DRUG & ALCOHOL FINDINGS *Matrix cell*

Alcohol Treatment Matrix cell D3

Organisational functioning; Medical treatment

Selected studies and reviews on how treatment organisations affect the implementation and effectiveness of medical interventions and treatment in medical settings. Asks whether evidence-based innovation is always a good thing, and explores the evidence for and against integrating substance use treatment with medical or psychiatric care.

S Seminal studies **K** Key studies **R** Reviews **G** Guidance **MORE** Search for more studies

Links to other documents. Hover over for notes. Click to highlight passage referred to. Unfold extra text

S Workplace support and experience needed for training to be effective (1986). In England specialist centres including alcohol treatment clinics offered the most favourable environments for training to generate positive attitudes to working with problem drinking because they provided opportunities to gain support and experience on return to work. This study was discussed in cell D2 and related studies from the same team in cell B3.

K High quality primary care helps sustain recovery after detoxification (2007; free source at the time of writing). The substance use of US patients (most with both drug and alcohol problems) referred to primary care after detoxification was found to be related to the general quality of their care. Organisational factors associated with greater alcohol problem reduction included how easy the practice made it for the patient to get in touch and visit and whether they saw the same doctor each time. For discussion click and scroll down to highlighted heading.

K Integrate addiction treatment with medical care for its consequences (2001). That was the message of a US trial which randomly allocated patients (most dependent on alcohol) at a substance use clinic to primary care integrated into the clinic, or to a service run by the same provider but which worked independently. Patients whose medical complaints were associated with substance use (the majority) further reduced their drinking and other substance use when allocated to integrated care. Findings confirmed those of a similar study (1999) focused on dependent drinkers with alcohol-related physical illnesses. For discussion click and scroll down to highlighted heading.

K Integrated 'chronic disease management' model not found to improve on usual primary care (2013; alternative free source at time of writing). Generally, chronic illnesses requiring long-term behaviour change respond well to disease management models based in primary care but integrated with specialised services, supporting the patient in managing their illness. Expectations (2008; free source at time of writing) that the same would apply to addiction were confounded when researchers found little or no extra benefit compared to usual primary care, and no sign (2012; free source at time of writing) that a higher quality or more engaging disease management intervention would improve things. For discussion click and scroll down to highlighted heading.

R Implementing evidence-based innovations ([Australian] National Centre for Education and Training on Addiction, 2008). Lessons from health promotion and medical care on how to improve addiction treatment, including the use of organisational and administrative quality-improvement strategies. For discussion click and scroll down to highlighted heading.

R Evidence weak for integrating addiction and mental health treatment (2013; free summary and commentary from the US Centre for Reviews and Dissemination). Synthesis of research findings finds some evidence that integrated treatment for substance use and mental health problems improves psychiatric symptoms and (in residential settings) reduces drinking more than non-integrated care, but none of the slight advantages approached statistical significance. See also Effectiveness Bank hot topic on 'dual diagnosis'. Related guidance below.

G Is your organisation fit to implement change? ([US] Substance Abuse and Mental Health Services Administration, 2009). How to assess an organisation's capacity to identify priorities, implement changes, evaluate progress, and sustain effective improvement programmes, and how to actually implement these programmes: "If your organization is troubled, you need to build a healthier work culture before change will be possible." For discussion click and scroll down to highlighted heading.

G Strategies to translate theory into practice ([Australian] National Centre for Education and Training on Addiction, 2005). Chapter on managing organisational change includes the organisational factors which impede or promote change and how to manage them. For discussion click and scroll down to highlighted heading.

G NICE advises against specialist 'dual diagnosis' services ([UK] National Institute for Health and Care Excellence, 2016). UK's gatekeeper to the public provision of health care says that rather than creating specialist 'dual diagnosis' services, health and social care (including substance misuse) services should adapt to seriously mentally ill substance users, and their care should be led by the mental health service. Other NICE guidance (2011) has dealt specifically with psychosis

and substance use. Related review above.

MORE Search for all relevant Effectiveness Bank analyses or search more specifically at the subject search page. Also see hot topic on why some treatment services are more effective than others.

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- ▶ Comment/query
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- ▶ Add your name to the mailing list to be alerted to new studies and other site updates

Close Matrix Bite

Links to other documents. Hover over for notes. Click to highlight passage referred to. Unfold extra text

What is this cell about? About the treatment of alcohol dependence in a medical context and/or involving medical care, typically by GPs or at alcohol treatment or psychiatric units in hospitals. Clinical staff are responsible for medications, so the centrality of these to an intervention distinguishes it most clearly as medical. However, medications are never all there is to medical care, and in England most treatments do not feature them. Guidelines typically see psychosocial support as an essential component of treatment, and 'medical' treatment may consist entirely of advice and psychosocial support from clinicians. Apparent also in the studies listed in cell B2, how clinicians relate to patients affects whether they enter and engage in treatment. The clinician-patient relationship may also be a therapeutic influence in its own right.

In turn, clinicians work in a physical and social context which more or less legitimises and supports their work, generally taking the form of a service run by a distinct organisation. As well as concrete things like staff, management committees, resources, and an institutional structure, organisations have links with other organisations, histories, values, priorities, and an ethos. These factors cumulate into an 'organisational culture': "workers' understanding of 'the way we do things around here' ". "Often overlooked … organizational culture communicates to workers the extent to which this type of work is appropriate, valued and worthwhile", affecting whether the organisation offers an environment in which staff and patients/clients can maximise their potential. Among the activities affected by workplace culture is likely to be how keenly and effectively management and staff seek, identify and incorporate evidence-based practices.

However, it is not easy for researchers to manipulate organisational culture and its constituents in order to test their roles in the implementation of evidence-based practices or their effects on outcomes for patients. Instead, observations of real-world practice look for links between organisational qualities and practice and outcomes which *may* derive from a causal effect of one on the other, but may be due to something else. Rigorous research is scarce, and studies not specific to substance use (incorporated in some of the documents listed above) become more important.

This cell is about medical treatment. If research on an issue which interests you does not specifically relate to medical treatment, you may be able fall back cell D2, which deals with similar issues across treatment.

Where should I start? Exemplifying the scarcity of research, a review listed above from Australia's workforce development agency for the substance use sector had to look to other fields to identify how organisations can best implement evidence-based practices. In the process the authors did their own sector the great favour of garnering lessons from across health promotion and medical care and evaluating their applicability to substance misuse, resulting in a comprehensive assessment of quality improvement strategies.

The resulting menu of (somewhat inconsistently proven) practice-improvers included performance feedback to staff and integrating (preferably un-ignorable) reminders to clinicians to take the required steps in response to assessment results or patient progress. Beyond these internal processes was the thought-provoking effect of opening up the organisation to contact with other organisations and experts. But research was limited: even if these strategies did improve practice, there was little evidence that patients benefited, but this may have been because effects on patients were rarely recorded.

From the broader perspective offered by this review important messages emerged which confirmed clues from the addictions literature. An example is that educational meetings under the umbrella of continuing medical education are most likely to affect practice if followed up (for example by telephone consultations) and if participants are incentivised to through mechanisms such as feedback on performance and medical education credits. A one-off education or training session will have little impact unless the workplace the trainee returns to offers an environment where it is possible to embed that learning in practice, and steps are taken to make this happen – a lesson explored in seminal studies from England listed above.

Highlighted study Listed above, this cell's highlighted study used a generic questionnaire designed to assess the quality of primary care effectively to ask: If in relation to you, your GP and the practice is overall of high quality, does that somehow help resolve your substance use problems? Note that the answer is not a given; a doctor/practice could be excellent at treating your coughs and colds, but

ill-informed, reluctant and even prejudiced when it comes to treating dependence on alcohol or drugs.

Completed by the patients, the questionnaire is well-validated and widely used to monitor the quality of US primary care services. Higher scores have been found related to important processes and outcomes such as the degree to which patients follow medical advice and experience improved health. The study investigated whether – despite assessing *general* quality – the same indicator would also be related to the progress of detoxified drinkers and drugtakers referred to primary care practices for continuing care, an offshoot of a randomised trial of intensive referral to primary care after detoxification versus usual referral procedures (1 2). Of the 470 patients in the parent study, 86% were problem drinkers, but many were also problem drugtakers – three-quarters of the total sample in relation to cocaine and 69% cannabis. Largely lacking health insurance, about half had recently been homeless and half imprisoned.

Regardless of whether the patient had been allocated to intensive referral, the offshoot study focused on the 183 who actually attended primary care after referral and responded to follow-up research interviews. On all but one dimension, the higher the quality of their primary care as assessed by the patient, the greater the remission in the severity of their drinking problems six or more months later. The missing dimension was preventive counselling – less relevant for this set of patients, already well past the possibility of prevention in respect of their substance use. Organisational dimensions positively and significantly associated with patient progress included how easy the practice makes it to get in touch and visit, and whether the patient sees the same clinician at each visit. Beyond these was the relationship with the doctor and how and well they examined and communicated with the patient, findings explored in cell B3: unfold the supplementary text in the linked section. However, division into organisational factors versus those to do with the individual doctor-patient relationship may be somewhat artificial. For example, communication, trust and "whole person" knowledge of the patient are likely to flourish best when the same clinician is seen each time and the practice does not frustrate patients by obstructing access.

Emerging from this study is a potentially important implication: that (as with other complaints), the general quality of a primary care practice affects how well dependent drinkers do – all the more notable because all the patients had just emerged from inpatient detoxification; the primary care service was not a standalone influence on their recovery. But confidence in these implications is weakened by the usual limitations (see above) of research on organisational factors. In this case, it could be that patients who were going to do well anyway or were already doing well saw their doctors and the practice through rose-tinted spectacles, or enabled the development of better doctor-patient relationships. In other words, that rather than quality leading to a good prognosis, a good prognosis may have led to positive views of the quality of the practice. Set against this is the fact that measures of how well patients progressed were taken six to 18 months after the consultations on the basis of which they had formed their impressions of the practice and their doctors. Also, the findings were adjusted for differences between the patients and whether they were in addiction or mental health treatment or had attended Alcoholics Anonymous during the follow-up period.

Using the same data, the study might also have asked a rather different and perhaps more interesting question. The one it asked was at the level of the individual patient-practice encounter. The answers do not relate to the quality of the doctor or practice as such, but to their quality in relation to the focal individual. To assess quality at the level of a primary care practice, the analysts could have amalgamated patient feedback from all the practice's patients, and then related to this to how well those patients a whole progressed relative to those seen at other practices, a more appropriate reflection of the influence of the organisation. There are then, at least two reasons for highlighting this study: for its potentially important implications for substance use treatment, and to show far we have yet to go to adequately explore such issues.

Issues to consider and discuss

Is (even evidence-based) innovation always a good thing? Generally evidence-based organisational change is assumed to be a good thing, and resisting it a sign of a moribund organisation unable or unwilling to improve. But one caution in Australian guidance listed above stands out: "Organisational change can be a significant source of stress and job dissatisfaction. The experience of instability and frequent change can result in 'change fatigue', characterised by cynicism and exhaustion in response to change initiatives." The advice is to allow staff to consolidate and recuperate by spacing out change efforts – advice given extra salience by the upheaval in Britain in commissioning and service-provision structures and by recommissioning cycles which disrupt services every few years; to ladle yet

more change on top risks being a step too far.

But what about the mantra of 'continuous improvement', adopted by the UK's Department for Business, Innovation & Skills? And the similar recommendation for substance use treatment programmes in particular from the US health department (document listed above): "a commitment to continuous quality improvement ensures the program's ability to respond to future changes in the needs of the client population and community". Would 'taking breaks' leave organisations lagging in a fast-changing world? On the other side are the possible negatives of frequent change, including a demoralised workforce in no position to do their best for patients.

Among the reasons why this matters is that the 're-moralisation' and optimism engendered by new ways of working which promise to make a difficult job more satisfying could be a major factor in the effectiveness of innovations. Optimism that you *can* help even unpromising patients seems a significant influence promoting recovery. If unwanted change instead *de*moralises staff, the reverse effect on recovery seems likely. There is also the possibility that (again to quote the Australian guidance listed above) staff may be *right* to resist change: "Change that has little obvious benefit or connection to organisational goals is likely to be met with reluctance from workers."

How would you balance these seemingly contradictory imperatives? Continuous improvement, or slow down to avoid continuous disruption? Re-moralise staff and engender optimism by introducing new ways to do better for their patients, or would this risk demoralising staff by seeming to denigrate their current practice and overwhelming them with demands to change?

▸ **Integrate medical care and addiction treatment?** We get an intriguing answer to that question from a rare trial listed above of an integrated approach conducted in the late '90s. Most dependent on alcohol, its participants were patients seeking treatment at a Californian substance use clinic. They were randomly allocated to primary care integrated into the work of the clinic and conducted by clinic staff, versus referral to an off-site primary care service run by the same organisation, but whose work was not coordinated with that of the clinic. The substance use treatment was the same; all that varied was whether primary care was integrated with it or separate.

> *Abstinence gained by integration was specific to patients whose complaints were related to substance use*

Six months later over 90% of these health-insured and employed patients were re-assessed, and for the whole sample records of service usage over 12 months were available from the health-provider organisation. Across the whole sample of 654 patients there were few indications that integrating primary care with substance use treatment had made any substantial or significant difference to the patients' substance use or health. But among the 370 patients with physical or psychiatric complaints associated with heavy substance use, the picture was very different. Now over the last month of the six-month follow-up, integrated-care patients were significantly more likely (80% v. 65%) not to have drunk alcohol and also not to have consumed drugs or alcohol (69% v. 55%). The picture was similar when just patients with substance-related psychiatric complaints were analysed, but not when the analysis was extended to any patient with a medical or psychiatric complaint, regardless of whether substance-related. In other words, the extra abstinence gained by integration *was specific to the patients whose medical and/or psychiatric complaints were related to heavy substance use*. "The findings suggest that patients with physiologic or behavioral conditions related to substance abuse can benefit from having their medical and addiction treatment integrated," said the researchers.

On costs, the picture was mixed. Among patients with substance-related conditions, over the 12 months after the trial started medical costs excluding addiction treatment had fallen much more steeply if they had been allocated to integrated care. But among the same patients, reports of service usage over the first six months implied total costs slightly higher among integrated-services patients, due mainly to greater receipt of counselling and treatment for substance use problems.

The researchers felt the most likely explanations for their findings was that the doctor-patient interaction was more effective when addiction treatment and medical care were integrated. It seems probable that a good relationship was most important for patients with medical conditions related to substance use, among whom talking about these conditions would (or should) also mean talking about their substance use. The researchers did not know whether for a particular individual their medical and psychiatric complaints were actually due to heavy drinking, but the complaints which identified these patients were of the kind which would be aggravated by continued drinking. Familiar with their substance use problems, the doctors would have been in a better position to evaluate the patient and give appropriate care, while the patients might have felt more comfortable with someone who already knew about their substance use

and its treatment, rather than a primary care doctor who might react in unknown ways to these revelations. One sign of these processes was that doctors treating integrated-services patients were more likely to diagnose new physical or psychological complaints. Two closely related studies (there are also others) shed more light on the reasons for these findings. Click here to unfold our summaries.

Supplementary text. Click to close

We focused on the study discussed above because within the same trial it was able to show that only patients with physical or psychiatric complaints linked to heavy substance use benefit from integrated care in the ways assessed by the study. Listed above, a similar study focused exclusively on this patient group in the form of typically elderly, unemployed and single men, all of whom were problem drinkers and had also been diagnosed with consequent illnesses, usually liver disease. Recruited from a medical centre for ex-military personnel in Minneapolis, despite typically severe dependence they were not necessarily looking for their alcohol problems to be addressed, but for usual medical care.

The patients were randomly referred either to a clinic which integrated techniques for addressing excessive drinking and psychosocial problems with primary medical care, or to separate services for alcohol-related problems versus general and specialised medical care. Integrating care at the clinic ensured that when they came for treatment of medical complaints, the package also included "constant, gentle encouragement to examine their drinking and its effect on their health". In contrast, few patients offered non-integrated services took up the opportunity to address their drinking. "By integrating alcoholism interventions with medical care, [integrated care] was able to engage patients who were willing to return for medical appointments but would not accept a referral for alcoholism treatment," explained the researchers.

The effects were visible in the outcomes. Two years later about half the patients who had been offered non-integrated care were no longer drinking, but three-quarters of integrated-care patients. When results from this study were amalgamated with those from another similar one and adjusted for age, integrated-care patients were also more likely to live longer. However, measures of quality of life and subjective wellbeing had not improved more among integrated-care patients.

The Minneapolis study described above saw the integrated-care clinic as promoting a management-rather-than-cure programme closely resembling the management of chronic medical disorders such as diabetes. That was explicitly the model adopted by a later US study listed above conducted in Boston. Generally its patients were exiting an inpatient detoxification programme but not necessarily looking to further control their drinking (about 77% were dependent) or drug use (about two-thirds were dependent on alcohol plus other drugs), and it is not known how many were suffering medical or psychiatric complaints related to their substance use.

At random they were referred to a clinic providing integrated medical care and addiction treatment, or given an appointment with a primary care doctor and a list of addiction treatment resources. The integrated-clinic team managed the overall care of their patients and promoted the patient's self-management of their drinking within a chronic care management model, but engaged other services rather than directly providing for all the patient's addiction and medical care needs.

In the event, integrating care in this way made no difference to whether alcohol-dependent patients received treatment for their drinking (most did not), except for a small increase in the few prescribed anti-drinking medications. Despite expectations of extra benefits from integrated care, "This study did not find an effect of [chronic care management] for substance dependence on substance use, related consequences (with the exception of a small effect on alcohol problems among those with dependence), health-related quality of life, or acute health care utilization."

Close supplementary text

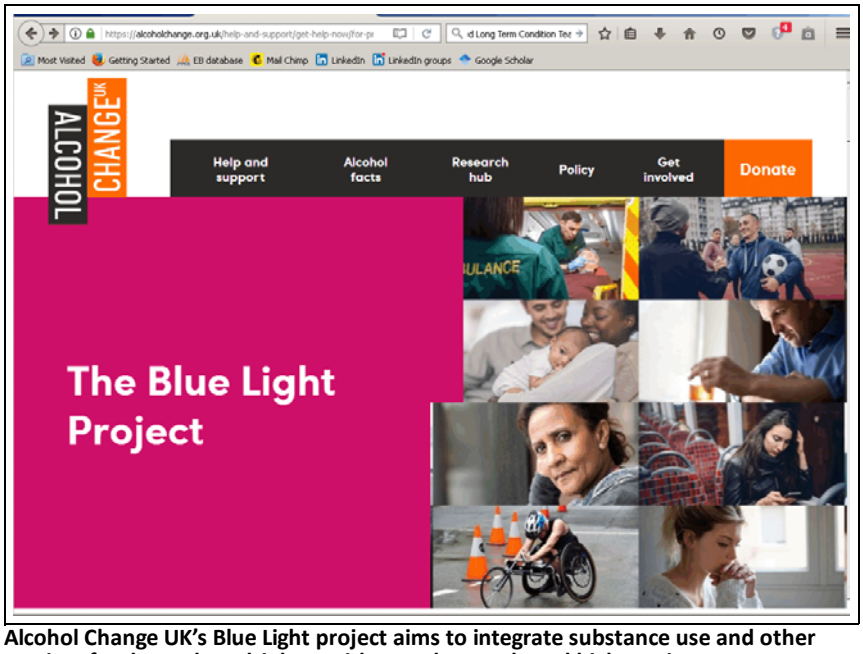
What can we make of these findings? That integrating primary medical care and substance use treatment for patients whose medical and psychiatric complaints are 'integrated' with their dependent drinking seems to improve substance use outcomes and possibly too improve the diagnosis and treatment of their other complaints, and that in patients seriously ill due to their drinking and/or whose conditions would be aggravated by continued heavy drinking, the effect can be to noticeably prolong life. Conversely, that without actually integrating the day-to-day care of these patients, merely integrating the case management role (orchestrating but not providing care) but requiring patients to attend elsewhere for medical and addiction treatment may make no difference compared to usual referral practices.

If that is the message from the research, in what circumstances (if any) in the UK context might it be feasible and effective to integrate care for these patients – and would we need specialist clinics, or to reinforce the ongoing and integrated care which should be provided by GPs to ensure it identifies and

takes on the treatment of drinking problems? The first may be costly and the latter difficult, given GPs' reluctance to get involved even in brief alcohol interventions.

One situation where integrated teams might be considered worthwhile is for patients disengaged from both alcohol treatment and primary care, and who generate very high care costs, typically due to frequent emergency attendances and hospital admissions, driven by continued drinking despite this causing or aggravating physical or psychiatric conditions. That was the scenario which led to the setting up of an integrated team in Nottinghamshire in England. An evaluation described how they assertively contacted and maintained contact with their referrals, aiming above all to stabilise and reduce harm by managing both the drinking problem and the medical conditions (almost all the patients had liver disease) and other problems. Given the costs associated with these patients before the team took them on, even incomplete harm-reduction progress was calculated to generate huge savings.

The Nottinghamshire initiative has been presented as an exemplar of Alcohol Change UK's Blue Light project "bringing key agencies such as police, housing, mental health, hospital and others together with the specialist alcohol services. This allows the identification of key individuals (often known to most or all services in the area), and the development of consistent, jointly owned interventions." Alcohol Concern, a predecessor to Alcohol Change UK, had described it as a "national initiative to develop alternative approaches and care pathways for treatment resistant drinkers who place a burden on public services … supported by Public Health England and 23 local authorities across the country." The project's manual makes it clear that often the realistic aim is to help manage drinking and reduce harm through a chronic care programme rather than a near-term 'cure' in the form of abstinence or non-hazardous drinking.



Alcohol Change UK's Blue Light project aims to integrate substance use and other services for dependent drinkers with complex needs and high service use.

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