PART 4 • THE ACTIVE INGREDIENTS

hepatitis C and needle exchange

Needle exchange can help stem the hepatitis C epidemic – but it takes high volume, high activity, high support and lateral thinking. The final part of this series isolates the most promising practice ingredients and mixes.

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a **FINDINGS** *analysis*

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THIS CONCLUDING PART of the series aims to tease out from the previous parts the practices which help or hinder needle exchange curb the spread of hepatitis C, all the time keeping in mind that each exchange is a complex system whose elements interact with each other and with the environment. Like cooking, rather than any particular practice ingredient being 'good' or 'bad', it all depends on quantities, combinations, and context.[140]

The core service: supplying sterile equipment

One thing seems clear. Trickle-feed needle exchange does not work, or not well enough.[219 220] Hepatitis C demands much more ambitious strategies which aim to eliminate even occasional risky sharing and which extend to all the equipment directly or indirectly in contact with an injector's blood,[221] and all the ways this might happen.[222]

VOLUME AND ACCESS

The ideal is to have a fresh needle and syringe to hand on each injecting occasion, making it at least as easy to employ a clean as a used one. Rather than a straggling line, sterile equipment emanating from exchanges should be like a "swarm" of malaria-free mosquitoes displacing their infectious cousins.[223]

Rarely is output sufficient to approach this ideal. Though Britain is relatively well endowed, in England syringe output is sufficient for a fresh set to be used for just one in four injections while in Scotland supplies are a third as adequate.[99 281] Commonly at the root of the problem lies a reluctance to support services seen as accepting of drug users' lifestyles.[12 140] Services which are funded may be forced into overly strict one-for-one exchange and limits on quantities,[129 224] opening hours, and locations.[113 148 153 155 156 157] Sometimes these are a well-meaning attempt to induce frequent attendance, reduce injecting,[225] prevent equipment being sold or used to initiate new injectors, or to ensure safe disposal,[129] but the effect can be to condemn exchanges to an avoidable failure.

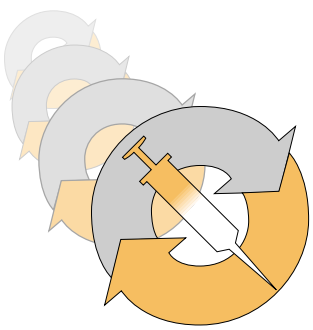
How the elements fit together is important. For example, a one-for-one policy need not be a problem if exchanges do not unduly limit supplies, and go to users rather than making users come to them carrying used equipment.[76 141] On the other hand, the conjunction of fixed-site, one-for-one exchange and limits on supplies demands unrealistically frequent visits[61] from high-rate injectors.[113 153]

Diversifying outlets helps with coverage[19 226] but potentially at the cost of behaviour change. If pharmacy exchanges work in partnership with drug agency or specialist exchanges, the advantages (access, low cost) will be retained and the disadvantages (lack of proactive risk reduction) could be reduced through cross-referral and shared training. The Avon model of an agency exchange managing and acting as an assessment (and re-assessment) service for the pharmacy scheme is one example.[106]

MATCHING DISTRIBUTION TO DEMAND

Sheer volume is necessary but not sufficient. Despite overall abundance, limits on the times and places when equipment can be obtained can create a mismatch between supply and demand,[76] especially when cocaine binges sharply escalate the rate of injection.[75 113 148 151] Rather than an indiscriminate flood, the outflow may need to be micro-managed to ensure that equipment reaches in to all the niches where and when injecting occurs.[102 113 123]

The problem arises partly from a defining feature of addiction: the urgent focus on obtaining and taking the drug. The result is an at times highly



THE 4 PARTS OF THE SERIES

Issue 8 The first part of this series established that hepatitis C is spreading rapidly due to continued sharing of injecting equipment and that needle exchange is the main service modality with the potential to curb the epidemic.

Issue 9 Six case studies showed that this potential can be realised, but also that exchanges have usually been unable to demonstrate effectiveness against the virus. Service restrictions forced by or intended to deflect public hostility seemed the major reason for the deficiencies.

Issue 10 Revealed that in Britain there is no hard evidence that exchanges have helped attenders reduce risk behaviour or avoid infection. The early pilot studies were flawed and we know little about the effects of today's exchanges.

Issue 11 This article and the final part of the series dissects the previous parts to identify the practice elements which limit or can extend viral control.

constricted circle beyond which injectors will not (metaphorically or actually) travel to obtain sterile injecting equipment, typically in distance a mile or two.[104 153 188 198 204 275] Proximity is not the whole answer,[86 93 123 157 172] but it helps. Accessible exchanges encourage attendance[126] and living close to one has been linked to reduced sharing.[86]

Proximity is not an issue when an exchange is conveniently located within a small area of injecting drug use. In this situation, extending hours may be all it takes to ensure adequate supplies. Elsewhere, it may require diversification to all-night pharmacies, outreach workers,[58] mobile exchanges, vending machines,[226] and emergency departments.[74 204] In other cases it is about identifying hotspots where even extensive and diversified access leaves injectors with drugs but without sterile equipment, a risky combination.[93 275] Examples are Vancouver's welfare hotels, America's shooting galleries,[68 103] and the pre-outing social gatherings of amphetamine injectors in northwest England.[100] Here the aim is to ensure the service is there in person or via its customers doing secondary exchange.[148 149]

Mobile or peripatetic exchanges seem an ideal solution, but if they operate for only a short time at each location there is a high chance that they will be missed and that sharing will fill the gap.[150] Home delivery and collection[157] is particularly suitable for injectors wary of carrying syringes in the street or of being identified using the exchange. Both tactics have a special role where injectors are thinly spread across a wide area.

GAPS IN THE CUSTOMER BASE

With a virus as transmissible and prevalent as hepatitis C, preventing its spread requires the 'inoculation' of a high proportion of a network of injectors through access to sterile equipment.[114 252] If some groups are missed, the entire enterprise is threatened.

In particular, hepatitis C places a premium on reaching new injectors, as early as within a year of their starting to inject.[222] Yet exchanges in Britain[74 86 104 106 115 189 190 194 195] and elsewhere[121 148 185 227 228] typically attract few new injectors. They also often miss younger injectors[76 123 179 277] and those who do come may attend less often.[76] Being able to point to the long injecting history of your visitors is a defence against accusations of consolidating or initiating injecting careers, but one with a price. Women too are often found to be under-represented,[32 121 189 195 205] though in London those who did come found exchanges helpful and accessible.[229]

Catching people early is doubly important because younger and newer injectors[86 222] are at greater risk of infection due to riskier behaviour. Special efforts should also be made to attract and retain other high-risk groups[123]

◤ *Essential first step: assessing risk*, p. 27.

Diversification of outlets helps because injectors unwilling or unable to use one can use another. Compared to exchanges, in France vending machines tend to attract young injectors, those not in treatment, and those who inject less frequently.[226 230] In Britain, pharmacy schemes attract people who prioritise speed and convenience[32] while others prefer what they see as the more welcoming and comprehensive response of a specialist or drug agency exchange.

STERILE EQUIPMENT FROM EXCHANGES SHOULD BE LIKE A SWARM OF MALARIA-FREE MOSQUITOES DISPLACING THEIR INFECTIOUS COUSINS

ALL THE EQUIPMENT, ALL THE TIME

Another priority is to widen the focus to equipment other than needles and syringes.[222] This 'paraphernalia' includes filters, spoons to heat drugs in, water to clean and flush syringes and dissolve drugs, and acid to dissolve heroin and crack cocaine.[231] Hepatitis C also places the emphasis on hygiene – safely cleaning up blood spills and disposing of swabs and tourniquets.[19 27]

Exchanges have a poor record at preventing paraphernalia sharing.[32 76 80 93 117 179] An obvious reason is because these materials have not been supplied.[111 115 116] In one English evaluation, around 80% of injectors given sterile water and 'cookers' said they were now less likely to re-use someone else's.[279] Not providing these materials may also send an implicit message that re-using them is 'OK' – certainly how some English exchange users see it.[106] Meeting the established demand[232] for this equipment is likely to be most important for people without their own homes who cannot, for example, just reach for a fresh spoon or fresh water.[233]

THE PROBLEM OF SPORADIC ATTENDANCE

Sporadic attendance is a common (but not universal[195]) obstacle to effective exchange.[61 188 189 205 206 209 220] Especially coupled with caps on how many sets the exchange is prepared to give out or the attender to carry, infrequent attendance leads to supplies falling short, in turn linked to re-use of other people's equipment.[61 76 77 209]

Even without caps, infrequent attendance elevates risk by extending the time used syringes remain in circulation.[234 235] At exchanges which require these to be returned at the next visit, the time between visits roughly corresponds to the circulation time. The longer this is, the more opportunities there are for equipment to become contaminated and for people to become infected by it.[236]

Attempting to force frequent visits by capping quantities risks under-supply and the rapid spread of infection.[174 177] An alternative is to look at the deterrents to attendance. One commonly reported is fear of being stopped by the police while carrying needles and syringes.[32 50 101 109 157 186 188 194 204 206 224 236 237 277] Sometimes the stigma of drugs and AIDS is such that exposure as an injector also risks ostracism and violence from the public.[220] Where reactions are less extreme, possible exposure to family, employers, friends and neighbours still deters exchange attendance.[277] Having to carry back used equipment aggravates the situation, but regardless of whether this is required, injectors prefer not to be seen at syringe outlets.[186 194 204 240 226]

Because they extend the circulation time of used equipment,[154] deterrents to attendance are particularly damaging when coupled with a one-for-one exchange service to which users have to travel. One-for-one policies stem partly from concern that otherwise used equipment will be dangerously discarded. That concern has some foundation, especially when police pressure and stigma encourage injectors to quickly discard used syringes rather than risk exposure while depositing them in public sharps bins or returning them to the exchange.[157 238]

One way out of this bind is to be able to reassure injectors by gaining the cooperation of local police. Drug users' networks can quickly spread the news, making a big difference to attendance,[239] but trust in the police

WHY EXCHANGES RESTRICT SUPPLIES

A study in Ontario gives us a rare glimpse of what drives the distribution policies of needle exchanges.[225] Staff who saw syringes and needles not as the means to avoid infection, but primarily as posing a risk to injectors and to the public, tended to limit the amount they gave out and to insist on one-for-one exchange. In these services the return rate is all-important, pressure is put on customers to see that the statistics tally, and secondary exchange may be banned.

Such attitudes can be a defensive response to the precariousness of public support for exchanges.[161] In Ontario they were most common in newer services still establishing their credibility and those under attack from hostile local opinion. More confident and less besieged services could focus on distributing sterile needles and syringes rather than collecting used ones. In these services, output restrictions are seen as obstacles to supplying life-saving equipment. Returns are encouraged not by sanctions but through dialogue and mutually agreed solutions such as home pick-ups and return containers. An injector's assessment of the amount they need is accepted and secondary exchange encouraged. Such services may still aim to take back as much as they give out, but not necessarily at each transaction.

A lone sterile syringe has no chance against contaminated equipment

is fragile[236] and quickly reversed.[224]

Other solutions include secondary exchange,[277] home pick-ups,[157] and (for at least the return part of the exchange journey) safe disposal bins in premises such as public toilets. These efforts can still be thwarted if injectors lack close links with an exchange user who can collect for them,[277] or because instability in injecting locations and in drug users' lifestyles mean they cannot be guaranteed to inject while near a bin, or to be in when a worker calls.[236]

Around the core: options for enhanced risk reduction

Getting sterile equipment to injectors is essential but not necessarily enough. Proactive intervention aimed at behaviour change may be needed if the exchange's output is not simply to feed unchanged sharing patterns ◤ *To intervene or not* p. 28. Armed from the previous parts of this series with an understanding of why risk behaviour has persisted, we can suggest an extended menu of intervention options. Few have been tested at exchanges. Much more research has been done in the context of outreach, peer education, community organisation, and brief interventions. Reviewing this work is beyond the scope of this article, but some pointers are offered.

ESSENTIAL FIRST STEP: ASSESSING RISK

Referral to treatment, individualised risk-reduction, adapting services to the local risk profile, evaluating performance – all hinge on first assessing the risks run by visitors to the exchange,[116] yet sometimes this essential step has been lacking.[32 189 204] Assessments also allow exchanges to focus interventions on visitors whose risk behaviour stems from factors not addressed simply by supplying equipment and standard information. Assessment could itself reduce risk, both directly[243] and by encouraging injectors to arrange HIV and hepatitis tests and counselling,[184 194] especially if as a result they become aware that they are infected and infectious.[51 244 245]

Deciding when to do the first thorough assessment requires sensitivity. Wariness at probing too hard too early is justified,[32 189] but if visitors do not return at all or for months, delay amounts to a lost risk-reduction opportunity. In terms of what to do, only detailed questioning will uncover all the potential hepatitis C transmission routes, allied with an interviewing style which does not offer easy ways out of admitting this behaviour or encourage denial by seeming judgemental. Interview schedules developed for research provide validated frameworks.[90 95] The assessment should cover overdose as well as infection risk, and be regularly repeated.[246]

Risk-elevating attributes identified by research offer clues to priority targets and assessment topics: younger injectors;[23 45 52 55 56 62 75 85 86 87] women in a sexual relationship with a male injector and anyone for whom co-injecting friendships make non-sharing difficult;[74] those who let others take the lead in buying and preparing their drugs[96] or in helping them inject;[100 148] people unaware of the risks and how to avoid them, specifically injectors who underestimate the risks from close friends or lovers[2 101 106] or who falsely believe that cleaning syringes protects them;[100] those so depressed, fatalistic or disturbed that they do not care about the risks or do not react rationally;[154] very frequent injectors;[50 121 151] those so chaotic that accidents will certainly happen;[157 172] injectors unusually negligent about the risks, associated with heavy drinking,[139] indiscriminate polydrug use[56] and injecting cocaine, speedballs,[52 62 68 69 70 71 75 76 78 79] or tranquillisers;[56 74] more dependent injectors;[74 96 101 112] people who jointly purchase and inject street drugs, especially those with larger injecting circles[42 44] and in fluid injecting networks;[119] the homeless, ill-housed and materially deprived and (related to this) those who inject in public or in the street.[71 75 76 80 100 104 111 112 151]

KNOWLEDGE AS WELL AS NEEDLES

From the start exchanges acknowledged that beyond needles and syringes, reducing risk behaviour required *knowledge* of the risks and how they could be avoided.[1]

In the early years of the HIV epidemic,[12 86] information campaigns almost certainly curbed syringe sharing. Injectors today are poorly informed about the risks of sharing paraphernalia and how hepatitis C can spread,[115 116 117] suggesting the need for similar campaigns on these issues.[276] Ignorance may be partly why, even when it is supplied, paraphernalia can continue to be shared.[76 208]

The implication is that supplying this equipment should be seen not as an end in itself, but as paving the way for interventions to reduce re-use and joint use. Research suggests that exchange users would welcome structured face-to-face education[194 204 245] – as long as the trainer was knowledgeable about the virus and about injecting lifestyles. Current and former injectors have a credibility head-start.[12 245] But information itself is often insufficient to reduce risk,[80 93 123 208] especially if this is grounded in shared lives and shared purchase and use of drugs.[102 117 118] Here the aim must be to construct anti-sharing norms strong enough to counter the practical and emotional attractions of sharing equipment ◤ *True friends do not share (syringes)*, p. 29.

For hepatitis C in particular, the 'facts' are unlikely to be enough to energise risk-reduction. Injectors may see the virus as a minor issue compared to HIV, overdose, and the daily batterings of a life centred on illegal drug use.[247 248] Also, the virus may be seen as virtually unavoidable and therefore not worth trying to avoid.[280]

STRUCTURED RISK-REDUCTION

Because supplying sterile syringes has been difficult there, the USA has generated alternatives. In Britain, these could also be used to augment needle exchange. One approach tested in two national programmes used outreach workers to encourage injectors back to 'off street' locations for one or two brief risk-reduction sessions.[249] There were no control groups, but the findings suggest a consequent reduction in the numbers injecting, in injection frequency, crack use, re-use of needles and syringes and other equipment, and more frequent decontamination of used equipment, all protective against infection.

High volume and high access make it possible for sterile supplies to displace potentially contaminated equipment

Just two sessions can make a worthwhile impact. In one of the programmes contacts were randomly allocated to extra sessions.[250] Six months later these had slightly increased treatment uptake and exits from injecting, but risk-reduction overall had not been improved. However, the basic two sessions were much more than a swift encounter on the street. In session one, time was set aside in private for a manual-driven programme of HIV testing and pre- and post-test counselling, and to introduce injectors to a hierarchy of means and skills for reducing risk. The follow-up session reinforced these messages and provided an opportunity to discuss how they had worked out in practice.

Another US study collated results from HIV risk-reduction interventions during drug treatment.[251] These reduced sexual risk behaviour and improved risk-reduction skills, skills which could help prevent risky injecting among injectors not in treatment.

Whether exchanges should train visitors how to clean syringes is a moot point. The issue is whether it is feasible for injectors to practice sufficiently thorough decontamination to kill hepatitis C, or whether encouraging them to do so takes everyone's eye of the ball – never re-using other people's equipment.[12] Even if adhered to (and they rarely are[32 85 93 100 106 115 116 201]), methods recommended against HIV may be little use against hepatitis C.[6 7 252] The main effect could be to give false reassurance.[93 106]

ENCOURAGING TREATMENT ENTRY

Exchanges attract the highest risk and most dependent drug users – the very people who when they enter addiction treatment make the greatest gains for themselves and for society,[254 255] including the avoidance of viral infection.[256 257 258]

That exchanges can act as conduit to treatment has been demonstrated overseas[234] and by early work in Britain.[190] Towards the end of the '80s, one London exchange logged

722 visitors, of whom nearly 40% were not just given, but apparently acted on referrals to external help, mostly to treatment services.[282] A fifth of the referred clients had come seeking such help (far more than those not referred) but presumably many were steered in this direction by the exchange. At Baltimore's exchange, the treatment entry rate of clients referred to methadone maintenance was only a little below par and they did about as well as other patients.[120]

How many of their users benefit from treatment is partly in the exchange's hands; focusing on referral can greatly increase treatment uptake.[186] These findings lend weight to calls for exchanges to actively forge links with treatment services and refer to those services.[123 140 191 259] One suggestion is to interview attenders monthly to identify those whose injecting is accelerating (in this study, also the most regular attenders) in order to target them for referral to treatment.[191]

Successful referral paves the way for treatment and exchange to exert a synergistic impact on risk. In so far as they reduce the frequency of injecting, oral substitution programmes also reduce the opportunities for sharing equipment and for viral spread.[256] Meantime, the role of exchanges is to see that uncontaminated equipment is used for each remaining injection and to remove used equipment. Evidence for precisely this kind of joint impact is available from the USA[77 120 126] and from Britain, where in the early years of needle exchange injectables were more widely prescribed than today; facilitating access to this treatment was probably one of the main ways exchanges reduced infection risk.[104] By reducing the number of injections, treatment should also help exchanges meet the remaining demand for equipment.

Even if it does not cut the frequency of injecting, sourcing injectable drugs from a doctor divorces patients from the joint drug procurement and consumption arrangements[196] which characterise illegal drug use,[88 102 103 117 118 197] making it less likely that they will share injecting equipment. Treatment can also address psychosocial risk factors beyond the reach of exchanges ◤ *below*.

The accessibility of treatment limits whether staff will refer and clients attend.[149 259 260] Where services are lacking or unsuitable, exchanges can still use their access to injectors to lobby for improvements.[123 204]

ADDRESSING POVERTY AND DISTRESS

Tackling material deficits and psychological problems will be required where these make risk behaviour resistant to simple needle exchange or direct intervention.[114]

Exchange users are often very poor, seriously depressed and distressed, lack stable housing, and in legal trouble. Often depression responds well to treatment but there is no reason to believe (and no evidence) that the same is true of starting to use an exchange. In a US study, exchange users were nearly twice as likely as methadone patients to be seriously depressed.[261]

Where food, shelter, safety and avoiding arrest are immediate concerns, the distant prospect of AIDS or liver disease may seem less pressing.[94 245] Material deficits and psychological problems also limit the resources injectors can call on to safeguard their health, leading to risky sharing and impeding behaviour change.[32 77 104 111] Among exchange attenders in New York, having lived in one's own house during the last six months halved the chances of continued re-use of used syringes.[77] In Vancouver, housing, poverty and distress lay at the heart of risk behaviour.[148 151] Needle exchange is the drug service most likely to be in contact with these marginalised populations, giving exchanges a potentially central role in responding to their needs.[274] Often exchanges will be unable to directly address these needs but they can link to services which can, act as advocates, and help their visitors do the same.[149 151]

INJECTORS ARE NOT JUST THE EXCHANGE'S CUSTOMERS, BUT ITS COLLABORATORS

CUSTOMERS ARE ALSO SERVICE PROVIDERS

The social nature of sharing suggests a key role for working with networks of injectors. In this vision, injectors are not just the exchange's customers, but its collaborators.[114] The argument has been powerfully made that further progress in infection control requires a shift from targeting individuals, to targeting networks and the group norms which sustain risk behaviour despite needle exchange provision.[1 18 76 77 114 204]

Helping to shape the service to their requirements is a basic role for exchange users, particularly important in Britain where exchanges compete against pharmacies and other injectors.[157] Beyond this is engaging users in delivering the service. Practically from the start, exchanges have supplied visitors with extra equipment to pass on to their contacts. Quantity caps so low as to effectively prohibit this are the main impediment.[61 74 177 209] Where these allow it, 'secondary' distribution can be very common in Britain[32 100 106 197 199 203 204] and elsewhere,[76 77] providing an important extension to the service,[140 240] particularly where group injecting is the major risk scenario.[262] Though it might attract criticism, deliberately engaging drug dealers in syringe supply and collection could also be effective risk-reduction.[100]

Baltimore's exchange was prepared to frequently hand out large amounts of equipment, with the result that 9% of its visitors distributed two-thirds of its output.[262 263] Their motives varied from making money to saving lives. Those of their 'customers' included (compared to going to the exchange) convenience and confidentiality and less chance of being caught with syringes.[237]

San Francisco's Prevention Point hands out more syringes than any other US ex-

TO INTERVENE OR NOT

Exchanges with a poor record of risk-reduction have commonly adopted, or been forced to adopt, a non-interventionist stance.[32 74 115 116 161 184 189 195 205] Particularly when equipment is readily available from other outlets, the result may be no added risk-reduction.[71 145 150 184 241] The fact that hepatitis C has spread, and risk behaviour persisted, despite accessible and low-threshold exchange suggests that a more interventionist stance is needed.[219 222] Risk-reduction and health-promotion enhancements are also the main ways specialist exchanges distinguish themselves from pharmacy schemes, justifying the extra investment.[32 74 106 242] These services can also aid coverage by attracting more visitors.[197]

Obstacles to intensified engagement are both practical and philosophical.[149 183 185] Shortage of time,[106 170] under-resourcing, and unsuitable premises, locations or vehicles,[155] all preclude extended encounters.[76] Exchange's founding assumption[1] that injectors would not knowingly risk infection when they had the means to avoid it, also implied that energetic intervention was unnecessary, as were the costly staff and facilities needed to mount them. Exchanges were, after all, going with the flow of injecting drug use, seeking only to divert it a little in the injector's interests. The limited success of this approach has focused attention on the fact that *not* sharing injecting equipment is in some ways very much against the flow of injecting subcultures, and that safer injecting requires big means like housing and self-respect as well as the little means of needles and syringes.[222]

Would it deter customers?

There was also a more positive reason for the early exchanges not to push too hard for behaviour change. To attract visitors, exchanges had to avoid seeming just like the drug treatment clinics most injectors then[283 284] (and now[274 281]) stayed away from. The emphasis was on 'low thresholds', 'user friendly' staff, and, above all, on not pressurising the visitor – and rightly so. Fears that too precipitate an approach could deter visitors were well founded,[32 203] and improving coverage by lowering the threshold remains critical. The challenge is to upgrade to intensified intervention without alienating visitors or making access to equipment contingent on extra risk-reduction activities.[129]

change, aided by the fact that half its visitors also exchange for others. Research found that direct and indirect exchangers both had reduced risk behaviour compared to other injectors, presumed to reflect indirect transmission of harm reduction messages from the exchange along with its equipment.[277]

The same city illustrates the potential of peer exchange in a community small enough for the networks to be personal, and for peer exchangers to reach a high proportion of their peers. Four injectors recruited at a 'camp' used by young homeless drug users were trained by a local agency.[264] Each recruited a small crew with a view to maintaining a 24-hour service. Compared to sites without secondary exchange, at the camp many more injectors sourced syringes from exchanges rather than friends, and needle sharing was nearly four times less likely.

NATIONAL POLICY SEES COMMUNITIES OF INJECTORS AS TARGETS TO BE DISMANTLED RATHER THAN NURTURED

In the Netherlands, Australia, and New Zealand, drug users' groups commonly not only do peer exchange 'in the field', but themselves manage exchanges.[3 77 278]

TRUE FRIENDS DO NOT SHARE (SYRINGES)

Exchanges also provide a platform from which to influence social norms governing how equipment is used, either directly by recruiting influential local injectors,[2 104] or indirectly by cooperating with outreach and peer education initiatives.[18] The aim might, for example, be to replace the norm 'friends share', with the norm, 'true friends do not share injecting equipment'.[107]

Employing (ex)injectors to conduct outreach among their networks, and to recruit other HIV risk-reduction advocates, is a well established tactic.[265] In Baltimore, potential peer leaders were identified simply by asking injectors to nominate and bring back for interview people who drug users might listen to about HIV prevention.[266] Eight in ten were themselves injectors. There was strong evidence that participating led them to reduce their risk behaviour and suggestive evidence of a similar impact among their contacts.

Another approach borrows from pyramid selling but incorporates quality checks into its reward structure. Noting that younger injectors rarely turn up at exchanges, an Australian project recruited some, taught them about hepatitis C transmission routes, and paid them to teach other injectors who returned to the project to be 'examined', for which they in turn received payment.[227] 'Bonuses' were paid to the peer educators if their pupils got high marks. A similar intervention has been implemented in the USA, and replicated in Russia alongside secondary exchange.[240] Quality checks are important to prevent off-message or off-putting communications from self-appointed opinion leaders.[267] This seems an attractive way to get information to new injectors and to encourage them to use the exchange via contact with older exchange users.

Other methods trialed in the USA involve bringing together groups of injectors to discuss HIV risk and how to avoid it. Some studies show greater risk reduction than individual approaches.[265] In one the initiative began simply by asking injectors to bring in their syringe-sharing contacts.

Which type of intervention is feasible will depend on the nature of the local network. Where this is relatively stable and based on ties that go beyond joint drug procurement and use, natural groups can exert influence and spread information. Elsewhere, one may need to identify and recruit the few stable participants in an unstable social scene.

TIME TO FOCUS ON *preventing* INJECTING?

In respect of hepatitis C, the difficulty of instilling truly safe practices has refocused attention on cutting the prevalence of injecting as well trying to make it safer.[15 22 117 268 269]

Exchanges have at least two potential roles. First, they can seek to shorten injecting careers by encouraging visitors to take drugs in other ways and by putting them in touch with treatment and other services ◤ *Encouraging treatment entry*, p. 27 and *Addressing poverty and distress*, p. 28. Second, they can try to prevent their visitors spreading the injecting habit, building on the prominent role played by current injectors in initiating others.

Though not at an exchange, an intervention along these lines has been trialed in Britain.[270] In a session lasting under an hour, drug worker and client explored initiation and its risks, how the client may inadvertently promote injecting, and responses to common initiation scenarios. The intervention was practicable, and was followed by substantial reductions in the frequency of injecting in front of non-injectors and of non-injectors asking to be initiated. Six of the trainees had initiated someone in the three months before the session, just two after it. However, for many trainees the session would have been wasted. Most had never initiated anyone and would resist doing so. Cost-effectiveness dictates screening these out and targeting only potential initiators ◤ *Essential first step: assessing risk*, p. 27.

STAFF SKILLS AND TRAINING

To undertake enhanced intervention, staff need the skills and confidence to maximise behaviour change without alienating users. Though willing, sometimes they feel unable to do more due to insufficiently detailed knowledge of injecting and related risks[204] or inadequate communication skills.[116]

A basic requirement is sufficient knowledge to be able to train injectors in safer injecting and good hygiene.[201] To encourage clients to act on this training, staff might draw on techniques used in other settings where the client is, from their point of view, attending for another purpose. Motivational interviewing has a strong research record.[194] Cognitive therapy is another model.[7 80] One aim might be to generate motivation by making it hard to persist with risk behaviour and still see oneself as a 'responsible' injector. Ability to organise marginalised groups, advocate on their behalf, and to foster the interpersonal skills required to negotiate risk avoidance, are also important.[94 104]

CHALLENGE YOUR ASSUMPTIONS

Evaluating exchanges often produces surprising results which would probably not have been predicted by staff.[219 271] Though basic information on syringe sharing is now called for in English guidelines,[216] self-evaluation against anti-infection criteria (as opposed to caseload and syringe output and recovery) is not central to needle exchange practice.

Periodic reassessments of visitors (especially after risk-reduction initiatives) are a fundamental way to assess performance, but should be supplemented by more detailed exercises. A research mentality and research inputs are important because (especially to staff) visitors may prefer to under-report their risktaking[183] and because how questions are phrased greatly affects the answers.[90 95 246]

Beyond counting outcomes, exchanges might also talk in depth to a sample of their customers or commission researchers to do the same, preferably using a standard interview schedule. Detailed information on how, where and why risk arises should be an important stimulus to developing the service.[116] Vancouver shows how valuable talking to less than 20 injectors could be.[172]

COURTESY OF IAN GRIFITHS OF THE HEALTHY OPTIONS TEAM NEEDLE EXCHANGE IN NEWHAM.

Home delivery and collection at squats like this one in East London extend the service to the most risk-prone injectors

Services will also want to go beyond their attenders to assess the risk profile of the local drug injecting population and to find out why some under-use the exchange.[194 204] One way is to link in to needs assessments conducted for drug action teams or local services. In Canada this led to the instigation of mobile exchanges and ongoing contacts with injectors to identify injecting 'hotspots'.[275] Commissioners too have a role in encouraging monitoring, setting risk-reduction targets, and funding needs assessments.[116]

LINKS
Hepatitis C and needle exchange.
Parts 1, 2 and 3, issues 8, 9 and 10
Nuggets **8.2 5.8 1.8 1.7**

Extended reach needed to control hepatitis C

Despite focusing on the shortfalls, what emerges from this review is not a case for cutting back on exchange, rather the opposite. Inadequacies stem from the under-resourcing and marginalisation of this work which leaves it unable to match the size of the task. So fragile is the support for needle exchange that one potential needle-stick injury to a local resident may be all it takes to close a service or to force it to make unrealistic demands on its customers, potentially at the cost of many drug injectors' lives.[272]

Uniquely, specialist or drug agency exchanges can attract large numbers of high-risk injectors into a space (mental and physical) where their injecting can be acknowledged and responded to by knowledgeable and trusted staff.[32 106] Exchanges can only realise this potential if they no longer have to constrict themselves due to shortsighted financial restrictions, community opposition, and misplaced morality, or deliberately choose to tie their own hands.

To match the size of the task, needle exchange should be convenient and widespread and seen as a priority within drugs work, not (as it often is) restricted to a few hours a week from an unsuitable location.[9]

Time, resources and support, enable a change of working style – from transaction to pro-action. The threshold must remain low, but once crossed the injector would find themselves in an environment equipped for and conducive to intervention. Hurried exchanges conducted under pressure and perhaps under sufferance by inadequately trained, unmotivated and undervalued staff give no leeway for making this shift.

Progress will be greater still when a service delivery model is replaced by one in which injectors use services to achieve behaviour change rooted in their own social networks. Exchanges are well placed to stimulate, influence and support these social trends, though they will be working against the grain of a national policy which sees communities of injectors as targets to be dismantled rather than nurtured.

Such conclusions were reached many years ago by experienced British staff.[253 273] The most developed services are already comprehensive harm reduction and welfare centres offering the safety net of an extended hours service accessed simply by knocking on the door. With a sufficient boost, Britain has a platform from which to step up.

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