

Approved by:
Physician Extender: _____
Supervising Physician: _____
Physician: _____
Date: _____

TRI-COUNTY PROTOCOL
FOR
DIABETES, NEW & OLD PATIENTS
1/86

I. Establishing the diagnosis

A. Diagnostic criteria for diagnosis of diabetes is documented somewhere in the chart.

1. Blood test indicative

- a) Elevated blood glucose over 300 mg/dl
- b) Over 140 mg/dl fasting blood glucose two or more times
- c) Two or more blood glucose levels over 200 mg/dl on glucose tolerance test
- d) Ketosis

2. Urine test indicative

- a) Any sugar in urine
- b) Ketones in association with glycosuria

3. Indicative report from other physician

4. Evidence of target organ involvement

5. Patient's verbal history of diabetes-one glucose over 200

6. Symptomatic Ketoacidosis

B. Other causes of hyperglycemia have been ruled out

1. Thiazide diuretics

2. Steroids

3. Tricyclic antidepressants

4. Phenothiazine anti-anxiety agents

5. Pregnancy

6. Cushings syndrome
 7. Myocardial infarct
 8. Stroke
 9. Chronic pancreatitis
 10. Infection
 11. Other endocrine abnormalities
- C. If other causes of hyperglycemnia are documented, The M.L.P. has consulted a physician.

II. Management of complications
(complexity exceeds current mapping capability)

III. Management of Diabetes

- A. Mid-level practitioner has consulted physician for previously undiagnosed diabetes
- B. An effort to control diabetes with diet has been documented as either primary or adjunctive therapy to hypoglycemic agents
 1. Weight loss program and/or carbohydrate restriction program initiated
- C. Insulin treatment or oral agents initiated when diet therapy fails
- D. Oral agents have been avoided when contraindications are present
 1. Absolute contraindications:
 - a. Diabetic coma history
 - b. Acidosis history
 - c. Ketosis history
 - d. Pregnancy
 2. Relative contraindications:
 - a. Renal failure
 - b. Liver disease

- c. Heart disease
- d. Vascular disease
- e. Alcoholism

E. Patient and Family Education
Instructions have been given in regard to:

1. Hygiene and infection
2. Home urine testing
3. Insulin injection technique, as appropriate
4. Weight reduction, as appropriate
5. Dietary/nutritional counseling, as appropriate
6. Exercise counselling
7. Home blood glucose monitoring, if feasible
8. Record keeping
9. Foot care
10. Medical alert information or ID card
11. Recognition of early signs of hyperglycemia & hypoglycemia
12. Warning signs of chronic complications:
 - a) retinopathy, nephropathy, neuropathy, & vascular disease
13. Emotional support system identification

IV. Diabetic surveillance program

- A. Initial work-up should include the following baseline information.
1. personal history (diet, stress, chronic obesity)
 2. family history (hx. of diabetes)
 3. medical history
 4. ob/gyn history ("heavy babies", > 9lbs, stillbirths, congenital anomalies and SAB's)

5. medication record
 6. specific description of symptoms
 7. height and weight
- B. Systemic complications sought initially (within 3 months), and periodically (at least annually)
1. Seek symptoms of angina pectoris and/or heart failure
 2. Seek symptoms of skin infection or vaginitis
 3. Occular fundi checked for vascular lesions
 4. Vision accuity checked for loss
 5. Neurologic exam for paresthesia and/or orthostatic hypotension
 6. Extremities examined for circulatory inadequacy
 7. Urinalysis checked for infection and proteinuria
 8. Blood test (BUN, creatinine) for renal impairment
 9. ECG checked for infarct
 - a) Baseline ECG on patients less than 45 years of age
 - b) Yearly on patients greater than 45 years of age
 10. Cholesterol and triglyceride levels (initial visit and annually)
 11. Chest x-ray (initial visit only) for greater than 45 years of age
- C. The record should document the following baseline data (recommended diagnostic procedures):
1. Baseline Blood test indicated by:
 - a) blood sugar
 - b) fasting and/or 2 hour postprandial sugar
 2. Baseline urinalysis
 - a) fasting urinalysis (multi-dip) for sugar, acetone and protein
 - b) Baseline urine micro and then annually
 3. Baseline lipid profile

D. Revisits scheduled at regular intervals include:

1. Weight control effort

- a) Steady loss for obese patients (any amount)
- b) Stable weight for lean patients
- c) Weight documented each visit
- d) If no success, at least documentation of diet instruction
- e) Review patient/family education

2. Sugar control effort documented

- a) Urine or blood glucose monitored periodically
- b) Plasma glucose kept between 100 and 200 mg/dl
- c) Urine kept at trace or 1+
- d) If unsuccessful, plan documented for eventual control

V. Referrals/Consultations

A. Mid-level practitioner consults physician if glucose control fails

1. Blood glucose exceeds 400 mg/dl at any time

2. Patient is not responding to therapy with glucose or urine sugar remaining elevated for 6 month time period if no symptoms and as appropriate.

B. Physician & mid-level practitioner refer to ophthalmologist. Baseline by ophthalmologist and then annual prn DM>10 years or otherwise document dilated fundoscopic annually by physician on site (or refer to ophthalmologist).

VI. Revisit is scheduled

VII. Signature of physician.

Tri-County Customization
1/88

(patients must be followed by physician
on site & 12 months)
START

Elevated blood glucose > 200 mg/dl	1
Fasting glucose > 140 mg/dl	2
Glucose tolerance test > 200 mg/dl X 2	3
Sugar in urine	4
Physician report indicating diagnoses	5

Ketosis

Newly diagnosed patient	6	yes	M.L.P. consult physician	7
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Baseline Information

Personal history	23
Family history	24
Medical history	25
OB/Gyn history	26
Medication record	27
Specific description of symptoms	28
Height	29
Weight	30
other	31
other	32
other	33

(present at time of diagnoses)

Thiazide RX	8
Steroid RX	9
Anti-anxiety RX	10
Anti-depressant RX	11
Pregnancy	12
Cushing Syndrome	13
Myocardial infarct	14
Stroke	15
Pancreatitis	16
infection	17
other	18
other	19
other	20

Effort to control diabetes with diet	34
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Insulin RX or oral agents prescribed	35
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Initial and annual assessments
Investigation of symptoms:

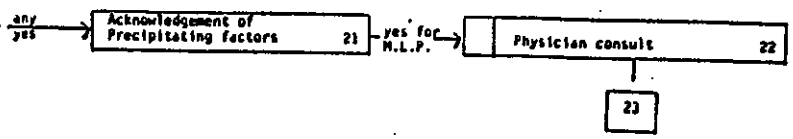
Cardiovascular	36
peripheral vascular	37
skin	38
eye	39
CNS	40
renal	41
other	42
other	43
other	44

Referred to ophthalmologist annually	45
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Initially in 3 months

ok documented di listed
funduscopic exam MD onsite
- only for PM pts > 10 year hx DM

Clinic: _____
Patient Number: _____
Provider: _____
Date of Encounter: _____
Abstractor: _____
Date of Review: _____



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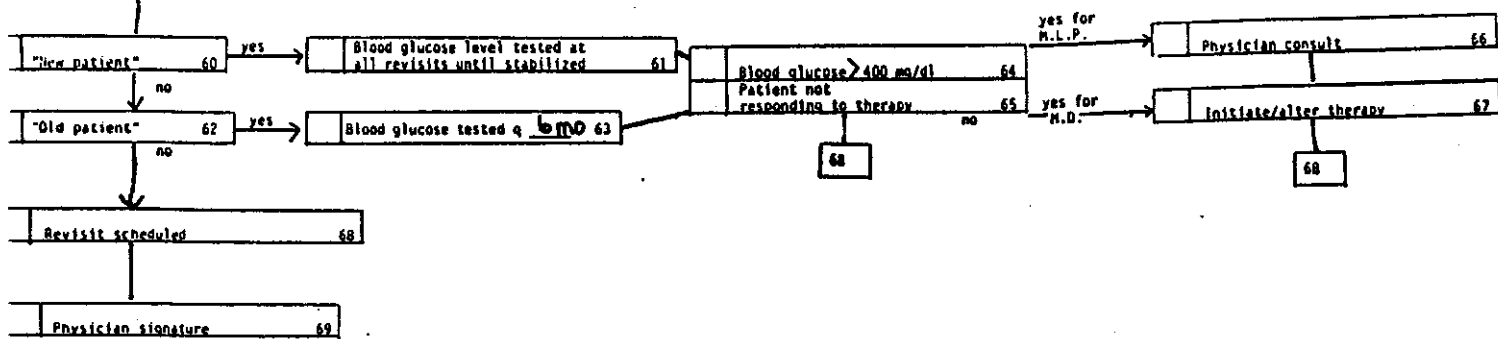
M.D. = physician
M.L.P. = Mid-level practitioner

Tri-County Customization
1/86

Patient and Family Education

Hygiene and Infection	46
Home urine test	47
Insulin injection technique	48
Dietary/Nutritional counseling	49
Weight Reduction for obesity	50
Exercise counseling	51
Home blood glucose monitoring	52
Record keeping	53
Foot care	54
medical alert information <i>or ID card</i>	55
Recognition of early signs of hyper/hypo glycemia	56
other	57
other	58
other	59

Clinic: _____
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STOP

M.D. = physician
 M.L.P. = Mid-level practitioner

If drug(s) ordered, note:
 Age: _____ Weight: _____
 For each drug note:
 Name: _____
 Dose: _____
 Schedule: _____
 Duration: _____

DIABETES
Scoring Guide

- 1) Criteria for diagnosis are documented.
- 2) On a newly diagnosed patient, the recognition of alternate causes of elevated blood sugar, if present was documented.
- 3) Baseline information was documented.
- 4) If a baseline information was documented it included the following:
 - a) personal history
 - b) family history
 - c) medical history
 - d) OB/Gyn history
 - e) medication record
 - f) specific description of symptoms
 - g) height
 - h) weight
 - i) other
 - j) other
 - k) other
- 5) Physician consult is documented, as appropriate, on newly diagnosed patients (M.L.P.).
- 6) Effort to control diabetes with diet, either as primary or adjunctive therapy, is documented.
- 7) Investigation of systemic complications of diabetes is documented.
- 8) If investigation for systemic complications was documented, it included the following systems:
 - a) cardiovascular
 - b) peripheral vascular
 - c) skin
 - d) eye
 - e) CNS
 - f) renal
 - g) other
 - h) other
 - i) other
- 9) An annual referral to an ophthalmologist was documented.
- 10) Initiation or maintenance of patient education program is documented.

11) Patient and family education included the following

- a) hygiene and infection
- b) home urine test
- c) insulin injection technique
- d) dietary/nutritional counseling
- e) weight reduction for obesity
- f) exercise counseling
- g) home blood glucose monitoring
- h) record keeping
- i) foot care
- j) medical alert information
- k) recognition of early signs if hypo/hyperglycemia
- l) other
- m) other
- n) other

12) Measurement of Blood Glucose level is arranged for at appropriate time intervals for new or established patients.

13) Physician consult is documented when glucose control fails (M.L.P.).

14) Physician initiates/alters therapy when glucose control fails.

15) Attempt to provide on-going supervision at appropriate time intervals for new or established patients is documented.

16) Physician signature is documented.

Code

1 = yes

2 = no

3 = yes, but

4 = no, but

5 = not applicable

DIABETIC EDUCATION PROTOCOL

Objective (s)

- To provide information and services and to share with the patient tips/pointers that may help them to understand their condition and ways of establishing control.
- To help the patient acquire a better understanding of their condition.
- To prevent further problems that may be associated with their condition.
- All new diabetics are to see Health Educator for counseling on an individual basis according to schedule if possible.
- All diabetics that have not had or made contact with the Health Educator are to be referred for classes.
- Diabetics placed on insulin are to see Health Educator for instruction.

Initial encounters with the patient will usually be an introductory type session.

Rationale

Rationale for the introductory session is:

- to allow the patient to feel comfortable in talking about condition
- to establish rapport and
- to assess the needs of the patient.

Health Educator will be primarily responsible for continuation and follow-up.

I. Film: Diabetes

- (1) Review of film
- (2) Control measures - Diet, Exercise, Medication

II. Urine Testing

- (1) Collection of specimen
- (2) Use of diastix, test tape, storage
- (3) Reverse procedure (patient testing urine)
- (4) Charting urine
- (5) Explanation as to the results

III. Skin Care

- (1) The diabetic skin
- (2) Problems with improper skin care
- (3) Problem prevention
- (4) Using good skin care

IV. Insulin administration (if applicable)

- (1) Types of Insulin, Syringes
- (2) Storage of Insulin
- (3) Preparation of Insulin
- (4) Preparation of skin for injection
- (5) Injection - Site rotation
- (6) Trouble Prevention

V. Uncontrolled Diabetes

- (1) Hyperglycemia Signs, symptoms
- (2) Ketoacidosis Prevention

(3) Insulin Reaction Treatment

VI. Maintenance & Control

(1) Following regime including diet

(2) Travel, ADL (activities of daily living)

Dependent upon patient, the sessions may not follow any particular order. The needs of the patient will be addressed first.

VII. Review