

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: 5/30/00

BILL NO. \_\_\_\_\_

OR

SUBJECT Audit re medical

care in the Dept of Corrections

EDWARD S. FRIEDRICHS, M.D.  
(NAME)

8076 N. 64th St.  
(Street Address or Route Number)

BROWN DEER, WI 53223  
(City and Zip Code)

WISC STATE MEDICAL SOCIETY  
(Representing)

Speaking in Favor:   
*if able to stay long enough*

Speaking Against:

Registering in Favor:   
but not speaking:

Registering Against:   
but not speaking:

Speaking for information only; Neither for nor against:

Please return this slip to a messenger **PROMPTLY.**

Senate Sergeant-At-Arms  
State Capitol - B35 South  
P.O.Box 7882  
Madison, WI 53707-7882

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: 5/30/00

BILL NO. \_\_\_\_\_

OR

SUBJECT Health Care

Audit in DOC

LeNore Wilson  
(NAME)

2001 W. Dutton Hwy  
(Street Address or Route Number)

Madison, Wis.  
(City and Zip Code)

Dist. 11994/United Prof Union  
(Representing)

Speaking in Favor:

Speaking Against:

Registering in Favor:   
but not speaking:

Registering Against:   
but not speaking:

Speaking for information only; Neither for nor against:

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State Capitol - B35 South  
P.O.Box 7882  
Madison, WI 53707-7882

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: 5-30-00

BILL NO. \_\_\_\_\_

OR

SUBJECT SUPPORT INDEPENDENT  
AUDIT OF DOC  
HEALTH CARE SERVICES

PAUL PERSSON  
(NAME)

16715 Wolfgram Dr  
(Street Address or Route Number)

PAROEVELLE, WIS 53954  
(City and Zip Code)

UPRHC 11994 SEIU  
(Representing)

Speaking in Favor:

Speaking Against:

Registering in Favor:   
but not speaking:

Registering Against:   
but not speaking:

Speaking for information only; Neither for nor against:

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P.O.Box 7882  
Madison, WI 53707-7882

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: May 30 - 2000

BILL NO. \_\_\_\_\_

OR

SUBJECT \_\_\_\_\_

Sen. Judy Robson  
(NAME)

(Street Address or Route Number)

(City and Zip Code)

(Representing)

Speaking in Favor:   
*Audit of med. services*  
Speaking Against:

Registering in Favor:   
but not speaking:

Registering Against:   
but not speaking:

Speaking for information only; Neither for nor against:

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Senate Sergeant-At-Arms  
State Capitol - B35 South  
P.O. Box 7882  
Madison, WI 53707-7882

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: 5-30-2000

BILL NO. \_\_\_\_\_

OR

SUBJECT Audit of Dec Health

Rep Scott Walker  
(NAME)

(Street Address or Route Number)

(City and Zip Code)

WIS-AD

(Representing)

Speaking in Favor:   
Speaking Against:

Registering in Favor:   
but not speaking:

Registering Against:   
but not speaking:

Speaking for information only; Neither for nor against:

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Senate Sergeant-At-Arms  
State Capitol - B35 South  
P.O. Box 7882  
Madison, WI 53707-7882

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: 5/30/00

BILL NO. \_\_\_\_\_

OR

SUBJECT Health Care  
Advt - DOC

John Wasserman  
(NAME)

Capitol 111-North

(Street Address or Route Number)

(City and Zip Code)

Self

(Representing)

Speaking in Favor:   
Speaking Against:

Registering in Favor:   
but not speaking:

Registering Against:   
but not speaking:

Speaking for information only; Neither for nor against:

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Senate Sergeant-At-Arms  
State Capitol - B35 South  
P.O. Box 7882  
Madison, WI 53707-7882

**SENATE HEARING SLIP**

(Please Print Plainly)

DATE: 5-30-00

BILL NO. \_\_\_\_\_

OR

SUBJECT Audit of

Prison Health Care

SYSTEM (Larry Fox)

2412 E. Edwards

(Street Address or Route Number)

Shrewsbury, WI 5324

(City and Zip Code)

SELF

(Representing)

Speaking in Favor:

Speaking Against:

Registering in Favor:

but not speaking:

Registering Against:

but not speaking:

Speaking for information

only: Neither for nor against:

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Senate Sergeant-At-Arms  
State Capitol - B35 South  
P.O. Box 7882  
Madison, WI 53707-7882

# Vote Record

## Senate - Joint committee on Audit

Date: MAY 30, 2000

Bill Number: PROPOSED AUDIT OF DEPT. OF CORRECTIONS, HEALTH SERVICES

Moved by: ROZE Seconded by: ROB

Motion: Adopt audit proposed in Score Statement

(as amended) per L. Fox + Sen Robson

(see remarks)

<u>Committee Member</u>	<u>Aye</u>	<u>No</u>	<u>Absent</u>	<u>Not Voting</u>
Sen. Gary George, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sen. Judy Robson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sen. Brian Burke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sen. Peggy Rosenzweig	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sen. Mary Lazich	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Carol Kelso, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. John Gard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Stephen Nass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Robert Ziegelbauer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. David Cullen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Totals: 7

Motion Carried

Motion Failed



State of Wisconsin \ LEGISLATIVE AUDIT BUREAU

JANICE MUELLER  
STATE AUDITOR

22 E. MIFFLIN ST., STE. 500  
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Leg.Audit.Info@legis.state.wi.us

**DATE:** May 23, 2000

**TO:** Senator Gary R. George and  
Representative Carol Kelso, Co-chairpersons  
Joint Legislative Audit Committee

**FROM:** Janice Mueller *Janice Mueller*  
State Auditor

**SUBJECT:** Proposed Audit of Health Care Services in the  
Department of Corrections – Background Information

At your request, we have gathered background information the Joint Legislative Audit Committee may find useful in considering requests from Senator Robson and Representative Wasserman to audit health care services in Wisconsin prisons. Following the death of an inmate at the Taycheedah Correctional Institution in February 2000, legislators and others raised a number of questions concerning the protocols used in emergency and non-emergency situations, the extent to which medical services within prisons meet accepted medical standards, and whether there is adequate health care staffing to meet inmate needs.

For state fiscal year 1998-99, the budget for health care services in prisons was \$28.2 million, including \$27.9 million GPR and \$260,100 PR. This funding supported approximately 230 full-time equivalent (FTE) positions. The biennial budget, 1999 Wisconsin Act 9, increased funding for prison health care by \$3.1 million GPR in FY 1999-00 and an additional \$5.6 million GPR in FY 2000-01; a 31 percent increase over the biennium. Increases in funding support population-related increases in service delivery, increased pharmacy staff at the central pharmacy at the Dodge Correctional Institution, health service delivery at the Supermax Correctional Institution, and contractual medical services at Redgranite Correctional Institution and the probation and parole hold/alcohol and other drug abuse facility in Milwaukee.

Currently, services are provided in a number of settings. For example, at each institution, a health services unit functions as an outpatient clinic. The infirmary at Dodge Correctional Institution provides acute care, as do the University of Wisconsin Hospitals and Agnesian Healthcare when specialty or inpatient care, including surgical procedures, are required. Admissions examinations and evaluations for all adult prisoners are conducted at Dodge, which also provides hemodialysis services. At the present time, approximately 123 FTE health care services positions report centrally to the Department's Bureau of Health Services, and 107 FTE health care service positions report to the warden at their respective institution.

Since February 2000, the Department of Corrections has conducted a formal investigation of the death at Taycheedah and included the Mortality Review Committee, which normally meets quarterly to review deaths, in that investigation. On March 8, 2000, Secretary Litscher reported to the Assembly Committee on Corrections and Courts on a number of recommendations that resulted from the investigation. In addition, the Department has developed a Health Services Action Plan, designed to improve services.

An evaluation of prison health care services could include:

- an assessment of the extent to which the Health Services Action Plan developed by the Department of Corrections is being implemented;
- a comparative analysis of health care service delivery standards used in other states' correctional institutions or in federal correctional facilities;
- an analysis of Department of Corrections plans, including staffing levels, for providing cost effective health care services as the inmate population continues to increase; and
- a review of mental health services provided to inmates.

If you have any additional questions regarding this request, please contact me.

JM/KW/bm

cc:	Senator Judith Robson	Representative Steve Nass
	Senator Brian Burke	Representative John Gard
	Senator Peggy Rosenzweig	Representative Robert Ziegelbauer
	Senator Mary Lazich	Representative David Cullen

Representative Sheldon A. Wasserman

Jon E. Litscher, Secretary  
Department of Corrections

**Testimony for an Audit of the Health Care System in  
The Department of Corrections,  
State of Wisconsin and Out of State Prisons Contracted by the State of  
Wisconsin**

SUBMITTED BY: Lawrence L. Fox, 2412 East Edgewood Avenue, Shorewood, WI 53211.

Thank you for accepting my testimony today. I would like to share why I believe it is necessary to complete a comprehensive audit of the State of Wisconsin prison health care system and the health care system for contract beds under the control of the State of Wisconsin Department of Corrections. My personal experience has to do with the treatment of my son's diabetes in the prison system, although there may well be other health concerns that have the same treatment issues.

My son was transferred to the Dodge Correctional Facility for processing on June 15, 1998, at which time he was a healthy male. I would visit almost every Saturday and try to spend as much time as I could. Shortly after he went to Dodge, I noticed he was pale and losing weight. I would ask how he was doing, trying to assess what was happening to him. Because I am diabetic, I recognized that he seemed to have the symptoms of diabetes and told him to make sure that his blood sugar was checked. Eventually, the medical staff determined that his blood sugar was indeed high and gave him an oral drug to control his diabetes. I immediately objected and told Michael that he needed to be on insulin. I asked if the medical staff was monitoring his ketones; he said no. This concerned me very much.

He continued to have higher blood sugars and was probably spilling ketones into his system. He continued to look very unhealthy when I visited with him, and I told him he needed to get more help with the diabetes. He did ask the prison health care people with whom he was in contact about ketone tests and insulin, but nothing was done. After one Saturday visit approximately three to four weeks after the onset of his diabetes, I was so upset by Michael's condition that I called my personal physician and begged him to help my son get adequate medical treatment before he fell into ketoacidosis and coma. At this time Michael's blood sugars varied between

240 and 543 (normal is 80 to 120), his vision was blurry, and he had lost 22 pounds. My doctor, an endocrinologist specializing in diabetes, immediately called the Dodge facility, contacted their medical staff, and instructed them to give my son insulin. That day Michael got his first injection. My doctor indicated that the staff just did not have the proper experience to treat diabetes appropriately.

When an individual is young (Michael was 30 years old at the time), not overweight and losing weight (Michael went from 159 to 127 pounds), and starts having high levels of blood sugar for an extended period of time (Michael's blood sugars were elevated as high as 543 milligrams per deciliter of blood), it is necessary to correct the situation with insulin. In addition, a ketone test should be run to monitor for ketoacidosis, a hazardous condition associated with high blood sugar, and which eventually leads to coma and death. Michael had experienced high blood sugars for some time (approximately 3 weeks, and maybe longer) before insulin was administered, and there were no ketone tests run during the time period that his blood sugars were high. This was neither proper nor humane treatment.

New diabetics should be counseled on proper diet by a registered dietitian, on daily exercise by an exercise physiologist, and most importantly be seen by a physician who specializes in diabetes at the internal medicine level or an endocrinologist. Treating a diabetic is a team effort, as described in the clinical practice published by the American Diabetes Association (ADA) and attached to my testimony. (Note that they also address the treatment of diabetes in correctional facilities, which is also attached.) The ADA has clear evidence that diabetes not properly cared for in the early stages can result in serious complications in the future with many secondary illnesses associated to this poor care. There have been studies completed by the ADA, particularly the diabetes control and complications trial (DCCT), which shows clear evidence that a well-cared-for diabetic can reduce his or her secondary complications by as much as 60%.

The ADA will provide assistance to anyone trying to provide good and comprehensive care to the diabetic. I have had the ADA send information to Dr. George Daley (chief physician for the Wisconsin Department of Corrections) and Dr. Mathews (the current physician at the Whiteville



Correctional Facility). Dr. Daley never did call me back or accept any more of my phone calls. I have had one brief conversation with Dr. Mathews as of this point in time.

Not all doctors are specialists in every field of medicine, nor should they be expected to be. In the case of a primary disease such as diabetes, where there is a large amount of reference material produced by an organization dedicated to the care of diabetes—produced by physicians—any physician should take advantage of that resource when confronted with the onset of diabetes in a new patient. I am sure that this would apply to many other diseases as well. The Medical Director, Dr. George Daley, should be expected to provide leadership for the medical staff in this regard. However, I have offered Dr. Daley information and free help, and I can document several calls to his office that went unanswered. Mr. Jon Litscher's letter (attached) indicates that I am not satisfied with Dr. Daley's response; that is because I never got a response. The problems in Wisconsin's prison health system, in my opinion, stem directly from this lack of leadership. **This is a good area of investigation for the audit committee.**

The audit committee should ensure that there is a written program in place for diabetic care, which could easily be provided by the practice recommended by the ADA. The telephone numbers for consultation with the ADA or the University of Wisconsin should be made available in the event that questions should arise. (These phone numbers are generally all 800 numbers.) All prison guards in the areas where diabetics are housed should, at a minimum, be trained to recognize and care for low blood sugar symptoms and know how to take the proper action in the event of a hypoglycemic attack.

All written policies within the Wisconsin prison system that control the independent physicians' judgment for the primary care of all prisoners should be reviewed. While there are many specialists within the University of Wisconsin Hospital system that are available to the Department of Corrections, as reported to me by Mr. Litscher, the question remains: is there a team of a diabetic specialist, a registered dietician, and an exercise physiologist from the University available to consult with the Department of Corrections? If so, why wasn't that resource used for the treatment of my son? Mr. Litscher's letter indicates that the Bureau relies

on the primary care physicians who have direct contact with their patients. He does not say how or under what circumstances the primary care physician may refer a patient to more appropriate care, or even if there is some sort of a guideline to do this. **This is another good area of investigation for the audit committee.**

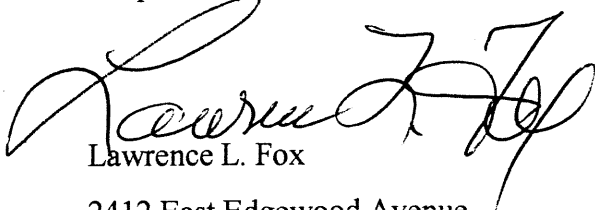
When I talked with my son's Tennessee physician, he indicated that he was providing the best care "under the circumstances." We have not had an opportunity to explore what that means. However, my son has told me that when the prison is in a "lock down," they don't necessarily have access to blood checks or insulin or proper food. It is not appropriate treatment, under any circumstances, to withhold medication under the pretense of maintaining security. The care for a diabetic is simple, and while security is important in any prison setting, health care and the lives of people have to take an equal position. What are the guidelines for health care during prison upsets? **This is another good area of investigation.**

This audit should have some guidelines, and the best place to look for that guidance is the experts—perhaps "The Medical Society of Wisconsin" or some other organization that is qualified to make judgment on the practices that are currently taking place. It must be an outside, third-party, independent organization. Furthermore, this audit must extend to the out-of-state prisons that are currently under contract to the State of Wisconsin. The health care of a Wisconsin prisoner should be the same, wherever he is. With people transferring back and forth, there cannot be a dual health care system, especially for individuals with chronic diseases.

I have talked with many people in the prison system and some people do have an understanding for the care that a diabetic should have. However, there are many more diabetics like my son who are being hurt by the medical leadership not stressing an equal priority for health care and human life along with security and other necessary issues. This audit must look to that leadership for the example it sets regarding what practice is currently taking place. This is especially important since I have suggested to Dr. Daley that the diabetic care in the prison is not adequate; certainly at the earlier diagnostic stages, **AND HE HAS PROVIDED NO RESPONSE!**

Thank you once again for accepting my testimony today. I need to share one additional piece of information for you to consider. I myself have been a diabetic for almost 30 years and I am currently dependent on an insulin pump to control my disease. Fortunately I have not experienced the secondary complications generally associated with the disease at this point in time. The primary reason is my dedication to learning, understanding, and caring for the disease. I am trying to instill in my son the same dedication and care that is needed to survive with this disease. Make sure that he has the tools to be healthy and not be an additional burden on society in the future. This committee has, at this time, a unique opportunity to reduce future costs and ensure the health and well-being of a large population of people. **The audit committee needs to investigate if the health care system is up to date using the latest information available to treat diabetes and other diseases.** Please ensure that a comprehensive, independent audit is the result of your action here today.

Respectfully Submitted:



Lawrence L. Fox

2412 East Edgewood Avenue

Shorewood, Wisconsin 53211

414-332-9848

<b>Diabetes</b>	<b>Care</b>
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**Volume 23 Supplement 1**  
**American Diabetes Association:**  
**Clinical Practice Recommendations 2000**

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**POSITION STATEMENT**

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# Standards of Medical Care for Patients With Diabetes Mellitus

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American Diabetes Association

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**D**iabetes is a chronic illness that requires continuing medical care and education to prevent acute complications and to reduce the risk of long-term complications. People with diabetes should receive their treatment and care from a physician-coordinated team. Such teams include, but are not limited to, physicians, nurses, dietitians, and mental health professionals with expertise and a special interest in diabetes.

The following standards define basic medical care for people with diabetes. These standards are not intended to preclude more extensive evaluation and management of the patient by other specialists as needed.

These standards of diabetes care seek to provide:

1. Physicians and other health care professionals who treat people with diabetes with a means to

- Set treatment goals
- Assess the quality of diabetes treatment provided
- Identify areas where more attention or self-management training is needed
- Define timely and necessary referral patterns to appropriate specialists

2. People with diabetes with a means to

- Assess the quality of medical care they receive
- Develop expectations for their role in the medical treatment
- Compare their treatment outcomes with standard goals

For more detailed information, refer to Skyler (Ed.): *Medical Management of Type 1 Diabetes* and Zimmerman (Ed.): *Medical Management of Type 2 Diabetes* (see bibliography).

**GENERAL PRINCIPLES** — Persistent hyperglycemia is the hallmark of all forms of diabetes. Treatment aimed at lowering blood glucose to or near normal levels in all patients is mandated by the following proven benefits:

1. The danger of acute decompensation due to diabetic ketoacidosis (DKA) or hyperosmolar hyperglycemic nonketotic syndrome, with their accompanying morbidity and mortality, is markedly reduced.
2. The symptoms of blurred vision are alleviated, and the risk of polyuria, polydipsia, fatigue, weight loss with polyphagia, vaginitis, or balanitis may be decreased.
3. The risks of development or progression of diabetic retinopathy, nephropathy, and neuropathy are all greatly decreased. It is possible that these complications may even be prevented by early effective management.
4. Near normalization of blood glucose has been demonstrated to be associated with a less atherogenic lipid profile.

Achieving near normal or normal blood glucose levels in patients requires comprehensive education in self-management and, for most individuals, intensive treatment programs. Such programs include the following components according to individual patient need:

- Appropriate frequency of self-monitoring of blood glucose (SMBG)
- Medical nutrition therapy (MNT)
- Regular exercise
- Physiologically based insulin regimens, i.e., multiple daily injections of rapid-acting insulin analogs (e.g., lispro), short-acting (e.g., regular), intermediate-acting (e.g., NPH or lente), or long-acting (e.g., ultralente) insulins or continuous subcutaneous insulin infusion, in type 1 and some type 2 patients
- Less-complex insulin regimens or oral glucose-lowering agents in some type 2 patients
- Instruction in the prevention and treatment of hypoglycemia and other acute and chronic complications

- Continuing education and reinforcement
- Periodic assessment of treatment goals

To be effective, treatment programs require ongoing support from the clinical care team.

## SPECIFIC GOALS OF TREATMENT

### Type 1 diabetes

Setting individual patient glycemic targets should take into account the results of prospective randomized clinical trials, most notably the Diabetes Control and Complications Trial (DCCT). This trial conclusively demonstrated that in patients with type 1 diabetes the risk of development or progression of retinopathy, nephropathy, and neuropathy is reduced 50–75% by intensive treatment regimens when compared with conventional treatment regimens. These benefits were observed with an average HbA<sub>1c</sub> of 7.2% in intensively treated groups of patients compared with 9.0% in conventionally treated groups of patients. The reduction in risk of these complications correlated continuously with the reduction in HbA<sub>1c</sub> produced by intensive treatment. This relationship implies that near normalization of glycemic levels may prevent complications. The nondiabetic reference range for the HbA<sub>1c</sub> in the DCCT was 4.0–6.0. Because different assays can give varying glycated hemoglobin (GHb) values, it is important that laboratories only use assay methods that are certified as traceable to the DCCT HbA<sub>1c</sub> reference method.

	Normal	Goal	Additional action suggested
<b>Whole blood values</b>			
Average preprandial glucose (mg/dl)†	<100	80–120	<80/>140
Average bedtime glucose (mg/dl)†	<110	100–140	<100/>160
<b>Plasma values</b>			
Average preprandial glucose (mg/dl)‡	<110	90–130	<90/>150
Average bedtime glucose (mg/dl)‡	<120	110–150	<110/>180
HbA <sub>1c</sub> (%)	<6	<7	>8

\*The values shown in this table are by necessity generalized to the entire population of individuals with diabetes. Patients with comorbid diseases, the very young and older adults, and others with unusual conditions or circumstances may warrant different treatment goals. These values are for nonpregnant adults. †Additional action suggested depends on individual patient circumstances. Such actions may include enhanced diabetes self-management education, team management with a diabetes team, referral to an endocrinologist, change in pharmacological therapy, initiation of or increase in SMBG, or more frequent contact with the patient. HbA<sub>1c</sub> is referenced to a nondiabetic range of 4.0–6.0% (mean 5.0%, SD 0.5%). ‡Measurement of capillary blood glucose. †Values calibrated to plasma glucose.

SMBG targets in the DCCT were 70–120 mg/dl (3.9–6.7 mmol/l) before meals and at bedtime and <180 mg/dl (<10.0 mmol/l) when measured 1.5–2.0 h postprandially. However, these goals were associated with a threefold increased risk of severe hypoglycemia. Therefore, it may be appropriate to increase these targets (e.g., 80–120 mg/dl [4.4–6.7 mmol/l] before meals and 100–140 mg/dl [5.6–7.8 mmol/l] at bedtime) (Table 1, top). These targets should be further adjusted upward in patients with a history of recurrent severe or unrecognized hypoglycemia.

Whole blood glucose values were provided for the SMBG targets in the DCCT. Because laboratory methods measure plasma glucose, many blood glucose monitors approved for home use and some test strips now calibrate blood glucose readings to plasma values. Plasma glucose values are 10–15% higher than whole blood glucose values, and it is crucial that people with diabetes know whether their monitor and strips provide whole blood or plasma results. The preprandial and bedtime glucose values in the bottom of Table 1 have been modified to show plasma readings.

Individual treatment goals should take into account the patient's capacity to understand and carry out the treatment regimen, the patient's risk for severe hypoglycemia, and other patient factors that may increase risk or decrease benefit (e.g., very young or old age, end-stage renal disease (ESRD), advanced cardiovascular or cerebrovascular disease, or other coexisting diseases that will materially shorten life expectancy).

The desired outcome of glycemic control in type 1 diabetes is to lower GHb (or any equivalent measure of chronic glycemia) so as to achieve maximum prevention of complications with due regard for patient safety. To achieve these goals with intensive management, the following may be necessary:

- Frequent SMBG (at least three or four times per day)
- Medical nutrition therapy
- Education in self-management and problem solving
- Possible hospitalization for initiation of therapy

In situations where resources are unavailable or insufficient, referral to a diabetes care team for consultation and/or comanagement is recommended.

### **Type 2 diabetes**

The largest and longest study of patients with type 2 diabetes, the United Kingdom Prospective Diabetes Study (UKPDS), conclusively demonstrated that improved blood glucose control in these patients reduces the risk of developing retinopathy and nephropathy and possibly reduces neuropathy. The overall microvascular complications rate was decreased by 25% in patients receiving intensive therapy versus conventional therapy. Epidemiological analysis of the UKPDS data showed a continuous relationship between the risk of microvascular complications and glycemia, such that for every percentage point decrease in HbA<sub>1c</sub> (e.g., 9 to 8%) there was a 35% reduction in the risk of microvascular complications. These results confirm in type 2 diabetes that lowering

blood glucose is beneficial. The UKPDS also showed that aggressive control of blood pressure, consistent with American Diabetes Association recommendations, significantly reduced strokes, diabetes-related deaths, heart failure, microvascular complications, and visual loss.

Several observational studies, including the results of the epidemiologic analysis of UKPDS data, have shown strong and statistically significant associations between blood glucose control and the risk of cardiovascular disease morbidity and mortality. The UKPDS showed a 16% reduction (not statistically significant,  $P = 0.052$ ) in the risk of combined fatal or nonfatal myocardial infarction and sudden death in the intensively treated group.

For further discussion, see the American Diabetes Association's position statement "Implications of the United Kingdom Prospective Diabetes Study."

When setting treatment goals for type 2 diabetes (Table 1), the same individual patient characteristics should be considered as for type 1 diabetes: the patient's capacity to understand and carry out the treatment regimen, the patient's risk for severe hypoglycemia, and other patient factors that may increase risk or decrease benefit (e.g., advanced age, ESRD, advanced cardiovascular or cerebrovascular disease, or other coexisting diseases that will materially shorten life expectancy).

Daily SMBG is especially important for patients treated with insulin or sulfonylureas to monitor for and prevent asymptomatic hypoglycemia. The optimal frequency of SMBG for patients with type 2 diabetes is not known, but it should be sufficient to facilitate reaching glucose goals. The role of SMBG in stable diet-treated patients with type 2 diabetes is not known.

Type 2 diabetes treatment methods should emphasize diabetes management as a multiple risk factor approach including MNT, exercise, weight reduction when indicated, and use of oral glucose-lowering agents and/or insulin, with careful attention given to cardiovascular risk factors, including hypertension, smoking, dyslipidemia, and family history. Whether treated with insulin or oral glucose-lowering agents, or a combination, goals remain those outlined in Table 1.

## **INITIAL VISIT**

### **Medical history**

The comprehensive medical history can uncover symptoms that will help establish the diagnosis in the patient with previously unrecognized diabetes. If the diagnosis of diabetes has already been made, the history should confirm the diagnosis, review the previous treatment, allow evaluation of the past and present degrees of glycemic control, determine the presence or absence of the chronic complications of diabetes, assist in formulating a management plan, and provide a basis for continuing care. Elements of the medical history of particular concern in patients with diabetes include the following:

- Symptoms, results of laboratory tests, and special examination results related to the diagnosis of diabetes



- Prior GHb records
- Eating patterns, nutritional status, and weight history; growth and development in children and adolescents
- Details of previous treatment programs, including nutrition and diabetes self-management education
- Current treatment of diabetes, including medications, meal plan, and results of glucose monitoring and patients' use of the data
- Exercise history
- Frequency, severity, and cause of acute complications such as ketoacidosis and hypoglycemia
- Prior or current infections, particularly skin, foot, dental, and genitourinary infections
- Symptoms and treatment of chronic eye; kidney; nerve; genitourinary (including sexual), bladder, and gastrointestinal function; heart; peripheral vascular; foot; and cerebrovascular complications associated with diabetes
- Other medications that may affect blood glucose levels
- Risk factors for atherosclerosis: smoking, hypertension, obesity, dyslipidemia, and family history
- History and treatment of other conditions, including endocrine and eating disorders
- Family history of diabetes and other endocrine disorders
- Gestational history: hyperglycemia, delivery of an infant weighing >9 lb, toxemia, stillbirth, polyhydramnios, or other complications of pregnancy
- Lifestyle, cultural, psychosocial, educational, and economic factors that might influence the management of diabetes
- Tobacco and alcohol use

### **Physical examination**

A physical examination should be performed during the initial evaluation. People with diabetes have a high risk of developing eye, kidney, foot, nerve, cardiac, and vascular complications. Patients with type 1 diabetes have an increased frequency of autoimmune disorders, especially thyroid disease. All individuals with poorly controlled diabetes are at increased risk for infections. Children with poorly controlled diabetes may have delayed growth and maturation. Therefore, certain aspects of the detailed physical examination require particular attention. These include the following:

- Height and weight measurement (and comparison to norms in children and adolescents)
- Sexual maturation staging (during peripubertal period)
- Blood pressure determination (with orthostatic measurements when indicated) and comparison to age-related norms
- Ophthalmoscopic examination (preferably with dilation)
- Oral examination
- Thyroid palpation
- Cardiac examination
- Abdominal examination (e.g., for hepatomegaly)
- Evaluation of pulses (by palpation and auscultation)
- Hand/finger examination
- Foot examination
- Skin examination (including insulin-injection sites)
- Neurological examination

The clinician should also be alert for signs of diseases that can cause secondary diabetes, e.g., hemochromatosis, pancreatic disease, and endocrine disorders such as acromegaly, pheochromocytoma, and Cushing's syndrome.

### **Laboratory evaluation**

Blood glucose testing and urine ketone testing should be available in the office for immediate use as needed. In addition, each patient should undergo laboratory tests that are appropriate to the evaluation of the individual's general medical condition. Certain tests should be performed to establish the diagnosis of diabetes (see the American Diabetes Association's "Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus" for a complete discussion on this subject), determine the degree of glycemic control, and define associated complications and risk factors. These include the following:

- Fasting plasma glucose (a random plasma glucose test may be performed in an undiagnosed symptomatic patient for diagnostic purposes)
- GHb
- Fasting lipid profile: total cholesterol, HDL cholesterol, triglycerides, and LDL

cholesterol

- Serum creatinine in adults; in children if proteinuria is present
- Urinalysis: glucose, ketones, protein, sediment
- Test for microalbuminuria (e.g., timed specimen or the albumin-to-creatinine ratio) in pubertal and postpubertal type 1 patients who have had diabetes for at least 5 years and in all patients with type 2 diabetes
- Urine culture if sediment is abnormal or symptoms are present
- Thyroid-stimulating hormone (TSH) in all type 1 patients
- Electrocardiogram in adults

### **Management plan**

A complete, organized medical record system is essential to providing ongoing care of people with diabetes. The records must always be accessible to the diabetes treatment team and organized so that they not only document what has occurred but also serve as a reminder of what should be done at appropriate intervals.

The management plan should be formulated as an individualized therapeutic alliance among the patient and family, the physician, and other members of the health care team skilled in the management of diabetes to achieve the desired level of diabetes control. Patient self-management should be emphasized. To this end, the management plan should be formulated in collaboration with the patient, and the plan should emphasize the involvement of the patient in problem solving as much as possible. A variety of strategies and techniques should be employed to provide adequate education and development of problem-solving skills in the various aspects of diabetes management.

In formulating this management plan, consideration should be given to the patient's age, school or work schedule and conditions, physical activity, eating patterns, social situation and personality, cultural factors, and presence of complications of diabetes or other medical conditions. Implementation of the management plan requires that each aspect be understood and agreed on by the patient and the care providers and that the goals and treatment plan are reasonable. The management plan should include the following:

- Statement of short- and long-term goals
- Medications (insulin, oral glucose-lowering agents, glucagon, antihypertensive and lipid-lowering agents, aspirin therapy, other endocrine drugs, and other medications)
- Individualized nutrition recommendations and instructions, preferably by a registered dietitian familiar with the components of diabetes MNT
- Recommendations for appropriate lifestyle changes (e.g., exercise, smoking cessation)

- Patient and family education for self-management that is consistent with the National Standards for Diabetes Self-Management Education Programs
- Monitoring instructions: SMBG, urine ketones, and use of a record system. Frequency of SMBG should be individualized according to clinical circumstances, the form of treatment employed, and the response to treatment. Urine glucose may be considered as an alternative only if the patient is unable or unwilling to perform blood glucose testing or if the only goal is avoidance of symptomatic hyperglycemia.
- Annual comprehensive dilated eye and visual examinations by an ophthalmologist or optometrist for all patients of age 10 years and older who have had diabetes for 3–5 years, all patients diagnosed after age 30 years, and any patient with visual symptoms and/or abnormalities
- Consultation for podiatry services as indicated
- Consultation for specialized services as indicated
- Agreement on continuing support, follow-up, and return appointments
- Instructions on when and how to contact the physician or other members of the health care team when the patient has not been able to solve problems and when management of acute problems is required
- For women of childbearing age, discussion of contraception and emphasis on the necessity of optimal blood glucose control before conception and during pregnancy
- Dental hygiene
- Pneumococcal vaccine; influenza vaccine annually

See Table 2 for a summary of the initial visit.

Table 2—Components of the initial visit

- |  |
|--|
| <ul style="list-style-type: none"> <li>I. Medical history           <ul style="list-style-type: none"> <li>A. Symptoms, laboratory results related to diagnosis</li> <li>B. Nutritional assessment, weight history</li> <li>C. Previous and present treatment plans               <ul style="list-style-type: none"> <li>1. Medications</li> <li>2. MNT</li> <li>3. Self-management training</li> <li>4. SMBG and use of results</li> </ul> </li> <li>D. Current treatment program</li> <li>E. Exercise history</li> <li>F. Acute complications</li> </ul> </li> </ul> |
|--|

- G. History of infections
  - H. Chronic diabetic complications
  - I. Medication history
  - J. Family history
  - K. CHD risk factors
  - L. Psychosocial/economic factors
  - M. Tobacco and alcohol use
- II. Physical examination
- A. Height and weight
  - B. Blood pressure
  - C. Ophthalmoscopic examination
  - D. Thyroid palpation
  - E. Cardiac examination
  - F. Evaluation of pulses
  - G. Foot examination
  - H. Skin examination
  - I. Neurological examination
  - J. Oral examination
  - K. Sexual maturation (if peripubertal)
- III. Laboratory evaluation
- A. Fasting plasma glucose (optional)
  - B. GHb
  - C. Fasting lipid profile
  - D. Serum creatinine
  - E. Urinalysis
  - F. Urine culture (if indicated)
  - G. TSH (type 1 patients)
  - H. Electrocardiogram (adults)
- IV. Management plan
- A. Short- and long-term goals
  - B. Medications
  - C. Medical nutrition therapy
  - D. Lifestyle changes
  - E. Self-management education
  - F. Monitoring instructions
  - G. Annual referral to eye specialist
  - H. Specialty consultations (as indicated)
  - I. Agreement on continuing support/follow-up
  - J. Pneumococcal and influenza vaccines

**CONTINUING CARE** — Continuing care is essential in the management of every patient with diabetes. At each visit, the patient's progress in achieving treatment goals should be evaluated by the health care team, and problems that have occurred should be reviewed. If goals are not being met, the management plan needs to be revised and/or the goals need to be reassessed.

#### Visit frequency

The frequency of patient visits depends on the following:

- Type of diabetes
- Blood glucose goals and the degree to which they are achieved
- Changes in the treatment regimen
- Presence of complications of diabetes or other medical conditions

Patients initiating insulin therapy or having a major change in their insulin program may need to be in contact with their health care providers as often as daily until glucose control is achieved, the risk of hypoglycemia is low, and they are competent and comfortable implementing the treatment plan. Some patients may require hospitalization for initiation or change of therapy.

Patients beginning treatment with MNT or oral glucose-lowering agents may need to be contacted as often as weekly until reasonable glucose control is achieved and they are competent to conduct the treatment program. Regular visits should be scheduled for all patients with diabetes. Patients should generally be seen at least quarterly until achievement of treatment goals. Thereafter, the frequency of visits may be decreased as long as patients continue to achieve all treatment goals. More frequent contact also may be required if patients are undergoing intensive insulin therapy, not meeting glycemic or blood pressure goals, or have evidence of progression in microvascular or macrovascular complications. Patients must be taught to recognize problems with their glucose control as indicated by their SMBG records and to promptly report concerns to the health care team to clarify and strengthen their self-management skills. They also should be taught to recognize early signs and symptoms of acute and chronic complications and to report these immediately. Severe hypoglycemic reactions requiring the assistance of another person must be reported as soon as possible.

### **Medical history**

An interim history should be obtained at each visit and should include the following:

- Frequency, causes, and severity of hypoglycemia or hyperglycemia
- Results of SMBG
- Adjustments by the patient of the therapeutic regimen
- Problems with adherence
- Symptoms suggesting development of the complications of diabetes
- Other medical illnesses
- Current medications
- Psychosocial issues

- Lifestyle changes
- Tobacco and alcohol use

**Physical examination**

The routine follow-up examination should include the following:

- Height (until maturity)
- Weight
- Blood pressure
- Sexual maturation (in peripubertal patients)
- Funduscopy in patients at risk (referral if retinopathy detected)
- Foot examination in patients at risk

If abnormalities are identified, more frequent follow-up may be required.

Comprehensive dilated eye and visual examinations should be performed annually by an ophthalmologist or optometrist who is knowledgeable and experienced in the management of diabetic retinopathy for all patients age 10 years and older who have had diabetes for 3–5 years, all patients diagnosed after age 30, and any patient with visual symptoms and/or abnormalities. For further discussion, see the American Diabetes Association's position statement "Diabetic Retinopathy."

All individuals with diabetes should receive a thorough foot examination at least once a year to identify high-risk foot conditions. This examination should include an assessment of protective sensation, foot structure and biomechanics, vascular status, and skin integrity. People with one or more high-risk foot conditions should be evaluated more frequently for the development of additional risk factors. People with neuropathy should have a visual inspection of their feet at every contact with a health care professional. For further discussion, see the American Diabetes Association's position statement, "Preventive Foot Care in People With Diabetes."

**Laboratory evaluation**

A GHb determination should be performed routinely in all patients with diabetes, first to document the degree of glycemic control at initial assessment, then as part of continuing care. Since GHb reflects mean glycemia over the preceding 2–3 months, measurement approximately every 3 months is required to determine whether a patient's metabolic control has remained continuously within the target range. Thus, regular measurements of GHb permit detection of departures from the target range in a timely fashion. For any individual patient, the frequency of GHb testing should depend on the treatment regimen employed and the judgment of the clinician. In the absence of well-controlled studies that suggest a definite testing protocol, expert opinion recommends GHb testing at least twice a year in patients who are meeting treatment goals and who have stable glycemic control

and more frequently (quarterly assessment) in patients whose therapy has changed or who are not meeting glycemic goals.

Low-risk, borderline, and high-risk lipid levels for adults are shown in Table 3. Adult patients with diabetes should be tested annually for lipid disorders with fasting serum cholesterol, triglyceride, HDL cholesterol, and calculated LDL cholesterol measurements. If values fall in lower-risk levels, assessment may be repeated every 2 years. Tests resulting in borderline or abnormal values should be repeated for confirmation. Tests resulting in abnormal values requiring institution of therapy should be repeated, following the National Cholesterol Education Program recommendations. Lipid values should be reevaluated following a macrovascular event.

Table 3—Category of risk based on lipoprotein levels in adults with diabetes

Risk	LDL cholesterol	HDL cholesterol*	Triglyceride
High	≥130	<35	≥400
Borderline	100–129	35–45	200–399
Low	<100	>45	<200

Data are given in milligrams per decaliter \*For women, HDL cholesterol values should be increased by 10 mg/dl

A lipid profile should be performed on children older than 2 years after diagnosis of diabetes and when glucose control has been established. Tests resulting in borderline or abnormal values should be repeated for confirmation. If values fall within accepted risk levels, assessment should be repeated every 5 years. Tests resulting in abnormal values requiring institution of therapy should be repeated, following the National Cholesterol Education Program recommendations for children and adolescents.

In the absence of previously demonstrated microalbuminuria, an annual test for the presence of microalbumin is necessary. Screening for microalbuminuria in individuals with type 1 diabetes should begin with puberty and after 5 years' duration of the disease. Because of the difficulty in precise dating of the onset of type 2 diabetes, such screening should begin at the time of diagnosis. Screening for microalbuminuria can be performed by three methods:

1. Measurement of the albumin-to-creatinine ratio in a random, spot collection
2. 24-h collection with creatinine, allowing the simultaneous measurement of creatinine clearance
3. Timed (e.g., 4-h or overnight) collection

The first method is often found to be the easiest in an office setting and generally provides accurate information. First-void or other morning collections are preferred because of the



known diurnal variation in albumin excretion, but if this timing cannot be used, uniformity of timing for different collections in the same individual should be employed.

The role of annual urine protein dipstick testing and microalbuminuria assessment is less clear after diagnosis of microalbuminuria and institution of ACE inhibitor therapy and blood pressure control. Many experts recommend continued surveillance both to assess response to therapy and progression of disease. In addition to assessment of urinary albumin excretion, assessment of renal function is important in patients with diabetic kidney disease.

### Management plan

The management plan should be reviewed at each regular visit to determine progress in meeting goals and to identify problems. This review should include the control of blood glucose levels, assessment of complications, control of blood pressure, control of dyslipidemia, nutrition assessment, frequency of hypoglycemia, adherence to all aspects of self-care, evaluation of the exercise regimen, follow-up of referrals, and psychosocial adjustment. In addition, knowledge of diabetes and self-management skills should be reassessed at least annually. Continuing education should be provided or encouraged.

**Table 4—Potential components of continuing care visits**

- |      |  |
|------|--|
| I.   | Contact frequency  |
| A.   | Daily for initiation of insulin or change in regimen                             |
| B.   | Weekly for initiation of oral glucose-lowering agent(s) or change in regimen     |
| C.   | Routine diabetes visits  |
| 1.   | Quarterly for patients who are not meeting goals                                 |
| 2.   | Semiannually for other patients  |
| II.  | Medical history  |
| A.   | Assess treatment regimen   |
| 1.   | Frequency/severity of hypo-/hyperglycemia  |
| 2.   | SMBG results   |
| 3.   | Patient regimen adjustments  |
| 4.   | Adherence problems   |
| 5.   | Lifestyle changes  |
| 6.   | Symptoms of complications  |
| 7.   | Other medical illnesses  |
| 8.   | Medications  |
| 9.   | Psychosocial issues  |
| 10.  | Tobacco and alcohol use  |
| III. | Physical examination   |
| A.   | Physical examination annually  |
| B.   | Dilated eye examination annually   |
| C.   | Every regular diabetes visit   |
| 1.   | Weight   |
| 2.   | Blood pressure   |
| 3.   | Previous abnormalities on the physical exam                                      |
| D.   | Foot examination annually; more often in patients with high-risk foot conditions |
| IV.  | Laboratory evaluation  |
| A.   | GHb  |

1. Quarterly if treatment changes or patient is not meeting goals
  2. Twice per year if stable
- B. Fasting plasma glucose (optional)
  - C. Fasting lipid profile annually, unless low risk
  - D. Microalbumin measurement annually (if indicated)
- V. Evaluation of management plan
- A. Short- and long-term goals
  - B. Medications
  - C. Glycemia
  - D. Frequency/severity of hypoglycemia
  - E. SMBG results
  - F. Complications
  - G. Control of dyslipidemia
  - H. Blood pressure
  - I. Weight
  - J. MNT
  - K. Exercise regimen
  - L. Adherence to self-management training
  - M. Follow-up of referrals
  - N. Psychosocial adjustment
  - O. Knowledge of diabetes
  - P. Self-management skills
  - Q. Smoking cessation, if indicated
  - R. Annual influenza vaccine

See Table 4 for a summary of continuing care.

## SPECIAL CONSIDERATIONS

### Children and adolescents

Approximately three-quarters of all newly diagnosed cases of type 1 diabetes occur in individuals younger than 18 years. Care of this group requires integration of diabetes management with the complicated physical and emotional growth needs of children, adolescents, and their families. Diabetes care for children of this age-group should be provided by a team that can deal with these special medical, educational, nutritional, and behavioral issues.

At the time of initial diagnosis, it is extremely important to establish the goals of care and to begin diabetes self-management education. A firm educational base should be provided so that the individual and family can become increasingly independent in the self-management of diabetes. Glycemic goals may need to be modified to take into account the fact that most children younger than 6 or 7 years have a form of "hypoglycemic unawareness," in that they lack the cognitive capacity to recognize and respond to hypoglycemic symptoms. Intercurrent illnesses are more frequent in young children. Sick-day management rules must be established and taught to prevent severe hyperglycemia and DKA that require hospitalization. A nutritional assessment should be performed at diagnosis, and at least annually thereafter, by an individual experienced with the nutritional needs of the growing child and the behavioral issues that have an impact on adolescent diets. Caution must be exercised to avoid overaggressive dietary manipulation in the very young. Assessment of lifestyle needs should be accompanied by possible

modifications of the diabetic regimen. For example, an adolescent who requires more flexibility might be switched to a three- or four-insulin-injection program when needed.

A major issue deserving emphasis in this age-group is that of "adherence." No matter how sound the medical regimen, it can only be as good as the ability of the family and/or individual to implement it. Health care providers who care for children and adolescents, therefore, must be capable of evaluating the behavioral, emotional, and psychosocial factors that interfere with implementation and then must work with the individual and family to resolve problems that occur and/or to modify goals as appropriate.

Information should be supplied to the school or day care setting so that school personnel are aware of the diagnosis of diabetes in the student and of the signs, symptoms, and treatment of hypoglycemia. It is desirable that blood glucose testing be performed at the school or day care setting before lunch and when signs or symptoms of abnormal blood glucose levels are present.

For further discussion, see the American Diabetes Association's position statement, "The Care of Children With Diabetes in the School and Day Care Setting."

### **Referral for diabetes management**

For a variety of reasons (e.g., intercurrent illness, DKA, recurrent hypoglycemia), it may not be possible to provide care that meets these standards or achieves the desired goals of treatment (Table 1). In such instances, additional actions suggested may include enhanced education of diabetes self-management, comanagement with a diabetes team, or referral to an endocrinologist.

### **Intercurrent illness**

The stress of illness frequently aggravates glycemic control and necessitates more frequent monitoring of blood glucose and urine ketones. Marked hyperglycemia requires temporary adjustment of the treatment program, and, if accompanied by ketosis, frequent interaction with the diabetes care team. The patient treated with oral glucose-lowering agents or MNT alone may temporarily require insulin. Adequate fluid and caloric intake must be assured. Infection or dehydration is more likely to necessitate hospitalization of the person with diabetes than the person without diabetes. The hospitalized patient should be treated by a physician with expertise in the management of diabetes.

### **Diabetic ketoacidosis and hyperosmolar hyperglycemic nonketotic syndrome**

These conditions represent decompensation in diabetic control and require immediate treatment. Careful evaluation of the patient for associated or precipitating events must be undertaken (e.g., infection, medications, vascular events), and associated problems must be treated appropriately. Depending on the severity of the illness and available resources, treatment can be initiated in the physician's office, but it is best carried out in the emergency room, hospital room, or intensive care unit. Because of the potential morbidity and mortality of DKA and the hyperosmolar hyperglycemic nonketotic syndrome, prompt consultation with a diabetologist/endocrinologist is recommended when the initial clinical and/or biochemical state is markedly abnormal, when the initial response to standard therapy is unsatisfactory, or when metabolic complications or cerebral edema occur. Recurrence of DKA demands a detailed psychosocial and educational evaluation by a diabetes specialist.

**Severe or frequent hypoglycemia**

The occurrence of severe, frequent, or unexplained episodes of hypoglycemia may be due to a number of factors such as defective counterregulation, hypoglycemic unawareness, insulin dose errors, and excessive alcohol intake. Hypoglycemia may also be a consequence of the therapeutic regimen and always requires evaluation of both the management plan and its execution by the patient. Family members and close associates of the patient who uses insulin should be taught to use glucagon.

The successful accomplishment of these goals requires more frequent patient contacts during readjustment of the treatment program and patient/family reeducation.

**Pregnancy**

To reduce the risk of fetal malformations and maternal and fetal complications, pregnant women and women planning to become pregnant require excellent blood glucose control. These women need to be seen frequently by a multidisciplinary team, including a diabetologist, internist or family practice physician, obstetrician, diabetes educators, including a nurse, registered dietitian, and social worker, and other specialists as necessary. In addition, these women must be trained in SMBG and may require specialized laboratory and diagnostic tests. For further discussion, see the American Diabetes Association's position statement "Preconception Care of Women with Diabetes."

Because of the need for prepregnancy planning and excellent glucose control, every pregnancy in a woman with diabetes should be planned in advance. Therefore, any diabetic woman who is not currently attempting to conceive should be informed of and offered acceptable and effective methods of contraception.

For information on gestational diabetes mellitus, see the American Diabetes Association's position statement on this topic.

**RETINOPATHY** — In addition to undergoing the annual retinal examination by an ophthalmologist or optometrist who is knowledgeable and experienced in the management of diabetic retinopathy, patients with any level of macular edema, severe nonproliferative retinopathy, or any proliferative retinopathy require the prompt care of an ophthalmologist who is knowledgeable and experienced in the management of diabetic retinopathy. (For further discussion, see the American Diabetes Association's position statement "Diabetic Retinopathy.")

**HYPERTENSION** — Hypertension contributes to the development and progression of chronic complications of diabetes. In patients with type 1 diabetes, persistent hypertension is often a manifestation of diabetic nephropathy, as indicated by concomitant elevated levels of urinary albumin and, in later stages, by a decrease in the glomerular filtration rate (GFR). In patients with type 2 diabetes, hypertension often is part of a syndrome that includes glucose intolerance, insulin resistance, obesity, dyslipidemia, and coronary artery disease. Isolated systolic hypertension may occur with long duration of either type of diabetes and is in part due to inelasticity of atherosclerotic large vessels. Control of hypertension has been demonstrated conclusively to reduce the rate of progression of diabetic nephropathy and to reduce the complications of hypertensive nephropathy, cerebrovascular disease, and cardiovascular disease.

**General principles**

Lifestyle modifications should initially be employed to reduce blood pressure unless hypertension is at an urgent level. Such modifications include weight loss, exercise, reduction of dietary sodium, and limits on alcohol consumption. If lifestyle modifications do not achieve specified goals, medications should be added in a stepwise fashion until blood pressure goals are reached. Several medications in patients with albuminuria (e.g., ACE inhibitors) appear to have selective benefit in patients with diabetes. Other cardiovascular risk factors, such as smoking, inactivity, and elevated LDL cholesterol levels, should also be managed concomitantly.

**Specific goals of treatment**

The primary goal of therapy for adults should be to decrease blood pressure to <130/85 mmHg. In children, blood pressure should be decreased to the corresponding age-adjusted 90th percentile values.

Hypertension in adults has traditionally been defined as a systolic blood pressure  $\geq 140$  mmHg and/or a diastolic blood pressure  $\geq 90$  mmHg. Most epidemiological studies have suggested that risk due to elevated blood pressure is a continuous function, so these cutoff levels are arbitrary. In the general population, the risks for end-organ damage appear to be lowest when the systolic blood pressure is <120 mmHg and the diastolic blood pressure is <80 mmHg.

For patients with an isolated systolic hypertension of  $\geq 180$  mmHg, the goal is a blood pressure <160 mmHg. For those with systolic blood pressure of 160–179, the goal is a reduction of 20 mmHg. If these goals are achieved and well tolerated, further lowering to 140 mmHg may be appropriate. (For more detailed information, see the consensus statement "Treatment of Hypertension in Diabetes.")

**NEPHROPATHY****General principles**

Persistent albuminuria in the range of 30–300 mg/24 h (microalbuminuria) has been shown to be the earliest stage of diabetic nephropathy and is a significant risk marker for cardiovascular disease. Patients with microalbuminuria will likely progress to clinical albuminuria ( $\geq 300$  mg/24 h) and decreasing GFR over a period of years. Once clinical albuminuria occurs, the risk for ESRD is high in type 1 diabetes and significant in type 2 diabetes. If untreated, hypertension can hasten the progression of renal disease. Over the past several years, a number of interventions have been demonstrated to retard the initial development or rate of progression of renal disease.

**Specific goals of treatment**

Intensive diabetes management with the goal of achieving near normoglycemia has been proved to delay the onset of microalbuminuria, and the progression of microalbuminuria to clinical albuminuria, in patients with type 1 diabetes.

Lowering blood pressure to <130/85, by any effective means, should be the goal in hypertensive individuals. A reduction in blood pressure will also decrease the rate of progression of diabetic nephropathy.

In hypertensive patients with either type 1 or type 2 diabetes who have microalbuminuria or clinical albuminuria, treatment with ACE inhibitors has been shown to delay progression from microalbuminuria to clinical albuminuria and to slow the decline in GFR in clinical albuminuria. Because of the high proportion of patients who progress from microalbuminuria to overt nephropathy and subsequently to ESRD, the use of ACE inhibitors is recommended for all type 1 patients with microalbuminuria, even if they are normotensive. However, because of the more variable rate of progression from microalbuminuria to overt nephropathy and ESRD in patients with type 2 diabetes, the use of ACE inhibitors in normotensive type 2 diabetic patients is not as well substantiated as in normotensive type 1 diabetic patients. Therefore, treatment with ACE inhibitors in normotensive type 2 patients should be based on physician assessment. Should such a patient show progression of albuminuria or develop hypertension, then ACE inhibitors would clearly be indicated.

The albumin-to-creatinine ratio can be measured in a random urine specimen. Alternatively, measurement of urine albumin may be done on a 24-h or other timed urine collection. There is marked day-to-day variability in albumin excretion, so that at least two of three collections measured in a 3- to 6-month period should show elevated levels before a patient is designated as having microalbuminuria. Abnormalities of albumin excretion are defined in Table 5.

Table 5—Definitions of abnormalities in albumin excretion

Category	24-h collection ( $\mu\text{g}/24\text{ h}$ )	Timed collection ( $\mu\text{g}/\text{min}$ )	Spot collection ( $\mu\text{g}/\text{mg creatinine}$ )
Normal	<30	<20	<30
Microalbuminuria	30–300	20–200	30–300
Clinical albuminuria	>300	>200	>300

Because of variability in urinary albumin excretion, two of three specimens collected within a 3- to 6-month period should be abnormal before considering a patient to have crossed one of these diagnostic thresholds. Exercise within 24 h, infection, fever, congestive heart failure, marked hyperglycemia, and marked hypertension may elevate urinary albumin excretion over baseline values.

Assessment of the creatinine clearance should be performed by using the serum creatinine and formulas that take into account the patient's age, sex, and body size or by measuring creatinine in serum and in a timed urine specimen.

Repeat timed or overnight urine collections or measurements of albumin-to-creatinine ratios should be obtained periodically to document the effect of treatment on albumin excretion and to detect the rare case of a deleterious effect of drug therapy. If ACE inhibitors are used, serum potassium levels should also be monitored for the development of hyperkalemia, with an increased frequency of monitoring when there is a progressive decrease in GFR or in patients with hyporeninemic hypoaldosteronism.

Protein restriction to  $0.8\text{ g} \cdot \text{kg}^{-1}\text{ body wt} \cdot \text{day}^{-1}$  (~10% of daily calories), the current adult recommended daily allowance for protein, should be instituted with the onset of

overt nephropathy. However, it has been suggested that once the GFR begins to fall, further restriction to  $0.6 \text{ g} \cdot \text{kg}^{-1} \text{ body wt} \cdot \text{day}^{-1}$  may prove useful in slowing the decline of GFR in selected patients. On the other hand, nutritional deficiency may occur in some individuals and may be associated with muscle weakness. Protein-restricted meal plans should be designed by a registered dietitian familiar with all components of the dietary management of diabetes.

Referral to a physician experienced in the care of diabetic renal disease should be considered when the GFR has fallen to either  $<70 \text{ ml} \cdot \text{min}^{-1} \cdot 1.73 \text{ m}^{-2}$ , when serum creatinine has increased to  $>2.0 \text{ mg/dl}$  ( $>180 \text{ } \mu\text{mol/l}$ ), or when difficulties occur in management of hypertension or hyperkalemia. (For a complete discussion on the treatment of nephropathy, see the American Diabetes Association's position statement "Diabetic Nephropathy.")

**CARDIOVASCULAR DISEASE** — Evidence of cardiovascular disease, such as angina, claudication, decreased pulses, vascular bruits, and electrocardiogram abnormalities, requires efforts to correct contributing risk factors (e.g., obesity, smoking, hypertension, sedentary lifestyle, dyslipidemia, poorly regulated diabetes) in addition to specific treatment of the cardiovascular problem. Daily intake of aspirin has been shown to reduce cardiovascular events in patients with diabetes. (For specific recommendations and further discussion, see the American Diabetes Association's position statement "Aspirin Therapy in Diabetes.")

Although evidence from randomized controlled studies is lacking, the American Diabetes Association Consensus Development Conference on the Diagnosis of Coronary Heart Disease in People With Diabetes has recommended that patients with an established coronary heart disease (CHD) history or who have had a prior cardiac event warrant cardiac testing for risk stratification. Further, in patients without a prior history of an event or symptoms strongly suggesting CHD, testing for CHD is warranted in patients with the following: 1) typical or atypical cardiac symptoms; 2) resting electrocardiogram suggestive of ischemia or infarction; 3) peripheral or carotid occlusive arterial disease; 4) sedentary lifestyle, age  $\geq 35$  years, and plans to begin a vigorous exercise program; and 5) in addition to diabetes, two or more cardiac risk factors (total cholesterol  $\geq 240 \text{ mg/dl}$ , LDL cholesterol  $\geq 160 \text{ mg/dl}$ , or HDL cholesterol  $<35 \text{ mg/dl}$ ; blood pressure  $>140/90 \text{ mmHg}$ ; smoking; family history of premature CHD; positive micro-/macroalbuminuria test). Cardiac testing might consist of exercise stress testing, stress perfusion imaging, stress echocardiography, or catheterization. The type of testing and need for referral to a cardiologist depend on the severity of underlying or suspected coronary artery disease. (For further discussion, see the American Diabetes Association's Consensus Statement "Diagnosis of Coronary Heart Disease in People With Diabetes.")

## DYSLIPIDEMIA

### General principles

Diabetes increases the risk for atherosclerotic vascular disease. This risk is greatest in people who have other known risk factors, such as dyslipidemia, hypertension, smoking, and obesity. Furthermore, in type 2 diabetes there is an additional increased risk for obesity and lipid abnormalities independent of the level of glycemic control. A common abnormal lipid pattern in such patients is an elevation of VLDL, a reduction in HDL, and

an LDL fraction that contains a greater proportion of small, dense LDL particles.

Data about treatment of dyslipidemia in people with diabetes, especially in children, are limited. However, current recommendations from the National Cholesterol Education Program Adult Treatment Panel II Report and the Expert Panel on Blood Cholesterol Levels in Children and Adolescents Report on the general management of elevated cholesterol and triglycerides have set increasingly stringent treatment targets based on the number of cardiovascular risk factors and the presence of CHD. Risk factors include age (men  $\geq 45$  years or women  $\geq 55$  years, or premature menopause without estrogen replacement therapy), diabetes mellitus, hypertension, HDL cholesterol  $< 35$  mg/dl ( $< 0.90$  mmol/l) in men and  $< 45$  mg/dl ( $< 1.15$  mmol/l) in women, smoking, microalbuminuria, and a family history of premature CHD. Because diabetes appears to eliminate the protective effect of female sex against CHD, all adults with diabetes are candidates for progressively aggressive therapy.

The following recommendations are designed to achieve two major goals as a result of treatment of dyslipidemia: 1) to reduce the risk for development of CHD in people without documented CHD and 2) to reduce the risk for progression of CHD or to cause regression in people with known CHD.

A meal plan designed both to lower glucose levels and to alter lipid patterns and regular physical activity are the cornerstones in the management of lipid disorders. The goal of MNT should focus on three major strategies: weight loss if indicated, increased physical activity, and MNT individualized for the patient.

Weight loss is achieved by reducing total caloric and fat intake and by increasing physical activity. Recommendations for increased physical activity, however, need to be made in the context of the patient's history and medical status. The recommendations should detail a frequency, duration, and intensity of exercise. Lipid-lowering pharmacological agents are indicated if there is an inadequate response to a trial of MNT, exercise, and improved glucose control. (For a complete discussion of the treatment of lipid disorders, see the American Diabetes Association's position statement "Management of Dyslipidemia in Adults With Diabetes.")

The primary emphasis in children and adolescents with serum lipid abnormalities should be on glucose control, MNT, and exercise. Because there are important considerations regarding the efficacy and safety of drug therapy for dyslipidemia in children and adolescents, drug therapy in these individuals should be undertaken only in consultation with a physician experienced in the area of lipid disorders in children.

### **Specific goals of treatment**

The primary goal of therapy for adult patients with diabetes is to lower LDL cholesterol to  $\leq 100$  mg/dl ( $\leq 2.60$  mmol/l).

People with diabetes who have triglyceride levels  $\geq 1,000$  mg/dl ( $\geq 11.3$  mmol/l) are at risk of pancreatitis and other manifestations of the hyperchylomicronemic syndrome. These individuals need special, immediate attention to lower triglyceride levels to  $< 400$  mg/dl ( $< 4.50$  mmol/l). Further reduction to Adult Treatment Panel II goals of  $< 200$  mg/dl ( $< 2.30$  mmol/l) may be beneficial.



A secondary goal of therapy is to raise HDL cholesterol to >45 mg/dl (>1.15 mmol/l) in men and >55 mg/dl (>1.40 mmol/l) in women.

The primary goal of therapy for children with risk factors in addition to diabetes is to lower LDL cholesterol to <110 mg (<2.80 mmol/l), following the recommendations of the National Cholesterol Education Program's Report of the Expert Panel on Blood Cholesterol Levels in Children and Adolescents.

**NEUROPATHY** — Peripheral diabetic neuropathy may result in pain, loss of sensation, and muscle weakness. Autonomic involvement can affect gastrointestinal, cardiovascular, and genitourinary function. Each condition may require special diagnostic testing and consultation with an appropriate medical specialist. Improvement in neuropathy should be sought by increased attention to blood glucose control. Relief can be provided by various medications, alterations in MNT, or specialized procedures.

**FOOT CARE** — Problems involving the feet may require care by a podiatrist, orthopedic surgeon, vascular surgeon, or rehabilitation specialist experienced in the management of people with diabetes. All patients, especially those with evidence of sensory neuropathy, peripheral vascular disease, and/or altered biomechanics must be educated about the risk and prevention of foot problems, and this education must be regularly reinforced.

Patients with a history of previous foot lesions, especially those with prior amputations, require preventive foot care and lifelong surveillance, preferably by a foot care specialist. (For a complete discussion on foot care, see the American Diabetes Association's position statement "Preventive Foot Care in People With Diabetes.")

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The recommendations in this paper are based on the evidence reviewed in the following publication: Standards of care for diabetes (Technical Review). *Diabetes Care* 17:1514–1522, 1994.

Originally approved 1988. Most recent review/revision, 1999.

**Abbreviations:** CHD, coronary heart disease; DCCT, Diabetes Control and Complications Trial; DKA, diabetic ketoacidosis; ESRD, end-stage renal disease; GFR, glomerular filtration rate; MNT, medical nutrition therapy; SMBG, self-monitoring of blood glucose; TSH, thyroid-stimulating hormone; UKPDS, United Kingdom Prospective Diabetes Study.

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<b>Diabetes</b>	<b>Care</b>
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Volume 23 Supplement 1  
American Diabetes Association:  
Clinical Practice Recommendations 2000

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**POSITION STATEMENT**

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# Management of Diabetes in Correctional Institutions

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American Diabetes Association

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**P**eople with diabetes in correctional facilities should be provided care equivalent to that provided to all patients with diabetes. Inmates with diabetes have unique circumstances that need to be considered so that all of the standards of care (1) may be provided. Adolescents in juvenile detention or boot camp facilities should have particular attention provided to diabetes management.

On entering the correctional facility, all inmates with diabetes require a complete history and physical examination. The history should focus on the inmate's type of diabetes, and if the inmate is taking insulin, efforts should be made to differentiate between type 1 diabetes and insulin-requiring type 2 diabetes. A nutritional history should be obtained, including a summary of the types of food generally avoided by the inmate for spiritual, allergic, and other reasons. A review of and justification for the types of snacks should be determined. A review of medications should focus not only on the dose of the drug(s) and on the timing of administration, but also on the timing of meals and snacks. Routine changes in medical nutrition therapy (MNT) or medication for exercise should also be noted. The frequency of ketoacidosis as well as hypoglycemia should be determined. A history of severe hypoglycemia without awareness (i.e., requiring the assistance of another person) should be sought. Finally, a history of any known chronic complications and findings from the last dilated retinal examination should be noted.

Monitoring of blood glucose should be performed for those who are taking insulin or oral glucose-lowering agents. This is required both to achieve goals of glycemic control (Table 1) and to detect asymptomatic hypoglycemia. (Many blood glucose monitors approved for home use and some test strips now calibrate blood glucose readings to plasma values. Plasma glucose values are 10–15% higher than whole blood glucose values, and it is crucial that people with diabetes know whether their monitor and strips provide whole

<http://journal.diabetes.org/FullText/Supplements/DiabetesCare/Supplement100/s98.htm>

blood or plasma results. Table 1 contains preprandial and bedtime whole blood and plasma glucose values.) Frequency and timing of glucose monitoring should be dictated by the needs and goals of the individual, but for most individuals with type 1 diabetes, monitoring three or four times daily is recommended. The optimal frequency of glucose monitoring for individuals with type 2 diabetes is not known, but it should be sufficient to facilitate reaching goals of glycemic control.

Table 1—Glycemic control for people with diabetes\*

	Normal	Goal	Additional action suggested
<b>Whole blood values</b>			
Average preprandial glucose (mg/dl)†	<100	80-120	<80/>140
Average bedtime glucose (mg/dl)†	<110	100-140	<100/>160
<b>Plasma values</b>			
Average preprandial glucose (mg/dl)‡	<110	90-130	<90/>150
Average bedtime glucose (mg/dl)‡	<120	110-150	<110/>180
HbA <sub>1c</sub> (%)	<6	<7	>8

\*The values shown in this table are by necessity generalized to the entire population of individuals with diabetes. Patients with comorbid diseases, the very young and older adults, and others with unusual conditions or circumstances may warrant different treatment goals. These values are for nonpregnant adults. "Additional action suggested" depends on individual patient circumstances. Such actions may include enhanced diabetes self-management education, comanagement with a diabetes team, referral to an endocrinologist, change in pharmacological therapy, initiation of or increase in SMBG, or more frequent contact with the patient. HbA<sub>1c</sub> is referenced to a nondiabetic range of 4.0-5.0% (mean 5.0%, SD 0.5%).  
 †Measurement of capillary blood glucose. ‡Values calibrated to plasma glucose.

People with diabetes generally do best when their medication is administered, and their meals are eaten, at approximately the same time each day. For patients receiving insulin, timing of the insulin injection with meals and snacks needs to be individualized. The delay between injection and eating should be decreased or eliminated if premeal hypoglycemia is present. Regular exercise is also beneficial and should be incorporated into the treatment plan. Ideally, exercise should occur at approximately the same time each day. The risks of immediate and late hypoglycemia as a result of exercise should be understood and, if necessary, decreased by modifying the diabetes regimen.

Appropriate MNT needs to be provided. This may at times require food different from that provided to the other inmates. Because the meal plan is such an important part of diabetes therapy, a nutritionist familiar with these principles should be available to educate the inmate.

Self-management is important for all people with diabetes. Treatment targets for both blood glucose and glycated hemoglobin should be discussed at the initial encounter. Targets should be as close as possible to those recommended by the American Diabetes Association (Table 1). Because of the nature and circumstances surrounding incarceration, all inmates must have access to prompt treatment of hypoglycemia and hyperglycemia. Furthermore, correctional staff should be trained about the recognition and treatment of

hypoglycemia. Appropriate staff should be trained to administer glucagon. Correctional staff should be trained to recognize symptoms and signs of serious metabolic decompensation and refer the inmate promptly for appropriate care.

At the initial evaluation, a complete examination, including blood pressure measurement, cardiovascular examination, and foot inspection, should be performed. Glycated hemoglobin should be measured initially and at least twice a year in patients who are meeting treatment goals and have stable glycemic control, and more frequently (quarterly assessment) in patients whose therapy has changed or who are not meeting glycemic goals. Urine protein should be measured annually. If the result is negative for protein, a test for the presence of microalbumin is necessary. A dilated retinal examination by an ophthalmologist or optometrist who is knowledgeable and experienced in the management of diabetic retinopathy should also be performed yearly. Fasting lipid levels (serum cholesterol, triglyceride, HDL cholesterol, and calculated LDL cholesterol) should be tested annually; if values fall in lower-risk levels, assessment may be repeated every 2 years.

Patients with diabetes should have blood pressure levels <130/85 mmHg and LDL cholesterol levels  $\leq$ 100 mg/dl (2.60 mmol/l). Specific therapies for the treatment of hypertension (2), diabetic nephropathy (3), and dyslipidemia (4) should follow the recommendations of the appropriate American Diabetes Association statements.

Correctional facilities should have written policies and procedures for the management of diabetes and training of medical and correctional staff in diabetes care.

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Originally approved 1989. Most recent review/revision, 1999.

**Abbreviations:** MNT, medical nutrition therapy.

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Tommy G. Thompson  
Governor

Jon E. Litscher  
Secretary



State of Wisconsin  
Department of Corrections

Mailing Address

149 East Wilson Street  
Post Office Box 7925  
Madison, WI 53707-7925  
Telephone (608) 266-2471  
Fax (608) 267-3661

May 18, 2000

Mr. Lawrence Fox  
2412 East Edgewood St.,  
Shorewood, Wisconsin 53211

Dear Mr. Fox:

Your letter to Senator Moore with a copy to Representative Scott Walker has been referred to the Department of Corrections for response.

In your letter you state your son was diagnosed as having diabetes mellitus while residing at Dodge Correctional Institution. Your personal physician discussed your son's care and treatment with health care staff at Dodge and you contacted Dr. Daley, Medical Director of the Bureau and are not satisfied with his response to your concerns.

The Bureau relies on their primary care physicians who have direct contact with their patients in the correctional facilities to manage their medical conditions. Primary care physicians may refer their patients to the specialists at the University of Wisconsin Hospital and Clinics Authority for consultation.

You are also concerned with the care and treatment your son is receiving at the Whiteville Correctional Facility in Tennessee. I understand from Mr. Poliak, Supervisor of the Health Contract Monitoring Unit that you and he have discussed your son's medical care and treatment. Mr. Poliak has also discussed your son's care and treatment with Dr. Matthews, the Physician at Whiteville. You may wish to contact Dr. Matthews directly or have your personal physician contact him to discuss the care and treatment your son is receiving. Mr. Poliak has indicated the health contract monitors will be reviewing your son's medical record and discussing his care with medical staff at Whiteville during their next site visit.

Your consideration of the above information is appreciated. Please feel free to contact Mr. Poliak or Ms. Zunker, Director of the Bureau of Health Services with further concerns.

Sincerely,

A handwritten signature in cursive script that reads "Jon E. Litscher".

Jon E. Litscher  
Secretary

Cc: The Honorable Scott Walker  
Office of the DOC Secretary  
R. Margolies, Leg. Liaison

Warden Pitzer, WCF  
Office of the DAI Administrator  
S. Zunker, Director, BHS  
Dr. George Daley, Medical Director, BHS  
D. Poliak, Supervisor, HCMU



**DISTRICT 1199W/UNITED PROFESSIONALS  
FOR QUALITY HEALTH CARE  
SEIU, AFL-CIO, CLC**

**TESTIMONY BEFORE THE  
LEGISLATIVE AUDIT COMMITTEE  
REGARDING DOC HEALTH SERVICES**

**May 30, 2000**

Good Morning. Thank you for this opportunity to address you on a very important topic.

The members of District 1199 strongly support an independent audit of Health Care Services in the Department of Corrections.

The problems we are currently experiencing in Health Services in DOC did not happen overnight. These problems have been developing for many years. As has been well documented, health services staffing has remained basically unchanged since the 1980's. At the same time the prison population has skyrocketed. Our prisons are far above capacity. The health care needs of today's population are more serious and demanding. The healthiest inmates are being shipped out of state, leaving the sicker ones behind.

This union has been working for years: through labor/management meetings, our grievance procedure, and negotiations to call attention to the health care needs of the men, women, and children behind bars in this state. The responses we have received have been little more than lip service along with broken promises. Budget after budget has been passed without the addition of more staff. Contract language has been bargained to deal with such issues as telephone triage and the overall work environment, only to be ignored time after time. Grievances have been met with delays and excuses.

In many cases, Health Services Managers and Wardens have been sympathetic to the increasing burden being placed on the health care professionals in DOC. Their requests for help have fallen on deaf ears.

The death of Michelle Greer was certainly tragic. It was also the result of a system stretched to the breaking point. 6 nurses at TCI are suppose to provide quality health care to over 600 female inmates with increasingly difficult health issues. This is the same number of nurses that use to care for 200. In addition there is a long history of problems at this institution. The current warden was previously removed from the Treatment Director position at TCI because of her inability to manage. Yet, within a short time she became warden. The Health Services Manager position was vacant for months. The turnover rate of nurses has been in excess of 125% since 1998. Communication between officers and health services has been completely inadequate. Nobody cared.

But the problems don't stop at Taycheedah.

- Problems with hiring and retaining all types of staff are prevalent throughout DOC
- Racine Correctional has been without a Health Services Manager for months. The Nurse Practitioner position has been vacant as well. At least 2 health care professionals have been on extended stress-related medical leave. Nurse turnover rates are high.
- Columbia Correctional is currently functioning with just 2 of 5 nurses. There are 2 vacant positions and one on medical leave
- Fox Lake has been without a regular doctor for several weeks. It has been without a dentist for 2 years. 70 inmates are currently on an urgent dental care list
- Green Bay Correctional is having difficulty with adequate physician coverage.
- Our nurses are regularly working 50-60 hour weeks trying to keep up with the demands being placed upon them. At places like TCI, RCI, and CCI, their workweeks are even longer.
- Officers with little or no training are expected to pass medications and determine emergencies.
- Equipment is outdated and/or in poor condition.
- Training is not being provided on new equipment sent in with patient/inmates.
- Current workloads make it impossible to allow for even the most basic training of new hires.
- Health care has simply not been a priority.

With the magnitude of these problems, it is truly amazing that there have not been more tragedies.

This union has tried to work with the Department to find solutions to this health care crisis. I personally spent many hours calling a list of nurses given me by the department to seek volunteers for Taycheedah. When I went back to the Department with a list of concerns the nurses wanted addressed, these concerns were ignored. Instead, an "emergency" was declared and the nurses were ordered to go. We invited the Secretary to our membership meeting to discuss these problems. We were met with hostility, disdain, and blame. Instead of any expression of appreciation for the tremendous efforts that are being put forth by our members on a daily basis, we were told that it is our fault these problems exist. We haven't spoken loudly enough or gone to the right people. When he was asked about following proper channels, he became belligerent and hostile. When he was asked about the turnover rates and difficulty with filling vacancies, we were blamed once again. This time it was for speaking out on the working conditions our members must endure.

The Department has taken the position that an independent audit is not necessary. Mr. Litscher has said the Department can deal with these issues by itself and an independent audit would only delay solutions.

The Secretary submitted a Health Care Action Plan in April. This plan is suppose to deal with the many systemic issues plaguing Health Services. Several items in this plan had goals of May 1<sup>st</sup> and May 15<sup>th</sup>. A check with nurses around the state indicate that they know little, if anything, about what is going on much less seeing these goals met. Such basic things as policies regarding expectations for emergency care and basic life support and training staff in proper

communication between officers and health care providers were suppose to be complete by May 1<sup>st</sup>. Most of the nurses I've talked to still haven't heard a word about them.

Perhaps what is most important is what is missing from this action plan. What is missing is "AN ATTITUDE ADJUSTMENT". By nature, Corrections has a dictatorial attitude. By that I mean that the same harsh management style used to control inmates is also used to control employees. Rules are made. If they are broken, swift punishment follows. There is no room for discussion, cooperation, or team building. Rules are rules no matter how impossible to follow they may be.

For Corrections to function well, staff must be recognized and treated in a friendly, respectful, cooperative manner. Health Care Workers need to be treated like the professionals they are. Our contract has specific language acknowledging the kind of work environment needed to build a strong, competent, satisfied workforce.

Throughout this Action Plan, the active involvement of our workers or any non-management staff is at a bare minimum. Offers by this union to participate in finding solutions have been ignored. Our members are in the trenches every day. They see the problems every day. They have many ideas, some small, some large that would make a positive difference. The question is: who will listen to them?

The issues listed in this Action Plan are good ones. They need to be addressed. But it does not go far enough. This plan does not address the underlying causes of high turnover and difficulty hiring. Training wardens and managers in techniques to improve working relationships is not enough. The attitude that health care is important and health care professionals are employees to be respected and valued must come from the top.

Another agency in the state is currently having similar problems with hiring and retention along with the some of the same dictatorial attitudes found in DOC. In contrast, the Secretary of that Department has directed labor/management discussions to deal with these problems and use a team effort to find solutions. An outside facilitator has been brought in to help lead these discussions. All the unions are involved along with management personnel from several levels. I don't need to tell you that with that kind of support and "attitude" the chances of success increase dramatically.

This same approach is used in all the state's collective bargaining endeavors and has been very successful. Why is this approach not being used in DOC?

The problems in DOC Health Services are huge. The men, women, and children in these institutions are entitled to decent health care. It is in the public interest to make every effort to see that inmates leaving the prison system are healthy and ready to become productive citizens. Only an independent audit can provide the necessary tools to thoroughly investigate all of the issues. Only then can solutions be found and further tragedies avoided.

Thank you.

LeNore J. Wilson  
Senior Staff Representative/Organizer

*Edward S. Friedrichs, M.D.*

INTERNAL MEDICINE

SLEEP MEDICINE – SUBSTANCE ABUSE

DIAGNOSIS & THERAPEUTIC PLANNING

May 30, 2000

8076 N. 64TH ST.  
BROWN DEER, WI 53223  
(414) 355-7100

The Wisconsin State Medical Society is on record favoring review of the medical care programs in the State Department of Corrections. Twice in the past five years the annual House of Delegates of the Society has passed Resolutions in this regard. To my knowledge no effective action has yet taken place as a result of these Resolutions.

At the House of Delegates in April, <sup>1996</sup> Dr. Armond Start, Professor at the University of Wisconsin Medical School, sponsored a Resolution to that effect, which was fully supported. Dr. Start, in my opinion, was the finest, most experienced Correctional Physician in Wisconsin, having served as Medical Director of the D.O.C. under a previous administration. He worked tirelessly with dedication and determination at both the national and state level to raise the standards of prison medical care. In recent years the nation-wide Society of Correctional Physicians has honored Dr. Start with an annual Outstanding Physician Award given in his name. Educationally, Dr. Start stressed the impropriety of physicians taking part in any aspect of capital punishment.

Last summer Wisconsin lost Dr. Start when he assumed the Medical Directorship of the Oklahoma Correctional System. Sadly I have just learned that Dr. Start died suddenly of a heart attack near his home in Tulsa. Correctional medicine has lost a great leader and friend.

At the 1995 House of Delegates Dr. Start, once again, and myself offered Resolutions to examine the prison medical and addiction/neurologic/psychiatric care respectively. Our proposals were combined and passed as "RESOLVED, That the State Medical Society of Wisconsin study and evaluate the adequacy and quality of the health care program in the Wisconsin prison system." The Resolution was referred to the Committee on Addictive Disease of the SMS.

At this time I cannot give you any promising information that these Resolutions have begun to be implemented. It appears it will take a broader mandate to bring such a Review to fruition.

Thank you.

Respectfully,

*Edward S. Friedrichs M.D.*

Edward S. Friedrichs, M. D.

1 **RESOLVED, That the State Medical Society of Wisconsin study and evaluate**  
2 **the adequacy and quality of the health care program in the Wisconsin state**  
3 **prison system.**

4  
5 Resolution 15 directs the State Medical Society to explore current addiction and  
6 neuropsychiatric treatment programs offered in state prisons, and to present  
7 guidance to those treatment programs to improve outcomes and reduce recidivism  
8 of prison inmates.

9  
10 Resolution 18 directs the State Medical Society to examine and evaluate the  
11 adequacy and quality of health care in the Wisconsin state prison system and in  
12 selected jails.

13  
14 The reference committee believes that the jail system is a separate entity and thus  
15 should not be a part of this study and that the concerns expressed in Resolution  
16 15 will be addressed in the substitute resolution.

17  
18 (4) **RESOLUTION 16: ACCURATE INFORMATION ON HOMOSEXUALITY,**  
19 **BISEXUALITY AND TRANSGENDERISM**

20  
21 **Mr. Speaker, your reference committee recommends that Resolution 16 be**  
22 **adopted as amended.**

23  
24 **RESOLVED, That the State Medical Society of Wisconsin authorize study**  
25 **and a committee of interested physicians to review new findings, evaluate**  
26 **resources, and offer accurate information to the physicians of Wisconsin,**  
27 **and other interested parties needing accurate scientific information on gay,**  
28 **lesbian, bisexual, and transgendered sexuality.**

29  
30 Resolution 16 directs the State Medical Society to create a committee to review  
31 new findings, evaluate resources and offer accurate information to physicians and  
32 others on scientific information on gays, lesbians, bisexual and transgendered  
33 sexuality.

34  
35 The reference committee believes that the Board of Directors should determine  
36 the appropriate group to study this issue.

37  
38 (5) **RESOLUTION 17: HELPING PARENTS OF LESBIANS, GAY, BISEXUAL AND**  
39 **TRANSGENDERED CHILDREN**

40  
41 **Mr. Speaker, your reference committee recommends that Resolution 17 be**  
42 **adopted as amended.**

43  
44 **RESOLVED, That the State Medical Society of Wisconsin inform physicians**  
45 **through available resources such as the *Wisconsin Medical Journal*, etc., of**  
46 **a national organization with many state-wide chapters called PFLAG**  
47 **(Parents, Family and Friends of Lesbians and Gays) and other organizations**  
48 **which has have proven very helpful in helping families come through these**  
49 **stressful times and which has have been very helpful in educating the**  
50 **public.**

RESOLUTION 15 - 1998

*State audit*

Subject: Addiction, Neurologic and Psychiatric Care in Wisconsin State Prisons

Introduced by: Edward S. Friedrichs, MD and Medical Society of Milwaukee County

Referred to: Scientific Activities

1           Whereas, Nearly fifteen thousand citizens are incarcerated by the Wisconsin  
2 Department of Corrections and an equal number in city and county jails; and

3  
4           Whereas, Recent national studies show 80% of criminality is related to behavior  
5 involving drug and alcohol abuse; and

6  
7           Whereas, Prisons are recognized as "the chronic mental hospitals" of the 1990's; and

8  
9           Whereas, Modern scientific knowledge relates much violence and criminality to  
10 neurologic impairment and mental defect; and

11  
12           Whereas, Addiction, neurologic and psychiatric treatment in the prisons is not  
13 monitored from outside the Department of Corrections; and

14  
15           Whereas, The behavioral treatment programs in Wisconsin prisons need an academic  
16 and humanitarian input from the medical professional community; and

17  
18           Whereas, The prisons are an ideal controlled environment for intensive behavioral  
19 assessment and treatment; therefore be it

20  
21           **RESOLVED**, That the State Medical Society of Wisconsin direct the existing  
22 Commission on Addictive Diseases to thoroughly explore current addiction and  
23 neuropsychiatric treatment programs offered in Wisconsin state prisons; and be it further

24  
25           **RESOLVED**, That the Commission on Addictive Diseases present sound academic  
26 and humanitarian guidance to those treatment programs to improve outcomes and reduce  
27 recidivism of inmates.

Fiscal note: Within current budget if staff priorities are reallocated.

RESOLUTION 18 - 1998

*State audit*

Subject: SMS Task Force - Study of Correctional Health Care

Introduced by: Armond Start, MD and Dane County Medical Society

Referred to: Scientific Activities

1           Whereas, The House of Delegates addressed only the national portion of Resolution  
2 63 during the 1996 meeting; and

3  
4           Whereas, The State of Wisconsin is rapidly increasing the prison and jail population  
5 resulting in a decreased attention to adequate health services; and

6  
7           Whereas, The Department of Corrections health services program is not accredited  
8 by the National Commission on Correctional Health Care (NCCHC) as meeting national  
9 standards; and

10  
11           Whereas, The Department of Corrections is on record as promoting sensory  
12 deprivation (construction of a super max prison) as a method of punishment; and

13  
14           Whereas, The State Medical Society of Wisconsin has taken no action in addressing  
15 the health care issues of 13,000+ Wisconsin citizens; and

16  
17           Whereas, In the next five years, 30,000 persons will be released from the state  
18 prison system; therefore be it

19  
20           **RESOLVED**, That the State Medical Society of Wisconsin require a commission to  
21 evaluate the adequacy and quality of the health care program in the Wisconsin state prison  
22 system; and be it further

23  
24           **RESOLVED**, That the task force examine the health care services in selected jails  
25 for adequacy and quality of medical care provided in these facilities.

Fiscal note: \$10,000 if new task force is formed.

Continued from page 3

## John Riesch, MD Installed as SMS President

tobacco industry was praised as work for the health and benefit of Wisconsin citizens, especially children.

Vowing to work to bring the practice of medicine back to physicians, John R. Riesch, MD was installed as the 145th president of the State Medical Society of Wisconsin. Dr. Riesch is a general surgeon who practices and performs surgery at his primary hospital, Community Memorial Hospital in Menomonee Falls. He practices with the Medical Associates group.

### Resolutions

Living up to its call to bring technology innovations to SMS meetings, Paul Loewenstein, MD testified before the State and National Affairs Reference Committee via telephone in favor of a resolution he and Eric Kindwall, MD introduced. The measure calls for regulation of hyperbaric chambers.



MSMC Board Member Susan Kaehler, MD testifies before a SMS House Reference Committee.

MSMC Board Member Susan Kaehler, MD testified on behalf of a resolution introduced by MSMC President Tom Kowalski, MD.

This resolve calls for a state study on how insurance covers and provides for individuals with behavioral and mental health problems.

Speaking as advocates for patients many Wisconsin residents may wish to ignore, Edward Friedrichs, MD of Milwaukee and Armond Start, MD of Madison advocated for the health care service offered to individuals incarcerated in Wisconsin prisons. Dr. Friedrichs, an addictionologist, characterized behavioral health programs currently available in jails, as a "boot camp...a program meant for war." He said that medical and mental problems undiagnosed and untreated in the prisons only lead to drug addiction and crime once the prisoner is released.

The call for compassion and a recognition of reality was echoed by Madison's Armond Start, MD. "There are 16,000 Wisconsin residents in prison today. As medical patients, these individuals have no advocates," Dr. Start said. "There are preventable deaths that occur in the prison system, but who cares? That's the problem. The bottom line is no one cares," Dr. Start said.

Society is being shortsighted when it ignores the health needs of the prison population. Dr. Start noted

that over the next five years, thirty thousand prisoners will be released in Wisconsin. Will they be healthy or will they be dropped on shrinking health and social services for the indigent? <sup>a SYSTEM</sup>

The House combined the resolutions of Drs. Friedrichs and Start and has directed a study of the adequacy of health services provided in Wisconsin Correctional Facilities.

Two resolutions introduced by resident physician Kawsar Talaat, MD were accepted by the SMS House for referral to the American Medical Association. Dr. Talaat championed two ideas being promoted by the Physicians for Social Responsibility. The first raised public health questions over the use of Methylclopentadienyl manganese carbonyl (MMR), a gasoline additive. The second raises concerns over the release of persistent organic pollutants into the environment.

Proposed changes to the SMS Constitution and Bylaws that would restructure the organization and governance of the House will be voted up or down during the 1999 meeting of the House.

The proposals that would downsize both the House of Delegates and the SMS Board of Directors met opposition from physicians testifying during a hearing on the recommendations. MSMC President-elect Ron Stark, MD told delegates that the Milwaukee County Board of Directors is opposed to proposals that would allow the deunification of county and state membership. Charles Rainey, MD spoke for residents who just gained a seat on the SMS Board, "Don't eliminate the recently gained recognition you have given the state's residents" he said.

## How the House Voted on Milwaukee Resolutions

### 1998 Resolutions

#### State and National Issues

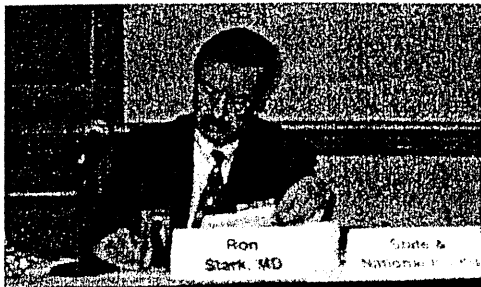
1. Res. #1 Regulation of Hyperbaric Chambers—Paul Loewenstein, MD, Eric Kindwall, MD—Accepted on the Consent Calendar.
2. Late Res. #25 Support of Graduated Driving privileges for 16–21 year olds—Passed on Consent Calendar but extracted for debate. Some rural physicians felt barring a teenager from driving would cause undue hardship to families.
3. Late Res. #26 J. Petersen, MD—Physician Data Sets Proposed as a response to AB 315...this measure would create an SMS Task force that will frame ques-

Continued on page 17



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## How the House Voted on Milwaukee Resolutions



MSMC President-Elect Ron Stark, MD chairs the State and National Issues Reference Committee.

tions to be asked about the performance of the health care system, define the data sets that will answer those questions and

estimate the costs of compiling the data...the working group will include insurance and hospital association representatives...Directs the SMS to pursue data collection legislation based on the work of this group. The resolution was supported by the House.

### Socio-Economic Reference Committee

4. Late Resolution # 27 introduced by L. Glicklich-Rosenberg—amended by the reference committee to state that the SMS calls on physicians and Alliance members to become more active in their communities and to publicly recognize physicians and Alliance members who engage in such activities.

5. Late Resolution # 29 introduced by M. Armstrong, MD—amended by the reference committee to have the SMS Commission on Continuing Medical Education change its name to the Commission on Medical Education. The commission will redefine its mission to include graduate medical education and report to the House on how it plans to address issues surrounding Graduate Medical Education.

6. Late Resolution 30 from William Stineman, MD was withdrawn. It called on SMS to work with the Yellow Pages editors to maintain separate listings for Allopathic and Osteopathic physicians.

7. Report B on Adolescent Pregnancy Prevention created floor discussion and in the end the report was accepted.

Report B calls on the SMS to review its 1993 Wisconsin Care Health Program that would provide for universal access. The report also puts the SMS in favor of schools providing age appropriate sex education as a

part of an adolescent pregnancy prevention program.



8. Resolution # 14 Study on Provision of Behavioral Health Services—T. Kowalski, MD—Amended to direct the SMS to study how behavioral and mental health care is provided and paid for in Wisconsin and to make recommendations for improvement.

9. Resolution # 16 by Ed Friedrichs, MD of Milwaukee was combined with resolution # 18 from Armond Start, MD of Madison. The new resolve directs the SMS to study and evaluate the adequacy and quality of health care services provided in Wisconsin correctional facilities.



Resident Kawsar Talaat, MD attends her first meeting of the SMS House and convinces delegates to support two causes championed by Physicians for Social Responsibility.

10. Late resolutions 31 and 32 introduced by Kawsar Talaat, MD call on the SMS to ask for AMA studies and reports on MMT, a manganese based gasoline additive, and Persistent Organic pollutants in the environment. Resolution 32 accepted on the Consent Calendar.

## MEDICAL INFORMATICS

### GRADUATE STUDIES

jointly offered by  
Medical College of Wisconsin (MCW) and  
Milwaukee School of Engineering (MSOE)

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Wednesday, August 5, 1998  
5 p.m. - 8 p.m.

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