.e. the following day) Standard referral with an incentive (n=46): Told at the clinic they would receive an incentive if they went to aftercare program. Staff escort + incentive (n=58): Were told they would qualify to receive an incentive at the aftercare program if they successfully completed the intake procedures on the day of their discharge (which included attendance at a one hour community education group at the aftercare clinic) Assessment Points:-No follow-up
GILBERT1988(USA) 1.Case management 2. Treatment as usual (Traditional) 3. Home visit Reasons for Exclusion from Meta-Analysis Not enough information about participants in each group to input into meta-analyses	Treatment Characteristics: Aftercare follow-ups: Traditional: Outpatient therapy + no active attempts made to improve attendance at scheduled appointments Case manager: Outpatient therapy + 2 or 3 days prior to each scheduled appointment patients received a phone call from therapist reminding them of date/time of next appointment Home visit: Outpatient therapy + appointments were not scheduled at hospital. Therapist agreed to meet patient at location that was convenient for patient. If patients missed appointment, attempts made to contact. Assessment Points: 3, 6, 9, 12 months
KRUPSKI2009(USA) 1. Case Management 2. Standard care (substance abuse treatment) Reasons for Exclusion from Meta-Analysis No available outcomes for inclusion in meta-analyses	Baseline characteristics None provided Treatment Characteristics Access to recovery (case management) program (n=4206): Received case management, transportation (i.e. taxi fares), housing (transitional housing) and medical (vouchers for dental work). All clients received some form of case management. Comparison treatment: Chemical dependency treatment. Did not receive Access to Recovery services. Assessment Points:- 12 months
SANNIBALE2003(AUSTRALIA) Structured vs. Unstructured aftercare 1.Structured Aftercare 2.Unstructured Aftercare Reasons for Exclusion from Meta-Analysis No available outcomes for inclusion in meta-analyses STOUT1999(USA)	Baseline characteristics Proportion days abstinent (m, SD) → whole sample: 0.2(0.2) SADQ score, m(SD) 1. Structured aftercare: 37.3(12.6) 2. Unstructured aftercare: 38.1(12.2) Treatment Characteristics Structured aftercare (n=39): Required to attend 9 sessions over 6 months immediately after residential treatment. SA based on cognitive behavioural therapy programme (Monti et al). Participants reminded of missed appointments/ contacted to reschedule. Unstructured (n=38): asked to maintain contact with their primary clinician and to request counselling on a need basis. Consisted of crisis counselling within a problem-solving framework. Participants were offered 1 counselling appointment each time they requested assistance. Assessment Points:- 3, 6, 9, 12 months Treatment Characteristics:

1.Case management	Case monitoring: Involved telephone contacts on a tapering schedule (contact rates increase if risk for relapse) for 2 years.
2. Treatment as usual	Control: no mention of treatment
Reasons for Exclusion from Meta-Analysis	Assessment Points: 2 year follow-up
No available outcomes for inclusion in meta-analyses	,

3 Case management studies excluded from this guideline

STUDYID	Reason for Exclusion
ANTON2006	Medical management; not case management
BOND1991	Comorbid population (primarily psychosis)
DRAKE1998	Comorbid population (primarily psychosis)
ESSOCK2006	Comorbid population (primarily psychosis)
LASH1998	Does not meet definition of case management
LASH2001	Quasi-experimental and does not meet definition of case management
LASH2004	Quasi-experimental and does not meet definition of case management
MCLELLAN2005	Evaluation and implementation study
MEJTA1997	Drugs not alcohol primary focus
MORGENSTERN2006	Drugs not alcohol primary focus
RYAN2006	Cannot separate drugs from alcohol; no usable outcome data
SIEGAL2002	Drugs not alcohol primary focus

SULLIVAN1994	Not a trial involving comparisons;
	implementation study

Excluded Studies References:

Anton, R., O'Malley, S., Ciraulo, D. et al. (2006). Combined pharmacotherapies and behavioural interventions for alcohol dependence: the COMBINE study: A randomized controlled trial. JAMA, 295(17), 2003 – 2017.

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Essock, S, Mueser, K., Drake, R. et al. (2006). Comparison of ACT and Standard case management for delivering integrated treatment for co-occurring disorders. Psychiatric Services, 57(2), 185-196.

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Mejta, C., Bokos, P., Mickenberg, J., et al (1997). Improving substance abuse treatment access and retention using a case management approach. Journal of Drug Issues, 27(2), 329-340.

Morgenstern, J., Blanchard, K., McVeigh, K. et al. (2006). Effectiveness of intensive case management for substance-dependent women receiving temporary assistance for needy families. American Journal of Public Health, 96(11), 2016-2023.

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