2. RECRUITMENT AND SCREENING PROCEDURE

2.1 INTRODUCTION

Matthews Media Group (MMG) will coordinate the U.S. and Canadian recruitment for the GoKinD Study, except for New England and the Canadian provinces of Nova Scotia and Newfoundland, which will be covered by the Joslin Diabetes Center in Boston, Massachusetts. MMG will undertake recruitment in coordination with The George Washington University Biostatistical Center, which serves as the study coordinating center for the U.S. and Canada, except for those areas covered by the Joslin Center.

2.2 THE GOKIND STUDY SITES

Study sites will be identified throughout the U.S. and Canada. These sites include some EDIC sites; other diabetes care centers; renal care centers; and organ transplant centers. MMG will assist The George Washington University Biostatistics Center with site identification.

2.3 THE GOKIND STUDY PARTICIPANT RECRUITMENT

Recruitment will prioritize probands affected by diabetic nephropathy (cases) and their parents. The next priority is to recruit trios unaffected by diabetic kidney disease. We will also recruit adults with Type 1 diabetes, both with and without kidney disease, whose parents are not available to participate. The components of recruitment are:

1. Promotional materials development
2. National media outreach
3. Direct mail programs
4. Outreach campaign and technical assistance to local sites
5. Operation of a North American toll-free call center and maintenance of a potential participant database
6. Coordination of recruiting complete trios as well as singletons

2.3.1 Promotional Materials Development

Promotional materials have been developed by MMG, reviewed by the GoKinD Study Executive Committee, and approved by the appropriate JDRF personnel. The CDC IRB has reviewed the promotional and informational materials, which will be sent to each GoKinD Study site for their IRB review. These materials include:

- Brochures (English and Spanish)
- “Point-of-Purchase” (PoP) cardboard counter displays with tear-off cards (English)
- Bulletin board flyers (English and French)
- Media kits (English)
- Sample letter to family members requesting their participation (English)
- “Frequently Asked Questions” (FAQs) information sheet (for reference by call center staff and site staff) (English)
- Magnets
- Laminated study cards for medical staff

- Print ads, PSAs
- Audio News Release for the radio

2.3.2 National Media Outreach

A comprehensive media kit was developed and used for the 2001 campaigns to promote stories on type 1 diabetes, nephropathy, and the GoKinD Study. Both national and local media kits will be developed and will include:

- News release (either local or national)
- GoKinD Study brochure
- Fact sheet on type 1 diabetes and nephropathy
- Informational brochure about the JDRF
- JDRF Folder

MMG is currently undertaking a comprehensive World Wide Web promotion to ensure that study information is promoted on both diabetes and renal care websites likely to reach the eligible populations. The JDRF Web site will highlight the GoKinD Study on a continuing basis.

MMG has also devised a radio campaign that includes paid media that guarantees 11.5 million media impressions.

2.3.3 Direct Mail Programs

MMG will investigate and initiate appropriate direct mail programs, which typically will involve intermediary groups or other programs that reach the study's target population. The study will underwrite such promotions. These mailings will either be nationwide or occur in local areas where the GoKinD study has a medical center.

2.3.4 Outreach Campaign and Technical Assistance to Local Sites

MMG will undertake partnered activities with appropriate groups, as determined appropriate by the executive committee and GoKinD Study sites, as applicable. This may include mailing programs (discussed previously), web links, or conference exhibits.

MMG will undertake a national outreach component to reach key intermediary groups (e.g., National Kidney Foundation, American Association of Kidney Patients, and diabetes camps [to reach counselors and camp alumni]). Other outreach activities include study promotion through diabetes supply companies and targeted pharmaceutical companies.

For local recruitment, the GoKinD Study sites will likely have established patient populations from which they can draw to identify participants.

To find additional participants, MMG will assign specific staff persons to assist the GoKinD Study sites in local outreach efforts. MMG will collaborate with local coordinators to strategize on the most effective promotion for each locality. Of course, local chapters of JDRF will be distributing GoKinD Study promotional materials as well.

Generally, the most successful local recruitment occurs when sites actively partner with the recruitment organization in outreach. Investigators and coordinators at the local sites know their communities best and often have contacts in the local media they can share with MMG.

One key area of site support by MMG is the phone follow-up that MMG's call center will undertake to track appointments and to complete enrollment of trios.

2.3.5 Operation of a North American Toll-Free Call Center and Participant Database

An important component to recruitment will be the operation of a call center. The call center's toll-free North American phone line is 1-866-4GO-KIND (1-866-446-5463). This number will be featured in all promotional literature and serves as a common point of contact for the GoKinD Study promotions. (Space has been left on the study brochures for local sites to list local contact information, should this be desired.)

The GoKinD Study call center provides trained information specialists with whom potential participants can speak to learn more about the study. It will be fully operational weekdays, Eastern time zone, during business hours. Calls that arrive during the evening hours and weekends will be returned the next business day. All caller information will be kept confidential and the database has appropriate electronic safeguards to protect patient privacy.

Callers who contact the call center are asked a number of screening questions (See Table 2.1 for a copy of the JDRF Patient Screening Questionnaire.). If they are considered eligible, they are referred to the study site closest to their home (through Zip Code). For the study sites, this means increased interaction with the call center as the study identification number is being assigned at the call center.

Currently, caller information is faxed to GoKinD Study sites; however, sites have three options for receiving referrals from the call center:

- **Fax**—Referrals on eligible callers are faxed to sites daily. The referrals contain the participant's contact information. The call center will also fax, under separate cover, the responses to the screening questionnaire for each participant to all sites. Upon receipt of the referral, you should:
  - Contact the participant within 24 hours of receipt of the referral
  - Schedule a visit

If you believe that you are having problems receiving faxed referrals, make sure that everyone with the study knows which fax machine is receiving reports at your institution. In some cases, we will e-mail a fax notification to the study coordinator, as needed.

- **Direct Scheduling**—By providing MMG with available time slots from your schedule, our call center can schedule eligible participants for you. Once a participant has been scheduled, the call center specialist will fax a referral to you with the scheduled date and time along with other demographic information. MMG highly recommends this method as scheduling participants at initial contact significantly decreases participants lost to follow-up. Upon receipt of the referral, you should:
  - Contact the participant within 24 hours of receipt of the referral to confirm appointment date and time and provide other site-specific information (e.g., directions, office number)

- **Direct Transfer**—The call center has the capability to transfer eligible callers to your site. By providing MMG with a telephone number at a site with voicemail capability, MMG will transfer callers to your site after they complete the call center screening and are deemed eligible. This referral method is also highly recommended because transferring the caller during initial contact promotes completion of study visits and decreases participants lost to follow-up. For these participants, coordinators will also receive a referral faxed to a site containing the participant's demographic information. Upon receipt of a direct transfer:
  - Sites should make an appointment for the study participant and obtain demographic information.
  - In the event that the caller is transferred into voicemail and leaves a message, sites should contact the caller **within 24 hours** to schedule an appointment.

Call center questionnaire (Table 2.1 - JDRF screening questionnaire)

This screening questionnaire is important because it contains data that will be sent to the coordinating center. For example, the questions regarding adoption and siblings are not captured on the case report forms but are included in the questionnaire and are essential to completing the GoKinD database. The questionnaire must be completed for both the proband and parents (with all questions answered) and faxed to the MMG call center.

To obtain the study ID number assignment, study sites can:

- **Fax**: Complete the screening questionnaire and fax the form to the call center (one option is to complete the questionnaire before the study participant's appointment)
- **Telephone the call center:** Study coordinators can call the toll-free number and provide answers to the screening questions to the information specialist. **PLEASE NOTE**: The information specialists can only provide study ID assignment once ALL screening questions are recorded in the call center database. This means that **the coordinator is required to go through the entire screening questionnaire on the call to receive a study ID for the participant.**
- **Obtain a pre-assigned block of study ID numbers:** MMG can provide a block of study ID numbers to your site. If your site elects to receive a block of ID numbers, it is especially important that the call center receive the completed questionnaire for each assigned study ID number because:
  - All family members need to be linked to the same family ID number. If the data is not received by the call center, one family member might not receive the correct family ID assignment.
  - Some screening questionnaire data is not captured on the case report forms but this data will be entered into the GoKinD Study database.

Patient Referral Summary Report

This report is faxed to study sites weekly to help MMG and The George Washington University Biostatistics Center (GWU) track study enrollment. The report contains your site's name and city, the participant's study ID number, contact source, and date the participant contacted the call center. Upon receipt of the form, site staff should:

- Confirm that you have received all of the referrals on the list (if not, please contact MMG)
- Enter the date of the scheduled appointment
- Enter the date enrolled or screen failed date
- Fax the completed form back to the call center (the fax number and instructions can be found at the bottom of the report)

2.3.6 Coordination of Recruiting Complete Trios

The most challenging recruitment issue will be achieving participation of complete trios. In order to maintain confidentiality, no personal identifying information or health history may be collected from the initiating family member about remaining family members. If so desired, a letter will be provided to the initial family member to request additional family participation. It can be sent with a study brochure.

Recruiters should request that the initial family member speak with the remaining family members about the study. All GoKinD Study participants must initiate personal involvement with the study. Recruiters should not attempt to initiate contact with those family members who have not personally indicated their willingness to participate in the study.

Should additional family members agree to participate, the call center staff or site staff will screen the participants per protocol. If family members are unable or unwilling to participate, the proband will be offered enrollment into the study as a singleton.

2.4 IDENTIFICATION OF CANDIDATE PROBANDS

2.4.1 Eligibility and Exclusion Criteria

Men and women with type 1 diabetes, aged 18-54 at the time of enrollment, living in the U.S.A. or Canada, are eligible for the study. The JDRF collection will include all individuals, regardless of race or ethnic origin. However, the size of the proposed data collection for this study will not be large enough to support meaningful subgroup analyses based on ethnicity. Data on subgroups will be collected and stored, and the Coordinating Center will monitor and develop opportunities to utilize this information. As many total examinations as necessary to collect the 4300 samples for comparison with the Diabetes UK (formerly the BDA) data collection will be made.

2.4.1.1 Definitions for Inclusion Into the Study

Probands for this data collection must have type 1 diabetes and either presence or absence of diabetic nephropathy according to the following definitions:

Type 1 diabetes is diagnosed if:

- Subject had diabetes diagnosed before age 31
- Treatment with insulin was instituted within one year of diagnosis, and
- Treatment with insulin has been uninterrupted since diagnosis.

Presence of diabetic nephropathy (case) is diagnosed if:

- Subject with diabetes for at least 10 years has persistent proteinuria or ESRD (not due to condition other than diabetes)
- If a patient has received dialysis or had a kidney or kidney/pancreas transplant for renal disease, he/she will not need to undergo the urine screening process to be considered eligible for the study

- Persistent proteinuria is defined as at least 2 out of 3 tests positive for albuminuria (at least 1 month apart), i.e., dipstick (Albustix or Multistix) at least 1+ or ACR value exceeding 300 μg albumin/mg of urine creatinine.
- When using historical data for the first urine screen only, the following tests may also be used timed urine greater than 208 μg/min (300 mg/24 hr), overnight collection greater than 200 μg/min, or total urinary protein greater than 500 mg/24 hr.
- The actual value of the historical ACR measurement should be maintained in the GoKinD patient file at the clinic.

Absence of diabetic nephropathy (control) is diagnosed if:

- Subject has persistent normoalbuminuria despite duration of type 1 diabetes for at least 15 years and has never been treated with ACE inhibitors.
- Persistent normoalbuminuria is defined as at least 2 out of 3 ACR measurements (at least 1 month apart) in random urine specimens being less than 20 μg of albumin/mg of creatinine. If 3 ACR measurements are needed, the highest must also be less than 40 μg of albumin/mg of creatinine.
- Use of historical information for the initial urine screen is allowed if the last ACR in the past 12 months is less than 40 μg of albumin/mg of creatinine.
- If historical information is used, it is considered as the first urine screen. If the value of the historical screen is $20 \leq ACR1 < 40$, then ACR2 and ACR3 must be less than 20 μg of albumin/mg of creatinine.
- When using historical data for the first urine screen only, the following tests may also be used timed urine less than 30 μg/min (< 40 mg/24 hr), overnight collection less than 30 μg/min, total urinary protein less than 230 mg/24 hr, or dipstick negative-trace.
- The actual value of the historical ACR measurement should be maintained in the GoKinD patient file at the clinic.

2.4.1.2 Definitions for Exclusion From the Study

Individuals will be excluded from the study if they do not meet the inclusion criteria just described or if any of the following exclusion criteria are met:

- Unable or unwilling to give informed consent
- Unable to communicate with staff
- Major psychiatric disorder such as schizophrenia
- Exclusion in relation to medication
  - Antihypertensives for controls
- Infectious disease
  - Self-reported HIV positivity
  - Active tuberculosis
- Other kidney disease in cases
  - Alport syndrome
  - Analgesic nephropathy
  - Atheroembolic renal disease
  - Congenital nephrotic syndrome

- Focal segmental glomerulosclerosis (FSGS)
- Glomerulonephritis
- Goodpasture's syndrome
- HIV nephropathy
- IgM mesangial proliferative nephritis
- Lupus nephritis
- Kidney cancer
- IgA nephropathy
- Polycystic kidney disease
- Urinary tract infection

(Note: infectious processes such as cystitis and urinary tract infections do not represent a permanent exclusion. Patients may be recontacted or asked to send a supplemental urine sample at a later date.)

- Pregnant women (although they may be reconsidered 3 months after delivery if breastfeeding is not taking place)

TABLE 2.1

JDRF PATIENT SCREENING QUESTIONNAIRE

This questionnaire is used by the staff of Matthews Media Group when interviewing subjects regarding eligibility for GoKinD.

To receive a patient ID number, please fax all completed questionnaires to: 301-881- 8543 -ATTN: GoKinD Study Lead Information Specialist

If the site assigns the patient ID number, enter here: **__ __ __ __ __ __ __ __ __ __**

A. How did you hear about the study?

B. Demographic:

1. Name:
2. Address:
3. Home phone number:
4. Work phone number:
5. E-mail address:
6. Gender: M or F
7. Date of Birth: __ __/__ __/__ __
   Age at screening (must be between 18-54): __ __
8. If Proband, ask: Did your parents adopt you? _____ (If yes, ineligible; if no, continue)

C. Eligibility questions:

1. How old were you when you were diagnosed with Type 1 diabetes? _____(has to be before 31 years old)
2. Do you currently have kidney disease as a result of your diabetes or has a doctor ever told you that you have kidney disease as a result of your diabetes? _____(if they answer no, go to question 3; if they answer yes, go to question 6)

Patient ID number: __ __ __ __ __ __ __ __ __ __

3. Has a doctor ever told you that you have protein in your urine? _____(if they answer no, go to question 4; if they answer yes, go to question 6)

4. Are you currently on any medications for hypertension? _____(if answered yes, will be ineligible; if answered no, go to question 5)

5. Do you know if you are taking, or have ever taken, any medication to protect your kidneys? _____(if they answer yes, will be ineligible; if answered no, go to question 7)

6. How long have you had diabetes? ____(if 10 years or greater, go to question 8; if less than 10 years, will be ineligible)

7. How long have you had diabetes? _____(if 15 years or greater, go to question 8; if less than 15 years, will be ineligible)

8. The next few questions are of a sensitive nature. You are free to change your mind at any time and to stop answering the questions. I'm going to give you a list of medical conditions, please wait until I have completed the list and provide only one yes or no answer. Do you have any of the following conditions:

    - Any major psychiatric disorders such as schizophrenia, bipolar disease (previously known as manic depression), or dementia
    - HIV
    - Active tuberculosis

    _____

    (if yes is answered at the end of this list, ineligible; if no, go to question 9)

9. (For females only) Are you currently pregnant? _____(if answered yes, will be ineligible to participate now but will be considered 3 months after delivery; if no, go to question 10)

10. (For females only) Are you currently nursing? _____(if answered yes, will be ineligible to participate now but will be considered when nursing is completed; if no, go to question 11)

11. (For females only) Do you have a child under the age of 3 months?_____ (if answered yes, will be ineligible to participate now but will be considered when the child is older than 3 months; if no, go to question 12)

Patient ID number: **__ __ __ __ __ __ __ __ __ __**

12. Have you been diagnosed with any other kidney diseases other than diabetic kidney disease? _____(if answered yes to any other kidney diseases, would be ineligible; if no, go to question 13)

13. Are both of your parents living? Where do they live? _____.
    - If answered only 1 parent is living or if answered no parents are living, go to question 14 and enroll as singleton (keep parent information on record for possible enrollment at a later date if protocol is amended)

14. Do you have any siblings? _____(if answered yes, go to question 15; if no, end questionnaire)

15. How many siblings do you have? _____

    What are their ages and genders? _____
    _____ _____

    _____ _____(go to question 16)

16. Do any of your siblings have Type 1 diabetes? _____(if yes or no, end questionnaire)

Parent Questionnaire:

Father ID number, enter here: _ _ _ _ _ _ _ _ _ _

A. How did you hear about the study?

B. Demographic:

1. Name:
2. Address:
3. Home phone number:
4. Work phone number:
5. E-mail address:
6. Gender: M or F

C. Eligibility Questions:

7. The next few questions are of a sensitive nature. You are free to change your mind at any time and to stop answering the questions. I'm going to give you a list of medical conditions, please wait until I have completed the list and provide only one yes or no answer. Do you have any of the following conditions:

   - Any major psychiatric disorders such as schizophrenia, bipolar disease (previously known as manic depression), or dementia
   - HIV
   - Active tuberculosis

   _____

   (if yes is answered at the end of this list, ineligible; if no – end questionnaire)

Parent Questionnaire:

Mother ID number, enter here: __ __ __ __ __ __ __ __ __ __

A. How did you hear about the study?

B. Demographic:

2. Name:

2. Address:

3. Home phone number:

4. Work phone number:

5. E-mail address:

6. Gender: M or F

D. Eligibility Questions:

7. The next few questions are of a sensitive nature. You are free to change your mind at any time and to stop answering the questions. I'm going to give you a list of medical conditions, please wait until I have completed the list and provide only one yes or no answer. Do you have any of the following conditions:

- Any major psychiatric disorders such as schizophrenia, bipolar disease (previously known as manic depression), or dementia
- HIV
- Active tuberculosis

_____

(if yes is answered at the end of this list, ineligible; if no – end questionnaire)