CONSULTANCY REPORT FOR
UN PLUS and UN CARES

REVIEW OF
UNICEF-VANBREDA INSURANCE PILOT PROJECT
RELATED TO HIV

Lessons and Recommendations

Prepared By:
Thomas A. Bieler, Ph.D.

25 January 2013
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Background</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Genesis of the nine-country pilot project</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Premise of the Pilot Project</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>The Wellness Day Concept</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Managed care and 100% insurance coverage</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>Relationships between the parties to the Pilot Project</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>Implementation of the pilot project</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>Rationale for the Pilot Project</td>
<td>14</td>
</tr>
<tr>
<td>10</td>
<td>Assessment of the Pilot Project</td>
<td>15</td>
</tr>
<tr>
<td>11</td>
<td>Cost/ benefit assessment</td>
<td>15</td>
</tr>
<tr>
<td>12</td>
<td>Extension of the pilot project</td>
<td>17</td>
</tr>
<tr>
<td>13</td>
<td>Funding Phase 2</td>
<td>18</td>
</tr>
<tr>
<td>14</td>
<td>Economies of scale</td>
<td>19</td>
</tr>
<tr>
<td>15</td>
<td>How can agencies that do not have a VBI-administered insurance plan participate?</td>
<td>19</td>
</tr>
<tr>
<td>16</td>
<td>Insurance issues</td>
<td>20</td>
</tr>
<tr>
<td>17</td>
<td>Occupational Safety and Health</td>
<td>22</td>
</tr>
<tr>
<td>18</td>
<td>Summary of Conclusions and Recommendations</td>
<td>24</td>
</tr>
<tr>
<td>19</td>
<td>Phase 2 of the Pilot Project</td>
<td>24</td>
</tr>
<tr>
<td>20</td>
<td>Beyond Phase 2 – participation by other organizations</td>
<td>24</td>
</tr>
<tr>
<td>21</td>
<td>Continued focus on HIV only</td>
<td>25</td>
</tr>
<tr>
<td>22</td>
<td>Monitoring and evaluation</td>
<td>25</td>
</tr>
<tr>
<td>23</td>
<td>Insurance</td>
<td>26</td>
</tr>
<tr>
<td>Annex 1</td>
<td>Summary of Memoranda of Understanding between UNICEF and VBI and between VBI and RTCHS</td>
<td>28</td>
</tr>
<tr>
<td>Annex 2</td>
<td>Results of wellness day testing (collated from the individual country case reports) and comparison of national HIV prevalence with staff prevalence from wellness day testing</td>
<td>29</td>
</tr>
<tr>
<td>Annex 4</td>
<td>Business case analysis</td>
<td>36</td>
</tr>
<tr>
<td>Annex 5</td>
<td>VBI financial proposal for Phase 2</td>
<td>38</td>
</tr>
</tbody>
</table>
Acknowledgements

At various stages during the preparation of this report, the consultant met with the following people:

Ms. Laurie Newell, Global Coordinator, UN Cares
Mr. Yoshiyuki Oshima, UN Plus Coordinator, UNAIDS
Ms. Bintou Keita, Deputy Director, Division of Human Resources, UNICEF
Ms. Martina Clark, former Staff Well-being Specialist-HIV
Mr. Bart Jordens, Director, Strategy and Marketing, Vanbreda
Dr. Inge Svhever, MD, MPH, Medical Consultant, Vanbreda
Mr. Michiel Everars, Account Manager, Group Plans, Vanbreda
Mr. Paul Debrabandere, Deputy Director, Global IGO Solutions, Vanbreda.

Their assistance in this endeavour is gratefully acknowledged, most especially that of Laurie Newell and “John” Oshima whose guidance was invaluable at each stage of the exercise. Funding for this consultancy was kindly provided by UN Plus, with travel expenses covered by UN Cares.
Executive Summary

The report has been prepared in response to Terms of Reference that call for an exposition of insurance issues relating to HIV, and relevant options that may be considered, with the particular focus of helping UN system organizations to improve their insurance plans in light of the lessons learned from the 2010-2011 UNICEF-Vanbreda pilot project.

Against the background of strong and sustained commitment by the United Nations to “providing a supportive workplace for its employees, regardless of their HIV status” and to ensuring “that the UN be a model of how the workplace should respond to HIV”, a pilot project was conceived and implemented by Vanbreda International (VBI) in 2009-2011 at nine UNICEF country offices in sub-Saharan Africa (Ghana, Malawi, Mozambique, Kenya, South Africa, Tanzania, Uganda, Zambia and Zimbabwe), focusing on National Officer and GS staff at those locations who were enrolled in the Medical Insurance Plan (MIP) for local staff, administered by VBI.

The objectives of the pilot project were to improve the quality of life for staff living with HIV, to provide a high quality disease management service and reduce the financial burden for staff, to reduce absenteeism and other indirect costs associated with HIV and at the same time have a positive impact on hospitalization and other insurance plan costs.

The core strategy of the pilot project comprised three elements, namely a wellness day of learning and awareness followed by voluntary testing and screening, 100% coverage under MIP in place of the customary 80% rate of reimbursement, allied to a programme of managed care at appropriate medical facilities that rendered their services under provider agreements with VBI and were remunerated directly by VBI without any involvement of the staff member concerned. These strategic elements taken together helped mitigate the barrier of stigma and discrimination (wellness day was open to all), helped to overcome resistance to undergoing treatment for financial hardship reasons, and boosted the sense that confidentiality would be maintained.

The pilot project had been the subject of a detailed analysis and evaluation conducted by a consultancy in 2011 on behalf of UNICEF, a study that is drawn upon in the present report. Both this work and an earlier consultancy report, an impact study of HIV and AIDS on the United Nations system, demonstrated through cost-benefit analysis that investments in prevention and treatment yielded positive returns, principally in the form of future costs for staff recruitment and replacement, death benefits and funerary costs that would thereby be averted. Key elements of these studies are summarized in annexes to the report. Other analyses have shown that, on the basis of the outcomes of the pilot project, the cumulative effect of prevention and treatment would lead to significant results in terms of infections averted and lives saved, though realistically the pilot project would need to be in operation for about five more years before a full results-based assessment of its effectiveness could be rendered. Nevertheless, all the analyses and evaluations point to the validity of the “wellness + 100% + managed care” strategy. In this connection it is noted that prior to the implementation of the pilot project, four of the individuals in managed care had been medically evacuated for HIV-related reasons, but none since the start of the programme.
A funding proposal for a 2-year extension of the pilot project to a Phase 2, involving UNICEF country offices in six additional sub-Saharan countries is examined. In this connection, the report shows that if other agencies with local staff in the same locations as UNICEF were to join the project under the terms of the “wellness + 100% + managed care” strategy, substantial economies of scale could be realized with resulting savings for each of the participating organizations.

Surveys of staff attitudes regarding the adequacy of available insurance show that there are concerns about the financial liability in meeting the 20% of medical expenses not covered by the normal 80% indemnity, delays in claims processing, and uncertainty that confidentiality was maintained. All these concerns are addressed in the pilot project strategy.

Based on rigorous analysis of the costs and far-reaching benefits of a concerted programme of learning and treatment, and the effectiveness of the pilot project strategy in identifying individuals who were not previously aware of their HIV status and securing appropriate treatment for them, it is strongly recommended that the pilot project be extended to phase 2 in 15 countries so as to reach more staff, and not just in the capital cities but also in more remote locations.

A review of the health plans of UN organizations indicates that there is substantial convergence regarding HIV-related insurance benefits at the present time. In order to ensure that HIV-positive staff members and their families across the UN system have access to an equal package of benefits, inter-agency agreement should first be reached on the full range of state-of-the-art treatment for staff living with HIV and then all insurance plans should be updated accordingly. As the various insurance plans are already substantially equivalent, it is unlikely that there would be significant financial impact on any one plan by the adoption of a “common standard”.

Based on the potential for savings due to economies of scale, and owing to the efficacy of the strategy itself, other agencies are encouraged to consider joining the project in its Phase 2. It has been ascertained that other agencies can participate even if their insurance plans are separate and not administered by VBI.
1. Introduction

This report has been prepared in response to Terms of Reference that call for a discussion of insurance issues relating to HIV, particularly with a “view to encouraging and helping UN system organizations to improve their existing insurance schemes, using lessons learned from the 2010-2011 UNICEF-Vanbreda pilot project.” The task is both broad and narrow – broad in the sense that “insurance” (pooled risk social security protection for staff members and their dependents) can be structured in various ways, but narrow in the sense that the focus derives from the outcome of the UNICEF-Vanbreda pilot project. At the outset, therefore, it is important that the context and concept of the pilot project be examined.

2. Background

The United Nations HIV/AIDS Personnel Policy applicable to all organizations of the UN system was adopted in 1991 (ACC decision 1991/10). From a 2002 global survey of the UN system workplace, undertaken within the context of the UN Learning Strategy on HIV/AIDS, it emerged that there was a large gap in the knowledge about HIV and AIDS among staff members, and a shortfall in level of preparedness on HIV throughout the system as a whole. It was also revealed that the level of awareness of the 1991 Personnel Policy was low and that the impact of HIV-related stigma had impeded many staff from being tested for HIV. The ACC decision of 1991 was reaffirmed in 2007 by the United Nations Policy Committee in the statement of intention to “ensure the UN system becomes a model workplace on AIDS for all staff”. Since adoption of the policy in 1991, various efforts, intra- and inter-organizational, have been made to deal with HIV in the UN system workplace.\(^1\)

In 2003, the Secretary-General issued a bulletin\(^2\) in which he declared that the “United Nations is committed to providing a supportive workplace for its employees, regardless of their HIV status. To achieve this, we must have an environment that promotes compassion and understanding and rejects discrimination and fear.” An annex to the bulletin contained a restatement of the earlier United Nations Personnel Policy on HIV/AIDS, confirming that it would “continue to guide our efforts in the development and implementation of programmes concerning HIV/AIDS in our workplace.” These programmes would ensure that:

- United Nations staff and their families have access to information about treatment and support;
- Staff members will not be required to undergo HIV testing or screening to obtain health insurance or upon recruitment, or at any other time;
- Every effort is made to ensure that those affected by HIV or so perceived do not suffer stigmatization or discrimination.

More recently, in 2008, Secretary-General Ban Ki-Moon stated his resolve that “we must make the UN a model of how the workplace should respond to HIV. We are

\(^1\) CEB/2007/HLCM/20 (3 Sept. 2007), p.3
not only employers and programmatic experts; we are role models and, as such, must lead by example”.

UNAIDS reports that approximately 34 million people were living with HIV at the end of 2011 and that an estimated 0.8% of adults between the ages of 15 and 49 years (the prime labour force age band) are HIV-positive. Furthermore, although the incidence of the epidemic varies considerably between countries, sub-Saharan Africa is the most severely affected region of the world, accounting for almost 1 in 20 adults living with HIV, equivalent to about 70% of the total number of HIV positive persons worldwide.³

At the same time, however, that report states that the number of those newly infected with HIV has continued to fall, to about 2.5 million, a 20% decline since 2001. Twenty-three of the countries with substantial declines in HIV prevalence are in sub-Saharan Africa, where the number of people becoming newly infected with the virus dropped by 25% compared to the level ten years earlier. Nevertheless, this region of the world accounted for 71% of all new infections in 2011, “underscoring the importance of continuing and strengthening HIV prevention efforts in the region”. The report also reveals that that there has been a dramatic drop in the number of people dying from AIDS in sub-Saharan Africa, declining in 2011 by 32% from the level in 2005, although that region still accounted for 70% of all AIDS-related deaths.

The power of early intervention emerges clearly from the recent history of success in stemming the spread of HIV. According to the 2012 UNAIDS Global Report: “The rapid expansion of antiretroviral therapy – one of the most remarkable achievements in recent public health history – continued in 2011…with the number of people living with HIV receiving treatment rising by 21% compared with 2010 based on data from country progress reports.”⁴ Elsewhere, UNAIDS reports that “Early investments in the AIDS response have long-term benefits. Early HIV education and prevention investments in Senegal have resulted in one of the lowest infection rates in sub-Saharan Africa.”⁵ In a press release dated 12 May 2011, UNAIDS also reported on results announced by the United States National Institutes of Health showing that if an “HIV-positive person adheres to an effective antiretroviral therapy regime, the risk of transmitting the virus to their uninfected sexual partner can be reduced by 96%.” In regard to that report, the Director-General of WHO, Dr. Margaret Chan, stated, “This is a crucial development, because we know that sexual transmission accounts for about 80% of all new infections. The findings from this study will further strengthen and support the new guidance that WHO is releasing in July to help people living with HIV protect their partners.”⁶

According to ILO, “A workplace policy provides the framework for action to reduce the spread of HIV/AIDS and manage its impact”.⁷ Elsewhere ILO has emphasized the role of the “world of work” in addressing HIV and AIDS. “It offers a valuable entry point to reach women and men workers in the setting where they spend much of their lives: the workplace. Development and implementation of workplace policies and programmes on HIV and AIDS facilitate access to prevention, treatment,

---

4 UNAIDS, 2012 Global Report, p. 50
5 UNAIDS, “HIV, a workplace issue everywhere”
6 UNAIDS, Press Release dated 12 May 2011
7 ILOAIDS, A workplace policy on HIV/AIDS and what it should cover.
care and support services for workers and their families and dependents”. The workplace nexus is a strong one. Therefore, efforts to address the spread of HIV and improve the health and welfare of this segment of the population by prevention and treatment programmes become workplace imperatives.

With two out of three people who live with HIV going to work each day, the workplace is uniquely positioned to be an effective setting for addressing the epidemic – communications systems are in place, existing facilities can potentially be used to foster prevention, care and support services, among other advantages of the workplace community.

The UNICEF report cites ILO statistics in reporting that in 2006 1.4% of workers worldwide were HIV positive, and, in the absence of UN-specific data, makes the reasonable assumption that the prevalence is probably similar among the approximately 75,000 employees of the UN global system. From an economic and productivity perspective, HIV exerts a strong adverse impact on the labour force, households and businesses, leading in the most-affected countries to a loss of gross domestic product (GDP) of around 1.5% per annum. The costs to business of HIV in the workplace are also substantial. The UNICEF report cites several studies that have measured the impact of HIV on southern African and South African enterprises in terms of the “AIDS tax” - the financial impact due to loss of productivity, absenteeism, medical costs and other human resource costs – which can amount to more than 5% of labour costs and can reduce profits by “at least 6-8%”. Other studies indicate that there are large positive returns on investments in the prevention of HIV, reaching “as high as 3.5 to 7.5 times the cost of intervention”. Findings of this nature make the case for the economic utility of early intervention and treatment of HIV in the workplace, particularly when the wider socio-economic benefits of ARV therapy on the labour force and families are taken into account.

3. Genesis of the nine-country pilot project

Vanbreda International (VBI) has been the insurance broker/claims administrator, later claims administrator only, of the United Nations’ international health insurance plan (covering also UNDP, UNICEF and later UNFPA) since the late nineteen fifties. Over the years VBI also became the broker/claims administrator for many other United Nations organizations globally. It has a long record of association with United Nations personnel worldwide and in that time has built up a wealth of health delivery system experience and provider contacts in both the major duty stations and in field locations.

Beginning in 2006, based on the pattern of claims that it saw after it took over the claims administration of MIP (formerly undertaken on an in-house basis), VBI sought to build up a specific database of HIV providers worldwide, including HIV testing and counseling providers, hospitals and clinics.

---

8 ILO, Recommendation concerning HIV and AIDS and the world of work, 2010 (No. 200)
9 UNAIDS, HIV, a workplace issue everywhere.
10 UNICEF Report, Main Report, p. 10
11 Ibid. p. 11
12 Ibid. pp. 12, 25
13 Medical Insurance Plan for locally recruited staff at designated duty stations away from Headquarters (ST/IA/343).
Voluntary HIV counseling and testing is the process by which an individual undergoes counseling to enable him/her to make an informed choice about being tested for human immunodeficiency virus (HIV). This decision must be entirely the choice of the individual and he or she must be assured that the process will be confidential.  

Moreover, three to four years ago VBI developed a new focus, in effect an expansion of its traditional role as an insurance broker and claims administrator with global capability to the establishment of chronic disease management capability. In this connection, VBI developed a relationship with Right-to-Care Health Services (RTCHS), based in Johannesburg, a not-for-profit organization that supports and delivers prevention, care and treatment services for HIV and the associated opportunistic diseases. The acquisition of Vanbreda International by CIGNA in August 2010 further pushed forward the proposal to UNICEF for a health and wellness pilot project in certain countries in sub-Saharan Africa in reflection of the good fit between VBI’s new focus and CIGNA’s core business in the United States and internationally of providing integrated health care and well-being programmes. Together VBI and RTCHS developed a specific programme of HIV-related treatment grounded on the WHO protocols.

It was against this background that a proposal initiated by Vanbreda International to UNICEF in 2009 developed into the pilot project – or Health and Wellness Programme as it is more formally referred to – to cover HIV-related expenses at full cost (rather than the standard insurance plan benefit of 80% reimbursement) through MIP, linked to a structured wellness programme and managed care. The Pilot Project was rolled out over a 5-month period starting in April 2010 in 9 countries of sub-Saharan Africa (originally intended to be 10), selected because of the relatively high numbers of local staff enrolled in MIP and owing to the significant HIV prevalence in these countries.

VBI and RTCHS visited each UNICEF country office, meeting with administration and staff to ascertain their interest in the project. They also made an assessment of the medical and care services and facilities in each location, visiting physicians and laboratories and identifying HIV testing and counseling providers from both the UN Cares Services Directory on HIV and VBI’s own contacts.

---

14 HIV Voluntary Counseling and Testing: a gateway to protection and care (UNAIDS case study, June 2002).
15 RTCHS specializes in health in the workplace programmes, especially workplace HIV management programmes.
16 CIGNA is the claims administrator of the UN’s dental insurance programme at Headquarters.
The countries and dates of initial implementation are as follows: 

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>7 - 10 April</td>
</tr>
<tr>
<td>Zambia</td>
<td>11 - 14 April</td>
</tr>
<tr>
<td>Kenya</td>
<td>19 - 21 April</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>12 - 14 May</td>
</tr>
<tr>
<td>Tanzania</td>
<td>26 - 27 May</td>
</tr>
<tr>
<td>Uganda</td>
<td>7 - 10 June</td>
</tr>
<tr>
<td>Mozambique</td>
<td>21 - 23 June</td>
</tr>
<tr>
<td>Ghana</td>
<td>9 - 13 August</td>
</tr>
<tr>
<td>Malawi</td>
<td>24 - 25 August</td>
</tr>
</tbody>
</table>

The pilot project was set to run for twelve months, from April 2010. In March 2011 a consulting group, Executive Consultants, was engaged to conduct a detailed assessment and evaluation of the project on behalf of UNICEF. That study, which will be referred to hereafter as the UNICEF Report, examined the pilot project both at the country level (largely operational) and from a macro-level economic and cost-effectiveness standpoint. The present report draws on the findings of the UNICEF Report as the major source document on the conception, structure and specific outcomes of the nine country pilot project.

4. Premise of the Pilot Project

The UNICEF-VBI pilot project was predicated on three principal pillars, namely:

- The establishment of a “wellness” programme in the offices concerned for the purpose of identifying staff in need of care;
- The introduction of a 100% insurance coverage benefit level for HIV-related expenses (see table below) in order to mitigate financial obstacles to seeking necessary treatment and to support a high level of confidentiality;
- The implementation of a “managed care” approach to the treatment of HIV positive individuals.

17 The proposal for the Pilot Project originally envisaged ten countries. However, the tenth country, Nigeria, was dropped when the project could not be implemented there.

18 Executive Consultants, “Health and Wellness Programme: an analysis of the Vanbreda Pilot covering 100% of HIV-related expenses for UNICEF staff in ten countries” [the UNICEF Report]
UNICEF MIP COVERAGE UNDER UNICEF-VANBREDA PILOT PROJECT

<table>
<thead>
<tr>
<th></th>
<th>Current Coverage</th>
<th>New Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient doctor’s fee</td>
<td>80%</td>
<td>100%</td>
</tr>
<tr>
<td>Pharmaceutical products</td>
<td>80%</td>
<td>100% for HIV drugs; TB drugs, STI treatment, cotrimoxazol and fluconazol prophylaxis</td>
</tr>
<tr>
<td>Vitamins</td>
<td>Not covered</td>
<td>Covered if prescribed*</td>
</tr>
<tr>
<td>Vaccinations</td>
<td>Not covered for adults</td>
<td>100% for prescribed: Hepatitis B, influenza</td>
</tr>
<tr>
<td>Lab tests</td>
<td>80%</td>
<td>100% for follow up tests: CD4, Viral Load, FBS, Liver and kidney tests</td>
</tr>
<tr>
<td>Family Planning/contraceptives</td>
<td>80% if medical condition/not covered for birth control</td>
<td>Covered for birth control**</td>
</tr>
<tr>
<td>PAP Smear</td>
<td>80% for 1/ calendar year</td>
<td>100%***</td>
</tr>
<tr>
<td>Baby milk</td>
<td>Not covered</td>
<td>Covered****</td>
</tr>
<tr>
<td>Breast pump</td>
<td>Not covered</td>
<td>Covered*****</td>
</tr>
<tr>
<td>Hospitalization doctor’s fees</td>
<td>80%</td>
<td>100% if HIV-related hospitalization</td>
</tr>
</tbody>
</table>

* Medical literature indicates that daily dose of multivitamins reduces HIV progression in developing countries where adequate nutrition can be problem.
** Family planning and birth control is an important part of the care for HIV patients; access to condoms should be guaranteed at workplace
*** Covered because HIV-infected women have increased risk for cervix cancer
**** Covered for prevention of mother to child transmission (PMTCT) to reduce HIV transmission
***** Only covered if mother wishes exclusive breastfeeding.

5. The Wellness Day Concept

Wellness programmes have become increasingly common in the modern workplace, whether linked to employer-provided health insurance plans or offered separately. While there is no single definition of what the term “wellness” encompasses, in the workplace context it is generally associated with organizational policies designed to support healthy (risk averse) behaviours among employees and, as a concomitant outcome, to promote productivity and good morale. Sometimes referred to as “corporate well-being”, such programmes can range from the provision of an on-site fitness facility and healthy food options in the cafeteria (exercise and nutrition) to an extensive workplace health focus on prevention and intervention geared to reducing employee health risks such as hypertension, cardiovascular disease and a range of other chronic diseases. In predominantly industrial countries a strong motivating force underlying such programmes is the desire not just to boost employee welfare but at the same time
to generate a positive impact on corporate costs and profits by reducing absenteeism, increasing "on-the-job" worker effectiveness and reducing health insurance costs.

There is ample evidence in the research literature that preventive practices, such as learning and health awareness, screenings and health risk appraisals, and behaviour modification coaching and incentives are a considerably better use of resources than spending on the relative minority of employees who are responsible for high-cost medical insurance claims.\(^{19}\) In fact, numerous estimates, including some cited in the UNICEF Report as well as data issued by the US Centers for Disease Control, indicate that comprehensive workplace wellness programmes in tandem with appropriate health insurance plans can yield returns of from $3 to $6 for each dollar invested.\(^{20}\) The economic impact study conducted by the consulting firm Constella Futures International (CFI) in 2007 on behalf of UN Cares also highlighted the value of implementation of the UN Cares 10 Minimum Standards at all UN workplaces, demonstrating that the return on investment would be significant.

Clearly, therefore, the concept of workplace wellness in all its shades of meaning is coming to be widely embraced. The centrality of the "wellness" concept in the context of the pilot project, however, is based on a rather different set of drivers than those described above. The key reason for establishing a wellness day as an integral part of the implementation of the pilot project in the nine countries has less to do with "industrial" employee health concerns than with its effectiveness as a mechanism for mitigating the barriers to undertaking HIV testing and counseling. Whereas, for example, little stigma generally attaches to a hypertensive employee, the opposite is too frequently the case with respect to people living with HIV. By creating a wellness day occasion, open to all without a condition-specific focus, with a structured learning component in line with the United Nations Learning Strategy on HIV/AIDS as well as HIV testing and counseling consistent with WHO protocols, a major source of resistance to undertaking HIV testing and counseling, the fear of stigma and discrimination, was significantly mitigated. A UNAIDS report of 2005 states that:

\textit{From the start of the AIDS epidemic, stigma and discrimination have fuelled the transmission of HIV and have greatly increased the negative impact associated with the epidemic. HIV-related stigma and discrimination continue to be manifest in every country and region of the world, creating major barriers to preventing further infection, alleviating impact and providing adequate care, support and treatment.}

\textit{Not only is HIV-related discrimination a human rights violation, but it is also necessary to address such discrimination and stigma in order to achieve public health goals and overcome the epidemic…Ideally, people should be able to seek and receive voluntary and confidential counseling and testing to identify their HIV status without fear of repercussions. Those who test HIV-negative should receive prevention counseling so as to be able to stay negative. Those}

---


\(^{20}\) There is a great variation in methodologies pertaining to measures of “return on the dollar”. For some organizations “return” is gauged in terms of insurance premium savings per wellness dollar spent. In other instances, including the present instance and the Constella Futures International analysis earlier, the cost/benefit analyses look at other cost factors such as absenteeism, statutory death benefits and funerary expenses as well as morbidity gains (HIV infections averted).
who test HIV-positive should receive available treatment and care, and prevention counseling to protect others from infection and themselves from re-infection.21

6. Managed care and 100% insurance coverage

The other two pillars of the pilot project, a programme of managed care for the treatment of those staff members [and several dependents] who tested positive, linked with 100% payment of the related hospital and/or medical expenses, are integral to the success of the Project. Findings from in-depth interviews with predominantly MIP-enrolled staff members in several countries conducted for UN Plus with the primary objective of identifying gaps in coverage and other concerns regarding health insurance schemes in the UN system revealed that many were concerned about (a) the personal financial liability in meeting the 20% of costs not met by the plans, (b) the difficulty for many to be able to deal with the indemnity aspects of the plans, that is, with the need to pay medical bills “up front” and then await reimbursement of the 80% covered, (c) the potential for, and in some instances the actuality of, breaches of confidentiality, and (d) the inadequacy or paucity of briefings and explanations about the insurance plans themselves.

The issue of enabling staff to gain a fuller comprehension of the coverages and conditions of the United Nations insurance plans, (d) above, is one which presents a greater challenge for staff in field offices than for those in major or headquarters offices. The latter group tends to have readier access to authoritative sources of information about the plans. Moreover, the official issuances by which insurance scheme benefits and other relevant details are promulgated tend to be written legalistically rather than in a user-friendly style.22

The other three concerns, however, are addressed, indeed are central to the pilot project process. By paying 100% of the costs of counseling, treatment and care the patient incurs no residual financial liability. Further, by VBI’s making these payments directly to the provider (a procedure established contractually by VBI with each approved managed care provider), the staff member is relieved of worrying about delays in receiving reimbursement under the traditional claims process. Moreover, the “managed care plus 100% coverage” structure plays a significant role in that it not only relieves the staff member living with HIV from the burden of having to delay or forego treatment for financial reasons (a common concern) but also buttresses in the patient the sense that his or her medical records will be maintained in high confidence. Beyond the removal of financial obstacles to seeking timely treatment, the managed care strategy relieves staff members living with HIV of the burden of having to seek out appropriate care and treatment by themselves. In some ways the managed care structure bears a similarity to the concept of the Health Maintenance Organization (HMO) medical delivery system ubiquitous in the United States with its wellness and prevention focus. From the standpoint of the patient, it is a one-stop service that provides an integrated programme of treatment, medical and behavioral. The principal role of RTCHS is the implementation of the clinical treatment and management program (including monitoring and oversight)

21 UNAIDS: HIV-Related Stigma, Discrimination and Human Rights Violations, p.4
22 Interestingly, a requirement of the United States’ Affordable Care Act – “Obamacare” – is that insurance companies, for the first time, have to issue policy documents, benefit descriptions, exclusions and other terms and conditions, in plain language.
for staff living with HIV whose treatment is rendered by local clinics identified by, and subject to provider agreements with VBI.

In effect, it is the combined impact of the three elements, taken as a package that defines the strategy of the pilot project. It cannot be claimed that the pilot project approach, by itself, eliminated stigma and discrimination in the UNICEF office workplace. As stated in a report on the 26th Meeting of the UNAIDS Programme Coordinating Board (June 2010):

*In 2005-2006, in country and regional consultations on universal access to HIV prevention, treatment, care and support, stakeholders reported that stigma and discrimination against people living with HIV were major barriers to universal access and undermined the effectiveness of national responses to HIV...In the last decade, considerable progress has been made in identifying the causes, manifestations and consequences of stigma and discrimination and in increasing the evidence of effective approaches to reduce them."

It can, however, be seen from the available data on the outcome of the wellness days in the nine UNICEF country offices (in a section below) that a significant advance was made against the fear of undergoing testing.

### 7. Relationships between the parties to the Pilot Project

In addition to the substantive elements of the programme, the pilot project was from the outset conceived as a Public-Private Partnership (PPP) among UNICEF (public sector), Vanbreda International (private insurer) and a third private sector party, Right-to-Care Health Services (RTCHS) of South Africa, in effect a sub-contractor of VBI. The linkage between these entities and the statements of their respective roles and relationships have been set out in Memoranda of Understanding, summaries of which are contained in Annex 1.23

### 8. Implementation of the Pilot Project

As noted earlier, ten countries were initially identified for the project, however only nine participated in the wellness activities (Nigeria did not participate and thus was dropped from further inclusion in the project).

Following the initial roll-out of visits to UNICEF offices by VBI and RTCHS (conducted by two physicians, the Director of RTCHS and the Medical Consultant to VBI) and the associated assessment of local services available to provide for the managed care of HIV positive staff members, a second visit was made some months later in conjunction with RTCHS to conduct at each office the wellness day. The wellness activities (carried out by RTCHS) included learning and awareness sessions as well as the normal range of medical tests for HIV, cholesterol, blood sugar and so on. Non-staff contractors were included in these tests, though not in the managed care follow-up as they were not covered by the VBI-administered MIP.

The nine individual country case reports that form part of the overall report on the pilot project included background data on each country such as the respective Human

---

23 See UNICEF Report, Main Report, p.36-37
Development Indicators and pertinent data drawn from UNDP’s Human Development Reports, a summary of country-specific key policy issues and strategies relevant for the HIV epidemic, and an account of the initial visit by the VBI project team. In most of the reports, details were provided of the contacts that were made (clinics and other medical care providers), as well as a summary of the outcome of the wellness day at each location. The latter are summarized in Annex 2 together with a table comparing national HIV prevalence in the nine countries and the actual prevalence among those tested in the country offices evidenced in the wellness day outcomes.24

9. Rationale for the Pilot Project

The objectives of the Pilot Project were to:

- *Provide a quality HIV disease management service to UNICEF’s HIV positive population;*
- *Improve the quality of life for HIV positive patients;*
- *Reduce absenteeism;*
- *Reduce the financial burden for HIV patients;*
- *Reduce hospitalization and the related costs for VBI and UNICEF MIP plan.*

The core strategic components designed to achieve these objectives were expansion of the 80% standard level of coverage under the MIP reimbursement scheme to a 100% coverage of selected HIV-related expenses for a full, integrated HIV case management programme, covering HIV testing and counseling, care and treatment (including necessary drugs and hospitalization). RTCHS, under contract to VBI was given complete responsibility for onsite HIV testing and counseling and the integration of this in the workplace wellness programme, including not just HIV testing, but also screening for hypertension, diabetes, cholesterol, tuberculosis and BMI (body mass index)26 as well as all other aspects of the managed care and treatment programme. In general, the pilot project followed the WHO guidelines for HIV testing and counseling, diagnosis and treatment and care. A major focus of the evaluation of the project in the UNICEF Report was to develop from that experience a standard operating procedure and treatment protocol for UN staff living with HIV to be applied in the future as the project was extended.

---

24 These data are collated from the 9 individual country reports and differ somewhat from data utilized in the investment case analysis in the UNICEF Report owing to differences in reference time periods. This variance is not significant from a project evaluation standpoint.

25 UNICEF Report, Main Report, p. 16

26 In the pilot project, non-HIV tests were funded by the country offices at an average cost of about $800 per office.
10. **Assessment of the Pilot Project**

The aggregate results of the Pilot Project over the period 1 April 2010 to 31 March 2011 can be summarized as follows:

- Total number of eligible staff (MIP-enrolled) in the nine countries: 816*
- Total number of eligible staff tested (Wellness Day): 255*
- Number of staff diagnosed HIV positive: 22
- Percentage undergoing testing: 31%
- Percentage HIV positive: 8.6%

In total, 816 staff members were eligible for the pilot project, namely locally recruited staff at the national officer and general service levels, both regular and temporary staff, who with their eligible dependents were entitled to health insurance coverage under MIP. The 31% proportion of those who underwent testing (a good result at this early stage of the project) can be explained in part by the fact that the wellness day screenings were conducted in the country capitals only and not in the more remote field offices. Apart from the HIV positive staff members, 7 spouses and 2 children were also found to be HIV positive, and were registered in the managed care programme. The number under managed care treatment rose altogether to 35, including two who were not among those originally tested but being aware of their HIV positive status had self-referred for the treatment programme. Owing to death and separation from service, the number of individuals registered with the RTCHS managed care at the end of 2012 was 29. Prior to the implementation of the pilot project, four of the individuals in managed care had been medically evacuated for HIV-related reasons, but none since the start of the project.

11. **Cost/benefit assessment**

A programme such as the pilot project requires investment, and the cost effectiveness of such investment is assessed by developing a cost/benefit analysis. The cost side of the equation principally comprises prevention and treatment services, while the benefit side comes in the form of future costs avoided, mainly replacement costs, and death and funerary benefits.\(^{27}\) If both costs and the future flow of benefits are brought to present value terms by an appropriate discount rate (e.g. 3%), the present value of benefits must exceed the present value of total costs to justify these expenditures. Such an analysis has been carried out by Constella Futures International resulting in the estimate that the investment in a comprehensive (80% coverage level) workplace strategy will yield a fourfold financial benefit in terms of costs that will not be borne in the future.

Other analyses carried out by CFI looked more broadly at the value to the United Nations of infections averted by virtue of a “comprehensive” programme of prevention and treatment. It should be borne in mind, however, the CFI study examines the issue from a “macro” perspective, does not apply UN-specific parameters and is methodologically more in line with public health policy studies, such as in the calculation

---

* See footnote 24.

27 Prevention and treatment services reduce future costs by (a) allowing staff who need and receive ARV treatment to continue as productive workers, and (b) leading to future infections being averted, which in turn will reduce ARV treatment needs and treatment expenses. See CFI Report, p.23.
of HIV infections averted by the comprehensive strategy. Nevertheless, it is a rigorous and valuable analysis that clearly demonstrates the substantial returns, in workforce and financial terms, to a concerted programme of prevention and treatment. A summary of the methodology and findings of the CFI study is contained in Annex 3.

The UNICEF report also embodies an assessment of the pilot project and, following a methodology similar to that of the CFI report, concludes that the pilot project “averted 13 infections” at a cost per infection of $27,500 (based on total pilot project cost of $360,000, approximately $270,000 came from VBI and $90,000 reflected UNICEF’s contribution of P4 and G5 staff time). A summary of the key metrics contained in the UNICEF report is set out in Annex 4.

A separate estimate was made of the impact of the project on medical evacuations based on norms developed in a World Bank (WB) study. The WB estimate was based on the fact that AIDS-related evacuations dropped from 15% to 8% over seven years and thus 4 evacuations were averted, yielding a combined evacuation and medical cost saving of $20,900 (direct costs). In addition, it was estimated that indirect costs\(^28\) averted amounted to $5,400 per evacuation. The comparable estimate pertaining to the UNICEF project took as a parameter the 50% drop in evacuations from the WB experience (15% to 8%) and applied that to UNICEF data, noting that 40% of hospitalizations for HIV patients in 2010 were evacuations to South Africa resulting in 6 admissions. Based on the WB 50% drop, the UNICEF Report calculated that therefore 3 admissions would be averted for a saving of $78,900 (WB’s 20,900 + $5,400 x 3).\(^29\) In fact, recent information from VBI has indicated that since the managed care programme began there have been no new cases of HIV-related evacuations.

WB also made an estimate of the cost of absenteeism, based on a 5-year record of the average annual workdays lost per staff member living with HIV. For those compliant with WB’s disease management programme the lost time averaged four days. For those not in the programme or not compliant the average number of days lost was 34.5 per annum. WB estimated that on average two Africa-based staff members are on short-term disability each year at an additional cost of $7,244 per year, each. The UNICEF Report, basing its estimate on the WB data (namely 30.5 fewer sick leave days for those in managed care and comparable cost), also concludes that savings of around $15,000 per year may be achieved.\(^30\)

The estimates above refer to sick leave days averted through timely treatment of HIV-related health issues. With regard to absenteeism, defined as an absence from work except for official leave of absence, holidays or vacation time, the UNICEF report looks first at data for 2009, before the pilot project began, and notes that there does not appear to be any correlation to either HIV prevalence among the population in the respective countries nor to the tested UNICEF staff. It was also found that when absenteeism in 2009 was contrasted with that in 2010, the number of countries that showed an increase was about the same as the number that showed a decline and, furthermore, the increase or decrease was not correlated with the number of months since pilot project testing had commenced. The causes of absenteeism are complex,

---

\(^{28}\) Indirect costs are costs arising from absenteeism, replacement of staff (recruitment and training), death benefits and funerary expenses.

\(^{29}\) UNICEF Report, Main Report, p. 55

\(^{30}\) UNICEF Report, Main Report, p. 56
involving other factors such as job satisfaction and working conditions, such that it would in any event be difficult to make a definitive link between the degree of absenteeism and the incidence of HIV and related medical conditions.  

Similarly, the evaluation found no consistent relationship among the country offices with respect to staff turnover between 2009, before the pilot project began, and 2010, after its implementation. Staff turnover in these circumstances, the replacement of staff on prolonged sick leave or as a result of disability separation or death, by the recruitment of new staff is an impact of HIV prevalence with adverse implications for costs and worker morale. However, the fact that rates of turnover did not appear to bear any relationship to HIV prevalence only says that (a) the pilot project was of insufficient duration and scale to evidence any long-term trend, and (b) other exigencies, not related to HIV, may underlie staff recruitment and replacement efforts.

It is not surprising therefore that no correlation between the implementation of the pilot project and absenteeism and turnover rates was seen. The theoretical results of public health models have statistical meaning when large numbers are involved. Thus, the pilot project has not in its short year literally averted 13 infections – though over time that and better could be expected. The wellness day approach did, however, lead to the discovery of over 30 cases of HIV infection that may not otherwise have come to light until likely much later, and has resulted in these individuals receiving necessary treatment under the managed care regime. It is not hard to see that if it were to continue, and learning from the lessons of that experience – what worked well and less well – the cumulative effect of prevention and treatment would lead to significant results in terms of infections averted and lives saved. Realistically, however, the pilot project formula would have to be in operation for at least 5 years before a full, results-based, assessment of its effectiveness could be rendered. Absent this experience, the model-based analyses and the positive cost/benefit calculations all point to the validity of the “wellness+100%+managed care” approach.

12. Extension of the pilot project

The UNICEF Report makes a strong recommendation that the pilot project should be continued for a further two-year, Phase 2, period. This recommendation, also supported here, is based on the findings that the project is cost-effective, that there will be a substantial return on investment, that it has materially increased general awareness and identified staff who previously did not know their HIV status and provided them with managed care treatment, that it has made inroads against the barrier of stigma and discrimination and that it saves lives. A similar recommendation has been made in the rigorous large-scale analysis of the CFI report (2007 UN Cares Economic Impact Study), which pre-dated the pilot project by some 3 years and predicted positive outcomes from a concerted comprehensive programme of prevention directed toward all employees of the United Nations system of organizations. A summary of the key elements of the 2007 UN Cares Economic Impact Study is set out in Annex 3 wherein the calculation of positive returns on investments in such a programme, as well as the positive outcomes in the form of HIV cases newly detected and averted are demonstrated.

31 Ibid. p. 21
32 Ibid. p. 22
Though relatively small in scale and of short duration, the pilot project has convincingly demonstrated that the “three pillars” approach to tackling the HIV epidemic in the workplace is highly effective as a mechanism for improving the welfare of staff and leading to reductions in new HIV infections. In a Phase 2, however, would the three pillars (“wellness day + 100% + managed care”) need to be retained as a package, or could they, or some parts thereof, be disaggregated and in this way lead to some saving? The area in which some economies could be realized is in the area of travel. VBI has advised that a DVD recording of the learning session component of the wellness day programme has been prepared, and that the video-recorded presentation in combination with a live telephone question and answer arrangement with RTCHS in Johannesburg would obviate the need for RTCHS travel to country offices, or more outlying “deep field” duty stations. Whether this option would be feasible, without compromising the quality of the wellness day experience for staff (particularly those for whom it would be for the first time) should be evaluated on a case-by-case basis. Consideration of the video-presentation option could be a viable option where the number of staff eligible to participate in wellness day at a particular location is small. Aside from this option however, which would introduce a potential cost reduction element, the three pillars package needs to be maintained intact to avoid the risk of diminishing the quality, consistency and efficacy of the overall programme.

The pilot project wound up at the end of June 2011, though funding provided by UNICEF for the 100% “top up” allowed those already in managed care to continue in treatment. Ideally, a project of this nature should not have been undertaken without a commitment of at least five years, if for no other reason than to ensure the institutionalization of the wellness day, which should be conducted at twelve-month intervals or closely thereto. The regularity of wellness day is important so that the wellness day counseling and testing, followed by registration for the managed care treatment programme for those determined to be HIV positive become almost routine events and accepted by all as part of an ongoing proactive health and wellness outreach by the organization. The VBI representatives interviewed in conjunction with this report indicated that during the course of the initial visits to the country offices they found encouraging the fact that the staff at those locations welcomed the initiative, and specifically the fact that the project had come to them rather than the other way around. A telling sign also of the initial acceptance of the Project can be seen in the self-referral of two staff members, both aware of their HIV positive status, from two different locations, into the managed care treatment programme.

However, VBI has indicated that there is a danger that with the time gap between the initial wellness day when testing took place at each country office (dates ranging from June 2010 to January 2011) and a future date when Phase 2 might be commenced, some momentum will have been lost. In essence, were a Phase 2 to be authorized the programme is likely to have to be, to some extent, re-introduced in the nine pilot project offices. The momentum and the gains already achieved can be recovered, but only with the assurance that the project can proceed on a consistent basis.

13. Funding Phase 2

The pilot project was funded by VBI in the amount of $260,000 to cover mainly direct programme costs, and VBI travel expenses. This amount covered all of the RTCHS costs including necessary travel, organization of wellness day and the managed
care component. UNICEF also incurred some cost at the global level, 33% of P4 officer’s time and 33% of a G5 Administrative Assistant’s time. In addition, the costs of the non-HIV screenings carried out in the course of the wellness days (in the same session as the HIV tests) were borne by the budgets of the country offices for an average amount of $800 each. Furthermore, all of the medical expenses, hospitalization, medical treatment and drugs, were charged to MIP, including the 20% “top-up”.

The purpose of Phase 2, originally anticipated to be continuous with the first phase, is to (a) consolidate the gains made in the first phase, (b) to establish the annual regularity of a day of wellness at each office, (c) to deepen the programme by reaching more eligible dependents and staff in field offices away from the capitals and to expand the project by up to five more countries, Botswana, Lesotho, Swaziland, Angola, and Namibia and in these ways maximize the impact of the project.

Initially, VBI presented UNICEF with a cost proposal of $544,000 for the two years of Phase 2 ($272,000 per year). However, recently VBI has presented a revised financial proposal for Phase 2 in the amount of $171,000 per annum. Details of this proposal are set out in Annex 5.

14. *Economies of scale*

VBI has confirmed that there is ample scope to realize economies of scale with respect to the fixed programme category of expenses. VBI has indicated that if, say, another organization with comparable numbers of eligible staff in the countries in subject were to join the project, the fixed cost figure of $114,000 in the table above would rise by something of the order of $20,000 (or even less), so that on a shared cost basis, the fixed expense could be reduced to under $65,000 for each of the two organizations in this example. The $20,000 cited above should not be taken as definitive, but rather strongly indicative of the degree to which scale effects would impact overall costs. One variable not reflected in the above example is the extent of coincidence of concentration in the populations of the organizations or the degree to which they are dispersed. The greater the dispersion of staff, the greater the costs due to higher travel requirements.

15. *How can agencies that do not have a VBI-administered insurance plan participate?*

VBI has also confirmed that participation by any agency that has staff in the countries of the pilot project, or other countries to which Phase 2 may be extended, is entirely feasible. On the benefit side, it would be required that such agency accept the package of benefits that are the core of the pilot project (wellness day + 100% + managed care), at least in respect of staff participating in the project. It should be noted in this respect that whether or not another agency’s health insurance scheme is self-insured, or whether or not it is self-administered, does not in principle matter, except perhaps from the standpoint of the agency’s own internal arrangements. One such arrangement is in fact already in operation, namely with UNHCR in Nairobi. UNHCR has its own MIP, self-insured and self-administered. Nevertheless, UNHCR staff in Nairobi living with HIV receive managed care treatment at UNON’s one-stop clinic under VBI’s 100% coverage and direct billing arrangement. On the financial side, VBI would create a

---

33 See the table on p. 6
monthly receivable comprising the hospital/medical/drug charges plus the share of the fixed costs (see above) and the variable cost total for the agency’s staff in managed care ($50 per month per patient) for payment by the agency.

16. Insurance issues

The overall quality of the insurance plans of the United Nations organizations lies, after the pension fund system, at the heart of the organizations’ responsibility to provide a system of social security for staff. However, unlike the United Nations Joint Staff Pension Fund (UNJSPF), organizations’ insurance schemes are far from joint, a circumstance that led to the JIU issuing studies on two occasions, in 1977 (JIU/Note/77/2) and again in 2007 (JIU/REP/2007/2) focusing on the disparities in the various plans and recommending greater harmonization of the schemes.

The important distinction to be made here is between the plan benefit structures on the one hand (what is reimbursable and at what level of indemnity), and the categories of employee and related eligibility criteria, on the other. A third issue, not directly related to the insurance coverage per se is that of the availability of medical services and medications in some locations and especially in remote areas. In terms of the scope of the plan designs themselves, there is a high degree of convergence among the various schemes in regard to the major categories of coverage, even as there exist at the same time disparities in many of the benefit details. Nor is there uniform practice regarding the financial bases of the various health insurance schemes (insured versus self-insured) or the system of plan/claims administration (self-administered claim handling versus third-party claims administration). To some degree, the difference in approach between one organization and another reflects accepted practice in the respective locations. In the United States, for example, health insurance plans of the magnitude of those available to UN Headquarters staff, covering thousands of active staff, retirees and their eligible dependents, tend to be self-insured. At the same time, owing largely to the complexity of the medical delivery systems in the United States, claims operations are almost invariably outsourced to specialist concerns (such as Aetna and Blue Cross, under “administrative services only” agreements) that also offer preferred provider networks and the associated medical cost savings. In Europe, on the other hand, self-insurance is a less common practice whereas self-administration of claims is more common.

Several studies have been carried out regarding the benefits and adequacy of the insurance plans of the United Nations organizations, focusing particularly on coverage with respect to HIV-related expenses. A consultant, Fouad M. Kronfol, prepared two such studies, one in 2009 on behalf of UN Cares and UN Plus, and a second in 2011 for UN Plus/UNAIDS. With respect to benefits for HIV positive staff, he found that among the agencies “the degree of coverage, while not uniform, is increasingly being narrowed such that the differences, if there are any, have virtually disappeared, for example the access to antiretroviral drugs”. The major element of difference that he found was in the realm of contractual arrangements and the related eligibility status, an issue that is not one of benefits or coverage.

---

34 Supporting HIV+ staff in the United Nations: a desk review of health insurance schemes (2009), and Towards a UN system-wide full coverage of health insurance benefits for HIV positive personnel (2011).
In 2010 a consultant carried out a survey with local assistance in 20 countries, with 141 staff and family members participating.\(^{35}\) Of the respondents, 63% were living openly with HIV, almost 45% had at least one HIV positive dependent/family member, and nearly 37% paid for their dependent’s medical expenses. The survey covered a wide range of issues, from confidentiality and stigma and discrimination to contract matters (which lie beyond the scope of this report), but many of the chief concerns were these:

- Having to pay the 20% up front, being out of pocket;
- Delays in processing claims;
- Problems with reimbursement;
- “Direct billing” system.

Each of the above concerns is addressed by the Pilot Project approach: 100% coverage for all HIV related care and treatment expenses combined with direct billing of providers (and direct payment to them by VBI). This mechanism obviates the concerns relating to out-of-pocket expenses and reimbursement delays or other problems.

Regardless of whether an organization’s health insurance scheme is insured externally or self-insured, or whether claims are handled internally or by a third party administrator (TPA), they all share one feature in common, namely that the sponsoring organization is the benefit fiduciary. That is, the organizations themselves are responsible for establishing (generally through the mechanism of a joint management/staff advisory body) the plan of benefits, not the insurer if there is one, or any outside agency. In the case of those organizations that contract third party claims administrators, the TPA is the claim fiduciary and has legal responsibility to administer the plan as established by the organization, but has no authority over the benefits themselves.

Thus, the question of variances in the insurance plans of the UN system where they exist should not be seen as an exogenously determined issue, but rather as one over which the organizations themselves have full control. As regards staff living with HIV, the question to be asked is whether HIV-related benefits, in their totality, are adequate and up-to-date (in the sense of providing for the latest ARVs) and whether this package of benefits is consistent throughout the UN system. Clearly, full consistency has not yet been achieved, but, as noted by Kronfol, today coverage for HIV-related medical care and drugs is very similar among the plans of the UN system.

The most direct way of assuring that HIV positive staff and their dependents across the UN system have access to an equal package of benefits would be (a) to obtain inter-agency agreement on the full range of state-of-the-art treatment and drugs for HIV patients and (b) update all insurance plans accordingly. As the insurance provisions of UN and Agency plans are substantially equivalent today it is unlikely that

---

there would be significant financial impact on any individual plan by adopting a “common standard”.

A point to be emphasized in the context of health insurance is that the hallmark of a good scheme is not merely the financial recovery aspect of the benefit structure (typically, 80% of “reasonable and customary” charges) but also the degree to which plan provisions are responsive to the medical delivery environment, the social security aspects of insurance protection. The 100% plus managed care package is, in effect, a new MIP insurance “product”, whereby HIV-positive patients receive treatment from selected providers, who have been vetted and whose participation in the project has been secured by “provider agreement” with VBI, in a programme where their treatment is monitored and adjusted as necessary. A managed care programme in the circumstances of the pilot project countries is far more likely to be successful in prevention of HIV transmission and in supporting treatment adherence than a less structured treatment environment.

17. Occupational Safety and Health

The concept of occupational safety and health (OSH) as the focus of medical delivery and policy within the UN system is gaining in recognition and acceptance. A recent JIU report about the issue states “The adoption of OSH policies by United Nations system organizations will necessitate a paradigm shift in the provision of medical services, as emphasis will now be placed on prevention rather than cure.” The report elaborates the various factors that constitute a viable organizational OSH, discusses modalities of establishing an OSH function in the UN system, administrative locus and reporting lines, the economies and efficiencies that derive wherefrom and presents recommendations in these regards.

In a table listing a representative selection of the components and outputs of an organizational OSH programme, under the heading “Healthy workers”, the following are cited, inter alia: non-occupational injury and illness management, medical screening and preventive services. Elsewhere, the report discusses the roles of UN Cares and UN Plus in the context of system-wide medical service coordination/cooperation and notes that the UN Medical Directors Working Group (UNMDWG) has issued numerous “position and policy guidance statements over the years on topics such as screening and testing of HIV/AIDS.”

With these developments under way or in contemplation, it would appear that the OSH structure would provide a natural home for workplace policy and practice regarding HIV in the UN community. OSH would be the umbrella structure covering wellness and disease prevention strategies. Viewed in that perspective, HIV would be one chronic condition (though a critical one) among others, including high blood pressure, diabetes, obesity and other chronic conditions and diseases. With regard to the conduct of the Pilot Project, the wellness day screenings covered not only HIV, but also the other chronic diseases (the cost of the non-HIV screening funded by country office resources).

---

36 The upgraded insurance benefits introduced into UNICEF’s MIP by VBI for the countries of the pilot project for the purpose of providing full (100%) coverage for HIV positive staff and dependents enrolled in the managed care programme is set out in a table on page 10.
37 Review of the Medical Service in the United Nations System (JIU/REP/2011/1)
38 Ibid. Introduction, p. 1
39 Ibid. p. 27
While all participants in the programme received the results of testing on a confidential basis from RTCHS directly, only HIV-positive individuals received treatment under the managed care programme, with direct billing to VBI and 100% coverage.

The issue of whether UN Cares should expand its programme to embrace a wider range of wellness concerns or continue to focus on HIV alone is outlined in a 2012 UN Cares report to the CEB Human Resources Network. The question has been raised from time to time and during a 2011 external evaluation of UN Cares, in which this question was raised, 50% said that UN Cares should expand to issues beyond HIV, while the other 50% favored an exclusive focus on HIV. That question could also be framed in the context of the pilot project. As noted above, testing for non-HIV chronic conditions was conducted and cases of obesity, high blood sugar counts and high blood pressure were identified. Under MIP treatment and medications for all these conditions are covered, but at the customary 80% rate of reimbursement, not 100% as in the case of those living with HIV. Can a “preferential” focus with enhanced benefits for HIV positive staff then be justified?

In the view of this consultant the answer is “Yes”, for several reasons. In the first place, the United Nations has taken a strong policy stance with respect to HIV and is committed to “providing a supportive workplace for its employees regardless of their HIV status…” and ensuring that “staff and families have access to information and treatment and support, voluntary confidential counseling and testing, and antiretroviral drugs with costs to be met by the maximum amounts provided for by the medical insurance schemes in which staff are enrolled.” Already in 1991 the UN Personnel Policy on HIV/AIDS was promulgated, and in 1996 UNAIDS was launched. The Millennium Development Goals include a goal of halting and beginning to reverse the spread of HIV/AIDS by 2015. No comparable policy and programmes exist relative to other chronic conditions. Clearly, the aim of providing comprehensive prevention, treatment, care and support related to HIV is a special case.

In the second place, other diseases and chronic conditions do not engender the stigma and discrimination experienced by people living with HIV. Thirdly, if the progress made thus far in the AIDS response is to be consolidated, it is necessary to keep a concerted focus on strategies that yield positive results in that endeavour. The pilot project is just such an endeavour, and the 100% coverage is an integral part of that strategy. Finally, unlike most chronic conditions, HIV is infectious, and anti-retroviral treatment can reduce the likelihood of transmission to a partner by 96%. Thus, there is a further medical argument that justifies a differential treatment of HIV.

Nevertheless, the strategic logic of according a higher level of benefit under MIP (or the plan of another agency) for a certain segment of insured staff members but not all others can certainly be seen to raise an issue of equity – equal treatment of those with other chronic conditions that come to light during the testing phase of wellness day. Indeed the equities could be thought to extend even beyond MIP to other insurance plans in which UNICEF staff members are enrolled at headquarters and around the world. This report recognizes that the 100% coverage aspect of the pilot project (and later Phase 2, if endorsed) may present some difficulty. On the other hand, for the all

---

40 UN Cares Report for the meeting of the CEB HR Network, 27-29 June 2012, Paris (CEB/2012/HLCM/HR/20), p. 4
reasons adduced above – the strategic imperative of strongly advancing prevention against HIV – added to the potential to deal appropriately with the other chronic conditions in the context of OSH, this consultant believes that those considerations outweigh the equity concerns at this time, in the context of the limited undertaking of the pilot project.

18. Summary of Conclusions and Recommendations

In essence the focus of this report as stated at the outset is relatively narrow, namely to analyse/critique the UNICEF/VBI “experiment” – the pilot project - and propose for consideration steps for future action, options for individual organizations of the UN system consider, particularly with respect to the insurance aspects of the issues.

1. Phase 2 of the Pilot Project

It has been made clear earlier in this report that the analyses that have been carried out regarding the value of investing in HIV treatment and prevention programmes bear out the proposition that the returns are positive, by some measures strongly so. The progress being made worldwide in averting new HIV infections and in preventing new infections in children and keeping their mothers alive testifies to the power of early intervention. The pilot project approach and subsequent extension to Phase 2 and beyond has the potential to reach deeply to UN system employees in high HIV prevalence countries.

It is therefore recommended that the pilot project be extended to Phase 2 as detailed above for an initial extension period of two years, not just in the original nine countries but expanding to the six additional countries, and deepening the reach in those countries to more remote locations. The momentum of the pilot project needs to be recovered. The annual wellness day needs to be institutionalized in the sense that it becomes a regular fixture on the calendars of the country offices.

2. Beyond Phase 2 – participation by other organizations

While the variable costs will increase in direct proportion to the growth in numbers (at the projected rate of $50 per patient in managed care per month), the fixed cost component per organization in the programme will decrease substantially (economies of scale, as shown above). The estimate for “expenses related to the project” ($36,900 per year for nine countries) is less sensitive to the numbers of individuals participating in wellness day than it is to the number of such sessions, the number of locations involved, and the travel that RTCHS must undertake in that connection. A larger number of staff participating in a wellness day (a learning session and screening) at the same location and time would not affect that element of cost by very much.

Participation in the project is open to all organizations/agencies that have MIP or another plan for their local staff, including those not administered by VBI. In fact, the more organizations that have staff in the project countries (15 altogether in Phase 2), the lower will be the apportioned fixed cost for each organization as a result of the economies of scale that will be achieved.
VBI has confirmed that participation by any agency that has staff in the countries of the pilot project, or other countries to which Phase 2 may be extended, is entirely feasible. On the insurance benefit side, it would be required that such agency accept the package of benefits that are the core of the pilot project (wellness day + 100% + managed care), at least in respect of staff participating in the project. It should be noted in this respect that whether another agency’s health insurance scheme is self-insured or not, or whether it is self-administered or not, does not in principle matter, except perhaps from the standpoint of the agency’s own internal arrangements. One such arrangement is in fact already in operation, namely with UNHCR in Nairobi. UNHCR has its own MIP, self-insured and self-administered. Nonetheless, UNHCR staff in Nairobi living with HIV receives managed care treatment at UNON’s one-stop clinic under VBI’s 100% coverage and direct billing arrangement.

On the financial side, VBI would create a monthly receivable comprising any hospital/medical/drug charges incurred plus the apportioned share of the fixed costs and the variable cost total for the agency’s staff and/or dependents in managed care ($50 per month per patient) for payment by the agency.

Therefore, it is recommended that other organizations consider joining UNICEF in the project, under the terms of the Pilot Project (wellness approach, 100% coverage, managed care, direct billing and payment) and with related financial arrangements directly with VBI.

3. Continued focus on HIV only

The structure of the pilot project is uniquely geared to meeting the needs of HIV-positive staff members and their dependents. In order to maximize the impact of the project approach as it is renewed and expanded, it is important to maintain that focus. To do otherwise risks a dissipation of effort and, to paraphrase the dictum, when too much is attempted little gets done.

It is therefore recommended that the Health and Wellness Programme (pilot project) be continued in Phase 2 with its exclusive focus on HIV, and that strategies to deal with other chronic conditions in the UN system workplace be developed in the context of an OSH programme at a later stage.

4. Monitoring and evaluation

Monitoring a workplace wellness and managed care programme is not a well-defined exercise. In the case of the UNICEF-Vanbreda pilot project, monitoring occurs on two bases, the organizational and the medical. Regarding the latter, RTCHS consistently receives and collates bio-medical data on the individuals in managed care. This process will be strengthened in Phase 2 with more clinical and laboratory data. VBI monitors the MIP expenses, especially with respect to hospitalizations and the costs related to opportunistic infections but is not in a position to monitor the indirect cost factors stemming from the HIV epidemic, namely absenteeism, funerary expenses and time off work to attend funerals, training and recruitment costs to replace staff, reduced productivity, as well as reduction in expenses for HIV-related medical evacuations. These costs tend to be workplace-specific and so have to be recorded “on-site”. It has been noted earlier that absenteeism can occur for many reasons and cannot be
unambiguously linked to illness. Nevertheless, over time, reduction in these “indirect cost” occurrences constitutes one of the best, though imperfect, measures of project performance at the local level.

Accordingly, it is recommended that country offices involved in Phase 2 of the Health and Wellness Programme maintain consistent records on absenteeism.

5. Insurance

It has been argued in this paper, notwithstanding the fairly widespread concern among HIV-positive staff about the adequacy of their insurance coverage, that such concerns are frequently less about the failure of plan benefits to cover needed drugs and treatment but instead more often about the inadequacy of the standard indemnity policy to meet the particular needs staff living with HIV -- the fact that traditionally virtually all plans require that the staff member pay medical expenses “up-front” and then file a claim and await partial (usually 80%) reimbursement, and that too often difficulty is encountered in affording the treatment and in waiting for outlays to be reimbursed. As this report is concerned only with HIV-related issues, and specifically as they pertain to MIP for local staff, the focus of the observations and recommendations that follow is on MIP, though the implications can be viewed in a wider insurance context.

Much of what is perceived to be inadequate in current insurance arrangements, as noted earlier, is in fact positively addressed in the Pilot Project strategy. The core elements of 100% coverage and direct payment to managed care providers (under a regime of agreed, contracted prices) eliminate out-of-pocket concerns and go some distance toward furthering trust that confidentiality will be fully maintained. A provision of MIP allows for the possibility of reimbursements above the stipulated calendar year maximum of 3-times the MIP reference salary where “demonstrated hardship is involved."42 The 100% benefit strategy for HIV positive staff in managed care eliminates the “hardship” concern for these individuals. Nor, in the context of the pilot project, is the “top-up” very high – currently approximately $400 per annum for each of 29 persons. It is important to bear in mind that the 100% coverage element is not just about financial relief for the affected staff, but about its strategic impact in reducing resistance to undergoing managed care and thereby spurring treatment and better health for the individuals concerned, leading to lower absenteeism, a more productive staff and reduced transmission of HIV.

Should the 100% regime be applied to the HIV-related medical expenses of all MIP-eligible staff? Should the 100% be further extended to all staff at all duty stations? In either case, should there be 100% coverage of these costs in the absence of the associated managed care programme? These questions engage equity concerns and at the same time raise pragmatic policy issues. There is no simple answer. It is clear, however, that these questions should be examined jointly by all organizations, and that decisions be joint decisions. Just as there is a common policy stance towards HIV, there should be no divergence related to the insurance side of the equation.

It is therefore recommended that consideration be given to increasing the level of coverage for all HIV-related treatment and drugs, in line with an agreed set of specific standardized benefits under MIP, not just for Phase 2

---

42 ST/AI/343 (31 July 1987), Para, 4.8.3
of the pilot project. Further consideration may be given to extending the same benefit level to all plans at some future stage. It is recognized that the cost implications for insurance plans need to be determined and that such an initiative would require acceptance at the plan governance level, the joint advisory bodies.

The basis of any insurance plan is that of pooled risk. At any one time, the expenses of claimants (the sick) are met out of the premium payments of the healthy. A useful rule-of-thumb is the 80:20 rule – in a given period, such as a year, 20% of the insured population accounts for 80% of the claims.

Aside from the strategic character of the 100% coverage, the expectation is that medical treatment (combined with other preventive measures) paid for now out of MIP resources will mitigate morbidity in the future and thereby reduce future charges, not alone to the plan, but also to budgets for the range of “indirect costs”. That being the case, the question can be asked whether there might not be justification for charging, if not the fixed costs, at least the variable costs of the project (the $50 per patient per month that is the RTCHS charge for managing the care) to MIP. In essence, this is not so much an insurance question as a finance and legal matter.

It is recommended that the appropriateness and feasibility of meeting the variable costs (the RTCHS components) of the Health and Wellness Programme from MIP be examined and brought to the plan governance level, as may be relevant.
Annex 1

Summary of Memoranda of Understanding between UNICEF and VBI and between VBI and RTCHS

MOU between RTCHS and VBI

RTCHS to plan and design the HIV programme implementation; to provide on-site testing through local HIV testing and counselling clinics; for the HIV-positive, to set up a comprehensive clinical treatment and managed care programme; to set up a 24-hour counseling and call centre service; check quality of drug prescriptions and drug delivery; to provide post-exposure prophylaxis.

VBI to coordinate activities and communications between UNICEF and RTCHS; assist in selection of the appropriate approach within the selected countries and identification of available resources; pay RTCHS project management fees and the costs of travel and accommodation; pay the local providers for HIV testing, out-patient consultations, laboratory tests and drugs, as well as admissions to hospitals (administered by VBI directly); assist in the selection of variables for various reports; provide eligibility data to RTCHS.

MOU between UNICEF and VBI

UNICEF to assist with communication about the pilot project locally; agree that the costs related to HIV and AIDS can be charged to MIP at the rate of 100% for the MIP-insured; initiate discussions with MIP participating organizations for possible adoption of this pilot project.

VBI to handle coordination of activities and communication related to the pilot project with RTCHS (RTCHS is VBI’s “implementing partner”); provide monthly, quarterly and yearly reports on the pilot project; make a financial proposal before the end of 2010 for possible extension of the pilot project beyond the pilot project year.

Further, according to the MOU, VBI will “bear the costs incurred for the services during the pilot project period of one year; if the pilot project is extended after this pilot period, UNICEF will take over this responsibility from VBI.”

The Pilot Project was in fact extended by 3 months, until June 2011 owing to delays in implementation in several countries, with the expenses for those three months covered by Vanbreda.
Annex 2

Results of wellness day testing (collated from the individual country case reports) and comparison of national HIV prevalence with wellness day infection rates:

<table>
<thead>
<tr>
<th>Country</th>
<th>MIP-eligible staff</th>
<th>Staff tested</th>
<th>HIV+</th>
<th>National HIV prevalence %</th>
<th>Prevalence in tested staff %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>48</td>
<td>16</td>
<td>1</td>
<td>1.8</td>
<td>6.3</td>
</tr>
<tr>
<td>Kenya</td>
<td>174</td>
<td>31</td>
<td>0</td>
<td>6.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Malawi</td>
<td>78</td>
<td>35</td>
<td>8</td>
<td>11.0</td>
<td>22.9</td>
</tr>
<tr>
<td>Mozambique</td>
<td>86</td>
<td>22</td>
<td>0</td>
<td>11.5</td>
<td>0.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>40</td>
<td>23</td>
<td>0</td>
<td>17.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>67</td>
<td>24</td>
<td>0</td>
<td>5.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Uganda</td>
<td>77</td>
<td>38</td>
<td>3</td>
<td>6.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Zambia</td>
<td>57</td>
<td>26</td>
<td>6</td>
<td>13.5</td>
<td>23.1</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>200</td>
<td>33</td>
<td>4</td>
<td>14.3</td>
<td>12.1</td>
</tr>
<tr>
<td>Total</td>
<td>827</td>
<td>248</td>
<td>22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As these data indicate, the outcome of the pilot project from a statistical perspective is inconclusive, due to the small scale of the project (by comparison with the respective national aggregates) and the very short duration of its implementation. As may be seen, conclusions cannot be drawn about HIV prevalence among UNICEF staff – the numbers involved are too few to even appropriately use the term “prevalence” (though we have used it). Nevertheless, the data, while indeterminate can be viewed as indicative when taken as a whole. The un-weighted average of the prevalence in the nine countries comes to 9.8% while the average of the infection rate data is 8.9%. It would not be valid, however, to conclude that the incidence of HIV among all of the UNICEF staff at these locations is lower than the nine-country un-weighted average prevalence. However, an expansion of the pilot project to more staff, achieving greater penetration of the programme among the eligible staff in the nine countries and possibly beyond, with more countries involved and other agencies also, would greatly increase the significance of subsequent “prevalence” findings.
Annex 3

Summary of the Constella Futures International report:

The case for investing in HIV prevention in the United Nations community of organizations has been well articulated by a consulting firm specializing in model-based empirical analyses of global health issues, Constella Futures International (CFI), in a report entitled Impact Study of HIV and AIDS on the United Nations System (31 October, 2007). The Terms of Reference for the study were developed by the Inter-Agency Human Resources Task Force on HIV and AIDS in the UN System Workplace (now called the UN Cares Task Force) and mandated that CFI:

- Conduct a quantitative and qualitative analysis of the impact of HIV and AIDS on the United Nations system;
- Make estimates of the impact of UN Cares prevention and treatment strategies on averting future HIV infections and cost savings; and
- Provide recommendations for future actions to respond to HIV and AIDS in the UN workplace through the UN Cares initiative.

Based on a working assumption that the prevalence of HIV among the worldwide UN workforce mirrors the prevalence rate among the global workforce (about 1.4% at the time of the study, as calculated by UNAIDS using global HIV prevalence and CEB Secretariat staffing statistics), CFI calculated that over the 6-year period 2008-2013 an estimated 213 HIV infections among UN staff and dependents could potentially be prevented. Aside from the humanitarian value of saving lives and improving welfare, CFI further estimated that from a financial perspective there would be strong positive return on investment in a “comprehensive” programme of prevention and treatment services. The methodologies developed by CFI and the principal findings are briefly reviewed below.

As its starting point, CFI report recognizes the leading role of the United Nations system of organizations in addressing HIV in the workplace, and the fact that as a matter of policy all staff and their dependents “have access to prevention education, voluntary and confidential counseling and testing services, health insurance and a workplace free of stigma and discrimination”.

The focus of the report is on generating estimates of the impact of workplace prevention strategies rather than on an analysis of the economic impact of HIV and AIDS on the United Nations system per se, an approach that directly relates to the purposes of the VBI pilot project.

The economic impact model factors in on the “benefit” side, that is, costs that are not incurred by UN organizations as a result of a workplace prevention and treatment programme, such variables as estimates of the costs to replace and retrain staff, death benefits and work time lost due to attendance at funerals. To the extent feasible these data are UN-specific and otherwise proxy data and best estimates have been used. For example, due to the difficulty in determining the total size of the UN system the study utilized official United Nations staff statistics from the CEB Secretariat, which cover only regular staff and, therefore, undercount the true employment figures.

As UN Cares is a global programme, not just concerned with the high HIV prevalence regions of sub-Saharan Africa, the study applied 2006 UNAIDS official national prevalence estimates to the UN employee populations in all regions in which staff were present. The study also assumed the employees of each UN agency could access prevention and treatment services equally. While death benefits were calculated from individual agency data, other factors such as HIV prevalence, costs of prevention and treatment services, replacement costs, funeral attendance costs as well as baseline sexual behaviour statistics were based on regional data.

The study then examined the manner in which the UN Cares prevention strategies affected the behaviour of UN staff and consequently the degree to which the number of new HIV infections was impacted. Five prevention strategies, designed to modify risky behaviours and strengthen non-risky behaviours, were covered:

- Prevention education
- Condom distribution
- Treatment of sexually-transmitted infections
- HIV testing and counselling
- Prevention of mother-to-child transmission services.

As UN-specific data regarding employee risk behaviour was unavailable, the study utilized as a proxy for the UN system workplace country-level information from other sources. The risk behaviour indicators developed on this basis included the sexually active population percentage, coital frequency, average number of partners, consistency of condom use, prevalence of sexually-transmitted infections (STI), percentage of persons with STIs seeking treatment, number of women who are HIV-positive and could potentially become pregnant.

The degree to which a prevention and treatment programme strategy can be effective is directly related to the proportion of the target population that accesses the HIV testing, counselling and treatment services (“coverage”). CFI applied the impact model to two coverage scenarios, a “low” coverage level of 20% (i.e. coverage of both prevention and treatment services in each region is 20%) to conservatively approximate actual coverage levels across the various organizations and a “high” or comprehensive coverage workplace programme under which 80% of the workplace population accessed prevention and treatment services.

An effective prevention programme leads to change in behaviour, that in turn impacts prevalence and certain related costs. Averting these costs is the financial “benefit” against which the programme costs are measured. The CFI study made calculations of average death benefits for the various regions based on established policies and procedures and on certain other assumptions. The cost of recruiting and training a new staff member was assessed to be the equivalent of about one year’s staff cost. Through a focus group approach, estimates were generated regarding the “cost” of AIDS-related funeral attendance, and tests were made in support of the hypothesis that AIDS-related funerals were mainly a concern of the sub-Saharan high prevalence African countries.
The CFI report acknowledged several significant data limitations that affected the quality of the analysis. The most serious of these, referred to previously, was the lack of better personnel data. Lack of information regarding the location of residence of dependents made it difficult to more correctly apply the UNAIDS national prevalence statistics. Also, owing to the UN policy of not requiring disclosure of HIV status or screening for HIV, allied to the policies regarding stigma and discrimination, UN-specific data were unavailable, necessitating the use of national-level data as a proxy.44

Based on 2005 CEB data for the system-wide regular staff, almost 58,000 employees, CFI estimated that the total UN system population at risk for HIV infection, including dependents, was 148,100 persons, based on 2.1 dependents per staff member. The analysis then focused on the impact of a workplace programme of prevention and treatment on:

(a) The number of new HIV infections averted;
(b) Programme costs and financial benefits;
(c) Economic measures of programme impact.

Based on this analysis, CFI concluded “providing a comprehensive work place programme for United Nations staff and their dependents not only prevents new infections, but offers good value for money.”45 The report came to the further conclusion that under the comprehensive strategy (80% coverage) 213 new HIV infections could be averted by the end of the six-year period 2008-2013, representing around 30% of all new HIV infections occurring in this time period. On the other hand, the 20% coverage “low” strategy would avert only 60 new HIV infections, about 8% of the new infection total.

The probability that staff and dependents may become infected with HIV bears a strong relationship to the impact of workplace prevention and treatment programmes. The study considered in particular the impacts of prevention learning, condom distribution and voluntary and confidential counseling and testing (VCCT), treatment of sexually transmitted diseases (STI) and prevention of mother-to-child transmission (PMTCT). The study specifically analyzed the impact of UN Cares prevention strategies on three behaviour measures critical to the reduction of HIV in the workplace, namely, consistent condom use, treatment of STIs, and the average number of sexual partners. Based on a review of the literature regarding the impact of these prevention modalities on the three sexual behaviours, CFI found that:

HIV testing and counseling has the largest impact on condom use;
providing access to effective medical treatment of STIs has the largest impact on getting treated for STIs; and prevention education has the largest impact on the average number of sexual partners. Aside from the treatment benefits of PMTCT, changes in all three risk measures impact the probability of becoming infected with HIV. This analysis estimates the number of HIV infections averted under the UN Cares strategies using this probability estimate.46

44 CFI Report. p.14
45 Ibid. p. 15
46 Ibid. p.16
Without any prevention or treatment services (i.e. if the United Nations “did nothing”) this study estimates there would be 722 new HIV infections among United Nations staff and their dependents. This estimate compares with 509 new infections under a comprehensive strategy and 662 infections under a low strategy.\(^{47}\)

CFI noted further that:

\begin{quote}
The number of infections the United Nations can avert under a comprehensive strategy is highest in those regions with the highest regional prevalence and the highest number of United Nations staff...A comprehensive workplace strategy will avert approximately 51 infections in Eastern Africa and 69 infections in Southern Africa by 2013. These are the regions hardest hit by HIV and AIDS worldwide, and presumably the hardest hit for United Nations staff.\(^{48}\)
\end{quote}

The study developed a value analysis based on estimated costs of establishing a workplace prevention and treatment programme of the kind indicated above, contrasted with the financial benefits flowing from the resulting lower incidence of HIV infections and deaths from AIDS-related causes, as quantified by the extent to which future costs incurred by the payment of death and funerary benefits, and the recruitment, replacement and training of new staff will have been averted.

The costs per region were calculated based on a per capita estimate of programme costs and the number of UN staff per region. For the global staff total of 58,000 (the global total based on 2005 CEB data for regular staff), the aggregate cost of the comprehensive strategy (80% coverage) was estimated to be $8.6 million, or just over $1.4 million for each of the years 2008-2013. Under the Low strategy scenario (20% coverage) the corresponding aggregate cost was estimated to be nearly $2.2 million, for an annual cost of $360,000. With respect to the regions of Eastern Africa and Southern Africa the corresponding figures were as follows:\(^{49}\)

\begin{table}[h]
\centering
\begin{tabular}{lcccc}
\hline
Region          & Total staff & Coverage level & Estimated annual programme cost & Six year total programme cost \\
\hline
Eastern Africa & 5,225 & 20% & $32,365 & $194,190 \\
Southern Africa & 1,963 & 20% & $12,160 & $72,960 \\
Global         & 57,988 & 20% & $359,188 & $2,155,128 \\
\hline
Eastern Africa & 5,225 & 80% & $129,460 & $776,760 \\
Southern Africa & 1,963 & 80% & $48,637 & $291,822 \\
Global         & 57,988 & 80% & $1,436,753 & $8,620,518 \\
\hline
\end{tabular}
\end{table}

\(^{47}\) Constella, p. 18  
\(^{48}\) Ibid. p. 19  
\(^{49}\) Data drawn from CFI, Table 4, p.22 and Appendix C, pp 44,45
Globally, the cost per infection averted was calculated to be $40,472 for the 80% coverage level and $35,919 for the 20% level (the marginal cost of each infection averted increases as coverage level approach 100%). For Eastern Africa, the cost per infection averted comes to $15,324 under the 80% scenario and $13,439 under the 20% scenario. The corresponding costs for Southern Africa are $4,249 and $3,895, respectively. Constella concludes that if the cost incurred by the United Nations of averting one new HIV infection per year comes to between $36,000 and $40,000, such costs are less than the annual average staff replacement costs.

**Benefit/cost analysis**

CFI carried out a cost-benefit analysis, comparing the future flow of benefits to the flow of programme costs over the same period, expressed in “present value” terms at an annual rate of 3%. That analysis led to an estimate that the United Nations could achieve a level of benefits (i.e. future expenditures avoided) of about **four** times the programme costs through implementation of the comprehensive workplace strategy.

*If UN staff and their dependents access prevention and treatment services this can decrease future expenditures in two ways:

- If individuals that need it receive antiretroviral treatment, this allows those individuals to remain productive workers in the workplace, and
- If prevention services are successful in averting future infections, the number of individuals that will eventually need antiretroviral treatment decreases…*

The study recognized that in light of the timeframe and resource constraints it was not possible to take account of all future costs saved, such as the positive effects of better health and morale on staff productivity and lessened absenteeism, thus possibly understating the full benefits of the comprehensive strategy.

CFI also carried out a rigorous analysis of the comprehensive strategy in terms of valuing lives saved utilizing the concept of the DALY (disability adjusted life-year, a metric that combines morbidity and mortality), an economic rather than financial indicator of the return on investment in prevention and treatment. Several approaches were followed in demonstrating the way in which, and the extent to which, strategies to avert HIV infections translated into significant benefits for the United Nations.

Based on the calculation that, under the Comprehensive strategy, the cost of each averted infection came to about $40,000 the study concluded that the cost of each DALY saved was near $7,000. Those costs compare very favourably with the global UN annual staff cost level of $57,000.

In order to compare benefits and costs using any one of three indicators, the internal rate of return (IRR), net present value (NPV) and the benefit-cost ratio (BCR) require ascribing a monetary value to each DALY saved. In the present case, the study puts that value at $50,000, approximately equivalent to the average annual UN staff

---

50 CFI Report p.23
51 Based on the assumption that each infection averted saves 6 DALYs of the 2009-2017 period. See CFI Report, p. 27
cost, and each infection averted as a result of the UN Cares programme adds six DALYs.

The IRR, the interest rate that equates current and future costs of the programme and its benefits in present value terms came to a very high 145% for the 10-year period 2008-2017, based on a valuation of $50,000 for each DALY saved and a programme cost (per UN Cares estimates) of $1.4 million for each of the 10 years.\(^{52}\)

A benefit-cost calculation, differing from the earlier purely financial benefit-cost ratio, defines benefits in terms of DALYs and programme costs. For the same 10-year period the aggregate cost of the programme, $12.6 million ($1.4 million a year discounted annually at 3%) and the aggregate discounted flow of benefits of $62.4 million (in terms of cumulative DALYs times $50,000 each) yield a benefit-cost (C-B) ratio of 4.95.\(^{53}\)

Whether the measure is the IRR or the C-B ratio, the analyses demonstrate that the comprehensive strategy yields high positive results.

The study also considered the impact of several elements that were not accounted for in the model. These included the data limitation of not counting non-regular staff, the costs of attendance at AIDS-related funerals, the effect of staff mobility and high-stress deployments, and most importantly, the impact of stigma and discrimination.

Based on the highly positive results of the analyses, the Constella Futures report concludes by making a strong recommendation that the United Nations should implement a Comprehensive strategy for its UN Cares programme.\(^{54}\)

\(^{52}\) Ibid. pp. 28,29  
\(^{53}\) Ibid. pp. 30,31  
\(^{54}\) Ibid. p. 34
Annex 4

Business case analysis

A business case analysis was carried out in the UNICEF report, in part along the lines and methodology of the Constella Futures International analysis, the purpose being to outline a justification for the project, formalize the pilot project programme cost structures and to assess the cost-effectiveness of the project. The exercise was undertaken both to sharpen the assessment of the pilot project and to establish a performance baseline for a possible extension of the project to Phase 2 and, in effect, provide an objective rationale for further investment in the programme. To the greatest extent possible, the efficiency calculations are based on the actual costs and outcomes of the pilot project. Where no UNICEF data exist, other sources have been drawn upon as proxies.

The cost and cost effectiveness (for 100% coverage\(^55\)) data and calculations provided in the report and the key elements of the calculations are summarized as follows:

1. Total pilot project cost (rounded) $360,000
   This represents the UNICEF, VBI and RTCHS total cost including “top-up” to 100%

2. Prevalence of HIV in UNICEF staff (total 816) 8.6%
   This figure is derived from the aggregate country case file data. Of the 816 eligible staff members deployed among the nine countries that participated in the Pilot Project, 255 underwent testing and 22 were found to be HIV positive

3. Transmission probability 74%
   This parameter is drawn from a 2007 research study that tested the hypothesis that the probability of HIV transmission from men to women must be far higher than previously thought. “Highly efficient HIV transmission to young women in South Africa”, Pettifor, Audrey, et. Al.

4. Number of new infections, if no treatment programme 52
   (Derived from - UNICEF staff total (816) x prevalence (8.6%) x transmission probability (74%))
   Estimates, below, of the protective effect of HIV treatment services prior to the Pilot Project are based survey data from Malawi. Of 391 health care worker respondents, 21 disclosed their HIV status (5%), of who 17 received treatment (81%). It is assumed in the EC study that these proportions apply also to UNICEF

\(^55\) The term “coverage” here refers only to the rate at which medical expenses are paid and does not have the same meaning as that referred to in the Constella Futures study in the context of the Comprehensive strategy.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Proportion of UNICEF staff tested before Pilot Project</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>Of staff tested HIV positive, proportion receiving anti-retroviral treatment</td>
<td>81%</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of HIV related diseases averted (5% x 81%) (Pilot Project results)</td>
<td>4.1%</td>
</tr>
<tr>
<td>8</td>
<td>Proportion of staff tested (255/816)</td>
<td>31%</td>
</tr>
<tr>
<td>9</td>
<td>Of those tested HIV positive, proportion who chose to participate in the managed care programme (From Pilot Project data. Of 32 tested, 30 are in managed care treatment (30/32), which is assumed to be 100% effective)</td>
<td>94%</td>
</tr>
<tr>
<td>10</td>
<td>Percentage of HIV infections averted under Pilot Project (Derived from line 8 x line 9)</td>
<td>29.30%</td>
</tr>
<tr>
<td>11</td>
<td>Net gain in percentage of HIV infections averted (Line 10 minus line 7)</td>
<td>25.20%</td>
</tr>
<tr>
<td>12</td>
<td>Net HIV infections averted, and therefore deaths (one year)</td>
<td>13</td>
</tr>
</tbody>
</table>
Annex 5

VBI financial proposal for Phase 2

<table>
<thead>
<tr>
<th>Scope</th>
<th>Programme component</th>
<th>Financial proposal Annual cost in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine countries</td>
<td>Fixed Programme Expenses</td>
<td>114,000</td>
</tr>
<tr>
<td></td>
<td>Variable Expenses</td>
<td>21,000</td>
</tr>
<tr>
<td></td>
<td>Sub-total</td>
<td>135,000</td>
</tr>
<tr>
<td></td>
<td>Expenses Related to the Project</td>
<td>36,900</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>171,900</td>
</tr>
</tbody>
</table>

Fixed programme expenses comprise the following:

- Coordination between VBI, UNICEF country offices, RTCHS and providers
- Overall programme coordination with UNICEF HQ
- Pro rata of FTE expenses for VBI programme manager, VBI Medical Board, RTC programme coordinator, RTC medical team
- Reporting
- Set-up and maintenance of a clinical treatment management programme
- Set-up and maintenance of the 24-hour counseling and call centre services
- Eligibility management
- Development of communication material for plan members and providers
- Production and distribution of ID cards in the framework of the project
- Contracting providers for the project and continuous follow-up with these providers
- Pro rata travel expenses of VBI’s representatives

Variable expenses are comprised of the following:

- Individual implementation of the clinical treatment and management programme for the HIV positive plan member. This encompasses making appointments with providers, following up on lab test results, engaging directly with the HIV positive individual, shipping medication where needed/possible
- Expenses for outbound calls to individuals
- Claims management for HIV positive plan members
- Paying local providers, including bank costs
Expenses relating to the project comprise the expenses involved in organizing on-site testing, the wellness component and travel expenses for RTCHS personnel. This figure is an estimate only; consistent with prior estimates covering the same area. Only actual expenses incurred would be charged to the programme.

VBI has also provided marginal cost data showing the increment to Phase 2 costs for each country added. Thus, if the project were expanded to 10 countries, the fixed programme expense would increase by $12,000, from $114,000 to $126,000. If the project were to be expanded to 15 countries – the original nine plus Nigeria and the five new countries – the fixed programme expense figure would increase by $12,000 times 6, or $72,000.

The variable cost figure in the table above is based on the RTCHS fee of $50 per patient per month – the figure of $21,000 above reflects an assumed 35 persons in treatment times $50 times 12 months. The assumed 35 are based on the maximum number of persons in treatment during the course of the Pilot Project.

MIP charges are not reflected in the figures above.