

# 3.7: Bridging the gap: An analysis of global spend and resourcing need for harm reduction

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## Introduction

Twenty-five years into the response to HIV among people who inject drugs, considerable progress has been made. The techniques to prevent the spread of HIV infection among people who inject drugs are well known and well tested and HIV-related harm reduction has been shown to work in a wide range of settings.

The international community has endorsed the HIV-related harm reduction package. The effectiveness of the comprehensive package of HIV prevention – including opioid substitution therapy (OST), outreach, needle and syringe programmes (NSPs), education and sexual risk interventions for people who inject drugs – has been well established and evaluated in high, middle and low income countries.<sup>1</sup> Numerous reviews, including an extensive assessment by the US Institute of Medicine,<sup>2</sup> have concluded that the scientific literature is clear that OST, access to needles and syringes and outreach are effective at decreasing drug-related risk behaviours.

The international community has also endorsed universal access to prevention, treatment and care for all people affected by HIV/AIDS, including people who inject drugs,<sup>3</sup> and there have been major increases in the allocation of resources to fight HIV.<sup>4</sup>

However, notwithstanding this progress, people who inject drugs in the majority of countries do not get access to the prevention tools and services that they need and to which they are entitled.<sup>5</sup> Despite the international commitment to universal access, resourcing for harm reduction remains entirely inadequate to

meet the needs of people who inject drugs worldwide. IHRA considers that \$160 million<sup>a</sup> is a plausible estimate of the money spent on HIV-related harm reduction in low and middle income countries in 2007.<sup>6</sup> Amounting to less than three US cents per day per injector in these countries, this response is clearly insufficient. It also means that the biggest investors in harm reduction are people who inject drugs. The expenditure on harm reduction supplies (e.g. needles and syringes) and on drug treatment mainly comes from drug users' out-of-pocket expenses rather than from harm reduction services.

This chapter examines expenditure on harm reduction, how far this expenditure falls short of need and the implications of the shortfall for the international community, for national governments, for donors and for the future shape of harm reduction.

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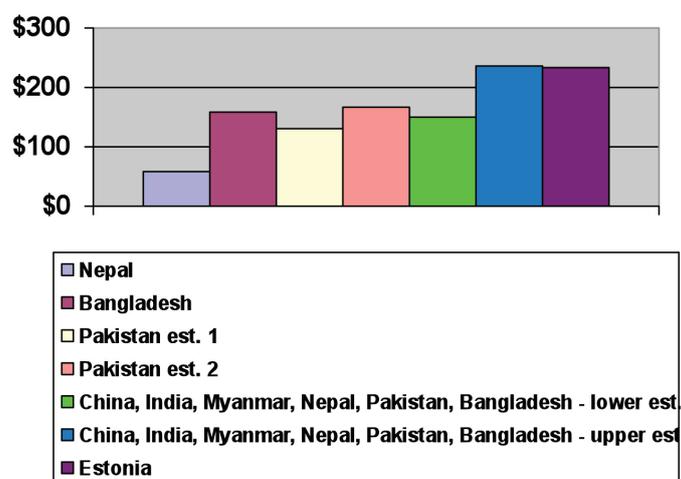
<sup>a</sup> All \$ figures are US dollars.

### A low-cost, high-impact intervention

- Prevention of HIV infection is cheaper than treatment of HIV/AIDS. The Commission on AIDS in Asia concluded that the comprehensive package of HIV harm reduction interventions costs approximately \$39 for every disability-adjusted life year saved, considerably less than anti-retroviral treatment, which costs approximately \$2,000 per life year saved.<sup>7</sup>
- The benefit return for methadone maintenance treatment is estimated to be around four times the treatment cost. According to the US National Institute on Drug Abuse, 'Research has demonstrated that methadone maintenance treatment is beneficial to society, cost-effective, and pays for itself in basic economic terms.'<sup>8</sup>
- NSPs directly averted an estimated 32,050 new HIV infections and 96,667 new hepatitis C infections in Australia between 2000 and 2009. For every dollar invested in needle and syringe exchange, more than four were returned in health care savings.<sup>9</sup>

Based on these figures, it is reasonable to estimate that the cost per injector per year in low income countries is approximately \$100 for NSPs and \$500 for OST. These figures are not normative and not intended to be used for budget planning purposes.

Figure 3.7.1: Examples of unit costs for NSPs<sup>12</sup>



## The cost of harm reduction

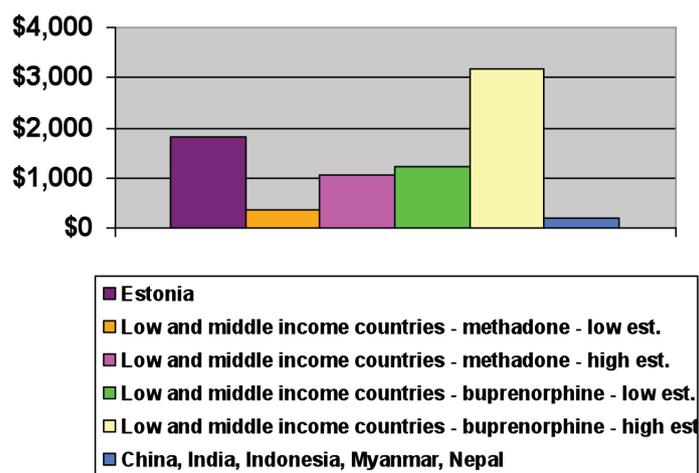
There has been insufficient research done on the costs of harm reduction interventions across an adequate range of countries. Although in theory the information needed should be relatively easy to access from programme budgets, in practice there are a number of difficulties in calculating costs.

Take the example of NSPs. It is difficult to assess their costs because of the range of delivery systems: pharmacies, vending machines, outreach and specialist exchange programmes, each with its own specific associated cost. Also, most needle and syringe exchanges provide a mix of services: they often deliver information materials and voluntary HIV counselling and testing, and may also offer social support, legal advice and referral to treatment. As well as the costs of the needles and syringes, there are the costs of set-up, staffing, premises, overheads and ensuring local political and community support.

Likewise, OST can take place in a range of settings from specialist units through to primary care, each with staff at different levels of cost and each offering various services in addition to methadone treatment. While these services are usually delivered through government health systems in high income countries, civil society organisations are often the primary providers of harm reduction in low and middle income countries.

Despite these inherent difficulties, some costings are provided in the resource needs estimates developed by UNAIDS,<sup>10</sup> the Commission on AIDS in Asia<sup>7</sup> and the UN Regional Task Force on Injecting Drug Use and HIV/AIDS for Asia and the Pacific.<sup>11</sup> These suggest that the cost of delivering NSPs for each injector reached in drop-in and outreach programmes ranges between \$51 and \$235 per year (see Figure 3.7.1). The annual costs for OST range from \$132 to \$1,811 (see Figure 3.7.2). Higher costs reflect higher labour costs and treatments using buprenorphine, which is comparatively expensive.

Figure 3.7.2: Examples of unit costs for OST<sup>12</sup>



## Estimating the total resources needed for harm reduction

UNAIDS makes estimates of the total global and country resources needed for HIV prevention based on the size of the target population, the unit cost of each intervention and the level of coverage required (see Figure 3.7.3).

**Figure 3.7.3: Calculating resource needs estimates**



This equation is easy to understand and has simple inputs. More sophisticated resource models can be developed, but given the generally low expenditure on harm reduction that is reported, the simple resource needs model is adequate for present purposes.

The size of the target population can be estimated using a variety of research methods. Most countries lack good knowledge of the size of the target population and therefore the best estimates for the numbers of people injecting drugs are reported by the Reference Group to the United Nations on HIV and Injecting Drug Use.<sup>13</sup>

There has been considerable debate about the level of coverage required for effective HIV prevention. The original idea of '60%' coverage came from vaccine programmes, which do not require 100% coverage in order to provide a good level of population immunity. Public health specialists have argued, based on epidemic modelling studies, that less than 100% coverage is needed in order to prevent epidemics. Expert consensus, although arguably based on limited evidence and analysis, is that NSPs need to cover 60% of the population and OST programmes need to cover 40% of the population. These are the figures used in UNAIDS resource needs estimates.<sup>14</sup>

This then poses the problem of how to measure coverage. Coverage is the proportion of a population needing a service that has access to that service. The WHO, UNAIDS and UNODC target-setting guide defines coverage of NSPs as the number of people who inject drugs who have had access to a programme at least once a month or more in the past twelve months.<sup>15</sup> Other measures might, for example, be the percentage of injections that are covered by using a sterile syringe.

It is clear that, for many reasons including logistics, access and appropriateness of interventions, 100% coverage will not be reached. However, it is important to recognise that the way in which 'universal access' is interpreted by UNAIDS falls far short of the 2006 declaration of commitment on HIV/AIDS. The implications of this declaration are that *all people who inject drugs should have access to HIV prevention, treatment and care.*<sup>3</sup> Given the fundamental commitment of the UNAIDS programme to human rights, all vulnerable people have the right to have access to HIV interventions. A 'right to health' approach therefore expects that every member of the target population should have access to essential medicines and to harm reduction services.

### **Refinements to resource needs estimates<sup>16</sup>**

Resource needs estimation models could also take into consideration:

- Economies of scale: The cost of going to scale may not be a simple replication of the costs of small projects on which the unit costs are often derived. Scaling up and bulk purchasing can lead to cost savings.
- Combined delivery: There can be savings where two or more services are provided in the same place, hence reducing overhead costs.
- Interaction effects within harm reduction services: There can be interactions between different interventions, where, for example, the successful delivery of needles and syringes significantly reduces health burden and hence other health care costs.
- Interaction effects within health and community delivery systems: Where, for example, investment in primary care reduces the need for outreach and community services, or vice versa; or where investment in OST strengthens other aspects of primary care by enhancing staff competency.
- Cost-effective allocation: The simple model assumes no priorities between interventions. However, some will be more cost-effective than others and may need to be put in place first. In resource-constrained settings, priority might be given to establishing low cost/high effectiveness interventions.

### **Estimates of the resources needed**

Applying the resource needs model to all populations, the UN estimates that the total global resources needed for HIV/AIDS between 2009 and 2013 would be almost \$200 billion to achieve universal access, and \$140 billion for slower scale-up to achieve universal access by 2015.<sup>10</sup>

For people who inject drugs, UNAIDS uses the 60% target for NSPs and 40% target for OST. Based on this, UNAIDS estimates that the resources needed for needle exchange and OST are \$2.13 billion in 2009 and \$3.29 billion in 2010. These figures exclude the resources required for anti-retroviral treatment, care and support. The UNAIDS estimates are equivalent to an average per injector of \$170 in 2009 and \$256 in 2010.

## Estimating global spending on harm reduction

There is no simple, accurate source of information on how much is being spent on harm reduction. Despite the establishment of mechanisms for global resource tracking, harm reduction is relatively invisible in national and international budgets. This may be indicative of the lack of attention to the issue of resourcing for harm reduction by advocates, national governments and international agencies.

The UNAIDS Resource Tracking, Resource Needs and Costing Team collects information from donors and national governments and aims to track money from source to spend. Although the National AIDS Spending Assessment (NASA) specifies detailed budget

lines, including harm reduction, these often remain unused in the reports and it is generally not possible to analyse resource allocation within a country according to specific prevention activities.

More detailed information about harm reduction expenditure has to be gained directly from donors, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), bilateral national donors and large philanthropic donors, as well as from implementing agencies. As there is no existing database of harm reduction donors or harm reduction programmes, it is only possible to come to informed estimates through the use of personal contacts within donor countries and agencies and by cross-checking with implementing agencies in receipt of funds, a process that inevitably fails to identify some donors.

IHRA's main sources of information included personal contacts, project reports, financial reports and the websites of multilateral agencies and country and philanthropic donors. The data were of variable availability and quality and attempts were made, where possible, to cross-check information and to compare estimates with those of others and against country-level estimates. All estimates were referred to donors for checking.

In collecting information on global resourcing, 'HIV-related harm reduction' was defined as comprising the comprehensive package of interventions including needle exchange, OST, outreach, voluntary testing and counselling, access to primary health care and prevention of sexual transmission. As the objective was to identify spending on frontline HIV prevention – in other words how much of the money was actually going to HIV prevention services for people who inject drugs – attempts were made to exclude spending on antiretroviral treatment, research and capacity building. In practice, however, it is often impossible to disentangle expenditure in this manner.

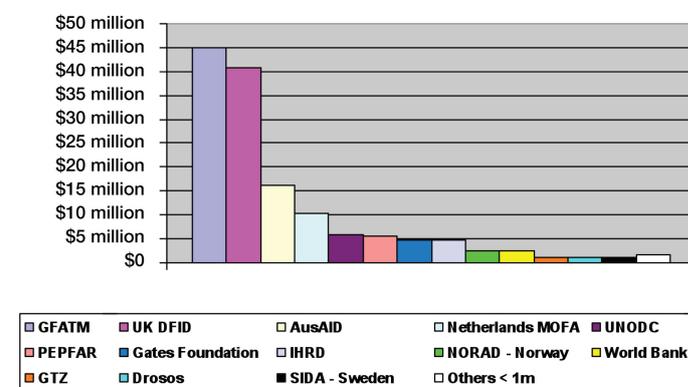
#### Problems in gaining information on expenditure

- Donors not making budgeted information available in the public domain.
- Countries not keeping central records of international spending.
- Lack of functional budgets, i.e. budget lines specifying HIV prevention activities.
- Harm reduction expenditure subsumed under broader budgets, such as HIV/AIDS or development.
- Donors moving from earmarked funding to global budget support.
- Different definitions of HIV prevention and harm reduction.
- Where HIV expenditures are identified, a lack of disaggregation of prevention resources to different populations.
- Lack of disaggregated expenditure according to capacity building, care, treatment, support and impact mitigation, as well as direct services.
- Lack of clarity between financial commitments and actual disbursements.
- Differences in accounting years.
- Potential double counting, where resources are reported both by donor agencies and sub-recipients.
- Lack of reporting of 'out-of-pocket' expenditure on harm reduction by people who inject drugs.

The funds that IHRA identified are shown in Figure 3.7.4. There is room for error in these estimates. In many cases, budgets were unclear, necessitating judgments about, for example, the proportion spent in each year and the allocation of expenditures specifically for HIV-related harm reduction within larger budgets. As a result the figures probably underestimate domestic expenditure (i.e. expenditure from national governments). However, many of the budgets were likely to have lower harm reduction components than those in these estimates.

While the assumptions used in estimating expenditure are open to challenge, this only points to the need for better data collection globally and it is fair to assume that errors resulting in over- or under- estimation will cancel out each other. Specific sums reported may be contested, but it is unlikely that any major sources of funding have been overlooked.

**Figure 3.7.4: Estimated expenditure on harm reduction interventions, 2007<sup>12</sup>**



#### Estimated total expenditure

It is cautiously estimated that approximately \$160 million was invested in HIV-related harm reduction in low and middle income countries in 2007, of which \$136 million (90%) was from international donors.

There is little evidence to suggest that this sum has increased since 2007. In some countries, expenditure on harm reduction might have decreased as many projects initiated within the last decade are coming to an end. The estimate of \$160 million is plausible when compared with the spend in countries where harm reduction budgets were able to be identified, most of which were countries with higher than usual investment.

The \$160 million estimated expenditure equates to \$12.80 per injector per year in low and middle income countries, or three US cents per day. This figure is calculated by dividing the global spending by the estimated 12 million people who inject in low and middle income countries. \$12.80 per injector compares with an estimated per capita spend of \$25 per person in Ukraine, \$13.50 in the Russian Federation, \$62.50 in Vietnam and \$141.60 in Taiwan.<sup>6</sup>

This estimate of \$160 million exaggerates the actual amount of funding for frontline services and interventions. Given the early state of implementation of harm reduction in many countries, much of the resourcing goes into capacity building and advocacy.

Many large programmes funded by bilateral donors target both general populations and vulnerable sub-populations. Even where harm reduction is identified, the total budgets reported often do not include a breakdown of what is spent on each activity, for example on OST or NSPs. In a few cases, spending on particular activities could be identified. For example, it is estimated that approximately one-third of the funding from the German GTZ and the Dutch Ministry of Foreign Affairs goes on direct health services; the equivalent proportion is approximately 30 to 60% for AusAID.<sup>6</sup>

Given the lack of resource tracking for harm reduction, there remains room for error in these estimates. For the reasons identified above, these figures probably overestimate the amount spent. But even if they underestimate global spending by a factor of two or three (which is unlikely) it does not change the conclusion that the amount of money invested in harm reduction is extremely low.

**Figure 3.7.5: Estimated total harm reduction expenditure, 2007**

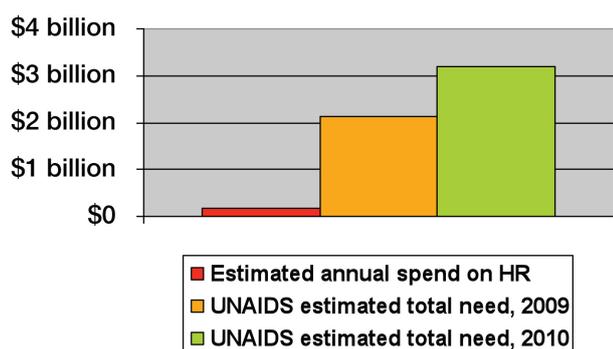


On the basis of expert advice from HIV researchers, three cents a day is less than the amount many drug users themselves will be spending on needle and syringes and other harm reduction commodities including drug treatment.

## The gap between spending and need

While there are challenges in accurately determining spending levels, the huge gap between the estimated need and the estimated spend overshadows any measurement errors (see Figure 3.7.6). The \$160 million spent on harm reduction in 2007 was a mere 7% of the \$2.13 billion estimated by UNAIDS as necessary in 2009 to address HIV prevention among people who inject drugs. And it was only 5% of the \$3.2 billion UNAIDS estimates to be needed in 2010.

**Figure 3.7.6: The harm reduction resource gap**



The annual spend of \$12.80 per injector is low in comparison with the indicative unit costs of providing needles and syringes (approximately \$100 per person per year) or methadone (approximately \$500 per person per year). It is much less than the UNAIDS resource needs calculations, which indicate that approximately \$170 and \$256 per injector per year should be spent in 2009 and 2010 respectively.

Comparing the current estimated spend with the estimated need, the resources required for HIV prevention for people who inject drugs are between fourteen and twenty times greater than the resources currently allocated.

## What can be done?

There are many things that can be done.

The many obstacles to scaling up HIV-related harm reduction for people who inject drugs have been well documented in the *Global State of Harm Reduction* and elsewhere. HIV prevention for injecting drug users is unpopular. Implementing harm reduction, both establishing it to begin with and then delivering it with good coverage, requires many obstacles to be overcome. These obstacles frequently go hand in hand with a lack of investment. Often the demand for harm reduction services does not exist at a high level within countries and is insufficiently vocalised by civil society organisations.

### Obstacles to harm reduction

- Ignorance of governments and public health officials.
- Antipathy to drug users by governments and professional elites.
- Massive over-investment in criminal justice approaches to drugs and drug users at the expense of health investment.
- Legal barriers to harm reduction interventions in many countries, which prevent NGOs from operating, make needle and syringe exchange illegal or forbid the prescribing of methadone or other opioid substitution therapies.
- The marginal and undervalued place in society of people who use drugs and, by association, those who choose to work with them.

Funding for harm reduction must be made proportionate to need or to funds going into HIV prevention. Based on evidence of the lack of coverage and the concomitant resources, a conservative guideline for donors is that around **20% of total global funds allocated for HIV prevention for low and middle income countries should go into harm reduction.**

The limited number of donors who fund harm reduction is a notable barrier. The main international donors for harm reduction – the United Kingdom, Australia and the Netherlands – between them accounted for \$67.4 million in 2007 (42% of the donor funding identified). This amount is greater than that provided by the Global Fund. Clearly there is an urgent need for more wealthy countries to fund harm reduction. In this regard, the potential for the US President's Emergency Plan for AIDS Relief (PEPFAR) to openly and directly fund specific harm reduction interventions now that US policy against needle and syringe exchange has been removed is a welcome development.

### Recommendations

1. More global resources are needed for harm reduction.
2. Resources for harm reduction and HIV services for people who use drugs should be proportionate to need within countries.
3. Donors should set targets for the proportion of spending going to HIV-related harm reduction, with 20% of total global funds allocated for HIV prevention for low and middle income countries going to harm reduction.
4. Global expenditure on harm reduction must be properly monitored by UNAIDS and by NGOs.
5. Better estimates are required on the resources needed for harm reduction.
6. New ways of delivering harm reduction services may be needed.
7. More resources are required to advocate for and create demand for harm reduction via the Global Fund's community system strengthening and/or establishing a global community fund for harm reduction.

There needs to be a significant increase in allocations to harm reduction within country budgets. National governments have typically been unwilling or unable to provide their own resources, although there are notable exceptions. Malaysia, for example, where approximately 70% of HIV infections between 1997 and 2005 were related to unsafe injecting, committed \$150 million in 2005 for harm reduction programmes including OST and NSPs.<sup>17</sup>

Taiwan introduced a harm reduction programme in 2005, including OST and NSPs, and in 2007 doubled the national HIV/AIDS prevention budget to \$8.5 million.<sup>18</sup> By July 2006 every city and province was distributing free needles to drug injectors. The number of syringes distributed increased to four million in 2007. OST was scaled up into a national programme in 2009.

Domestic allocations to harm reduction need to be tracked – even if they are only of symbolic significance – as they indicate political will and commitment to harm reduction.

Another barrier of note is that few philanthropic donors fund harm reduction or are able to identify harm reduction expenditure within their budgets. The Bill and Melinda Gates Foundation funds only two major projects that include harm reduction: the Avahan Project in India and the China HIV Prevention Programme. \$4.8 million was identified as being spent on harm reduction in these projects in 2007. This amounts to 0.001% of the annual Gates Foundation budget for 2008/9 and 1.96% of the total HIV grants for 2006 to 2009.

There is clearly room for current donors – both national governments and philanthropic organisations – to invest more of their budgets in harm reduction, and also for more donors to begin funding. However, achieving this will require a concerted advocacy effort, most likely led by current donors.

There is also the need to address the apparent under-performance of the Global Fund, which spent an estimated \$45 million on harm reduction in 2007 and an estimated \$180 million over the period from 2004 to 2008. These figures compare poorly with Global Fund spending on HIV/AIDS of \$1 billion in 2007, \$1.6 billion in 2008 and \$2.8 billion in 2009.<sup>19 20</sup>

The difficulty is that the Global Fund responds to country-level demands. How then should the international community, which resources the Global Fund, deal with the problem of countries that ignore drug users in their bids or underplay the significance of HIV/AIDS and drug use? There are a number of things that can be done to draw attention to drug use issues, such as requiring all applications to be firmly based on epidemiological and resource needs, according to an agreed methodology, so as to ensure that the needs of the most-at-risk groups are properly reflected in bids.

The Global Fund is committed to the involvement of civil society organisations in the response to HIV/AIDS. However, many civil society organisations find it difficult to engage with Global Fund bids through the national country coordinating mechanism. The Global Fund can do much more to publicise the issue of the under-resourcing of harm reduction through its work with civil society organisations and Global Fund grant writers. The demand for harm reduction expenditure has to be encouraged.

## The need for advocacy for harm reduction

The current resource gap is so huge that resource mobilisation is unlikely to occur unless there is strong advocacy for harm reduction resources at national, regional and global levels. Unfortunately, harm reduction frontline organisations and harm reduction advocacy organisations are themselves seriously underfunded.

Only a handful of NGOs are funded for advocacy at the international or regional levels. In this respect, the recent consultation by the Global Fund on a community system strengthening framework is a welcome development.<sup>21 22</sup> For harm reduction NGOs, this means not only the provision of direct services to drug users, but also the possibility of funding to strengthen community organisations and to create a conducive legal and policy framework for effective harm reduction delivery.

Much support will be needed to enable harm reduction and drug user groups involved in advocacy to access these funds and negotiate their place in national Global Fund financed programmes. Harm reduction organisations are currently small and in a vicious circle as they lack the capacity to bid for the funds that would eventually increase their capacity.

There are other barriers preventing the development of effective regional and international advocacy for harm reduction. Many donors are often unenthusiastic about funding advocacy and prefer to direct their resources to frontline services. In addition, funding restrictions on national and philanthropic donors frequently prevent monies going to international or regional organisations. Large donors also often lack provision for handling the relatively small amounts of money required by small organisations.

There is an urgent and time-limited need to fund harm reduction advocacy so that the demand for harm reduction funding can be enhanced. An emergency Community Fund for Harm Reduction would provide resources to help organisations build their capacity, strengthen their voices and bid for harm reduction resources. Building harm reduction capacity and strengthening advocacy is also a means for increasing political commitment.

Many donors are shifting from earmarked funding to general budget support. In other words, they are becoming less interested in funding monies earmarked for specific diseases, such as HIV/AIDS, and more interested in funding health services and strengthening general budget support to poor countries. This encourages country ownership and allows countries to set their demands. However, the downside is that if a country is not interested in specific diseases or population groups, they are cut out of bids for funding at the national level.

A shift to general budget support, and the Global Fund's emphasis on responding to demand, clearly means that advocates have to be funded to ensure that marginalised groups get their share of funds.

The difficulty in obtaining high-quality information on harm reduction and expenditure from otherwise well-intentioned donors is perhaps symptomatic of the lack of attention given to this area. Significant improvements can be made to the NASA as there are serious discrepancies between country-level data and information about actual budgets.

Donors' difficulties in providing accurate information suggest that there is a need for a specialist global resource-monitoring system to track harm reduction expenditure. This would not require a huge amount of resources. It is a specialist activity that may be difficult to subsume within UNAIDS. Indeed, although it is the role of UNAIDS to monitor global spending and to encourage donors and countries to better report spending according to agreed criteria and functional budget lines, this activity should not be left to UN agencies alone.

There is a clear role for civil society to be involved in the process of resource tracking, to establish databases on the harm reduction programmes that are funded and to use this information to advocate for more resources. Such a framework would increase donor accountability and is potentially of value to donors themselves in improving coordination and avoiding duplication. It might also go some way to avoiding the funding gaps that so often arise between funding rounds.

Linked to this, there is a need for better estimates of resource needs so as to advocate for and allocate resources more efficiently on the basis of need, rather than on donor idiosyncrasies. Current resource needs estimation tends to be too global (as in the case of UNAIDS) or only patchily available at the national level (as in the work of the Commission on AIDS in Asia). A more transparent discussion about the interventions included in resource needs models, better information on unit costs and more data for more countries are required.

Given the huge gap in funding, it is not unreasonable to question whether needs will ever be fully met. It is difficult to imagine that donors will be sufficiently animated to increase their funding tenfold or twentyfold to bridge the current gap.

Serious discussion within the public health and harm reduction community is therefore required about the best way to deliver harm reduction services.

Currently, given the current low scale of harm reduction activity, a scale-up to high levels of coverage tends to be done by the multiplication of specialist NGO-led micro projects, for example moving from a few needle and syringe exchanges to many. Furthermore, the specialist nature of these services means that harm reduction projects are mainly delivered by civil society and community organisations.

There is, however, a need to explore different ways of delivering harm reduction services. For example, needle and syringe access can be increased by changing legislation about access and sale of needles and syringes in pharmacies. In this manner, not all countries need go through the route of specialist needle and syringe exchanges, but might instead jump straight to wider scale distribution through pharmacies or ordinary shops.

Another model of service delivery involves integrating harm reduction into general health and social welfare systems, whereby it becomes part of the responsibility of ordinary health and welfare systems to address harm reduction issues and to have harm reduction activities. This in part reflects the emphasis of some donors in shifting from donor-driven earmarked financing towards general budget support.

Australia and European countries with well-established harm reduction programmes have already taken significant steps towards integrating harm reduction into primary care and other community-led services. However, there are risks in this approach. The jump to integration, or to general budget funding, might backfire and exclude the very type of civil society organisations and input that are needed in the response to HIV/AIDS.

Currently there is no centre of excellence within the UN system or within academic institutions with the global analytic capacity to explore how harm reduction should be delivered. As the end of the third decade of harm reduction approaches, greater capacity to critically explore new models of harm reduction service delivery is certainly required. The comprehensive package alone may no longer deliver what is needed.

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