Botswana-Baylor Children’s Clinical Centre of Excellence

Annual report 2008
FOREWORD

I am pleased to report that the year ending June 30th 2008 has been a very special one for all of us at the COE. We celebrated five years since the clinic was opened on 20 June 2003 and we did it in great style: We hosted the 9th BPJAI Network meeting whose opening ceremony was graced by Honourable Lesego Motsumi, the newly reappointed Minister of Health. Afterwards delegates were treated to a grand gala dinner during which Mark Kline, the BPJAI President was awarded the “Botso Award” in recognition of his contribution to the health of African children and their families who are infected or affected by HIV and AIDS.

To cap it all, His Excellency Former President Festus Mogae found the time to personally hand over the Botso Award to Mark Kline after a moving citation by Honourable Motsumi. Those who had attended previous Network meetings pronounced the 9th meeting “the best ever” and “a difficult act to follow.” I want to thank all those staff COE who worked tirelessly to make our Fifth Year Anniversary so memorable.

It is gratifying to note that we have maintained very high standards in delivering services to our patients. In addition, service expansions have occurred in several programmes including the In-reach and Physician Outreach and Adolescent. Of these three, perhaps the Adolescent Programmes which features the “Teen Club” and whose activities have grown to include teens in Greater Gaborone has expanded most. In this regard, our regular staff and growing number of committed volunteers have all been indispensable. Special thanks are due particularly to the leadership of these programmes.

A major challenge this past year has been the MEDITECH system — the official Ministry of Health patient management system — with which our clinic staff have really struggled to cope. Frequent and prolonged breakdowns have not helped. Thus we have been forced to consider an alternative solution. It is therefore with anticipated relief that we move into the coming year with plans for implementing a tested and trusted electronic medical record or EMR. We expect not only to maintain better medical records, but also to save time, reduce patient waiting times and boost staff morale.

Another challenge has been coping with the impact of the “Scarce Skills” remuneration package that was introduced by the Government of Botswana early this year. The generous allowances engendered by this package have been welcomed by affected health professionals, but due to budgetary constraints, the COE was not able to match these increments. While our better work environment may have cushioned the COE against what could have been major staff losses, there will likely be pressure this coming year to narrow this new remuneration gap if we are to maintain a competitive edge in staff retention. In spite of these challenges, it is gratifying to note that our staff has made sure that every child and family whom it has seen our privilege to serve has received what has become our trade mark, that is, quality attention and care.

As in previous years, we have maintained excellent collaborative working relationships with our colleagues at the Princess Marina and Nyangabave Referral Hospitals and have developed new partnerships as our physician and nurse mentoring services have expanded from six to twenty-one other health facilities throughout Botswana. Provision of light aircraft flights have enabled our doctors to serve in the furthest corners of Botswana and we are very grateful to Airborne Lifeline and its collaborative partnership with the Ministry of Health for providing this much needed service.

Closer to home, all of our clinics have continued to show encouraging trends. More than ever, fewer children are being diagnosed with HIV and those who are infected are coming into care early. Regarding research, the BANA-2 study has achieved full patient enrollment and may be concluded during the coming twelve months. Not least, our team of ten Paediatric AIDS Corps (PAC) doctors have been tireless in outperforming themselves on all fronts.

We have been successful in securing multi-year funding support for the In-reach and Extended Physician Outreach projects and the evaluation of Paediatric KITSO training project is nearing its completion. Our collaboration with UNICEF, CDC, Botswana, the National AIDS Coordinating Agency and Ministry of Local Government and more recently the Ministry of Education and Skills Development remain excellent. At the community level we are looking to explore new partnerships and collaborations in providing psychological and social support to our fast growing adolescent paediatric population. With regard to partnerships, we are ever conscious of the fact that we can never do it all by ourselves. Rather, we are continuously looking to build on each partner’s synergies and strengths in order to bring quality services to all children in need in the most efficient and efficacious manner.

Among the challenges that lay ahead, the need to prepare for the care of the ever increasing population of adolescents and young adults who are living with HIV and AIDS stands out most. We must pool resources and discover better methods to help these most vulnerable members of our community. This is the challenge of our time: it is also the opportunity of our age.

As we look forward to the year ahead, I feel confident that, given the continued commitment of our staff, partners and funders, we can all grow from strength to strength and to greater and greater heights in terms of our service delivery.

Sincerely,

Gabriel M. Anawbani
Executive Director
1. OUR HISTORY

1.1 The Botswana-Baylor Children’s Clinical Centre of Excellence

The Botswana-Baylor Children’s Clinical Centre of Excellence (COE) was dedicated in June 2003 by the former President of Botswana, H.E Festus Mogae. The centre celebrated five years of caring for Botswana’s children in June 2008. The COE is the product of a public-partnership between the Baylor College of Medicine International Pediatric AIDS Initiative (BIPAI) in Houston, Texas, USA and the Government of Botswana. Baylor College of Medicine is among the top ten medical schools in the USA and is internationally renowned for excellence in education, research and patient care.

In 1999, Professor Mark Kline, who was then Chief of Retrovirology at the Texas Children’s Hospital established a collaborative staff exchange and research relationship between Princess Marina and Texas Children’s Hospital. A relationship developed between him and Professor Gabriel Anabwani, who was at the time the head of Paediatrics at Princess Marina Hospital. By 2001, under the leadership of Mark Kline, a free-standing centre for the care of HIV infected children was established in Romania in 2001. Given his interest in the plight of children infected by HIV/AIDS in Botswana, and motivated by Botswana’s exemplary leadership in the fight against HIV and AIDS, Mark Kline proposed the construction of the COE on the Princess Marina campus. Bristol Myers Squibb Secure the Future programme pledged 100 million USD for the construction of the COE, as well as financial support for five years.

The COE operates on the principle of collaborative partnership with the Ministry of Health and all its programmes are guided by the policies of the Government of Botswana. The services provided by the COE aim to enhance the health of children and their families through a comprehensive approach to HIV treatment and care. Health professional education, clinical research and community outreach are also integral to the COE’s mission.

Botswana’s approach to care strongly promotes emphasis on community partnerships and outreach services. Community outreach is a critical component of the COE’s commitment to Botswana. The presence of Paediatric AIDS Corps since 2006 has made it possible to plan and expand services to include home visits for all COE patients, physician outreach and mentorship to other hospitals and the pilot programme that educates school teachers. The COE also aims at developing the capacity to treat and care for HIV infected/affected children. Over the past year a number of Botswana physicians in the COE has significantly increased.

By June 2003, when the COE recognised its 5 year anniversary, more than 9000 patients had been tested for HIV, over 2000 started on highly active antiretroviral therapy and more than 800 health professionals trained country-wide. The COE has become a significant part of Botswana’s fight against the HIV pandemic and a model for several other centres that have followed in Lesotho, Swaziland, Uganda, Malawi, Burkina Faso and Tanzania.
The chart below illustrates COE’s key relationships, and how they are guided by the Memorandum of Agreement with the Government of Botswana and the Deed of Trust:

**RELATIONSHIP BETWEEN THE COE AND KEY STAKEHOLDERS**

<table>
<thead>
<tr>
<th>BIPAI</th>
<th>BOTSWANA GOVT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MOA &amp; DEED TRUST</td>
</tr>
<tr>
<td>LOCAL ADVISORY BOARD</td>
<td>COE BOARD OF TRUSTEES</td>
</tr>
<tr>
<td>DEED OF TRUST</td>
<td>MOA &amp; DEED TRUST</td>
</tr>
<tr>
<td>COE</td>
<td>PMH</td>
</tr>
</tbody>
</table>

MOA or DEED OF TRUST = relationship as defined in the memorandum of agreement or the COE Deed of Trust

**Celebrating 5 years of touching children’s lives in Botswana**

In June 2008, the COE celebrated 5 years of changing the lives of Botswana children, who, until the COE was established, had little hope for survival. Even though the COE has been in existence for a short time, a lot can be said about how far it has come. The COE Executive Director, Gabriel Anabwani, always speaks with passion about where the COE is coming from, and where we are going. He clearly remembers the day the COE was opened, when it was dubbed by the international media as ‘a white elephant which will never benefit the children of Botswana’. Today, the COE tells a different story. Below are the milestones worth mentioning:

- Sept 1999    Began collaboration between BCM & Dept of paediatrics at PMH
- Dec 2001    BANA-I Trial officially launched
- Aug 2001    Ground breaking for COE
- May 2002    Screening Clinic, PIDC
- Aug 2002    Construction of COE commences
- April 2003  COE Director appointed
- June 2003   Opening of the COE: PIDC, FMC, BANA-I;
- July 2003   1st COE staff recruitment
- Dec 2003    Signing of MoA with GoB
- Dec 2003    Outreach Services commenced
- Dec 2003    Registration of BBCCCCE Trust
- Mar 2004    Start of BANA-2 trial
- May 2004    Launch of Pediatric KITSO
- June 2004   IFC and Adolescent Services resume
- June 2004   Strategic Planning 2005-2009
- Dec 2004    1st Annual Camp (Mokolodi)
- Aug 2006    Arrival of PAC doctors
- Jan 2007    Further expansion of services

**1.2 Baylor International Pediatric AIDS (BIPAI) Initiative**

BIPAI was established in 1996 with the aim of fostering international HIV/AIDS prevention care and treatment, health professional education and clinical research. BIPAI consists of a network of clinical centres modelled after two landmark HIV/AIDS care and treatment centres constructed and opened in 2001 in Constanta, Romania and Gaborone, Botswana in 2003. These centres represent active partnerships between BIPAI and local governments Ministries of Health. They are staffed collaboratively by U.S.A. and local health professionals. Members of the network currently consist of health professionals from HIV Centres in Romania, Mexico, Argentina, Libya, Botswana, Uganda, Lesotho, Swaziland, Malawi, Burkina Faso, and the U.S.A.
BIPAI aims to develop the local capacity of healthcare workers and enhance their models of care. In 2006, BIPAI recruited Pediatric AIDS Corps (PAC) Doctors as part of a joint program of Baylor College of Medicine and the Bristol-Myers Squibb Foundation’s Secure the Future initiative. Through this initiative, BIPAI will deploy 50 doctors to countries around Africa for a period of five years.

This initiative demonstrates that despite limited resources, comprehensive care for children is possible by combining excellent doctors, solid infrastructure, and valuable partnership with governments and real training.

The BIPAI president, Prof. Mark Kline, has in many forums indicated the top 10 values of the BIPAI Network:

10. We celebrate diversity
9. We value teamwork
8. We focus on solutions, not problems
7. We are hopeful and optimistic
6. We respect and prize our partners
5. We never give up
4. We refuse to duplicate or squander resources
3. We see opportunity in every challenge
2. We are true to our word
1. We allow nothing to distract us from our commitment to children and families

BIPAI PARTNERS

BIPAI works in close partnership with the following organizations:

- Elizabeth Glaser Paediatric AIDS Foundation
- U.S. Centers for Disease Control and Prevention
- Fogarty International Centre
- U.S. State Department

- Governments of host countries
- Bristol-Myers Squibb Foundation
- Abbott Fund
- UNICEF
2. DELIVERING OUR STRATEGIC OBJECTIVES

2.1 Introduction

The COE’s mission is stated as follows:

“To pursue excellence in the provision of comprehensive care and treatment, in clinical research and health professional training and to become nothing less than the finest paediatric HIV/AIDS centre in the world.”

Below is a statement of objectives which have been set by COE in order to achieve its mission:

• to provide comprehensive state-of-the-art HIV/AIDS care and treatment services to the children of Botswana and their families using the COE as a springboard to the whole country;
• to carry out clinical research designed to answer questions of local and worldwide importance regarding the prevention, diagnosis, and treatment of paediatric HIV infection;
• to enhance the care of children through multi-disciplinary clinical research and health professional training; and
• to promote and foster the spirit of scientific and technical cooperation and international understanding through student and staff exchanges, collaborative research, and training.

2.2 Implementing the Strategy

The COE’s first strategic plan for 2005-2009 has served as a strong guide in the direction of all COE programs. With the input from the Board of Directors, the COE management as well as our staff and partners, the COE has seen several strategic achievements over the past year:

• The Physician Extended Outreach Programme, which was piloted in 2006 to support the care being offered to children in ARV sites around the country, expanded from 10 sites to 22 sites around Botswana, and it is still expanding.
• The intensive follow-up of patients has been expanded from children who are falling treatment to all children seen at the COE. These home visits are part of the ‘in-reach’ projects.
3. PATIENT CARE

3.1 Screening Clinic

The Screening Clinic remains an important part of services offered to patients coming to COE. Although the Ministry of Health has rolled out testing of children to many clinics around Gaborone, we still see an average of 10 screening patients per day. The majority of our patients come from Princess Marina Hospital. On discharge, mothers who participated in the Prevention of Mother to Child Transmission (PMTCT) programme are asked to bring their babies to the COE for DNA PCR within 6 months. The delivery ward in Princess Marina Hospital sends the list of these patients to the Screening Clinic for tracking. In addition, the clinic accepts both self referrals and referrals from other clinics.

Every HIV exposed Motswana baby is tested at 4 to 6 weeks of age to coincide with the mother's postnatal visit. The Dry Blood Spot (DBS) DNA PCR test is used which allows for quicker diagnosis of HIV infection in children, with a typical turn around time of 2 weeks.

All primary caregivers coming to the COE receive intensive pre- and post test counseling which is vital in reinforcing important HIV related education and care. The screening nurse also engages caregivers in a discussion covering questions such as:

1. Who should be screened?
2. When should a patient testing negative for HIV be re-tested?
3. When should a patient testing HIV positive be re-tested?
4. When should cotrimoxazole be given to an infant?

The following tables detail the numbers of children by both rapid tests and DNA PCR since January 2008. The figures clearly indicate that fewer children test positive, using both DNA PCR & rapid tests.

**TABLE 1: DNA PCR Results (January 2008 – July 2008)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Negative</th>
<th>Positive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>15</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>Feb</td>
<td>24</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>March</td>
<td>27</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>April</td>
<td>19</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>May</td>
<td>12</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>June</td>
<td>22</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>July</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>39</td>
<td>172</td>
</tr>
</tbody>
</table>

**TABLE 2: Rapid test Results (January 2008 – July 2008)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Negative</th>
<th>Positive</th>
<th>Awaiting Results</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>73</td>
<td>14</td>
<td>1</td>
<td>88</td>
</tr>
<tr>
<td>Feb</td>
<td>69</td>
<td>3</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td>March</td>
<td>67</td>
<td>8</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td>April</td>
<td>69</td>
<td>4</td>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td>May</td>
<td>23</td>
<td>9</td>
<td>4</td>
<td>36</td>
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<tr>
<td>June</td>
<td>32</td>
<td>6</td>
<td>3</td>
<td>41</td>
</tr>
<tr>
<td>July</td>
<td>27</td>
<td>1</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>45</td>
<td>27</td>
<td>422</td>
</tr>
</tbody>
</table>
3.2 Paediatric Infectious Disease Clinic (PIDC)

The Paediatric Infectious Disease clinic in the COE is one of the largest providers of highly active antiretroviral (HAART) treatment for children in Africa. As part of the Government’s National ARV Rollout Program known as MASA (literally, “new dawn”), it provides comprehensive treatment and care services to all Botswana children, free of charge. The PIDC team consists of nurses, doctors, social workers, and psychologists who work together towards achieving excellent, comprehensive treatment and care of children infected/affected by HIV/AIDS. Since its inception, 1433 children have been initiated on HAART by PIDC staff. One of the goals of the PIDC is to work towards decentralization by transferring stable children who are doing well on treatment to ARV centers closer to their homes. To date the COE has reached this goal with 315 patients. As part of the COE’s strategic plan, existing programmes continue to improve. In order to help empower patients to maintain good adherence and to counteract treatment failure, the following initiatives were implemented in 2006.

(i) Intensive Follow-up Clinic or ‘In-reach’

Providing appropriate care to HIV positive children is a big challenge to families. Optimising care and support for such children is one of the goals of the COE. With this in mind, the COE continues to intensify its “in-reach” programme. The term “in-reach” was coined because it represents a broadening of services to patients who are already enrolled in the COE programmes. The patients who qualify for “in-reach” are typically those with difficult home situations and inadequate adherence.

The COE’s intensive follow-up programme involves weekly visits to patients’ homes to conduct an overall social assessment of the home and identity needs per family. The goal is to ensure that children and caregivers have all the support needed not only at clinic level but at family and community level. The COE “in-reach” team typically comprises a nurse, a social worker and sometimes a nutritionist. With the leadership of Mrs. Mnpula Sechele, the COE’s Nurse Manager; and Bakani Johnson, the COE’s Social Worker; this has proven to be a fruitful and strong intervention strategy for patients with poor adherence.

Currently, 150 home visits have been completed. The support of caregivers for this programme has been encouraging. Working with caregivers in a relaxed and familiar environment, such as the home encourages open expression of existing child and family needs. With such home visits, we have been able to help clients disclose to their families and thereby ensure that other family members are able to support caregivers. Education about medication is also done during the home visit, with an emphasis on adhering to ARVs as well as other components of the medical care plan, such as keeping appointments, hygiene and good nutrition. Family members are also encouraged to attend structured Adherence Counselling Sessions, which are conducted at the COE from Monday to Friday every week.

There has been a lot of progress among the children and families visited for both adherence levels and general care.
A small survey was recently completed to assess the impact of in-reach on adherence. The survey was looking at the adherence of patients seen at the clinic using Pill Count and calculating adherence percentage. These numbers indicate adherence during every visit, not per patient. The results for three months were computed, and the adherence was rated as follows:

- Excellent: (100%)
- Good: (95% - 99%)
- Fair: (85% - 94%)
- Poor: (84% and below)

More than 100% indicates missing doses.

In three months 1527 consultations were made and adherence was calculated. Of these:

- 527 patients were rated excellent
- 316 patients were rated good
- 126 patients were rated fair
- 32 patients were rated poor

The majority of the patients are doing well on treatment from these results.

In the coming year, the COE plans to expand the ‘in-reach’ program to all children on treatment in the COE in order to prevent treatment failure by introducing appropriate interventions long before they fall treatment.

**Adherence Counseling**

One of the services P IDC offers to all of the patients and families at the COE is adherence classes. We strongly encourage all caregivers to attend, especially those preparing to initiate HAART and those with documented poor adherence. COE staff, including nurses and social workers, participate in teaching caregivers about HIV, HAART, and the importance of adhering to medications. When these classes began in 2006, they were offered three times a week. To meet the increased needs of our families, they are now given daily. After these classes, many of the caregivers demonstrate better understanding that translates into better adherence. These classes also serve as an important forum for caregivers to ask questions, to interact with other caregivers facing similar issues, and to find encouragement and support from other caregivers and COE staff. Caregivers are encouraged to bring their children to the classes but only if the child’s status has been disclosed to them.

**Challenge Clinic**

In July 2008, in accordance with the new 2008 Botswana National HIV Guidelines, the COE started its first “Challenge Clinic” for children who were failing second line ARV therapy. We currently have 18 children in the clinic who are known to meet the criteria for failing treatment. Every two weeks, a multidisciplinary team of physicians, nurses, social workers, and psychologists gather to discuss these cases as a team in order to improve the care and management of these children. All COE members are welcome to join the meetings, and everyone brings their past experiences of working with each patient and individual strengths to the table for discussion. In addition, general issues related to the overall care of HIV in the Centre and on the national level are discussed. Linkages with the outreach and in-reach programs are often made to improve the care of each involved child. Our goals in Challenge Clinic are:

- To improve each child’s quality of life.
- To decide on plans to improve virological outcomes.
- To increase our group’s collective knowledge of complicated HIV cases.

The pursuit of these goals ensures that children with failing ARV regimens continue to receive high-quality care and support.
3.3 Adolescents’ Clinic

The COE’s Adolescent Clinic started in 2005 with 23 teenagers. By June 2008, the clinic had enrolled over 275 teenagers. With antiretroviral therapy and expert clinical care, more of our children are surviving their early years and reaching adolescence. We estimate that by 2010 the COE will have over 600 teenagers. Teenagers need appropriate skills to help them in their transition to adulthood. In particular, teenagers in the COE need education on how to live positively with HIV and understand that there is life beyond HIV. They also require psychosocial support, particularly on how to deal with issues of stigma, relationships, life planning, and adherence. Our adolescents are provided with additional support including age-appropriate HIV education, psychosocial counseling when necessary, monthly clinical visits to improve adherence, and an invitation to join our Teen Club for peer support. Healthcare providers who staff the Adolescent Clinic have extensive expertise and experience in working with the adolescent population. As this age group increases in number at our clinic, we will continue to expand our support services for this population.
Teen Club

Teen Club is a recreational and psychosocial support intervention that evolved as a forum for teenagers to meet with other HIV-positive peers who are experiencing many of the same difficulties of adolescence. Teenagers who join the club know their HIV status and have the consent of their caregivers to attend club activities. Teen Club has experienced a huge growth trajectory since the first event in May of 2005 to over 75 attendees in June of 2008. The Teen Club events occur every month on a Saturday morning and a multidisciplinary team of adult healthcare workers regularly volunteer their time. Past events have included pool parties, nature reserve trips, drama skits, movie nights and sporting events. Educational components are also incorporated into Teen Club events including HIV/AIDS education, life skills, college and career planning, and goal-setting. To enable greater access to our activities, we reimburse the teens for transportation expenses and provide them all with a healthy lunch.

The COE has responded to Teen Club’s massive growth and popularity by enlisting a full-time Adolescent Support Officer, Mr. Edward Pettitt, a Peace Corps volunteer. Mr. Pettitt is fluent in Seiswana and has extensive experience in working with Botswana’s youth population. Part of his agenda will be the creation of a long-term plan for Teen Club’s financial and programmatic sustainability. In May 2008, the Teen Club members elected seven of their peers to serve as Teen Leaders. The Teen Leaders work with the adult volunteers to ensure successful planning of Teen Club activities. The 2009 plan includes the development of a customized curriculum and toolkit for providing psychosocial, educational and recreational support to HIV-positive adolescents. This toolkit will be used at our COE and also at outreach sites as we establish similar teen support groups in other parts of Botswana. In addition, Teen Leaders will be trained in effective peer mentoring skills. In order to evaluate the demographics and clinical impact of teen club attendance, monitoring and evaluation plan is in place. Through a comprehensive and innovative

Teen Club model, we hope to become a global model of excellence for the provision of support to HIV-positive adolescents.
Youth Alive ("Basha ba a Tshela") Programme

The COE is also involved in facilitating an intervention group that is targeting medication adherence within our adolescent population. The Basha ba a Tshela programme will also involve a concurrent support group made up of the caregivers of these children. The group intervention is designed to target youth aged 13-17, especially those with a history of or ongoing medication adherence difficulties. The group will address many topics our youth face in their daily lives and in coping with living with HIV. The Basha ba a Tshela programme has been designed in partnership with DC National Children's Hospital and Adolescent Services division of World Health Organisation.

3.4 Family Model Clinic (FMC)

Comprehensive care of children has been a primary focus of the COE and for the last 5 years, children have been the entry point for families into the Family Model Clinic. HIV is not a disease or an epidemic of the individual but of the family. In the setting of Southern Africa, many if not all other family members are infected and certainly affected. The Family Model Clinic paradigm of care, attending to parents and children in the same clinic, has proven to be highly successful and has merited duplication in many other antiretroviral sites throughout the country. Specifically in context to the other COE clinics, the FMC has been a necessary and effective approach to working with families failing or at high risk of not doing well on antiretroviral treatment.

One of the patients in the Family Model Clinic, Keseo is a 3 month old infant who was admitted to the Princess Marina Hospital Pediatric Wards with tuberculosis. While admitted, he was diagnosed with HIV. He was referred to Baylor clinic at discharge and when he was seen here the evaluating doctor referred the family to the FMC. Both parents and his 3 year old sibling came with the infant but the mother had not disclosed to the father the HIV status of the child. Mother tested HIV positive while pregnant but neglected to return to her clinic for fear the father would find out about her status. The father worked as a manual labourer and was not able to take off of work to address his cough and progressive weight loss. These parents obviously cared about the health of their child but still suffered from external social pressures, such as fear of stigma and inability to manage their own care. This child came into the clinic at great risk of not adhering to ARVs well, or worse, losing one or both of his parents to HIV. Through the comprehensive care of the family that is provided in the FMC, all of these problems were addressed. The mother of the child was able to inform her husband that she and the child have HIV in a safe and supportive environment. The older sibling and father were tested for HIV and TB. The father was ultimately started on treatment for both diseases. They continue to be followed in the family clinic, thereby simplifying their healthcare. They all see the doctor together, avoiding multiple, day-long appointments at different clinic sites. This saves them money on transportation, and minimizes time missed from work.

As demonstrated in the above family, the Family Model Clinic:

- Addresses the health of the caregiver, which directly impacts the health of the child
- Facilitates HIV testing for other family members
- Provides safe and supportive atmosphere for disclosure to family members and development of social support in the home
- Screens for opportunistic infections such as TB in the home

Currently, there are 373 families enrolled in the FMC, and 439 adults registered. Of these adults 354 are females while 85 are males. We have also seen an increase in the participation of males over the last year. This will ultimately lead to decreased burden on women, who have been the primary caregivers for HIV infected/affected children. Disclosure within families will also be easier for women, with continued male participation.

In the last year, the COE devised a mechanism for transferring adults who were doing well on therapy, or whose home environment has improved, to clinics near their homes. The patients were involved in this solution, for ease of transfer. 34 adults were transferred out over the last year.
Below is a summary of the adults currently enrolled in care since the inception of the FMC in 2003:

**Table 3: Family model clinic enrolment**

<table>
<thead>
<tr>
<th>ART Status</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deceased</td>
<td>17</td>
</tr>
<tr>
<td>Defaulter</td>
<td>23</td>
</tr>
<tr>
<td>Enrolled</td>
<td>65</td>
</tr>
<tr>
<td>Lost to Follow Up</td>
<td>39</td>
</tr>
<tr>
<td>On Therapy</td>
<td>255</td>
</tr>
<tr>
<td>Stopped (HIV Negative)</td>
<td>1</td>
</tr>
<tr>
<td>Suspended</td>
<td>5</td>
</tr>
<tr>
<td>Transferred Out</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>439</td>
</tr>
</tbody>
</table>

The numbers of patients lost to follow-up in the FMC has been declining over the last 5 years, as indicated below. In the last year, there were only 7 patients lost to follow-up.

**Table 4: No. Lost to follow-up**

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>28</td>
</tr>
<tr>
<td>2004</td>
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**3.5 Nutrition and Diet**

Incorporating nutrition activities into ART use over time has shown to improve both the nutritional and general health status of children who are HIV infected. Upon realizing the important role that nutrition plays in the treatment and care of HIV-positive children, the COE took the initiative of integrating nutritional interventions and activities into all HIV/AIDS treatment programmes. During this reporting period an additional dietician, Jennifer Zsolar, joined the COE team. Her main responsibility is in the in-reach project. Under this project, registered clients who are not doing well and require extensive follow up, are visited in their homes.

Dieticians also ensure that caregivers are guided and empowered so that they are in a better position to continuously and appropriately care and feed their children. The counselling sessions and nutrition clinics that are undertaken equip the caregivers with skills and adequate nutrition information to be self-reliant and carry out good child care practices. Currently supplements are provided to 30 registered children who need help to improve their nutrition. In addition, specialized formula is given to younger children. This figure changes over time as some children are discontinued due to improvement while others are started on supplements. Some of our clients also receive a highly nutrient dense spread (HNDS) which is ready to use through the nutrition rehabilitation centre at PMH. This is a collaborative effort which was established in the past year where severely malnourished children who have been stabilized are enrolled and nutritionally rehabilitated by receiving a ready to use therapeutic feed (RUTF). Currently, there are ten (10) children from the COE who are benefiting through this collaboration. The dietetic department is however considering purchasing RUTF for other COE children. The enrolment and discharge criteria used by the nutrition rehabilitation do not cater for most of our children who could otherwise benefit.

RUTF is a preferred food supplement to both the food basket and liquid supplements for use in most children in our setting in that it:
- is child specific and appropriate.
- is ready to use any time anywhere. It does not require availability of clean water or cooking fuel.
- can be eaten as is, mixed with other foods like motogo or spread on breads.
- has great taste, long shelf life (spoils less), and cheaper per kilogram.

We believe that with continuous improvement of our nutrition programs, as well as ongoing interventions, the COE will make positive contribution to the nutritional status of all the children enrolled in the COE.
3.6 Our involvement in the Community

Outreach to communities has been scaled up over the past year, and continues to intensify. The physician outreach project was successfully piloted, and has been expanded to over 27 ARV treatment sites around Botswana. The continued presence of the Paediatric AIDS Corps doctors since 2005, and the recruitment of additional Batswana physicians, has lead to an increased capacity to provide outreach services to these sites. The extension of services to communities still remains at the centre of our mission, and with collaborative partnerships with Government of Botswana’s Ministries of Health, Local Government and Education & Skills Development, as well as other Non-Governmental Organisations (NGO’s), the COE believes, that it is on track to achieve the goal of decentralising care to communities.

3.6.1 Physician Outreach

The Physician outreach programme now covers (22) twenty-two sites compared to only ten (10) in 2007. From the COE in Gaborone regular outreach visits are conducted to hospitals in Mochudi, Lobatse, Molepolole, Thamaga, Kanye, Goodhope, Phutsho-lobo (in Molepolole), Mabutsane, Ghanzi, Hukuntsi, Kasane, Maun, Tsabong and Gumare. The PAC doctor attached to Nyangabgwe Referral Hospital conducts visits to hospitals in Palapye, Mahalapye, Serowe, Selebi-Phikwe, Gumare, Gweta, Tutume and Masunga. Sites that are within 100km radius from Gaborone are visited twice a month whilst the rest of those in the northern part including Maun, Hukuntsi, Tsabong, Kasane and Gumare, which are covered from Gaborone are visited every 6 to 8 weeks.

In February 2008, the COE appointed Dr. Haruna Jibiri, a Clinical Coordinator for the project. Dr. Jonathan Berneheimer also has continued presence as the lead PAC doctor attached to the project. Mrs. Neo Gaetswe also joined the team as Outreach Officer, with the primary role of coordinating the administrative aspects of this project. With their leadership, the project continued to strengthen and intensify. In June 2008, the team expanded to include a nurse who accompanies a doctor to all sites. There is provision to also include a dietician, a clinical psychologist, a social worker, a monitoring & evaluating specialist and community outreach personnel as and when required. This expansion is meant to provide timely comprehensive support, training and mentorship to health care workers. By working in partnership with the COE Team, health personnel in the clinics improve their comfort and skill with paediatric patients so that in the long run they are able to continue providing excellent care to their children and families, in treatment sites closer to their homes.

To measure progress made in the programme, in May 2008, the outreach team developed a Site Follow up Form which the doctors complete after each visit. This data is analysed by the M&E Specialist who has been charged with the responsibility of producing monthly reports to the COE Management.

We would like to extend our gratitude to Air Borne Lifeline, who has made it possible for our team to travel to Maun, Kasane, Gumare, Ghanzi, Tsabong and Hukuntsi, by offering airline service, free of charge, as part of a partnership agreement with the Government of Botswana.
3.6.2 Improving the care and diagnostic strategies of Tuberculosis in children in Botswana

The COE plans to continue to upgrade the services for tuberculosis care for children in Botswana. The components of our plan include health worker education, enhancing our partnerships, mentorship, improved diagnostic capacity, and patient education.

Our plan is for the COE to become a referral service centre, which will deal with complicated TB/HIV disease and multi-drug-resistant TB (MDR-TB) in children. A mentoring and supervision system would be implemented, with an outreach support component to standardize the approach to paediatric TB/HIV and MDR-TB management. The COE is collaborating with the Botswana National Tuberculosis Program (BNTP) and Government of Botswana to increase access to high-quality tuberculosis care and to train health care workers in the care of TB/HIV-infected children according to the national guidelines. The COE will continue to assist hospitals in the country to improve TB screening and diagnosis of pulmonary TB in children. This will be achieved by adopting sputum induction in children who are unable to produce sputum by coughing. As part of this plan, a respiratory therapist will train a group of COE health care workers who will in turn train health professionals across the country on how to conduct the procedure. The COE is advocating that sputum induction become part of the Institute of Health and Sciences nursing curriculum. Ultimately, upgrading the country’s ability to perform pediatric sputum induction will improve Botswana’s diagnostic capacity.

The COE has been tasked with designing and implementing an Information, Educational and Communication (IEC) strategy to target parents of children with TB disease, and adolescents at high risk of HIV and TB infection. The strategy will involve the creation of pamphlets and posters as educational tools for these target populations. The material will be available free of charge to patients in all of the out-patient clinics throughout Botswana.

This programme has been made possible by the generous support of CDC/BOTUSA.
4. RESEARCH

4.1 Introduction

Research continues to influence many aspects of the COE. Results from various studies not only influence patient care, but also inform current programmes that relate to adherence support, disclosure processes and intensive follow-up.

BANA-2 Clinical trial is currently the COE’s largest ongoing research study.

4.2 The BANA-2 Clinical Trial

BANA-2 started in February 2004 and remains the largest clinical trial carried out in the COE paediatric population. It is a randomised, open label, phase III, two arm, comparative trial of continuous versus intermittent HAART in HIV-infected infants and children in Botswana. Patients on continuous therapy are in arm 1 while arm 2 consists of patients who interrupt therapy when their immune system as measured by CD4 cells is deemed to have recovered. CD4 cell determinations are done monthly, and treatment in arm 2 is resumed whenever their immunity declines below normal levels.

The study has been progressing well and by the end of June 2008 there were 598 patients randomised. Of these, 32 patients were excluded from the study, mostly due to social reasons, not due to disease progression.

So far, the longest period of treatment interruption is 3 years and 10 months.

An Independent Data Safety and Management Board (DSMB) convened in February 2008, to look closely at the study data to verify data quality and to ensure patient safety and whether the study was meeting the highest required standard. The DSMB consisted of two local experts and two from the United States Of America. Their evaluation was favourable showing no significant differences between the two arms in terms of disease progression, drug toxicities or deaths. They advised that the study should continue. The second DSMB meeting will be held in September.

In the meantime, patient re-consenting process was conducted from August to September 2007. This was necessary especially after the international study SMART trial involving adult patients was discontinued prematurely by the study DSMB due to unfavourable outcomes in the interruption arm. All caregivers were informed about the study and its outcomes and allowed to make an informed decision to continue with the study. It was emphasised that participation in the study was voluntary. The re-consenting process was conducted for those caregivers whose children were enrolled in the BANA-2 Study before the SMART trial was discontinued. (440) caregivers consented and none declined or withdrew their child’s participation.

Even though the study is going well, we experience the challenge of slower recruitment than anticipated. This is mainly due to the declining rates in the numbers of children who test positive in the COE. Other challenges include poor adherence to medication, mainly due to multiple caregivers and adolescence.

Research continues to play an important role in patient care. By undertaking research, we not only learn more about patient care of HIV infected children, but we also work towards improving services offered to the COE patients to ensure that it is of the highest standard.

BANA-2 has provided valuable experience for COE staff, other health professionals countrywide and visiting health professionals. Should the trial prove to be successful, it will have great benefit not only for the treatment of children in Botswana, but also in other low resourced countries in Africa.
4.3 The “Voice” of the HIV Infected and Affected School Age Children in Botswana

The “Voice” of the HIV Infected and Affected School Age Children in Botswana is a cross-sectional psychosocial survey which will be conducted by the COE in collaboration with Ministry of Education & Skills Development. Planning for this survey is at an advanced stage, and we should start before the end of 2008.

Historically, the planning of interventions for HIV-infected and affected young people has proceeded without benefit of consultation with the children themselves. Ideally, policies and programmes designed to aid children who are infected or affected by HIV should take into account the known and perceived needs of the intended beneficiaries. The successful roll out of the antiretroviral program to children in Botswana over the last six years, as well as the success of the Prevention of Mother to Child Treatment (PMTCT) has meant that fewer children are getting infected at birth while those already infected are living longer and surviving into adulthood. Consequently, an increasing number of HIV-infected children are expected to complete primary and secondary school in the coming years. It is not known whether the community at large or the school environment is ready to provide the increasing number of surviving HIV-infected children with the supportive psychosocial environment that they need.

The “Voice” of the HIV infected and affected School Age Children in Botswana survey is intended to close this knowledge gap by obtaining information directly from HIV infected and affected children and supplementing this with information obtained from the children’s caregivers and teachers.

The study survey population will include 900 HIV infected children, their guardians, 450 HIV affected children, and over 2000 teachers. It is expected that direct information from both the questionnaires and narrative accounts of the HIV infected children and adolescents detailing their experiences, needs, and challenges will render the study highly relevant to the educational needs and services of this population. It is also hoped that the quantitative and qualitative information from those enrolled will shed new light on identifying specific areas of need in general health, HIV/AIDS knowledge, outlook on life, emotional challenges and school services support system.

In addition to these aims, new and otherwise unknown information will likely emerge and assist in addressing the needs of the HIV child in Botswana and will guide us and other interested parties in informing future research.
5. EDUCATION

5.1 Introduction

Education and training are some of the integral components of achieving the COE's mission. Best practices and experiences in treatment and care of HIV infected/affected children can be transferred to other professionals around Botswana, Africa and the rest of the world through education and training. This will in the long run lead to the successful rollout of knowledge and close the gap that exists in Paediatric HIV treatment and care. Our staff in the COE has over the past year participated in training activities within the COE, at ARV sites around the country and in other countries in Africa. COE training activities continue to expand, and we continually evaluate process and review our training curricula to suit the dynamic field of Pediatric HIV. The COE continues to host scholars from Botswana, African region and abroad, who have observed our programmes, some of whom have replicated COE models of care in their countries. From training activities, the COE has been able to enhance teaching capacity as well as transfer experiences and knowledge to other health care workers, who have in the process increased their comfort levels in treating and caring for children with HIV/AIDS, and in most cases, their families as well.

5.2 KITSO-Baylor Paediatric HIV/AIDS Training

At the core of our Education programme is the role that we undertake on behalf of the Ministry of Health and the Ministry of Local Government to train doctors, nurses and other health professionals in pediatric HIV/AIDS treatment and care. This maximizes the leverage of expertise at the COE by taking practical and didactic training to ARV rollout sites across Botswana. This activity is made possible by support from CDC/BOTUSA, UNICEF-Botswana, Ministry of Health and Ministry of Local Government.

Tailored to the needs of Botswana health professionals, the KITSO-Baylor Paediatric HIV/AIDS training course provides much needed training in paediatric HIV, improving pediatric care and treatment and boosting the numbers of children enrolled in the National ARV programme.

The Paediatric KITSO curriculum is designed to help healthcare providers become more comfortable screening and diagnosing HIV infected children, initiating them on ARVs, and providing appropriate follow-up care. The training is conducted over the course of 5 days per week. Conducting the training at the rollout sites provides opportunity for trainees to have practical experience with children on HAART.

In 2007 the curriculum was revised in line with the new Botswana National HAART Guidelines implemented in 2008. From our experiences and feedback from trainees, our revised curriculum also incorporates challenging topics such as disclosure of HIV to a children.

Over the last year, the COE trained 298 healthcare workers from ARV sites around Botswana. This makes a total of (937) healthcare workers trained through the KITSO Pediatric HIV/AIDS Training program since it was initiated in July 2005.

COE staff also contribute continually to other aspects of the National KITSO Training program, in collaboration with the Botswana Harvard Partnership (BHP). Contributions include the paediatric components of the Advanced KITSO Course, the Medication Adherence Counseling Course, and the AIDS Clinical Care Fundamentals Course.

During the coming year, the COE will continue its training activities at ARV sites aimed at increasing the number of healthcare professionals who have the confidence and expertise to care for and treat children and adolescents with HIV. The COE is in the process of devising a post-training evaluation strategy with planned follow-up support provided to the trainees through the COE physicians’ outreach programme.

5.2.1 Our experiences over the last year

i) The expressed need for KITSO Paediatric Training:

Evidence shows a need for paediatric KITSO training, as facilities begin to appreciate the fact that by expanding the pool of trained health care providers, the COE increases entry points for children into HIV treatment and care because more providers are able to identify exposed and potentially infected children when routine health care is sought.

The approach adopted, whereby trainees from health facilities within the same area are trained in clusters, leads to improved referrals and networking amongst the health institutions and ultimately better access to standardised service by HIV infected children and their families.

On various occasions facilities have expressed the need for more training to be conducted and for a tailored training course for other health cadres that have traditionally not been included in the training’s such as Family Welfare Educators and Auxiliary Health Workers, as well as other volunteers working in the IDCC. In the coming year, the COE aims to address these needs with another round of training.
(ii) **The increased interest and participation by health managers:**

Health managers from both the District Health Teams and Government hospitals have shown a keen interest in our training. This brings team spirit within the learning environment, and they also had an opportunity to exchange experiences on the logistical constraints and other issues that are likely to affect provision of effective paediatric HIV/AIDS care within their areas of operation. We believe that equipped with such information, the health managers are better able to appreciate the need to avail resources in terms of logistics, space and time so that their subordinates are able to utilise the skills and knowledge from the training. We are also hopeful that by health managers being involved at this level, they will minimise redeployment of staff to unrelated areas of operations after training, in order to optimise continuity of care.

(iii) **The blending of clinical management with psychosocial training:**

One thing that health workers appreciate about the KITSO paediatric training is that it familiarises them with psychosocial issues in the care of children infected and affected by HIV/AIDS. The course introduces principles of counselling and communicating with children, disclosure of HIV diagnosis to children, and legal ethical issues in child care. Many of the health workers have admitted that prior to the training, they were more focused on the physical needs of the HIV infected children, while overlooking their social and emotional needs. The KITSO training emphasises the healthcare workers’ integral role in providing and coordinating psychosocial support in conjunction with other professionals, as well as their role as the link between the children and community resources. There is very limited value in offering good quality physical life without viable psychosocial survival for HIV infected/affected children.

5.4 **Expert Patient Training**

In partnership with the Clinton Foundation and the Ministry of Health, physicians in the COE created a curriculum on HIV education to train expert patients. These expert patients are individuals infected with HIV who are doing very well on therapy and have been identified as role models in their communities. They assist other families to maintain good adherence on ARVs, and identify children who are in need of testing or treatment. The expert patients are trained to advise their peers on how to seek appropriate treatment and care, by providing an invaluable link between the local treatment sites and their communities. The curriculum covers topics such as diagnosis and testing, clinical manifestations of HIV, disclosure to children, and the rights of families affected by HIV. The Expert Patient Programme is currently a pilot project providing training to expert patients, lay counsellors, health educators, and nurses in 5 communities - 3 in Southern Botswana while 2 are in Northern Botswana. It is planned that in the coming year the project would be rolled out throughout the country.

5.3 **“Aunties / Uncles” Training program for BONEPWA**

The COE staff has designed a week long curriculum to be used by the Botswana Network of People Living With AIDS (BONEPWA) to train recruited layperson staff for their ‘Aunties / Uncles’ Program. The training is funded by Family Health International and covers various topics, including HIV basics, HIV Medications and Adherence, Disclosure, Stigma, Basic child counselling techniques, recognising symptoms of physical, mental and emotional problems and addressing all psychosocial needs in children and families. The COE staff, under the leadership of Kimberly Metha, a volunteer clinical psychologist, trained the trainers for BONEPWA. These trainers will act as a supporting team for the programme within their agency. The programme goals involve utilizing these staff as mentors within families with identified Orphans and Vulnerable Children, including those who are HIV positive.
5.5 **School Teacher Training Programme**

The School teacher training programme is being implemented in collaboration with the Ministry of Education & Skills Development. This program is aimed at improving the HIV/AIDS knowledge and attitudes of primary and secondary school staff. The COE staff involved with the project deliver formal educational workshops to primary and secondary school teachers and other school staff in government schools. The workshops aim to empower school staff to better support HIV-infected/affected children and to promote prevention of further spread of HIV. We aim to increase the comfort level of school staff with topics related to HIV and AIDS, and ultimately increase each infected/affected child’s access to appropriate support, care and treatment.

The pilot for the School Teacher Training Programme started in 2006. Since then, the COE has trained over 300 teachers in 9 schools. There has been a significant impact as measured by vast improvement in the pretests and post tests and surveys of the teacher’s attitudes and comfort - levels with the topics discussed. The number of HIV related myths prevalent among school staff have also been effectively dispelled through our workshops. Most of the teachers reported that the workshops have made them more comfortable discussing HIV with children, and that they will incorporate more HIV topics in their lessons. Overall, teachers will be better able to support infected and affected children in their classrooms.

It is expected that these training’s will be rolled out to the whole country in 2009, with financial support received from the Ministry of Education & Skills Development. The expansion of this project will be spearheaded by one of the local Batswana physicians, Dr. Refilwe Sello, who took over Dr. Magomotsi Matshaba, when he left for further training.

5.6 **The Visiting Scholars Programme**

The Visiting Scholars Programme forms a vital component of the COE training programme. The programme allows medical students and other health professionals from Botswana and all over the world to experience and learn best practices in Pediatric HIV/AIDS treatment and care.

More than 30 visiting scholars enlivened and stimulated the COE in the last year. Many of them came from universities in the United States, Canada and Norway. Three of the students were Batswana who would like to return to Botswana after completing training. Whether staying for a few weeks or several months, the visiting scholars participated actively in the day-to-day patient care activities under the mentorship of COE staff, and many were also engaged in related projects.

We would like to make special mention of Samuel Bjork a Harvard undergraduate scholar who spent 6 months with the COE and contributed tremendously to the teacher training pilot project. We wish him the best in his future endeavors.

One of the visiting scholars, Meera Shah who is a pediatrics resident at the University of Toronto, Canada, was asked to share her experiences on her attachment, and this is what she had to say:

“**The attachment to Botswana-Baylor COE was invaluable in providing me with exposure to care of children with HIV. Having the opportunity to see a large number of clinic patients significantly improved my practical knowledge of pediatric HIV. The staff were uniformly knowledgeable and were generous and encouraging teachers. It was also very educational to accompany the doctors on outreach visits as a way of learning more about medical care and challenges outside of Gaborone. I hope to return to Africa for a longer stay after completing fellowship in a couple of years, and this is partially in response to my positive experience in Botswana**”

Ahmad Fahd Aqeel, Resident, Baylor College of Medicine also had positive experiences to share:

“**My experience at Botswana-Baylor COE was one that I will never forget. The staff were helpful and great teachers. Working in the paediatric ward, working in the clinics, attending the HIV and teen camps and travelling to rural village hospitals were both educational and eye opening. The kids were so sweet and playful**”

I had an excellent experience at the COE. All of the places I had a chance to work were great, but I probably was able to glean the most from the outreach trip to Lobatse and the week I spent inpatient at Princess Marine Hospital. The COE clinic functioned so well that it truly seemed better run than some clinics I have worked at here in the U.S. All of the staff physicians I worked with, Baylor and non-Baylor were friendly and willing to teach me as much as they could and let me do as much I felt comfortable to do. I have been recommending Botswana-Baylor COE and the other COE sites to all the other residents since I came back.”
5.7 Sharing Knowledge

As the COE’s goal is to be in the forefront of paediatric knowledge, we recognise the need to share information and experiences with other professionals, both locally and internationally. In the last year COE staff members have been invited to numerous conferences, seminars and study missions to present papers and participate in expert discussions. The BIPAI Network meeting remains the main forum where our staff has shared information and experiences with other professionals. Our staff has also participated in local and international conferences, including:

- 1st Clinicians Society Conference held in Gaborone
- Paediatric AIDS Treatment for Africa (PATA) Conference held in Swaziland. At this conference, 40 teams from 20 countries tackled issues around TB/HIV/AIDS and caring for HIV-infected adolescents.
- Prof Gabriel Anabwani presented at the World Conference on Clinical Pharmacology and Therapeutics held in – Toronto, Canada.
- Prof Gabriel Anabwani presented at the Nestlé Nutrition Institute Africa (NINIA) Meeting held in Cameroon in June 2008
- Prof Gabriel Anabwani was part of a UNICEF mission to Sierra Leone in October 2007

The COE also hosts Journal Club every Thursday, and attendees include health professionals from PPH, COE staff, and from other local clinics and health centres. These health professionals present papers which cover a variety of topics relevant to our operations.

6. CAPACITY BUILDING

6.1 Training of Batswana Physicians

The COE has done well in supporting the training of Batswana physicians who wish to advance in Paediatric HIV/AIDS. These physicians spend at least two years in the COE before they are sent abroad for further training in Paediatrics. Since the inception of the Physician-In-Training program in 2007, the following physicians have been sent for further training in the USA:

- Marape Marape
- Mogomotsi Matshaba
- Motshwe Chilume

The COE is currently recruiting additional physicians to be enrolled in the programme. Dr. Refilwe Sello is one of the physicians currently participating in the programme, and she has over the past year in the COE gained extensive experience in treatment and care of HIV-infected/affected children. Below is an account of her experiences:

Dr. Refilwe Sello’s story

Dr. Refilwe Sello, one of the physicians in the ‘Physician – in-training’ program, pours her heart out on the anniversary of her joining the COE.

“I couldn’t sleep last night just excited about today, my 1 year anniversary at my dream place to work – the Batswana Baylor Children Centre of Excellence, where excellent HIV care for children and their families is provided. I really wanted to be a member of this wonderful family, that’s why I crossed mountains and oceans to be here, and I have no regrets.

I am glad I relocated home for a while to be here. The COE staff help families to face the challenges, the tears and the heartbreak associated with the HIV/AIDS epidemic.

I have witnessed more happier times than ever in my life, in an environment where I thought I would witness sadness and grief. Patients initiated on treatment are doing very well on medication. The staff in the COE is more supportive than I thought, they are open to listening to me, very understanding and always meet me half way. There are more teaching opportunities and mentoring from other colleagues and my supervisors.

The COE is my model ‘Family’ clinic where the family spirit is felt in every sense. I can’t live with and without them. For all you do, I want to say Thank you and let you know that I appreciate every single one of you!!

![Image of Dr. Refilwe Sello and a colleague working together]
7. OTHER ACTIVITIES

7.1 Children’s Christmas party

The children’s Christmas party has become an anticipated annual event. The COE held a very successful Christmas party this year, with many more surprises and activities for our children. As usual, our staff and volunteers, under the leadership of our Administrative Manager, Mrs. Pona Sejotse, offered the much-needed assistance in organising this year’s Christmas party.

Many thanks go to the following organisations who made it possible to have the 2007 Christmas party, through their generous financial support:

- Wimpy – Food, drinks, t-shirts and toys
- Standard Chartered Bank – P5000.00 towards toys
- Native Impressions – P5000.00 towards toys

In the previous years, we have also received donations locally from Wimpy, Nandos Chicken, Saxifrage Gardens and BFM as well as from individuals associated with the COE. International organisations have donated toys to be issued to the children.

7.2 Camp Hope, Botswana

Camp Hope celebrated its fourth annual camp in April 2008. 56 children attended this five-day overnight camp, during their school holidays, at the Manapula private school. Camp Hope provides a setting for the children to enjoy a week away from home and the opportunity to realize that they are not the only children dealing with HIV/AIDS. The children chosen for camp were from the COE clinic population, with a strong preference for those kids who had significant problems with medication adherence or stigma.

The camp provides new perimeters for friendships among the children and strengthens the bond between them and the COE staff, the children who have attended camp are often noticeably empowered by the experience. They have more confidence and they often take more ownership of their own medication adherence.

The volunteer staff was a mix of COE staff, Peace Corps volunteers, and qualified staff from organisations in the community. Mrs. Bakani Johnson, social worker; and Dr. Paul Mullane, one of the new Pediatric AIDS Corps doctors, directed this major event after months of careful planning. Bakani is every child’s best friend at camp and she has been with Camp Hope since the beginning. Dr. Mullane brought his ten years of experience at children’s camps to make this event unforgettable for the children and he looks forward to mentoring a new director at next year’s event. Dr. Elizabeth Lowenthal, who has also been with Camp Hope since the beginning, was excited to step down this year from her previous role as director so that she could spend more time with the kids during their camp activities.

AIDS Foundation Houston remains the biggest sponsor for the camp. Many thanks to the following local organisations for their contribution:

- Seabrook Express has been donating a bus service every year since camp activities started in 2004. This year, they once again donated a bus for an afternoon to take all of the children and volunteers to the Mokolodi Game Reserve.
- Mnokolodi Game Reserve donated a substantial amount to offset the costs of admission into the reserve. For many of the children, this was their first time on a game drive, and they were very excited to see their first zebra, hyena, rhino, and cheetah.

A day for local businesses was organised to watch the children engage in “Olympic Day” in order for them to see the value and the fun that children were having at camp. The COE hopes in the years to come that more local organizations will take ownership for the financial costs of this valuable asset for Botswana’s children.
7.3 2007 World AIDS Day

The COE was among the number organisations who participated in this year’s ‘World AIDS Day’ celebrations. The theme for this year’s celebrations was STOP AIDS: Keep the promise. The guest speaker was Minister for Science and Technology Mrs Pelonomi Venson-Moitoi. At this event, the COE displayed some of its products and publicity materials, as well as shared information on COE activities. COE staff participated in the March towards the national stadium.

7.4 Celebrating culture

In July 2008, the COE staff celebrated Botswana culture by dressing in traditional wear. The COE is looking forward to an even more colourful event in the coming year.

7.5 9th BIPAI Network meeting

The BIPAI Network of centres meets bi-annually to share cases, experiences and developments in the field of paediatric HIV/AIDS. The COE was privileged to host the 2008 meeting in April. The event took place at Gaborone International Convention Centre and received a wide range of media coverage.

The meeting was officially opened by the Minister of Health, Hon. Lesego Motsumi. Important dignitaries, the BIPAI president, Prof. Mark Kline, BIPAI centres’ directors and developmental partners from all over Africa, Europe and the United States of America attended.

The COE also took the occasion to celebrate its 5th Anniversary with its network partners during the week of the conference. The COE hosted a dinner which was graciously attended by the former president of Botswana, His Excellency Festus Mogae, as the guest of honour. This was a true honour to the COE and the network, since Mr. Mogae has demonstrated true support for BIPAI from the inception of the COE. He officially opened the COE in 2003.

7.6 Visitors to the COE

Over the last year, the COE continued to receive visitors from Botswana, Africa and the rest of the world. Most of the visitors come to observe our programs, and take some lessons back to their organisations. Visitors from the past year are listed below:

- Senior Executives from Bristol-Myers Squibb Company
- PEPFAR Country Coordinator
- Staff from CDC/BOTUSA
- The management of L-TECH-Botswana
- Senior representatives from USAID
- Representatives from the American Red Cross
- Representatives from the Twinning Centre
- Senior Representatives from GlaxoSmithKline

The ‘Bothat’ Award

The COE also took this opportunity to recognise Dr Mark Kline for his dedication to changing the lives of HIV infected/affected children and their families on the African continent, and particularly in Botswana.

During the 5th year anniversary gala dinner, Dr. Kline was awarded the “Bothat” award in recognition for all his efforts in advocating for the millions of HIV infected/affected children on the African continent who, on every passing day, have no access to the care, treatment and support they need and deserve. He is a true leader indeed and his dedication, compassion and love for these children cannot go unnoticed.

“Bothat” in Setswana symbolises a mixture of compassion, love and respect.
8. ADMINISTRATION

8.1 The Board

The Board of Directors of the Botswana-Baylor Children’s Clinical Centre of Excellence is appointed by Baylor College of Medicine. The board is responsible for shaping the strategic direction of the COE, and giving guidance to the COE Management in implementing the COE programs. Over the last year, Dr. Elizabeth Lowenthal, who was Secretary to the Board, left the team since she had to pursue further studies in the USA. She was replaced by Mrs. Pona Selotale. Dr. Ryan Phelps, the COE Associate Director, was also elected as an additional member of the Board. The Board members of the COE Board of Directors for 2007/2008 are as follows:

(1) Prof. Mark Kline  Chairman
(2) Mr. Mike Mizwa  Deputy Chairman
(3) Prof. Gabriel Anabwani  Executive Director
(4) Mrs. Pona Selotale  Secretary
(5) Mr. Joseph Kanewski  Treasurer
(6) Ms. Nancy Calles  Member
(7) Dr. Ryan Phelps  Additional Member
8.2 The Management Committee

The Management Committee report to the Board of Directors. The Committee is responsible for implementing the strategy of the COE. Over the last year the Associate Director, Dr Elizabeth Lowenthal, left the Management committee to pursue further studies in the USA. Our Senior Management committee is as follows:

1. Prof Gabriel Anabwani
2. Dr Ryan Phelps
3. Mrs Pona Selotate
4. Mrs Olekantse Molathegi
5. Mrs Mmapula Sechele
6. Haruna Jibril

Executive Director
Associate Director
Administrative Manager
Finance Manager
Nurse Manager
PMH

The Superintendent of Princess Marina Hospital (PMH) is an additional member of the committee.

Dr Haruna Jibril has been a valuable member of the management committee since 2006, and his presence in the committee has enhanced working relations between the COE and PMH. He was also appointed to coordinate the clinical component of our Inreach/Outreach program.

8.3 Workforce

The staff in the COE has displayed that they are passionate and driven towards the common vision of achieving excellence in the treatment and care of HIV affected and infected children. They all take pride in what they do for the children. The COE workforce comprises of staff directly employed by the COE Trust. Specialists seconded from the Baylor College of Medicine and health professionals seconded from the Ministry of Health and PMH. Volunteers have also played an important role in enhancing some of the programs in the COE.

Over the past year, there have been few staff movements. However, there are a number of staff members who left the COE for various reasons:

- Resignations
  - Sannah Motshobogwa Data Manager BANA
  - Tebogo Zulu Data Assistant, BANA

- Further training/going back home/relocation
  - Dr. Mogomotsi Matshaba Medical Officer
  - Dr. Motshu Chilume Medical Officer
  - Dr. Elizabeth Lowenthal Associate Director
  - Dr. Manna Adegbite PAC Doctor
  - Dr. George Han PAC Doctor
  - Dr. Megan Harkless PAC Doctor

- The following staff members joined the COE:
  1. Bashi Mothetho Inreach/Outreach project Assistant
  2. Neo Gaetsewe Inreach/Outreach Project Officer
  3. Nkumbuludz Ndwapi Data Officer, BANA
  4. Ryan Phelps Associate Director
8.3.1 Paediatric Aids Corps

In August 2008, the COE welcomed its third group of Paediatric AIDS Corps (PAC) doctors to Botswana. BIPAI partnered with the Bristol-Myers Squibb Foundation in 2005 to create the PAC programme in order to increase human capacity at the network’s COEs as well as to help build capacity throughout the host countries. Through this programme, 50 doctors per year are funded to work in six African countries. Since the inception of the PAC programme in 2005, the COE has had twenty (20) PAC doctors who have had vast specialties—paediatrics, internal medicine as well as paediatric sub-specialists. With their presence, the COE has been able to expand many of its programmes, including Physician Outreach. The PAC doctors, all specialists, also work in the Government’s two referral hospitals—Nyangawe Referral Hospital in Francistown and Princess Marina Hospital in Gaborone also supporting the Department of Paediatrics both in the in-patient and out-patient settings. They collaborate with the nurses, medical students, medical officers to provide support, training, and mentorship. PAC doctors also participate in several training activities including Paediatric KITSO, Teacher Training, and Expert Patient training.

The PAC doctors have made a great difference to the staffing capacity of the COE. Because of their presence in the surrounding communities through outreach, the COE has been able to assist many children and families in accessing care closer to their homes. We believe that the PAC’s impact will be felt for years into the future through the knowledge and mentorship they provide to local healthcare providers.

8.3.2 Farewell to Dr. Elizabeth Lowenthal

Dr. Elizabeth Lowenthal, who has been our Associate Director and Board Member for the past four years, sadly had to leave the COE to go back to the U.S.A. for further studies. “Liz” will definitely be missed by all staff and patients in the COE. She was a true leader, committed to driving the staff towards achieving the goals of the COE. She is especially remembered spending long hours working in the COE, sacrificing time to be with her family, and ensuring that the best quality of work is always produced. The COE wishes her all the best in her studies. This is what she had to say when she arrived in the USA:

“I have arrived in Pennsylvania after saying goodbyes to the team and patients in Botswana last week. My husband came to Botswana with me four years ago mainly because it’s where I wanted to work. I left Botswana with a heavy heart, as I have come to love and be very proud of the Botswana-Baylor team.

Over the past few months, I found Mondays to be the most difficult as Mondays were when I would see my continuity patients. Most of these children I have seen monthly for the last few years. I distinctly remember meeting some of them almost 4 years ago and in some cases not expecting them to ever thrive. Receiving goodbye hugs from so many of these now-healthy children was truly bitter-sweet. The impact that BIPAI and the Botswana national treatment program has had on their lives is obvious and fabulous.

Botswana and BIPAI have also had great impact on me and my family. I can’t imagine a more fulfilling line of work than what I discovered in Botswana. My 22 month old daughter, born in Botswana, will always remind me of her place of birth. Currently, she speaks an entertaining mix of English and Setswana. I hope that we will be able to make frequent trips back to Botswana to visit our friends, continue doing good work, and helping Miriam, my daughter, who was named ‘Bontle’ to maintain her Setswana skills.”
8.4 Strategic Plan

The COE has seen a lot of progress in implementing the strategic plan. Even though the COE faced some challenges, all staff have been actively involved in programs that lead to the realization of their goal.

Over the past years significant progress has been made in the following areas:

(i) Monitoring and Evaluation (M&E)

The M&E component of the COE’s programs in the COE has been expanding considerably. In March 2008, BIPAI seconded a Monitoring & Evaluation Specialist, Mr. Edwin Machine, to work on strengthening the COE’s M & E framework, and lead in the implementation of the Electronic Medical Record (EMR) system. This system will be incorporated into the record-keeping routine of the COE. The indicators collected by the EMR will enable the COE to track the success of key outcome oriented activities in the COE’s strategic plan. The system will allow the COE to capture and learn from the information generated, ensuring continued excellence in pediatric HIV care. Meanwhile, the Ministry of Health’s Integrated Patient Management System (IPMS) will continue to be used at the COE, per Ministry of Health requirements. As a build-up to the implementation of the EMR, tools have been developed to accompany the in-reach and outreach programs and ensure that off-site visits are also incorporated into the M&E framework. Currently, such tools are routinely completed after each in-reach or outreach visit by one of the COE’s doctors, nurses, social workers or nutritionists. The COE will be launching the EMR in July 2008. Soon the Botswana COE will be utilizing and benefiting from an electronic system similar to those in other BIPAI Network sites, such as Swaziland, Lesotho, and Malawi.

(ii) COE Policies

The COE has seen some changes in staff needs, as brought about by rapid growth of our programs. There is an increased need to focus on staff development, staff empowerment, and further strengthening of our Human Resource policies. The first draft of our revised conditions of employment has been produced. These policies have been revised to keep up with the changing human resource environment and accommodate most of the growing needs of our staff, in alignment to our strategic plan.
(iii) Human Resource Electronic Record Systems

As the COE staff complement continues to expand, it has been challenging for the COE to keep physical personal records for all COE staff. Plans are underway to implement an electronic HR Management System, which will make staff records more accessible and manageable. This new form of records will place the COE in a better position to plan for staff and organisational needs.

(iv) Partnerships

The COE has maintained good relations with major partners: the Ministry of Health and PMH. In September 2007, the COE signed a revised Memorandum of Agreement (MOA) with the Ministry of Health. In the revised MOA the Government of Botswana has committed to providing an annual subvention of $750,000.00 to support the operations of the COE. This is a welcome development, which will go a long way in sustaining COE programs, and ensuring that the children have continuity of care.

As a result of collaborations with the Ministry of Education and Skills Development, two new projects were developed. The school teacher training project is being piloted, and plans are underway to roll out the program to the whole country. The other project is a survey of the feelings and perceptions of HIV infected/affected children, which will be conducted by the COE on behalf of the Ministry of Education.

All partnerships and collaborations are highly valued, as they are important in the delivery of the COE’s mission. The COE would like to thank the following partnering organisations from the past financial year:

- CDC BOTUSA
- UNICEF
- Ministry of Education & Skills Development
- Ministry of Local Government’s Social Services Department
- Ministry Of Health Departments
- Princess Marina Hospital (PMH)

Over the coming year, the COE plans to start revising the strategic plan, and draw another plan for the coming three years, 2009-2011.
8.5 Finance

The finance activities of the COE also continue to strengthen. As the programmes have grown over the last year, the COE has responded by adopting robust electronic systems to manage accounting procedures. A new payroll system was developed to minimise the manual processing of salaries.

The 2006/2007 accounts were audited by Deloitte. After a successful audit, the report and recommendations were forwarded to the BPAI Board of Directors in September 2007. The COE has already adopted some of the recommendations and continue to implement others. The 2007/2008 accounts have been prepared and are currently being audited.

Below is a summary of income received, in addition to the Government of Botswana’s cash subvention, for the financial year 2007/2008:

<table>
<thead>
<tr>
<th>Donor</th>
<th>Amount (Pula)</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPAI</td>
<td>1,472,500</td>
<td>Fund COE operation and admin costs</td>
</tr>
<tr>
<td>CDC - BOTUSA</td>
<td>1,704,000</td>
<td>Covers salaries and benefits for the five nurses and training coordinator</td>
</tr>
<tr>
<td></td>
<td>581,172</td>
<td>To cover costs relating to education and communication (IEC) material</td>
</tr>
<tr>
<td></td>
<td></td>
<td>targeting caregivers of children with HIV/TA infection.</td>
</tr>
<tr>
<td>RMS</td>
<td>2,995,207</td>
<td>Covers all BANA 2 research costs</td>
</tr>
<tr>
<td>UNICEF</td>
<td>413,760</td>
<td>Funds used in KITSO-Baylor HIV/AIDS training activities.</td>
</tr>
<tr>
<td>Nestle Nutrition</td>
<td>125,000</td>
<td>Covers the salary and benefits of the dietician</td>
</tr>
<tr>
<td>Institute of Africa (NNIA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas Children Hospital (TCH)</td>
<td>1,619,243</td>
<td>In-reach / extended outreach activities, to optimize the care currently being provided to COE patient</td>
</tr>
<tr>
<td>Debiswana</td>
<td>50,000</td>
<td>Funding used in running of adolescent activities.</td>
</tr>
</tbody>
</table>

8.6 Fundraising and Donations

The COE continues to rely on donations raised to support some of COE programs. BPAI continues to make a notable contribution to the operations of the COE. In addition, the COE received the following donations from local businesses and individuals:

(i) Trans-Kalahari Bike Ride

In May 2008, Dr Jonathan Bernheimer, one of the PAC doctors, raised P245,000.00, in cash and in-kind support, by biking across the Kalahari Desert, from Windhoek Namibia to Gaborone, Botswana. This will be an annual event and the proceeds will go towards the procurement and maintenance of cardiovascular equipment both at PMH and in the COE. We wish to thank to the following organisations and individuals for their donations towards this worthwhile activity:

- KPMG and USN for their coordination and mobilising donors, transport, gear, supplements and drinks for the team
- Stanbic Bank Botswana
- Standard Chartered Bank Botswana
- Seaboelo’s Express
- Canon Botswana
- BONELA
- Cumberland Hotel
- Faraday Investments
- Mutual & Federal
- Mrs. L. Brink
- Mr. M. Korae
- Jonathan Bernheimer’s friends and family members in the USA
(ii) Other donations:

- The Cheshire foundation donated wheelchairs to the COE and Paediatric Ward at PMH.
- Standard Chartered Bank staff painted our counseling room with bright colours.
- Native Impressions and Standard Chartered Bank donated P5000 each towards the children’s Christmas party.
- Wimpy donated food, drinks and toys towards the children’s Christmas party.
- Seabelo’s Express, for their continued support in transporting children at Camp Hope since 2004.
- King’s Camp hosted some of our children at their annual camps.
- Individuals donated food, clothing and equipment to the children.

(iii) COE financial supporters

We continue to receive funding from BPAI to support COE operations. The Government of Botswana has also pledged an annual cash subvention to sustain our operational costs.

In addition the COE would like to extend gratitude to the following organisations for their financial support over the past year.

- Bristol-Myers Squibb – BANA-2 Study, PAC Program.
- CDC/BOTUSA – Four nursing positions, KITSO training program, TB Project.
- UNICEF - Paediatric KITSO training.
- Abbott Foundation – Rapid HIV testing kits, biannual BPAI Network meetings.
- Nestle Nutrition Institute Africa - Dietician/Nutritionist.

8.7 Information Technology and Facilities

We continue to enjoy the benefits of a superb facility which enables the COE to deliver a quality of care equivalent to the best in the world. At the same time, the COE continues to ensure that the facilities and technology are meeting both present and expected future needs.

- Over the last year new members of staff have joined the COE, therefore demand for office space continues. The COE has therefore improvised by using all of the COE’s available space even more efficiently.
- A new Patient Information Management System (EMR) has been implemented to complement the existing PMS system. This will give the COE a very strong reporting tool to help with monitoring and evaluation of patients.
8.7.1 Telemedicine Project

Telemedicine is the use of Information and Communications Technology to deliver medical services and exchange medical information when distance separates the patients and health professionals into separate locations. The COE has always recognized the potential value of telemedicine in patient care. Since the COE’s building opened in 2003, space has been reserved for such equipment.

In February 2007, the COE was approached by the Meraka Institute of South Africa, with the proposal to partner in piloting a telephone system that was toll-free. Through this system, caregivers and the public would be able to call the toll-free number and get answers to frequently asked questions using a series of touch tone prompts.

In 2008, the Meraka Institute worked closely with our staff, particularly Dr. Paul Mullan, one of the Paediatric AIDS Corp physicians, Prof. Gabriel Anabwani, and the nursing staff to design such a system. The extensive series of health education topics has culturally relevant advice and covers topics ranging from antiretroviral medicine to zero transmission lifestyles. The Meraka Institute piloted the system with patient caregivers and received a lot of valuable feedback. They are using this information to design an even more user-friendly system that could be used widely by patients at our clinic and across greater Botswana.

The Meraka Institute are currently in the process of exploring means to fund some of the further steps in this project including design enhancement and the sponsorship for the toll-free aspect of the programme. The COE is hopeful that this system will be available to anyone in Botswana with access to a phone, including healthcare workers.

Prof. Gabriel Anabwani turns 60!

The COE’s Executive Director, Prof. Gabriel Anabwani, this year turned 60. He decided to take the on the challenge, and prove that at 60 years of age he still had what it takes to climb Mount Kilimanjaro. He described it as, “the best time of my life”. The COE thanks him for his dedication to the mission, his passion and all he has done to fight for the children of Botswana, who have been infected and affected by HIV/AIDS. The COE wishes him 60 more years of life!
## GLOSSARY

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFH</td>
<td>AIDS Foundation, Houston</td>
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<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Virus</td>
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<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
</tr>
<tr>
<td>ARV</td>
<td>Antiretroviral</td>
</tr>
<tr>
<td>BANA</td>
<td>Botswana Baylor Antiretroviral Assessment</td>
</tr>
<tr>
<td>BCM</td>
<td>Baylor College of Medicine</td>
</tr>
<tr>
<td>BIPAI</td>
<td>Baylor International Paediatric AIDS Initiative</td>
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<tr>
<td>BNTP</td>
<td>Botswana National Tuberculosis Programme</td>
</tr>
<tr>
<td>BONELA</td>
<td>Botswana Network on Ethics, Law and HIV/AIDS</td>
</tr>
<tr>
<td>BONEPWA</td>
<td>Botswana Network of People Living with Aids</td>
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<tr>
<td>BOTEC</td>
<td>Botswana Technology Centre</td>
</tr>
<tr>
<td>BOTUSA</td>
<td>Botswana USA Project</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<tr>
<td>COE</td>
<td>Centre of Excellence</td>
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<tr>
<td>DSMB</td>
<td>Data Safety &amp; Management Board</td>
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<tr>
<td>EGPAF</td>
<td>Elizabeth Glaser Paediatric AIDS Foundation</td>
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<tr>
<td>GoB</td>
<td>Government of Botswana</td>
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<tr>
<td>HAART</td>
<td>Highly Active Antiretroviral Treatment</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency virus</td>
</tr>
<tr>
<td>HNDS</td>
<td>Highly Nutrient Dense spread</td>
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<tr>
<td>IDCC</td>
<td>(Adult) Infectious Disease Care Clinic</td>
</tr>
<tr>
<td>IFC</td>
<td>Intensive Follow-up Clinic</td>
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<tr>
<td>IPMS</td>
<td>Integrated Patient Management System</td>
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<tr>
<td>KITSO</td>
<td>Knowledge, Innovation and Training Shall Overcome</td>
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<tr>
<td>MDR-TB</td>
<td>Multi Drug Resistant Tuberculosis</td>
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<tr>
<td>MOA</td>
<td>Memorandum of Agreement</td>
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<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
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<tr>
<td>PAC</td>
<td>Paediatric AIDS Corps</td>
</tr>
<tr>
<td>PIDC</td>
<td>Paediatric Infectious Disease Clinic</td>
</tr>
<tr>
<td>PMH</td>
<td>Princess Marina Hospital</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission</td>
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<tr>
<td>RDA</td>
<td>Recommended Daily Allowance</td>
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<tr>
<td>RUTF</td>
<td>Ready to Use Therapeutic Feed</td>
</tr>
<tr>
<td>SMART</td>
<td>Strategies for Management of Anti-Retroviral Therapy</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>UPENN</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
</tbody>
</table>
10. ACKNOWLEDGEMENTS

We wish to thank the following staff for the contribution they made to the 2007/2008 issue of the annual report:

Gabriel Anabwani – Foreword and guidance

Pona Selotate – Overall coordination and supervision of the design, Administration section, Strategic Plan, Donations, Partnerships, BIPAI Network meeting

• Mmapula Sechele – In-reach project

• Ryan Phelps – Coordination of articles

• Paul Mullan – TB project, Adolescent project, Telemedicine, Camp Hope

• Neo Gaetsewe – Inreach/Outreach project

• Michelle Kiang – PAC doctor program, PIDC

• Keofentse Mathuba – BANA II Research

• Kimberley Mehta – Survey of feelings of HIV infected/affected children

• Grace Karugaba – Training section

• Reifwe Sello – Personal experience in the COE, School teacher training project

• Olekantse Molathegi – Finance

• Nicholas Muriithi – IT and Maintenance

• Naomi Mochabo – Visitors to the COE, Sharing knowledge

• Jerry Makhanda – Nutrition

• Smiley Pool, Michelle Kiang, Paul Mullan - Kimberly Mehta Pictures

• Judith Neil & Chase O’brien - Proof-reading