OUR VISION:
No child should die of diabetes

OUR MISSION:
Life for a Child supports the provision of the best possible healthcare, given local circumstances, to all young people with diabetes in developing countries, through the strengthening of paediatric diabetes services in these countries.
FOREWORD

Over 90 years since the discovery of the life-saving drug insulin, diabetes continues to cause unnecessary suffering, disability and loss of life in many parts of the world. Developing countries are hardest hit by the rising epidemic and children with diabetes continue to be among the main victims of the disparity in access to affordable and quality medication and care. This is totally unacceptable.

Increasing access to and availability of essential diabetes medicines, supplies and technologies for all people with diabetes is one of the cornerstones of the Federation’s work. Thanks to our efforts we were able to have it included as one of the nine landmark global non-communicable disease (NCD) targets adopted by the World Health Assembly in 2012. The IDF Life for a Child Programme (LFAC) continues to play an important role in helping to meet the need in countries where the Government is unable to ensure delivery of the necessary treatments and services.

We are proud to present this Annual Report showcasing the unique and inspiring work of the Programme. The pages that follow demonstrate how it is concretely making a difference to the lives of thousands of young people living with diabetes, championing the vision that ‘No child should die of diabetes.’

2012 saw the Programme reach the significant milestone of supporting over 10,000 children with diabetes in the developing world. If you consider that around 1,000 children were being supported just four years ago, the achievement of this target is truly remarkable and testimony to the rapid expansion that has taken place in a short space of time.

41 countries in all four corners of the globe are now benefitting from the life-saving care that Life for a Child is able to provide. It is of particular significance that over the past 12 months the Programme was able to considerably expand the number of children receiving vital monitoring supplies, allowing them to better manage their diabetes and increase their chances of living longer and healthier lives. This was made possible thanks to new and substantial contributions from partners and supporters, evidence of the increased recognition that the vital work and mission of Life for a Child continues to receive.

The Programme was able to further expand its activities focussed on building and strengthening the knowledge base around diabetes and developing and disseminating resources to help raise awareness and improve education of diabetes in the young among health professionals. This, along with the vital supplies that Life for a Child makes available, combined with outstanding support from Programme partners, major contributors, and donors.

We thank you all for your generosity and contributions and look forward to seeing this valuable effort and commitment continue to increase in the new triennium. The task remains immense but together we can ensure that diabetes care reaches all in need.

JEAN CLAUDE MBANYA
President 2009-2012
International Diabetes Federation

SIR MICHAEL HIRST
President 2013-2015
International Diabetes Federation
Life for a Child is a unique programme that harnesses the efforts and resources of the global diabetes community to help young people affected by the disease to access care and supplies. The Programme’s model of working directly with established diabetes centres, providing resources and guidance so that medical care can both improve and expand, has proved to be a robust and sustainable method.

2012 was a highly successful year for Life for a Child, one that saw the major milestone of supporting 10,000 children and youth with diabetes in the developing world achieved. This target had been set at a meeting in London in October 2008, when the Programme was supporting around 1,000 children and youth.

At the end of 2012, Life for a Child was supporting 11,200 children and youth in 41 countries.

Most of these countries require support with insulin and each year donated supplies are shipped to them. The cost of self-monitoring blood glucose is even higher than insulin and far fewer developing country governments are able to provide this supply. Due to generous in-kind support for LFAC, 2012 saw a marked expansion in the number of children and youth who are able to regularly check their blood glucose levels, impacting positively on self and clinical care.

In addition to access to insulin, diabetes education for children and their families and health professionals is critical to achieving good health outcomes. The Life for a Child Programme’s web-based education resources pages expanded to seven languages and targeted education materials were distributed to all countries. Input from local experts ensure that content is relevant and culturally adaptable.

Various mentoring relationships were also established, linking developed and developing country centres, and the Programme set up a Medical and Scientific Advisory Group to advise and facilitate planning for the future.

Much has been achieved, but as the diabetes epidemic continues to increase in all countries, many more children and youth are in need of support. To efficiently address this, clinical research projects have been initiated and will help define the scope of the problem as well as documenting best practices for providing optimal support in resource-limited settings.

Moreover, attention is also being given to the challenge of self-sufficiency once the youth supported turn 26, beyond the age for programme assistance. Local and international funds are currently being directed to local pilot education support and vocational training projects.

At the end of 2012, Life for a Child was supporting 11,200 children and youth in 41 countries.
### TABLE 1
COUNTRIES IN WHICH LFAC CENTERS OPERATE AND THE NUMBER OF CHILDREN CURRENTLY RECEIVING ASSISTANCE

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>SITES</th>
<th>NR OF CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papua New Guinea</td>
<td>Whole country</td>
<td>1</td>
</tr>
<tr>
<td>Fiji</td>
<td>Whole country</td>
<td>20</td>
</tr>
<tr>
<td>Philippines</td>
<td>Manila and surrounds</td>
<td>31</td>
</tr>
<tr>
<td>India</td>
<td>Nagpur, Vellore, Haridwar and Ahmedabad</td>
<td>650</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Whole country</td>
<td>160</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Whole country</td>
<td>160</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Colombo and surrounds</td>
<td>150</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>Kinshasa and surrounds, Goma</td>
<td>352</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Whole country</td>
<td>634</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Dar-es-Salaam and surrounds</td>
<td>530</td>
</tr>
<tr>
<td>Nepal</td>
<td>Patan, Kanti and surrounds</td>
<td>60</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Lagos and surrounds</td>
<td>120</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>Tashkent, Samarkand, Andijan and Bukhara</td>
<td>400</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Harare and other areas</td>
<td>325</td>
</tr>
<tr>
<td>Mali</td>
<td>Bamako, Sikasso, Tomboucto</td>
<td>115</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Guayaquil, Quito and surrounds</td>
<td>170</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>Honiara and surrounds</td>
<td>1</td>
</tr>
<tr>
<td>Morocco</td>
<td>Rabat and surrounds</td>
<td>35</td>
</tr>
<tr>
<td>Sudan</td>
<td>Gezira, Khartoum and surrounds</td>
<td>630</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Ho Chi Minh City and surrounds</td>
<td>30</td>
</tr>
<tr>
<td>Maldives</td>
<td>Whole country</td>
<td>60</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Whole country</td>
<td>250</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Dhaka</td>
<td>1,495</td>
</tr>
<tr>
<td>Uganda</td>
<td>Kampala and surrounds</td>
<td>40</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Santo Domingo</td>
<td>85</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Guatemala City</td>
<td>80</td>
</tr>
<tr>
<td>Haiti</td>
<td>Port-au-Prince and surrounds</td>
<td>50</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Addis Ababa</td>
<td>1,420</td>
</tr>
<tr>
<td>Cayman Islands</td>
<td>Whole country</td>
<td>20</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Asmara</td>
<td>800</td>
</tr>
<tr>
<td>Liberia</td>
<td>Ganta and Monrovia</td>
<td>50</td>
</tr>
<tr>
<td>Guyana</td>
<td>Whole country</td>
<td>30</td>
</tr>
<tr>
<td>Togo</td>
<td>Whole country</td>
<td>50</td>
</tr>
<tr>
<td>Kenya</td>
<td>Nairobi</td>
<td>50</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Karachi</td>
<td>1,200</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Dushanbe and surrounds</td>
<td>400</td>
</tr>
<tr>
<td>Ghana</td>
<td>Accra and Kumasi</td>
<td>305</td>
</tr>
<tr>
<td>Iraq (Kurdistan)</td>
<td>Erbil</td>
<td>-</td>
</tr>
<tr>
<td>Mexico</td>
<td>Guadalajara, Guanajuato, Merida, Mexico City</td>
<td>130</td>
</tr>
<tr>
<td>Burundi</td>
<td>Bujumbura</td>
<td>75</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>Pointe Noire</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>11,211</strong></td>
</tr>
</tbody>
</table>
FIGURE 1
COUNTRIES SUPPORTED BY LFAC

Countries supported by the Life for a Child Programme

Countries joining the Programme in 2012
COUNTRY OUTCOMES

OVERVIEW

Health services in five countries joined the Programme in 2012, bringing the total number of countries supported to 41. The recipient centre varies from country to country. It can be the capital city hospital, the national diabetes association or a mission hospital. Thorough Programme monitoring and, if relevant, financial information is fed back annually to the LFAC management team in Sydney.

> AFRICA

- Burundi
- Democratic Republic of Congo
- Eritrea
- Ethiopia
- Ghana
- Kenya
- Liberia
- Mali
- Nigeria
- Morocco
- Republic of Congo
- Rwanda
- Sudan
- Tanzania
- Togo
- Uganda
- Zimbabwe

17 of the 55 countries in Africa receive support through Life for a Child. The Programme works with the key group caring for children and youth with diabetes in the respective area. In 2012, centres in Burundi, Ghana, and the Republic of Congo joined the Programme, providing support for 4,200 children and youth with diabetes.

In Rwanda and Tanzania, where LFAC support commenced in 2004, the numbers of children supported are higher than in some of the more populous nations, as the model of diabetes care penetrates rural areas of each country, resulting in lower mortality rates and more children being engaged with the Programme.

In Nigeria, thanks to the efforts of Dr. Abiola Oduwole who established a network of young paediatric endocrinologists, the number of children receiving LFAC support increased from 31 to 120. Support also increased to cover 800 children in Eritrea, where LFAC is collaborating with the Eritrean National Diabetic Association and Government health services.

> CENTRAL ASIA

- Azerbaijan
- Iraq (Kurdistan)
- Tajikistan
- Uzbekistan

Life for a Child works in partnership with centres in Azerbaijan, Tajikistan, and Uzbekistan, supporting almost 1,000 children in total. In Azerbaijan, Dr. Gunduz Ahmadov and others in the Government health service have organised support for children in most parts of the country. In Uzbekistan, the Government Endocrinology Institutes in various provinces are delivering care. In Tajikistan, assistance from NGO Operation Mercy has strengthened LFAC efforts to supply government institutes around the country with insulin, meters and strips. In Kurdistan, Iraq, the Programme began supporting the Diabetic Child Association and was able to successfully dispatch education materials.

> THE AMERICAS

- Bolivia
- Cayman Islands
- Dominican Republic
- Ecuador
- Guatemala
- Guyana
- Haiti
- Jamaica
- Mexico

Across North, Central, South America and the Caribbean, LFAC supports a diverse range of organisations caring for children and youth with diabetes. Mexico joined the Programme in 2012, with the Federación Mexicana de Diabetes A.C. (Mexican Diabetes Federation - FMD), the umbrella organisation for 13 Diabetes Associations in 10 states, agreeing to coordinate implementation nationally.
Life for a Child is making a growing contribution to the diabetes communities in the South East Asia region, expanding support in three of the world’s most populous countries: India, Pakistan, and Bangladesh. In India, LFAC joined forces with Dia Care in Ahmedabad, bringing the total number of LFAC centres in the country to four. In Pakistan, the National Institute of Child Health in Karachi, caring for over 360 youth under the age of 23, also joined the Programme in 2012.

There is a relatively low incidence of type 1 diabetes in many countries of the Western Pacific, and Life for a Child supports a small number of children and youth across the region. These include the three original pilot sites for the Programme: Fiji, Papua New Guinea, and the Philippines. In Vietnam, LFAC partners with Children’s Hospital 2 in Ho Chi Minh City, and the education and advocacy organisation CLAN (Caring and Living as Neighbours).

**FIGURE 2**
**NUMBER OF COUNTRIES AND NUMBER OF CHILDREN/YOUTH ASSISTED BY LFAC, 2001-2012**

- **SOUTH EAST ASIA**
  - Bangladesh
  - India
  - Maldives
  - Nepal
  - Pakistan
  - Sri Lanka

- **WESTERN PACIFIC**
  - Fiji
  - Papua New Guinea
  - Philippines
  - Solomon Islands
  - Vietnam
RESOURCE DISTRIBUTION

INSULIN

Donations of insulin were sent to 24 countries and funds were provided for in-country purchase of insulin in an additional three. Governments provided support in the remaining 14 countries.

BLOOD GLUCOSE METERS AND TEST STRIPS

Donated supplies were sent to 26 countries and funds were provided for the local purchase of meters and strips in a further three. Governments in a few countries (eg, Fiji and Azerbaijan) are now able to provide some or all of the test strips themselves, which is a welcome development.

HBA1C TESTING

The measurement of glycosylated haemoglobin (HbA1c) is a key component of clinical care. This test, conducted quarterly, provides an overall picture of blood glucose control. In 2012, LFAC increased the number of centres with ready access to HbA1c testing by eight, through the provision of machines and test cartridges.

DIABETES EDUCATION

In February 2012 LFAC conducted the second round of its education resource distribution project. A variety of valuable education materials were delivered to 18 centres in 15 countries. The materials included:

- “Moseka” – a cartoon novel about two village children developing diabetes. This informative, realistic and detailed comic-style story, produced in the Democratic Republic of Congo by Dr. Marguerite De Clerck and others, is available for download in English, French and Bahasa Indonesian, on the LFAC Education resources website.
- “Professor Bumblebee’s Guide to Diabetes” – a DVD developed by the Australian Diabetes Council. Available in five languages (English, French, Spanish, Vietnamese and Tagalog), this engaging DVD has proved a great success with children and parents from Nigeria to Tajikistan and a number of other countries. It can be viewed on the Life for a Child YouTube channel http://www.youtube.com/LifeforaChild
- Parent education manuals in English (the Australian manual), kindly provided by the Australian editors.
- Manuals on care of children and youth with diabetes, kindly provided by Dr. Ragnar Hanas and Class Publishing.

In April and May, 1,000 copies of the Spanish version of the popular ‘Pink Panther’ Manual were sent to LFAC-supported centres in Bolivia, Ecuador, Guatemala, Dominican Republic, Mexico, and Costa Rica. LFAC extends thanks to its editors and the Barbara Davis Center for their support.

When children and adolescents first develop diabetes, the diagnosis is often delayed and they develop a serious condition called diabetic ketoacidosis (DKA). In some developing countries diabetes is frequently misdiagnosed and the child is treated for malaria, pneumonia, typhoid or some other disease, resulting in death. In 2012, LFAC developed an education poster to raise awareness of the warning signs of diabetes in children. The poster was printed and distributed in a number of countries. www.idf.org/lifeforachild/education-resources/dka-awareness

A campaign organised by the IDF Life for a Child Programme and the Ethiopian Diabetes Association with funding from the Leona M and Harry B Helmsley Charitable Trust.
The LFAC online education resources for children and adolescents - www.lifeforachild.org/diabetes-education-resources - were made available in Bahasa Indonesian, Tagalog (Filipino) and Vietnamese, increasing the total number of languages to seven.

MENTORING AND SITE VISITS

In many countries diabetes in the young is an unusual problem and so there may be a lack of expertise among health professionals. Even in countries where there is considerable knowledge, every centre can benefit from contact with other expert centres. In 2012, LFAC established a number of relationships between developed and developing country centres and enhanced some that were already in place. These relationships foster teaching, training and research.

The following visits were conducted by Programme staff and international experts:

- Bangladesh, Vietnam – Ms. Angie Middlehurst (Sydney)
- Cayman Islands – Dr. Lori Laffel (Boston)
- Dominican Republic – Ms. Diana Washeim, Dr. Cordero (New York)
- Eritrea – Dr. Christian Kastendieck (Bremen, funded from other sources)
- Guatemala – Dr. Hans-Jacob Bangstad (Oslo)
- Haiti – Dr. Mark Atkinson (Gainesville), Prof. Francine Kaufman (Los Angeles) (both funded from other sources)
- Mexico, Pakistan, Tanzania, Sudan – Dr. Graham Ogle (Sydney)
- Morocco – Prof. James Ron (Minneapolis)
- Nepal – Dr. Holley Allen (Springfield, Massachusetts)
- Rwanda – Prof. Trevor Orchard and Ms. Sara Marshall (Pittsburgh, NIDDK funds), Dr. Deborah Edidin (Chicago, funded from other sources)
- Solomen Islands – Dr. Bruce King (Newcastle, Australia)
- Togo – Dr. Deborah Edidin (Chicago)

In addition, IDF Young Leaders in Diabetes Katharina Schudmann and Maria Hillinger spent time at Christian Medical College in Vellore, India, assisting with education and providing support for the children and youth with diabetes. Patient advocate Kyle Rose carried out a similar activity in Bolivia.

RESEARCH

The incidence of diabetes varies widely around the world, as does the frequency of various types of diabetes. Not all diabetes in childhood is type 1 or type 2. It is vital to know the incidence and prevalence of diabetes in each country, the types of diabetes that occur and the genetic influences. Ultimately, this information will guide training, treatment, resource allocation and advocacy, and also help researchers around the world as they strive towards predicting and preventing diabetes, and finding a cure.

Studies are underway in Rwanda (in partnership with the University of Pittsburgh) and Fiji. LFAC planned and received ethics approval in Australia for an epidemiological study in five countries supported by the Programme. In all five, local ethics approval is being obtained, and the study will commence in 2013. Experts from the United States of America will also be involved.

MEDICAL AND SCIENTIFIC ADVISORY GROUP

The Life for a Child Medical and Scientific Advisory Group was set up to support the Programme in achieving its vision that “No child should die of diabetes”. The group is composed of 26 International Advisors and 52 Country Advisors who will:

- Advise on new initiatives that are being planned (e.g., reduction of misdiagnosis, management of microalbuminuria)
- Assist with site visits/assessments, and establishment of twinning/mentoring relationships
- Assist with the development of educational resources in different languages
- Identify special needs/new directions for the Programme
- Advise on the development of training programmes

The International Advisors bring a wealth of knowledge that covers not only medical specialities but also science, law, social media, human rights, sport, management and supply chain expertise, leadership of international diabetes associations, and advocacy.

The Country Advisors are the ‘local champions’ of Life for a Child, and work tirelessly in their country to support children and youth with diabetes and families in need. Without their work on the ground, the Programme would be unable to continue.
**USE OF FUNDS**

**FIGURE 3**

**USE OF THE FUNDS SENT TO LFAC PROGRAMME CENTRES IN 2012**

(IN USD AND % OF TOTAL)

- **Insulin**
  - $194,767
  - 27%

- **Strips & Meters**
  - $331,387
  - 44%

- **Syringes & Needles**
  - $42,912
  - 6%

- **Equipment**
  - $4,657
  - 1.5%

- **Other (medical care, infrastructure, food, transport etc)**
  - $42,660
  - 6%

- **HBA1c**
  - $55,936
  - 7.5%

- **Education**
  - $60,701
  - 8%
**FIGURE 4**
**AMOUNT OF IN-KIND DONATIONS IN 2012**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin</td>
<td>$2,175,375</td>
</tr>
<tr>
<td>Strips</td>
<td>$1,659,623</td>
</tr>
<tr>
<td>Syringes</td>
<td>$0</td>
</tr>
<tr>
<td>Meters</td>
<td>$71,025</td>
</tr>
<tr>
<td>Education</td>
<td>$42,720</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,948,743</strong></td>
</tr>
</tbody>
</table>
The IDF Life for a Child Programme would like to acknowledge the generous support of Associations, companies, individuals and families around the world. Their contributions enable the Programme to help more and more children with diabetes in developing countries to receive the clinical care and education they require to stay alive and live healthy lives.

**PROGRAMME SUPPORTERS**

**PARTNERS AND MAJOR CONTRIBUTORS**

**AUSTRALIAN DIABETES COUNCIL (ADC)**

An original founding partner of the Programme, ADC continues to support LFAC by hosting staff, providing financial, marketing and fundraising expertise, contributing to oversight of Programme activities, and providing access to diabetes education materials.

**HOPE worldwide**

Another founding partner, HOPE worldwide provides assistance by collecting and passing on tax-deductible donations on behalf of the Programme in Australia, USA and the UK. HOPE affiliates provide in-country oversight in the Philippines, Papua New Guinea, Fiji, and Nigeria.

**INSULIN FOR LIFE (IFL)**

IFL works in partnership with LFAC, delivering clinical diabetes supplies to Ecuador, the Maldives, and Uzbekistan. Additionally, IFL is able to refer enquiries regarding support needs directly to LFAC, and advise the Programme on specific issues relating to diabetes internationally.

**INTERNATIONAL SOCIETY FOR PAEDIATRIC AND ADOLESCENT DIABETES (ISPAD)**

ISPAD’s extensive expert membership around the world supports LFAC in multiple ways, including the development of guidelines, conduct of training workshops for health professionals, site visits and advocacy.
Eli Lilly and Company has supported LFAC since its inception, most notably through the ongoing provision of free insulin. In 2012, 144,215 vials were distributed to 8,810 children and youth in 20 countries, amounting to an in-kind donation of over US$2 million. For some families, donated insulin is quite literally the difference between life and death. LFAC gratefully recognises the vital role Eli Lilly and Company play in the success of the Programme.

Nipro have provided reduced-price blood glucose test strips to five LFAC-supported countries since 2007. In 2012 they initiated a major commitment to the Programme, providing blood glucose meters, test strips and lancets at a markedly reduced rate for 5,000 children and youth with diabetes in 17 countries, most of whom had no prior access to self-monitoring equipment.

LifeScan have been an active supporter of the Programme for a number of years. In November 2012 they committed one million test strips to LFAC-supported centres in seven countries: Bangladesh, Guatemala, Guyana, Mali, Nepal, Sri Lanka, and Zimbabwe.

A private United States Trust, Helmsley selected LFAC as beneficiary of a substantial two-year grant in 2011. This has allowed the Programme to expand significantly, not just in terms of numbers of children supported but also with regards to education, training and research activities, and the expansion of blood glucose self-monitoring.

In 2010 LFAC received a very generous donation from the Fondation de l’Orangerie and its donors, which helped ensure the sustainability and expansion of the Programme throughout 2010-11. In May 2012 the Fondation exceptionally renewed its grant, extending it for two more years. These funds will facilitate the introduction and training in blood glucose self-monitoring for thousands of children and youth.

LFAC wishes to acknowledge and thank the individual donors for their steady contribution and unwavering faith in the Programme’s work and vision. Around the world, numerous individuals donate to better the care and lives of children and youth with diabetes in developing countries. Their support positively impacts not only the child in need of but also the local support structure which provides for the daily care. Continued commitment to the Life for a Child Programme eases the burden of diabetes among the less fortunate and ensures that accidents of geography do not decide who lives or dies from diabetes. Hope is on the horizon for children and their families living with this killer disease giving them the possibility to live a healthy and happy life.