First year report on the support from Diabetes UK to Mozambique within the framework of the International Diabetes Federation Twinning Programme

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Introduction
This current report highlights the progress made during 2007 with regards to the different objectives established as part of Diabetes UK’s Twinning project with Mozambique. This report details progress made in 2007, the completion of the objectives set in the first year and the proposed course of action for 2008 and 2009.

It is hard to describe and measure the influence of Diabetes UK’s support to Mozambique during 2007 in a report. This support impacted the visibility and importance given to diabetes by different stakeholders and also revitalised and motivated members of AMODIA, clinicians and the Ministry of Health. It was truly impressive to see the enthusiasm of all those involved in ensuring successful activities for World Diabetes Day and also bumping into people in the
streets wearing their World Diabetes Day t-shirts and recognising me from either my work with the different AMODIA branches or at the World Diabetes Day events. One concrete result of World Diabetes Day activities was 34 new members joined AMODIA Maputo in the 2 weeks following World Diabetes Day (normally 5-6 new members monthly) and number of people coming in to get blood glucose measured doubled in Maputo during the same period.

The course was a huge success and from my perspective Mozambique may be one of the only countries in sub-Saharan Africa able to mobilise 6 local specialists to deliver such a high quality lectures.

Diabetes UK acted as a catalyst and its support was greatly appreciated by all those involved. In addition to their gratitude, that I was asked to convey, Diabetes UK’s partners in Mozambique would be grateful to be able to bring something to Diabetes UK as they feel that it is important for them to contribute to this Twinning Initiative.

Progress Report 2007
This section of the report is structured around the 9 points that form the basis of Diabetes UK’s aims for Twinning in Mozambique and highlights the main progress made in the different periods of the first year’s activities. More detailed progress from the first 2 interim reports as well as a more detailed description of the activities from September to December 2007 is detailed in Appendix 1.

1. Support for the training of trainers programme initiated by the Ministry of Health
   • 24 healthcare workers (doctors and medical technicians) in Maputo have been trained and provided a basic “kit” for diabetes care and how to organise chronic consultations
   • Due to a delay in funds being made available from IDF AFRO, Diabetes UK support was used to organise a course in Maputo with 12 participants from 5 provinces using only local faculty
   • Course was extremely well delivered and participants were very satisfied
   • Photos of course are included on CD in Appendix 2

2. Further training of healthcare workers through different options e.g. sending them to Tanzania, training organised in Mozambique by someone external, specialised training.
   • Areas identified for further training for health professionals:
     - Diabetes Foot – possibility of using expert from Tanzania
     - Nutrition and diabetes
     - Diabetes and HIV/AIDS
     - Paediatric aspects of diabetes – possibility of Mozambique participating in European Society of Paediatric Endocrinology (ESPE) training course
     - Clear need for development of Diabetes Educators and expert patients

3. Invitation to Dr. Carla Silva-Matos to deliver a talk at the Annual Professional Conference in 2008 coupled with talks to voluntary and lay groups
   • Dr. Richard Holt has organised a session at the APC including, Professor John Yudkin, David Beran, Dr. Carla Silva-Matos and himself to discuss diabetes in Mozambique as well as Diabetes UK’s Twinning Project
   • Programme of visits to different health facilities, Diabetes UK and other diabetes and health related organisations is being finalised
4. **Diabetes UK literature made available to AMODIA with appropriate adaptation and translation**
   - Materials from Diabetes UK, Portuguese and Brazilian Diabetes Associations and Mali were discussed with Dr. Carla Silva-Matos and members of AMODIA
   - Diabetes UK materials will be used as a model incorporating the information from Brazil and Mali

5. **Organisation of World Diabetes Day events**
   - Activities in Maputo, Beira and Quelimane for World Diabetes Day (11-17 November 2007) included:
     - Community education sessions
     - Education sessions at diabetes associations
     - Special events on 17 November 2007 with activities including: walk, exercise sessions, measurement of BMI, blood pressure, blood glucose, waist circumference, heart rate, nutrition advice, checking of feet for people with diabetes
     - Participants during 17 November activities: Maputo 1,200, Beira 400, Quelimane 200
   - Considerable media coverage
   - Photos from World Diabetes Day and copies of two articles can be found in Appendix 2

6. **Advocacy and policy support to Dr. Carla Silva-Matos by David Beran**
   - National Plan on Non Communicable Diseases finalised and will be presented to the Minister of Health in early 2008 (details can be found in Appendix 3)
   - IIF contributions included in the National Plan:
     - Data from the RAPIA was included in the situation analysis
     - Inclusion of development of specialised services in the 3 Central Hospitals for Type 1 diabetes
     - As part of the assessment of the implementation of the National Plan a RAPIA is included
     - The 11 points from the Diabetes Foundation report on implementing national diabetes programmes in sub-Saharan Africa are included
   - Both Diabetes UK and the IIF are included in the national plan as partners

7. **Develop core group of people involved in diabetes. This should include people from the Ministry of Health, Clinicians and people with diabetes.**
   - World Diabetes Day activities provided an opportunity to improve the collaboration between the different stakeholders
   - Maputo close collaboration between AMODIA, Ministry of Health, Maputo City Health Authority and Clinicians
   - In Beira there was an increase in collaboration between the clinicians and AMODIA since last visit
   - In Quelimane excellent collaboration between Clinical Director of the Provincial Hospital and Clinicians

8. **Development of AMODIA**
   - Overall improvements in all 3 branches of AMODIA were visible
   - Both AMODIA Maputo and Quelimane have made immense efforts in developing their diabetes consultations and management capacity and have now started to organise education sessions and community outreach activities
• Some problems still remain in Beira with regards to the management of the branch by the president, but since the last visit most recommendations have been adopted

9. Long term research programmes in Mozambique in Health Services and Basic Science
• The idea of Diabetes UK sponsoring 1-2 Public Health Masters students was further discussed
• Other areas of research:
  - Financial impact of diabetes
  - Prevalence study
  - Impact of AMODIA on diabetes care versus hospital based care

Achievement of 2007 objectives
In looking at the Objectives established by Diabetes UK following Dr. Richard Holt and Jill Steaton’s visit to Mozambique in October 2006, the following results can be observed:

1. 5 trained healthcare workers at each Central Hospital
   • 720% based on numbers of healthcare workers trained
   • 66% based on training at 3 Central Hospitals (only Maputo and Beira healthcare workers trained)

2. Assessment of feasibility and what option would work best with local partners
   • 100%

3. Invitation extended to Dr. Carla Silva-Matos
   • 100%

4. Selected Diabetes UK documents presented to local stakeholders and specific documents selected for adaptation and translation
   • 100%

5. Production of posters, leaflets and t-shirts for World Diabetes Day and activities organised in the 3 existing branches of AMODIA
   • 100%

6. Advocacy
   • 90%

7. Identify 3 people for training/encouragement in the area of diabetes in Maputo
   • 100%

8. Support to AMODIA
   • 85%

9. Explore feasibility of different research project
   • 100%

A more detailed description of the completion of the 2007 objectives can be found in Appendix 4.

Activities for 2008-2009
Based on discussions with local partners the following activities have been proposed for 2008-2009: Diabetes UK objectives have been combined with the aims put forward by the National Plan for Non Communicable Diseases to ensure that the activities supported by Diabetes UK in 2008 and 2009 contribute to the advancement of the National Plan.
• Expand course organised in December with Diabetes UK support
• Training of 2 doctors or technicians in foot care and training of 2 paediatricians in Type 1 diabetes
• Development of patient education materials:
  o Type 1 diabetes
  o Type 2 diabetes
  o Complications
  o Diet
  o Exercise
  o Foot care
  o Information about diabetes for the general public
• Organisation of similar events for World Diabetes Day as in 2007 and expansion
• Technical support and training for Dr. Carla Silva-Matos, sponsorship of MPH programmes
• David Beran to continue support at Ministry of Health and AMODIA as in 2007
• Purchase of computers and printers for AMODIA branches in Maputo and Quelimane
• Expansion of AMODIA
  o Develop self-management capacity
  o Training of core members of AMODIA
• Development of studies on different aspects of diabetes
Appendices
Appendix 1 – Detailed progress report for 2007

1. Support for the training of trainers programme initiated by the Ministry of Health

1.1 April – June 2007
- Discussions with Dr. Kaushik Ramaiya (IDF Africa) and Dr. Carla Silva-Matos (Ministry of Health) about planning for IDF sponsored training and how additional support from Diabetes UK could be used.

1.2 June – September 2007
- 24 healthcare workers (doctors and medical technicians) in Maputo have been trained and provided a basic “kit” for diabetes care and now hold “chronic consultations” for diabetes and hypertension in 12 health centres in Maputo.
- Training has been planned in the three regions in Mozambique (South, Central and North) with a total of 24 doctors trained with the aim for them to become trainers in their respective provinces. Diabetes UK support was requested for the training course in Pemba.
- IDF AFRO will support the training in the South (September 2007) and Central (October 2007) Regions.

1.3 September – December 2007
- Due to a delay in funds being made available from IDF AFRO, the original plan to use Diabetes UK support to organise a course in the North of Mozambique, was changed to organising a course in Maputo.
- There were 12 participants at the course from:
  - Inhambane: 4
  - Beira: 3
  - Maputo: 3
  - Xai Xai: 1
  - Zambezia: 2
- More participants from Maputo were planned to attend, but unfortunately there was a cholera outbreak and most doctors in Maputo were on call and unable to attend.
- The course included lectures on:
  - Introduction to diabetes
  - Scope of problem
  - Classification
  - Diagnostic criteria
  - Team work
  - Type 1 and Type 2 diabetes
  - Prevention
  - Control
  - Treatment of diabetes (diet and exercise, oral medication, insulin)
  - Complications
  - Diabetes foot
  - Hypertension
- The faculty was composed of only local professionals and the level was extremely good and the participants were very satisfied.
- The course also included a visit to AMODIA in Maputo and seeing how it was organized and discussions with patients.
- Further courses using the support from IDF AFRO (which arrived in December instead of August) is planned.
• In Appendix 2 there are pictures of the training course

2. **Further training of healthcare workers through different options e.g. sending them to Tanzania, training organised in Mozambique by someone external, specialised training.**

2.1 **April – June 2007**
• Discussions with Dr. John Day about possibly building on contacts he has with Portuguese Diabetes Association
• Meeting with Dr. Mike Lawson, GP in Bradford with an interest in diabetes who worked in Mozambique for 3 years

2.2 **June – September 2007**
Areas identified for further training for health professionals:
• Diabetes Foot – possibility of using expert from Tanzania
• Nutrition and diabetes
• Diabetes and HIV/AIDS
• Paediatric aspects of diabetes – possibility of Mozambique participating in European Society of Paediatric Endocrinology (ESPE) training course to be held in Nairobi
• Clear need for development of Diabetes Educators and expert patients

2.3 **September – December 2007**
• Dr. Carla Silva-Matos expressed that her priorities for training were Diabetes Foot and training a paediatrician per Central Hospital in the management of Type 1 diabetes
  ○ Questions remain on where to find the appropriate course in Portuguese for this training and if it is best to send people abroad or have trainers come to Mozambique
• David Beran met with the group from ESPE organising a paediatric endocrinology course in Nairobi
  ○ The first course will be held in February 2008
    ▪ It has been decided to wait and see if the first course is successful and then further investigate the possibility of sending doctors from Mozambique to this course

3. **Invitation to Dr. Carla Silva-Matos to deliver a talk at the Annual Professional Conference in 2008 coupled with talks to voluntary and lay groups**

3.1 **April – June 2007**
• Contact established with Dr. Richard Holt and organising committee
• Discussions with Jill Steaton about organising other parallel visits with voluntary groups for Dr. Carla Silva-Matos
• Discussions with Dr. Carla Silva-Matos to see what she would be interested in doing/seeing with regards to diabetes in the UK

3.2 **June – September 2007**
• Dr. Carla Silva-Matos has accepted the invitation
• She would be interested in visiting different diabetes clinics, hospital, GP and nurse run clinics, meeting with a policy maker and also learning more about Diabetes UK’s structure and activities (fund raising, advocacy, training patient and healthcare worker, volunteers)
• Dr. Richard Holt has proposed the following programme for the presentation:
3.3  **September – December 2007**

- A programme for Dr. Carla Silva-Matos’ visit has been drafted and a meeting between Jill Steaton and David Beran will take place in January to finalise details
- As of now Dr. Silva-Matos would be interested in:
  - Visiting hospitals, diabetes clinics, foot clinics and pharmacies
  - GP run diabetes clinics
  - NHS logistics
  - Someone involved in policy aspects around diabetes
  - Spend 1 full day at Diabetes UK to see what different departments do
  - Meeting with volunteers

4.  **Diabetes UK literature made available to AMODIA with appropriate adaptation and translation**

4.1  **April – June 2007**

- Diabetes UK material obtained from Jill Steaton
- Other materials to be obtained from Portuguese Diabetes Association

4.2  **June – September 2007**

- Diabetes UK, Portuguese and Brazilian Diabetes Association materials given to Dr. Carla Silva-Matos for discussion with AMODIA
- AMODIA already has two brochures, one on what is diabetes including dietary information and one on diabetes foot. Both patients and clinicians stated that these were very useful and expressed interest in other simple pamphlets addressing other aspects of diabetes and care

4.3  **September – December 2007**

- In addition to the materials described above materials from Mali were also obtained
- Discussions were held at all branches of AMODIA to see what their needs were with regards to education materials
- The material from Brazil was seen to be useful as well as some of the posters developed in Mali
  - The following materials were requested:
    - Type 1 diabetes
    - Type 2 diabetes
    - Complications
    - Diet
      - Tables with different local foods
      - Quantities of foods that can be eaten with the possibility of developing visual aids
    - Exercise
    - Foot care
    - Information about diabetes for the general population – improving pamphlet that already exists
5. **Organisation of World Diabetes Day events**

5.1 **April – June 2007**
- No activities

5.2 **June – September 2007**
- A plan for World Diabetes Day was developed during this visit with the Ministry of Health and AMODIA. Activities for World Diabetes Day will be held in the 3 branches of AMODIA and will include:
  - TV and radio spots and interviews
  - A walk
  - Preparation of pamphlets, posters and t-shirts to raise awareness
  - Measurement of waist circumference followed by advice

5.3 **September – December 2007**
- Coordination of activities with Dr. Carla Silva-Matos in Maputo
- Visits to AMODIA branches in Beira and Quelimane to organise events for World Diabetes Day activities in collaboration with Hospital and Provincial Health Authorities
- All branches of AMODIA received the following materials:
  - T-shirts
  - Banners
  - Posters
  - Pamphlets
  - Copies of the Diabetes Strategy for Africa
  - Sheets to collect data from measurements
- **Beira:**
  - 11/11 – Visits to churches for information sessions and publicity about activities on 17/11
  - 14/11 – Meeting and presentation to members at Hospital with distribution of t-shirts
  - 17/11 – Activities organised included:
    - Walk
    - Exercise session
    - Traditional entertainment
    - Measurement of BMI, Blood Pressure, Waist Circumference and Heart Rate
    - Checking of feet for people with diabetes
  - About 400 participants
  - MCEL local mobile company provided t-shirts and other gifts as well as tents for activities on the 17\(^{th}\) of November
- **Quelimane:**
  - 11/11 – Planning meeting for World Diabetes Day (30 members present)
  - 12/11 – Education sessions at Police and Port Authority
  - 13/11 – Education session and discussion at Instituto de Ciencias de Saúde (Institute of Health Sciences, training school for Medical Technicians) and home visits to patients
  - 14/11 – Discussion and Q&A session at Association, distribution of t-shirts (40 members present)
  - 14/11 – Donation of glucometer and sphygmomanometer to Hospital and visit to wards and donation of fruit
15/11 – Education session and discussion at Instituto de Ciencias de Saúde (Institute of Health Sciences, training school for Medical Technicians)

17/11 – Activities organised included:
- Walk
- Exercise session
- Traditional entertainment
- Measurement of BMI, Blood Pressure, Blood Glucose, Waist Circumference and Heart Rate
- Checking of feet for people with diabetes

About 200 participants

Maputo:
- 14/11 – Award ceremony for AMODIA nurse opened by the Permanent Secretary of the Ministry of Health (50 participants)
- 15/11 – Open session on diabetes at the faculty of medicine (200 participants)
  - presentations by clinicians and patients
- 17/11 – Activities organised included:
  - Walk
  - Exercise session
  - Traditional entertainment
  - Measurement of BMI, Blood Pressure, Blood Glucose, Waist Circumference and Heart Rate
  - Checking of feet for people with diabetes

About 1,200 participants

19/11 – Education session at Cathedral (120 participants)

Media coverage:
- Radio Mozambique
- Mozambique Television
- STV
- Miramar Television
- Community Radio
- Noticias (newspaper)
- MediaFax (electronic news)

Other financial support was given by the WHO (US$ 3,000) and the Ministry of Health (US$ 2,200)

Impact of World Diabetes activities:
- Collaboration between different stakeholders
- 34 new members joined AMODIA Maputo in the 2 weeks following World Diabetes Day (normally 5-6 new members monthly) and number of people coming in to get blood glucose measured doubled
- Increased visibility for AMODIA and diabetes

In Appendix 2 there is a CD with photos from World Diabetes Day as well as 2 articles

6. Advocacy and policy support to Dr. Carla Silva-Matos by David Beran
6.1 April – June 2007
- Possibility of helping Dr. Carla Silva-Matos organise a meeting on Non Communicable Diseases in August at the Ministry of Health
• Assistance with budgeting for World Diabetes Foundation funds available to Mozambique

6.2 June – September 2007
• David Beran assisted Dr. Carla Silva-Matos in finalising the National Plan for Diabetes and Hypertension. The main points of this plan are included in Appendix 3
• Main priorities for Dr. Carla Silva-Matos:
  o Advocacy
  o World Diabetes Day to increase visibility of problem for government and donors and increase knowledge for general population
  o Training
  o Capacity building for association
  o Development of materials for patient education
  o Data
• These priorities are both addressed in Diabetes UK’s objectives, the National Plan for Hypertension and Diabetes
• Availability of diagnostics has increased in Hospitals due to investment by Ministry of Health. Health centres with chronic consultations in Maputo, diabetes consultation at Beira Hospital and AMODIA Quelimane consultation have received basic tools for diagnosis from Ministry of Health
• Subsidised treatment of patients with diabetes and other chronic conditions is working well
  o New introduction of MT 5 (≈ £ 0.10) per prescription
• No problems observed with access to medicines for patients
  o Improvement in availability of insulin and all diabetes medicines, since previous studies and visits carried out by David Beran (RAPIA study 2003, visit in 2004 and 2006)
  o Some problems remain with availability of Metformin
• A main aspect lacking at all levels is that of data on people with diabetes in Mozambique, with regards to numbers of patients, the effectiveness of their treatment and also any complications. In order to address this during the visit to Beira and Quelimane, David Beran and Dr. Carla Silva-Matos carried out a clinical file review to identify problems and also see what data could be generated from the files without too much difficulty.
  o Overall the files were a source of some interesting information and allowed the identification of various problems (use of medicines, problems with definition between Type 1 and Type 2 diabetes, poor control of hypertension in people with diabetes, etc.)

6.3 September – December 2007
• Following David Beran’s last visit the Minister of Health requested that the National Plan for Diabetes and Hypertension be integrated into an overall plan for non-communicable diseases
• David Beran extended his stay in Mozambique as requested by Dr. Carla Silva-Matos in order to assist her finalise the National Strategic Plan on non-communicable diseases
• The plan includes:
  o Diabetes
  o Hypertension
  o Cancer (cervical, breast and prostate cancer)
David Beran mainly provided support in carrying out research, proof reading, combining the different sections into one comprehensive document and assist with the development of objectives, results and indicators.

Preparation and attendance at a presentation of the national plan to different stakeholders from the Ministry of Health on the 19th of December

- Plan was extremely well received

Dr. Silva-Matos will now be presenting the plan to the Minister of Health for approval in early 2008.

With regards to the IIF and the National Plan:

- Data from the RAPIA was included in the situation analysis
- Inclusion of development of specialised services in the 3 Central Hospitals for Type 1 diabetes
- As part of the assessment of the implementation of the national plan a RAPIA is included
- The 11 points from the Diabetes Foundation report on implementing national diabetes programmes in sub-Saharan Africa are included

- Both Diabetes UK and the IIF are included in the national plan as partners
- After having carried out the analysis of patient files in Beira and Quelimane, David Beran carried out a similar exercise in Maputo
  - Data collection methods and tools discussed and developed with AMODIA branches

7. **Develop core group of people involved in diabetes. This should include people from the Ministry of Health, Clinicians and people with diabetes.**

7.1 **April – June 2007**

- No activities

7.2 **June – September 2007**

- This already happens within Maputo with Dr. Carla Silva-Matos, clinicians and members of AMODIA

- For other branches during the visit by Dr. Carla Silva-Matos and David Beran to Beira and Quelimane a formal agreement signed by the Minister of Health was distributed to Provincial directors, Clinical directors of Hospitals, clinicians and AMODIA branches. This agreement creates a coordination group for AMODIA in each Province with representation from the Provincial Health Authority, Hospital and AMODIA.

7.3 **September – December 2007**

- Maputo close collaboration between AMODIA, Ministry of Health, Maputo City Health Authority and Clinicians
  - World Diabetes Day activities in Maputo provided opportunity for close collaboration between these stakeholders

- In Beira there was an increase in collaboration between the clinicians and AMODIA since last visit
  - World Diabetes Day provided the opportunity for AMODIA to work with the management of the Hospital and the Provincial Health Authorities

- In Quelimane excellent collaboration between Clinical Director of the Provincial Hospital and Clinicians
Increased collaboration with Provincial Health Authorities since last visit
World Diabetes Day activities organised by AMODIA with close collaboration with Hospital and Provincial Health Authorities

8. Development of AMODIA

8.1 April – June 2007
- No activities

8.2 June – September 2007
- AMODIA Maputo branch has improved its management, since last visit in 2006, and now has a steady income from consultations, membership fees, monthly fees and payment from sale of strips for blood glucose measurements as well as an effective consultation and additional educational and care activities for patients
  - Membership is approaching 1,000
  - 3 AMODIA members are now responsible for management aspects
  - Psychologist at AMODIA has increased their role and there is now a physical education teacher that organises exercise sessions
  - Some issues remain with regards to data collection, management and planning of activities

- AMODIA Beira has improved management aspects and now has 352 members, however some problems still remain:
  - Benefits to members not clear besides cheaper blood glucose measurements
  - Issues around data collection and management
  - Coordination with Hospital for more effective diabetes consultations
  - Parallel activities such as education, exercise and educational role of AMODIA Beira need to be developed
  - More active role for Clinical Officer trained in Tanzania, especially with regards to education
  - Inclusion of doctor from Catholic University Beira and support from Catholic University Beira to be included in an effective and sustainable way in coordination with Hospital Director

- AMODIA Quelimane has approximately 200 members. It runs a consultation once a week given by a doctor in a small office away from the hospital. It also has some community activities, such as picnics, home visits and education. Problems identified during the visit
  - Issues around data collection and management
  - Coordination with Hospital for more effective diabetes consultations
  - Clear activity plan needs to be developed
  - Better coordination with Hospital and Provincial authorities

8.3 September – December 2007
- David Beran spent 1 week with AMODIA Beira and Quelimane and 2 weeks with AMODIA Maputo dealing with general management aspects, improving benefits to patients and organisation of World Diabetes Day activities.

- Beira:
  - AMODIA provides some support and guidance to patients coming to hospital for diabetes care
  - Lack of confidence of AMODIA members and patients in Beira of President of AMODIA Beira Branch
• No clear benefits for patients as consultation is seen as part of hospital unlike in Maputo and Quelimane where consultation is seen as part of AMODIA
• Consultation is well organised
• Education sessions too complex
• Problems with clinical knowledge remain

• Beira recommendations and work:
  o Discussions about improving non-clinical benefits to patients (e.g. education sessions, etc.)
  o Work on reporting and general management of AMODIA
  o Preparation of a plan for education
  o Increase collaboration with other stakeholders
  o Discussions about how to improve management of AMODIA Beira discussed with Hospital Management and Dr. Carla Silva-Matos
  o Discussion about improvement of patient education and organisation of consultation
  o Identified new healthcare workers to involve in diabetes care
  o Develop activity plan 2008-2009

• Quelimane:
  o Clear improvements in management and coordination since last visit
  o Strong management team working closely together
  o Participation of members in general activities
  o Regular meetings
  o Consultation well organised and doctor very dedicated, but problems with knowledge remain
  o Consultation room extremely hot

• Quelimane recommendations and work:
  o Discussions about improving non-clinical benefits to patients (e.g. education sessions, etc.)
  o Work on reporting and general management of AMODIA
  o Preparation of a plan for education
  o Discussion about improvement of patient education and organisation of consultation
  o Move consultation to Hospital and development of Chronic Consultation at Hospital
  o Management team is very motivated, but needs to be organised and develop clear plans of action
  o Develop activity plan 2008-2009

• Maputo:
  o Clear improvements in management and coordination since last visit
  o Excellent coordination between AMODIA, clinicians and Hospital
  o Strong management team working closely together
  o Education sessions every week delivered by members and well attended
  o Consultation well organised (nurse is present every day, doctor present once a week)

1 During a planning meeting for World Diabetes Day members raised money for a bicycle for the administrator (30 members present and proposal put forward by a member)
It is interesting to note that there has been an increase in the range of socio-economic status in the patient population attending with almost all classes represented, whereas in the past it was mainly low-middle income people with diabetes.

- Maputo recommendations and work:
  - Discussions about improving non-clinical benefits to patients (e.g. education sessions, etc.)
  - Work on reporting and general management of AMODIA
  - Preparation of a plan for education and education materials
  - Discussions about how to improve adherence
  - Increase number of days doctor is present
  - Develop activity plan 2008-2009

- E-mail exchange with VSO – VSO in Mozambique does not work in the area of health

- Meeting with country director of Skillshare in Mozambique. This type of project would be of interest to them. The issue is that the costs of hiring someone through Skillshare is quite high and also finding someone with the appropriate knowledge may be difficult

- David Beran gave a copy of the guide from Nicaraguan Ministry of Health on “How to organise and manage a chronic club” for now it is felt that it is not necessary to translate this manual.

9. Long term research programmes in Mozambique in Health Services and Basic Science

9.1 April – June 2007
- No activities

9.2 June – September 2007
- Discussion with Dr. Carla Silva-Matos, Professor Julie Cliff and Dr. John Day
- Areas of possible research:
  - General research on diabetes risk factors, condition and complications
  - Diabetes Foot
  - Nutrition
  - Health systems research
- The possibility was discussed with Professor Cliff and Dr. Carla Silva-Matos about Diabetes UK funding 1-2 students for a Masters in Public Health at the Medical Faculty in Maputo or at least their research project with a focus on diabetes. Opportunity for Diabetes UK to provide mentors for these students and also any funded students would be required to work in the field of diabetes Ministry of Health or AMODIA after their course.

9.3 September – December 2007
- The idea of Diabetes UK sponsoring 1-2 Masters students was further discussed
  - These students would assist Dr. Carla Silva-Matos at the Ministry and work at AMODIA as conditions to this support

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2. This manual was created by the Ministry of Health in Nicaragua to organise community support groups (chronic clubs) in health centres where chronic consultations take place. During the IIF’s project in Nicaragua this manual was seen to be very useful and may be of benefit to AMODIA.

3. Students who receive funding from different sources e.g. government, NGOs often sign a contract saying that following their course they will stay 2-3 years in a given area/organisation chosen by the funder.
- Costings for this are being investigated
- Other areas of research that Dr. Silva-Matos would like to carry out in Mozambique are:
  - Financial impact of diabetes
  - Prevalence study
  - Impact of AMODIA on diabetes care versus hospital based care
Appendix 2 – Pictures from World Diabetes Day and diabetes training course in Maputo and 2 articles from MediaFax and Noticias

To view this file you will need Windows Media Player
Appendix 3 – National Strategic Plan for the Prevention and Control of Non Communicable Diseases 2008-2014

Following David Beran’s last visit the Minister of Health requested that the National Plan for Diabetes and Hypertension be integrated into an overall plan for non communicable diseases. Two parallel plans have been developed, both with the same structure, on Non Communicable Diseases and the other on Trauma.

The structure of these reports is as follows:
1. Profile of Mozambique
   1.1. Geographic and demographic situation
   1.2. Socio-economic situation
   1.3. Health indicators
   1.4. National Health System
2. Situation Analysis
   2.1. Cardiovascular Disease
   2.2. Diabetes
      2.2.1. Recommended interventions for the prevention and control of cardiovascular diseases and diabetes
   2.3. Cancer
      2.3.1. Cervix cancer
         2.3.1.1. Recommended interventions for the prevention and control of cervix cancer
      2.3.2. Breast cancer
         2.3.2.1. Recommended interventions for the prevention and control for breast cancer
      2.3.3. Prostate cancer
         2.3.3.1. Recommended interventions for the prevention and control of prostate cancer
   2.4. Chronic Respiratory Diseases
      2.4.1. Asthma
         2.4.1.1. Recommended interventions for the prevention and control of asthma
   2.5. Financial and social impact of Non Communicable Diseases
   2.6. Strategies for the prevention and control of Non Communicable Diseases
3. National Response to Non Communicable Diseases
   3.1. Main activities developed for each level of prevention
   3.2. Main challenges and opportunities for the prevention and control of Non Communicable Diseases in Mozambique
   4.1. Vision
   4.2. Mission
   4.3. Orientating Principles
   4.4. General Objectives
   4.5. Strategic Objectives
   4.6. Main strategies
   4.7. Areas of intervention
5. Objectives and Strategies
6. Implementation
   6.1. Target group
   6.2. Structure and implementation of plan
   6.3. Implementation of plan
7. Monitoring and evaluation

In looking specifically at Diabetes and Hypertension the main areas of intervention are detailed below:

1. Data, advocacy and research about hypertension, diabetes and cardiovascular disease in Mozambique
   a. Increase baseline data available on hypertension, diabetes and cardiovascular disease, risk factors, disease and complications
   b. Increase knowledge about hypertension, diabetes and cardiovascular disease, risk factors, disease and complications in Ministry of Health, Provinces, other ministries, donors, other organisations in and out of Mozambique and in the general population
   c. Carry out research on hypertension, diabetes and cardiovascular disease, risk factors, disease and complications in Mozambique
   d. Carry out second WHO STEPs study on cardiovascular risk factors in the Mozambican population in 2010

2. Primary prevention of hypertension, diabetes and cardiovascular disease in Mozambique
   a. Increase knowledge and awareness of these disease within the population
   b. Involve other departments within the Ministry of Health and other Ministries e.g. Ministry of Education and community in prevention programmes

   a. Creation of chronic consultations in health units
   b. Training of healthcare workers in diagnosis, treatment and follow-up of these diseases
   c. Improve the clinical and laboratory diagnostic capacity for these diseases
   d. Creation of kits for different levels of the health system for laboratory equipment and medicines
   e. Train 2 health “activists” in health units for education in hypertension and diabetes
   f. Develop programmes for patient education
   g. Creation of specialised consultations for children with Type 1 diabetes in each Central Hospital

4. Tertiary prevention of hypertension, diabetes and cardiovascular disease in Mozambique
   a. Increase the number of patients with diabetes and hypertension who are controlled
   b. Decrease the number of amputations in people with diabetes aged over 40
   c. Decrease the number of patients with complications and physical handicaps due to stroke and diabetes
   d. Decrease mortality due to stroke and diabetes
### Appendix 4 – Completion of 2007 Objectives

#### Table 1 – Details of objectives for 2007 and completion

<table>
<thead>
<tr>
<th>Project area</th>
<th>Objectives Year 1</th>
<th>Results</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for the training of trainers programme initiated by the Ministry of Health</td>
<td>- 5 trained healthcare workers at each Central Hospital</td>
<td>- 36 healthcare workers trained, including 5 from the Central Hospitals in Maputo and Beira. No healthcare workers trained at Central Hospital in Nampula.</td>
<td>- 720% based on numbers of healthcare workers trained. 66% based on training at 3 Central Hospitals (only Maputo and Beira healthcare workers trained).</td>
</tr>
<tr>
<td>Further training of healthcare workers through different options e.g. sending them to Tanzania, training organised in Mozambique by someone external, specialised training.</td>
<td>- Assessment of feasibility and what option would work best with local partners.</td>
<td>- Different options investigated - ESPE course - Sending people to Tanzania - Having trainers come to Mozambique (favoured option).</td>
<td>- 100%</td>
</tr>
<tr>
<td>Invitation to Dr. Carla Silva-Matos to deliver a talk at the Annual Professional Conference in 2008 coupled with talks to voluntary and lay groups</td>
<td>- Invitation extended to Dr. Carla Silva-Matos</td>
<td>- Dr. Carla Silva-Matos accepted invitation - Programme being finalised</td>
<td>- 100%</td>
</tr>
<tr>
<td>Diabetes UK literature made available to AMODIA with appropriate adaptation and translation</td>
<td>- Selected Diabetes UK documents presented to local stakeholders - Specific documents selected for adaptation and translation</td>
<td>- Documents from Diabetes UK given to Dr. Carla Silva-Matos and AMODIA - Documents from Diabetes UK will be used as models - Information from Brazil and Mali to be adapted.</td>
<td>- 100%</td>
</tr>
<tr>
<td>Project area</td>
<td>Objectives Year 1</td>
<td>Results</td>
<td>Completion</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
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</tbody>
</table>
| Organisation of World Diabetes Day events                                 | - Production of posters, leaflets and t-shirts for World Diabetes Day  
- World Diabetes Day events organised in the 3 existing branches of AMODIA | - Posters, leaflets and t-shirts for World Diabetes Day produced  
- World Diabetes Day events at the 3 existing branches of AMODIA organised | 100%        |
| Advocacy and policy support to Dr. Carla Silva-Matos by David Beran         | - Increase in availability of diagnostics to key areas  
- Regulation on availability of free/subsidised treatment for people with diabetes  
- Development of Registries and surveillance  
- Improve quantification and distribution of medicines and diabetes related supplies  
- Development of National Diabetes Programme with:  
  - Ministry of Health  
  - WHO country representative  
  - Clinicians  
  - AMODIA  
- Involvement and discussions with other aid and donor agencies and NGOs present in Mozambique | - Diagnostic tools increased based on survey in Beira, Quelimane and Maputo since RAPIA assessment in 2003  
- Current policy of Meticais 5 per prescription  
- Organisation of better data collection methods at AMODIA branches  
- Inclusion of these aspects in the national plan  
- National plan finalised and ready for presentation to Minister for approval | 90%        |
<p>|                                                                            |                                                                                                                                                   | - Lacking real discussion with NGOs and donor agencies in Mozambique. This may be facilitated once national plan in approved |            |</p>
<table>
<thead>
<tr>
<th>Project area</th>
<th>Objectives Year 1</th>
<th>Results</th>
<th>Completion</th>
</tr>
</thead>
</table>
| Develop core group of people involved in diabetes. This should include people from the Ministry of Health, Clinicians and people with diabetes. | - Identify 3 people for training/encouragement in the area of diabetes in Maputo  
- Closely link with objective described below | - Core people identified in Maputo and Quelimane for this | - 100% |
| Development of AMODIA | - Identification of core group of members in the three existing branches of AMODIA  
- Training in “what is diabetes”, general organisation and management, fundraising and advocacy  
- Increase in membership  
- Build relationships with respective hospital administration and other key community leaders  
- Organisation of activities for World Diabetes Day | - Core group identified in Maputo and Quelimane  
- Issues remain and need to be resolved in Beira  
- Basic training in “what is diabetes” and discussions about diabetes by David Beran, but limited due to time and language barriers  
- Most of time focused on training for general organisation and management, fundraising and advocacy  
- Relationships strengthened  
- World Diabetes Day activities organised | - 85%  
- Problems remain in Beira with regards to AMODIA  
- Lack of time and language barrier for training in diabetes during year 1 |
| Long term research programmes in Mozambique in Health Services and Basic Science | - Explore feasibility  
- What can be done and how | - List of priority studies developed  
- Concept of support for Masters Students explored | - 100% |
Appendix 5 – Action Plan for 2008 and 2009

The following action plan was developed in collaboration with Dr. Carla Silva-Matos, members of AMODIA in Maputo, Beira and Quelimane and other stakeholders.

The national plan for non communicable diseases, including diabetes has recently been finalised and includes the following areas of activities:

A. Primary prevention, including:
   - Increase knowledge about risk factors of non communicable diseases and healthy lifestyles, for example by using World Diabetes Day
   - Involve partners in prevention and control of non communicable diseases

B. Secondary prevention, including:
   - Training of healthcare professionals
   - Involve the patient and families in care
   - Use of community counsellors

C. Tertiary prevention, including:
   - Specialised training for healthcare workers. For diabetes especially in foot care
   - Collaboration with rehabilitation services
   - Involve the patient and families in care

D. Advocacy, data collection and research, including:
   - Advocacy for a the establishment of a positive political and legal environment including the provision of free medicines and diagnostics for people with non communicable diseases
   - Develop registers
   - Carry out studies with regards to non communicable diseases

In line with the proposal put forward to Diabetes UK, which includes the following areas of support:

1. Support for the training of trainers programme
2. Specialised training
3. Development of patient education material
4. Organisation of World Diabetes Day events
5. Advocacy and policy support to Dr. Carla Silva-Matos
6. Development of AMODIA
7. Long term research programmes

These two strategic documents have been combined to ensure that the activities supported by Diabetes UK in 2008 and 2009 contribute to the advancement of the national plan.
<table>
<thead>
<tr>
<th>Specific activity</th>
<th>Diabetes UK area of support</th>
<th>National Plan Priority area</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand course organised in December with Diabetes UK support</td>
<td>1. Support for the training of trainers programme</td>
<td>B. Secondary and C. Tertiary prevention (training of health professionals)</td>
<td>1(^{st}) quarter 2008 – Educators</td>
</tr>
<tr>
<td></td>
<td>2. Specialised training</td>
<td>B. Secondary and C. Tertiary prevention (training of health professionals and creation of specialised centres for the care of children with Type 1 diabetes)</td>
<td>2nd half 2008 - 2009</td>
</tr>
<tr>
<td>Training of 2 doctors or technicians in foot care and training of 2 paediatricians in Type 1 diabetes</td>
<td>3. Development of patient education material</td>
<td>A. Primary and B. Secondary prevention (develop patient education)</td>
<td>Development of patient education materials 2(^{nd}) quarter 2008</td>
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<td></td>
<td></td>
<td></td>
<td>Adapt and review then reproduce 3(^{rd}) quarter 2008</td>
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<tr>
<td>Development of patient education materials:</td>
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<tr>
<td>• Type 1 diabetes</td>
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<td>• Type 2 diabetes</td>
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<td>• Complications</td>
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<td>• Diet</td>
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<tr>
<td>• Exercise</td>
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<tr>
<td>• Foot care</td>
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<tr>
<td>• Information about diabetes for the general public</td>
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<td></td>
<td></td>
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<tr>
<td>Adapt and review then reproduce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation of similar events as 2007 and expansion</td>
<td>4. Organisation of World Diabetes Day events</td>
<td>A. Primary Prevention and D. Advocacy, data collection and research</td>
<td>4th quarter 2008 and 2009</td>
</tr>
<tr>
<td>Technical support and training for Dr. Carla Silva-Matos, sponsorship of MPH programmes</td>
<td>5. Advocacy and policy support to Dr. Carla Silva-Matos</td>
<td>D. Advocacy (Development of human</td>
<td>2008-2009</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Specific activity</td>
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<td>Timeline</td>
</tr>
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<tr>
<td>David Beran to continue support at Ministry of Health and AMODIA as in 2007</td>
<td>5. Advocacy and policy support to Dr. Carla Silva-Matos</td>
<td>A. Primary Prevention, B. Secondary Prevention, C. Tertiary Prevention and D. Advocacy, data collection and research</td>
<td>2008-2009</td>
</tr>
<tr>
<td><strong>• Purchase of computers and printers for AMODIA branches in Maputo and Quelimane</strong>&lt;br&gt;<strong>• Expansion of AMODIA</strong>&lt;br&gt;<strong>• Develop self-management capacity</strong></td>
<td>6. Development of AMODIA</td>
<td>A. Primary prevention and B. Secondary prevention (Involvement of Non Governmental Organisations and community in all areas of prevention and management of NCDs)</td>
<td><strong>• Purchase of computers and printers 2nd quarter 2008</strong>&lt;br&gt;<strong>• Expansion of AMODIA 2008-2009</strong>&lt;br&gt;<strong>• Continued support by David Beran 2008-2009</strong></td>
</tr>
<tr>
<td>Training of core members of AMODIA</td>
<td>6. Development of AMODIA</td>
<td>A. Primary prevention and B. Secondary prevention (Involvement of Non Governmental Organisations and community in all areas of prevention and management of NCDs)</td>
<td>2008-2009</td>
</tr>
<tr>
<td><strong>• Development of protocols</strong>&lt;br&gt;<strong>• Carrying out of studies</strong></td>
<td>7. Long term research programmes</td>
<td>D. Advocacy, data collection and research</td>
<td>2008-2009</td>
</tr>
</tbody>
</table>