



Financial resources required to achieve universal access to HIV prevention, treatment, care and support

**Interventions for HIV prevention, treatment and care among people
who inject drug: methods and assumptions recommended by the
working group**

Methodological Annex - IX

Disclosure

This annex presents the agreed methodology used by the Resource Needs Working Group on HIV prevention, treatment and care among people who inject drugs. The document contains expert opinion rather than evidence based data and includes assumptions used only for resource needs estimation purposes.

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Guidance on cost estimates for IDU interventions

Two key interventions

The “comprehensive package” of interventions for the prevention, treatment and care of HIV/AIDS in injecting drug users (IDUs) includes nine core components; however for cost estimation here we consider the two key interventions that are IDU specific and not included elsewhere.

These are:

1. Needle and syringe programmes (NSP)
2. Opioid Substitution Therapy (OST)

Both are proven to prevent HIV transmission and, in the case of OST, improve access and adherence to HIV/AIDS treatment and care.

Denominator populations

The following denominator populations are used in our coverage and cost estimations:

<i>Opioid users (global)</i>	<i>15.6 million</i>	<i>UNODC World Drug Report</i>
<i>Opioid users (low and middle income countries)</i>	<i>13.5 million</i>	<i>UNODC World Drug Report</i>
<i>Opioid injectors (estimated 60% of above)</i>	<i><u>8.1 million</u></i>	<i>WHO/UNODC expert opinion</i>
<i>Injecting Drug Users IDUs (all substances)</i>	<i>13.2 million</i>	<i>UN Ref. Group</i>
<i>IDUs (low middle inc. countries)</i>	<i><u>10.3 million</u></i>	<i>UN Ref. Group</i>

It is assumed that the size of the denominator populations will remain stable at current levels by the year 2015.

1. OST: Coverage targets lower and middle income countries

Based on coverage typically reached in countries with well established OST programmes 40% (or more) of opioid dependent persons in treatment, is typically achieved. For example in western European countries and Australia, up to 60% of opioid dependent persons receive OST and most treat 20-60%. Typically in countries where these levels of coverage were reached HIV epidemics among IDUs were stabilized, halted and reversed.

Therefore:

A coverage target of 40% of opioid injectors on OST by 2015 would be desirable.

A denominator population of **8.1 million opioid injectors**, used in our calculations of coverage and cost estimates for OST, is based on an assumption that priority is given to scaling up OST to opioid IDUs. However, consideration needs to be given to the fact that dependent opioid users who do not inject also benefit from OST and providing OST to them could prevent the transition to starting to inject opioids. Hence 8.1 million is a conservative estimate.

Based on the above our coverage target for OST in low- and middle-income countries is:

40% of 8.1 million opioid injectors = 3.2 million opioid injectors on OST by 2015

Based on historic evidence and (limited) country consultation and estimation we further assume that we can determine **two levels of coverage**:

It is anticipated that countries that have ***already introduced OST***, such as India and China, will arrive at a coverage level of **40% by 2015**.

However, countries that have ***not yet introduced (or registered) OST***, such as the Russian Federation, may implement OST by 2010 (assuming a coverage of 0% until 2010) and will reach a lower coverage of around **20% by 2015**.

The following countries have implemented OST with methadone and or buprenorphine and can be expected to achieve (or have already achieved) 40% coverage by 2015.

Methadone maintenance treatment (MMT) (including pilot programmes) is available in 53 countries:

Albania, Andorra, Australia, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Indonesia, Iran, Ireland, Israel, Italy, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malaysia, Malta, Mexico, Moldova, Myanmar, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Thailand, United Kingdom (plus overseas territories/dependencies), United States of America, and Ukraine is about to start.

Buprenorphine maintenance treatment (BMT) and or detoxification (including pilot programmes) is available in 35 countries:

Australia, Austria, Belgium, Bulgaria, China (Hong Kong), Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, India, Indonesia, Iran, Israel, Italy, Latvia, Lebanon, Lithuania, Luxembourg, Malaysia, Netherlands, Norway, Portugal, Singapore, Slovak Republic, Slovenia, South Africa, Sweden, Switzerland, Ukraine, United Kingdom, United States of America.

Based on current levels of utilization and assumption that the relatively less expensive methadone will be used in preference to buprenorphine it is assumed that:

Of those receiving OST in low- and middle-income countries it is estimated that 80% will be on methadone and 20% on buprenorphine.

Unit cost of OST

Unit costs include programme costs directly related to delivery of methadone or buprenorphine and medication costs and not the costs covered elsewhere, such as HIV testing and counselling.

Methadone

USD 1.00 – 2.90 per patient per day (medication costs 33c for 80mg in Iran to \$2.06 for 80mg in Indonesia)

USD 363.65 – 1,057 per patient per year

Buprenorphine (only low dose estimates available 4-10mg per day, as compared to recommended doses of 12-24mg)

USD 3.39 – 8.68 per patient per day (medication costs \$2.72 for 10mg in Iran to \$7.84 for 8mg in Indonesia)

USD 1,236 – 3,166.70 per patient per year

The non medication costs include salaries and to a lesser extent pathology tests (mainly urine drug screens). These estimates do not include the costs of building clinics or training staff. The estimates are based on ongoing maintenance treatment, and do not include the additional costs involved with commencement of treatment and therapeutic withdrawal from treatment.

2. NSP: coverage targets lower and middle income countries

Based on a retrospective analysis of the coverage required to reverse the HIV/AIDS epidemic among IDUs in New York (Des Jarlais D.C. and Friedman S., 1998) and coverage rates typically reached in those European countries that averted or reversed epidemics, coverage of 60% or more of IDUs regularly reached (more than once a month) by 2015 is considered “very good”. 60% coverage has demonstrated reduction in HIV prevalence by 4% over 5 years in Odessa, Ukraine where prevalence had already reached 54% (Vickerman et al, 2006).

Therefore:

Coverage target of 60% of all IDUs (opioid or other substances) in regular reach of NSP by 2015 would be desirable.

A denominator population of **10 million IDUs** is used in our calculation of coverage and cost estimation for NSPs.

Regular reach is defined as an IDU being in contact with an NSP **more than once a month**

Based on the above our coverage target for NSPs in lower and middle income countries is:

60% of 10 million IDUs = 6 million IDUs in regular contact with an NSP by 2015

The unit cost of NSPs

The unit costs for NSP are calculated at **between 4-10 USD per person per year.**