0.28–0.61). The OGRS was a more respectable 0.69 (95% CI 0.53–0.85). In the HCR-20 high-risk group, AUC for VRAG was 0.67 (95% CI 0.54–0.81) and OGRS 0.68 (95% CI 0.64–0.81).

Perhaps there would be mileage in squeezing the fruit again in Buchanan's next study?

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Effectiveness of methadone treatment for heroin addiction

Regarding Byford *et al*'s paper,[1] the authors present an analysis of the results of the Randomised Injectable Opiate Treatment Trial (RIOTT).[2] Participants of RIOTT were very few in number – fewer than 45 individuals in each of the three arms of the study (injectable heroin, injectable methadone and 'optimised' oral methadone). It required 3 full years at 3 sites to screen 301 volunteers, of whom 127 (40%) began the trial and only 89 completed the 26-week treatment protocol.

All of the participants had been receiving 'conventional' methadone treatment for more than 6 months and continued 'to inject "street" heroin regularly'. On average, they had had over four prior treatment episodes. Accordingly, it is reasonable to assume that the overriding motivation of those who volunteered was the hope of receiving injectable opiates, and it is likely that participant bias may have had a substantial impact on outcomes. Indeed, it is revealing that among those assigned to receive optimised oral methadone, 7 (17%) never began the trial and of the remaining 35 only 24 were still enrolled 26 weeks later.

Some of the reported findings seem to underscore the severe limitations that must be kept in mind in drawing even the most tentative conclusions. For example, although the oral methadone group claimed to have committed roughly three times as many crimes as the intravenous methadone group (mean 21 *v.* 7 crimes), the latter group spent 15 times more nights in prison (mean 6.1 *v.* 0.4). Surely provision of oral methadone did not somehow make patients more successful in their criminal pursuits.

Perhaps inevitably, the limited ability to extrapolate has been ignored in the wider distribution of the findings. Thus, one report (which refers readers seeking more information to the Press Officer of King's College London, with which the principal author and five of the seven co-authors are affiliated) had the unqualified headline: 'Injectable opioid treatment for chronic heroin addiction more cost-effective than oral methadone', and claimed that 'total cost savings of providing injectable opiate treatment for this chronic group in England could be between £29 and £59 million per year'.[3]

The criticisms noted above must not detract from the bottom-line, common sense, conclusion with regard to injectable opioid treatment: in the interests of addicts as well as the general community, it is essential that those who respond poorly to treatment (any treatment) be provided information on and referral to the broadest possible array of alternative services.

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Authors' reply: Newman rightly draws attention to the effectiveness of appropriately delivered methadone treatment for many people with heroin addiction worldwide over the past half-century. Our economic evaluation[1] and the preceding report on the main findings from the RIOTT trial[2] should not be considered an attack on the value of oral methadone to the majority who show substantial benefit from this treatment.[3,4] Rather the RIOTT trial needs to be recognised for what it was – an investigation of effectiveness and cost-effectiveness of alternative treatments in a subgroup of the treatment population with severe and chronic addiction who were not responding to oral methadone maintenance treatment.

It is also appropriate to inject a note of caution about the potential influence of expectations on trial participants. This limitation is inherent in any trial where the patient has a preference for which treatment arm they may be assigned to, and Newman is right that this has the potential to be a pronounced influence in the addiction treatment field. In fact, aware of this potential, we gathered some data from patients on their expectations and experiences of treatment within the trial, and this has recently been reported separately.[5]

Newman notes the modest sample size in this trial (total of 127 participants). This is a particular challenge in a field where treatment is intensive and expensive, and in countries which do not have a tradition of funding large treatment trials in the addictions field. We would nevertheless point out that the sample size was calculated in advance by the applicants for the original research award and was judged to be adequate to detect the expected effect size as defined in the protocol.[2]

Newman highlights a further limitation of sample size in this highly variable population, using the example of criminal activity. Although the oral methadone group reported committing a much higher number of crimes than the injectable methadone group, the latter group spent more nights in prison. However, the total number of participants spending any time in prison ($n = 6$; 5%) is extremely small relative to the number reporting any criminal activity ($n = 50$; 42%), so it would be inappropriate to try and come to any comparative conclusions.