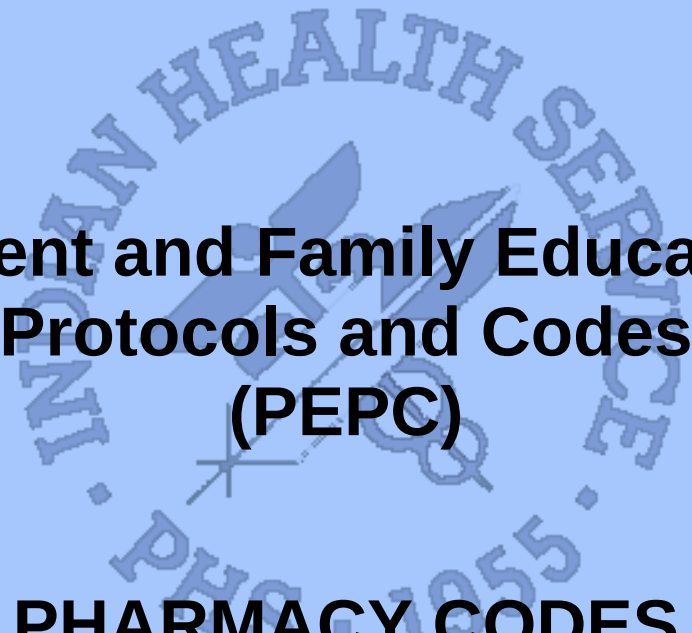
INDIAN HEALTH SERVICE



Patient and Family Education Protocols and Codes (PEPC)

PHARMACY CODES

11th Edition
January 2005

FOREWORD

The PEP-C (Patient Education Protocols and Codes committee) has diligently worked to add all protocols that were requested by providers or departments. We hope that you find codes helpful in documenting your patient education. Some of the codes found in this book will be used in ORYX and GPRA as indicators. Please consult your local SUD to see which indicators your site has chosen. More information about these topics can be obtained from Mary Wachacha or Mike Gomez. They are both in the IHS e-mail system.

As co-chairs of this committee we would like to sincerely thank all the members and guests of this committee. As usual they spent long hours preparing for the committee meeting and even longer hours in committee. They all deserve our appreciation. Without these dedicated committee members this would not be possible. We would also like to thank Mary Wachacha, IHS Chief of Health Education. Without her vision none of this would be possible. We would like to recognize Liz Dickey, R.N. for her part in envisioning an easier way to document education. We would like to thank Juan Torrez for his assistance in formatting and ensuring consistency in our document. We would like to thank all the programs in IHS for their dedication to the documentation of patient and family education. Finally, we are indebted to our colleagues in the Indian Health Service for their support, encouragement and input.

If you have new topics or codes you would like to see in future editions of the Patient Education Protocols and Codes please let us know. Submissions are requested and encouraged!!! Please e-mail submissions or mail them on floppy disk, in Word or Word Perfect format. Please try to follow the existing format as much as possible and as much as possible use mnemonics (codes) that are already in existence. The submissions will be reviewed by the committee and may be changed extensively prior to their publication for general use. New submissions should be sent to:

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FOREWORD TO THE 11TH EDITION OF THE PATIENT EDUCATION PROTOCOLS

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Use and Documentation of Patient Education Codes

Why Use the Codes?

Use of the codes helps nurses, physicians and other health care providers to document and track patient education. While it is frequently desirable to spend 15, 30 even 60 minutes making an assessment of need, providing education and then documenting the encounter, the reality of a busy clinical practice often requires us to do this in a more abbreviated fashion. The codes allow the educator a quick method of documenting that education took place during a given patient visit. The codes are then transferred to the health summary which informs everyone using the chart that a given patient received education on specific topics. The codes are limited in that they do not detail the exact nature of the education. However, using these codes consistently will show the pattern of education provided and encourage subsequent health professionals to do the appropriate follow-up. For instance, a typical health summary for a diabetic patient might show the following history of patient education:

07/19/04 DM-Nutrition, poor understanding, 10 min. (Provider Initials) GS: Pt. will include 5 veg/fruit/day

10/27/04 DM-Foot care, good understanding, 7 min. (Provider Initials)GM: Pt included 5 veg/fruit/day

11/07/04 DM-Exercise, good understanding, 15 min. (Provider Initials) GS: Pt. will walk 5 dys/wk/30 min.

A reasonable interpretation of this summary tells you that this patient is trying to understand management of their diabetes.

SOAP Charting and the Codes

Use of the codes *does not* preclude writing a SOAP note on educational encounters. Whenever a health professional spends considerable time providing education in a one-on-one setting, that visit should be recorded as an independent, stand-alone visit. The primary provider can incorporate the educational information into their SOAP note and use the code to summarize the visit and get the information onto the health summary. If the patient sees both a physician and a nurse during the same visit and the nurse completes a lengthy educational encounter, two PCC forms should be used— one for the physician visit and one for the nursing visit. In that particular case the patient had two primary care encounters during the same day.

How to Use the Codes

The Medical Records and Data Entry programs at each site determine where patient education will be entered on the PCC and other facility forms. Medical Records and Data Entry will also determine how the patient education is recorded. You should check with your Medical Records and Data Entry staff to determine how they would like your facility to document patient education. Using a stamp, over-printing on the PCC or the use of "education flow sheets" is discouraged for all disciplines and all sites. All education should be documented directly onto the PCC, PCC+ and in the Electronic Health Record.

The educator should document the education using the following steps:

1. Log onto the PCC, PCC+ or Electronic Health Record or document the education on the PCC Group Preventive Services Form
2. Circle "Patient Education" in the section marked "Medications/Treatment/Procedures/Patient Education"
3. If using the PCC+ or the Electronic Health Record, Patient Education is located in specific sections of the PCC+ and Electronic Health Record.
4. Begin your documentation by entering the appropriate:
    - STEP ONE: Write down the appropriate ICD-9 code, disease, illness or condition for which you are providing the education.
    - STEP TWO: Enter the education topic discussed (e.g. complications, nutrition, hygiene).
    - STEP THREE: Determine the patient's level of understand of the education provided and enter as good- (G), fair (F), or Poor (P).
        - If the patient refuses the education encounter, you document this refusal by writing an (R) for refused.
        - If you are providing education in a group (not an individual one-on-one encounter), the education provided is documented as (GP) for Group education. A "group" is defined as more than one person. Documenting with the Group (Gp) mnemonic indicates that the group member's level of understanding was not assessed.
    - STEP FOUR: Enter the amount of time spent educating the patient. Use specific time amounts rounded off to the minute, i.e., 3 minutes, 17 minutes.
    - STEP FIVE: Initial your entry so that you can get credit for the education provided.
    - STEP SIX: Lastly, each provider is able to encourage the patient to participate in the determination of their personal health by setting a goal for themselves. This capability is the last item documented at the end of

the educational encounter. The provider assists the patient in setting a "plan of action" for themselves to aid in the improvement of their health. This is documented by using (GS) for Goal Set; (GM) for Goal Met; and (GNM) for Goal Not Met. Upon the documentation of the setting of a Goal, each subsequent health care provider can refer to the "Health Summary" and look under the "Most Recent Patient Education" to review any goals set by the patient.

OBJECTIVE	DEFINITION	MNEMONIC
Goal Set	• State a plan; • State a plan how to maintain at least one _____; • Write a plan of management; • Plan to change ___; • A plan to test _____(blood sugar); • Choose at least one change to follow _____; • Demonstrate ____ and state a personal plan for _____; • Identify a way to cope with _____;	GS
Goal Met	Behavior Goal Met	GM
Goal Not Met	Behavior Goal Not Met	GNM

The PCC Coders can only select "Good, Fair, Poor, Group or Refused" for the level of understanding. Remember, this section is meant for speedy documentation of brief educational encounters. If you wish to write a more lengthy narrative, please do so, on a separate PCC form using the codes to simply summarize your note. On inpatient PCCs each entry must be prefaced by a date.

Recording the Patient's Response to Education

The following "Levels of Understanding" can be used in the PCC system:

Good (**G**):	Verbalizes understanding Verbalizes decision or desire to change (plan of action indicated) Able to return demonstrate correctly
Fair (**F**):	Verbalizes need for more education Undecided about making a decision or a change Return demonstration indicates need for further teaching
Poor (**P**)	Does not verbalize understanding Refuses to make a decision or needed changes Unable to return demonstrate
Refuse (**R**):	Refuses education
Group (**Gp**):	Education provided in group. Unable to evaluate individual response

Documenting Patient Education (Forms)

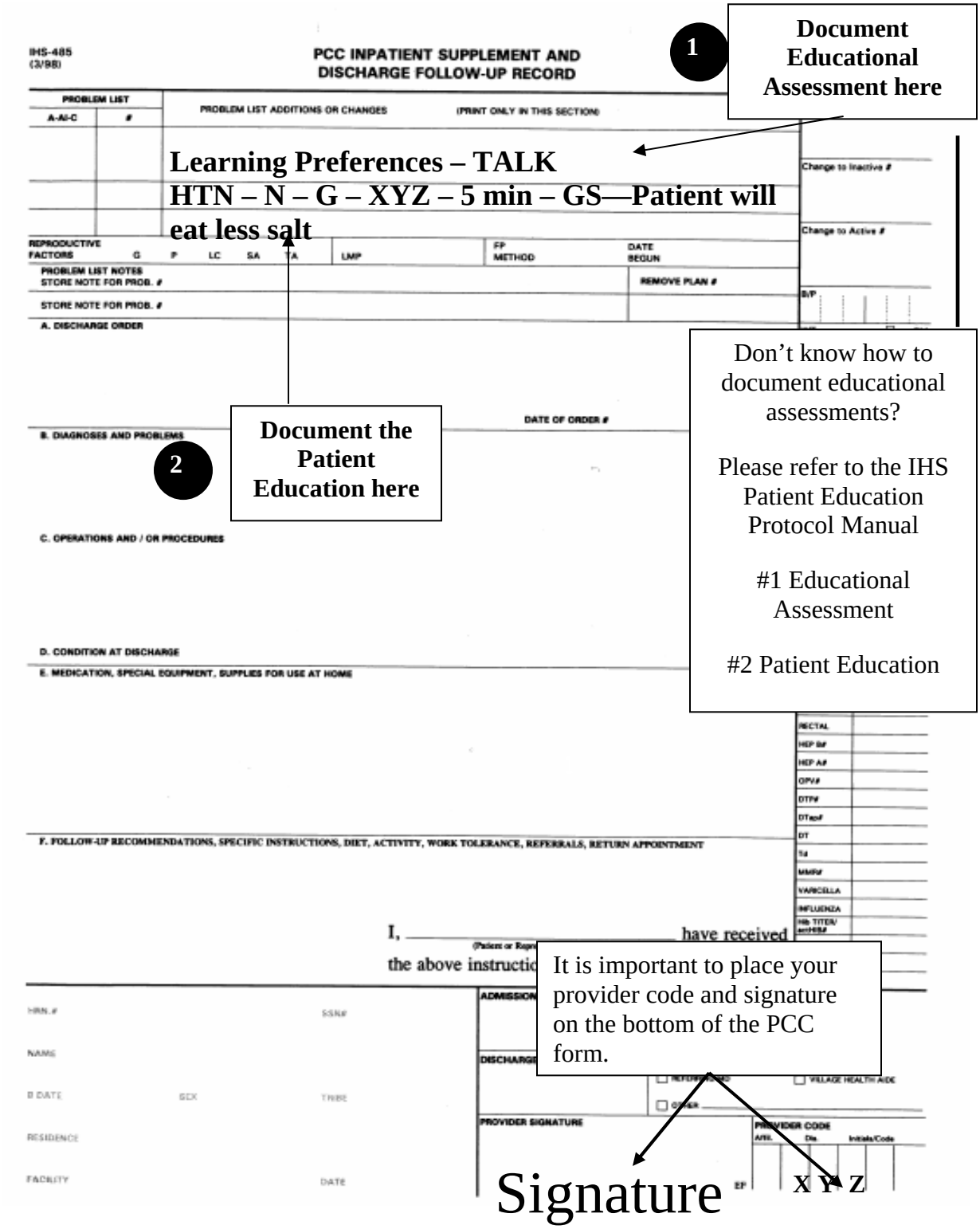


Figure 1: ***Documenting Patient Education on the PCC Inpatient Supplement and Discharge Follow-Up Record form.***

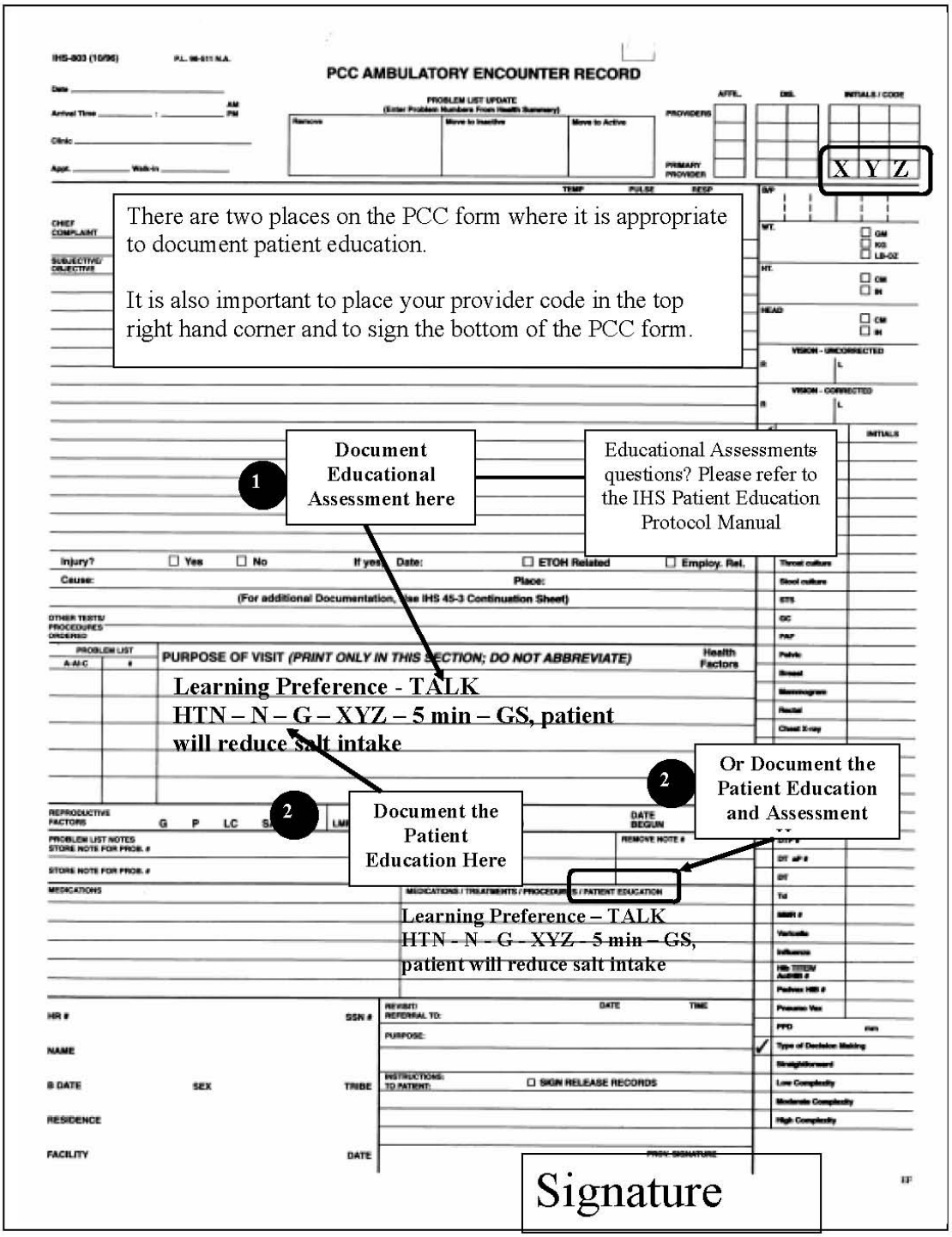


Figure 2: Documenting Patient Education with the PCC Ambulatory Encounter Record form

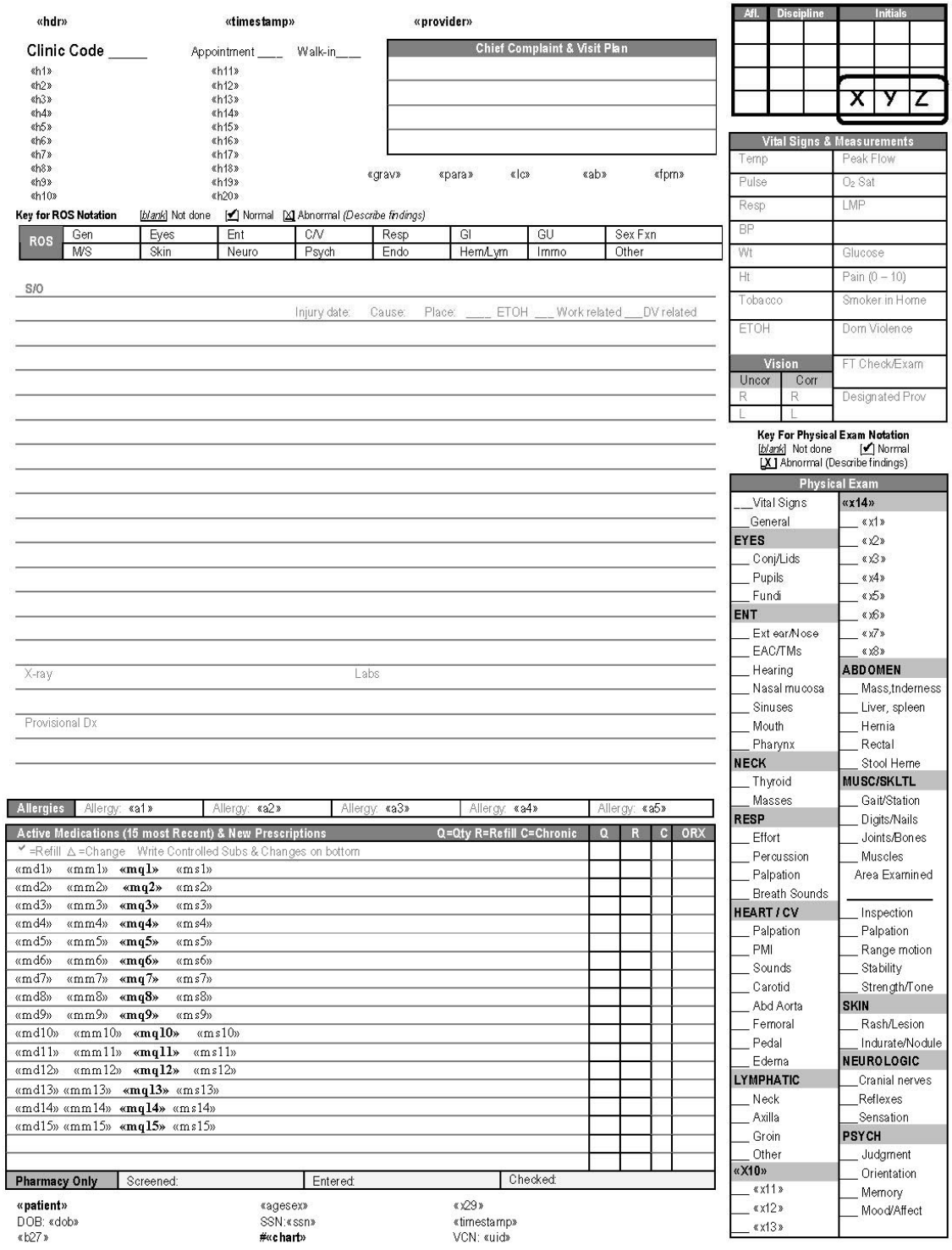


Figure 3: Documenting Patient Education on a PCC+ form, page 1

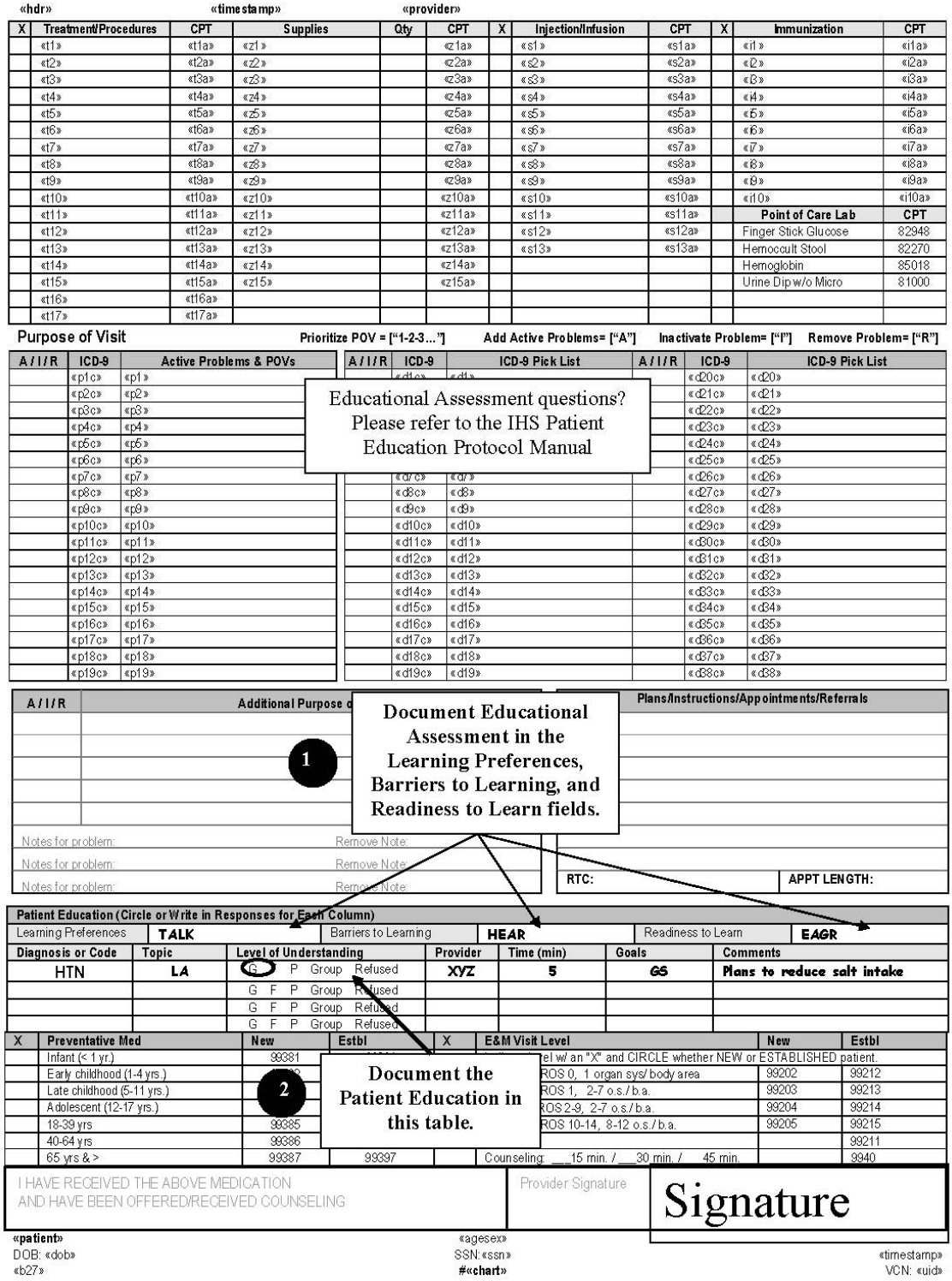
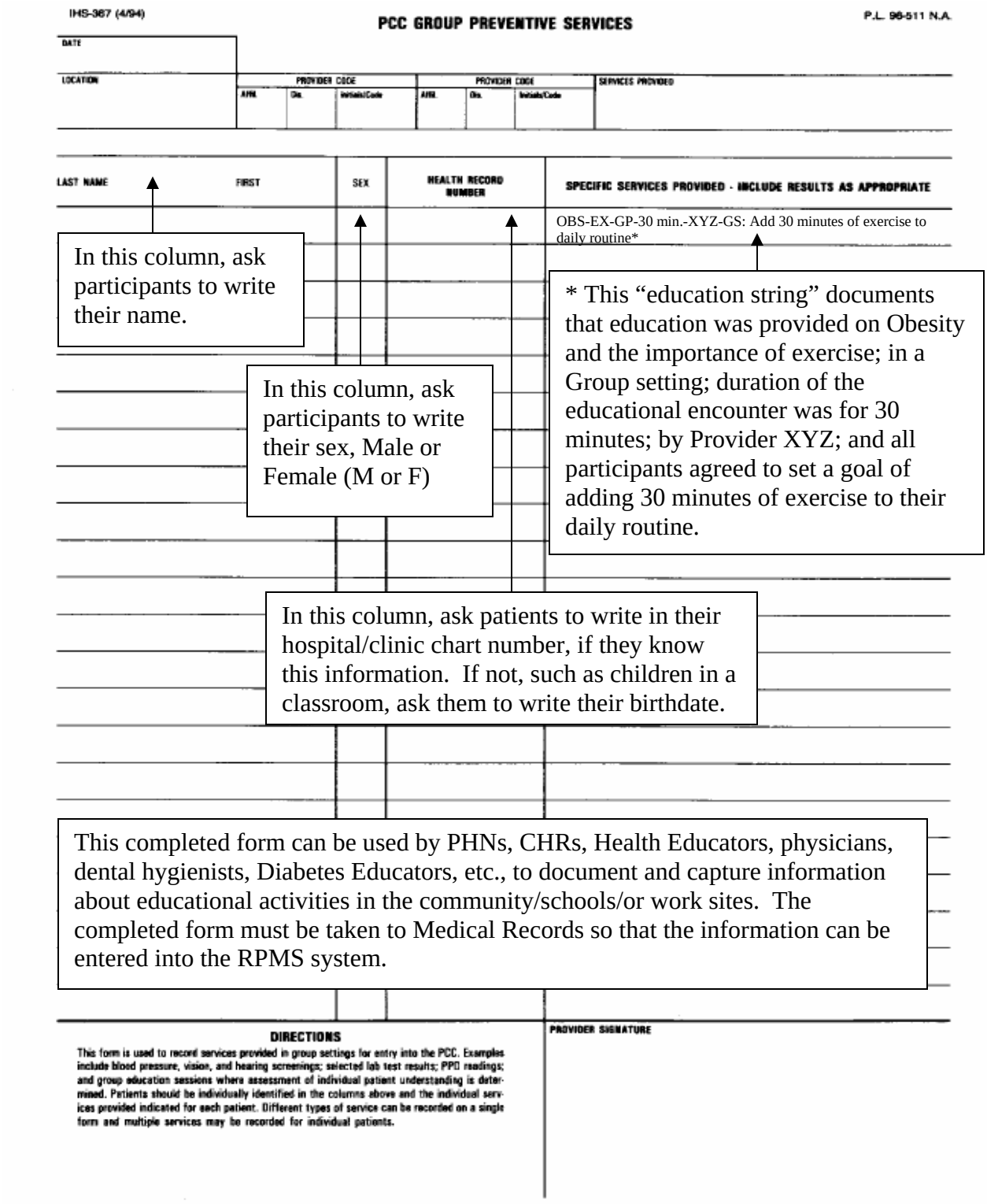


Figure 4: Documenting Patient Education on a PCC+ form, page 2

USE AND DOCUMENTATION OF PATIENT EDUCATION CODES

This form is used by all healthcare workers providing education in the community, schools, work sites, etc.



IHS-367 (4/94)

PCC GROUP PREVENTIVE SERVICES

P.L. 98-511 N.A.

DATE

LOCATION

PROVIDER CODE (AFIL. | Dis. | Initials/Code)

PROVIDER CODE (AFIL. | Dis. | Initials/Code)

SERVICES PROVIDED

LAST NAME	FIRST	SEX	HEALTH RECORD NUMBER	SPECIFIC SERVICES PROVIDED - INCLUDE RESULTS AS APPROPRIATE
				OBS-EX-GP-30 min.-XYZ-GS: Add 30 minutes of exercise to daily routine*

In this column, ask participants to write their name.

In this column, ask participants to write their sex, Male or Female (M or F)

* This "education string" documents that education was provided on Obesity and the importance of exercise; in a Group setting; duration of the educational encounter was for 30 minutes; by Provider XYZ; and all participants agreed to set a goal of adding 30 minutes of exercise to their daily routine.

In this column, ask patients to write in their hospital/clinic chart number, if they know this information. If not, such as children in a classroom, ask them to write their birthdate.

This completed form can be used by PHNs, CHRs, Health Educators, physicians, dental hygienists, Diabetes Educators, etc., to document and capture information about educational activities in the community/schools/or work sites. The completed form must be taken to Medical Records so that the information can be entered into the RPMS system.

DIRECTIONS

This form is used to record services provided in group settings for entry into the PCC. Examples include blood pressure, vision, and hearing screenings; selected lab test results; PPD readings; and group education sessions where assessment of individual patient understanding is determined. Patients should be individually identified in the columns above and the individual services provided indicated for each patient. Different types of service can be recorded on a single form and multiple services may be recorded for individual patients.

PROVIDER SIGNATURE

USE AND DOCUMENTATION OF PATIENT EDUCATION CODES

READINESS TO LEARN
(RL Code)

Eager to Learn	**RL-EAGR**
Receptive	**RL-RCPT**
Unreceptive	**RL-UNRC**
Pain	**RL-PAIN**
Severity of Illness	**RL-SVIL**
Not Ready	**RL-NOTR**
Distraction	**RL-DSTR**

Assessed each teaching session

PATIENT'S RESPONSE TO EDUCATION (Level of UNDERSTANDING)

GOOD (G) - Verbalized understanding. Verbalizes decision to change (plan of action indicated) able to demonstrate correctly.
FAIR (F) - Verbalizes need for more education. Undecided about making a decision or change. Return demonstration indicates need for further teaching.
POOR (P) - Does not verbalize understanding. Refuses to make a decision or needed changes. Unable to return demonstration.
REFUSED (R) - Refuses education.
GROUP (GP) – Group taught

LEARNING PREFERENCES (LP Code)
Assessed Yearly
If Assessed Today, Today's Date:

Talk (one-on-one)	**LP-TALK**
Video	**LP-VIDO**
Group	**LP-GP**
Read	**LP-READ**
Do/Practice	**LP-DOIT**

BARRIERS TO LEARNING - BAR (Assessed Annually); If Assessed Today, Date Assessed:
Check those that apply:

- ☐ No Barriers **BAR-NONE**
- ☐ Fine Motor Skills **BAR-FIMS**
- ☐ Doesn't read English **BAR-DNRE**
- ☐ Hard of Hearing **BAR-HEAR**
- ☐ Interpreter Needed **BAR - INTN**
- ☐ Deaf **BAR-DEAF**
- ☐ Social Stressors **BAR-STRS**
- ☐ Visually Impaired **BAR-VISI**
- ☐ Cognitive Impairment **BAR-COGI**
- ☐ Values/Beliefs **BAR-VALU**
- ☐ Blind **BAR-BLND**
- ☐ Emotional Impairment **BAR- EMOI**

List measures taken to address above barriers:

Comments: ____

DATE	PATIENT EDUCATION	(Check box to refer to Progress Notes)	PROVIDER INITIALS OR PROVIDER CODE	READINESS TO LEARN CODE (RL)	LEVEL OF UNDER-STANDING CODE	PERSON TAUGHT	TIME	GOAL SET GOAL MET GOAL NOT MET	CPT CODE
	ICD-9 CODE DISEASE STATE, ILLNESS OR CONDITION	EDUCATION TOPIC							
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
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		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			
		™		EAGR RCPT UNRC PAIN SVIL NOTR DSTR		PATIENT OTHER			

Patient Identification

Providers please sign on back of form

Signature:	**Initials/Provider code:**	

Reimbursement for Patient Education

Preventive Medicine Services

Evaluation and Management (E&M) CPT Coding and ICD-9 Diagnostic Coding

Reimbursement for Patient Education

To properly document and receive reimbursement for patient education services, it is important to provide enough document to substantiate accurate CPT Procedural Coding and ICD-9 Diagnostic Coding. These two types of codes are mandatory to properly complete the claim forms that will be submitted to third party payers.

For CPT Coding, the reimbursement of patient education would fall under the Evaluation and Management (E&M) Codes based on *Time*. *Time* is a factor in clinical encounters. The most common and most important element that *'Time'* becomes a factor is when counseling dominates the visit (i.e. patient education).

"In the case where counseling and/or coordination of care dominates (more than 50%) of the physician/patient and/or family encounter (fact-to-face time in the office or other outpatient setting, floor/unit time in the hospital or nursing facility), *Time* is considered the key or controlling factor to qualify for a particular level of E/M services.

The following codes are used to report the preventive medicine evaluation and management of infants, children, adolescents and adults. The extent and focus of the services will largely depend on the age of the patient.

If an abnormality/ies is encountered or a preexisting problem is addressed in the process of performing this preventive medicine evaluation and management service, and if the problem/abnormality is significant enough to require additional work to perform the key components of problem-oriented E/M service, then the appropriate Office/Outpatient code 99201-99215 should also be reported. Modifier '-25' should be added to the Office/Outpatient code to indicate that a significant, separately identifiable Evaluation and Management service was provided by the same physician on the same day as the preventive medicine service. The appropriate preventive medicine service is additionally reported.

An insignificant or trivial problem/abnormality that is encountered in the process of performing the preventive medicine evaluation and management service and which does not require additional work and the performance of the key components of a problem-oriented E/M service should not be reported. The "comprehensive" examination of the Preventive Medicine Services codes 99381-99397 is NOT synonymous with the "comprehensive" examination required in Evaluation and Management codes 99201-99350.

Codes 99381-99397 include counseling/anticipatory guidance/risk factor reduction interventions which are provided at the time of the initial or periodic comprehensive preventive medicine examination. (Refer to codes 99401-99412 for reporting those counseling/anticipatory

guidance/risk factor reduction interventions that are provided at an encounter separate from the preventive medicine examination.)

If the physician elects to report the level of service based on counseling and/or coordination of care, the total length of *Time* of the encounter (face-to-face or floor time, as appropriate) should be documented and the record should describe the counseling and/or activities to coordinate care."

In practice, this means that if you document spending >50% of a 15 minute visit in counseling (education), you get a 99213 code even if you don't ask a single question or touch the patient. Similarly, >50% of a 25 minute encounter gets you 99214. IHS providers do provide patient education and counseling but most sites are neglecting to charge for these services. We either do not document the actual time spent or the content of the counseling. Certainly the private sector charges for these services.

Definition: Discussion with patient when 50% or more of the total physician face to face time of the encounter includes:

- Results of diagnostic tests or impressions
- Prognosis
- Risk and benefits of treatment options
- Instructions for care at home and follow-up with physician/other provider of care
- Importance for compliance with treatment plan
- Risk factor education, e.g., diet, exercise
- Patient and Family Education regarding disease and or the disease process

Documentation Requirements:

- Total face to face time is the basis for code selection
- 50% or more of the encounter is counseling
- Documentation of the total time of the encounter and the counseling Time
- Document a summary of the counseling performed
- Document any history or exam that was performed

Coordination of Care

Definition: When 50% of more of the total time of the encounter includes:

- Establishing and/or reviewing patient's record
- Documenting in the patient's medical record
- Communication with nursing staff, other physicians or health professionals and/or patient's family
- Scheduling treatment, ordering testing and/or x-rays

Important Aspects concerning Reimbursement for PATIENT EDUCATION

- Third Party claims should be processed for Medicare Part B eligible patients. Medicare Part A does not reimburse for these services
- Each site should contact their local payers and research the billing rules and regulations of ALL third party payers to determine if they will reimburse for patient education services.
- You must identify (the education provided) and routinely document the services and have PCC Data Entry enter the information by using the appropriate CPT code
- Identify who provided the service i.e., physician, PHN, FNP, PA, RD
- Education may be covered by an alternate resource as part of their plan coverage
- Use those CPT codes that are related to education
- "Incident To" services are billable

Documentation of Evaluation and Management (E/M) Services

- Three Key Components:
  - history
  - examination
  - medical decision making
- Other Components:
  - Counseling
  - Time (may use to determine Office Visit level if > 50% of time is spent in face-to-face counseling)

BRIEF Sample - Office Visits, Established Patients

CODES	99211	99212	99213	99214	99215
History	Not Required	Problem Focused	Expanded Problem Focused	Detailed	Comprehensive
Exam	Not Required	Problem Focused	Expanded Problem Focused	Detailed	Comprehensive
Decision Making	Not Required	Straight Forward	Low	Moderate	High
Time	5 Minutes	10 Minutes	15 Minutes	25 Minutes	40 Minutes

New Patient: Initial preventive medicine evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk facto reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures

Established Patient: Periodic preventive medicine reevaluation and management of an individual including a comprehensive history, comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory /diagnostic procedures

PROCEDURAL TERMINOLOGY	
CPT Codes	**Description of Procedure**
G0108	Diabetes Education – Group Education
G0109	Diabetes Education – Individual Education
97802	Medical Nutrition Therapy (MNT)
97803	Hospital-Observation/In-Patient
97804	Hospital-Observation/In-Patient
99201	Office Visit, New Patients-Office or other outpatient
99202	Office Visit, New Patients-Office or other outpatient
99203	Office Visit, New Patients-Office or other outpatient
99204	Office Visit, New Patients-Office or other outpatient
99205	Office Visit, New Patients-Office or other outpatient
99211	Office Visits, Established Patients-Office of other outpatient
99212	Office Visits, Established Patients-Office of other outpatient
99213	Office Visits, Established Patients-Office of other outpatient
99214	Office Visits, Established Patients-Office of other outpatient
99215	Office Visits, Established Patients-Office of other outpatient
99218	Hospital-Observation/In-Patient
99219	Hospital-Observation/In-Patient
99220	Hospital-Observation/In-Patient
99381	Preventive Medicine – New Patient Infant Age under 1 year
99382	Preventive Medicine – New Patient Early childhood (age 1 through 4 years)

PROCEDURAL TERMINOLOGY	
CPT Codes	**Description of Procedure**
99384	Preventive Medicine – New Patient Adolescent (age 12 through 17 years)
99385	Preventive Medicine – New Patient 18 – 39 years
99386	Preventive Medicine – New Patient 40 – 64 years
99387	Preventive Medicine – New Patient 65 years and over
99391	Preventive Medicine – Established Patient early childhood (age 1 to 4 years)
99392	Preventive Medicine – Established Patient - late childhood (age 5 to 11 years)
99393	Preventive Medicine – Established Patient - adolescent (age 12 to 17 years)
99394	Preventive Medicine – Established Patient - 18 – 39 years
99395	Preventive Medicine – Established - 40 – 64 years
99396	Preventive Medicine – Established - 65 years and over
99397	Preventive Medicine – Established - 65 years and over
99401	Preventive Medicine Evaluation and Management counseling and/or risk factor reduction intervention(s) provided to a New or Established Patient
99402	Preventive Medicine-Evaluation and Management New and Established approximately 30 min.
99403	Preventive Medicine-Evaluation and Management New and Established approximately 45 min
99404	Preventive Medicine-Evaluation and Management New and Established approximately 60 min.
99411	Preventive Medicine Counseling/Education and/or risk factor reduction intervention(s) provided to individuals in a ***group*** setting (separate procedure); – Established Patients approximately 30 minutes.
99412	Preventive Medicine Counseling/Education and/or risk factor reduction intervention(s) provided to individuals in a *group* setting (separate procedure); – Established Patients approximately 60 minutes.

The ICD-9 Diagnostic codes will be used for coding diagnoses that support the provision of these educational services. Below are major codes identified that can be used for guidance.

ICD-9 DIAGNOSTIC CATEGORIES	
ICD9 Code Range	**Name of Category**
V65.3	Dietary surveillance and counseling
V65.40	Counseling NOS
V65.41	Exercise Counseling
V65.42	Counseling on Substance use/abuse
V65.43	Counseling on Injury Prevention
V65.44	HIV counseling
V65.45	Counseling on other STDs
V65.49	Other specified counseling
V65.5	Person with feared complaint in whom no diagnosis was made
V65.8	Other reasons for seeking consultation
V65.9	Unspecified reason for consultation

Diabetes Curriculum Education

What are the Diabetes Curriculum Education Codes?

The Diabetes Education Curriculum Codes (DMC) are a VERY specific set of codes that follow the IHS Diabetes Curriculum "Living With Diabetes." These IHS diabetes education codes are meant to be used by persons who are familiar with the IHS Diabetes Curriculum, "Living With Diabetes."

Most providers who document diabetes education but these sites are not using the "Living With Diabetes" will want to use the DM codes found in the main set of patient education codes.

Diabetes Curriculum Education Codes

DMC—Diabetes Mellitus

DMC-ABC KNOWING YOUR NUMBERS (ABC)

OUTCOME: The individual/family will be able to identify target goals for A1c, blood pressure and blood fat levels.

STANDARDS:

ABC-1	Verbalize one reason for measuring A1c.
ABC-2	State the target A1c goal for blood sugar control.
ABC-3	Identify current A1c.
ABC-4	State two ways to reach or maintain their A1c goal.
ABC-5	Verbalize one reason for measuring blood pressure.
ABC-6	State the target for blood pressure control.
ABC-7	Identify current blood pressure.
ABC-8	State two ways to reach or maintain a target blood pressure.
ABC-9	Verbalize one reason for measuring blood fats.
ABC-10	State the target goals for target blood fats
ABC-11	Identify at least one current blood fat level.
ABC-12	List two or more ways to reach or maintain target blood fat goals.
ABC-13	State where to get help to improve their ABC numbers.
ABC-GS	State or write a plan to reach or maintain at least one of the ABC numbers.
ABC-GM	Behavior goal met (follow-up)
ABC-GNM	Behavior goal unmet (follow-up)

DMC-AC ACUTE COMPLICATIONS

OUTCOME: The individual/family will understand acute complications and self-care actions to take to prevent or treat acute complications.

STANDARDS:

LOW BLOOD SUGAR

AC-1 Define low blood sugar.
AC-2 Discuss two or more causes of low blood sugar.
AC-3 List two or more symptoms of low blood sugar.
AC-4 State two or more actions to take when feeling symptoms of low blood sugar.
AC-5 State two or more actions to prevent low blood sugar.

HIGH BLOOD SUGAR

AC-6 Define high blood sugar.
AC-7 State two or more causes of high blood sugar.
AC-8 List two or more symptoms of high blood sugar.
AC-9 Discuss two or more actions to take when the blood sugar is high.
AC-10 State two or more actions to prevent high blood sugar.

SICK DAY MANAGEMENT

AC-11 Explain how blood sugar is affected during illness.
AC-12 State two or more things to do to manage blood sugar when sick.
AC-13. Identify two or more food and drink choices to use when sick.
AC-GS State or write a plan to use for low blood sugar, high blood sugar, and sick day management.
AC-GM Behavior goal met (follow-up)
AC- GNM Behavior goal unmet (follow-up)

DMC-BG BEHAVIORAL GOALS (MAKING HEALTHY CHANGES)

OUTCOME: The individual/family will have a basic knowledge of the process of behavior change and goal setting.

STANDARDS:

BG-1 State in simple terms what a goal is.
BG-2 Discuss personal habits.
BG-3 Identify desirable behavioral changes.
BG-4 Describe the process for making personal change.
BG-GS State or write a plan to change one or more behaviors.
BG-GM Behavior goal met (follow-up)
BG-GNM Behavior goal unmet (follow-up)

DMC-BGM BLOOD SUGAR MONITORING, HOME

OUTCOME: The individual/family will understand the importance of blood sugar monitoring, know how to use the meter, and make personal blood sugar monitoring plan.

STANDARDS:

BGM-1 Explain that people with diabetes use a meter to learn how much sugar is in the blood.
BGM-2. List benefits of checking blood sugar.
BGM-3 State target blood sugar ranges to decrease risk for complications.
BGM-4 Discuss personal blood sugar goals.
BGM-5 State when to check blood sugar.
BGM-6 Discuss proper technique for checking blood sugar. (To include maintenance, support services)
BGM-7 Demonstrate how to record results correctly.
BGM-8 Discuss benefits of bringing meter and logbooks to clinic visits.
BGM-9 State proper disposal of sharps.
BGM-10 State how to get supplies to check blood sugar.
BGM-GS State or writes a plan to check blood sugar.
BGM-GM Behavior goal met (follow-up)
BGM-GNM Behavior goal unmet (follow-up)

DMC-CC CHRONIC COMPLICATIONS (PREVENTING AND TREATING DIABETES COMPLICATION)

STAYING HEALTHY WITH DIABETES

OUTCOME: The individual/family will understand the prevention and treatment of long-term complications of diabetes.

STANDARDS:

CC-1 State that controlling blood sugar lowers the chance of getting diabetes complications.
CC-2 Identify two or more factors that increase the risk of complications.
CC-3 State two or more long-term complications of diabetes

RETINOPATHY

CC-4 Describe retinopathy in their own words.
CC-5 List at least two or more ways to prevent or delay eye disease.
CC-6 Discuss how eye disease is treated.

HEART DISEASE

CC-7 Define heart disease in their own words.
CC-8 List at two or more ways to prevent or delay heart disease.
CC-9 Discuss how heart disease is treated.

NEPHROPATHY

CC-10 Define nephropathy in their own words.
CC-11 List at two or more ways to prevent or delay kidney disease.
CC-12 Discuss how kidney disease is treated.

NEUROPATHY

CC-13 Define neuropathy in their own words.
CC-14 List two or more to prevent or delay nerve damage.
CC-15 Discuss how nerve damage is treated.(To include pain management)

SEXUAL HEALTH AND DIABETES

CC-16 Discuss in simple terms how diabetes and high blood sugars may impact intimacy/sexuality.
CC-17 List two or more ways to prevent or delay sexual health problems.
CC-18 Discuss how sexual health problems are treated.
CC-19 Discuss ways to talk about sexual concerns with significant others and members of the health care team.

PERIODONTAL

CC-20 Describe periodontal disease in their own words.
CC-21 List at two or more ways to prevent or delay gum/teeth problems.
CC-22 Discuss how periodontal disease is treated.

SUMMARY

CC-23 Describe the need for all people with diabetes to get yearly tests, exams, and immunizations.
CC-24 Identify their risk factors for diabetes complications.
CC-GS State or write at least one behavior change that will help lower their risk for diabetes complications.
CC-GM Behavior goal met (follow-up)
CC-GNM Behavior goal unmet (follow-up)

DMC-DP DISEASE PROCESS (WHAT IS DIABETES)

BALANCING YOUR LIFE AND DIABETES

OUTCOME: The individual/family will have a basic understanding of the definition, pathophysiology, and treatment of Type 2 diabetes.

STANDARDS:

DP-1 Provide a simple definition for diabetes in their own words
DP-2 Discuss the differences between Type 1 and Type 2 diabetes.
DP-3 Explain how the body normally uses food.
DP-4 List two or more risk factors for developing diabetes.
DP-5 Describe the impact of insulin resistance in diabetes.
DP-6 List two or more signs or symptoms of high blood sugar.
DP-7 State the range for normal fasting blood sugar.
DP-8 State a normal blood sugar range one to two hours after a meal.
DP-9 Explain that high blood sugar can cause damage to the nerves and blood vessels in the eyes, heart, kidneys, and feet.
DP-10 List two or more diabetes self-care actions necessary to reach target blood sugar goals.
DP-GS State or write one change to make for diabetes self-care.
DP-GM Behavior goal met (follow-up)
DP-GNM Behavior goal unmet (follow-up)

DMC- EX EXERCISE (MOVING TO STAY HEALTHY)

OUTCOME: The individual/family will understand the relationship of physical activity in achieving and maintaining blood sugar control by making a personal physical activity plan.

STANDARDS

EX-1 List two or more benefits of regular physical activity.
EX-2 State effects of physical activity on blood sugar.
EX-3 Discuss kinds of physical activity.
EX-4 Discuss time and frequency for physical activity.
EX-5 Discuss simple ways to measure intensity of physical activity.
EX-6 Discuss medical clearance issues for physical activity.
EX-7 List one or more ways to stay safe during physical activity.
EX-GS State or write a personal plan for physical activity.
EX-GM Behavior goal met (follow-up)
EX-GNM Behavior goal unmet (follow-up)

DMC-FTC FOOT CARE (TAKING CARE OF YOUR FEET)

OUTCOME: The individual/family will understand the importance of foot care for people with diabetes.

STANDARDS:

FTC-1 State one or more reasons to check feet every day.
FTC-2 Identify two or more risk factors for foot problems.
FTC-3 List two or more daily self-care action to prevent foot problems.
FTC-4 Describe how to cut toenails correctly.
FTC-5 Describe two or more things to look for when choosing proper footwear.
FTC-6 State two or more signs and symptoms of foot and skin infections.
FTC-7 State the reason for routine foot exams at each clinic visit and yearly foot screening.
FTC-GS Demonstrate a personal foot exam and state a personal foot care plan.
FTC-GM Behavior goal met (follow-up)
FTC-GNM Behavior goal unmet (follow-up)

DMC-M DIABETES MEDICINE- OVERVIEW AND DIABETES PILLS

DMC-IN DIABETES MEDICINE - INSULIN

OUTCOME: The individual/family will understand their medicine regiment.

SECTION 1: OVERVIEW

M-1 Discuss the role of diabetes medicines in the overall diabetes treatment plan
M-2 State two or more reasons for adding or changing diabetes medicines
M-3 State the importance of checking blood sugar more often when medicines are changed
M-4 State the importance of taking medicines as prescribed.
M-5 State two or more guidelines for when to contact a health care provider for medicine.
M-6 Discuss the role of alternative treatments for diabetes and how they affect blood sugar (including herbal, traditional healing methods, and over-the-counter medicines).

SECTION 2: DIABETES PILLS

M7 State the name of their diabetes pills, how much to take, when to take them, how they work, and possible side effects.
M-GS State or write a personal plan for taking their diabetes pills.
M-GM Behavior goal met (follow-up)
M-GNM Behavior goal unmet (follow-up)

SECTION 3: INSULIN

IN-1 Discuss how insulin works to control blood sugar in persons with Type 2 diabetes.
IN-2 Describe the type of insulin they use, the name of the insulin, how it works, how much to take, and when to take it.
IN-3 Identify insulin injection sites.
IN-4 Demonstrate proper technique for withdrawing and injecting insulin.
IN-5 Discuss proper storage of insulin.
IN-6 Discuss proper disposal of insulin syringes and other sharps.
IN-7 Discuss the major side effect of taking insulin.
IN-GS State or write a personal plan for taking insulin.
IN-GM Behavior goal met (follow-up)
IN-GNM Behavior goal unmet (follow-up)

DMC-MSE MIND, SPIRIT AND EMOTION

OUTCOME: The individual/family will understand the emotional impact of diabetes on their personal lives.

STANDARDS:

MSE-1 Express feelings about having diabetes.
MSE-2 Discuss one or more ways diabetes has affected his/her life and/or the lives of their family members and significant others.
MSE-3 Identify their support person(s).
MSE-4 Share past experiences in dealing with health or other kinds of problems.
MSE-5 Explain the body's response to stress.
MSE-6 Discuss ways to handle stress.
MSE-GS State or write one way to handle a stressful situation.
MSE-GM Behavior goal met (follow-up)
MSE-GNM Behavior goal unmet (follow-up)

DMC-N NUTRITION (BASICS OF HEALTHY EATING)

OUTCOME: The individual/family will understand the basics of healthy eating.

STANDARDS:

SECTION 1: INTRODUCTION TO HEALTHY EATING

N-1 Describe the effect of food on diabetes.
N-2 State that healthy food choices are good for the person with diabetes and their whole family.
N-3 Describe how timing and consistency of food can help people with diabetes reach their target blood sugar goals.
N-4 Describe the effect of portion sizes on blood sugar.
N-5 State that eating less sugar and fat can help lower blood sugar.
N-6 State how keeping a record of food eaten can help people with diabetes reach their target blood sugar goals.

SECTION 2: BASICS OF HEALTH EATING

N-7 State two or more benefits of healthy food choices for the person with diabetes.
N-8 Record a day's meal onto a food record.
N-9 Discuss the basic food groups.
N-10 Identify the food groups high in carbohydrates and recognize their efforts on blood sugar.
N-11 State that weight loss can help people with diabetes reach their target blood sugar goals.
N-12 Discuss how to find reliable resources for nutrition facts and answers to questions.
N-GS State or write a personal plan for making healthy food choices.
N-GM Behavior goal met (follow-up)
N-GNM Behavior goal not met (follow-up)

SECTION 3: HEART HEALTHY EATING

N-13 State that hearth healthy food choices are good for the person with diabetes and their whole family.
N-14 Identify foods that increase the risk for heart disease.
N-15 Identify foods that can decrease risk for heart disease.
N-16 Identify two or more ways to choose foods to lower the risk of heart disease.

DMC-N-FL NUTRITION (SESSION 1: INTRODUCTION TO FOOD LABELS)

OUTCOME: The individual/family will understand the basics of food labels.

STANDARDS

FL-1 Identify at least 4 items of information on a food label, including serving size, total calories, and amounts of carbohydrate and fat.
FL-2 State that ingredients on the food label are listed in the order of the amount from greatest to least.
FL-3 Define the words "free", "low", "reduced/less" and "light/lite" on the food label.
FL-4 Describe how to use the food label to make healthy food choices.
FL-GS State or write a person plan for using food labels.

DMC-N-CC NUTRITION (SESSION 2: INTRODUCTION TO CARBOHYDRATE COUNTING)

OUTCOME: The individual/family will understand the basics of carbohydrate counting.

STANDARDS

CC-1 Describe carbohydrate counting in simple terms.
CC-2 Identify the carbohydrate food groups and list 2 or more foods in each group.
CC-3 Define a serving size of carbohydrate food.
CC-4 State 2 or more benefits of using carbohydrate counting to reach and stay at target blood sugar goals.
CC-5 Identify the number of carbohydrate serving needed at each meal.
CC-GS State or write a personal plan for carbohydrate counting.

DMC-N-EL NUTRITION (SESSION 3: INTRODUCTION TO EXCHANGE LISTS)

OUTCOME: The individual/family will understand the basics of exchange lists.

STANDARDS

EL-1 Describe exchange lists in simple terms.
EL-2 Identify the exchange lists
EL-3 Identify 2 or more foods in each exchange list.
EL-4 Define one exchange.
EL-5 Describe 2 or more benefits of using exchange lists to make healthy food choices.
EL-GS State or write a personal plan for using exchange lists.

DMC-N-FS NUTRITION (SESSION 4: INTRODUCTION TO FOOD SHOPPING)

OUTCOME: The individual/family will understand the basics of food shopping.

STANDARDS

FS-1 Identify 2 or more sources of food.
FS-2 Identify 2 or more ways to choose healthy food when shopping.
FS-3 Make a shopping list that includes healthy food choices.
FS-4 Identify 2 or more ways to save money when buying healthy food.
FS-GS State or write a personal plan for food shopping.

DMC-N-HC NUTRITION (SESSION 5: INTRODUCTION TO HEALTHY COOKING)

OUTCOME: The individual/family will understand the basics of healthy food preparation.

STANDARDS

HC-1 Describe 2 or more ways to use less sugar in cooking.
HC-2 Describe the use of sugar substitutes in cooking.
HC-3 Describe 2 or more ways to use less fat in cooking.
HC-4 Describe 2 or more ways to use less sodium in cooking.
HC-5 State 2 or more ways to safely handle food during preparation and storage.
HC-GS State or write a personal plan for cooking.

DMC-N-EA NUTRITION (SESSION 6: GUIDELINES FOR EATING AWAY FROM HOME)

OUTCOME: The individual/family will understand the basics of healthy eating away from home.

STANDARDS

EA-1 Identify 2 or more things that can affect a person's food choices when eating away from home.
EA-2 Identify 2 or more ways to plan ahead for healthy food choices when eating away from home.
EA-3 Identify 2 or more ways to make healthy food choices when eating away from home.
EA-GS State or write a personal plan for eating away from home.

DMC-N-AL NUTRITION (SESSION 7: GUIDELINES FOR THE USE OF ALCOHOL)

OUTCOME: The individual/family will understand the basics of using alcohol with diabetes.

STANDARDS

AL-1 State 2 or more ways alcohol can affect a person with diabetes.

AL-2 State 2 or more guidelines for the use of alcohol.

AL-3 State 2 or more situations when it is important not to drink alcohol.

AL-GS State or write a personal plan for the use of alcohol.

DMC-N-D NUTRITION (SESSION 8: GUIDELINES FOR EVALUATING DIETS)

OUTCOME: The individual/family will understand the basics of evaluating diets.

STANDARDS

D-1 Describe "dieting" in simple terms.
D-2 Describe how to know if a diet is healthy.
D-3 Identify 2 or more problems that may happen with an unhealthy diet.
D-4 Discuss how to find reliable resources for nutrition facts and answers to questions about dieting.
D-GS State or write a personal plan for choosing a healthy diet.

DMC-PG PREGNANCY

DMC-PG-DM SESSION 1: PREGNANCY, DIABETES AND YOU: FIRST STEPS TO A HEALTHY

OUTCOME: The individual/family will understand the definition of pregestational and gestational diabetes.

STANDARDS:

DM-1 Describe personal feelings about pregnancy and diabetes.
DM-2 State in own words the difference between pre-gestational and gestational diabetes.
DM-3 State the target blood sugar goals for pregnancy.
DM-4 Describe the need for frequent care and follow-up during pregnancy.
DM-5 Identify 2 or more resources for support during pregnancy.
DM-GS State or write a personal plan for care during pregnancy.

DMC-PG-N SESSION 2: HEALTHY EATING DURING PREGNANCY

OUTCOME: The individual/family will understand the basics of healthy eating during pregnancy.

STANDARDS

SECTION 1: BASICS OF HEALTHY EATING DURING PREGNANCY

N-1 Identify the effect of carbohydrate foods on blood sugar during pregnancy.

N-2 Identify 2 or more healthy food choices to reach target blood sugar goals during pregnancy.

N-3 Describe a healthy eating pattern during pregnancy which includes several small meals and snacks throughout the day.

N-GS State or write a personal plan for using food choices to reach target blood sugar goals and/or manage common nutritional concerns of pregnancy.

SECTION 2: HEALTHY EATING FOR COMMON CONCERNS DURING PREGNANCY

N-4 Describe 1 or more ways to check for healthy weight gain during pregnancy.
N-5 Describe 2 or more ways to relieve nausea, constipation, and heartburn during pregnancy.
N-6 Describe 1 or more ways to manage milk intolerance during pregnancy.
N-7 Describe the use of sugar-free sweeteners during pregnancy.
N-8 Describe the proper use of vitamins and supplements during pregnancy.
N-GS State or write a personal plan for using food choices to reach target blood sugar goals and/or manage common nutritional concerns of pregnancy.

DMC-PG-PA SESSION 3: MOVING TO STAY HEALTHY DURING PREGNANCY

OUTCOME: The individual/family will understand the impact of physical activity on blood sugar during pregnancy.

STANDARDS

PA-1 List 2 or more benefits of physical activity during pregnancy.
PA-2 Identify 2 or more kinds of physical activity safe for pregnancy.
PA-3 Identify 2 or more things to do to keep physical activity safe during pregnancy.
PA-GS State or write a personal plan for physical activity during pregnancy.

DMC-PG-M SESSION 4: MEDICINE DURING PREGNANCY

OUTCOME: The individual/family will understand their medicine regimen.

STANDARDS

M-1 Describe the use of insulin during pregnancy.
M-2 Describe the use of diabetes pills during pregnancy.
M-3 Discuss the use of prescription, over-the-counter, and herbal medicines, as well as traditional practices, during pregnancy.
M-GS State or write a personal plan for the use of medicine during pregnancy.

DMC-PG-BGM SESSION 5: HOME BLOOD SUGAR MONITORING DURING PREGNANCY

OUTCOME: The individual/family will understand the importance of blood sugar monitoring to reach and stay at target blood sugar goals.

STANDARDS

BGM-1 State target blood sugar goals to decrease the chance for problems for the mother and baby.
BGM-2 State when to check blood sugar during pregnancy.
BGM-3 Demonstrate how to use a logbook during pregnancy.
BGM-GS State or write a personal plan to check blood sugar at home during pregnancy.

DMC-PG-C SESSION 6: STAYING HEALTHY DURING PREGNANCY

OUTCOME: The individual/family will understand the care needed to prevent potential problems for mother and baby.

STANDARDS

C-1 Describe 2 or more things the mother can do for self-care to reach target blood sugar goals during pregnancy.
C-2 State 2 or more potential problems for the mother during pregnancy.
C-3 Describe 2 or more potential problems for the baby if the mother's blood sugar is high during pregnancy.
C-4 Describe 2 or more tests, procedures, or examinations needed during pregnancy.
C-5 State 2 or more guidelines for when to talk with a health care provider during pregnancy.
C-GS State or write a personal plan to reach target blood sugar goals during pregnancy.

DMC-PG-PP SESSION 7: STAYING HEALTHY AFTER DELIVERY

OUTCOME: The individual/family will understand the continued self-care needs after delivery.

STANDARDS

PP-1 Identify 2 or more self-care needs after delivery of mothers with diabetes during pregnancy.
PP-2 Describe 2 or more things women with pre-gestational diabetes can do to manage diabetes after delivery.
PP-3 Describe 2 or more things women with gestational diabetes can do to prevent or delay diabetes after delivery.
PP-4 State 2 or more benefits of breastfeeding.
PP-5 State or write a personal plan for diabetes self-care after delivery.

DMC-PPC PRE-PREGNANCY COUNSELING

OUTCOME: The woman with diabetes and her significant other/family will understand the need for blood sugar control prior to pregnancy.

STANDARDS:

PPC-1 Describe the need to reach target blood sugar goals before becoming pregnant.

PPC-2 Identify two or more ways to reach target blood sugar goal before becoming pregnant.

PPC-3 State that insulin injections may be needed to reach target blood sugar goal before becoming pregnant.

PPC-4 State two potential problems for baby if pregnancy occurs while the mother's blood sugar is high.

PPC-5 State two potential problems for mother during pregnancy.

PPC-6 State the need to use birth control until ready to become pregnant.

PPC-7 State the need to seek early prenatal care.

PPC-8 State the need to avoid tobacco, alcohol, and drugs before and during pregnancy.

PPC-9 Identify community resources to support families before, during, and after pregnancy.

PPC-GS State or write a personal plan to prepare for pregnancy.

PPC-GM Behavior goal met (follow-up)

PPC-GNM Behavior goal unmet (follow-up)

GDM—Gestational Diabetes

GDM-BG BEHAVIORAL GOALS (MAKING HEALTHY CHANGES)

OUTCOME: The individual/family will have a basic knowledge of the process of behavior change and goal setting.

STANDARDS:

BG1 State in simple terms what a goal is.
BG2 Discuss personal habits.
BG3 Identify what the patient may want to change.
BG4 Describe the process for making personal change.
BG50 Write one behavior change plan.
BG51 Behavior goal met (follow-up)
BG52 Behavior goal unmet (follow-up)

GDM-BGM BLOOD SUGAR MONITORING, HOME

OUTCOME: The individual/family will understand the importance of blood sugar monitoring, know how to use the monitor and make personal blood sugar monitoring plan.

STANDARDS:

BGM1 Explain that blood is tested to learn how much sugar is in the blood.
BGM2 List benefits of testing blood sugar.
BGM3 State blood sugar ranges to decrease risk for complications.
BGM4 State personal blood sugar goals.
BGM5 State when to test blood sugar.
BGM6 Demonstrate proper testing of blood sugar. (To include maintenance, support services)
BGM7 Demonstrate how to record results correctly.
BGM8 Discuss benefits of bringing meter and logbooks to clinic visits.
BGM9 State proper disposal of insulin syringes and other sharps.
BGM10 States how to get blood sugar testing supplies.
BGM50 Writes a plan to test blood sugar.
BGM51 Behavior goal met (follow-up)
BGM52 Behavior goal unmet (follow-up)

GDM-C COMPLICATIONS

OUTCOME: The woman with gestational diabetes and her significant other/family will understand the relationship between high blood sugars and adverse outcomes of pregnancy.

STANDARDS:

C1 Discuss 2 complications for mom if blood sugars are high during pregnancy.
C2 Discuss 2 complications for baby if blood sugars are high during pregnancy.
C3 Describe the how to monitor fetal movement (kick counts).
C4 Discuss how to control blood sugar during pregnancy.
C5 Discuss 2 things she can do to help prevent or control diabetes after delivery.
C50 Write a personal plan to control blood sugar during pregnancy.
C51 Behavior goal met (follow-up)
C52 Behavior goal unmet (follow-up)

GDM-DP DISEASE PROCESS

OUTCOME: The woman with gestational diabetes and her significant other/family will understand diabetes self care management during pregnancy.

STANDARDS:

DP1 Define in simple terms gestational diabetes.
DP2 State blood sugar goals for pregnancy.
DP3 Describe feelings about diabetes and pregnancy.
DP4 Describe self-care management during pregnancy.
DP50 Write a personal plan for self care management during pregnancy.
DP51 Behavior goal met (follow-up)
DP52 Behavior goal unmet (follow-up)

GDM-EX EXERCISE (PHYSICAL ACTIVITY AND PREGNANCY)

OUTCOME: The woman with gestational diabetes and her significant other/family will have a safe physical activity plan to follow during pregnancy.

STANDARDS:

EX1 Describe a safe physical activity plan for pregnancy.
EX2 List 3 guidelines to follow for a safe exercise program.
EX50 Write a physical activity plan to use during pregnancy.
EX51 Behavior goal met (follow-up)
EX52 Behavior goal unmet (follow-up)

GDM-FU FOLLOW-UP

OUTCOME: The individual/family will understand the importance of routine follow-up in diabetes treatment and management.

STANDARDS:

FU1 Discuss the importance of regular medical appointments and education to prevent or delay the complications of diabetes.
FU2 States at least 3 standards of diabetes care.
FU3 States the local process to use to make appointments for clinical, education and other services for people with diabetes.
FU50 Writes or states a personal plan for follow-up visits.
FU51 Behavior goal met (follow-up)
FU52 Behavior goal unmet (follow-up)

GDM-L PATIENT INFORMATION LITERATURE

OUTCOME: The individual/family receives information about diabetes self-care management.

STANDARDS:

L1 Provided with diabetes self-care management information.
L2 Provided information about local resources to promote health.

GDM-N NUTRITION (MEAL PLANNING IN PREGNANCY)

OUTCOME: The woman with gestational diabetes and her significant other/family will be able to make a personal plan for nutritional needs during pregnancy.

STANDARDS:

N1 Discuss in simple terms carbohydrate foods.
N2 Discuss 2 or more healthy eating changes to control blood sugar during pregnancy
N3 Discuss importance of consistent timing of meals and snacks.
N50 Write a personal plan for making nutrition changes during pregnancy.
N51 Behavior goal met (follow-up)
N52 Behavior goal unmet (follow-up)

General Education Codes

Guidelines For Use

These general education codes were developed in response to the ever-expanding list of patient education codes. The following 18 codes are education topic modifiers which can be used in conjunction with any ICD-9 diagnosis to document patient and family education. The following list is NOT exhaustive, nor is it intended to be.

This newer, more general system is used in essentially the same way as the specific codes, except that instead of having a patient education diagnosis code the provider will simply write out the 1) diagnosis or condition, 2) followed by the education modifier, 3) level of understanding, 4) write your Provider Initials, 5) Time spend providing the education, and 6) finally write down if the patient set a goal for them selves using GS for Goal Set, GM for Goal Met, and GNM for Goal Not Met. For example:

Head lice - TX - P - <provider initials>10 min. – GS: Pt. will wash bed linens

This would show up on the health summary under the patient education section as:

Head lice - treatment - poor understanding, 10 minutes ,, <Provider Initials> Goal Set: Patient will wash bed lines.

If education on more than one topic on the same diagnosis is provided these topics should be written on a separate line in the Patient Education section of the PCC, PCC+ and Electronic Health Record.:

For example:

Head lice - P - P - <provider initials>10 min. – GS: Pt. will wash bed linens
Head lice - TX - G - <provider initials>7 min. – GS: Pt. will wash bed linens
Impetigo - M, FU - G - <provider initials>GS: Pt. will practice good hygiene by not sharing items.

This would show up on the health summary under the patient education section as:

Head lice - prevention - poor understanding10 min. – GS: Pt. will wash bed linens
Head lice - treatment - good understanding 7 min. – GS: Pt. will wash bed linens
Impetigo - medications, follow-up - good understanding: Pt. will practice good hygiene by not sharing items.

Please note that for reimbursement, the Education MUST have an associated ICD-9 diagnosis code. These codes must still be documented in the patient education section of the PCC, PCC+ or on the EHR. The levels of understanding have not changed and are **G=good, F=fair, P=poor, R=refused, and Gp=group.**

The committee would like to thank Lisa Hakanson, R.D. for her suggestion that resulted in this addition.

General Education Topics

AP - ANATOMY AND PHYSIOLOGY

OUTCOME: The patient and/or family will have a basic understanding of anatomy and physiology as it relates to the disease state or condition.

STANDARDS:

1. Explain normal anatomy and physiology of the system(s) involved.
2. Discuss the changes to anatomy and physiology as a result of this disease process or condition, as appropriate.
3. Discuss the impact of these changes on the patient's health or well-being.

C - COMPLICATIONS

OUTCOME: The patient and/or family will understand the effects and consequences possible as a result of this disease state/condition, failure to manage this disease state/condition, or as a result of treatment.

STANDARDS:

1. Discuss the common or significant complications associated with the disease state/condition.
2. Discuss common or significant complications which may be prevented by full participation with the treatment regiment.
3. Discuss common or significant complications which may result from treatment(s).

DP - DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pathophysiology, symptoms and prognosis of his/her illness or condition.

STANDARDS:

1. Discuss the current information regarding causative factors and pathophysiology of this disease state/condition.
2. Discuss the signs/symptoms and usual progression of this disease state/condition.
3. Discuss the signs/symptoms of exacerbation/worsening of this disease state/condition.

EQ - EQUIPMENT

OUTCOME: The patient/family will understand and demonstrate (when appropriate) proper use and care of home medical equipment.

STANDARDS:

1. Discuss indications for and benefits of prescribed home medical equipment.
2. Discuss types and features of home medical equipment as appropriate.
3. Discuss and/or demonstrate proper use and care of home medical equipment, participate in return demonstration by patient/family.
4. Discuss signs of equipment malfunction and proper action in case of malfunction.
5. Emphasize safe use of equipment, i.e., no smoking around O_2, use of gloves, electrical cord safety, and disposal of sharps.
6. Discuss proper disposal of associated medical supplies.

EX - EXERCISE

OUTCOME: The patient/family will understand the relationship of physical activity to this disease state, condition or to health promotion and disease prevention and develop a plan to achieve an appropriate activity level.

STANDARDS:

1. Explain the normal benefits of a regular exercise program to health and well-being.
2. Review the basic exercise or activity recommendations for the treatment plan.
3. Discuss the relationship of increased physical activity or limited physical activity as applicable to this disease state/condition.
4. Assist the patient/family in developing an appropriate physical activity plan.
5. Refer to community resources as appropriate.

FU - FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

HM - HOME MANAGEMENT

OUTCOME: The patient/family will understand the home management of their disease process and make a plan for implementation.

STANDARDS:

1. Discuss the home management plan and methods for implementation of the plan.
2. Explain the importance of following a home management plan, i.e., fewer emergency room visits, fewer hospitalizations, and fewer complications.
3. Explain the use and care of any necessary home medical equipment.

HY - HYGIENE

OUTCOME: The patient will recognize good personal hygiene as an aspect of wellness.

STANDARDS:

1. Discuss hygiene as part of a positive self image.
2. Review bathing and daily dental hygiene habits.
3. Discuss the importance of hand-washing in infection control.
4. Discuss the importance of covering the mouth when coughing or sneezing.
5. Discuss any hygiene habits that are specifically pertinent to this disease state or condition.

L - PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about the disease process or condition.

STANDARDS:

1. Provide patient/family with written patient information on the disease state or condition.
2. Discuss the content of patient information literature with the patient/family.

LA - LIFESTYLE ADAPTATIONS

OUTCOME: The patient will strive to make the lifestyle adaptations necessary to prevent complications of the disease state or condition or to improve mental or physical health.

STANDARDS:

1. Review lifestyle aspects/changes that the patient has control over - diet, exercise, safety and injury prevention, avoidance of high risk behaviors, and full participation with treatment plan.
2. Emphasize that an important component in the prevention or treatment of disease is the patient's adaptation to a healthier, lower risk lifestyle.
3. Review the community resources available to assist the patient in making lifestyle changes. Refer as appropriate.

M - MEDICATIONS

OUTCOME: The patient/family will understand the goal of drug therapy and be able to demonstrate and explain use of the prescribed regimen.

STANDARDS:

1. Discuss proper use, benefits, common side effects, and common interactions of prescribed medications. Review signs of possible toxicity and appropriate follow-up as indicated.
2. Emphasize the importance of full participation with medication regimen.
3. Discuss the mechanism of action as needed.
4. Emphasize the importance of consulting with a health care provider prior to initiating any new medications, including over-the-counter medications.
5. Emphasize the importance of providing a list of all current medications, including non-prescription or traditional remedies, to the provider.

N - NUTRITION

OUTCOME: The patient will understand the need for balanced nutrition and plan for the implementation of dietary modification if needed.

STANDARDS:

1. Review normal nutritional needs for optimal health.
2. Discuss current nutritional habits. Assist the patient in identifying unhealthy nutritional habits.
3. Discuss nutritional modifications as related to the specific disease state/condition.
4. Emphasize the importance of full participation to the prescribed nutritional plan.

P - PREVENTION

OUTCOME: The patient/family will understand that healthy lifestyle behaviors can reduce the risk of developing diseases, conditions, or complications.

STANDARDS:

1. List lifestyle habits that increase the risk for the onset, progression, or spread of a specific disease/condition.
2. Identify behaviors that reduce the risk for the onset, progression, or spread of a specific disease/condition, i.e., immunizations, hand washing, exercise, proper nutrition, use of condoms.
3. Assist the patient in developing a plan for prevention.

PRO - PROCEDURES

OUTCOME: The patient/family will understand the proposed procedure, including indications, complications, and alternatives, as well as possible results of non-treatment.

STANDARDS:

1. Discuss the indications, risks, and benefits for the proposed procedure.
2. Explain the process and what to expect after the procedure.
3. Explain the necessary preparation, i.e., bowel preps, diet instructions, bathing.
4. Discuss pain management as appropriate.
5. Emphasize post-procedure management and follow-up.

S - SAFETY

OUTCOME: The patient/family will understand principles of injury prevention and plan a safe environment.

STANDARDS:

1. Explain that injuries are a major cause of death.
2. Discuss the regular use of seat belts and children's car seats, obeying the speed limit, and avoiding the use of alcohol and/or drugs while in a vehicle.
3. Assist the family in identifying ways to adapt the home to improve safety and prevent injuries, i.e., poison control, secure electrical cords, fire prevention.
4. Discuss injury prevention adaptations appropriate to the patient's age, disease state, or condition.
5. Identify which community resources promote safety and injury prevention. Provide information regarding key contacts for emergencies, i.e., 911, Poison Control, hospital ER, police.

TE - TESTS

OUTCOME: The patient/family will understand the test(s) to be performed including indications and its impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed and how it relates to the course of treatment.
3. Explain any necessary preparation for the test, i.e., fasting.
4. Explain the meaning of test results.

TX - TREATMENT

OUTCOME: The patient/family will understand the possible treatments that may be available based on the specific disease process, test results, and individual preferences.

STANDARDS:

1. Explain that the treatment plan will be made by the patient and medical team after reviewing available options.
2. Discuss the treatment plan including lifestyle adaptations, pharmacologic, surgical, and psychosocial aspects of the treatment plan.
3. Discuss the importance of adhering to the treatment plan, including scheduled follow-up.
4. Refer to community resources as appropriate.

MNT—Medical Nutrition Therapy

****For Use By Registered Dieticians Only****

MNT involves the assessment of the nutritional status of patients with a condition, illness, or injury that puts them at risk. Assessment must include review and analysis of medical and diet history, lab values, and anthropometric measurements. MNT is based on assessment, nutrition modalities most appropriate to manage the condition or treat the illness or injury.

MNT plays a key role throughout the continuum of care in all practice settings and phases of the life cycle, from prenatal care to care of the elderly. After nutrition screening identifies those at risk, appropriate MNT leads to improved health outcomes resulting in improved quality of life and cost savings.

The Dietetic Practitioner also referred to, as a Registered Dietitian is the only member of the health care team uniquely qualified to provide MNT.

REGISTERED DIETICIAN: An individual who has completed the minimum of a baccalaureate degree granted by a U.S. regionally accredited college or university or foreign equivalent, has met current minimum academic requirements and complete pre-professional experience, has successfully completed the Registration Examination for Dietitians, and has accrued 75 hours of approved continuing professional education every 5 years.

EDUCATION NEEDS ASSESSMENT CODES

INDIAN HEALTH SERVICE
EDUCATION NEEDS ASSESSMENT CODES

BAR—Barriers to Learning

BAR-BLND BLIND

OUTCOME: The patient states or demonstrates the inability to see, or the patient's inability to see is documented.

STANDARDS:

1. Assess the type and degree of impairment.
2. Determine any adaptive technique or equipment that could accommodate the deficit.
3. Determine if patient can read Braille.

BAR-COGI COGNITIVE IMPAIRMENT

OUTCOME: The patient states or demonstrates an inability to comprehend new information, or, the patient has a documented cognitive impairment problem.

STANDARDS:

1. Assess the type and degree of impairment.
2. Determine adaptive approaches to learning that can be utilize.
3. Plan with patient/family how to reinforce basic information and skills needed for self care.

BAR-DEAF DEAF

OUTCOME: The patient states or demonstrates the inability to hear, or, the patient's inability to hear is documented.

STANDARDS:

1. Assess the type of deafness (cause by such as accident, illness or disease).
2. Determine any adaptive technique or equipment that could accommodate the deficit.
3. Assess Sign language ability and as needed obtain a sign interpreter.
4. Assess ability to lip read, as appropriate, speak directly facing patient and move lips distinctly while speaking.
5. Determine if patient can communicate through writing.

6. Assess and document the on-set of deafness.

BAR-DNRE DOESN'T READ

OUTCOME: The patient states or demonstrates an inability to read, or the patients' inability to read English is documented.

STANDARDS:

1. Ask patient/family if patient reads English.
2. Ask patient/family if patient reads in their primary language. If yes, what language is that?
3. Assess patient's English literacy level (English may be a second language).
4. Provide appropriate written materials.
5. Plan with patient/family about approaches to learning other than reading.

BAR-EMOI EMOTIONAL IMPAIRMENT

OUTCOME: The patient's ability to learn is limited due to an emotional impairment.

STANDARDS:

1. Assess the type and degree of emotional impairment, i.e., mood disorder, psychotic symptoms, acute stress, anxiety, depression.
2. Provide the minimum amount of information needed with simple written information for reinforcement.
3. Refer to Mental Health for assessment and intervention.
4. Plan with patient/family how to reinforce basic information and skills needed for self care.

BAR-FIMS FINE MOTOR SKILLS DEFICIT

OUTCOME: The patient states or demonstrates fine motor skills impairment, like checking blood sugars or measuring medications, or, the patient has a documented fine motor skills deficit.

STANDARDS:

1. Assess the type and degree of impairment.
2. Determine any adaptive technique or equipment that could accommodate the impairment.

BAR-HEAR HARD OF HEARING

OUTCOME: The patient states or demonstrates a problem with hearing, or, the patient's hearing impairment is documented.

STANDARDS:

1. Assess the type and degree of impairment.
2. Determine any adaptive technique or equipment that could accommodate the impairment.
3. Assess ability to lip read, as appropriate, speak directly facing patient and move lips distinctly while speaking.
4. Determine if patient can communicate through writing.

BAR-INTN INTERPRETER NEEDED

OUTCOME: For patients who do not readily understand spoken English, an Interpreter is made available.

STANDARDS:

1. Identify the patient's primary language.
2. Determine their preferred language.
3. As appropriate, obtain an interpreter.

BAR – NONE NO BARRIERS

OUTCOME: The patient/family has no apparent barriers to learning.

STANDARDS:

1. Through interview and /or observation, determine or rule out any barriers that may affect ability to learn.

BAR-STRS SOCIAL STRESSORS

OUTCOME: The patient's ability to learn is limited due to social stressors.

STANDARDS:

1. Assess acute and on-going social stressors (e.g., family separation and conflict, disease, divorce, death, alcohol/substance abuse, domestic violence).
2. Provide the minimum amount of information needed with simple written information for reinforcement. As appropriate defer additional education until crisis is over.
3. Refer to social services or mental health for assessment and/or subsequent referrals.
4. Set-up a date for follow-up assessment as indicated.

BAR-VALU VALUES/BELIEF

OUTCOME: Define what is meant by "value" and "belief." Identify differences in patients and provider's values and beliefs.

Note: There is frequently a discrepancy between what patients value and believe versus what providers think is important (about self-care issues). Initiate open dialogue with the patient. Discuss differences and establish common ground on what the patient is willing to do concerning their health.

Value - A principal, standard, or quality regarded as worthwhile or desirable to the client.

Belief - Something believed or accepted as true by the client.

STANDARDS:

1. Attempt to verbalize the difference(s).
2. Ask questions to clarify patients prospective.
3. Try to identify areas of agreement.
4. Address areas for which there is agreement.
5. Discuss the concept of Locus of Control with patient. Which statement below best describes how the patient sees his/her ability to affect his/her health?
   a. I can control my life/health through my own effort
   b. My doctor/family member/friends control my life/health
   c. I am powerless to affect my life/health

BAR-VISI VISUALLY IMPAIRED

OUTCOME: The patient states or demonstrates difficulty with vision, or the patient's visual impairment is documented.

STANDARDS:

1. Assess the type and degree of impairment.
2. Determine any adaptive technique or equipment that could accommodate the deficit.
3. Determine if patient can communicate through writing.

LP—Learning Preference

LP-DOIT DO/PRACTICE

OUTCOME: The patient/family will understand that by doing or practicing a new skill is their preferred style of learning new information.

STANDARDS:

1. Review the most common styles of adult learning (talk/discussion, watching & doing, group discussion, watching videos, reading)
2. Explain that every individual is unique and will have their own method or preference(s) in how they receive new information.
3. Ask the patient/family, "In what way or ways do you learn best?"

LP-GP SMALL GROUP

OUTCOME: The patient/family will understand that participating in small groups is their preferred style of learning new information.

STANDARDS:

1. Review the most common styles of adult learning (talk/discussion, watching & doing, group discussion, watching videos, reading)
2. Explain that every individual is unique and will have their own method or preference(s) in how they receive new information.
3. Ask the patient/family, "In what way or ways do you learn best?"

LP-READ READ

OUTCOME: The patient/family will understand that reading is their preferred style of learning new information.

STANDARDS:

1. Review the most common styles of adult learning (talk/discussion, watching & doing, group discussion, watching videos, reading)
2. Explain that every individual is unique and will have their own method or preference(s) in how they receive new information.
3. Ask the patient/family, "In what way or ways do you learn best?"

LP-TALK TALK

OUTCOME: The patient/family will understand that talk is their preferred style of learning new information.

STANDARDS:

1. Review the most common styles of adult learning (talk/discussion, watching & doing, group discussion, watching videos, reading)
2. Explain that every individual is unique and will have their own method or preference(s) in how they receive new information.
3. Ask the patient/family, "In what way or ways do you learn best?"

LP-VIDO VIDEO

OUTCOME: The patient/family will understand that viewing videos is their preferred style of learning new information.

STANDARDS:

1. Review the most common styles of adult learning (talk/discussion, watching & doing, group discussion, watching videos, reading)
2. Explain that every individual is unique and will have their own method or preference(s) in how they receive new information.
3. Ask the patient/family, "In what way or ways do you learn best?"

RL—Readiness to Learn

RL-DSTR DISTRACTION

OUTCOME: The patient is unable to learn because of distractions.

STANDARDS:

1. Acknowledge that the environment contains distractions to learning such as noise or young children.
2. Determine any action that could negate or minimize the distraction.
3. Consider deferring educational session until stimuli causing distraction is no longer an issue.

RL – EAGR EAGER TO LEARN

OUTCOME: The patient/family understands or demonstrates a level of eagerness to learn at the beginning of an educational encounter.

STANDARDS:

1. Plan your educational encounter at the most opportunistic and appropriate time during the patient/family's care.
2. Ask the patient/family for their attention to the subject matter.
3. Observe their response to your request or to your presentation of the subject matter.

RL – RCPT RECEPTIVE

OUTCOME: The patient/family understands or demonstrates a receptive level of readiness to learn at the beginning of an educational encounter.

STANDARDS:

1. Plan your educational encounter at the most opportunistic and appropriate time during the patient/family's care.
2. Ask the patient/family for their attention to the subject matter.
3. Observe their response to your request or to your presentation of the subject matter.

RL-PAIN PAIN

OUTCOME: The patient understands or demonstrates through the use of body language a certain level of pain.

STANDARDS:

1. Plan your educational encounter at the most opportunistic and appropriate time during the patient/family's care.
2. Assess their level of pain. Does the patient require pain medication? If so, when was their last dose administered?
3. If appropriate, ask the patient for his/her attention to the subject matter.
4. Observe his/her response to your request or to your presentation of the subject matter.
5. Consider deferring or terminating the educational session if the patient is experiencing a high level of pain or is being medicated for pain.

RL-SVIL SEVERITY OF ILLNESS

OUTCOME: The patient/family will be unable to gain new knowledge due to a condition or severity of illness that would impair or prevent learning.

STANDARDS:

1. Plan your educational encounter at the most opportunistic and appropriate time during the patient/family's care.
2. Assess the severity of their illness. Consider their level or "alertness."
3. Determine if family is available to assist with the patients care. Assess the family's readiness to learn.
4. If appropriate, ask the patient/family for their attention to the subject matter.
5. Observe their response to your request or to your presentation of the subject matter.
6. Consider deferring or terminating the educational session if the patient is experiencing complications from the illness that may distract the family's attention.

RL-UNRC UNRECEPTIVE

OUTCOME: The patient/family understands or demonstrates an unreceptive level of readiness to learn at the beginning of a teaching encounter.

STANDARDS:

1. Plan your educational encounter at the most opportunistic and appropriate time during the patient/family's care.
2. Ask the patient/family for their attention to the subject matter.
3. Observe their response to your request or to your presentation of the subject matter.
4. Ask or suggest to patient/family if they would like to meet at another time for education session.

A

AOD—Alcohol and Other Drugs

AOD-C COMPLICATIONS

OUTCOME: The patient/family will understand how to avoid the complications of alcohol and other drug (AOD) abuse/dependence and develop a plan to slow the progression of the disease by full participation with a prescribed daily program.

STANDARDS:

1. Review the short and long term effects that AODs have on the body.
2. Discuss the progression of use, abuse, and dependence.
3. Review the effects of AOD abuse/dependence on the lifestyle of the individual, the family, and the community.

AOD-CCA CONTINUUM OF CARE

OUTCOME: The patient/family will understand the importance of integrated Continuum of Care in the treatment of AOD use disorders.

STANDARDS:

1. Discuss with patient/family the concept of Continuum of Care in the treatment of AOD use disorders including the pre-treatment, treatment, sobriety maintenance, follow-up, and relapse prevention phases.

2. Provide assistance and advocacy to the patient/family in obtaining integrated Continuum of Care services.

AOD-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)

2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.

3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.

4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.

5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.

6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

AOD-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the disease process of AOD abuse and addiction and understand the stages of change.

STANDARDS:

1. Review the current medical information, including physical, psycho-social, and spiritual consequences of the patient's specific AOD abuse/dependency.
2. Discuss the diagnosis of AOD abuse/dependence and provide an opportunity to recognize the disease process of abuse and dependence.
3. Explain the stages of change as applied to the progression of AOD abuse/dependence, i.e., pre-contemplation, contemplation, preparation, action, and maintenance.
4. Discuss the role of the family/support system in the recovery process and an AOD-free lifestyle.
5. Assist the patient/family in developing a plan for healthy and AOD-free lifestyle.

AOD-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity for a healthy and AOD-free life style and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Discuss the benefits of regular physical activity, i.e., reduced stress, weight maintenance, improved self image, and overall wellness.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
3. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.

AOD-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will understand the importance of utilizing available AOD resources to maintain a healthy and AOD-free lifestyle.

STANDARDS:

1. Provide patient/family with appropriate patient information (including literature and/or website addresses) to facilitate understanding and knowledge of AOD issues.
2. Discuss the content of patient information with the patient/family.

AOD-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand that alcohol and other drug (AOD) use disorder is a chronic disease, which can be treated.

STANDARDS:

1. Discuss the patient's AOD abuse/dependence and the impact on the patient/family lifestyle.
2. Discuss the patient's perceptions which promote AOD abuse/dependence and mechanisms to modify those perceptions and associated behaviors.
3. Discuss relapse risk of AOD abuse and the need to utilize family, cultural/spiritual and community resources to prevent relapse.
4. Explain that the patient/family and the care team will develop a plan to modify behavior that may precipitate the use of AOD.

AOD-M MEDICATIONS

OUTCOME: The patient/family will understand and fully participate the medication regimen.

STANDARDS:

1. Review the mechanism of action of the prescribed medication.
2. Discuss important or common side-effects of the prescribed medications.
3. Emphasize the importance of taking medications as prescribed, i.e., avoiding overuse, under use or misuse.
4. Review OTC medications (e.g., cough syrup) that contain ETOH/drug additives and the signs/symptoms of intentional/unintentional ingestion.

AOD-N NUTRITION

OUTCOME: The patient/family will understand the importance of nutritionally healthy food choices in the recovery process of AOD-use disorders.

STANDARDS:

1. Review patient's current eating habits and how these habits might be improved with a healthy eating plan.
2. Refer to a registered dietician, when appropriate, for a comprehensive nutritional assessment and meal plan.

AOD-P PREVENTION

OUTCOME: The patient/family will understand the dangers of AOD-use disorders to promote a healthy and AOD- free lifestyle.

STANDARDS:

1. Emphasize awareness of risk factors associated with AOD abuse and dependence, such as experimentation with alcohol and other drugs, binge drinking, and family history of AOD abuse and dependence.
2. Discuss the impact of comorbid conditions and psychosocial stressors on AOD abuse and dependence.
3. Discuss how AOD abuse and dependence adversely affects the patient, family and community.

AOD-PLC PLACEMENT

OUTCOME: The patient/family will understand the recommended level of care/placement as a treatment option for AOD-use disorders.

STANDARDS:

1. Explain the rationale for the recommended placement based on patient/family preference, level of need, court order, safety, eligibility, availability and funding.
2. Explain that the purpose of placement is to improve mental or physical health and to ensure a safe and supportive environment for recovery from AOD-use disorders.
3. Discuss alternative placement or treatment options if recommended placement is declined or unavailable.
4. Discuss patient/family fears and concerns regarding placement and provide advocacy and support during the placement process.

AOD-SCR SCREENING

OUTCOME: The patient/family will understand the process of screening for alcohol and other drug related issues to determine an individual's need for further evaluation and referral.

STANDARDS:

1. Discuss with patient/family the initial reason for the referral for AOD screening and obtain informed consent for the screening as needed.
2. If referring to another provider for screening, explain the referral process for AOD screening and provide assistance with a referral contact as needed.
3. Explain the screening results to the patient/family and the indications for additional referrals or treatment.

AOD-SM STRESS MANAGEMENT

OUTCOME: The patient/family will understand the role of stress management in the treatment of AOD abuse and dependence.

STANDARDS:

1. Discuss that uncontrolled stress may increase alcohol and other drug use and interfere with treatment.
2. Emphasize the importance of seeking professional help as needed to reduce stress.
3. Discuss the various stress management strategies which may help maintain a healthy AOD-free lifestyle. Examples may include:
    a. Becoming aware of your own reactions to stress
    b. Recognizing and accepting your limits
    c. Talking with people you trust about your worries or problems
    d. Setting realistic and meaningful goals
    e. Getting enough sleep
    f. Making healthy food choices
    g. Regular physical activity
    h. Taking vacations
    i. Practicing meditation
    j. Self-hypnosis
    k. Using positive imagery
    l. Practicing relaxation methods such as deep breathing or progressive muscular relaxation
    m. Spiritual or cultural activities.
4. Provide referrals as appropriate

AOD-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered and any necessary consent as needed.
2. Explain the indications, benefits and risks of the test to be performed, as appropriate, including the consequences of refusal.
3. Explain how the test relates to the course of treatment.
4. Explain the necessary preparation for the test, including appropriate collection or preparation.
5. Explain the meaning of the test results, as appropriate, and the implications for care.

AOD-WL WELLNESS

OUTCOME: The patient/family will understand factors that contribute to wellness.

STANDARDS:

1. Assist the patient/family to identify an AOD-free supportive social network
2. Encourage the patient/family to participate in AOD free family, social, cultural/spiritual and community activities.
3. Discuss the associated health risks with AOD abuse/dependence, i.e., including sexually transmitted infections, unplanned pregnancies, family dysfunction, acute illness, exacerbation of chronic health problems.
4. Explain that AOD use increases the risk of injury, i.e., motor vehicle crashes, falls, assaults.

ABX—Antibiotic Resistance

ABX-C COMPLICATIONS

OUTCOME: The patient/family will understand that antibiotics are reserved for bacterial infections and may have deleterious effects if used when treating viral infections

STANDARDS:

1. Discuss the term antibiotic resistance as bacteria developing methods to survive exposure to antibiotics.
2. Explain why antibiotics are only effective in treating bacterial infections.
3. Discuss the potential to create resistant bacteria every time an antibiotic is used.
4. Discuss the following ways to minimize antibiotic resistance:
    a. Restrict antibiotic use to bacterial infections and not for viral infections
    b. Educate patients why "saving" or "sharing" antibiotics can cause resistance
        i. Medications may be expired and have questionable efficacy
        ii. Antibiotics for one type of infection may not treat another type of infection due to resistance
        iii. When medications are saved or shared, the original infection needing antibiotic did not receive a full course and may reoccur resistant to the antibiotic.
5. Instruct on the importance of taking the medication as prescribed regarding dose and duration.
6. Advise patients to take their antibiotics for the full course of therapy as prescribed even if they "feel better" after a few days. The duration of therapy can keep infections from coming back and keep bacteria from developing resistance.
7. Discuss the implications of taking an antibiotic that is not needed:
    a. Creating antibiotic resistance bacteria
    b. Side effects usually nausea, vomiting, and diarrhea
    c. Allergic reactions
    d. Secondary infections, i.e., yeast infections, diarrhea
    e. Cost
8. Discuss the impact of resistant bacteria on the course of therapy and the limitations it provides in treatment.
    a. Resistance limits treatment options to antibiotics that may be more expensive, have more side effects, or require hospitalization for administration
    b. There is a risk of developing bacteria in your body that are completely resistant to all known antibiotics and may be fatal.

ABX-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the disease process of antibiotic resistance.

STANDARDS:

1. Discuss that antibiotic resistance occurs when bacteria change their structure and/or DNA so antibiotics no longer work. The bacteria have developed ways to survive antibiotics that are meant to kill them.
2. Discuss how antibiotic resistance may develop:
    a. Antibiotic resistance can occur by the bacteria developing a way to block the antibiotic, deactivate the antibiotic, or pump the antibiotic out of the bacteria.
    b. Antibiotic resistance occurs from exposure to an antibiotic when:
        i. Antibiotics are given to patients more often than guidelines set by federal and other healthcare organizations recommend. For example, patients sometimes ask their doctors for antibiotics for a cold, cough, or the flu, all of which are viral and don't respond to antibiotics.
        ii. Patients who are prescribed antibiotics who don't take the full dosing regimen can contribute to resistance. The bacteria is exposed to sub-therapeutic concentrations of antibiotic or duration of therapy allowing for the bacteria to survive and resistance to occur.
        iii. Food-producing animals are given antibiotic drugs for therapeutic reasons, disease prevention or production reasons. These drugs have the downside of potentially causing microbes to become resistant to drugs used to treat human illness.
3. Discuss which illnesses are commonly caused by viruses and do not require antibiotics. Some examples include colds, flu, coughs, bronchitis, ear infections, sinus congestion, and sore throats. Viral infections usually cannot be specifically treated with medications and must resolve on their own. Often the symptoms of viral infections can be helped with prescription or over-the-counter medications.
4. Discuss which illnesses are commonly caused by bacteria and require antibiotics including Streptococcal pharyngitis, pneumonia, ear, sinus, and urinary tract infections.
5. Explain how antibiotics specifically target bacteria and do not have any effect on the treatment of viruses.

ABX-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up if symptoms do not resolve after antibiotic treatment or viral infections.

STANDARDS:

1. Encourage the patient to seek follow-up management for viral infections if symptoms significantly worsen, last longer than 10 days, or fever lasts longer than 72 hours.
2. Encourage the patient to seek follow-up management for bacterial infections if the patient has taken the full course of antibiotics and symptoms return, symptoms worsen while taking antibiotics, or symptoms do not improve after a certain time period determined appropriate by the provider.

ABX-L LITERATURE

OUTCOME: The patient/family will receive written information about antibiotic resistance, viral illnesses, or bacterial infections.

STANDARDS:

1. Provide the patient/family with written patient information literature.
2. Discuss the content of the patient information literature with the patient/family.

ABX-M MEDICATION

OUTCOME: The patient/family will understand the role of appropriate antibiotic choice to minimize antibiotic resistance and to treat antibiotic resistant bacteria.

STANDARDS:

1. Discuss with the patient/family appropriate empiric therapy for the bacterial infection that is suspected.
2. Discuss the potential need to change the antibiotic after sensitivity testing due to antibiotic resistance of the infection.
3. Discuss the need to follow the directions for duration of therapy and doses per day exactly to prevent the development of antibiotic resistance and to prevent reoccurrence of the infection or development of superinfection.

ABX-P PREVENTION

OUTCOME: The patient/family will understand actions that may be taken to prevent the development of antibiotic resistant bacteria.

STANDARDS:

1. Instruct the patient/family to complete the full course of antibiotics at the proper dosing and duration.
2. Advise patient not to share or save antibiotics for the use by others or for future use.
3. Discuss with patient the importance of evaluating whether an infection is viral or bacterial. Encourage the patient not to insist on antibiotics if the infection is viral.

ABX-TE TESTS

OUTCOME: The patient/family will understand the importance of culturing a bacterial infection when possible and determining an appropriate antibiotic.

STANDARDS:

1. Discuss with the patient/family when it is appropriate to do cultures and antibiotic resistance testing.
2. Explain what test(s) will be ordered. Provide information on the necessity, benefits, and risks of the tests.
3. Explain how test results will be used to guide therapy.
4. Emphasize that there are still some infections for which empiric therapy is appropriate (i.e., sinus infections, community acquired pneumonia, strep throat) and sensitivity testing may not be required.
5. Explain that serious infections like hospital acquired pneumonia and recurrent infections may require culture and antibiotic sensitivity testing to select the appropriate treatment.
6. When appropriate, discuss that not all types of bacteria may be cultured and that additional antibiotics may have to be used to treat anaerobic bacteria.

ACC—Anticoagulation

ACC-C COMPLICATIONS

OUTCOME: The patient/family will understand the complications of anticoagulation therapy and/or failure to follow medical advice in the use of anticoagulation therapy.

STANDARDS:

1. Explain that failure to follow medical advice in anticoagulation therapy may result in a blood clot or uncontrollable bleeding.
2. Explain that even with correct dosing, disease processes that cause problems with clotting may have devastating outcomes including stroke, uncontrollable bleeding, deep venous thrombosis or death, etc.
3. Emphasize the importance of immediately seeking medical attention for unexplained bruising or bleeding, pain in the legs or chest, severe headache, confusion, dizziness or changes in vision, etc.

ACC–DP DISEASE PROCESS

OUTCOMES: The patient will understand what causes a blood clot, the risks of developing blood clots, and methods to prevent the formation of blood clots.

STANDARDS:

1. Review the causative factors as appropriate to the patient.
2. Review lifestyle factors which may put the patient at risk of developing a blood clot.
3. Discuss the patient's specific condition, including anatomy and pathophysiology as appropriate.
4. Discuss the signs and symptoms of active clotting or over-anticoagulation.

ACC–FU FOLLOW-UP

OUTCOMES: The patient/family will understand the importance of follow-up and make a plan to make and keep the follow-up appointments.

STANDARDS:

1. Emphasize the importance of follow-up care to adjustment medications and prevent complications.
2. Encourage full participation in the treatment plan and acceptance of the diagnosis.
3. Explain the procedure for obtaining follow-up appointments.

ACC–HM HOME MANAGEMENT

OUTCOMES: The patient/family will understand what lifestyle adaptations are necessary to cope with the patient's specific disorder and how diet and activity will interact with anticoagulation therapy.

STANDARDS:

1. Assess the patient/family's level of acceptance of the disorder.
2. Emphasize the importance of avoiding dangerous or hazardous activities while receiving anticoagulation therapy.
3. Review the areas that may require adaptations, i.e., diet and physical activity.

ACC–L LITERATURE

OUTCOMES: the patient/family will receive written information regarding anticoagulation therapy.

STANDARDS:

1. Provide the patient/family with written patient information literature on anticoagulation therapy.
2. Discuss the content of the patient information literature with the patient/family.

ACC–LA LIFESTYLE ADAPTATIONS

OUTCOMES: The patient/family will understand what lifestyle adaptations are necessary to cope with the patient's specific disorder and how diet and activity will interact with anticoagulation therapy.

STANDARDS:

1. Assess the patient/family's level of acceptance of the disorder.
2. Emphasize the importance of avoiding dangerous or hazardous activities while receiving anticoagulation therapy.
3. Review the areas that may require adaptations, i.e., diet and physical activity.

ACC–M MEDICATIONS

OUTCOMES: The patient will understand the goal of medication therapy and be able to demonstrate and explain use of the prescribed regimen.

STANDARDS:

1. Review the patient's medication. Reinforce the importance of knowing the medication, dose, and dosing interval of medications.
2. Review common and important side effects, signs of toxicity, and drug/drug and drug/food interactions of medications.
3. Explain that some over-the-counter medications or herbal products can alter the effect of the anticoagulation therapy.
4. Emphasize that a health care provider must be consulted prior to starting any new medications (prescription, OTC, or herbal) while receiving anticoagulation therapy.

ACC–N NUTRITION

OUTCOMES: The patient/family will understand the effect of various foods in relation to their anticoagulation therapy.

STANDARDS:

1. Explain the importance of a consistent diet while receiving anticoagulation therapy.
2. Explain how various foods may interact with the patient's medication to alter coagulation.
3. Explain how various foods may alter the results of laboratory tests.

ACC–S SAFETY AND INJURY PREVENTION

OUTCOMES: The patient/family will understand the risks associated with anticoagulation therapy and the measures that must be taken to avoid serious adverse effects.

STANDARDS:

1. Discuss the risks associated with anticoagulation therapy, i.e., bleeding, stroke, adverse drug reactions.
2. Inform the patient/family to seek immediate medical attention in the event of an adverse reaction resulting from anticoagulation therapy.
3. Discuss the importance of informing all health care workers of anticoagulation therapy.
4. Emphasize the importance of avoiding dangerous or hazardous activities while receiving anticoagulation therapy to prevent the risk of serious adverse effects (bleeding).

ACC-TE TESTS

OUTCOME: The patient/family will understand the test(s) proposed, the risk(s) and benefit(s) of the test(s) and the risk/benefit of non-performance of the testing. The patient/family will further understand that it is extremely important to have regular testing while on anticoagulation therapy.

STANDARDS:

1. Discuss the importance of regular laboratory testing in the management of anticoagulation therapy. Explain that this testing is necessary to appropriately adjust the medication as applicable.
2. Explain the risk/benefit ratio of testing vs. non-testing.

ASM—Asthma

ASM-C COMPLICATIONS

OUTCOME: The patient/family will understand how to prevent complications of asthma.

STANDARDS:

1. Discuss that the most common complications of asthma are exacerbation or infection. These complications often result from failure to fully participate with treatment regimens (i.e., medications, peak flows) or from exposure to environmental triggers or infections.
2. Emphasize early medical intervention for minor URIs, fever, cough, and shortness of breath can reduce the risk of complications, hospitalizations, E.R. visits, and chronic complications of the disease.
3. Stress the importance of fully participating in the treatment plan. Explain that failure to fully participate with the treatment plan may result in permanent scarring of the lungs.

ASM-DP DISEASE PROCESS

OUTCOME: The patient will understand the etiology and pathophysiology of asthma.

STANDARDS:

1. Review the anatomy and physiology of the respiratory system.
2. Discuss common triggers of asthma attacks, i.e., smoke, animal dander, cold air, exercise.
3. Explain that asthma is a chronic inflammatory disease and must be treated on a long-term ongoing basis.
4. Explain the various aspects of an asthma attack, including airway inflammation (swelling), mucus production, and constriction of airway muscles.
5. Explain that asthma is an atopic condition and may occur in combination with other atopic illnesses, i.e., nasal allergy. Explain that control of these concomitant illnesses may be necessary to control the asthma.

ASM-EQ EQUIPMENT

OUTCOME: Refer to outcomes for **ASM-NEB**, **PF**, **MDI**, and **SPA**.

STANDARDS:

1. **Refer to ASM-NEB, PF, MDI, and SPA.**

ASM-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
2. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
3. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
4. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
5. Discuss medical clearance issues for physical activity.
6. Discuss that exercise is a common trigger of asthma attacks and that inhalers or other medications may be necessary before engaging in athletic activities. Explain that for persons with severe asthma, exercise may need to be limited until the asthma is under better control.

ASM-FU FOLLOW-UP

OUTCOME: The patient will understand the importance of regular follow-up and will strive to keep scheduled appointments.

STANDARDS:

1. Discuss the importance of regular follow-up care in the prevention of complications and adjustment of medications.
2. Encourage full participation with the treatment plan. Assess the patient's understanding of the treatment plan and acceptance of the diagnosis.
3. Provide positive reinforcement for areas of achievement.
4. Refer to community resources as appropriate.
5. Emphasize the importance of consistent peak flow measurement and charting of these measurements. Emphasize the importance of bringing peak flow charts to clinic visits as they assist in management of the asthma.

ASM-HM HOME MANAGEMENT

OUTCOME: The patient and/or family will understand the home management of their disease process and make a plan for implementation.

STANDARDS:

1. Discuss home management plan and methods for implementation of the plan.
2. Explain the importance of following a home management plan, i.e., fewer emergency room visits and fewer hospitalizations.
3. Emphasize the importance of consistent peak flow measurement and charting of these measurements. Emphasize the importance of bringing peak flow charts to clinic visits as they assist in management of the asthma.
4. Emphasize the importance of correctly using inhalers and other medications as prescribed.
5. Identify and avoid environmental triggers (i.e., cigarette smoke, stress, environmental smoke, pollen, mold, dust, roaches, insecticides, paint fumes, perfumes, animal dander, cold air, sulfites, aspirin) as appropriate for the patient.

ASM-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about asthma.

STANDARDS:

1. Provide the patient/family with written patient information literature on asthma.
2. Discuss the content of the patient information literature with the patient/family.

ASM-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will strive to make the lifestyle adaptations necessary to prevent complications of asthma and prolong life.

STANDARDS:

1. Discuss which lifestyle changes the patient has the ability to change: cessation of smoking, dietary modifications, weight control, treatment participation, and exercise.
2. Re-emphasize how complications of asthma can be reduced or eliminated by such changes.
3. Review the community resources available to help the patient in making such lifestyle changes.
4. Identify and avoid environmental triggers (i.e., cigarette smoke, stress, environmental smoke, pollen, mold, dust, roaches, insecticides, paint fumes, perfumes, animal dander, cold air, sulfites, aspirin) as appropriate for the patient.

ASM-M MEDICATIONS

OUTCOME: The patient and/or family will understand the goal of drug therapy and be able to demonstrate and explain use of the prescribed medication regimen.

STANDARDS:

1. Review the patient's medications. Reinforce the importance of knowing the drug, dose, and dosing interval of medications.
2. Review common side effects, signs of toxicity, and drug interactions of medication(s).
3. Discuss the difference between fast relief and long-term control metered dose inhalers.
4. Explain the difference between maintenance and rescue drugs.
5. Emphasize full participation and explain how effective use of medications can facilitate a more active life style for the asthma patient.
6. Emphasize the importance of consulting with a health care provider before using any OTC medication.

ASM-MDI METERED-DOSE INHALERS

OUTCOME: The patient will be able to demonstrate correct technique for use of MDIs and understand their role in the management of asthma.

STANDARDS:

1. Instruct and demonstrate steps for standard or alternate use procedure for metered-dose inhalers and ways to clean and store the unit properly.
2. Review the importance of using consistent inhalation technique. **Refer to ASM-SPA.**

ASM-N NUTRITION

OUTCOME: The patient/family will understand nutritional factors that may effect or trigger asthma.

STANDARDS:

1. Discuss that some foods may affect asthma. Common triggers are milk products, egg products, wheat products, and other.
2. Refer to a registered dietician as appropriate.

ASM-NEB NEBULIZER

OUTCOME: The patient will be able to demonstrate effective use of the nebulizer device, discuss proper care and cleaning of the system, and describe its place in the care plan.

STANDARDS:

1. Describe proper use of the nebulizer including preparation of the inhalation mixture, inhalation technique, and care of equipment.
2. Discuss the nebulizer treatment as it relates to the medication regimen.

ASM-PF PEAK-FLOW METER

OUTCOME: The patient will be able to demonstrate correct use of the peak-flow meter and explain how its regular use can help achieve a more active lifestyle.

STANDARDS:

1. Discuss use and care of the peak flow meter as a tool for measurement of peak expiratory flow rate (PEFR) and degree of airway obstruction. Discuss peak flow zones in management of airway disease.
2. Explain how monitoring measurement of PEFR can provide an objective way to determine current respiratory function.
3. Emphasize how a regular monitoring schedule can help determine when emergency care is needed, prevent exacerbations through early intervention, and facilitate a more active lifestyle.
4. Explain that charting of peak flow values daily and bringing the chart to clinic visits will assist the provider in assessing the patient's current asthma control and in adjusting medications accordingly.

ASM-SHS SECOND-HAND SMOKE

OUTCOME: Provide the patient and/or family with an understanding of the adverse health consequences associated with exposure to second-hand tobacco smoke, and discuss methods for limiting exposure of nonsmokers to tobacco smoke.

STANDARDS:

1. Define "passive smoking", ways in which exposure occurs:
   a. Smoldering cigarette, cigar, or pipe
   b. Smoke that is exhaled from active smoker
   c. Smoke residue on clothing, upholstery, carpets or walls
2. Discuss harmful substances in smoke
   a. Nicotine
   b. Benzene
   c. Carbon monoxide
   d. Many other carcinogens (cancer causing substances)
3. Explain the increased risk of illness in the asthma patient when exposed to cigarette smoke either directly or via second-hand smoke.
4. Explain that cigarette smoke gets trapped in carpets, upholstery, and clothing and still increases the risk of illness even if the asthma patient is not in the room at the time that the smoking occurs.
5. Discuss factors that increase level of exposure to second-hand smoke and preventive methods for minimizing this exposure.
6. Encourage smoking cessation or at least never smoking in the home or car.

ASM-SPA SPACERS

OUTCOME: The patient will be able to demonstrate the correct use of spacers and understand their importance in delivery of medications.

STANDARDS:

1. Instruct and demonstrate proper technique for spacer use.
2. Discuss proper care and cleaning of spacers.
3. Explain how spacers improve the delivery of inhaled medications.

ASM-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Discuss the necessity, benefits and risks of the test to be performed, as appropriate, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Discuss the meaning of the test results, as appropriate.

ASM-TO TOBACCO (SMOKING)

OUTCOME: The patient and/or family will understand the dangers of smoking in the asthma patient and develop a plan to cut back or stop smoking.

STANDARDS:

1. Explain the increased risk of illness in the asthma patient when exposed to cigarette smoke.
2. Encourage smoking cessation. If the patient is unwilling to stop smoking, emphasize the importance of cutting back on the number of cigarettes smoked in an effort to quit or minimize increased risk of illness or hospitalization.
3. **Refer to TO**.

ADD—Attention Deficit Hyperactivity Disorder

ADD-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the nature of the disorder that is categorized into two diagnostic criteria: inattention and/or hyperactivity-impulsivity. The disorder usually manifests itself in childhood and continues into adulthood.

STANDARDS:

1. Discuss the current theories of the causes of attention deficit disorder:
   a. Neurological: Brain damage
   b. Neurotransmitter Imbalances: Dopamine, Norepinephrine, Serotonin - likely but not proven
   c. Environmental toxins: lead, prenatal exposure to cigarette smoke and alcohol
   d. Dietary Substances: Food additives, sugar, milk - not supported by most research
   e. Genetics
   f. Environmental Factors: Parenting and social variables
2. Discuss the three types of attention deficit disorder: Predominately Inattentive, Predominately Hyperactive/Impulsive or a combination of both.
3. Discuss the problems associated with attention deficit disorder: academic achievement, learning disabilities, health problems, social problems, and, sleep problems.
4. Discuss the prognosis for attention deficit disorder.

ADD-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept. Discuss prescription medications and how follow-up relates to the ability of the patient to get refills of medications.

ADD-GD GROWTH AND DEVELOPMENT

OUTCOME: The patient/family will understand that the growth of children with ADD/ADHD needs to be monitored closely.

STANDARDS:

1. **Refer to ADD-N.**

ADD-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about ADD/ADHD.

STANDARDS:

1. Provide patient/family with written patient information literature on the ADD/ADHD.
2. Discuss the content of patient information literature with the patient/family.

ADD-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family have an increased understanding of the factors that contribute to better outcomes for ADD Children and Adults.

STANDARDS:

1. Explain that the treatment of ADD requires family involvement in an ongoing fashion.
2. Discuss that effective therapy often requires restructuring home, community and school environments.
3. Explain that use of multiple, consistent, persistent interventions are necessary for a good outcome.
4. Discuss the need to advocate for, not against the child.
5. Discuss the importance of positive reinforcement for good behaviors and support of self esteem.
6. Discuss the effects of parental stress and marital problems on children. Further discuss that ADD may exacerbate parental stress and marital problems. Explain that these problems should not be ignored and that appropriate help should be sought as soon as the problem is identified.

ADD-M MEDICATION

OUTCOME: The patient/family will understand the importance of fully participating with a prescribed medication regimen, if applicable

STANDARDS:

1. Review the proper use, benefits and common side effects of the prescribed medication.
2. Discuss drug and food interactions with prescribed medication.
3. Briefly review the mechanism of action of the medication if appropriate.
4. Explain that the medication should be stored in a safe place to avoid accidental overdoseage.

ADD-N NUTRITION

OUTCOME: The patient/family will understand nutritional requirements for the child with ADD/ADHD and will plan for adequate nutritional support.

STANDARDS:

1. Explain that the hyperactive child will often burn more calories than age-matched peers and will require additional caloric intake for adequate growth.
2. Discuss that many medications used for ADD/ADHD suppress appetite. Timing of medication may need to be adjusted to optimize hunger at mealtimes.
3. Explain that children with ADD are distractible and may need to be reminded to eat.

ADD-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed to diagnose ADD/ADHD.

STANDARDS:

1. Discuss the test(s) to be performed to diagnose ADD/ADHD. Answer the patient/family questions regarding the testing process.
2. Refer to Behavioral Health or other community resources as appropriate.

ADD-TX TREATMENT

OUTCOME: The patient/family will understand that the four components of treatment of ADD symptoms are based on biologically-based handicaps.

STANDARDS:

1. Discuss that the therapy for ADD is multifactorial and may consist of:
    a. Parent Education
    b. Behavior Management and Behavior Therapy
    c. Educational Management
    d. Medication Therapy

B

BWP—Biological Weapons

Information obtained from USAMRIID's Medical Management of Biological Casualties Handbook, Fourth Edition, February 2001

The information contained in these codes can be used to guide patient education and should not be relied upon as a source for guiding therapeutic decisions. For all questions related to treatment and vaccinations, please contact the most recent update of the USAMRIID's Medical Management of Biological Casualties Handbook, your state guidelines, and/or your hospital's policy and procedures.

BWP-C COMPLICATIONS

OUTCOME: The patient/family will understand the potential consequences of exposure to a biological weapon and will understand the effects, consequences possible as a result of this exposure, failure to manage the exposure, or as a result of treatment.

STANDARDS:

1. Discuss common or significant complications that may occur after exposure to biological weapons as appropriate.
2. Discuss common or significant complications which may be prevented by fully participating in the treatment regimen.
3. Discuss common or significant complications which may result from treatment(s).

BWP-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

BWP-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the expected course of disease resulting from exposure to the biological weapon.

STANDARDS:

1. Discuss the current information about the suspected biological weapon including the time-course, clinical features, and pathophysiology.
2. Discuss the signs/symptoms and usual progression of the suspected biological weapon.
    a. **Anthrax:** The incubation period is generally 1-6 days, although longer periods have been noted. Fever, malaise, fatigue, cough and mild chest discomfort progresses to severe respiratory distress with dyspnea, diaphoresis, stridor, cyanosis, and shock. Death typically occurs within 24-36 hours after onset of severe symptoms. Anthrax presents as three somewhat distinct clinical syndromes in humans: cutaneous, inhalational, and gastrointestinal disease. The cutaneous form (also referred to as a malignant pustule) occurs most frequently on the hands and forearms of persons working with infected livestock. It begins as a papule followed by formation of a fluid-filled vesicle. The vesicle typically dries and forms a coal-black scab (eschar), hence the term anthrax (from the Greek for coal).

This local infection can occasionally disseminate into a fatal systemic infection. Gastrointestinal anthrax is rare in humans, and is contracted by the ingestion of insufficiently cooked meat from infected animals. Endemic inhalational anthrax, known as Woolsorters' disease, is also a rare infection contracted by inhalation of the spores. It occurs mainly among workers in an industrial

b. **Brucellosis:** Brucellosis has a low mortality rate (5% of untreated cases), with rare deaths caused by endocarditis or meningitis. Also, given that the disease has a relatively long and variable incubation period (5-60 days), and that many naturally occurring infections are asymptomatic, its usefulness as a weapon may be diminished. Large aerosol doses, however, may shorten the incubation period and increase the clinical attack rate, and the disease is relatively prolonged, incapacitating, and disabling in its natural form. Brucellosis, also known as "undulant fever", typically presents as a nonspecific febrile illness resembling influenza. Fever, headache, myalgias, arthralgias, back pain, sweats, chills, generalized weakness, and malaise are common complaints. Cough and pleuritic chest pain occurs in up to twenty percent of cases, but acute pneumonitis is unusual, and pulmonary symptoms may not correlate with radiographic findings. The chest x-ray is often normal, but may show lung abscesses, single or miliary nodules, bronchopneumonia, enlarged hilar lymph nodes, and pleural effusions. Gastrointestinal symptoms (anorexia, nausea, vomiting, diarrhea and constipation) occur in up to 70 percent of adult cases, but less frequently in children. Ileitis, colitis, and granulomatous or mononuclear infiltrative hepatitis may occur, with hepato- and splenomegaly present in 45-63 percent of cases. Lumbar pain and tenderness can occur in up to 60% of brucellosis cases and are sometimes due to various osteoarticular infections of the axial skeleton. Vertebral osteomyelitis, intervertebral disc space infection, paravertebral abscess, and sacroiliac infection occur in a minority of cases, but may be a cause of chronic symptoms. Consequently, persistent fever following therapy or the prolonged presence of significant musculoskeletal complaints should prompt CT or MR imaging. 99m Technetium and 67 Gallium scans are also reasonably sensitive means for detecting sacroiliitis and other axial skeletal infections. Joint involvement in brucellosis may vary from pain to joint immobility and effusion. While the sacroiliac joints are most commonly involved, peripheral joints (notably, hips, knees, and ankles) may also be affected. Meningitis complicates a small minority of brucellosis cases, and encephalitis, peripheral neuropathy, radiculoneuropathy and meningovascular syndromes have also been observed in rare instances. Behavioral disturbances and psychoses appear to occur out of proportion to the height of fever, or to the amount of overt CNS disease. This raises questions about an ill-defined neurotoxic component of brucellosis.

c. **Glanders and Melioidosis:** Incubation period ranges from 10-14 days after inhalation. Onset of symptoms may be abrupt or gradual. Inhalational

exposure produces fever (common in excess of 102 F), rigors, sweats, myalgias, headache, pleuritic chest pain, cervical adenopathy, hepatosplenomegaly, and generalized papular / pustular eruptions. Acute pulmonary disease can progress and result in bacteremia and acute septicemic disease. Both diseases are almost always fatal without treatment. Both glanders and melioidosis may occur in an acute localized form, as an acute pulmonary infection, or as an acute fulminant, rapidly fatal, sepsis. Combinations of these syndromes may occur in human cases. Also, melioidosis may remain asymptomatic after initial acquisition, and remain quiescent for decades. However, these patients may present with active melioidosis years later, often associated with an immune-compromising state. Aerosol infection produced by a BW weapon containing either B. mallei or B. pseudomallei could produce any of these syndromes. The incubation period ranges from 10- 14 days, depending on the inhaled dose and agent virulence. The septicemic form begins suddenly with fever, rigors, sweats, myalgias, pleuritic chest pain, granulomatous or necrotizing lesions, generalized erythroderma, jaundice, photophobia, lacrimation, and diarrhea. Physical examination may reveal fever, tachycardia, cervical adenopathy and mild hepatomegaly or splenomegaly. Blood cultures are usually negative until the patient is moribund. Mild leukocytosis with a shift to the left or leukopenia may occur. The pulmonary form may follow inhalation or arise by hematogenous spread. Systemic symptoms as described for the septicemic form occur. Chest radiographs may show miliary nodules (0.5-1.0 cm) and/or a bilateral bronchopneumonia, segmental, or lobar pneumonia, consolidation, and cavitating lung lesions. Acute infection of the oral, nasal, and/ or conjunctival mucosa can cause mucopurulent, blood-streaked discharge from the nose, associated with septal and turbinate nodules and ulcerations. If systemic invasion occurs from mucosal or cutaneous lesions then a papular and / or pustular rash may occur that can be mistaken for smallpox (another possible BW agent). Evidence of dissemination of these infections includes the presence of skin pustules, abscesses of internal organs, such as liver and spleen, and multiple pulmonary lesions. This form carries a high mortality, and most patients develop rapidly progressive septic shock. The chronic form is unlikely to be present within 14 days after a BW aerosol attack. It is characterized by cutaneous and intramuscular abscesses on the legs and arms. These lesions are associated with enlargement and induration of the regional lymph channels and nodes. The chronic form may be asymptomatic, especially with melioidosis. There have been cases associated with the development of steomyelitis, brain abscess, and meningitis.

d. **Plague:** Pneumonic plague begins after an incubation period of 1-6 days, with high fever, chills, headache, malaise, followed by cough (often with hemoptysis), progressing rapidly to dyspnea, stridor, cyanosis, and death. Gastrointestinal symptoms are often present. Death results from respiratory failure, circulatory collapse, and a bleeding diathesis. Bubonic

plague, featuring high fever, malaise, and painful lymph nodes (buboes) may progress spontaneously to the septicemic form (septic shock, thrombosis, DIC) or to the pneumonic form. Plague normally appears in three forms in man: bubonic, septicemic, and pneumonic. The bubonic form begins after an incubation period of 2-10 days, with acute and fulminant onset of nonspecific symptoms, including high fever, malaise, headache, myalgias, and sometimes nausea and vomiting. Up to half of patients will have abdominal pain. Simultaneous with or shortly after the onset of these nonspecific symptoms, the bubo develops – a swollen, very painful, infected lymph node. Buboes are normally seen in the femoral or inguinal lymph nodes as the legs are the most commonly flea-bitten part of the adult human body. The liver and spleen are often tender and palpable. One quarter of patients will have various types of skin lesions: a pustule, vesicle, eschar or papule (containing leukocytes and bacteria) in the lymphatic drainage of the bubo, and presumably representing the site of the inoculating flea bite. Secondary septicemia is common, as greater than 80 percent of blood cultures are positive for the organism in patients with bubonic plague. However, only about a quarter of bubonic plague patients progress to clinical septicemia. In those that do progress to secondary septicemia, as well as those presenting septicemic but without lymphadenopathy (primary septicemia), the symptoms are similar to other Gram-negative septicemias: high fever, chills, malaise, hypotension, nausea, vomiting, and diarrhea. However, plague septicemia can also produce thromboses in the acral vessels, with necrosis and gangrene, and DIC. Black necrotic appendages and more proximal purpuric lesions caused by endotoxemia are often present. Organisms can spread to the central nervous system, lungs, and elsewhere. Plague meningitis occurs in about 6% of septicemic and pneumonic cases. Pneumonic plague is an infection of the lungs due to either inhalation of the organisms (primary pneumonic plague), or spread to the lungs from septicemia (secondary pneumonic plague). After an incubation period varying from 1 to 6 days for primary pneumonic plague (usually 2-4 days, and presumably dose-dependent), onset is acute and often fulminant. The first signs of illness include high fever, chills, headache, malaise, and myalgias, followed within 24 hours by a cough with bloody sputum. Although bloody sputum is characteristic, it can sometimes be watery or, less commonly, purulent. Gastrointestinal symptoms, including nausea, vomiting, diarrhea, and abdominal pain, may be present. Rarely, a cervical bubo might result from an inhalational exposure. The chest X-ray findings are variable, but most commonly reveal bilateral infiltrates, which may be patchy or consolidated. The pneumonia progresses rapidly, resulting in dyspnea, stridor, and cyanosis. The disease terminates with respiratory failure, and circulatory collapse. Nonspecific laboratory findings include a leukocytosis, with a total WBC count up to 20,000 cells with increased bands, and greater than 80 percent polymorphonuclear cells. One also often finds increased fibrin split products in the blood indicative of a low-

grade DIC. The BUN, creatinine, ALT, AST, and bilirubin may also be elevated, consistent with multi-organ failure. In man, the mortality of untreated bubonic plague is approximately 60 percent (reduced to <5% with prompt effective therapy), whereas in untreated pneumonic plague the mortality rate is nearly 100 percent, and survival is unlikely if treatment is delayed beyond 18 hours of infection. In the U.S. in the past 50 years, 4 of the 7 pneumonic plague patients (57%) died. Recent data from the ongoing Madagascar epidemic, which began in 1989, corroborate that figure; the mortality associated with respiratory involvement was 57%, while that for bubonic plague was 15%.

e. **Q-Fever:** Fever, cough, and pleuritic chest pain may occur as early as ten days after exposure. Patients are not generally critically ill, and the illness lasts from 2 days to 2 weeks. Following the usual incubation period of 2-14 days, Q fever generally occurs as a self-limiting febrile illness lasting 2 days to 2 weeks. The incubation period varies according to the numbers of organisms inhaled, with longer periods between exposure and illness with lower numbers of inhaled organisms (up to forty days in some cases). The disease generally presents as an acute non-differentiated febrile illness, with headaches, fatigue, and myalgias as prominent symptoms. Physical examination of the chest is usually normal. Pneumonia, manifested by an abnormal chest x-ray, occurs in half of all patients, but only around half of these, or 28 percent of patients, will have a cough (usually non-productive) or rales. Pleuritic chest pain occurs in about one-fourth of patients with Q fever pneumonia. Chest radiograph abnormalities, when present, are patchy infiltrates that may resemble viral or mycoplasma pneumonia. Rounded opacities and adenopathy have also been described. Approximately 33 percent of Q fever cases will develop acute hepatitis. This can present with fever and abnormal liver function tests with the absence of pulmonary signs and symptoms. Uncommon complications include chronic hepatitis, culture-negative endocarditis, aseptic meningitis, encephalitis and osteomyelitis. Most patients who develop endocarditis have pre-existing valvular heart disease.

f. **Tularemia:** Ulceroglandular tularemia presents with a local ulcer and regional lymphadenopathy, fever, chills, headache and malaise. Typhoidal tularemia presents with fever, headache, malaise, substernal discomfort, prostration, weight loss and a non-productive cough. After an incubation period varying from 1-21 days (average 3-5 days), presumably dependent upon the dose of organisms, onset is usually acute. Tularemia typically appears in one of six forms in man depending upon the route of inoculation: typhoidal, ulceroglandular, glandular, oculoglandular, oropharyngeal, and pneumonic tularemia. In humans, as few as 10 to 50 organisms will cause disease if inhaled or injected intradermally, whereas approximately 10 organisms are required with oral challenge. Typhoidal tularemia (5-15 percent of naturally acquired cases) occurs mainly after inhalation of infectious aerosols, but can occur after intradermal or gastrointestinal challenge. F. tularensis would presumably be most likely

delivered by aerosol in a BW attack and would primarily cause typhoidal tularemia. It manifests as fever, prostration, and weight loss, but unlike most other forms of the disease, presents without lymphadenopathy. Pneumonia may be severe and fulminant and can be associated with any form of tularemia (30% of ulceroglandular cases), but it is most common in typhoidal tularemia (80% of cases). Respiratory symptoms, substernal discomfort, and a cough (productive and non-productive) may also be present. Case fatality rates following a BW attack may be greater than the 1-3 % seen with appropriately treated natural disease. Case fatality rates are about 35% in untreated naturally acquired typhoidal cases. Ulceroglandular tularemia (75-85 percent of cases) is most often acquired through inoculation of the skin or mucous membranes with blood or tissue fluids of infected animals. It is characterized by fever, chills, headache, malaise, an ulcerated skin lesion, and painful regional lymphadenopathy. The skin lesion is usually located on the fingers or hand where contact occurs. Glandular tularemia (5-10 percent of cases) results in fever and tender lymphadenopathy but no skin ulcer. Oculoglandular tularemia (1-2 percent of cases) occurs after inoculation of the conjunctivae by contaminated hands, splattering of infected tissue fluids, or by aerosols. Patients have unilateral, painful, purulent conjunctivitis with preauricular or cervical lymphadenopathy. Chemosis, periorbital edema, and small nodular lesions or ulcerations of the palpebral conjunctiva are noted in some patients. Oropharyngeal tularemia refers to primary ulceroglandular disease confined to the throat. It produces an acute exudative or membranous pharyngotonsillitis with cervical lymphadenopathy. Pneumonic tularemia is a severe atypical pneumonia that may be fulminant and with a high case fatality rate if untreated. It can be primary following inhalation of organisms or secondary following hematogenous / septicemic spread. It is seen in 30-80 percent of the typhoidal cases and in 10-15 percent of the ulceroglandular cases. The case fatality rate without treatment is approximately 5 percent for the ulceroglandular form and 35 percent for the typhoidal form. All ages are susceptible, and recovery is generally followed by permanent immunity.

g. **Smallpox:** Clinical manifestations begin acutely with malaise, fever, rigors, vomiting, headache, and backache. 2-3 days later lesions appear which quickly progress from macules to papules, and eventually to pustular vesicles. They are more abundant on the extremities and face, and develop synchronously. The incubation period of smallpox averaged 12 days, although it could range from 7-19 days following exposure. Clinical manifestations begin acutely with malaise, fever, rigors, vomiting, headache, and backache; 15% of patients developed delirium. Approximately 10% of light-skinned patients exhibited an erythematous rash during this phase. Two to three days later, an enanthem appears concomitantly with a discrete rash about the face, hands and forearms. Following eruptions on the lower extremities, the rash spread centrally to the trunk over the next week. Lesions quickly progressed from macules to

papules, and eventually to pustular vesicles. Lesions were more abundant on the extremities and face, and this centrifugal distribution is an important diagnostic feature. In distinct contrast to varicella, lesions on various segments of the body remain generally synchronous in their stages of development. From 8 to 14 days after onset, the pustules form scabs that leave depressed depigmented scars upon healing. Although variola concentrations in the throat, conjunctiva, and urine diminish with time, virus can be readily recovered from scabs throughout convalescence. Therefore, patients should be isolated and considered infectious until all scabs separate. For the past century, two distinct types of smallpox were recognized. Variola minor was distinguished by milder systemic toxicity and more diminutive pox lesions, and caused 1% mortality in unvaccinated victims. However, the prototypical disease variola major caused mortality of 3% and 30% in the vaccinated and unvaccinated, respectively. Other clinical forms associated with variola major, flat-type and hemorrhagic type smallpox were notable for severe mortality. A naturally occurring relative of variola, monkey pox, occurs in Africa, and is clinically indistinguishable from smallpox with the exception of a lower case fatality rate and notable enlargement of cervical and inguinal lymph nodes.

h. **Venezuelan Equine Encephalitis:** Incubation period 1-6 days. Acute systemic febrile illness with encephalitis developing in a small percentage (4% children; < 1% adults). Generalized malaise, spiking fevers, rigors, severe headache, photophobia, and myalgias for 24-72 hours. Nausea, vomiting, cough, sore throat, and diarrhea may follow. Full recovery from malaise and fatigue takes 1-2 weeks. The incidence of CNS disease and associated morbidity and mortality would be much higher after a BW attack. Susceptibility is high (90-100%), and nearly 100% of those infected develop overt illnesses. The overall case fatality rate for VEE is < 1%, although it is somewhat higher in the very young or aged. Recovery from an infection results in excellent short-term and long-term immunity. VEE is primarily an acute, incapacitating, febrile illness with encephalitis developing in only a small percentage of the infected population. Most VEE infections are mild (EEE and WEE are predominantly encephalitis infections). After an incubation period from 1-6 days, onset is usually sudden. The acute phase lasts 24-72 hours and is manifested by generalized malaise, chills, spiking high fevers (38˚ C-40.5 ˚ C), rigors, severe headache, photophobia, and myalgias in the legs and lumbosacral area. Nausea, vomiting, cough, sore throat, and diarrhea may follow. Physical signs include conjunctival injection, erythematous pharynx and muscle tenderness. Patients would be incapacitated by malaise and fatigue for 1-2 weeks before full recovery. During natural epidemics, approximately 4% of infected children (<15 years old) and less than 1% of adults will develop signs of severe CNS infection (35% fatality for children and 10% for adults). Adults rarely develop neurologic complications during natural infections. Experimental aerosol challenges

in animals suggest that the incidence of CNS disease and associated morbidity and mortality would be much higher after a BW attack, as the VEE virus would infect the olfactory nerve and spread directly to the CNS. Mild CNS findings would include lethargy, somnolence, or mild confusion, with or without nuchal rigidity. Seizures, ataxia, paralysis, or coma follow more severe CNS involvement. VEE infection during pregnancy may cause encephalitis in the fetus, placental damage, abortion, or severe congenital neuroanatomical anomalies.

i. **Viral Hemorrhagic Fevers (VHF):** VHFs are febrile illnesses which can feature flushing of the face and chest, petechiae, bleeding, edema, hypotension, and shock. Malaise, myalgias, headache, vomiting, and diarrhea may occur in any of the hemorrhagic fevers. The clinical syndrome that these viruses may cause is generally referred to as viral hemorrhagic fever, or VHF. The target organ in the VHF syndrome is the vascular bed; accordingly, the dominant clinical features are usually due to microvascular damage and changes in vascular permeability. Not all infected patients develop VHF. There is both divergence and uncertainty about which host factors and viral strain characteristics might be responsible for the mechanisms of disease. For example, an immunopathogenic mechanism has been identified for dengue hemorrhagic fever, which usually occurs among patients previously infected with a heterologous dengue serotype. Antibody directed against the previous strain enhances uptake of dengue virus by circulating monocytes. These cells express viral antigens on their surfaces. Lysis of the infected monocytes by cytotoxic T-cell responses results in the release of pro-inflammatory cytokines, pro-coagulants, and anticoagulants, which in turn results in vascular injury and permeability, complement activation, and a systemic coagulopathy. DIC has been implicated in Rift Valley, Marburg and Ebola fevers, but in most VHFs the etiology of the coagulopathy is multifactorial (e.g., hepatic damage, consumptive coagulopathy, and primary marrow injury to megakaryocytes). Common symptoms are fever, myalgia, and prostration. Physical examination may reveal only conjunctival injection, mild hypotension, flushing, and petechial hemorrhages. Full-blown VHF typically evolves to shock and generalized mucous membrane hemorrhage, and often is accompanied by evidence of pulmonary hematopoietic, and neurologic involvement. Renal insufficiency is proportional to cardiovascular compromise, except in HFRS, which features renal failure as an integral part of the disease process. Apart from epidemiologic and intelligence information, some distinctive clinical features may suggest a specific etiologic agent. While hepatic involvement is common among the VHFs, a clinical picture dominated by jaundice and other features of hepatitis is only seen in some cases of Rift Valley fever, Congo-Crimean, Marburg, and Ebola HFs, and yellow fever. Kyanasur Forest disease and Omsk hemorrhagic fever are notable for pulmonary involvement, and a biphasic illness with subsequent CNS manifestations. Among the arenavirus infections, Lassa fever can

cause severe peripheral edema due to capillary leak, but hemorrhage is uncommon, while hemorrhage is commonly caused by the South American arenaviruses. Severe hemorrhage and nosocomial transmission are typical for Congo-Crimean HF. Retinitis is commonly seen in Rift Valley fever, and hearing loss is common among Lassa fever survivors. Because of their worldwide occurrence, additional consideration should be given to Hantavirus infections. Classic HFRS has a severe course that progresses sequentially from fever through hemorrhage, shock, renal failure, and polyuria. Nephropathia endemica features prominent fever, myalgia, abdominal pain, and oliguria, without shock or severe hemorrhagic manifestations. North American cases of Hantavirus Pulmonary Syndrome (HPS) due to the Sin Nombre virus lack hemorrhagic manifestations and renal failure, but nevertheless carry a very high mortality due to rapidly progressive and severe pulmonary capillary leak, which presents as ARDS. These syndromes may overlap. Subclinical or clinical pulmonary edema may occur in HFRS and nephropathia endemica, while HFRS has complicated HPS due to South American Hantaviruses and the Bayou and Black Creek Canal viruses in North America. Mortality may be substantial, ranging from 0.2% percent for nephropathia endemica, to 50 to 90 percent among Ebola victims.

j. **Botulinum:** Usually begins with cranial nerve palsies, including ptosis, blurred vision, diplopia, dry mouth and throat, dysphagia, and dysphonia. This is followed by symmetrical descending flaccid paralysis, with generalized weakness and progression to respiratory failure. Symptoms begin as early as 12-36 hours after inhalation, but may take several days after exposure to low doses of toxin. The onset of symptoms of inhalation botulism usually occurs from 12 to 36 hours following exposure, but can vary according to the amount of toxin absorbed, and could be reduced following a BW attack. Recent primate studies indicate that the signs and symptoms may not appear for several days when a low dose of the toxin is inhaled versus a shorter time period following ingestion of toxin or inhalation of higher doses. Cranial nerve palsies are prominent early, with eye symptoms such as blurred vision due to mydriasis, diplopia, ptosis, and photophobia, in addition to other cranial nerve signs such as dysarthria, dysphonia, and dysphagia. Flaccid skeletal muscle paralysis follows, in a symmetrical, descending, and progressive manner. Collapse of the upper airway may occur due to weakness of the oropharyngeal musculature. As the descending motor weakness involves the diaphragm and accessory muscles of respiration, respiratory failure may occur abruptly. Progression from onset of symptoms to respiratory failure has occurred in as little as 24 hours in cases of severe food borne botulism. The autonomic effects of botulism are manifested by typical anticholinergic signs and symptoms: dry mouth, ileus, constipation, and urinary retention. Nausea and vomiting may occur as nonspecific sequelae of an ileus. Dilated pupils (mydriasis) are seen in approximately 50 percent of cases. Sensory symptoms usually do not occur. Botulinum

toxins do not cross the blood/brain barrier and do not cause CNS disease. However, the psychological sequelae of botulism may be severe and require specific intervention. Physical examination usually reveals an afebrile, alert, and oriented patient. Postural hypotension may be present. Mucous membranes may be dry and crusted and the patient may complain of dry mouth or sore throat. There may be difficulty with speaking and swallowing. Gag reflex may be absent. Pupils may be dilated and even fixed. Ptosis and extraocular muscle palsies may also be present. Variable degrees of skeletal muscle weakness may be observed depending on the degree of progression in an individual patient. Deep tendon reflexes may be present or absent. With severe respiratory muscle paralysis, the patient may become cyanotic or exhibit narcosis from CO 2 retention.

k. **Ricin:** Acute onset of fever, chest tightness, cough, dyspnea, nausea, and arthralgias occurs 4 to 8 hours after inhalational exposure. Airway necrosis and pulmonary capillary leak resulting in pulmonary edema would likely occur within 18-24 hours, followed by severe respiratory distress and death from hypoxemia in 36-72 hours. The clinical picture in intoxicated victims would depend on the route of exposure. After aerosol exposure, signs and symptoms would depend on the dose inhaled. Accidental sublethal aerosol exposures which occurred in humans in the 1940's were characterized by acute onset of the following symptoms in 4 to 8 hours: fever, chest tightness, cough, dyspnea, nausea, and arthralgias. The onset of profuse sweating some hours later was commonly the sign of termination of most of the symptoms. Although lethal human aerosol exposures have not been described, the severe pathophysiologic changes seen in the animal respiratory tract, including necrosis and severe alveolar flooding, are probably sufficient to cause death from ARDS and respiratory failure. Time to death in experimental animals is dose dependent, occurring 36-72 hours post inhalation exposure. Humans would be expected to develop severe lung inflammation with progressive cough, dyspnea, cyanosis and pulmonary edema. By other routes of exposure, ricin is not a direct lung irritant; however, intravascular injection can cause minimal pulmonary perivascular edema due to vascular endothelial injury. Ingestion causes necrosis of the gastrointestinal epithelium, local hemorrhage, and hepatic, splenic, and renal necrosis. Intramuscular injection causes severe local necrosis of muscle and regional lymph nodes with moderate visceral organ involvement.

l. **Staphylococcal Enterotoxin B:** Latent period of 3-12 hours after aerosol exposure is followed by sudden onset of fever, chills, headache, myalgia, and nonproductive cough. Some patients may develop shortness of breath and retrosternal chest pain. Patients tend to plateau rapidly to a fairly stable clinical state. Fever may last 2 to 5 days, and cough may persist for up to 4 weeks. Patients may also present with nausea, vomiting, and diarrhea if they swallow the toxin. Presumably, higher exposure can lead to septic shock and death. Symptoms of SEB intoxication begin after a latent period of 3-12 hours after inhalation, or 4-10 hours after ingestion.

Symptoms include nonspecific flu-like symptoms (fever, chills, headache, myalgias), and specific features dependent on the route of exposure. Oral exposure results in predominantly gastrointestinal symptoms: nausea, vomiting, and diarrhea. Inhalation exposures produce predominantly respiratory symptoms: nonproductive cough, retrosternal chest pain, and dyspnea. GI symptoms may accompany respiratory exposure due to inadvertent swallowing of the toxin after normal mucocilliary clearance. Respiratory pathology is due to the activation of pro-inflammatory cytokine cascades in the lungs, leading to pulmonary capillary leak and pulmonary edema. Severe cases may result in acute pulmonary edema and respiratory failure. The fever may last up to five days and range from 103 to 106 degrees F, with variable degrees of chills and prostration. The cough may persist up to four weeks, and patients may not be able to return to duty for two weeks. Physical examination in patients with SEB intoxication is often unremarkable. Conjunctival injection may be present, and postural hypotension may develop due to fluid losses. Chest examination is unremarkable except in the unusual case where pulmonary edema develops. The chest X-ray is also generally normal, but in severe cases increased interstitial markings, atelectasis, and possibly overt pulmonary edema or an ARDS picture may develop.

m. **T-2 Mycotoxin**: Exposure causes skin pain, pruritus, redness, vesicles, necrosis and sloughing of the epidermis. Effects on the airway include nose and throat pain, nasal discharge, itching and sneezing, cough, dyspnea, wheezing, chest pain and hemoptysis. Toxin also produces effects after ingestion or eye contact. Severe intoxication results in prostration, weakness, ataxia, collapse, shock, and death. In a BW attack with trichothecenes, the toxin(s) can adhere to and penetrate the skin, be inhaled, and can be ingested. In the alleged yellow rain incidents, symptoms of exposure from all 3 routes coexisted. Contaminated clothing can serve as a reservoir for further toxin exposure. Early symptoms beginning within minutes of exposure include burning skin pain, redness, tenderness, blistering, and progression to skin necrosis with leathery blackening and sloughing of large areas of skin. Upper respiratory exposure may result in nasal itching, pain, sneezing, epistaxis, and rhinorrhea. Pulmonary/tracheobronchial toxicity produces dyspnea, wheezing, and cough. Mouth and throat exposure causes pain and blood tinged saliva and sputum. Anorexia, nausea, vomiting and watery or bloody diarrhea with crampy abdominal pain occurs with gastrointestinal toxicity. Eye pain, tearing, redness, foreign body sensation and blurred vision may follow ocular exposure. Skin symptoms occur in minutes to hours and eye symptoms in minutes. Systemic toxicity can occur via any route of exposure, and results in weakness, prostration, dizziness, ataxia, and loss of coordination. Tachycardia, hypothermia, and hypotension follow in fatal cases. Death may occur in minutes, hours or days. The most common symptoms are vomiting, diarrhea, skin involvement with burning pain, redness and pruritus, rash or blisters, bleeding, and dyspnea. A late

effect of systemic absorption is pancytopenia, predisposing to bleeding and sepsis.

BWP-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments

STANDARDS:

1. Discuss the importance of follow-up care
2. Discuss procedure for obtaining follow-up appointments
3. Emphasize importance of keeping appointments and following the recommendations established by the city, county, state, and federal health care organizations.
4. Encourage the patient to seek further management if:
    a. Significant worsening of symptoms occurs
    b. Symptoms last longer than expected

BWP-I INFORMATION

OUTCOME: The patient/family will receive information about biological weapons as appropriate

STANDARDS:

1. Identify the suspected biological weapon that the patient/family has been exposed to or that the patient/family is interested in learning about.

   a. **Anthrax:** Bacillus anthracis, the causative agent of Anthrax, is a gram-positive, sporulating rod. The spores are the usual infective form. Anthrax is primarily a zoonotic disease of herbivores, with cattle, sheep, goats, and horses being the usual domesticated animal hosts, but other animals may be infected. Humans generally contract the disease when handling contaminated hair, wool, hides, flesh, blood and excreta of infected animals and from manufactured products such as bone meal. Infection is introduced through scratches or abrasions of the skin, wounds, inhalation of spores, eating insufficiently cooked infected meat, or by biting flies. The primary concern for intentional infection by this organism is through inhalation after aerosol dissemination of spores. All human populations are susceptible. The spores are very stable and may remain viable for many years in soil and water. They resist sunlight for varying periods.

   b. **Brucellosis:** Brucellosis is one of the world's most important veterinary diseases, and is caused by infection with one of six species of Brucellae, a group of gram-negative cocco-baccillary facultative intracellular pathogens. In animals, brucellosis primarily involves the reproductive tract, causing septic abortion and orchitis, which, in turn, can result in sterility. Consequently, brucellosis is a disease of great potential economic impact in the animal husbandry industry. Four species (B. abortus, B. melitensis, B. suis, and, rarely, B. canis) are pathogenic in humans. Infections in abattoir and laboratory workers suggest that the Brucellae are highly infectious via the aerosol route. It is estimated that inhalation of only 10 to 100 bacteria is sufficient to cause disease in man

   c. **Glanders and Melioidosis:** The causative agents of Glanders and Melioidosis are Burkholderia mallei and Burkholderia pseudomallei, respectively. Both are gram-negative bacilli with a "safety-pin" appearance on microscopic examination. Both pathogens affect domestic and wild animals, which, like humans, acquire the diseases from inhalation or contaminated injuries. B. mallei is primarily noted for producing disease in horses, mules, and donkeys. In the past man has seldom been infected, despite frequent and often close contact with infected animals. This may be the result of exposure to low concentrations of organisms from infected sites in ill animals and because strains virulent for equids are often less virulent for man. There are four basic forms of disease in horses and man. The acute forms are more common in mules and donkeys, with death typically occurring 3 to 4 weeks after illness

onset. The chronic form of the disease is more common in horses and causes generalized lymphadenopathy, multiple skin nodules that ulcerate and drain, and induration, enlargement, and nodularity of regional lymphatics on the extremities and in other areas. The lymphatic thickening and induration has been called farcy. Human cases have occurred primarily in veterinarians, horse and donkey caretakers, and abattoir workers. B. pseudomallei is widely distributed in many tropical and subtropical regions. The disease is endemic in Southeast Asia and northern Australia. In northeastern Thailand, B. pseudomallei, is one of the most common causative agents of community-acquired septicemia. Melioidosis presents in humans in several distinct forms, ranging from a subclinical illness to an overwhelming septicemia, with a 90% mortality rate and death within 24-48 hours after onset. Also, melioidosis can reactivate years after primary infection and result in chronic and life-threatening disease. These organisms spread to man by invading the nasal, oral, and conjunctival mucous membranes, by inhalation into the lungs, and by invading abraded or lacerated skin. Aerosols from cultures have been observed to be highly infectious to laboratory workers. Biosafety level 3 containment practices are required when working with these organisms in the laboratory. Since aerosol spread is efficient, and there is no available vaccine or reliable therapy, B. mallei and B. pseudomallei have both been viewed as potential BW agents.

d. **Plague:** Yersinia pestis is a rod-shaped, non-motile, non-sporulating, gram-negative bacterium of the family Enterobacteraceae. It causes plague, a zoonotic disease of rodents (e.g., rats, mice, ground squirrels). Fleas that live on the rodents can transmit the bacteria to humans, who then suffer from the bubonic form of plague. The bubonic form may progress to the septicemic and/or pneumonic forms. Pneumonic plague would be the predominant form after a purposeful aerosol dissemination. All human populations are susceptible. Recovery from the disease is followed by temporary immunity. The organism remains viable in water, moist soil, and grains for several weeks. At near freezing temperatures, it will remain alive from months to years but is killed by 15 minutes of exposure to 55°C. It also remains viable for some time in dry sputum, flea feces, and buried bodies but is killed within several hours of exposure to sunlight.

e. **Q-Fever:** The endemic form of Q fever is a zoonotic disease caused by the rickettsia, Coxiella burnetii. Its natural reservoirs are sheep, cattle, goats, dogs, cats and birds. The organism grows to especially high concentrations in placental tissues. The infected animals do not develop the disease, but do shed large numbers of the organisms in placental tissues and body fluids including milk, urine, and feces. Exposure to infected animals at parturition is an important risk factor for endemic disease. Humans acquire the disease by inhalation of aerosols contaminated with the organisms. Farmers and abattoir workers are at greatest risk occupationally. A biological warfare attack with Q fever

would cause a disease similar to that occurring naturally. Q fever is also a significant hazard in laboratory personnel who are working with the organism.

f. **Tularemia:** Francisella tularensis, the causative agent of tularemia, is a small, aerobic non-motile, gram-negative cocco-bacillus. Tularemia (also known as rabbit fever and deer fly fever) is a zoonotic disease that humans typically acquire after skin or mucous membrane contact with tissues or body fluids of infected animals, or from bites of infected ticks, deerflies, or mosquitoes. Less commonly, inhalation of contaminated dusts or ingestion of contaminated foods or water may produce clinical disease. Respiratory exposure by aerosol would typically cause typhoidal or pneumonic tularemia. F. tularensis can remain viable for weeks in water, soil, carcasses, hides, and for years in frozen rabbit meat. It is resistant for months to temperatures of freezing and below. It is easily killed by heat and disinfectants.

g. **Smallpox:** Smallpox is caused by the Orthopox virus, variola, which occurs in at least two strains, variola major and the milder disease, variola minor. Despite the global eradication of smallpox and continued availability of a vaccine, the potential weaponization of variola continues to pose a military threat. This threat can be attributed to the aerosol infectivity of the virus, the relative ease of large-scale production, and an increasingly Orthopoxvirus-naive populace. Although the fully developed cutaneous eruption of smallpox is unique, earlier stages of the rash could be mistaken for varicella. Secondary spread of infection constitutes a nosocomial hazard from the time of onset of a smallpox patient's exanthem until scabs have separated. Quarantine with respiratory isolation should be applied to secondary contacts for 17 days post-exposure. Vaccinia vaccination and vaccinia immune globulin each possess some efficacy in post-exposure prophylaxis.

h. **Venezuelan Equine Encephalitis:** The Venezuelan equine encephalitis (VEE) virus complex is a group of eight mosquito-borne alphaviruses that are endemic in northern South America and Trinidad and causes rare cases of human encephalitis in Central America, Mexico, and Florida. These viruses can cause severe diseases in humans and Equidae (horses, mules, burros and donkeys). Natural infections are acquired by the bites of a wide variety of mosquitoes. Equidae serve as amplifying hosts and source of mosquito infection. Western and Eastern Equine Encephalitis viruses are similar to the VEE complex, are often difficult to distinguish clinically, and share similar aspects of transmission and epidemiology. The human infective dose for VEE is considered to be 10-100 organisms, which is one of the principal reasons that VEE is considered a militarily effective BW agent. Neither the population density of infected mosquitoes nor the aerosol concentration of virus particles has to be great to allow significant transmission of VEE in a BW attack. There is no evidence of direct human-to-human or horse-to-human transmission. Natural aerosol

transmission is not known to occur. VEE particles are not considered stable in the environment, and are thus not as persistent as the bacteria responsible for Q fever, tularemia or anthrax. Heat and standard disinfectants can easily kill the VEE virus complex.

i. **Viral Hemorrhagic Fevers (VHF):** The viral hemorrhagic fevers are a diverse group of illnesses caused by RNA viruses from four viral families. The Arenaviridae include the etiologic agents of Argentine, Bolivian, and Venezuelan hemorrhagic fevers, and Lassa fever. The Bunyaviridae include the members of the Hantavirus genus, the Congo-Crimean hemorrhagic fever virus from the Nairovirus genus, and the Rift Valley fever virus from the Phlebovirus genus; the Filoviridae include Ebola and Marburg viruses; and the Flaviviridae include dengue and yellow fever viruses. These viruses are spread in a variety of ways; some may be transmitted to humans through a respiratory portal of entry. Although evidence for weaponization does not exist for many of these viruses, they are included in this handbook because of their potential for aerosol dissemination or weaponization, or likelihood for confusion with similar agents that might be weaponized.

j. **Botulinum:** The botulinum toxins are a group of seven related neurotoxins produced by the spore-forming bacillus Clostridium botulinum and two other Clostridia species. These toxins, types A through G, are the most potent neurotoxins known; paradoxically, they have been used therapeutically to treat spastic conditions (strabismus, blepharospasm, torticollis, tetanus) and cosmetically to treat wrinkles. The spores are ubiquitous; they germinate into vegetative bacteria that produce toxins during anaerobic incubation. Industrial-scale fermentation can produce large quantities of toxin for use as a BW agent. There are three epidemiologic forms of naturally occurring botulism¾food borne, infantile, and wound. Botulinum could be delivered by aerosol or used to contaminate food or water supplies. When inhaled, these toxins produce a clinical picture very similar to food borne intoxication, although the time to onset of paralytic symptoms after inhalation may actually be longer than for food borne cases, and may vary by type anddose of toxin. The clinical syndrome produced by these toxins is known as "botulism".

k. **Ricin:** Ricin is a potent protein cytotoxin derived from the beans of the castor plant (Ricinus communis). Castor beans are ubiquitous worldwide, and the toxin is fairly easy to extract; Therefore, ricin is potentially widely available. When inhaled as a small particle aerosol, this toxin may produce pathologic changes within 8 hours and severe respiratory symptoms followed by acute hypoxic respiratory failure in 36-72 hours. When ingested, ricin causes severe gastrointestinal symptoms followed by vascular collapse and death. This toxin may also cause disseminated intravascular coagulation, microcirculatory failure and multiple organ failure if given intravenously in laboratory animals.

l. **Staphylococcal Enterotoxin B:** Staphylococcus aureus produces a number of exotoxins, one of which is Staphylococcal enterotoxin B, or SEB. Such toxins are referred to as exotoxins since they are excreted from the organism, and since they normally exert their effects on the intestines they are called enterotoxins. SEB is one of the pyrogenic toxins that commonly causes food poisoning in humans after the toxin is produced in improperly handled foodstuffs and subsequently ingested. SEB has a very broad spectrum of biological activity. This toxin causes a markedly different clinical syndrome when inhaled than it characteristically produces when ingested. Significant morbidity is produced in individuals who are exposed to SEB by either portal of entry to the body.

2. **T-2 Mycotoxins:** The trichothecene (T-2) mycotoxins are a group of over 40 compounds produced by fungi of the genus Fusarium, a common grain mold. They are small molecular weight compounds, and are extremely stable in the environment. They are the only class of toxin that is dermally active, causing blisters within a relatively short time after exposure (minutes to hours). Dermal, ocular, respiratory, and gastrointestinal exposures would be expected after an attack with mycotoxins.

BWP-L LITERATURE

OUTCOME: The patient/family will receive written information about exposure to biological weapons

STANDARDS:

1. Provide the patient/family with written patient information literature on biological weapons.
   a. Discuss the content of the patient information literature with the patient/family.

BWP-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will strive to make lifestyle adaptations necessary to limit exposure, prevent complications and prevent the spread of exposure to biological weapons as appropriate.

STANDARDS:

1. Review lifestyle aspects/changes that the patient has control over – diet, exercise, safety, injury prevention, avoidance of high-risk behaviors, and fully participating in a treatment plan.
2. Emphasize that an important component in the prevention or treatment of exposure to biological weapons is the patient's adaptation to a healthier, lower risk lifestyle.
3. Emphasize that an important component in the preventing the spread of exposure to biological weapons is the patient's adaptation to a healthier, lower risk lifestyle as appropriate.
4. Emphasize that if patient/family believes that there has been exposure with a biological weapon they should contact a health care professional for advice Usually the patient should remain where they are and fully participate with recommendations in order to limit the possibility of spreading the disease as appropriate.
5. Review the community resources available to assist the patient in making lifestyle changes. Refer as appropriate.

BWP-M MEDICATIONS

OUTCOME: The patient/family will understand the role of medications in the acute treatment of exposure, prophylaxis, and the prevention of disease resulting from exposure to biological weapons as appropriate.

STANDARDS:

1. Discuss the proper use, benefits, common side effects, and common interactions of prescribed medications. Review signs of possible toxicity and appropriate follow-up as indicated.
2. Review common side effects, signs of toxicity, and drug interactions of the medications
3. Emphasize the importance of fully participating in the medication plan and explain how effective use of medications may reduce symptoms, complications, and prevent death.

BWP-P PREVENTION

OUTCOME: The patient/family will understand actions that may be taken to prevent exposure to and infection with biological warfare agents

STANDARDS:

1. Instruct patient to avoid contact with people who are suspected of exposure to biological weapons.
2. Instruct patient on the importance of hand washing and maintaining appropriate hygiene.
3. Encourage patient to maintain natural resistance to infection through adequate nutrition, rest, and exercise
4. Encourage patient to receive recommended medications and/or vaccinations for post-exposure prophylaxis and/or threat of biological agents as appropriate.
    a. **Anthrax:** Oral antibiotics for known or imminent exposure. An FDA-licensed vaccine is available. Vaccine schedule is 0.5 ml SC at 0, 2, 4 weeks, then 6, 12, and 18 months (primary series), followed by annual boosters.
    b. **Brucellosis:** There is no human vaccine available against brucellosis, although animal vaccines exist. Chemoprophylaxis is not recommended after possible exposure to endemic disease. Treatment should be considered for high-risk exposure to the veterinary vaccine, inadvertent laboratory exposure, or confirmed biological warfare exposure.
    c. **Glanders and Melioidosis:** Currently, no pre-exposure or post-exposure prophylaxis is available.
    d. **Plague:** For asymptomatic persons exposed to a plague aerosol or to a patient with suspected pneumonic plague, appropriate course of antibiotic therapy or the duration of risk of exposure plus one week. No vaccine is currently available for plague prophylaxis. The previously available licensed, killed vaccine was effective against bubonic plague, but not against aerosol exposure.
    e. **Q-Fever:** Chemoprophylaxis begun too early during the incubation period may delay but not prevent the onset of symptoms. Therefore, appropriate antibiotic therapy should be started 8-12 days post exposure and continued for 5 days. Antibiotic therapy has been shown to prevent clinical disease. An inactivated whole cell IND vaccine is effective in eliciting protection against exposure, but severe local reactions to this vaccine may be seen in those who already possess immunity. Therefore, an intradermal skin test is recommended to detect pre-sensitized or immune individuals.
    f. **Tularemia:** A live, attenuated vaccine is available as an investigational new drug. It is administered once by scarification. A two-week course of tetracycline is effective as prophylaxis when given after exposure.

g. **Smallpox:** Immediate vaccination or revaccination should be undertaken for all personnel exposed.

h. **Venezuelan Equine Encephalitis:** A live, attenuated vaccine is available as an investigational new drug. A second, formalin-inactivated, killed vaccine is available for boosting antibody titers in those initially receiving the first vaccine. No post-exposure immunoprophylaxis. In experimental animals, alpha-interferon and the interferon-inducer poly-ICLC have proven highly effective as post-exposure prophylaxis. There are no human clinical data.

i. **Viral Hemorrhagic Fevers:** The only licensed VHF vaccine is yellow fever vaccine. Prophylactic ribavirin may be effective for Lassa fever, Rift Valley fever, CCHF, and possibly HFRS (Available only as IND under protocol).

j. **Botulinum Toxin:** Pentavalent toxoid vaccine (types A, B, C, D, and E) is available as an IND product for those at high risk of exposure.

k. **Ricin:** There is currently no vaccine or prophylactic antitoxin available for human use, although immunization appears promising in animal models. Use of the protective mask is currently the best protection against inhalation.

l. **Staphylococcal Enterotoxin B:** Use of protective mask. There is currently no human vaccine available to prevent SEB intoxication.

m. **T-2 Mycotoxins:** The only defense is to prevent exposure by wearing a protective mask and clothing (or topical skin protectant) during an attack. No specific immunotherapy or chemotherapy is available for use in the field.

BWP-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in bioterrorism.

STANDARDS:

1. Explain realistic information regarding bioterrorism threats in order to decrease the sense of crisis or anxiety that could arise from the threat or potential threat of biological weapons.
2. Discuss that stress from a threatened act of bioterrorism may be as great and as real as stress from an actual act of bioterrorism.
3. Explain that effective stress management may help reduce the anxiety associated with potential bioterrorism threats.
4. Discuss various stress management strategies such as becoming aware of your own reactions to stress, recognizing and accepting your limits, talking with people you trust about your worries or problems, practicing spiritual and cultural activities and forming as well as practicing a plan.
5. Provide referrals as appropriate.

BWP-TE TESTS

OUTCOME: The patient/family will understand the role of testing in appropriate management of exposure to biological weapons.

STANDARDS:

1. Discuss why a microbiology culture may or may not be required to confirm diagnosis of a biological weapon.
2. Explain what test(s) will be ordered. Provide information on the indication, benefits, and risks of the tests.
3. Explain how test results will be used to guide therapy.

BWP-TX TREATMENT

OUTCOME: The patient/family will understand the possible treatments available after exposure to a biological weapon.

STANDARDS:

1. Explain that the treatment plan will be made by patient and the health care team after reviewing available options
    a. **Anthrax:** Although effectiveness may be limited after symptoms are present, high dose antibiotic treatment should be undertaken. Supportive therapy may be necessary.
    b. **Brucellosis:** Antibiotic therapy in combination with other medications for six weeks is usually sufficient in most cases. More prolonged regimens may be required for patients with complications of meningoencephalitis, endocarditis, or osteomyelitis.
    c. **Glanders and Melioidosis:** Therapy will vary with the type and severity of the clinical presentation. Patients with localized disease, may be managed with oral antibiotics for a duration of 60-150 days. More severe illness may require parenteral therapy and more prolonged treatment.
    d. **Plague:** Early administration of antibiotics is critical, as pneumonic plague is invariably fatal if antibiotic therapy is delayed more than 1 day after the onset of symptoms.
    e. **Q-Fever:** Q fever is generally a self-limited illness even without treatment, but antibiotic therapy should be provided to prevent complications of the disease. Q fever endocarditis (rare) is much more difficult to treat.
    f. **Tularemia:** Administration of antibiotics with early treatment is very effective.
    g. **Smallpox:** At present there is no effective chemotherapy, and treatment of a clinical case remains supportive.
    h. **Venezuelan Equine Encephalitis:** Treatment is supportive only. Treat uncomplicated VEE infections with analgesics to relieve headache and myalgia. Patients who develop encephalitis may require anticonvulsants and intensive supportive care to maintain fluid and electrolyte balance, ensure adequate ventilation, and avoid complicating secondary bacterial infections.
    i. **Viral Hemorrhagic Fevers:** Intensive supportive care may be required. Antiviral therapy with ribavirin may be useful in several of these infections (Available only as IND under protocol). Convalescent plasma may be effective in Argentine hemorrhagic fever (Available only as IND under protocol).

j. **Botulinum Toxin:** Early administration of trivalent licensed antitoxin or heptavalent antitoxin (IND product) may prevent or decrease progression to respiratory failure and hasten recovery. Intubation and ventilatory assistance for respiratory failure. Tracheostomy may be required.

k. **Ricin:** Management is supportive and should include treatment for pulmonary edema. Gastric lavage and cathartics are indicated for ingestion, but charcoal is of little value for large molecules such as ricin.

l. **Staphylococcal Enterotoxin B:** Treatment is limited to supportive care. Artificial ventilation might be needed for very severe cases, and attention to fluid management is important.

m. **T-2 Mycotoxin:** There is no specific antidote. Treatment is supportive. Soap and water washing, even 4-6 hours after exposure can significantly reduce dermal toxicity; washing within 1 hour may prevent toxicity entirely. Superactivated charcoal should be given orally if the toxin is swallowed.

C

CD—Chemical Dependency

Refer to AOD-Alcohol and Other Drugs.

CWP—Chemical Weapons

CWP-C COMPLICATIONS

OUTCOME: The patient/family will understand the potential consequences of exposure to a chemical weapon.

STANDARDS:

1. Discuss with the patient/family the complications that may occur after exposure to chemical weapons as appropriate.

CWP-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

CWP-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the expected course of disease resulting from exposure to the chemical weapon.

STANDARDS:

1. Provide an overview of the suspected chemical weapon. Discuss the time course and clinical features of the suspected chemical weapon as appropriate.

   a. **NERVE AGENTS**

   The extent of the poisoning depends on the amount of chemical to which a person was exposed, how the person was exposed, and the length of the exposure. Exposure to low or medium doses can produce runny/watery eyes, pinpoint pupils, eye pain, blurred vision, drooling, excessive sweating, cough, chest tightness, rapid breathing, diarrhea, increased urination, confusion, drowsiness, weakness, headache, nausea, vomiting, abdominal pain, change in heart rate, change in blood pressure. Exposure to a large dose of nerve agents can cause loss of consciousness, convulsions, paralysis, or respiratory failure with the possibility of leading to death. Mild or moderately exposed individuals usually recover completely, but severely exposed individuals are not likely to survive.

   i. **Tabun:** symptoms can occur within a few seconds if exposed to the vapor form, and a few minutes to up to 18 hours after being exposed to the liquid form.

   ii. **Sarin:** is one of the most volatile nerve agents, and can easily transform from a liquid in to a vapor and spread in to the environment. Even a small drop of Sarin can cause sweating and muscle twitching where it touches the skin.

   iii. **Soman:** exposure can occur through skin contact, eye contact, or inhalation. It mixes easily with water and can be used to poison water, or it can also be used to poison with. Victim's clothes can release Soman for up to 30 minutes following exposure, rendering them toxic and likely to infect others. Repeated exposure can lead to accumulation of the chemical in the body due to its slow elimination. Soman vapor is thicker than air, and thus usually settles closer to the ground.

   iv. **VX:** Symptoms can be expected from 4 to 14 hours following exposure to VX. Of all the nerve agents, VX is the most volatile and can be easily transformed into gas. It is also the most toxic and more likely to produce the lethal side effects following exposure.

   b. **BLISTER/VESICANT AGENTS**

   The most likely routes of exposure to blister/vesicant agents are inhalation, dermal contact, and ocular contact. The severity of symptoms

will be dependant upon the amount and route of exposure, as well as the pre-morbid condition of the victim.

i. **Lewisite:** Exposure can occur by skin or eye contact, or breathing in contaminated air. Pain and irritation can occur within seconds, redness within 15 to 30 minutes, followed by blister formation up to several hours later. The blister will eventually become large enough to cover the initial red area. The lesions produced by exposure to Lewisite heal faster, and leave less discoloration. The eyes may become irritated, painful, and swollen with the likelihood of tearing. Patients may also experience runny nose, sneezing, hoarseness, bloody nose, sinus pain, shortness of breath, and cough. Nausea, Vomiting, and diarrhea could be expected, as well as low blood pressure ("Lewisite shock").

ii. **Sulfur Mustard:** sulfur mustard can be carried through the wind over great distances, and can also contaminate water. Exposure to sulfur mustard is usually not fatal. Depending upon the severity of the exposure. The victim may not experience symptoms for up to 2 to 24 hours. Sulfur can cause redness and itching of the skin within 2 to 48 hours of exposure, which may eventually lead to yellow blistering of the skin. The eyes may become irritated, painful, swollen and tearful within the first 3 to 12 hours of a mild to moderate exposure. A severe exposure could result in symptoms occurring within 1 to 2 hours of exposure, and could include light sensitivity, severe pain, or blindness that could be present for up to 10 days following the initiation of symptoms. Runny nose, sneezing, hoarseness, bloody nose, sinus pain, shortness of breath, and cough within 12 to 24 hours of a mild exposure and within 2 to 4 hours of severe exposure can occur. Abdominal pain, diarrhea, fever, nausea, and vomiting may be present. Exposure to the liquid form is more likely to result in second and third degree burns and scarring than is exposure to the vapor form of Sulfur mustard. Excessive inhalation of the vapor can lead to long-term respiratory disorders, repeated respiratory infections, or even death. Lengthy exposure to the eye can cause permanent blindness. Exposure to Sulfur mustard places an individual at higher risk for respiratory and lung cancer.

iii. **Nitrogen Mustards:** These can be found in a variety of forms; oily liquids, vapor, or solid, and with a variety of different smells. The symptoms of Nitrogen exposure usually do not occur immediately, and can take up to several hours to manifest themselves. Skin can become reddened within a few hours, and could be followed by blistering within 6 to 12 hours. The eyes may become irritated, painful, swollen, and tearful, with high amounts of exposure causing blindness. Nose and sinus pain, coughing, sore throat, and shortness of breath may occur within hours. Abdominal pain, nausea, vomiting, diarrhea. Under extreme circumstances, individuals could experience tremors, in coordination, and seizures. The liquid form is more likely to produce second or third degree burns that are more likely to leave scarring later. Excess inhalation of the

vapors can cause long-term respiratory disorders, and excess exposure to the eyes can cause chronic eye problems. Exposure has been associated with bone marrow suppression beginning as early as 3 to 5 days following the exposure, which can lead to anemia, bleeding, and increased risk for infection. Prolonged exposure to nitrogen mustards has been linked top leukemia.

iv. **Phosgene Oxime:** This can cause instant, excruciating pain of the skin almost immediately upon exposure to the chemical. Within seconds, blanching of the skin surrounded by red rings can occur, and within 15 minutes, the skin develops hives. 24 hours later, the whitened areas of the skin become brown and die, leaving a scab. As the skin heals, the patient may continue to experience itching and pain. Immediately following inhalation, victims should expect runny nose, hoarseness, and sinus pain. Absorbing Phosgene through the skin, or inhaling it can cause pulmonary edema (fluid accumulation in the lungs) with symptoms of shortness of breath and cough.

c. **BLOOD AGENTS**

i. **Cyanide**: Toxicity from this agent can be achieved through inhalation, contact with poisoned soil, drinking contaminated water, or eating contaminated food. The extent of the poisoning depends upon the route and length of exposure. The most harmful method of toxicity is through inhalation. As the gaseous form evaporates rather quickly, Cyanide is less toxic in large outdoor areas being that it is less dense than air and rises fast. This agent prevents the adequate delivery of oxygen to cells, and can be detrimental to the heart and brain. Upon exposure, the following symptoms can be seen within minutes; rapid breathing, restlessness, dizziness, weakness, rapid heart rate, headache, nausea, and vomiting. As poisoning progresses, respirations become slow and gasping and the skin may appear slightly blue in color. The lungs may become filled with fluid. Central nervous system symptoms usually occur rapidly, and include excitement, dizziness, nausea, vomiting, headache, and weakness. As poisoning progresses, drowsiness, spasms, lockjaw, convulsions, hallucinations, loss of consciousness, and coma may occur. Exposure to larger amounts may cause convulsions, low blood pressure, slow heart rate, loss of consciousness, respiratory failure leading to death. Survivors of serious Cyanide poisoning may develop heart and brain damage. Personality changes, memory deficits, disturbances in voluntary muscle movements, and the appearance in involuntary muscle movements have also been reported in survivors of Cyanide poisoning. Chronically exposed workers may complain of headache, eye irritation, easy fatigue, chest discomfort, palpitations, loss of appetite, and nosebleeds.

d. **PULMONARY AGENTS**

i. **Chlorine:** This can be found in industry and in households in the form of bleach, pesticides, rubber, and solvents. The gaseous form can be

recognized by its pungent, irritating odor, and it's yellow-green color. Chlorine can manifest its poison effects through skin/eye contact, inhalation, and ingestion of contaminated food or water. The seriousness of the side effects depend on the amount and type of Chlorine exposure. During, or immediately after inhalation of low concentrations victims may experience eye and nasal irritation, sore throat, and coughing. Higher concentration can rapidly lead to respiratory distress with airway constriction, and accumulation of fluid in the lungs. Chlorine can initially increase heart rate and blood pressure, and eventually lead to Cardiovascular collapse due to lack of oxygen. Low exposure the skin can cause burning pain, inflammation, and blisters, while it can cause involuntary blinking, redness, and tearing in the eyes. Following an isolated exposure, lung function can return to near normal in 7-14 days. Though complete recovery usually occurs, a chemical irritant-induced type of asthma known as Reactive airway syndrome (RAS) has occurred in some victims.

ii. **Phosgene:** The extent of the poising depends on how close the victims are to the place where the gas is released, the type, and amount of exposure. Routes of contamination include inhalation, skin/eye contact, and eating/drinking contaminated food or water. According to OSHA, the odor provides insufficient warning of hazardous concentrations. Inhaling low concentrations of Phosgene may initially cause minimal symptoms such as dryness/burning of the throat and cough, which may discontinue once the patient is removed from the source of exposure. However, after a 30 minute up to a 48 hour symptom free interval, some victims may experience rapid worsening of lung function which may include fluid accumulation in the lungs, rapid respiration, or painful cough which may produce frothy white or yellow liquid. Phosgene has also been linked to RAS. Due to any possible accumulation in the lungs, the inadequate supply of oxygen to the body can manifest as damage to the heart and it's important capillaries. If, upon exposure, the victim's skin is wet or moist, it can become irritated and red almost immediately. Liquid Phosgene can result in frostbite. Phosgene vapor can cause redness and tearing of the eye, clouding in the cornea, and perforation. Nausea and vomiting may be experienced. At high levels of exposure, permanent damage to the kidneys and liver can occur. If the victim survives the first 48 hours of exposure, they are likely to survive, but may acquire long term sensitivity to chemical irritants, chronic inflammation and irritation of the bronchioles (lung tubes), emphysema, and increased susceptibility to infections. Workers exposed to daily high levels of the chemical have been shown to have an increased risk of diseases and death associated with long term lung disorders.

CWP-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments

STANDARDS:

1. Discuss the importance of follow-up care
2. Discuss procedure for obtaining follow-up appointments
3. Emphasize the importance of keeping appointments
4. Encourage the patient to seek further management if:
    a. Significant worsening of symptoms occurs
    b. Symptoms last longer than expected

CWP-I INFORMATION

OUTCOME: The patient/family will receive information about chemical weapons as appropriate

STANDARDS:

1. Identify the suspected biological weapon that the patient/family has been exposed to.
    a. **Tabun:** is a clear, colorless, tasteless liquid that has a slight fruity, almond odor attributed to by the formation of hydrogen cyanide. It may contain 5-20 percent chlorobenzene as solvent and stabilizer. The substance can be absorbed into the body by all routes. Usually liquid in normal state, but will volatilize if heated to form vapor or aerosol. As little as 1 to 10 mls can be lethal
    b. **Sarin:** is also a clear, colorless, tasteless liquid, but has no identifiable odor. Sarin is one of the more volatile nerve agents and can easily be transformed in to a gaseous state, rendering it more able to spread through the environment. A persons clothing can release Sarin up to 30 minutes after exposure
    c. **Soman:** is a clear, colorless liquid that has been associated with a camphor or rotting fruit odor. It vaporizes in to air easily.
    d. **VX:** VX is a tasteless oily liquid that is amber in color, and evaporates at a slow rate comparable to the rate at which motor oil would evaporate. Extremely high temperatures are required to make VX evaporate
    e. **Lewisite:** an oily colorless liquid in its pure form that may appear amber to black in its impure form. It has an odor similar to geraniums. Lewisite contains arsenic, and thus has some effects similar to arsenic poisoning, including stomach ailments and low blood pressure.
    f. **Sulfur Mustard:** This can be clear or a yellow-brown colored in its oily liquid or solid state. It can also vaporize and spread through the environment.

SM sometimes smells like garlic, mustard, onions, or nothing at all. It can last in the environment for up to 2 days following release in regular weather conditions, but under very cold conditions, it can last for up to weeks or months.

g. **Nitrogen mustards:** These can be oily liquid, vapor, or solid forms. NM's can smell fishy, musty, soapy, or fruity. They can be clear, pale amber, or yellow in appearance.

h. **Phosgene Oxime:** This is also known as an urticant or nettle agent due to its ability to produce intense itching and rash, similar to hives, when it comes in contact with skin. In the liquid state, it appears to be yellow in color, while in the solid state it is clear. It is known to possess a disagreeable, irritating odor. It does not last in the environment for long as it breaks down within 2 hours in soil, and within a few days within water.

i. **Cyanide:** It is a colorless or pale blue liquid at room temperature. Being very volatile, it can readily produce toxic, flammable concentrations at room temperature. It has a distinct bitter almond odor and the ability to perceive it is a genetic trait (20 to 40% of the general population cannot detect Hydrogen Cyanide).

j. **Clorine:** This is one of the most commonly manufactured chemicals in the US for uses both industrial and household. It can present as a poisonous gaseous form, which can also be cooled, and pressurized in order to store or transport it. Once this liquid is released, it quickly turns in to the gaseous form that spreads relatively fast, and close to the ground. Chlorine gas has a distinct pungent, irritating odor, much like bleach and usually appears to be yellow-green in color at room temperature. At higher pressures, or temperatures below –30F, it is a clear, amber-colored liquid. Though Chlorine gas itself is noncombustible, it is a strong oxidizer that can readily form explosive compounds when it comes in to contact with many common substances. Chlorine gas is highly corrosive when it comes in to contact with any dermal surfaces, i.e., skin, eyes. Pure Chlorine is unlikely to be ingested, for it is a gas at room temperature.

k. **Phosgene**: This is a major industrial chemical used to make plastics and pesticides. At normal room temperature, Phosgene is a poisonous gas. It can be cooled, or pressurized in to a liquid form so that it may be packaged and transported; once opened, it will quickly return to its gaseous state, and spread fast in to the environment close to the ground. The gaseous form may be colorless or pale yellow in color. At low concentrations the gas may smell pleasantly of newly mown hay, but at higher concentrations, it may become a stronger, more unpleasant smell. Phosgene is non-flammable, unless mixed with certain other chemicals.

CWP-L LITERATURE

OUTCOME: The patient/family will receive written information about exposure to chemical weapons.

STANDARDS:

1. Provide the patient/family with written patient information literature about exposure to chemical weapons
2. Discuss the content of the patient information literature with the patient/family

CWP-M MEDICATIONS

OUTCOME: The patient/family will understand the role of medications in the acute treatment of exposure, prophylaxis, and the prevention of disease resulting from exposure to chemical weapons as appropriate.

STANDARDS:

1. Review the medication(s) with the patient. Reinforce the importance of knowing the drug, dose, dosing interval, and duration of medical therapy.
2. Review the common side effects, signs of toxicity, and drug interactions of the medications
3. Emphasize the importance of fully participating in the medication and plan and explain how effective use of medications may reduce symptoms, complications, and prevent death.

CWP-P PREVENTION

OUTCOME: The patient/family will understand actions that may be taken to prevent exposure to and infection with chemical weapons

STANDARDS:

1. Instruct the patient to avoid contact with people or area's suspected of exposure to chemical weapons
2. Instruct patient on the importance of hand washing and maintaining appropriate hygiene
3. Encourage patient to receive recommended medications and/or vaccinations for post-exposure prophylaxis and/or threat of chemical agents as appropriate.
    a. **Nerve Agents:**
        i. Pyridostigmine has been used in preparation for possible future exposure to nerve agents. A 30mg tablet every 8 hours (preferable a total of 21 tabs) are to be taken prior to exposure. NAPP helps protect acetyl cholinesterase from the action of nerve agents, and thus serves only to enhance post exposure prophylaxis.
        ii. Post exposure prophylaxis includes injecting Atropine for its ability to block Ach at muscarinic receptors. Depending on the severity of the symptoms, and the age of the victim, 1 to 4 mg should be administered. 2 PAM Cl is used for its ability to block and reverse the bonding of the nerve agent to acetyl cholinesterase, and victims are injected with 600mg IM. 10mg IM injection of diazepam may be utilized in order to prevent the occurrence of seizures.
    b. **Blistering agents/vesicants:**
        i. There are no known antidotes for these agents and post exposure support i.e., ventilation.
    c. **Blood Agents:**
        i. Sodium Nitrite 300mg IV over 3 minutes and Sodium Thiosulfate 12.5gm IV over a 10minute period in order to sequester and rid the body of Cyanide. Assisted ventilation may also be necessary.
    d. **Pulmonary Agents:**
        i. No current antidotes are available. Supportive therapy must be initiated.

CWP-TE TESTS

OUTCOME: The patient/family will understand the role of testing in appropriate management of exposure to chemical weapons

STANDARDS:

1. Discuss that certain lab tests may be required after exposure to a chemical weapon.
    a. **Nerve Agents:**
        i. RBC cholinesterase activity (severe symptoms usually present with greater than 70% cholinesterase inhibition)
        ii. CXR or pulse oximetry recommended in severe exposures
        iii. Routine labs, i.e., CBC, glucose, electrolytes.
    b. **Blister/Vesicant agents:**
        i. WBC<500 can indicate vesicant exposure
        ii. Routine labs
    c. **Blood Agents:**
        i. Routine labs/pulmonary function
    d. **Pulmonary Agents:**
        i. Routine labs/pulmonary function
4. Discuss why lab tests are used for patient monitoring purposes
5. Explain what test(s) will be ordered. Provide information on the indication, benefits, and risks of the tests.
6. Explain how test results will be used to guide therapy

CWP-TX TREATMENT

OUTCOME: The patient/family will understand the possible treatments available after exposure to a chemical weapon

STANDARDS:

1. Explain that the treatment plan will be made by the patient and the health care team after reviewing available options
2. **Nerve Agents:** Atropine should be continued at 5-10 minute intervals, until the adequate resolution of symptoms (Secretions have diminished and breathing is comfortable). Continue Diazepam if required for the prevention of convulsions. Phentolamine (5mg IV for adults, 1mg IV for children) can be used for 2-PAM induced hypertension.
3. **Blister Agents/Vesicants:**
    a. Mustard Blisters: Apply a one-eighth of an inch thick layer of mafenide acetate or silver sulfadiazine cream to be used as a topical anti-bacterial. If the blister worsens to an infected state, appropriate antibiotic therapy should be sought.
    b. Inhalation of Mustards: In cases of severe RT injury, where a pt is infected with a pneumonal infection, aggressive antibiotic therapy is required
    c. Mustard ingestion: In treating systemic symptoms 0.4-0.8 mg SQ Atropine may be useful in reducing GI activity. If the victims' white blood cell count were significantly reduced, isolation and appropriate antibiotic therapy would be needed.
4. **Blood Agents:** See above for post-exposure prophylaxis
5. **Pulmonary Agents:**
    a. Antimicrobial treatment is reserved only for cases of acquired bacterial bronchitis/pneumonitis.
    b. At sufficiently high doses of these agents, pulmonary edema is more than likely to follow. In these cases, large doses of steroids must be administered as soon as possible, preferably started within 15 minutes of exposure.
    c. Dexamethasone Na Phosphate: 4 puffs must be inhaled at the earliest possible time, then 1 puff q 3 mins until irritation has subsided. After this, 5 puffs q 15 minutes to total 150 puffs. Following this, 1 puff q 1h daily, with 5 puffs q 15mins to total 30 puffs in preparation for nighttime sleep. This regimen should be continued for at least 5 days.
    d. For treating life threatening situations, the above inhaled regimen should be supplemented with the following:
        i. Day 1: 1000 mg IV prednisolone
        ii. Day 2: 3800 mg IV prednisolone

iii. Day 3: 5700 mg IV prednisolone

iv. Beginning day 6, systemic CS dose should be reduced, provided the CXR remains clear

e. If the patient is pre-disposed to pulmonary infection complications, adjuvant antibiotic coverage should also be considered.

CPM—Chronic Pain

CPM-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

CPM–DP DISEASE PROCESS

OUTCOMES: The patient/family will understand the pathophysiology of the patient's specific condition.

STANDARDS:

1. Review the causative factors as appropriate to the patient. Assess the level of pain. Emphasize that the goal of treatment is to relieve pain.
2. Review lifestyle factors which may worsen or aggravate the condition.
3. Discuss the patient's specific condition, including anatomy and pathophysiology as appropriate.
4. Discuss that chronic pain is a multifaceted condition. Explain that control of contributing factors may help to control the pain, i.e., dysfunctional sleep patterns, depression or other psychological disorders, other disease states.

CPM-EQ EQUIPMENT

OUTCOME: The patient/family will have an understanding and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment as appropriate.
3. Discuss and/or demonstrate proper use, care, and cleaning of medical equipment.
4. Participate in a return demonstration by the patient/family, as appropriate.
5. Discuss signs of equipment malfunction and proper action to take in case of malfunction.
6. Emphasize safe use of equipment.
7. Discuss proper disposal of associated medical supplies.

CPM–EX EXERCISE

OUTCOMES: The patient will understand the importance of exercise in enhancing physical and psychological well-being.

STANDARDS:

1. Review the different types of exercise including active and passive range of motion and strengthening.
2. Explain the hazards of immobility. Discuss how to prevent contractures, constipation, isolation and loss of self-esteem.
3. Emphasize that physical activity/therapy is an integral part of the patient's daily routine.
4. Emphasize that moderate exercise may increase energy, control weight, improve circulation, enhance sleep, and reduce stress and depression.

CPM–FU FOLLOW-UP

OUTCOMES: The patient/family will understand the importance of follow-up and make a plan to make and keep the follow-up appointments.

STANDARDS:

1. Provide positive reinforcement for areas of achievement.
2. Emphasize the importance of follow-up care to prevent complications and adjustments of medication.
3. Encourage active participation in the treatment plan and acceptance of the diagnosis.
4. Explain the procedure for obtaining appointments.

CPM-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about chronic pain.

STANDARDS:

1. Provide patient/family with written patient information literature on chronic pain.
2. Discuss the content of patient information literature with the patient/family.

CPM–LA LIFESTYLE ADAPTATIONS

OUTCOMES: The patient/family will understand what lifestyle adaptations are necessary to cope with the patient's specific disorder.

STANDARDS:

1. Explain that the patient has a responsibility to make lifestyle adaptations to assist in controlling pain.
2. Assess the patient/family's level of acceptance of the disorder.
3. Emphasize the importance of rest and avoidance of fatigue.
4. Discuss the use of heat and cold as appropriate.
5. Refer to Social Services, Mental Health, Physical Therapy, Rehabilitative Services and/or community resources as appropriate.
6. Review the areas that may require adaptations: diet, physical activity, sexual activity, and bladder/bowel habits.

CPM–M MEDICATIONS

OUTCOMES: The patient will understand the goal of medication therapy and be able to demonstrate and explain use of the prescribed regimen.

STANDARDS:

1. Review the patient's medication. Reinforce the importance of knowing the medication, dose, and dosing interval of medications.
2. Review common side effects, signs of toxicity, and drug/drug or drug/food interactions of medications.
3. Discuss the importance of taking medications as prescribed.
4. Emphasize the importance of taking medications as prescribed. If more medication is needed consult with the medical provider prior to increasing the dose of medication.
5. Discuss non-pharmacologic pain control measures.

CPM-PSY PSYCHOTHERAPY

OUTCOME: The patient will understand the goals and process of such therapy.

STANDARDS:

1. Emphasize that for the process of psychotherapy to be effective the patient must keep all appointments. Emphasize the importance of openness and honesty with the therapist.
2. Explain to the patient/family that the therapist and the patient will jointly establish goals, ground rules, and duration of therapy.

CPM–S SAFETY

OUTCOMES: The patient will understand the importance of injury prevention and safety.

STANDARDS:

1. Explain to patient/family the importance of body mechanics to avoid injury.
2. Assist the family in identifying ways to adapt the home to prevent injuries or improve safety, i.e., remove throw rugs, install bars in the tub/shower.
3. Stress importance and proper use of mobility devices, i.e., cane, walker, wheel chair.

CPM-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in chronic pain management.

STANDARDS:

1. Explain that uncontrolled stress may exacerbate the symptoms of chronic pain. This can set up a cycle of pain-stress which becomes self-sustaining and may escalate.
2. Explain that uncontrolled stress can interfere with the treatment of chronic pain.
3. Discuss that in chronic pain, uncontrolled stress may lead to depression or other mood disorders. **Refer to CPM-PSY**.
4. Explain that effective stress management may reduce the severity of symptoms the patient experiences, as well as help improve the health and well-being of the patient.
5. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the severity of pain.
6. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
   a. becoming aware of your own reactions to stress
   b. recognizing and accepting your limits
   c. talking with people you trust about your worries or problems
   d. setting realistic goals
   e. getting enough sleep
   f. maintaining a reasonable diet
   g. exercising regularly
   h. taking vacations
   i. practicing meditation
   j. self-hypnosis
   k. using positive imagery
   l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
   m. spiritual or cultural activities
7. Provide referrals as appropriate.

CPM-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, , as appropriate, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test, including appropriate collection.
5. Explain the meaning of the test results, as appropriate.

CPM-TX TREATMENT

OUTCOME: The patient/family will understand the possible treatments that may be available based on the specific disease process, test results, and individual preferences.

STANDARDS:

1. Discuss with the patient/family the possible appropriate nonpharmacologic pain relief measures, i.e., TENS units, heat, cold, massage, meditation, imagery, acupuncture, healing touch, traditional healer, hypnosis.
2. Discuss with the patient/family the possible appropriate pharmacologic pain relief measures. **Refer to CPM-M.**
3. Discuss with the patient/family the possible appropriate procedural or operative pain management techniques, i.e., nerve block, intrathecal narcotics, local anesthesia.
4. Emphasize the importance of the patient/family's full participation in the development of a treatment plan.
5. As appropriate, discuss the implications of patient-provider contracts for pain medications.

CHF—Congestive Heart Failure

CHF-C COMPLICATIONS

OUTCOME: The patient/family will understand how to prevent complications of CHF.

STANDARDS:

1. Discuss common complications of CHF, i.e., pulmonary or peripheral edema, MI, death, inability to perform activities of daily living.
2. Discuss the importance of following a treatment plan including diet, exercise, and medications to prevent complications.
3. Discuss the importance of regular follow-up to prevent complications.
4. Emphasize early medical intervention for signs and symptoms of complications.

CHF-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

CHF-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the causes and symptoms of congestive heart failure.

STANDARDS:

1. Explain that CHF results from the heart not pumping as efficiently as it should. As a result, fluids back up in the extremities (edema) and in the lungs (pulmonary congestion). This back up of fluids causes weight gain. Weight gain should be reported.
2. Explain the cause of CHF as it relates to the patient's condition, i.e., previous M.I., long-standing hypertension.
3. Review signs and symptoms of CHF, i.e., swelling, fatigue, shortness of breath, weight gain.

CHF-EQ EQUIPMENT

OUTCOME: The patient/family will have an understanding and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment, as appropriate.
3. Discuss and/or demonstrate proper use and care of medical equipment. Participate in a return demonstration by the patient/family.
4. Discuss signs of equipment malfunction and proper action in case of malfunction as appropriate.
5. For inpatients, explain that the various alarms are to alert the medical personnel of the patient's status and/or the function of the equipment.
6. Emphasize the importance of not tampering with any medical device.
7. Discuss as appropriate the proper use and care and cleaning of medical equipment.
8. Discuss proper disposal of associated medical supplies.

CHF-EX EXERCISE

OUTCOME: The patient/family will understand the exercise recommendations or limitations for this patient's disease process.

STANDARDS:

1. Discuss the exercise recommendations or limitations of exercise for this patient.
2. Emphasize the importance of seeking medical advice before starting/changing any exercise program.

CHF-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of fully participating in treatment regimen and keeping all follow-up appointments.

STANDARDS:

1. Discuss the individual's responsibility in the management of CHF.
2. Encourage regular weight checks and the reporting of any sudden weight gain.
3. Explain the procedure for making follow-up appointments.
4. Review treatment plan with the patient, emphasizing the need for keeping appointments, fully participating in medication regimen, keeping to dietary modifications, and striving to maintain activity/rest balance.

CHF-HM HOME MANAGEMENT

OUTCOME: The patient/family will understand the home management of congestive heart failure and make a plan for implementation.

STANDARDS:

1. Discuss the home management plan and methods for implementation of the plan. (Attain or maintain a healthy weight, eliminate tobacco use, control alcohol intake, elevate feet to reduce edema, etc.)
2. Explain the importance of following a home management plan, i.e., fewer emergency room visits, fewer hospitalizations and fewer complications, as well as a healthier life.
3. Explain the relationship between congestive heart failure and the increased risk of a MI, PE, and/or stroke.
4. Discuss the importance of avoiding communicable diseases by avoiding contact with ill persons, and by obtaining vaccination for vaccine preventable diseases.
5. Balance activity and rest.

CHF-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about congestive heart failure.

STANDARDS:

1. Provide patient/family with written patient information literature on the congestive heart failure.
2. Discuss the content of patient information literature with the patient/family.

CHF-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will understand the lifestyle adjustments necessary to maintain control of congestive heart failure and formulate an adaptive plan with assistance of the provider.

STANDARDS:

1. Discuss lifestyle changes that may reduce the symptoms of heart failure and improve quality of life. (Attain or maintain a healthy weight, eliminate tobacco use, control alcohol intake, elevate feet to reduce edema, etc.)
2. Discuss the importance of avoiding communicable diseases by avoiding contact with ill persons, and by obtaining vaccination for vaccine preventable diseases.
3. Balance activity and rest.

CHF-M MEDICATIONS

OUTCOME: The patient will understand the importance of following a prescribed medication regimen.

STANDARDS:

1. Review proper use, benefit, and common side effects of the prescribed medications.
2. Emphasize the importance of maintaining full participation in the medication regimen.

CHF-N NUTRITION

OUTCOME: The patient will develop a plan to control CHF through weight control and sodium intake modification.

STANDARDS:

1. Assess current nutritional habits.
2. Review the relationship between sodium and fluid retention.
3. Emphasize the importance of a sodium-restricted diet.
4. Provide a list of foods high in sodium and emphasize the importance of reducing sodium intake. Refer to registered dietician or other local resources as available.
5. Assist in developing appropriate diet plan to achieve optimal weight and sodium control.

CHF-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in congestive heart failure.

STANDARDS:

1. Explain that uncontrolled stress can increase the severity of congestive heart failure.
2. Explain that uncontrolled stress can interfere with the treatment of congestive heart failure.
3. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from congestive heart failure.
4. Explain that effective stress management may help reduce the severity of congestive heart failure, help prevent progression of cardiovascular disease, as well as help improve the health and well-being of the patient.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

CHF-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Discuss the necessity, benefits and risks of the test to be performed, as appropriate, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Discuss the meaning of the test results, as appropriate.

CAD—Coronary Artery Disease

CAD-C COMPLICATIONS

OUTCOME: The patient will understand how to prevent complications of coronary artery disease.

STANDARDS:

1. Discuss the common and important complications of coronary artery disease, i.e., MI, angina, and stroke.
2. Discuss the importance of following a treatment plan to include diet, exercise, and medication therapy to prevent complications.
3. Emphasize immediate medical intervention for signs and symptoms of complications, i.e., chest pain, nausea, loss of consciousness, jaw/arm pain, SOB, diaphoresis.

CAD-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

CAD-DP DISEASE PROCESS

OUTCOME: The patient will understand coronary artery disease and its symptoms.

STANDARDS:

1. Explain that coronary artery disease is the result of the buildup of plaque in the interior wall of the coronary artery.
2. Review the factors related to the development of coronary artery disease - uncontrolled hypertension, elevated cholesterol, obesity, uncontrolled diabetes, sedentary lifestyle, increasing age, family history of vascular disease, and male sex. Emphasize that a personal history of any vascular disease greatly increases the risk or CAD.
3. Review the signs of coronary artery disease - substernal chest pain radiating to the jaw(s), neck, throat, arm(s), shoulder(s), or back. Nausea, weakness, shortness of breath, or diaphoresis (sweating) may accompany the pain.
4. Explain that chest pain is the discomfort felt when the heart muscle is deprived of oxygen.
5. Differentiate between angina (the temporary loss of oxygen to the heart muscle) and infarction (a permanent loss of oxygen to the heart muscle resulting in permanent damage and loss of function). Emphasize that angina is an important warning sign which should prompt immediate medical evaluation.
6. Explain that sometimes only a physician, through test interpretation, may be able to differentiate between angina and myocardial infarction.

CAD-EQ EQUIPMENT

OUTCOME: The patient/family will have an understanding and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment as appropriate.
3. Discuss and/or demonstrate proper use and care of medical equipment.
4. Participate in a return demonstration by the patient/family.
5. Discuss signs of equipment malfunction and proper action in case of malfunction as appropriate.
6. Emphasize safe use of equipment.
7. Discuss proper disposal of associated medical supplies.
8. For inpatients, explain that the various alarms are to alert the medical personnel of the patient's status and/or the function of the equipment.
9. Emphasize the importance of not tampering with any medical device.

CAD-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
2. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
3. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
4. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
5. Discuss medical clearance issues for physical activity.

CAD-FU FOLLOW-UP

OUTCOME: The patient will understand the importance of adhering to a treatment regimen, be able to identify appropriate actions to take for symptoms indicating life-threatening ischemia, and will make a plan to obtain and keep appropriate follow-up appointments.

STANDARDS:

1. Discuss the individual's responsibility in the management of coronary artery disease.
2. Review treatment plan with the patient, emphasizing the need for keeping appointments, fully participating with medication therapy, adhering to dietary modifications, and maintaining an appropriate activity/rest balance.
3. Review the symptoms that should be reported and maintained (symptoms more frequent or occurring during rest, symptoms lasting longer, using prn medications more frequently, etc.).
4. Instruct the patient that if chest pain is not relieved after taking three doses of nitroglycerine 3-5 minutes apart, he/she should go immediately to the nearest emergency care facility. Recommend use of the local emergency transport system.

CAD-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about coronary artery disease.

STANDARDS:

1. Provide patient/family with written patient information literature on coronary artery disease.
2. Discuss the content of patient information literature with the patient/family.

CAD-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand the lifestyle adaptations necessary to maintain optimal health.

STANDARDS:

1. Emphasize that the most important component in the prevention and treatment of coronary artery disease is the patient's adaptation to a healthier, lower risk lifestyle.
2. Discuss lifestyle adaptations that may reduce further risk of myocardial infarction and improve the quality of life (cease use of tobacco products, limit stress, control hypertension and elevated cholesterol through medications, diet and exercise, lose weight as indicated, control diabetes, and increase activity as prescribed by the physician).

CAD-M MEDICATIONS

OUTCOME: The patient will understand the importance of following a prescribed medication regimen.

STANDARDS:

1. Review proper use, benefits, and common side effects of the medications.
2. Emphasize the importance of maintaining full participation in the medication regimen.

CAD-N NUTRITION

OUTCOME: The patient/family will understand how to control coronary artery disease through weight control and diet modification and develop an appropriate plan for dietary modification.

STANDARDS:

1. Assess current nutritional habits.
2. Review the relationship between diet and coronary artery disease, hypertension, elevated cholesterol, and obesity.
3. Provide lists of foods that are to be encouraged and avoided. Refer to dietitian or other local resources as appropriate.
4. Assist in developing an appropriate diet plan to achieve optimal weight and cholesterol control.
5. **Refer to LIP**.

CAD-P PREVENTION

OUTCOME: The patient/family will understand ways to prevent CAD.

STANDARDS:

1. Discuss that prevention of coronary artery disease is far better than controlling the disease after it has developed.
2. Explain that consuming a diet low in fat, and controlling weight, lipid levels and blood pressure will help to prevent CAD.
3. Discuss that persons with uncontrolled diabetes and uncontrolled hypertension and uncontrolled dyslipidemia are more likely to develop CAD. Stress the importance of controlling these disease processes. **Refer to DM, HTN, LIP, OBS.**

CAD-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the plan for pain management.

STANDARDS:

1. Explain that chest pain unrelieved by the prescribed regimen should be considered an emergency and prompt immediate medical evaluation.
2. Explain that pain management is specific to the disease process of this particular diagnosis and patient and may be multifaceted. **Refer to PM.**
3. Explain that short-term use of narcotics may be helpful in pain management as appropriate.
4. Explain that other medications may be helpful to control the symptoms of pain.
5. Discuss non-pharmacologic measures that may be helpful with pain control.

CAD-PRO PROCEDURES

OUTCOME: The patient/family will understand the proposed procedure(s), as well as the risks, benefits, alternatives to the proposed procedure(s) and associated factors affecting the patient.

STANDARDS:

1. Explain the specific procedure(s) to be performed, including the risks and benefits of performing the procedure and the adverse events that might result from refusal of the procedure.
2. Discuss alternatives to the proposed procedure(s), including expectant management, as appropriate.
3. Discuss the expected patient/family involvement in the care required following the proposed procedure(s).

CAD-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in coronary artery disease.

STANDARDS:

1. Explain that uncontrolled stress can increase the severity of coronary artery disease.
2. Explain that uncontrolled stress can interfere with the treatment of coronary artery disease.
3. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from coronary artery disease.
4. Explain that effective stress management may help reduce the severity of coronary artery disease, as well as help improve the health and well-being of the patient.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

CAD-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Explain the test ordered (ECG, echo, thallium stress test, coronary angiography).
2. Explain the necessity, benefits, and risks of the test to be performed and how it relates to the course of treatment.

CAD-TX TREATMENTS

OUTCOME: The patient/family will understand the possible treatments that might be performed based on the test results.

STANDARDS:

1. List the possible procedures that might be utilized to treat the coronary artery blockage, i.e., angioplasty, coronary stent, coronary artery bypass.
2. Briefly explain each of the possible treatments.
3. Explain that the patient and medical team will make the treatment decision after reviewing the results of diagnostic tests.

D

DM—Diabetes Mellitus

DM-C COMPLICATIONS

OUTCOME: The patient/family will understand that serious complications may occur as a result of long-term uncontrolled blood sugar.

STANDARDS:

1. Emphasize that the end-organ damage (i.e., kidney failure, blindness, heart attack, impotence, limb amputations) results from long-term high blood sugar.
2. Emphasize that optimal blood sugar control can reduce the risk of complications and end-organ damage.
3. Explain that routine examinations are essential and monitoring for complications is required.
4. Discuss common complications of uncontrolled high blood sugar (i.e., blindness, impotence, increased yeast infections, increased urinary tract infections, kidney failure, loss of limbs, heart attack, stroke, early death).
5. Explain that patients with Type 2 DM are at high risk for infectious diseases. Review the current recommendations for immunizations and refer for immunization as appropriate. **Refer to IM.**
6. Explain that patients with Type 2 DM are at high risk for visual loss. Review the current recommendations for eye examinations and refer to appropriate heath-care providers. **Refer to ODM.**
7. Explain that uncontrolled blood sugar can result in small-vessel damage in the heart which leads to heart attacks and cannon usually be treated. Explain that Type 2 DM also worsens atherosclerotic disease, which can also lead to heart attacks and strokes. **Refer to CVA, CAD, and PVD.**

DM-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

DM-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the basic pathophysiology and symptoms of Type 2 DM.

STANDARDS:

1. Briefly describe the pathophysiology of Type 2 DM, including the concept of insulin resistance.
2. Emphasize that the end-organ damage (i.e., kidney failure, blindness, heart attack, impotence, limb amputations) results from high blood sugar and that the goal of management is to keep blood sugar as near to normal as possible.
3. Describe risk factors for development and progression of Type 2 DM, i.e., family history, obesity, high intake of simple carbohydrates, sedentary lifestyle.
4. Describe feelings/symptoms which the patient may experience when blood sugar is high, i.e., increased thirst, increased urination, lethargy, headache, blurry vision, impaired concentration.
5. Emphasize that Type 2 DM is a chronic, controllable condition which requires permanent lifestyle alterations and continuous attention and medical care. **Refer to DM-LA.**

DM-EQ EQUIPMENT

OUTCOME: The patient/family will understand the home management and self-care activities necessary to control blood sugar and make a plan to integrate these activities into daily life.

STANDARDS:

1. Discuss the specific components of this patient's home glucose monitoring and/or home blood pressure monitoring and/or home ketone monitoring and/or home insulin pumps.
2. Demonstrate and receive return demonstration of home glucose monitoring and/or the use of other home equipment.
3. Explain that home glucose monitoring (when prescribed) is a tool to assist the patient in home management of blood sugar.
4. Discuss the importance of logging home glucose readings and insulin administration.
5. Emphasize the importance of home blood pressure monitoring as appropriate.
6. Emphasize the importance of bringing home monitoring records (i.e., blood pressure, glucose) to all medical appointments.

DM-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in achieving and maintaining good blood sugar control and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that increased daily activity will reduce the body's resistance to insulin.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
3. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.

DM-FTC FOOT CARE AND EXAMINATIONS

OUTCOME: The patient/family will understand the risks of skin breakdown, ulcers, and lower extremity amputation associated with Type 2 DM and develop a plan for blood sugar control and regular foot care to prevent these complications.

STANDARDS:

1. Identify risks that can result in amputation. Stress that wounds do not heal properly if blood sugar is elevated.
2. Discuss the current recommendations for periodic foot screening.
3. Demonstrate the proper technique for a daily home foot check by patient or support person.
4. Discuss "dos and don'ts" of diabetic foot care (i.e., don't go barefoot, wear appropriate footwear, don't trim your own nails and/or ingrown toe nails, don't soak your feet).
5. Discuss the relationship between peripheral vascular disease, neuropathy, and high blood sugar. Explain that the progression to amputation is typical without early and appropriate intervention. **Refer to PVD.**
6. Emphasize the importance of footwear which is properly fitted for patients with diabetes. Refer for professional evaluation and fitting as appropriate.
7. Remind the patient to remove shoes for each clinic visit.
8. Emphasize the importance of a regularly scheduled detailed foot exam by a trained health care provider.

DM-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up in the prevention of complications and progression and will develop a plan to make and keep follow-up appointments.

STANDARDS:

1. Emphasize the importance of early intervention to prevent complications.
2. Explain that regular medical appointments are necessary to monitor and to adjust treatment plans to attain blood sugar, blood pressure, and lipid control.
3. Explain that the home glucose and home blood pressure monitoring logs are tools for evaluating the treatment plan and should be brought to every appointment.
4. Explain that diabetes management involves many health care providers. Explain that since Type 2 DM is a chronic condition which affects the entire body, total care is essential. Emphasize the importance of keeping appointments with all health care providers, i.e., dental, eye care, foot care, laboratory.
5. Discuss the procedure for making appointments.

DM-HM HOME MANAGEMENT

OUTCOME: The patient/family will understand the home management and self-care activities necessary to control blood sugar and make a plan to integrate these activities into daily life.

STANDARDS:

1. Discuss the specific components of this patient's home management (i.e., nutrition, exercise, home glucose monitoring, self-administration of insulin, taking medications).
2. Demonstrate and receive return demonstration of home glucose monitoring and/or insulin administration as appropriate.
3. Describe proper storage, care and disposal of medicine and supplies.
4. Explain that home glucose monitoring (when prescribed) is a tool to assist the patient in home management of blood sugar.
5. Discuss the importance of logging home glucose readings and insulin administration and emphasize the importance of bringing the record to all medical appointments.
6. Emphasize the importance of daily foot checks and appropriate foot care. **Refer to DM-FTC.**
7. Emphasize the importance of good personal and oral hygiene. **Refer to WL-HY**.
8. Emphasize the importance of nutritional management. Refer to registered dietician or other local resources as appropriate.

DM-KID KIDNEY DISEASE

OUTCOME: The patient/family will understand the risks of kidney damage and end-stage renal disease resulting in dialysis associated with Type 2 DM and develop a plan for blood sugar control and regular medical examinations to prevent these complications.

STANDARDS:

1. Emphasize that high blood sugar results in damage to the kidneys. This may result in renal failure requiring long term dialysis or kidney transplant. Once kidney damage occurs it cannot be reversed.
2. Emphasize the need for regular urine analysis and blood chemistry screening.
3. Emphasize that high blood pressure worsens diabetic kidney disease. Reinforce the importance of regular blood pressure screening and taking antihypertensive medications as prescribed. **Refer to HTN.**

DM-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about Type 2 DM.

STANDARDS:

1. Provide the patient/family with written patient information on Type 2 DM.
2. Discuss the content of the patient information with the patient/family.

DM-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand that the most important component in control of high blood sugar is the patient's lifestyle adaptations and will develop a plan to achieve optimal blood sugar control.

STANDARDS:

1. Emphasize that diet and exercise are the critical components of blood sugar control and medical therapies can at best supplement diet and exercise.
2. Emphasize that the end-organ damage (i.e., kidney failure, blindness, heart attack, impotence, limb amputations) results directly and indirectly from high blood sugar and that the goal of management is to keep blood sugar as near to normal as possible.
3. Explain that the longer the blood sugar is elevated, the greater the damage will be.
4. State the reasons for blood glucose monitoring – to keep track of the level of blood sugar and permit changes to the treatment plan necessary to keep sugar under control.

DM-M MEDICATIONS

OUTCOME: The patient/family will understand the prescribed medication regimen.

STANDARDS:

1. Explain that diet and exercise are the key components of control of Type 2 DM and that medication(s) may be prescribed as a supplement to nutrition planning and increased physical activity.
2. Describe the proper use, benefits, and common or important side effects of the patient's medication(s). State the name, dose, and time to take pills and/or insulin.
3. For patients on insulin, demonstrate steps in insulin administration. Describe proper storage, care and disposal of medicine and supplies.
4. Reinforce the need to take insulin and other medications when sick and during other times of stress.
5. Emphasize the importance of full participation in the medication regimen. Explain that many medications for Type 2 DM do not exert an immediate effect and must be used regularly to be effective.
6. Briefly explain the mechanism of action of the patient's medications as appropriate.
7. Discuss any significant drug/drug or food/drug interactions, including interaction with alcohol.
8. Discuss the signs, symptoms and appropriate actions for hypoglycemia.

DM-N NUTRITION

OUTCOME: The patient/family will understand the importance of nutritional management in the control of blood sugar and develop a plan to meet nutritional goals.

STANDARDS:

1. Emphasize that nutritional management includes meal planning, careful shopping, appropriate food preparation, and responsible eating.
2. Review the food guide pyramid and its role in meal planning. Refer to registered dietician or other local resources as appropriate.
3. Emphasize the importance of reading food labels. Instruct the patient/family as necessary.
4. Discuss the merits of various food preparation methods, i.e., broiling or baking is preferred over frying, avoid gravies and sauces, rinsing or blotting excess grease.
5. Emphasize the importance of appropriate serving sizes.
6. Emphasize that extra caution or planning is required when eating out, using USDA commodities, or going to special events since these foods are usually high in fat and sugar and serving sizes are often inappropriately large.
7. Emphasize that carbohydrates and low-fat proteins are preferred and that sugars and fats should be limited.

DM-P PREVENTION

OUTCOME: The patient/family will understand major risk factors for development of Type 2 DM and will develop a plan for risk reduction.

STANDARDS:

1. Discuss the role of obesity in the development of Type 2 DM.
2. Emphasize that to maintain health and prevent diabetes, extra commitment is necessary for people with a family and/or gestational history of Type 2 DM.
3. Explain that following the food guide pyramid and maintaining adequate activity levels will reduce the risk of getting Type 2 DM.
4. Explain that many people have Type 2 DM for as much as 5-7 years before diagnosis, and that end-organ damage is occurring during that time. Emphasize the importance of regular screening. Discuss current recommendations for screening.
5. Explain that the child of a mother who had high blood sugar during pregnancy is at greatly increased risk for development of Type 2 DM. Emphasize that family planning, pre-conception screening, and early prenatal care can significantly reduce this risk.

DM-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the importance of appropriate management of pain.

STANDARDS:

1. Explain that lower extremity pain may be significant for complications associated with neuropathy which needs to be discussed with the medical provider.
2. Explain that the use of over the counter medications for chronic pain management needs to be assessed by the medical provider to minimize risk to kidney function.
3. Explain that all chest pain must be evaluated by the medical provider to rule out the possibility of myocardial infarction.
4. **Refer to PM or CPM.**

DM-SCR SCREENING

OUTCOME: The patient/family will understand the proposed screening test including indications.

STANDARDS:

1. Discuss the indication, risks, and benefits for the proposed screening test (i.e., guaiac, blood pressure, hearing, vision, development, mental health).
2. Explain the process and what to expect after the test.
3. Emphasize the importance of follow-up care.
4. Explain the recommended frequency of various screenings.

DM-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in diabetes mellitus.

STANDARDS:

1. Explain that uncontrolled stress can contribute to insulin resistance and lead to increased morbidity and mortality.
2. Explain that uncontrolled stress can interfere with the treatment of diabetes mellitus.
3. Explain that effective stress management may reduce the adverse consequences of diabetes, as well as help improve the health and well-being of the patient.
4. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from diabetes mellitus.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

DM-WC WOUND CARE

OUTCOME: The patient/family will understand the necessity and procedure for proper wound care. As appropriate, they will demonstrate the necessary wound care techniques.

STANDARDS:

1. Explain the reasons to care appropriately for the wound; decreased infection rate, improved healing, etc.
2. Explain the correct procedure for caring for this patient's wound.
3. Explain signs or symptoms that should prompt immediate follow-up: increasing redness, purulent discharge, fever, increased swelling/pain, etc.
4. Detail the supplies necessary for the care of this wound (if any) and how/where they might be obtained.
5. Emphasize the importance of follow-up.

LIP—Dyslipidemias

LIP-C COMPLICATIONS

OUTCOME: The patient will understand the complications of uncontrolled dyslipidemia.

STANDARDS:

1. Review the disease process of atherosclerosis/thrombosis, and how high cholesterol is involved in this process and its involvement in cerebrovascular disease (stroke), cardiovascular disease (heart attack), and peripheral vascular disease.
2. Explain that heart attacks may result due to blocked arteries in the heart.
3. Explain that strokes may result due to blocked arteries in the neck or brain.
4. Explain that leg pain and loss of use of legs may result due to blocked arteries in the legs.

LIP-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

LIP-DP DISEASE PROCESS

OUTCOME: The patient will understand what causes their dyslipidemia.

STANDARDS:

1. Review the causative factors of dyslipidemia (i.e., genetic, DM, thyroid disease, liver disease, kidney disease, drugs) as appropriate to the patient.
2. Review lifestyle factors which may worsen dyslipidemia (i.e., obesity, high saturated fat/carbohydrate intake, lack of regular exercise, tobacco use, alcohol intake).
3. Review factors other than dyslipidemias which predispose toward development of atherosclerotic disease, i.e., DM, HTN, low HDL, tobacco use, age, or family history of premature heart disease. Emphasize that dyslipidemias in combination with other risk factors greatly increase the risk of other vascular diseases including heart attacks and strokes.

LIP-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
2. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
3. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
4. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
5. Discuss medical clearance issues for physical activity.

LIP-FU FOLLOW-UP

OUTCOME: The patient will understand the importance of follow-up and will develop a plan to manage their dyslipidemia and to make and keep follow-up appointments.

STANDARDS:

1. Emphasize that the treatment plan and full participation with it are the responsibility of the patient.
2. Encourage the patient to get a fasting lipid profile on a regular schedule, keep appointments, and fully participate with the therapeutic plan.

LIP-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about dyslipidemia.

STANDARDS:

1. Provide patient/family with written patient information literature on the dyslipidemia.
2. Discuss the content of patient information literature with the patient/family.

LIP-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will understand the lifestyle adaptations necessary to maintain control of dyslipidemia and develop a realistic plan to accomplish this.

STANDARDS:

1. Discuss the importance of regular exercise, weight control, and a reduced fat diet in the control of dyslipidemia.
2. Explain that regular aerobic exercise lowers lipid levels and recommend that the patient should start slow and work up to an appropriate exercise level that is recommended by the health care provider.
3. Discuss the importance of cessation of tobacco use in the control of dyslipidemia.
4. Assist the patient to formulate a therapeutic plan which includes stress reduction, diet, exercise, and medications, as indicated.
5. Review the nationally accepted, current lipid reduction goals and assist the patient to establish a personal goal for lipid control.

LIP-M MEDICATIONS

OUTCOME: The patient will understand the importance of their prescribed medications.

STANDARDS:

1. Briefly review the different classes of lipid lowering drugs.
2. Review the proper use, benefits, and common side effects of these medications.
3. Review the clinical effects expected with these medications.
4. Review medications which adversely affect lipids as appropriate.

LIP-N NUTRITION

OUTCOME: The patient will understand the interaction between diet and lipid levels and formulate a healthy nutrition plan.

STANDARDS:

1. Explain the basics of the Step I AHA diet for all patients with dyslipidemia. Refer to dietitian or other local resources as available.
2. Explain the importance of carbohydrates (including alcohol) and their relationship to elevated triglycerides.
3. Discuss the importance of decreasing total dietary fat intake and substituting monounsaturated fats for other dietary fats.

LIP-P PREVENTION

OUTCOME: The patient/family will understand ways to prevent dyslipidemia.

STANDARDS:

1. Explain that consuming a diet low in fat and cholesterol, controlling weight, and exercising may help prevent dyslipidemia.

LIP-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in lipid disorders.

STANDARDS:

1. Explain that uncontrolled stress can raise lipids and increase the severity of coronary artery disease.
2. Explain that uncontrolled stress can interfere with the treatment of lipid disorders.
3. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all of which can increase the risk of morbidity and mortality from arterial disease.
4. Explain that effective stress management may help reduce the severity of arterial disease, as well as help improve the health and well-being of the patient.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

LIP-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, as applicable, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Explain the meaning of the test results, as appropriate.

F

FP—Family Planning

FP-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient will have a basic understanding of anatomy and physiology and it relationship to reproduction.

STANDARDS:

1. Identify and explain the functions of the reproductive system.
2. Discuss the menstrual cycle.
3. Discuss conception vs. contraception.

FP-DIA DIAPHRAGM

OUTCOME: The patient will understand the safe and effective use of a diaphragm.

STANDARDS:

1. Discuss the method of insertion.
2. Emphasize the use of spermicide.
3. Discuss the amount of time the diaphragm must be left in place.
4. Emphasize that the diaphragm must be used each time intercourse takes place.
5. Emphasize that the diaphragm must be refitted if there is a 10 pound weight loss or gain, and after childbirth.

FP-DPO DEPOT MEDROXYPROGESTERONE INJECTIONS

OUTCOME: The patient will understand risks, benefits, side effects, and effectiveness of depot medroxyprogesterone injections.

STANDARDS:

1. Explain the method of action and effectiveness of depot medroxyprogesterone.
2. Discuss the method of administration and importance of receiving the medication on time (typically every 3 months).
3. Discuss the contraindications, risks, and side effects of the medication.

FP-EC EMERGENCY CONTRACEPTION (POST-COITAL)

OUTCOME: The patient/family will understand risks, benefits side effects, safety and effectiveness of Emergency Contraception.

STANDARDS:

1. Explain the methods of possible actions and effectiveness of Emergency Contraception.
2. Identify indications for use - a potential candidate is a reproductive-age woman who has had unprotected sexual intercourse within 72 hours of presenting herself for medical care, independent of the time of the menstrual cycle. Most common reasons for seeking the treatment are failure of a barrier method or failure to use any method.
3. Discuss the safety: there are no contraindications to EC pill due to the small overall hormone dose and the short duration of use. (Some studies excluded women from participating if they had an absolute contraindication to taking oral contraceptives). EC has no adverse affect on a fetus, if taken inadvertently. EC may be used during breastfeeding without effect on milk quantity or quality.
4. Review side effects, and management:
    a. Levonorgestal-only regimen: Nausea occurs in approximately 23 percent of women and vomiting occurs in about 6 percent, usually limited to the first three days after treatment.
    b. Combined estrogen-progestin (Yuzpe) regimen: Nausea and vomiting occur in about 43 and 16 percent, usually limited to the first three days after treatment.
    c. Both side effects can be minimized by the use of anti-emetic pre-treatment.
    d. A small number of women may experience irregular bleeding or spotting after taking ECs, this is not their menses. Most women will have their menstrual period within one week before or after the expected time.
    e. Breast tenderness can occur after EC treatment.

FP-FC FOAM AND CONDOMS

OUTCOME: The patient will have a basic understanding of the safe and effective use of foam and condoms.

STANDARDS:

1. Discuss proper use and application of foam and condoms.
2. Emphasize the importance of use each time intercourse takes place.
3. Emphasize why condoms must be applied before penetration.
4. Emphasize that male must withdraw before erection subsides.
5. Advise concomitant use of spermicidal foam as recommended by the medical provider.
6. Discuss use of spermicidal suppositories and intravaginal films.
7. Discuss that condoms provide possible protection against STIs.

FP-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

FP-IC IMPLANT CONTRACEPTION

OUTCOME: The patient will understand the safe and effective use of implantable contraceptives.

STANDARDS:

1. Discuss and review all birth control methods with the patient.
2. Explain the insertion procedure and mechanism of action including duration of effectiveness.
3. Discuss contraindications, risks, and side effects, including the possibility of pregnancy.
4. Stress the importance of yearly follow-up.

FP-IUD INTRAUTERINE DEVICE

OUTCOME: The patient will understand the safe and effective use of the IUD.

STANDARDS:

1. Explain why IUDs are more easily retained in multiparous vs. nulliparous women.
2. Explain how IUDs work.
3. Emphasize the importance of monthly string checks.
4. Emphasize the importance of reporting abnormal vaginal discharge, fever, or pain with intercourse.
5. Discuss contraindications to placement of IUDs.
6. Explain that the copper IUD's need periodic replacement.

   NOTE: IUDs may be UNAVAILABLE from time to time due to medicolegal reasons.

FP-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about family planning.

STANDARDS:

1. Provide patient/family with written patient information literature on family planning.
2. Discuss the content of the patient information literature with the patient/family.

FP-MT METHODS

OUTCOME: The patient will receive information regarding the available methods of birth control.

STANDARDS:

1. Discuss the reliability of the various methods of birth control.
2. Discuss how each method is used in preventing pregnancy.
3. Discuss contraindications, benefits, and potential costs of each method.

FP-N NUTRITION

OUTCOME: The patient will understand the role of folic acid in the prevention of neural tube defects and the importance of a balanced diet.

STANDARDS:

1. Identify the amount of folic acid required.
2. Explain that to be maximally effective, folic acid should be given before conception.
3. Identify food sources and supplemental forms of folic acid.
4. Discuss the importance of a balanced diet.

FP-OC ORAL CONTRACEPTIVES

OUTCOME: The patient will understand the safe and effective use of oral contraceptives.

STANDARDS:

1. Explain how the "pill" inhibits ovulation.
2. Discuss the methods of taking oral contraceptives.
3. Discuss the contraindications, risks, and side effects.
4. Discuss the signs and symptoms of complications.
5. Specifically counsel on potential drug interactions, especially that antibiotics may make the contraceptive ineffective.

FP-ST STERILIZATION

OUTCOME: In order to make an informed decision about irreversible contraception, the patient will receive information about sterilization.

STANDARDS:

1. Explain tubal ligation vs. vasectomy. Emphasize that these are PERMANENT methods of contraception.
2. Explain laparoscopic (LEC) procedures: Anesthesia, CO2, incision, vaginal bleeding.
3. Explain vasectomy procedures.
4. Discuss the possible side effects and risks: Infection, pain, failure, and bleeding at incision site.
5. Explain that IHS and the state may have specific legal criteria that must be met in order to be eligible for sterilization.
6. Review availability of other methods that can prevent or delay pregnancy as an option to permanent sterilization.
7. Offer behavioral health follow-up as appropriate.

F—Fever

F-C COMPLICATIONS

OUTCOME: The patient/family will understand the common and important complications of fever.

STANDARDS:

1. Explain that most fevers are harmless and are the body's natural response to infection and that fever may even be helpful in fighting infection.
2. Explain that fevers below 107˚F (41.6˚C) do not typically cause any type of permanent damage. Explain that the brain's thermostat keeps untreated fever below this level.
3. Discuss that only about 5% of children who develop fever may have a brief seizure associated with the fever. Explain that this type of seizure is generally harmless and will usually go away as the child gets older. Seizures with fever in adults are not febrile seizures and may require further investigation.
4. Discuss the potentially fatal complications of fever in a child under 2 months of age. **Refer to NF.**

F-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the role of fever in illness.

STANDARDS:

1. Discuss that fever is a body temperature that is above normal. Discuss the parameters used by your institution to define significant fever, i.e., rectal or oral temperature >101˚F or >38˚C.
2. Discuss that fever is a symptom, not a disease.
3. Discuss that fever is the body's natural response to infection.
4. Explain that fever helps fight infections by turning on the body's immune system and impeding the spread of the infection.
5. Explain that the height of the fever does not necessarily correspond to the seriousness of the illness. Explain that a better indicator of seriousness of illness is how sick the child or adult acts.
6. Discuss that most fevers are caused by viral illnesses, some are caused by bacterial illnesses. Explain that viral illnesses do not respond to antibiotic therapy.

F-EQ EQUIPMENT

OUTCOME: The patient/family will have an understanding and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment as appropriate.
3. Discuss and/or demonstrate proper use, care, and cleaning of medical equipment.
4. Participate in a return demonstration by the patient/family.
5. Discuss signs of equipment malfunction and proper action in case of malfunction as appropriate.
6. Discuss proper disposal of associated medical supplies.

F-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up for fever.

STANDARDS:

1. Explain the importance of returning to the clinic or emergency room immediately if the patient should become more ill, become lethargic, look very sick or develop a purple rash.
2. Discuss that if the patient does not seem to be getting better after a few days of treatment the patient may need to be re-evaluated.
3. Discuss the need to return to the clinic or emergency room for fever that will not come down with antipyretics (i.e., acetaminophen, ibuprofen) or is over 105° F (40.5˚C).
4. Discuss the potentially fatal complications of fever in a child under 2 months of age. Explain that any child with a fever who is under 2 months of age should be seen by a physician immediately. **Refer to NF**.

F-HM HOME MANAGEMENT

OUTCOME: The patient/family will understand the home care techniques for responding to fever, as appropriate to this patient.

STANDARDS:

1. Explain that fever causes excess loss of body fluids because of sweating, increased heart rate and increased respiratory rate. Discuss the importance of extra fluids to replace this excess body fluid loss.
2. Explain that clothing should be kept to a minimum as most body heat is lost through the skin. Bundling will cause higher fever.
3. Discuss that sponging is not usually necessary to reduce fever.
    a. Explain that sponging without giving acetaminophen or ibuprofen may cause shivering and this may actually increase the fever.
    b. Instruct that if shivering occurs during sponging that the sponging should be discontinued to allow the fever reducing agent to work.
    c. Discuss that if sponging is done, only lukewarm water should be used. Since sponging works to lower the temperature by evaporation of water from the skin's surface, sponging is more effective than immersion.
    d. Explain that only water should be used for sponging.
4. Explain that the use of rubbing alcohol for sponging may cause the fumes to be breathed in and could cause coma.

F-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about fever.

STANDARDS:

1. Provide the patient/family with written patient information literature on fever.
2. Discuss the content of the patient information literature with the patient/family.
3. Explain the need for follow-up if the fever lasts for more than 3 days.

F-M MEDICATIONS

OUTCOME: The patient/family will understand the use of antipyretics in the control of fever.

STANDARDS:

1. Emphasize that aspirin (even baby aspirin) should NEVER be used to control fever in children under the age of 13 except under the direction of a physician.
2. Discuss the appropriate dose of acetaminophen for this patient. Discuss that acetaminophen may be given every 4-6 hours for the control of fever.
3. Discuss the appropriate dose of ibuprofen for this patient. Discuss that ibuprofen may be given every 6-8 hours for the control of fever.
4. As appropriate, discuss dosing of other fever reducing agents that may be used for this patient.
5. Discuss avoidance of combination products (i.e., antipyretics combined with decongestants) unless directed to do so by a provider.
6. Discuss the method for combining acetaminophen and ibuprofen for the control of fever if appropriate. (Alternate the two medicines, i.e., acetaminophen every 8 hours and ibuprofen every 8 hours, giving one then the other at 4 hour intervals.)

F-TE TESTS

OUTCOME: The patient/family will understand that testing is necessary to determine the etiology of the fever. They will also have an understanding of the potential adverse outcomes of the tests to be performed or the risks of not performing the recommended tests.

STANDARDS:

1. Discuss with the patient/family the test(s) to be performed. Discuss the procedure for performing the test(s) in terms that can be understood by the patient /family.
2. Explain the benefit of the test as well as the risk(s) involved in performing the test(s). Explain the risk(s) associated with not performing the recommended test(s).
3. Explain that obtaining the results of some tests routinely performed to determine the etiology of fever (cultures of various body fluids) can take several days.

G

GER—Gastroesophageal Reflux Disease

GER-DP DISEASE PROCESS

OUTCOME: The patient will understand the anatomy and pathophysiology of gastroesophageal reflux disease.

STANDARDS:

1. Explain the anatomy and physiology of the esophagus and stomach.
2. Explain the process of acid reflux into the esophagus.
3. Explain how and why stomach acid reflux into the esophagus causes pain and disease.
4. Explain long-term complications of untreated GERD including carcinoma of the esophagus.

GER-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

GER-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about gastroesophageal reflux disease.

STANDARDS:

1. Provide the patient/family with written patient information literature on gastroesophageal reflux disease.
2. Discuss the content of the patient information literature with the patient/family.

GER-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient and/or family will understand how to control GERD through lifestyle adaptation.

STANDARDS:

1. Emphasize the importance of tobacco cessation and decreased alcohol consumption.
2. Identify obesity as a major exacerbating factor in GERD. Discuss the importance of regular exercise and its role in obtaining and maintaining desirable weight.
3. Identify foods that may aggravate GERD.
4. Review the effect of timing of meals, i.e., no large meals before bedtime, more frequent light meals instead of few large meals.
5. Discuss physical control measures such as elevating the head of the bed.

GER-M MEDICATIONS

OUTCOMES: The patient/family will understand the medication, dosage and side effects that may occur. Patient/family will understand how the medication works to prevent the symptoms of GERD.

STANDARDS:

1. Review proper use, benefits, and common side effects of the medication..
2. Explain how the medication works to prevent the symptoms of GERD.
3. Explain that non-pharmacologic therapies in combination with medications will help reduce the symptoms of GERD.
4. Emphasize the importance of possible drug interactions with foods and over the counter medications.

GER-N NUTRITION

OUTCOME: The patient will understand the need for balanced nutrition and plan for the implementation of dietary modification as needed.

STANDARDS:

1. Review normal nutritional needs for optimal health.
2. Discuss current nutritional habits. Assist the patient in identifying unhealthy nutritional habits.
3. Discuss nutritional modifications as related to Gastroesophageal Reflux Disease.
4. Emphasize the importance of fully participating in the prescribed nutritional plan.

GER-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the plan for pain management.

STANDARDS:

1. Explain that pain management is specific to the disease process of this particular diagnosis and patient and may be multifaceted. **Refer to PM.**
2. Explain that short term use of narcotics may be helpful in pain management as appropriate.
3. Explain that other medications may be helpful to control the symptoms of pain, nausea and vomiting.
4. Explain that administration of fluids may be helpful with pain relief and resolution of symptoms.
5. Explain non-pharmacologic measures that may be helpful with pain control.

GER-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in gastroesophageal reflux disease.

STANDARDS:

1. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all of which can increase the risk of morbidity from gastroesophageal reflux disease.
2. Explain that effective stress management may help reduce the severity of gastroesophageal reflux disease, as well as help improve the health and well-being of the patient.
3. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
4. Provide referrals as appropriate.

GER-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Upper gastrointestinal barium studies.
2. Explain that the upper GI barium study is an x-ray to assess the degree and extent of the disease.
3. Explain that barium liquid will be swallowed and radiographs taken.
4. Discuss NPO status as indicated.
5. Discuss the test(s) for H. Pylori and how testing may assist in diagnosis and treatment.
6. Discuss as appropriate the procedure for EGD and the risks and benefits of performing this test. **Refer to SPE.**

GER-TX TREATMENT

OUTCOME: The patient and/or family will understand the medical and surgical treatments available for GERD.

STANDARDS:

1. Discuss the use, benefits, and common side effects of the patient's prescribed medications.
2. Discuss possible surgical interventions for GERD as appropriate.

H

HA—Headaches

HA-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will understand the basic the AP of their particular type of headache.

STANDARDS:

1. Explain that headaches are multifactorial and the pathophysiology is dependant on the disease process.
2. Discuss the pathophysiogoly and related anatomy of this patient disease process.

HA-C COMPLICATIONS

OUTCOME: The patient/family will understand the effects and consequences possible as a result of headaches, failure to manage headaches, or as a result of treatment.

STANDARDS

1. Discuss the possible complications, including:
    a. Depression or other mood disorders
    b. Suicidal behaviors
    c. Domestic violence
    d. Substance abuse
    e. Substance use
    f. Employment problems.
    g. Relationship problems
    h. Cognitive difficulties
    i. Appetite change
    j. Sensitivity to light and noise
    k. Alteration in sleep patterns

HA-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the headache pain symptoms, type (migraine, tension, sinus, or cluster) and the causes if known.

STANDARDS:

1. Explain that the patient is the primary source of information about the pain's location, quality, intensity, onset, precipitating, or aggravating factors, frequency of headache pain and the measures that bring relief.
2. Discus the current knowledge of this patient's type of headache.
3. Emphasize the importance of communicating information about the headache to the provider.
4. Discuss that the patient's presentation of symptoms is a unique combination of the type of pain, individual experiences and sociocultural adaptive responses.
5. Explain that headache pain may act as a warning sign of some problems in the body, including:
   a. Sinus problems
   b. Dehydration
   c. Decayed teeth
   d. Problems with eyes, ears, nose or throat
   e. Infections and fever
   f. Injury to the head
   g. Physical or emotional fatigue
   h. Exposure to toxic chemicals
   i. High blood pressure
   j. Sleep apnea
   k. Mood disorders
   l. Caffeine withdrawal (i.e., coffee, chocolate, tea, soft drinks)
   m. Hangovers
   n. Tumor (extremely rare)
6. Emphasize that influencing factors from internal and external changes are present. Some of these factors include:

Internal Factors:	**External Factors:**
Hormonal changes	Weather changes
Stress	Alcohol
Change in sleep habit	Bright /flickering light

HA-FU FOLLOW-UP

OUTCOME: The patient will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.
4. Discuss important warning signs that would indicate earlier follow up is needed, including:
    a. If the headache keeps you from your usual activities
    b. If the headache lasts more than one day
    c. If you have fever, stiff neck, nausea, or vomiting
    d. If you feel drowsy or want to go to sleep
    e. If you have had a recent head injury
    f. If you develop eye pain, blurred vision, or trouble seeing
    g. If you suspect the headache was caused by medicines
    h. If you have persistent headaches seen by doctor
    i. If the headache was the result of a head injury
    j. If you have difficulty speaking
    k. If you develop numbness or weakness of the arms or legs
    l. If the headaches increase in intensity or frequency over time
    m. If you experience instantaneous onset of severe headache
    n. If the headaches require the daily use of pain-reliever medications
    o. If the headache is experienced by very young children (preschool age)
    p. If there is new onset headaches in middle-aged people.

HA-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient /family will receive written information about headache pain.

STANDARDS:

1. Provide the patient/family with written patient information literature.
2. Discuss the content of the patient information literature with the patient/family.

HA-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand the lifestyle changes necessary to optimize performance of everyday activities and promote well-being.

STANDARDS:

1. Explain that treatment of headache pain is very individualized and may involve lifestyle adaptation, i.e., medication, rest and relaxation, exercise, stress-reduction, and/or internal or external changes.
2. Explain that exercise and social involvement (i.e., familial, traditional, cultural) may decrease the sense of pain and the depression and anger associated with pain.
3. Review lifestyle areas that may require adaptations, i.e., diet, substance use, rest and sleep patterns, physical activity, sexual activity, role changes, communication skills and interpersonal relationships.
4. Discuss lifestyle changes in relation to headache style.
5. Discuss techniques that may reduce stress and depression, such as meditation, maintaining regular sleep patterns, exercise program, hobbies and crafts, acupuncture, spiritual and cultural activities, or biofeedback training.
6. Refer to community resources as appropriate.

HA-M MEDICATION

OUTCOME: The patient/family will understand their medication regimen and the importance of fully participating with the therapy.

STANDARDS:

1. Review proper use, benefits and common side effects of prescribed medications.
2. Discuss that there are many medications for the treatment or prevention of headaches and that narcotics are usually not indicated.
3. Explain that excess sedation and euphoria are not goals of palliative pharmacotherapy.
4. Emphasize that headache pain is not always completely understood and it is often necessary to take prophylactic medicines to assure optimal comfort levels. It is important to take preventive medication exactly as prescribed to prevent or reduce pain.
5. Discuss patient/family concerns about addiction. Explain the difference between psychological addiction and physical dependence upon prescribed medications. Reinforce that addiction is psychological dependence on a drug and is not equivalent to tolerance or physical dependence.
6. Emphasize the importance of consulting with provider before taking any OTC or herbal/traditional remedies.
7. Discuss the use of adjunct medications, if indicated, to control analgesic side effects, i.e., anti-emetics, laxatives, antacids.

HA-N NUTRITION

OUTCOME: The patient/family will understand the important contribution of healthy food choices and an adequate fluid intake in the treatment of headaches. They will be able to identify some dietary factors that may affect their headaches.

STANDARDS:

1. Assess eating habits.
2. Stress that eating regularly and not skipping meals is important.
3. Emphasize the necessary component – water – in a healthy diet.
4. Explain that constipation is a common side effect of some pain medications. Dietary measures such as increased water, increased fiber, increased fruit and decreased intake of milk products may be helpful.
5. Refer to dietitian or other local resources as indicated.

HA-P PREVENTION

OUTCOME: The patient/family will understand that headaches have varying etiologies and the mechanisms are not known for many headaches. The patient/family will identify the precipitating factors, if known, and develop a plan to maximize prevention strategies.

STANDARDS:

1. Discuss strategies for identifying headache triggers (i.e., journal, activity and food log).
2. Stress the importance of avoiding any known triggers.
3. Discuss that prophylactic medications must be taken as directed to be effective.
4. Emphasize that headaches seem to be more common during stressful times. **Refer to HA-SM.**

HA-PSY PSYCHOTHERAPY

OUTCOME: The patient/family will understand that grief reactions and mood disorders are common with chronic headaches.

STANDARDS:

1. Discuss symptoms of mood disorders that may need additional professional support, sympathy, time, attention, compassion, and communication for patient/family.
2. Explain that if anti-depressant drugs are prescribed by the provider, full participation with the treatment plan is important to maximize the effectiveness of the treatment.
3. Explain that many mechanisms for dealing with grief and depression are available, i.e., support groups, individual therapy, family counseling, spiritual guidance.
4. Refer to community resources as appropriate.

HA-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in headache management.

STANDARDS:

1. Explain that uncontrolled stress may exacerbate the symptoms of headache. This can set up a cycle of pain-stress which becomes self-sustaining and may escalate.
2. Discuss that in chronic headaches, uncontrolled stress may lead to depression or other mood disorders.
3. Explain that effective stress management may reduce the severity of symptoms the patient experiences, as well as help improve the health and well-being of the patient.
4. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as inappropriate eating, all which can increase the severity of pain.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

HA-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Explain the test ordered.
2. Discuss the necessity, benefits and risks of the test to be performed, as appropriate, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Discuss the meaning of the test results, as appropriate.

HA-TX TREATMENT

OUTCOME: The patient/family will understand the possible treatments that may be available based on the specific history, test results, and individual preferences.

STANDARDS:

1. Discuss with the patient/family the possible appropriate noninvasive pain relief measures, i.e., massage, heat, cold, rest, over-the-counter medications, books or tapes for relaxation.
2. Discuss with the patient/family the possible alternative pain relief measures, when appropriate, i.e., meditation, imagery, acupuncture, healing touch traditional healer, biofeedback, hypnosis.
3. Discuss with the patient/family the possible appropriate pharmacotherapy. **Refer to HA-M.**
4. Discuss with the patient/family other possible approaches, i.e., lifestyle changes, physical therapy, nutritional changes, stress management, or psychotherapy.
5. Emphasize the importance of the patient/family's active involvement in the development of a treatment plan.

HTN—Hypertension

HTN-C COMPLICATIONS

OUTCOME: The patient will understand the complications of uncontrolled hypertension.

STANDARDS:

1. Explain that arteriosclerosis and atherosclerosis impede blood flow through the circulatory system.
2. Explain that heart attacks may result from the heart having to work harder to pump blood through congested and hardened arteries.
3. Explain that blindness may result from injured blood vessels in the eye.
4. Explain that strokes may result from ruptures of injured blood vessels in the brain.
5. Explain that circulatory complications eventually impair the ability of the kidneys to filter out toxins.

HTN-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

HTN-DP DISEASE PROCESS

OUTCOME: The patient will understand hypertension and summarize its causes.

STANDARDS:

1. Explain the difference between systolic and diastolic pressure. Define the normal ranges.
2. Review causative factors:
   a. Lifestyle Factors: Obesity, high sodium intake, high fat and cholesterol intake, lack of regular exercise
   b. Special Conditions: Pregnancy, oral contraceptives
   c. Disease States: Diabetes, hyperthyroidism
   d. Personal Factors: Family history, sex, race.
3. Discuss that most hypertension is asymptomatic, but some patients may experience headache, dizziness, faintness, nosebleed, or ringing in the ears and any of these symptoms should prompt immediate re-evaluation by a physician.

HTN-EQ EQUIPMENT

OUTCOME: The patient/family will receive information on the use of home blood pressure monitors.

STANDARDS:

1. Provide the patient/family with information on the use of the specific home blood pressure monitor.
2. Discuss the use of blood pressure monitoring equipment in public places, i.e., stores.
3. Discuss when to contact a health care provider for a blood pressure value which is outside the patient's personal guidelines.

HTN-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain how regular exercise helps to reduce high blood pressure and maintain normal blood pressure.
2. Discuss activity allowances and expectations (heavy lifting may predispose to complications).
3. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
4. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
5. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
6. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
7. Discuss medical clearance issues for physical activity.

HTN-FU FOLLOW-UP

OUTCOME: The patient participates in the treatment plan and understands the importance of full participation .

STANDARDS:

1. Discuss the individual's responsibility in the management of hypertension.
2. Encourage regular blood pressure and weight checks.
3. Review treatment plan with the patient, emphasizing the need to keep appointments, take medication as directed, make indicated lifestyle changes, and control co-morbid conditions.

HTN-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about hypertension.

STANDARDS:

1. Provide the patient/family with written patient information literature on hypertension.
2. Discuss the content of the patient information literature with the patient/family.

HTN-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will understand the lifestyle adjustments necessary to maintain control of blood pressure and develop a plan to modify his/her risk factors.

STANDARDS:

1. Emphasize the importance of weight control.
2. Discuss the importance of a program of regular exercise.
3. Discuss the relationship of stress to hypertension. Suggest ways of reducing stress—napping, meditation, exercise and "just relaxing."
4. Explain that use of tobacco, either smoking or use of smokeless tobacco, can worsen hypertension and increase the risk of complications.

HTN-M MEDICATIONS

OUTCOME: If on medication, the patient will verbally summarize their medication regimen and the importance of full participation with therapy.

STANDARDS:

1. Review proper use, benefits and common side effects of prescribed medications.
2. Explain the importance of avoiding over-the-counter medications without checking with a physician.

HTN-N NUTRITION

OUTCOME: The patient will verbally summarize methods for control of blood pressure through weight control and diet modification.

STANDARDS:

1. Explain the role of salt intake in hypertension and ways to decrease salt intake:
   a. Remove the salt shaker from the table
   b. Taste food before salting
   c. Discuss other seasonings
   d. Read food labels to determine sodium content.
2. Discuss caffeine and its role in hypertension.
3. Discuss the importance of weight loss in controlling hypertension**. Refer to WL-N.**
4. Encourage adequate intake of fruits, vegetables, water and fiber.

HTN-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in hypertension.

STANDARDS:

1. Explain that uncontrolled stress can worsen hypertension and increase risk factors of cardiovascular disease.
2. Explain that uncontrolled stress can interfere with the treatment of hypertension.
3. Explain that effective stress management may reduce the adverse consequences of hypertension, as well as help improve the health and well-being of the patient.
4. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from hypertension.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

HTN-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, as applicable, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Explain the meaning of the test results, as appropriate.

HTH—Hyperthyroidism

HTH-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will have a basic understanding of the anatomy and physiology of the pituitary-thyroid axis.

STANDARDS:

1. Explain the normal location, function, and feedback mechanism of the pituitary-thyroid axis (heart rate, muscle strength, bowel function, fat metabolism, energy level, hair growth, and mood).
2. Discuss the changes to the thyroid gland and the body's metabolic state as a result of hypothyroidism.
3. Discuss the impact of these changes on the patient's health and well-being.

HTH-C COMPLICATIONS

OUTCOME: The patient/family will understand the effects and consequences possible as a result of hyperthyroidism, failure to manage hyperthyroidism, or as a result of treatment.

STANDARDS:

1. Discuss the significant complications associated with hyperthyroidism (atrial fibrillation, heart failure, angina, myocardial infarction, osteoporosis, depression, personality changes, proptosis).
2. Explain that taking medications as prescribed may prevent most or all significant complications.
3. Discuss common or significant complications which may result from treatment, i.e., subsequent hypothyroidism and the need to take lifelong medication.

HTH-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pathophysiology of hyperthyroidism.

STANDARDS:

1. Explain that hyperthyroidism occurs when the amount of thyroid hormone in the blood is too high. It affects over 2½ million Americans. More women have this problem than men.
2. Explain that hyperthyroidism leads to an overall increase in a person's metabolism, which can cause a number of problems.
3. Review the patient-specific cause and expected course of hyperthyroidism, i.e., "increased production" due to hypersecretory state (i.e., Grave's disease, toxic nodule, toxic multinodular goiter, or overproduction of TSH from pituitary), "leakage" of stored hormone due to thyroid damage (as in thyroiditis), or too much supplement.
4. Review the symptoms of hyperthyroidism:
    a. feelings of excessive warmth and sweating
    b. palpitations
    c. tremors
    d. weight loss despite having an increased appetite
    e. more frequent bowel movements
    f. weakness
    g. limited endurance
    h. difficulty concentrating
    i. memory impairment
    j. nervousness
    k. tiredness
    l. difficulty sleeping
    m. depression
    n. personality changes
    o. enlarged thyroid—usually nontender.

HTH-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of regular follow-up and will make a plan to obtain and keep appropriate follow-up appointments.

STANDARDS:

1. Discuss the individual's responsibility in the management of hyperthyroidism.
2. Review treatment plan with the patient, emphasizing the need for keeping appointments, fully participating with medication therapy, returning for appropriate follow-up, lab tests, and appointments.
3. Review the symptoms, which should be reported and evaluated (both symptoms of hyperthyroidism and hypothyroidism).
4. Assist the patient in obtaining a follow-up appointment as necessary.

HTH-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about hyperthyroidism.

STANDARDS:

1. Provide the patient/family with written patient information literature on hyperthyroidism.
2. Discuss the content of the patient information literature with the patient/family.

HTH-M MEDICATIONS

OUTCOME: The patient/family will understand the importance of following a prescribed medication regimen.

STANDARDS:

1. Review proper use, benefits, and common side effects of the medication.
2. Emphasize the importance of maintaining strict participation in the medication regimen and monitoring schedule.
3. Explain the signs and symptoms of too much or too little medication.
4. Explain the implications that medications have on current or potential pregnancy.
5. Discuss that some medications may have an adverse effect on the disease state, i.e., amiodarone, iodine.

HTH-N NUTRITION

OUTCOME: The patient/family will understand the nutritional needs of the patient with hyperthyroidism.

STANDARDS:

1. Review current nutritional status of patient and the use of dietary supplements.
2. Explain the importance of preventing or treating the complications associated with the patient's high metabolic rate, including bone demineralization.
3. Discuss that supplementation of the diet may be necessary for the following: vitamins A and C, B complex (esp. Thiamin, riboflavin, B6 and B12).
4. Discuss fluid requirements with the patient/family. This should be 3-4 liters per day unless contraindicated by cardiac or renal problems.
5. Discuss the need to avoid alcohol as it may cause hypoglycemia and diuresis.
6. Refer to a registered dietician as appropriate.

HTH-SCR SCREENING

OUTCOME: The patient/family will understand the screening device.

STANDARDS

1. Explain the screening device to be used.
2. Explain why the screening is being performed.
3. Discuss how the results of the screening will be used.
4. Emphasize the importance of follow-up care.

HTH-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed, the risk(s)/benefit(s) of the test(s) and the risk of refusal of the test(s).

STANDARDS:

1. Explain the test ordered (i.e., TSH, T3, T4, nuclear scan, ultrasound).
2. Explain the necessity, benefits, and risks of the test to be performed and how it relates to the course of treatment. Discuss the risks of non-performance of the testing.

HTH-TX TREATMENTS

OUTCOME: The patient/family will understand the possible treatments that may be performed based on the test results.

STANDARDS:

1. List the patient-specific possible therapies that might be utilized to treat hyperthyroidism (beta-blocker, anti-thyroid drugs, radioactive iodine, surgery).
2. Briefly explain each of the possible applicable treatments.
3. Explain that the patient and medical team will make the treatment decision after reviewing the results of diagnostic tests.
4. Explain the implications that treatment would have on current or potential pregnancy.

LTH—Hypothyroidism

LTH-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will have a basic understanding of the anatomy and physiology of the pituitary-thyroid axis.

STANDARDS:

1. Explain the normal location, function, and feedback mechanism of the pituitary-thyroid axis (heart rate, muscle strength, bowel function, fat metabolism, energy level, hair growth, and mood).
2. Discuss the changes to the thyroid gland and the body's metabolic state as a result of hypothyroidism.
3. Discuss the impact of these changes on the patient's health and well-being.

LTH-C COMPLICATIONS

OUTCOME: The patient/family will understand the effects and consequences possible as a result of hypothyroidism, failure to manage hypothyroidism, or as a result of treatment.

STANDARDS:

1. Discuss the significant complications associated with hypothyroidism (depression, excessive weight gain, high blood pressure, high cholesterol levels).
2. Discuss that full participation with the treatment regimen may prevent most or all significant complications.
3. Discuss common or significant complications which may result from treatment, i.e., jitteriness, heart racing, headaches. Consistently taking medications at the appropriate dose will minimize these complications.

LTH-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pathophysiology of hypothyroidism.

STANDARDS:

1. Explain that hypothyroidism occurs when the amount of thyroid hormone in the blood is too low. It affects almost 5% of the population. It is more common in women and in elderly persons.
2. Explain that hypothyroidism leads to an overall decrease in a person's metabolism, which can cause a number of problems.
3. Review the patient-specific cause and expected course of hypothyroidism. In most cases hypothyroidism is a permanent condition that requires life-long treatment with natural thyroid supplement.
4. Review the symptoms of hypothyroidism, which include feelings of:
    a. fatigue
    b. lack of motivation
    c. sleepiness
    d. weight gain
    e. feelings of being constantly cold
    f. constipation
    g. dry skin
    h. hair loss
    i. muscle cramps and muscle weakness
    j. high blood pressure and high cholesterol levels
    k. depression
    l. slowed speech
    m. poor memory
    n. feelings of "being in a fog."

LTH-EX EXERCISE

OUTCOME: The patient/family will understand the relationship between physical activity and hypothyroidism and develop a plan to achieve an appropriate level of activity.

STANDARDS:

1. Explain the normal benefits of a regular exercise program to health and well-being.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
3. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.
7. Discuss that in hypothyroidism, severe muscle weakness may occur and exercise tolerance is impaired. Explain that exercise is important not only for weight control, but also to reestablish muscle tone and fitness. In general, intense aerobic exercise should only be attempted after thyroid hormone levels have returned to normal. However, the patient can begin walking and modest weight-bearing exercise as treatment is initiated.

LTH-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of making and keeping follow-up appointments and will make a plan to obtain and keep appropriate follow-up appointments.

STANDARDS:

1. Discuss the individual's responsibility in the management of hypothyroidism.
2. Review the treatment plan with the patient, emphasizing the need for keeping appointments, fully participating with medication therapy, returning for appropriate follow-up, lab tests, and appointments.
3. Review the symptoms, which should be reported and evaluated (both symptoms of hyperthyroidism and hypothyroidism).
4. Assist the patient in making follow-up appointments as appropriate.

LTH-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about hypothyroidism.

STANDARDS:

1. Provide the patient/family with written patient information literature on hypothyroidism.
2. Discuss the content of the patient information literature with the patient/family.

LTH-LA LIFESTYLE ADAPTATIONS

OUTCOMES: The patient/family will understand the lifestyle adaptations necessary to maintain optimal health.

STANDARDS:

1. Emphasize that weight gain, high blood pressure, and high cholesterol levels are associated with hypothyroidism.
2. Explain that although most hypothyroid individuals will lose weight after they begin taking a thyroid supplement, significant weight loss will usually require attention to healthy eating habits and exercise. Individuals should avoid setting unrealistic goals.

LTH-M MEDICATIONS

OUTCOME: The patient/family will understand the importance of following a prescribed medication regimen.

STANDARDS:

1. Review proper use, benefits, and common side effects of the medication.
2. Emphasize the importance of maintaining full participation in the medication regimen and monitoring schedule.
3. Explain the signs and symptoms of too much or too little medication.
4. Explain the implications that medications have on current or potential pregnancy.
5. Discuss drug/drug and drug/food interactions as appropriate.
6. Discuss that some medications may have an adverse effect on the disease state, i.e., amiodarone, iodine.

LTH-N NUTRITION

OUTCOME: The patient/family will understand the need for balanced nutrition and plan for the implementation of dietary modification.

STANDARDS:

1. Review normal nutritional needs for optimal health.
2. Discuss current nutritional habits. Assist the patient in identifying unhealthy nutritional habits.
3. Discuss the need for the correct combination of nutrients and vitamins, as well as the need for a low-fat diet without excessive calories.
4. Explain that the following foods must be limited: cabbage, brussel sprouts, kale, cauliflower, asparagus, broccoli, soy beans, lettuce, peas, spinach, turnip greens and watercress as these foods may increase the risk of developing a goiter.
5. Explain that the long term use of soy protein products may be contraindicated.
6. Encourage the use of iodized salt if indicated.
7. Refer to registered dietician.

LTH-SCR SCREENING

OUTCOME: The patient/family will understand the screening device.

STANDARDS

1. Explain the screening device to be used.
2. Explain why the screening is being performed.
3. Discuss how the results of the screening will be used.
4. Emphasize the importance of follow-up care.

LTH-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Explain the test ordered, i.e., TSH, T3, T4, nuclear scan, ultrasound, blood counts.
2. Explain the necessity, benefits, and risks of the test to be performed and how it relates to the course of treatment. Discuss the risks/benefits of non-testing.

I

IM—Immunizations

IM-DEF DEFICIENCY

OUTCOME: The patient/family will understand the importance of fully participating with schedule of prescribed immunizations for protection from vaccine preventable disease.

STANDARDS:

1. Identify reasons for deficiency and provide education as indicated.
2. Explain that deficiency of immunization(s) may cause serious health problems.
3. Discuss diseases that have been eradicated due to immunizations.
4. Discuss the patient's particular immunization deficiency.
5. Review complications that could occur if infection develops.

IM-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of receiving immunizations on schedule.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

IM-I IMMUNIZATION INFORMATION

OUTCOME: Patient/family will understand the indication for and benefit of immunization, common and important side effects of vaccination, and post immunization care.

STANDARDS:

1. Explain the indication for immunization including the disease which is to be prevented by immunization.
2. Explain the contraindications of administering the vaccine.
3. Discuss appropriate vaccine sites.
4. Explain the important and common side effects of immunizations to be administered.
5. Explain post-immunization care including dose of antipyretics if needed and what to do if serious side effects are observed.
6. Explain how family members can assist with comforting immunized persons during and after vaccine administration, as culturally appropriate.

IM-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about immunizations.

STANDARDS:

1. Provide the patient/family with written patient information literature on immunizations.
2. Discuss the content of the patient information literature with the patient/family.

IM-P PREVENTION

OUTCOME: The patient/family will understand communicability and measures to control vaccine preventable disease for children and adults.

STANDARDS:

1. Explain that vaccines are available against certain infections or diseases.
2. Explain that certain infections can be eliminated or avoided through immunizations.
3. Provide information on types of vaccines available for children and adults.
4. Explain that good hand hygiene, use of tissues and waste receptacles and avoiding touching eyes, nose, and mouth are also important measures in the control of some disease transmission.

IM-SCH SCHEDULE

OUTCOME: The patient/family will understand the importance of fully participating with a schedule of prescribed immunizations for protection from vaccine preventable diseases.

STANDARDS:

1. Explain that some vaccines are prescribed to be given in series, within certain time frames and may not be counted if given too early and may need to be repeated.
2. Explain that some vaccines are required by law.
3. Provide schedules on types of vaccines for children and adults.

IGT—Impaired Glucose Tolerance

Refer to PDM—Prediabetes.

FLU—Influenza

FLU-C COMPLICATIONS

OUTCOME: The patient/family will understand the common and important complications of the flu.

STANDARDS:

1. Discuss that one of the most common complications of the flu is pneumonia and may lead to hospitalization.
2. Explain that the flu causes many deaths in the United States every year.
3. Discuss groups who are at higher risk for complications from the flu such as the elderly and infants. Also discuss that persons with chronic diseases such as pulmonary disease, cardiac disease, renal disease, cancer and diabetes are at higher risk for complications from the flu.
4. Discuss the importance of not giving aspirin or products containing aspirin to children (under 16 years of age) with the flu as it may induce a potentially fatal complication of the flu called Reye Syndrome.

FLU-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the basic pathophysiology of influenza infection.

STANDARDS:

1. Discuss that the flu is caused by an influenza virus and that antibiotics are not helpful in treating the flu.
2. Explain that the flu virus changes every year so that having had the flu in a previous year will not necessarily make one immune to flu this year.
3. Discuss that the most common symptoms of the flu are muscle aches, head ache, fever, malaise, non-productive cough, and fatigue.
4. Explain that the flu is spread from person to person by inhalation of small particle aerosols, by direct contact or by contact with objects that have recently been contaminated by secretions from someone who has the flu.

FLU-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss signs and symptoms that would indicate worsening of the disease and prompt a follow-up visit.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize the importance of keeping follow-up appointments.

FLU-IM IMMUNIZATION

OUTCOME: The patient/family will understand the role that immunization plays in preventing influenza. (Discuss the following as appropriate to this patient and situation.)

STANDARDS:

1. Discuss that the vaccine for the flu is formulated for the viruses that are predicted to be most prevalent this year.
2. Discuss that the currently available injected flu vaccines are killed virus vaccines and cannot cause the flu. (Please refer to current information on this year's flu vaccine.)
3. Discuss that there is a live attenuated intranasal vaccine available. This vaccine may protect individuals not only from the flu strains in the vaccine but also other flu strains. It may also decrease the incidence of colds and ear infections.
4. Discuss that persons who have a history of Guillain-Barre Syndrome, egg hypersensitivity or hypersensitivity to any flu vaccine component should probably not get the flu vaccine unless ordered by a physician.
5. Discuss that current injectable flu vaccines are not licensed for use in individuals under the age of 6 months and that the intranasal flu vaccine is licensed for use in individuals between the ages of 5-49 years.
6. Discuss that persons at high risk for complications from influenza are recommended to receive the flu vaccine every year.
7. Discuss the common and important complications of flu vaccine.

FLU-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about influenza.

STANDARDS:

1. Provide the patient/family with written patient information literature on influenza.
2. Discuss the content of the patient information literature with the patient/family.

FLU-M MEDICATIONS

OUTCOME: The patient/family will understand the role of medications used to reduce flu symptoms and/or duration. (discuss the following as appropriate).

STANDARDS:

1. Discuss treatment of symptoms with OTC medications including decongestants, cough suppressants, antipyretics, analgesics, antihistamines.
2. If appropriate, discuss that aspirin should not be used in patients that are under 16 years of age due to risk of Reye's syndrome.
3. Discuss the use of antiviral treatment for influenza and that therapy must be started within 48 hours.
4. Review the proper use, benefits and common side effects of prescribed medications.
5. Explain the importance of completing the full course of antiviral therapy, as prescribed, to prevent antibiotic resistance and to facilitate complete recovery.
6. Explain the importance of adhering to the medication schedule.
7. Discuss that zinc, Echinacea and vitamin C over the counter products for viral infections have not proven to be effective.
8. Explain that antibiotics are not used for viral illnesses because they are not effective on viruses:
    a. Antibiotics used for viral infections can cause antibiotic resistance
    b. Antibiotics can also cause side effects, allergic reactions, and increased cost with no benefit to treating the viral illness.

FLU-N NUTRITION

OUTCOME: The patient/family will understand how nutrition may impact the management of influenza.

STANDARDS:

1. Explain that influenza causes increased fluid losses and that extra fluid intake is usually required.
2. Explain that chicken soup may actually be helpful because it provides extra fluid, potassium and sodium.
3. Explain that small frequent meals or sips of fluid may be better tolerated than larger meals.
4. Discuss that vomiting may be present:
    a. Liquids or food will be better tolerated if the stomach is allowed to "rest" for 30 minutes to one hour before attempts to consume other fluids or foods.
        i. Small frequent intake of fluids will be better tolerated.
        ii. 5 to 15 cc's of clear fluid every 5 to 10 minutes until 8 hours have passed without vomiting is one effective strategy.

FLU-P PREVENTION

OUTCOME: The patient/family will understand communicability and measures to prevent the flu.

STANDARDS:

1. Discuss that influenza is a vaccine preventable disease. **Refer to FLU-IM.**
2. Emphasize the importance of receiving influenza vaccine every year as the virus that causes the flu changes every year.
3. Discuss that careful hand washing can help to prevent the spread of influenza.
4. Discuss that avoiding crowded places can decrease chances of getting influenza.
5. Discuss the importance of covering one's mouth and nose when coughing or sneezing and proper disposal of tissues.
6. Explain that influenza can be spread by fomites (i.e., contaminated objects such as telephone receivers), and that common use of disinfectant cleaners may reduce this spread.

L

LAB—Laboratory

LAB-DRAW PHLEBOTOMY

OUTCOME: The patient/family will understand the phlebotomy procedure.

STANDARDS:

1. Discuss the method of phlebotomy to be used for this lab draw.
2. Discuss common and important side effects or consequences of phlebotomy.

LAB-FU FOLLOW-UP

OUTCOME: The patient/family will understand the conditions that would require follow-up and how to obtain follow-up.

STANDARDS:

1. Discuss the findings that will signify a serious complication or condition.
2. Discuss the procedure for obtaining follow-up appointments.

LAB-L LITERATURE

OUTCOME: The patient/family will receive written information about the disease process or condition.

STANDARDS:

1. Provide patient/family with written patient information on the disease state or condition.
2. Discuss the content of patient information literature with the patient/family.

LAB-S SAFETY

OUTCOME: Explain the procedure used to protect the patient and staff.

STANDARDS:

1. Discuss the use of personal protective equipment (i.e., gloves) and their role in preventing transmission of disease to the patient and the staff.
2. Discuss that needles and other lab draw equipment are single patient use and will be discarded after this draw.
3. Discuss the procedure for accidental needle-stick of the patient or the staff as appropriate.

LAB-TE TESTS

OUTCOME: The patient/family will understand the test to be performed.

STANDARDS:

1. Explain the test that has been ordered.
2. Explain the necessity, benefits, and risks of the test to be performed. Refer to the primary provider as necessary.
3. Explain any necessary preparation for the test, i.e., fasting.
4. Explain the procedure for obtaining test results.
5. If the patient will obtain the specimen explain the procedure for properly obtaining the specimen and the storage of the specimen until it is returned to the lab.

M

M—Medications

M-DI DRUG INTERACTION

OUTCOME: The patient/family will have an awareness of potential drug, food, or alcohol interactions associated with their prescribed medications.

STANDARDS:

1. Explain the potentially serious adverse effects of the specific interactions with other drugs (including OTC medications and traditional or herbal medicines).
2. Specifically discuss adverse effects of this medication when combined with specific foods.
3. Emphasize the importance of informing the provider (i.e., physician, pharmacist, nurse) of any drug interaction(s) that have occurred in the past.
4. Inform the patient of the procedure to follow in the event of a drug interaction.

M-FU FOLLOW-UP

OUTCOME: The patient will demonstrate knowledge of the use and benefits of their medications in the treatment of disease process.

STANDARDS:

1. Review name of medication and reason for use. Show medication to patient where applicable.
2. Ask patient to explain how medications are to be taken at home.
3. Review possible adverse drug reactions, importance for full participation , and benefits of therapy.

M-I INFORMATION

OUTCOME: The patient/family will have a general understanding of the use and benefits of the medications prescribed.

STANDARDS:

1. Give the name of the drug and show drug to patient where applicable.
2. Briefly review the mechanism of action of the drug.
3. Review directions for use and duration of therapy.
4. Discuss probable benefits of therapy.
5. Discuss importance of full participation with medication regimen.
6. Review probable side-effects and toxicities of medication. Review the course of action to take if toxicity occurs.
7. Emphasize the importance of informing the provider prior to initiating any new medications.
8. Discuss the proper storage and handling of medications.

M-L PATIENT INFORMATION LITERATURE

OUTCOME: Patient/family will receive written information about medication(s) prescribed.

STANDARDS:

1. Provide patient/family with written patient information literature about the prescribed medication(s).
2. Discuss the content of the patient information literature with the patient/family.

M-PRX MEDICATION DISPENSATION TO PROXY

OUTCOME: The person to whom the medication is dispensed will understand information about the medication and develop a plan to assure proper medication use.

STANDARDS:

1. The proxy will receive information on proper administration of the medications dispensed.

MSX—Metabolic Syndrome

MSX-C COMPLICATIONS

OUTCOME: The patient will understand the complications associated with metabolic syndrome.

STANDARDS:

1. Explain that metabolic syndrome is a precursor to cardiovascular disease and diabetes.
2. Explain that arteriosclerosis and atherosclerosis impede blood flow through the circulatory system.
3. Explain that heart attacks may result from the heart having to work harder to pump blood through congested and hardened arteries.
4. Explain that good control of blood sugar can reverse or prevent progression of pre-diabetes.
5. Explain that strokes may result due to injured blood vessels in the neck or brain.
6. Explain that blindness may result from injured blood vessels in the eye.
7. Explain that leg pain may result due to injured blood vessels in the legs.

MSX-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

MSX-DP DISEASE PROCESS

OUTCOME: The patient will have a basic understanding of the pathophysiology of the metabolic syndrome.

STANDARDS

1. Explain that metabolic syndrome is a combination of dyslipidemia, hypertension and pre-diabetes (insulin resistance).
2. Review the risk factors and causative factors of dyslipidemia, hypertension and pre-diabetes.
3. .Discuss HDL, non-HDL, LDL and triglycerides. Define normal ranges.
4. Explain the difference between systolic and diastolic pressure. Define normal ranges.
5. Discuss the role of insulin resistance**.** Define normal ranges.

MSX –EQ EQUIPMENT

OUTCOME: The patient will receive information on the use of home blood pressure monitors and pedometers.

STANDARDS:

1. Provide the patient with information on the use of specific home blood pressure monitors and pedometers.
2. Discuss the use of blood pressure monitoring equipment in public places, i.e., such as stores.
3. Discuss correct way to record blood pressure and pedometer activity in a logbook and bring to clinic visits.
4. Discuss when to contact a healthcare provider for a blood pressure value which is outside the patient's personal guidelines.
5. Discuss the proper use and care of medical equipment.
6. Discuss signs of equipment malfunction and proper action in case of malfunction.

MSX-EX EXERCISE

OUTCOMES: The patient will understand the relationship of exercise to normal lipids, blood pressure and blood sugar. The patient will develop a physical activity plan.

STANDARDS:

1. Explain that consistent daily physical activity and improve dyslipidemia, blood pressure, blood sugar.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
3. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.

MSX-FU FOLLOW-UP

OUTCOMES: The patient will understand the importance of follow-up. The patient will develop a plan to make and keep appointments.

STANDARDS:

1. Emphasize the patient's responsibility in developing and following a treatment plan and keeping follow-up appointments.
2. Discuss the procedure for making appointments.
3. Discuss any necessary preparation for lab test(s).

MSX-L PATIENT INFORMATION LITERATURE

OUTCOMES: The patient will receive written information about metabolic syndrome.

STANDARDS:

1. Provide the patient with written information about metabolic syndrome.
2. Discuss the content of the patient information literature with the patient.

MSX-LA LIFESTYLE ADAPTATIONS

OUTCOMES: The patient will understand the lifestyle adaptations necessary to prevent or delay the progression of metabolic syndrome and develop a realistic plan to accomplish this.

STANDARDS:

1. Emphasize that healthy food choices and regular physical activity are the critical components in improving metabolic syndrome and preventing the progression to diabetes and cardiovascular disease.
2. Discuss the importance of tobacco cessation. Make referral to tobacco cessation programs if available.
3. Discuss the relationship of stress to metabolic syndrome and suggest ways to reduce stress. Refer to stress reduction program as appropriate.
4. Assist the patient to develop a self care plan.

MSX-M MEDICATIONS

OUTCOMES: The patient/family will understand their medication(s), regimen and the importance of fully participating in therapy.

STANDARDS:

1. Review proper use, benefits and common side effects of the prescribed medications.
2. Discuss any drug-drug or drug-food interactions with this medication as appropriate.
3. Review clinical effects and onset of action expected with these medications.
4. Review recommended monitoring laboratory tests which may be ordered.
5. Explain importance of avoiding over-the-counter medications without checking with a physician and/or pharmacist.
6. Discuss common and important signs of toxicity and/or adverse reactions and what to do if the patient/family suspects a reaction.

MSX-N NUTRITION

OUTCOMES: The patient will understand the importance of nutritional management in the improvement of metabolic syndrome.

STANDARDS:

1. Refer to registered dietician as appropriate.
2. Emphasize that nutritional management includes meal planning, making healthy food choices, appropriate serving sizes and food preparation.
3. Review the food pyramid and its role in meal planning.
4. Explain how to read nutrition information labels. Emphasize the importance of noting the serving size – the serving size may not be the same as the container size.
5. Discuss the merits of various food preparation methods.
6. Describe appropriate portion size and emphasize its importance.
7. Discuss the importance of decreasing total fat intake and using healthier fats sparingly.
8. Explain that excessive salt intake may play a role in hypertension and discuss ways to decrease salt intake.

MSX-P PREVENTION

OUTCOME: The patient will understand ways to prevent cardiovascular disease and diabetes.

STANDARDS:

1. Explain that consuming a diet low in fat and cholesterol, controlling weight and exercising may help prevent complications from metabolic syndrome or progression to cardiovascular disease and diabetes.
2. Emphasize the importance of regular blood sugar, blood pressure, and lipid screening. Discuss current recommendations for screening and/or monitoring.
3. Explain that the metabolic syndrome tends to run in families and that the patient's family members should be evaluated by a physician or other health care provider.

MSX-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in metabolic syndrome.

STANDARDS:

1. Explain that uncontrolled stress can cause increased release of stress hormones which can contribute to insulin resistance, dyslipidemia, obesity and hypertension. This can lead to increased morbidity and mortality from all disease processes included in metabolic syndrome.
2. Explain that uncontrolled stress can interfere with the treatment of metabolic syndrome.
3. Explain that effective stress management may reduce the adverse consequences of metabolic syndrome, as well as help improve the health and well-being of the patient.
4. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from metabolic syndrome.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

MSX-TE TESTS

OUTCOMES: The patient will understand the test(s) to be performed including indications and its impact on further care.

STANDARDS:

1. Explain the test(s) ordered, i.e., FBS , A1C, Lipids.
2. Explain any necessary preparation prior to the test(s).
3. Explain the indications, risks and benefits of the test(s), including risks of not having the test(s) performed.
4. Explain the meaning of the test results in relation to what “normal” results are, as appropriate.
5. Explain the test as it relates to planning the course of treatment.

O

OBS—Obesity

OBS-C COMPLICATIONS

OUTCOME: The patient will be able to name at least 2 complications of obesity.

STANDARDS:

1. Emphasize that obesity is the single most important risk factor in Diabetes Mellitus Type 2.
2. Explain how obesity increases the risk for heart disease, infertility, cholelithiasis, musculoskeletal problems, and surgical complications.

OBS-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

OBS-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the process underlying obesity and will be able to relate this process to changes necessary to attain improved health.

STANDARDS:

1. Relate obesity to health outcomes.
2. Emphasize the relationship among obesity, caloric intake, and exercise.
3. Explain that some people have a genetic predisposition to obesity which will require increased persistence to maintain health.

OBS-EX EXERCISE

OUTCOME: The patient will understand the relationship of physical activity in maintaining a healthy body weight, and will strive to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Stress the fact that exercise is a must in any weight loss program.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
3. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.

OBS-FU FOLLOW-UP

OUTCOME: The patient will understand that improved health requires a lifelong commitment to lifestyle adaptations which will assist with control of obesity.

STANDARDS:

1. Discuss the individual's responsibility in the management of obesity.
2. Review the patient's plan for lifestyle modification, emphasizing the need for keeping appointments, adhering to dietary modifications and increasing activity levels.
3. Encourage regular weight and blood pressure checks.
4. Reassess exercise and activity levels every 3-6 months.

OBS-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about obesity.

STANDARDS:

1. Provide the patient/family with written patient information literature on obesity.
2. Discuss the content of the patient information literature with the patient/family.

OBS-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will understand the importance of making lifestyle adaptations to attain a healthier body habitus.

STANDARDS:

1. Review dietary modifications and restrictions. Refer to the standards for **OBS-N**.
2. Emphasize the benefits of regular exercise. **Refer to WL-EX.**
3. Discuss the importance of good hygiene since additional body fat increases perspiration.
4. Discuss the pros and cons of alternate weight loss options, i.e., fad diets, surgery, medications.

OBS-M MEDICATION

OUTCOME: The patient/family will understand that weight loss medications can have side effects or drug interactions and the importance of discussing any over-the-counter or prescription weight loss medications with the health care provider prior to initiating said medication(s).

STANDARDS:

1. Explain the potentially serious adverse effects of the specific interactions of the medication with other drugs (including OTC medications and traditional or herbal medicines).
2. Specifically discuss adverse effects of this medication when combined with specific foods.
3. Emphasize the importance of informing the provider (i.e., physician, pharmacist, nurse) of any drug interaction(s) that have occurred in the past.
4. Discuss the risk/benefit ratio of the medication(s) that are being considered.

OBS-N NUTRITION

OUTCOME: The patient will identify dysfunctional eating patterns and plan adaptations in eating which will promote weight loss and improved health.

STANDARDS:

1. Assess current eating patterns. Identify helpful and harmful components of the patient's diet.
2. Emphasize the importance of regular meal times and of eliminating snack foods, fatty foods, fatty red meats, reducing sodium consumption and adding more fresh fruits, fresh vegetables and fiber to the diet.
3. Emphasize the necessary component — water — in a healthy diet. Reduce the use of colas, coffee, and alcohol.
4. Review which community resources exist to assist with diet modification and weight control. Refer to dietitian as appropriate.
5. Anticipate psychological or social stressors which may lead to over-consumption. Teach the patient to splurge by plan, not by impulse.
6. Teach person(s) responsible for food purchase and preparation techniques for avoiding fats and simple carbohydrates in meal plans.

OBS-P PREVENTION

OUTCOME: The patient/family will understand the importance of attaining and maintaining a healthy body weight throughout the life span.

STANDARDS:

1. Emphasize that obesity often begins at conception. Discuss the roles of maternal obesity, gestational diabetes, and overfeeding of infants.
2. Encourage a physically active lifestyle. **Refer to WL-EX**.
3. **Refer to WL-N and OBS-C.**
4. Identify cultural, familial, and personal perceptions of body image and their relationship to obesity and health.

OBS-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in obesity.

STANDARDS:

1. Explain that uncontrolled stress is linked with an increased incidence of obesity, which increases the patient's risk of cardiovascular disease, diabetes mellitus, stroke, etc.
2. Explain that uncontrolled stress can interfere with the treatment of obesity.
3. Explain that effective stress management may reduce the complications associated with obesity, as well as help improve the patient's self esteem, health, and well-being.
4. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all of which can increase the risk of morbidity and mortality from obesity.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

OBS-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, as applicable, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Explain the meaning of the test results, as appropriate.

P

PM—Pain Management

PM-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will understand that the perception of pain is highly complex and individualized.

STANDARDS:

1. Explain that pain normally acts as the body's warning signal of tissue injury. This warning signal notifies the body to withdraw from the stimulus.
2. Discuss the difference between the body's physiological response to pain and the person's perception of the event.
3. Explain that tissue damage causes the release of chemicals which result in the sensation of pain. Most pain medications work by blocking these chemicals.
4. Explain that touch type signals (i.e., rubbing, stroking, touching) may block the brain's reception of pain signals.

PM-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient’s condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

PM-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pain symptoms, type (i.e., chronic, acute, malignant) and the causes of the patient's pain if known.

STANDARDS:

1. Explain that the patient is the primary source of information about the pain's location, quality, intensity, onset, precipitating or aggravating factors and the measures that bring relief.
2. Emphasize the importance of communicating information about the pain to the provider.
3. Discuss that the patient's presentation of symptoms is a unique combination of the type of pain, individual experiences and sociocultural adaptive responses.
4. Explain that pain tolerance varies greatly from person to person and in the same individual under different circumstances.
5. Explain that it is very rare for patients to become addicted to drugs administered for the relief of acute pain.

PM-EQ EQUIPMENT

OUTCOME: The patient/family will have an understanding and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment as appropriate.
3. Discuss and/or demonstrate proper use, care, and cleaning of medical equipment.
4. Participate in a return demonstration by the patient/family.
5. Discuss signs of equipment malfunction and proper action in case of malfunction as appropriate.
6. Discuss proper disposal of associated medical supplies.
7. For inpatients, explain that the various alarms are to alert the medical personnel of the patient’s status and/or the function of the equipment.
8. Emphasize the importance of not tampering with any medical device.

PM-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that moderate exercise may increase energy, improve circulation, enhance sleep, and reduce stress and depression, and relieve some types of pain.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
3. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.

PM-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

PM-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about the patient's specific disease process, pain management issues, support groups or community resources as appropriate.

STANDARDS:

1. Provide patient/family with written patient information literature.
2. Discuss the content of the patient information literature with the patient/family.

PM-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand the lifestyle changes necessary to optimize performance of everyday activities and promote healing.

STANDARDS:

1. Explain that treatment of pain is very individualized, i.e., medication, rest, exercise, and disease-specific treatment modalities.
2. Explain that exercise and social involvement (i.e., familial, traditional, cultural) may decrease the subjective sense of pain and the depression and anger often associated with pain.
3. Review lifestyle areas that may require adaptations (i.e., diet, physical activity, sexual activity, bladder/bowel habits, role changes, communication skills and interpersonal relationships). Discuss lifestyle changes in relation to disease progression. Review activity limitation as appropriate.
4. Discuss techniques that may reduce stress and depression such as meditation and biofeedback as appropriate.
5. Refer to community resources as appropriate**. Refer to WL**.

PM-M MEDICATION

OUTCOME: The patient/family will verbally summarize the medication regimen and the importance of full participation with therapy.

STANDARDS:

1. Review proper use, benefits and common side effects of prescribed medications.
2. Emphasize that excess sedation and euphoria are not goals of palliative pharmacologic therapy.
3. Explain that chronic pain is usually irreversible and often progressive.
4. Discuss patient/family concerns about addiction. Explain the difference between psychological addiction and physical dependence upon prescribed pain medications. Reinforce that addiction is psychological dependence on a drug; and is not equivalent to tolerance or physical dependence.
5. Explain that insomnia and depression are often significant problems for chronic pain patients. Emphasize the importance of developing a plan with the provider to address these issues as appropriate.
6. Explain that spiritual pain is a reality and cannot be relieved with medications.
7. Discuss the importance of full participation with the medication regimen in order to assure optimal comfort levels. For example, round-the-clock dosing of pain medication is more effective in the treatment of chronic pain than medications that are taken after the pain recurs.
8. Discuss the use of adjunctive medication, if indicated, to control analgesic side effects, i.e., anti-emetics, laxatives, antacids.
9. **Refer to M.**

PM-N NUTRITION

OUTCOME: The patient/family will understand the importance of a nutritionally balanced diet in the treatment of their pain and specific disease process. They will be able to identify foods and meal plans that will promote the healing process if applicable.

STANDARDS:

1. Assess current nutritional habits and needs.
2. Emphasize the necessary component - WATER - in a healthy diet.
3. Explain that constipation is a common side-effect of opiates. Dietary measures such as increased water, increased fiber, increased fruit juices and decreased intake of milk products may be helpful. Other control measures should be discussed with the provider prior to initiation.
4. Review the patient's prescribed diet, if applicable. Refer to dietitian or other local resources as indicated.

PM-P PREVENTION

OUTCOME: The patient and/or family will understand the source of pain in relation to the appropriate disease process. They will make a plan to avoid the precipitating factors, minimize disease progression, promote healing; and/or maximize coping strategies.

STANDARDS:

1. Discuss importance of fully participating in treatment plan for an acute injury to reduce the risk of residual chronic pain.
2. Discuss good body mechanics in order to reduce risk of musculoskeletal injuries.

PM-PSY PSYCHOTHERAPY

OUTCOME: The patient/family will understand that grief reactions are common with chronic pain and that depression may be seen and that treatments are available for these problems.

STANDARDS:

1. Discuss symptoms of grief reaction, i.e., vigilance, trouble concentrating, hyperattentiveness, insomnia, distractibility.
2. Explain that the patient/family may need additional support, sympathy, time, attention, compassion and communication.
3. Explain that if anti-depressant drugs are prescribed by the provider, full participation with the treatment regimen is important to maximize the effectiveness of the treatment.
4. Refer to community resources as appropriate, i.e., bio-feedback, yoga, healing touch, herbal medicine, laughter, humor, traditional healer, guided imagery, massage, acupuncture, acupressure.
5. Explain that many mechanisms for dealing with grief and depression are available, i.e., support groups, individual therapy, family counseling, spiritual counseling. Refer as appropriate.

PM-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Explain the test ordered, i.e., EMG, CT scan, ultrasound.
2. Explain the necessity, benefits and risks of the test to be performed and how it relates to the course of treatment.
3. Discuss any necessary preparation for the test(s).

PM-TX TREATMENT

OUTCOME: The patient/family will understand the possible treatments that may be available based on the specific disease process, test results, and individual preferences.

STANDARDS:

1. Discuss with the patient/family the possible appropriate noninvasive pain relief measures, i.e., TENS units, heat, cold, massage.
2. Discuss with the patient/family the possible alternative pain relief measures, when appropriate, i.e., meditation, imagery, acupuncture, healing touch, traditional healer, hypnosis.
3. Discuss with the patient/family the possible appropriate pharmacologic pain relief measures. **Refer to PM-M**.
4. Discuss with the patient/family the possible appropriate procedural or operative pain management techniques, i.e., nerve block, intrathecal narcotics, local anesthesia.
5. Emphasize the importance of the patient/family's active involvement in the development of a treatment plan.

PVD—Peripheral Vascular Disease

PVD-C COMPLICATIONS

OUTCOME: The patient/family will understand how to prevent the complications of PVD.

STANDARDS:

1. Discuss common and important complications of PVD, i.e., injury, infection, amputation.
2. Emphasize early medical intervention for any injury, increased pain, decreased sensation, or signs/symptoms of infection (pain, redness, warmth).

PVD-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

PVD-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the pathophysiology of PVD.

STANDARDS:

1. Explain that PVD is the result of the buildup of plaque in the interior walls of the vessels supplying the extremities.
2. Explain that PVD is a chronic, progressive, and treatable disease.
3. Review the factors related to the development and progression of PVD (tobacco use, HTN, DM, obesity, and hyperlipidemia). Emphasize the patients with PVD are at greatly increased risk for other vascular diseases (CAD, CVA).
4. Review the symptoms of PVD (pain in extremities during exercise, coolness of hands and/or feet, ulcers of the extremities, skin pallor).

PVD-FU FOLLOW-UP

OUTCOME: The patient will understand the importance of adhering to a treatment regimen, be able to identify appropriate actions to take for symptoms indicating life- or limb-threatening ischemia, and will make a plan to obtain and keep appropriate follow-up appointments.

STANDARDS:

1. Discuss the individual's responsibility in the management of peripheral vascular disease.
2. Review treatment plan with the patient, emphasizing the need for keeping appointments, fully participating with medication therapy, adhering to dietary modifications, and maintaining an appropriate activity/rest balance.
3. Review the symptoms which should be reported and evaluated, i.e., symptoms more frequent or occurring during rest, symptoms lasting longer.

PVD-HM HOME MANAGEMENT

OUTCOME: The patient/family will understand the lifestyle adaptations necessary to maintain optimal health.

STANDARDS:

1. Emphasize that the most important component of home management in the prevention and treatment of peripheral vascular disease is the patient's adaptation to a healthier, lower risk lifestyle.
2. Discuss lifestyle adaptations that may reduce further risk of peripheral vascular disease and improve the quality of life (cease use of tobacco products, control hypertension and elevated cholesterol through medications, diet and exercise, lose weight as indicated, control diabetes, and increase activity as prescribed by the physician).

PVD-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about peripheral vascular disease.

STANDARDS:

1. Provide the patient/family with written patient information literature on peripheral vascular disease.
2. Discuss the content of the patient information literature with the patient/family.

PVD-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand the lifestyle adaptations necessary to maintain optimal health.

STANDARDS:

1. Emphasize that the most important component in the prevention and treatment of peripheral vascular disease is the patient's adaptation to a healthier, lower risk lifestyle.
2. Discuss lifestyle adaptations that may reduce further risk of peripheral vascular disease and improve the quality of life (cease use of tobacco products, control hypertension and elevated cholesterol through medications, diet and exercise, lose weight as indicated, control diabetes, and increase activity as prescribed by the physician).

PVD-M MEDICATIONS

OUTCOME: The patient will understand the importance of following a prescribed medication regimen.

STANDARDS:

1. Review proper use, benefits, and common side effects of the medications.
2. Emphasize the importance of maintaining full participation in the medication regimen.

PVD-N NUTRITION

OUTCOME: The patient/family will understand how to control peripheral vascular disease through weight control and diet modification and develop on appropriate plan for dietary modification.

STANDARDS:

1. Assess current nutritional habits.
2. Review the relationship between diet and peripheral vascular disease, hypertension, elevated cholesterol, and obesity.
3. Provide lists of foods that are to be encouraged and avoided. Refer to registered dietician or other local resource as available.
4. Assist in developing an appropriate diet plan to achieve optimal weight and control cholesterol.
5. **Refer to LIP**.

PVD-P PREVENTION

OUTCOME: The patient/family will understand ways to prevent PVD.

STANDARDS:

1. Discuss that prevention of peripheral vascular disease is far better than controlling the disease after it has developed.
2. Explain that consuming a diet low in fat and controlling weight and blood pressure will help to prevent PVD.
3. Discuss that persons with uncontrolled diabetes and uncontrolled hypertension are more likely to develop PVD. Stress the importance of controlling these disease processes. **Refer to DM and HTN.**

PVD-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the plan for pain management.

STANDARDS:

1. Explain that pain management is specific to the disease process of this particular diagnosis and patient and may be multifaceted. **Refer to PM.**
2. Explain that short term use of narcotics may be helpful in pain management as appropriate.
3. Explain that other medications may be helpful to control the symptoms of pain.
4. Explain that administration of fluids may be helpful with pain relief and resolution of symptoms.
5. Discuss non-pharmacologic measures that may be helpful with pain control.

PVD-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Explain the test ordered (Doppler ultrasound, angiography).
2. Explain the necessity, benefits and risks of the test to be performed and how it relates to the course of treatment.

PVD-TX TREATMENTS

OUTCOME: The patient/family will understand the possible treatments that may be performed based on the test results.

STANDARDS:

1. List the possible procedures that might be utilized to treat the peripheral artery blockage, i.e., angioplasty, arterial bypass.
2. Briefly explain each of the possible treatments.
3. Explain that the treatment decision will be made by the patient and medical team after reviewing the results of the diagnostic tests.

PSR—Psoriasis

PSR-BH BEHAVIORAL HEALTH

OUTCOME: The patient will understand that psoriasis has a physical impact on the skin, but it also affects feelings, behaviors, and experiences.

STANDARDS:

1. Discuss the importance of recognizing and acknowledging the social effects of psoriasis in order to cope with the disease.
2. Explain that psoriasis marks people as different because the skin looks different from other people's skin. Some people may react with insensitivity and ignorance to people with psoriasis.
3. Discuss that ways to cope with psoriasis will vary with individuals, and that there is no "best" way to cope with psoriasis. Coping might include discussing this condition with family and friends.
4. Discuss emotions associated with psoriasis, i.e., frustration with the condition, embarrassment, anger.
5. Discuss ways to cope with the emotional aspects of psoriasis:
    a. Learn the facts about psoriasis
    b. Practice responses to people who may comment on your skin
    c. Join (or start) a psoriasis support group
    d. Expect negative experiences but anticipate that each time it will get easier
    e. Fill life with a positive focus
    f. Remember that there is much more to life than just the skin disease
6. Refer to community resources as appropriate.

PSR-DP DISEASE PROCESS

OUTCOME: The patient will understand the basic pathophysiology, symptoms, and prognosis of psoriasis.

STANDARDS:

1. Explain that psoriasis is not contagious, there is no cure, and will require lifelong treatment. Psoriasis comes and goes in cycles of remission and flare-ups.
2. Explain that a variety of factors – ranging from emotional stress, trauma to the skin, dry skin and streptococcal infection – can induce an episode of psoriasis. Recent research indicates that some abnormality in the immune system likely plays a role.
3. Explain that in people with psoriasis; the immune system is mistakenly "triggered," causing skin cells to grow too fast. The rapidly growing cells pile up in the skin's top layers, leading to the formation of silvery lesions on the surface.
4. Explain that genetics may play a role and that psoriasis may be exacerbated by:
    a. Emotional stress
    b. Injury to the skin
    c. Reaction to certain drugs
    d. Some types of infection
5. Explain that psoriasis is a skin disease that causes dry, red, scaly patches to appear on the skin. It can show up on any part of the body. In most cases, it occurs on the elbows, knees, scalp, or torso.
6. Discuss the forms of psoriasis as indicated for this patient.
    a. Plaque psoriasis (most common): patches of raised, red skin covered by a flaky white or silver build-up called scale.
    b. Guttate psoriasis: sometimes preceded by strep throat. Small, red dots on the skin usually appear on the arms, legs, and trunk.
    c. Three less common forms of psoriasis:
        i. Erythrodermic – intense inflammation with bright, red skin that looks "burned" and sheds or peels.
        ii. Inverse – smooth, dry patches that are red and inflamed, often in the folds or creases of the skin, such as the armpits or groin, between the buttocks or under the breasts. Inverse psoriasis is more common in those who are overweight.
        iii. Pustular – blister like spots filled with liquid, surrounded by red skin. The blisters will often come and go in cycles. This form of psoriasis can appear on specific areas, like the hands or feet, or on larger areas of skin.
7. Later manifestations of psoriasis may include:

a. Palmer/Plantar psoriasis: red, scaly, cracked skin with tiny pustules on the palms of the hands or the soles of the feet.

b. Psoriatic arthritis:

i. Stiffness, pain, and tenderness of the joints

ii. Reduced range of motion

iii. Nail changes such as pitting, which is found in up to 80% of people with psoriatic arthritis

8. Explain that usually people have one kind of psoriasis at a time. However, one kind of psoriasis can turn into another kind.

9. Psoriasis can be:

a. Mild - up to 3% of your body

b. Moderate – 3 to 10% of your body

c. Severe – more than 10% of your body

PSR-FU FOLLOW UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

PSR-L PATIENT INFORMATION LITERATURE

OUTCOME - The patient/family will receive written information about psoriasis.

STANDARDS:

1. Provide patient/family with written patient information on psoriasis
2. Discuss the content of patient information literature with the patient/family.

PSR-M MEDICATIONS

OUTCOME: The patient will understand some of the medications available in the treatment of psoriasis.

STANDARD:

1. Discuss proper use, benefits, common side effects, and common interactions of prescribed medications. Review signs of possible toxicity and appropriate follow-up as indicated.
2. Emphasize the importance of full participation with medication regimen.
3. Discuss the mechanism of action as needed.
4. Emphasize the importance of consulting with a health care provider prior to initiating any new medications, including over-the-counter medications.
5. Emphasize the importance of providing a list of all current medications, including non-prescription or traditional remedies, to the provider.
6. Explain that the severity of psoriasis will determine which medication is needed.
7. Explain that no single medication works for everyone and that the goal is to find medications that work best with the fewest side effects.
8. Explain that different kinds of prescription and over-the-counter treatments can help with psoriasis.
9. Explain that Methotrexate and other immune modifying agents can provide dramatic results: however, may result in severe liver damage, immune suppression, and other complications and may require frequent blood tests.

PSR-N NUTRITION

OUTCOME: The patient/family will understand the need for a healthy diet pertaining to psoriasis.

STANDARDS:

1. Review normal nutritional needs for optimal health.
2. Discuss current nutritional habits. Assist the patient in identifying unhealthy nutritional habits.
3. Explain that vitamin D and E and Zinc may have some benefit.
4. Refer to a dietitian as needed.

PSR-P PREVENTION

OUTCOME: The patient will understand that avoiding psoriasis triggers can lessen the impact of the condition.

STANDARDS:

1. Explain that the patient should avoid skin injuries that result in a break in the skin which can exacerbate or trigger flare-ups, i.e., insect bites, cuts and scrapes, and burns. Emphasize that care should be taken to wear protective clothing to protect the skin.
2. Explain that other triggers that may exacerbate psoriasis include shaving, adhesive taping, tattoos, chafing, blisters, and boils.
3. Explain that common preventive measures include avoiding hot showers and perfumed lotions and soaps.
4. Explain that it is difficult to separate job and family-related stress from the psychological stress of living with psoriasis. One cause of stress probably reinforces the others. Clinical studies have supported the facts that psychological stress can worsen psoriasis. **Refer to PSR-SM.**

PSR-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management with psoriasis.

STANDARDS:

1. Explain that uncontrolled stress can contribute to increased outbreaks.
2. Explain that effective stress management may reduce the adverse consequences of psoriasis, as well as help improve the health and well-being of the patient.
3. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    d. becoming aware of your own reactions to stress
    e. recognizing and accepting your limits
    f. talking with people you trust about your worries or problems
    g. setting realistic goals
    h. getting enough sleep
    i. maintaining a reasonable diet
    j. exercising regularly
    k. taking vacations
    l. practicing meditation
    m. self-hypnosis
    n. using positive imagery
    o. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    p. spiritual or cultural activities
4. Provide referrals as appropriate.

PSR-TX TREATMENT

OUTCOME: The patient will understand that psoriasis usually responds to treatment but is not curable.

STANDARDS:

1. Explain that a simple treatment for psoriasis is to soak in a warm bath for 10-15 minutes, then immediately apply a topical ointment such as petroleum jelly, which helps the skin retain moisture.
2. Explain that topical ointments include salicylic acid ointments, steroid-based creams, and ointments containing calcipotriene, which is related to vitamin D.
3. Explain that coal-tar ointments and shampoos can alleviate symptoms but these may also cause side effects, such as folliculitis.
4. Explain that light therapy treatment is sometimes recommended for persistent, difficult-to-treat cases of psoriasis. However, the use of light therapy can be risky due to the possibility of skin damage from the ultraviolet light itself.
5. Explain that when these treatments fail, some doctors prescribe oral medications to treat psoriasis. Some of these medications affect the immune system and body organs and require careful monitoring.

PL—Pulmonary Disease

PL-BIP BILEVEL (OR CONTINUOUS) POSITIVE AIRWAY PRESSURE VENTILATION

OUTCOME: The patient/family will have a basic understanding of BiPAP or CPAP ventilation, as well as the risks, benefits, alternatives to BiPAP or CPAP and associated factors affecting the patient.

STANDARDS:

1. Explain that the patient does not require intubation with an endotracheal tube or tracheostomy tube in order to receive BiPAP or CPAP. BiPAP or CPAP is delivered utilizing a tight-fitting mask over the nose and/or mouth.
2. Explain the basic mechanics of BiPAP or CPAP, including the risks and benefits of receiving BiPAP or CPAP and the adverse events which might result from refusal.
3. Discuss alternatives to BiPAP or CPAP, including expectant management, endotracheal intubation or tracheostomy as appropriate.
4. Explain that patient cooperation is vital to successful BiPAP or CPAP management.

PL-C COMPLICATIONS

OUTCOME: The patient will understand how to prevent complications of pulmonary disease.

STANDARDS:

1. Discuss that the most common complications of pulmonary disease are exacerbation or infection. These complications often result from failure to fully participate with treatment regimens (i.e., medications, peak flows) or from exposure to environmental triggers or infections.
2. Emphasize early medical intervention for minor URI's, fever, cough, and shortness of breath.
3. Stress the importance of fully participating in the treatment plan.

PL-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

PL-DP DISEASE PROCESS

OUTCOME: The patient will understand the etiology and pathophysiology of their pulmonary disease.

STANDARDS:

1. Review the anatomy and physiology of the respiratory system.
2. Discuss how factors such as: environmental triggers, age, smoking, COPD, and asthma affect the ability of the respiratory system to exchange O_2/CO_2 and resist infection.
3. Discuss the pathophysiology of the patient's specific disease process.

PL-EQ EQUIPMENT

OUTCOME: The patient/family will have an understanding and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment as appropriate.
3. Discuss and/or demonstrate proper use, care, and cleaning of medical equipment.
4. Participate in a return demonstration by the patient/family.
5. Discuss signs of equipment malfunction and proper action in case of malfunction as appropriate.
6. Discuss proper disposal of associated medical supplies.
7. For inpatients, explain that the various alarms are to alert the medical personnel of the patient's status and/or the function of the equipment.
8. Emphasize the importance of not tampering with any medical device.

PL-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
2. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
3. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
4. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
5. Discuss medical clearance issues for physical activity.

PL-FU FOLLOW-UP

OUTCOME: The patient will understand the importance of regular follow-up and will strive to keep scheduled appointments.

STANDARDS:

1. Discuss the importance of regular follow-up care in the prevention of complications and adjustment of medications.
2. Encourage full participation in the treatment plan. Assess the patient's understanding of the treatment plan and acceptance of the diagnosis.
3. Provide positive reinforcement for areas of achievement.
4. Refer to PHN or community resources as appropriate.
5. Emphasize the importance of consistent peak flow measurement if appropriate.

PL-HM HOME MANAGEMENT

OUTCOME: The patient and/or family will understand the home management of their disease process and make a plan for implementation.

STANDARDS:

1. Discuss home management plan and methods for implementation of the plan.
2. Explain the importance of following a home management plan, i.e., fewer emergency room visits and fewer hospitalizations.

PL-INT INTUBATION

OUTCOME: The patient/family will have a basic understanding of endotracheal intubation, as well as the risks, benefits, alternatives to endotracheal intubation and associated factors affecting the patient.

STANDARDS:

1. Explain the basic procedure for endotracheal intubation, including the risks and benefits of endotracheal intubation and the adverse events which might result from refusal.
2. Discuss alternatives to endotracheal intubation, including expectant management, as appropriate.
3. Explain that the patient will be unable to speak or eat while intubated.

PL-IS INCENTIVE SPIROMETRY

OUTCOME: The patient will understand the reason for use of the incentive spirometer and demonstrate appropriate use.

STANDARDS:

1. Explain that regular and appropriate use of the incentive spirometer according to instructions reduces the risk of respiratory complications including pneumonia.
2. Explain that the optimal body position for incentive spirometry is semi-Fowler's position which allows for free movement of the diaphragm.
3. Instruct the patient to exhale normally and evenly inhale maximally through the spirometer mouthpiece.
4. Encourage the patient to hold the maximal inspiration for a minimum of three seconds to allow for redistribution of gas and opening of atelectatic areas.
5. Instruct the patient to exhale slowly and breathe normally between maneuvers.
6. Instruct the patient to repeat this maneuver as frequently as prescribed.

PL-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about pulmonary disease.

STANDARDS:

1. Provide the patient/family with written patient information literature on pulmonary disease.
2. Discuss the content of the patient information literature with the patient/family.

PL-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will strive to make the lifestyle adaptations necessary to prevent complications of pulmonary disease and prolong life.

STANDARDS:

1. Discuss lifestyle changes which the patient has the ability to make: cessation of smoking, dietary modifications, weight control, participation in treatment and exercise.
2. Re-emphasize how complications of pulmonary disease can be reduced or eliminated by such changes.
3. Review the community resources available to help the patient in making such lifestyle changes.
4. Identify and avoid environmental triggers (i.e., cigarette smoke, stress, environmental smoke, pollen, mold, dust, roaches, insecticides, paint fumes, perfumes, animal dander, cold air, sulfites, aspirin) as appropriate for the patient.

PL-M MEDICATIONS

OUTCOME: The patient and/or family will understand the goal of drug therapy and be able to demonstrate and explain use of the prescribed regimen.

STANDARDS:

1. Review the patient's medications. Reinforce the importance of knowing the drug, dose, and dosing interval of medications.
2. Review common side effects, signs of toxicity, and drug interactions of medication(s).
3. Discuss the difference between bronchodilator and anti-inflammatory medications.
4. Explain the difference between maintenance and rescue drugs.
5. Emphasize full participation with the treatment plan and explain how effective use of medications can facilitate a more active life style for the pulmonary disease patient.
6. Emphasize the importance of consulting with a health care provider prior to using any OTC medication.

PL-MDI METERED-DOSE INHALERS

OUTCOME: The patient will be able to demonstrate correct technique for use of MDIs and understand their role in the management of pulmonary disease.

STANDARDS:

1. Instruct and demonstrate steps for standard or alternate use procedure for metered-dose inhalers and ways to clean and store the unit properly.
2. Review the importance of using consistent inhalation technique.

PL-N NUTRITION

OUTCOME: The patient will understand how to modify diet to conserve energy and promote nutritional balance.

STANDARDS:

1. Assess the patient's current nutritional patterns. Review how these patterns might be improved.
2. **Refer to WL-N.**
3. Stress the importance of water intake to aid in liquefying sputum.
4. Explain how meal planning may need to be individualized for specific pulmonary disorders. Consider eliminating milk because it increases mucous production. Foods which are gas producing may hinder diaphragmatic movement. Several small meals instead of three large meals may be indicated to reduce respiratory effort. Refer to dietitian as appropriate.

PL-NEB NEBULIZER

OUTCOME: The patient will be able to demonstrate effective use of the nebulizer device, discuss proper care and cleaning of the system, and describe its place in the care plan.

STANDARDS:

1. Describe proper use of the nebulizer including preparation of the inhalation mixture, inhalation technique, and care of equipment.
2. Discuss the nebulizer treatment as it relates to the medication regimen.

PL-O2 OXYGEN THERAPY

OUTCOME: The patient and/or family will understand the need for and be able to demonstrate the proper use of oxygen administration equipment.

STANDARDS:

1. Discuss the dangers of ignition sources around oxygen, i.e., cigarettes, sparks, flames.
2. Emphasize the importance of regular maintenance checks of oxygen equipment.
3. Emphasize that O2 flow rate should not be changed except upon the order of a physician, since altering the flow rate may worsen the condition.
4. Discuss use, care, and cleaning of all equipment.
5. Explain the reason for O_2 therapy and the anticipated benefit.

PL-PF PEAK-FLOW METER

OUTCOME: The patient will be able to demonstrate correct use of the peak-flow meter and explain how its regular use can help achieve a more active lifestyle.

STANDARDS:

1. Discuss use and care of the peak flow meter as a tool for measurement of peak expiratory flow rate (PEFR) and degree of airway obstruction. Discuss peak flow zones in management of airway disease.
2. Explain how monitoring measurement of PEFR can provide an objective way to determine current respiratory function.
3. Emphasize how a regular monitoring schedule can help determine when emergency care is needed, prevent exacerbations through early intervention, and facilitate management of the pulmonary disease.

PL-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the plan for pain management.

STANDARDS:

1. Explain that pain management is specific to the disease process of this particular diagnosis and patient; and may be multifaceted. **Refer to PM.**
2. Explain that short term use of narcotics may be helpful in pain management as appropriate.
3. Explain that other medications may be helpful to control the symptoms of pain, nausea and vomiting.
4. Explain that administration of fluids may be helpful with pain relief and resolution of symptoms.
5. Explain non-pharmacologic measures that may be helpful with pain control.

PL-PRO PROCEDURES

OUTCOME: The patient/family will understand the proposed procedure(s), as well as the risks, benefits, alternatives to the proposed procedure(s) and associated factors affecting the patient.

STANDARDS:

1. Explain the specific procedure(s) to be performed, including the risks and benefits of performing the procedure and the adverse events which might result from refusal of the procedure.
2. Discuss alternatives to the proposed procedure(s), including expectant management, as appropriate.
3. Discuss the expected patient/family involvement in the care required following the proposed procedure(s).

PL-SHS SECOND-HAND SMOKE

OUTCOME: Provide the patient and/or family with an understanding of the adverse health consequences associated with exposure to second-hand tobacco smoke, and discuss methods for limiting exposure of nonsmokers to tobacco smoke.

STANDARDS:

1. Define "passive smoking", ways in which exposure occurs:
   a. smoldering cigarette, cigar, or pipe
   b. smoke that is exhaled from active smoker
   c. smoke residue on clothing, upholstery, carpets or walls.
2. Discuss harmful substances in smoke
   a. nicotine
   b. benzene
   c. carbon monoxide
   d. many other carcinogens (cancer causing substances).
3. Explain the increased risk of illness in the pulmonary patient when exposed to cigarette smoke either directly or via second-hand smoke.
4. Explain that cigarette smoke gets trapped in carpets, upholstery, and clothing and still increases the risk of illness even if the pulmonary patient is not in the room at the time that the smoking occurs.
5. Discuss factors that increase level of exposure to second-hand smoke and preventive methods for minimizing this exposure.
6. Encourage smoking cessation or at least never smoking in the home or car.

PL-SPA SPACERS

OUTCOME: The patient will be able to demonstrate the correct use of spacers and understand their importance in delivery of medications.

STANDARDS:

1. Instruct and demonstrate proper technique for spacer use.
2. Discuss proper care and cleaning of spacers.
3. Explain how spacers improve the delivery of inhaled medications.

PL-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, as applicable, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Explain the meaning of the test results, as appropriate.

PL-TO TOBACCO (SMOKING)

OUTCOME: The patient and/or family will understand the dangers of smoking or exposure of the pulmonary patient to cigarette smoke and develop a plan to eliminate said exposure.

STANDARDS:

1. Explain the increased risk of illness in the pulmonary patient when exposed to cigarette smoke either directly or via second-hand smoke.
2. Explain that cigarette smoke gets trapped in carpets and upholstery and still increases the risk of illness even if the pulmonary patient is not in the room at the time that the smoking occurs.
3. Encourage smoking cessation or at least NEVER smoking in the home or car.
4. **Refer to TO.**

PL-VENT MECHANICAL VENTILATION

OUTCOME: The patient/family will understand mechanical ventilation, as well as the risks, benefits, alternatives to mechanical ventilation and associated factors affecting the patient.

STANDARDS:

1. Explain that the patient must be intubated with an endotracheal tube or tracheostomy tube in order to receive mechanical ventilation.
2. Explain the basic mechanics of mechanical ventilation, including the risks and benefits of receiving mechanical ventilation and the adverse events which might result from refusal.
3. Discuss alternatives to mechanical ventilation, including expectant management, as appropriate.
4. Explain that the patient will be unable to speak or eat while intubated and receiving mechanical ventilation.
5. Explain that the patient will be sedated during intubation and the initiation of mechanical ventilation.
6. Discuss the possibility that the patient may require restraints to prevent accidental extubation.

R

XRAY—Radiology/Nuclear Medicine

XRAY-C COMPLICATIONS

OUTCOME: The patient/family will understand the common and important complications that may result from this procedure.

STANDARDS

1. Explain that some patients may have adverse reactions to contrast media or other medications used during radiographic/nuclear medicine procedures.
2. Discuss common and important complications as they apply to the procedure to be performed.
3. Discuss the procedure that will be undertaken if adverse events occur.

XRAY-FU FOLLOW-UP

OUTCOME: The patient/family will understand the conditions that would require follow-up and how to obtain follow-up.

STANDARDS:

1. Discuss the findings that will signify a serious complication or condition.
2. Discuss the procedure for obtaining follow-up appointments.

XRAY-L LITERATURE

OUTCOME: The patient/family will receive written information about the disease process or condition.

STANDARDS:

1. Provide patient/family with written patient information on the disease state or condition.
2. Discuss the content of patient information literature with the patient/family.

XRAY-M MEDICATIONS

OUTCOME: The patient/family will understand the goal of medication therapy as it relates to the procedure to be performed.

STANDARDS:

1. Discuss the proper use, benefits, common side effects, and common interactions of prescribed medications. Review signs of possible toxicity and appropriate follow-up as indicated.
2. Emphasize the importance of full participation with medication regimen.
3. Discuss the mechanism of action as needed.
4. Emphasize the importance of consulting with a health care provider prior to initiating any new medications, including over-the-counter medications.
5. Emphasize the importance of providing a list of all current medications, including non-prescription or traditional remedies, to the provider.

XRAY-PRO PROCEDURE

OUTCOME: The patient/family will understand the radiographic/nuclear medicine procedure to be performed.

STANDARDS:

1. Discuss the method of the radiographic/nuclear medicine procedure that has been ordered.
2. Discuss the indications, risks, and benefits for the proposed procedure.
3. Explain the process and what to expect after the procedure.
4. Explain the necessary preparation, i.e., bowel prep, diet instructions, bathing.
5. Discuss pain management as appropriate.
6. Emphasize post-procedure management and follow-up.

XRAY-S SAFETY

OUTCOME: Explain the procedure used to protect the patient and staff.

STANDARDS:

1. Discuss the use of personal protective equipment (i.e., lead shields, gloves) and their role in preventing transmission of disease or unnecessary radiation exposure.
2. Demonstrate the proper use of equipment to be used.
3. Discuss as appropriate that needles and other infusion equipment are single patient use and will be discarded.
4. Discuss the procedure for accidental needle-stick of the patient or the staff as appropriate.

XRAY-TE TESTS

OUTCOME: The patient/family will understand the test to be performed.

STANDARDS:

1. Explain the test that has been ordered.
2. Explain the necessity, benefits, and risks of the test to be performed. Refer to the primary provider as necessary.
3. Explain any necessary preparation for the test, i.e., fasting.
4. Explain the procedure for obtaining test results.

S

SZ—Seizure Disorder

SZ-C COMPLICATIONS

OUTCOME: The patient/family will understand the potential complications of the patient's seizure disorder.

STANDARDS:

1. Explain some of the complications that may occur during a seizure, i.e., anoxia from airway occlusion by the tongue or by vomitus, traumatic injury, potential for automobile accident.
2. Explain that uncontrolled seizures may result in progressive brain injury.

SZ-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

SZ-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the pathophysiology of seizure disorders.

STANDARDS:

1. Explain that seizures are usually paroxysmal events associated with abnormal electrical discharges of the neurons of the brain.
2. Explain that at least 50% of seizure disorders are idiopathic. No cause can be found and the patient has no other neurologic abnormalities.
3. Discuss the patient's specific type of seizure disorder if known.
4. Explain that following a seizure it is usual for a patient to have a period of increased sleepiness (postictal phase).

SZ-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of regular follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of regular follow-up care in the prevention of complications and adjustment of medications.
2. Encourage full participation in the treatment plan. Discuss the patient/family responsibility in the management of seizure disorder.
3. Discuss the mechanism for obtaining follow-up appointments.

SZ-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about seizure disorders.

STANDARDS:

1. Provide the patient/family with written patient information literature about seizure disorders.
2. Discuss the content of the patient information literature with the patient/family.

SZ-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand the impact of a seizure disorder on the patient/family's lifestyle and make a plan for needed adaptations.

STANDARDS:

1. Explain the importance of full participation with therapy to reduce seizure risk.
2. A normal lifestyle should be encouraged. Explain the particular risks of driving and participation in sports or other potentially hazardous activities if the seizure disorder is poorly controlled.
3. Emphasize a common sense attitude toward the patient's illness. Emphasis should be placed on independence and preventing invalidism.
4. Teach the patient's family how to care for the patient during a seizure, i.e.:
    a. Avoid restraining the patient during a seizure
    b. Help the patient to a lying position, loosen any tight clothing, and place something flat and soft such as a pillow under his/her head
    c. Clear the area of hard objects
    d. Avoid forcing anything into the patient's mouth
    e. Avoid using tongue blades or spoons as this may lacerate the patient's mouth, lips or tongue or displace teeth, and may precipitate respiratory distress.
    f. Turn the patient's head to the side to provide an open airway
    g. Reassure the patient after the seizure subsides, orienting him/her to time and place and informing him/her about the seizure.
5. Encourage the patient to get enough sleep as excessive fatigue may precipitate a seizure.
6. Discourage use of alcohol and street drugs as these may precipitate seizures.
7. Encourage the patient to learn to control stress, i.e., relaxation techniques.
8. Discuss the need to avoid photic stimulation such as strobe lights, emergency vehicle lights, light from some ceiling fans or any intermittent repeating light source.
9. Instruct that pregnancy or hormone replacement therapy may lower a person's seizure threshold.
10. Inform the family to keep track of duration, frequency and quality of seizure. Bring this log to the health care provider on follow-up.
11. Refer to community resources as appropriate.

SZ-M MEDICATIONS

OUTCOME: The patient/family will understand the goal of drug therapy and be able to demonstrate and explain the use of prescribed medication.

STANDARDS:

1. Explain the importance of full participation with the prescribed medication schedule. Review the patient's medications. Reinforce the importance of knowing the drug dose and dosing intervals.
2. Review common and important side effects, signs of toxicity, and drug/drug, and drug/food interactions. Review signs of toxicity that should prompt immediate evaluation. Of note there is an interaction between most seizure medications and birth control pills that may make the contraceptive less reliable.
3. Explain the importance of having anticonvulsant blood levels checked at regular intervals even if seizures are under control as applicable.
4. Explain how consistent use of anticonvulsant medications as prescribed can facilitate a more active lifestyle by improved seizure control.
5. Emphasize the importance of notifying the health care provider if the patient is not taking the medication as prescribed.
6. Advise women of childbearing age to inform their health care provider prior to becoming pregnant or as soon as pregnancy is expected as many anticonvulsant medications may be teratogenic.

SZ-S SAFETY AND INJURY PREVENTION

OUTCOME: The patient/family will understand the necessary measures to undertake to avoid injury of the patient or others.

STANDARDS:

1. Teach the patient's family how to care for the patient during a seizure, i.e.:
   a. Avoid restraining the patient during a seizure
   b. Help the patient to a lying position, loosen any tight clothing, and place something flat and soft such as a pillow under his/her head.
   c. Clear the area of hard objects
   d. Avoid forcing anything into the patient's mouth
   e. Avoid using tongue blades or spoons as this may lacerate the patient's mouth, lips or tongue or displace teeth, and may precipitate respiratory distress.
   f. Turn the patient's head to the side to provide an open airway
   g. Reassure the patient after the seizure subsides, orienting him/her to time and place and informing him/her about the seizure.
2. Explain the particular risks of driving and participation in sports or other potentially hazardous activities if the seizure disorder is poorly controlled.

SZ-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in seizure disorders.

STANDARDS:

1. Explain that uncontrolled stress is linked with an increased frequency of seizures.
2. Explain that effective stress management may reduce the occurrence of seizures, as well as help improve the patient's health and well-being.
3. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use, all of which can increase the risk of morbidity and mortality of seizure disorders.
4. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
5. Provide referrals as appropriate.

SZ-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, as applicable, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Explain the meaning of the test results, as appropriate.

SARS—Severe Acute Respiratory Syndrome

SARS-C COMPLICATIONS

OUTCOME: The patient/family will understand the potential consequences of exposure to and/or infection with the SARS virus.

STANDARDS:

1. Discuss with the patient/family the common or significant complications that may occur after infection with the SARS virus.
2. Discuss common or significant complications which may be prevented by full participation with the treatment regimen.
3. Discuss common or significant complications which may result from treatment(s).

SARS-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pathophysiology, symptoms and prognosis of infection with the SARS virus.

STANDARDS:

1. Explain that SARS is a respiratory illness that is caused by a new virus, (called the SARS virus); the SARS virus is similar to the coronavirus, which is a frequent cause of the common cold. Explain that the SARS virus was discovered after February 1, 2003 so infections prior to this date are unlikely to have been diagnosed as SARS.
2. Explain that symptoms usually start two to seven days after exposure to SARS. Explain that the SARS virus may spread through face-to-face contact, airborne spread, contact with contaminated stool, or possibly environmental factors.
3. Discuss the current information regarding causative factors and pathophysiology of infection with the SARS virus.
4. Discuss the signs/symptoms and usual progression of SARS. Explain that infection with SARS begins with a fever of 100.5 degrees Fahrenheit or higher with or without rigors, which may be accompanied by other nonspecific symptoms such as fatigue, headache, and myalgias. After three to seven days, respiratory symptoms such as a nonproductive cough and dyspnea may begin. This may progress to respiratory failure and require artificial means of ventilation, i.e., intubation and/or mechanical ventilation.
5. Explain that some cases may be very severe and result in death while others may result in less severe cases similar to the common cold. Discuss that some groups, such as the elderly, persons with diabetes, pulmonary disease or other chronic illnesses, are at increased risk of severe disease.

SARS-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

SARS-HM HOME MANAGEMENT

OUTCOME - The patient/family will understand the necessity of home management of their disease as appropriate and make a plan for implementation.

STANDARDS:

1. Discuss the home management plan and methods for implementation of the plan.
2. Explain the importance of following a home management plan, i.e., prevention of the spread of the SARS virus. **Refer to SARS–LA**.
3. Explain the use and care of any necessary home medical equipment.

SARS-HY HYGIENE

OUTCOME: The patient will recognize good personal hygiene as an aspect of wellness.

STANDARDS:

1. Discuss the importance of personal hygiene to prevent the spread of the SARS virus.
2. Emphasize the importance of hand washing to prevent the spread of SARS.
3. Explain that utensils, towels, and bedding should not be shared without proper washing.

SARS-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about the disease process or condition.

STANDARDS:

1. Provide patient/family with written patient information on the disease state or condition.
2. Discuss the content of patient information literature with the patient/family.

SARS-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will understand the lifestyle adaptations that may be necessary to prevent the spread of the of the SARS virus to others or to improve physical health.

STANDARDS:

1. Discuss the importance of good hygiene and avoidance of high risk behaviors.
2. Discuss the current recommendations regarding quarantine or other methods to reduce the spread of SARS virus.
3. Review the community resources available to assist the patient in making lifestyle changes. Refer as appropriate.

SARS-M MEDICATIONS

OUTCOME - The patient/family will understand the goal of drug therapy and be able to demonstrate and explain use of the prescribed regimen.

STANDARDS:

1. Explain that there are currently no medications (treatment or vaccine) to treat infection with the SARS virus. Some medications may help to alleviate the symptoms or prevent complications associated with the infection.
2. Discuss proper use, benefits, common side effects, and common interactions of prescribed medications. Review signs of possible toxicity and appropriate follow-up as indicated.
3. Emphasize the importance of full participation with medication regimen.
4. Discuss the mechanism of action as needed.
5. Emphasize the importance of consulting with a health care provider prior to initiate any new medications, including over-the-counter medications.
6. Emphasize the importance of providing a list of all current medications, including non-prescription or traditional remedies, to the provider.

SARS-P PREVENTION

OUTCOME - The patient/family will understand that healthy lifestyle behaviors can reduce the risk of developing diseases, conditions, or complications.

STANDARDS:

1. Discuss activities that decrease the risk for contracting the SARS virus such as avoidance of people exposed to the SARS virus or who have SARS and following CDC travel advisories. It is not known whether wearing a surgical mask prevents the spread or contracting of the SARS virus.
2. Discuss the importance of good hygiene and avoidance of high risk behavior.
3. Explain that the SARS virus can be contracted more than once.

SARS-TE TESTS

OUTCOME - The patient/family will understand the test(s) to be performed including indications and its impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed and how it relates to the course of treatment.
3. Explain any necessary preparation for the test, i.e., fasting.
4. Explain the meaning of test results.
5. Explain the implications of refusal of testing.

SARS-TX TREATMENT

OUTCOME - The patient/family will understand the possible treatments that may be available for SARS.

STANDARDS:

1. Explain that the treatment plan will be made by the patient and medical team after reviewing available options.
2. Discuss the treatment plan including lifestyle adaptations, pharmacologic, surgical, and psychosocial aspects of the treatment plan.
3. Discuss the importance of adhering to the treatment plan, including scheduled follow-up.
4. Refer to community resources as appropriate.

STD—Sexually Transmitted Disease

Refer to **STI—Sexually Transmitted Infections**.

STI—Sexually Transmitted Infections

STI-C COMPLICATIONS

OUTCOME: The patient/family/partner will understand the common and important complications of sexually transmitted infections.

STANDARDS:

1. Explain that the most common complication of untreated or progressed STI is pelvic inflammatory disease, infertility, and/or sterility.
2. Explain that some STIs if left untreated can progress to disability, disfigurement, and/or death.
3. Discuss that having one sexually transmitted infection greatly increases a person's risk of having a second sexually transmitted infection.
4. Explain the importance of HIV testing.
5. Discuss that some sexually transmitted infection can be life-long or fatal.
6. Discuss the potential for harm to a fetus from the sexually transmitted infection or its treatment.

STI-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

STI-FU FOLLOW-UP

OUTCOME: The patient/family/partner will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

STI-I INFORMATION

OUTCOME: The patient/family/partner will understand risk factors, transmission, symptoms and complications of causative agent(s).

STANDARDS

1. Discuss specific STI.
2. Explain the importance of partner(s) notification in the treatment and prevention of the spread of infection.
3. Explain how STIs are transmitted, i.e., semen, vaginal fluids, blood, mother to infant during pregnancy, child birth, breastfeeding, skin-to-skin contact.
4. Explain how STIs cannot be transmitted, i.e., casual contact, toilet seats, eating utensils, coughing.
5. Explain that there are no vaccines against STIs and that there is no immunity to STIs. List curable and incurable STIs. Stress the importance of early treatment.
6. Explain that infection is dependent upon behavior, not on race, age, or social status.
7. Describe how the body is affected.
8. List symptoms of infection and how long it may take for symptoms to appear.
9. List complications that may result if infection is not treated.
10. Review the actions to take when exposed to an STI.

STI-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family/partner will receive written information about sexually transmitted infections.

STANDARDS:

1. Provide the patient/family with written patient information literature on sexually transmitted infections.
2. Discuss the content of the patient information literature with the patient/family.

STI-M MEDICATION

OUTCOME: The patient/family/partner will understand the goal of drug therapy and be able to demonstrate and explain use of the prescribed regimen.

STANDARDS:

1. Discuss proper use, benefits, common side effects, and common interactions of prescribed medications. Review signs of possible toxicity and appropriate follow-up as indicated. Explain that medications may cure bacterial STIs but typically provide only symptomatic relief for viral STIs.
2. Emphasize the importance of full participation with medication regimen.
3. Discuss the mechanism of action as needed.
4. Emphasize the importance of consulting with a health care provider prior to initiating any new medications, including over-the-counter medications. Emphasize the importance of informing the provider of any allergies or the potential for pregnancy.
5. Emphasize the importance of providing a list of all current medications, including non-prescription, complementary medicine or traditional remedies, to the provider.
6. Explain that in most cases, the patient's partner(s) will need to be treated. Describe the treatment regimen as appropriate.

STI-P PREVENTION

OUTCOME: The patient/family/partner will plan behavior patterns which will prevent STI infections.

STANDARDS:

1. List behaviors that eliminate or decrease risk of infection, i.e., use of latex condoms, use of spermicide with condom, monogamy, abstinence, not injecting drugs. Non-latex condoms, while not as effective as latex, are recommended when latex sensitivity is an issue.
2. Describe behavior changes which prevent transmission of STIs.
3. Discuss proper application of a condom.
4. Describe type of lubricant to use with condom, i.e., water-based gels, such as K-Y, Astroglide, Foreplay.
5. Describe how alcohol/substance use and/or abuse can affect ability to use preventive measures.

STI-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in sexually transmitted infections.

STANDARDS:

1. Explain that uncontrolled stress is linked with an increased recurrence of symptomatic outbreaks with many sexually transmitted infections, such as genital herpes and human papilloma virus.
2. Explain that effective stress management may help reduce the frequency of outbreaks, as well as help improve the patient's health and well-being.
3. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals in small attainable increments
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation or prayer
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
4. Provide referrals as appropriate.

STI-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed including indications and its impact on further care.

STANDARDS:

1. Explain the test ordered and any special preparatory information, such as first morning void versus not voiding prior to test.
2. Explain the necessity, benefits and risks of the test to be performed and how it relates to the course of treatment.
3. Explain the meaning of test results.

STI-TX TREATMENT

OUTCOME: Patient and partner will understand their treatment plan.

STANDARDS:

1. Emphasize the importance of early detection and treatment.
2. Stress the importance of treatment of the partner to prevent re-infection and spread of the infection.
3. Discuss the patient's specific treatment plan.
4. Discuss the importance of routine follow-up and testing as appropriate.

SUN—Sun Exposure

SUN-C COMPLICATIONS

OUTCOME: The patient/family will understand the complications associated with excessive sun exposure.

STANDARDS

1. Explain that UVB causes sunburn and plays a significant role in superficial skin cancers called basal cell carcinomas and squamous cell carcinomas.
2. Discuss the 4 ABCD warning signs of malignant melanoma:
    a. Asymmetry – one half of the mole or lesion differs from the other half
    b. Border – The border of the mole or lesion is irregular, scalloped or underlined
    c. Color – Color varies from one area to another within the mole or lesion
    d. Diameter – The mole or lesion is larger than 6mm across – about the size of a pencil eraser
3. Explain that sunburns before the age of 18 are more likely to cause skin cancers later on in life.
4. Explain that excessive sun exposure causes premature aging of the skin.
5. Explain that dehydration and pain are common complications of sunburn.
6. Explain that secondary infections may result from sunburns that blister and peel.

SUN-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the pathophysiology of overexposure to the sun or other UV radiation/light.

STANDARDS:

1. Explain that the two types of ultraviolet radiation – ultraviolet A (UVA) and ultraviolet B (UVB) – have an effect on your skin and can impair your skin's DNA repair system which may contribute to cancer.
2. Explain that UVA usually causes the leathery, sagging, brown-spotted skin of those who spend a lot of time in the sun. UVA can also penetrate window glass, including car windows. Tanning beds are a source of high doses of UVA.
3. Explain that sunburn is the result of overexposure to the sun's ultraviolet (UV) radiation. Repeated exposure to UV radiation both tans and damages your skin. The signs and symptoms of sunburn usually appear within a few hours of exposure, bringing pain, redness, swelling and occasional blistering. Because sun burn often affects a large area of your skin, sunburn can cause headache, fever and fatigue.
4. Explain that the first step is to determine the degree and the extent of damage to body tissues. Damage from the sun is usually limited to first and second degree burns:
    a. First-degree burns are those in which only the outer layer of skin (epidermis) is burned. The skin is usually red, with swelling and pain sometimes present. The outer layer of skin hasn't been burned through. Treat a first degree burn as a minor burn unless it involves substantial portions of the hands, feet, face, or other large areas of the body.
    b. Second-degree burns are when the first layer of skin has been burned through and the second layer of skin (dermis) also is burned. Blisters develop and the skin takes on an intensely reddened, splotchy appearance. Second-degree burns produce severe pain and swelling.

SUN-I INFORMATION

OUTCOME: Parents/Family will understand sunburns; and the factors that are associated with increased risk of sunburn.

STANDARDS:

1. Explain that the UV content of sunlight varies. It's greater at higher elevations because it is unfiltered by clouds or haze. But reflected UV light also comes from snow, sand, water and other highly reflective surfaces and can burn as severely as direct sunlight. You can also get sunburn on a cloudy day
2. Explain that protection from the sun is very important in the prevention of skin cancer. Protective steps should begin in early childhood. Regular, proper use of broad-spectrum sunscreens such as those that offer protection from both UVA and UVB radiation is the key in preventing sunburn, sun damage and skin cancer.
3. Explain that regardless of skin pigmentation, all people are at risk for sun damage to their skin and should wear sunscreen.

SUN-L PATIENT INFORMATION LITERATURE

OUTCOME: The parent(s) and family will receive written information appropriate to the type and degree of the sunburn.

STANDARDS:

1. Provide written information about first and second-degree burns that are the result of over-exposure to the sun.
2. Discuss the content of the patient information literature.

SUN-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will understand the lifestyle adaptations necessary to prevent complications of sunburn.

STANDARDS:

1. Review lifestyle aspects/changes that the patient has control over, such as:
    a. Consistent use of a sunscreen each and every day
    b. Discuss the importance of infants, children and youth using a sunscreen. Explain that sunburns before the age of 18 are more likely to cause skin cancers later on in life.
    c. Avoid the use of tanning beds
    d. Limit outdoor exposure to early morning or late afternoon. Sunlight is strongest from 11am-2pm.
    e. Wear appropriate clothing to cover the body, i.e., long sleeved shirts and wide brimmed hats.

SUN-P PREVENTION

OUTCOME: The patient/family will understand the factors associated with an increased risk of sunburns and how to lower the risk of sunburn and prevent complications.

STANDARDS

1. Explain that protection from the sun is very important in the prevention of skin cancer. Protective steps should begin in early childhood. Regular, proper use of broad-spectrum sunscreens such as those that offer protection from both UVA and UVB radiation is the key in preventing sunburn, sun damage and skin cancer.
2. Explain that when purchasing sunscreens, it is important to check the label to ensure that the product is a broad spectrum sunscreen offering both UVA and UVB protection. Sunscreen advertisements such as total sunblock, waterproof, all-day protection and deep-tanning are mis-leading as they do not necessarily offer both UVA and UVB protection. Read sunscreen labels carefully for UVA and UVB protection.
3. Explain that the Sun Protection Factor (SPF) ratings are based on how much longer someone may be protected from sunburn than he or she is if no sunscreen were applied. For example, if you normally burn in 20 minutes, a product with SPF 15 may allow you to stay out in the sun 15 times longer, if properly applied. The minimum level of SPF purchased should be SPF 15.
4. Explain that most people use sunscreens too sparingly. A liberal application is 1 ounce – two tablespoons full – to cover exposed parts of the body.
5. Explain that the timing of sunscreen application is also important. To have the best effect, sunscreens need to be applied 30 minutes before any outdoor activities– not after you go out.
6. Explain that because of sweating, swimming and toweling off, sunscreen should be reapplied throughout the day. Even water-resistant sunscreens need to be reapplied every 90 minutes.
7. Discuss the need to avoid using tanning beds. There is no such thing as a safe tan. Tanning beds aren't safe, and they may cause skin cancer. While tanning salons may advertise that they use only UVA light, research doesn't support VUA being "good" and UVB – as being "bad." Both UVA and UVB may increase the risk of skin cancer or melanoma.
8. Explain that if a tan is desired, consider use of one of the many "bronzers" available at cosmetic counters. Patients using "bronzers" must be reminded that they must still use a sunscreen over their "bronzer" as bronzers usually do not contain sunscreens.
9. Discuss ways in which the patient can protect themselves from the sun regardless of whether you are in the sun for work or play.
10. Explain that regardless of skin pigmentation, all people are at risk for sun damage to their skin and should wear sunscreen.

SUN-S SAFETY AND INJURY PREVENTION

OUTCOME: The patient will understand that precautions should be taken every day to avoid over exposure to UVA and UVB sunlight.

STANDARDS:

1. Discuss the consistent use of a sunscreen each and every day.
2. Discuss the added importance of infants, children and youth using a sunscreen.
3. Remind patient/family to avoid the use of tanning beds.
4. Emphasize outdoor exposure during the 11am-2pm time period should be limited.

SUN-TX TREATMENT

OUTCOME: The patient/family will understand the importance of treating the discomforts of sunburn and when to seek appropriate medical care.

STANDARDS:

1. Explain that exposure to large areas of the skin can result in headache, fever, fatigue, and dehydration.
2. Explain that if you have a sunburn:
   a. Take a cool bath or shower
   b. Apply an aloe vera lotion several times a day
   c. Leave blisters intact to speed healing and avoid infection. If they burst, apply an antibacterial ointment on the open areas and cover with a sterile gauze bandage.
3. Explain, if needed, for discomfort take a mild over-the-counter analgesic.
4. Encourage consumption of water or other non-caffeinated beverages.
5. Explain that severe sunburn may require and benefit from medical attention.
6. Encourage the patient to be smart about sun exposure:
   a. wear a broad-brimmed hat and light-colored clothing that covers your exposed skin
   b. use a broad-spectrum sunscreen
   c. limit outdoor sports and other activities to the early morning or late afternoon whenever possible.
   d. wear UVA and UVB rated sunglasses
7. Explain that the use of alcohol and other drugs may impair sound judgment when participating in outdoor activities. Caution should be exercised in combining the use of alcohol and other drugs with outdoor activities.
8. Refer to **BURN**.

T

TO—Tobacco Use

It is important to screen tobacco use and to record the responses appropriately in the Health Factors. Listed below are the definitions for tobacco use:

- Non-Tobacco Use – *Never* used *any* tobacco products
- Current Smoker – Smokes. Ask number of cigarettes/packs smoked per day
- Current Smokeless – Uses smokeless. Ask number of Cans/plugs per day
- Cessation Smoker – Former smoker, now quit. Document Quit Date _____
- Cessation Smokeless – Former smokeless user, now quit. Document Quit date____
- Previous Smoker – Smoker who smoked for ____years. Now Quit.
- Previous Smokeless – Smokeless user for ___ years. Now Quit.
- Non-Smoker but smoker in home, i.e., exposed to second hand smoke
- Environmental Exposure – Works in environment (casino, Bingo) with exposure to smoke.
- Ceremonial/Traditional use of tobacco

TO-C COMPLICATIONS

OUTCOME: The patient/family will understand how to avoid the slow progression of disease and disability resulting from tobacco use.

STANDARDS:

1. Discuss the common problems associated with tobacco use and the long term effects of continued use of tobacco, i.e., COPD, cardiovascular disease, numerous kinds of cancers including lung cancer.
2. Review the effects of tobacco use on all family members- financial burden, second-hand smoke, asthma, greater risk of fire, early death of a bread-winner.
3. Discuss the possible implications of tobacco use on newborns, infants and children, as well as being a possible link to SIDS.

TO-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

TO-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the slow progression of disease and disability associated with tobacco use.

STANDARDS:

1. Review the current factual information regarding tobacco use. Explain that tobacco use in any form is dangerous.
2. Explain nicotine addiction.
3. Explain dependency and co-dependency.

TO-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in this patient's disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
   a. 30 minutes 5 days per week
   b. 15 minutes bouts 2 times a day 5 days per week
   c. 10 minutes bouts 3 times a day 5 days per week
2. Encourage the patient to increase the intensity of the activity as he/she becomes more fit.
3. Assist the patient in developing a personal exercise plan. **Refer to WL-EX.**
4. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
5. Discuss medical clearance issues for physical activity.

TO-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

TO-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about tobacco use or cessation of use.

STANDARDS:

1. Provide the patient/family with written patient information literature on tobacco use or cessation of use.
2. Discuss the content of the patient information literature with the patient/family.

TO-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will see tobacco abstinence as a way of life.

STANDARDS:

1. Discuss the patient's use/abuse of tobacco.
2. Discuss tips for stress relief and healthy "replacement habits".
3. Discuss the difference between recreational use of tobacco versus traditional or ceremonial use of tobacco.

TO-M MEDICATIONS

OUTCOME: If applicable, the patient/family will understand the importance of fully participating with a prescribed medication regimen.

STANDARDS:

1. Review the proper use, benefits and common side effects of the prescribed medication.
2. Briefly review the mechanism of action of the medication if appropriate.
3. Explain that medications can help only if the patient is ready to quit and that medications work best in conjunction with counseling and lifestyle-modification education.
4. Explain that some medications may not work right away but will require a few days to a few weeks to take effect.
5. Emphasize that there may be dangers in using medications in conjunction with smoking and that some medications may be addictive, so it is important to have a dose-tapering regimen and keep to it.

TO-QT QUIT

OUTCOME: The patient/family will understand that smoking is a serious threat to their health, that they have been advised by health professionals to quit, and how participation in a support program may prevent relapse.

STANDARDS:

1. Discuss the importance of quitting tobacco use now and completely.
2. Establish a quit date and plan of care.
3. Review the treatment and support options available to the patient/family.
4. Review the value of close F/U and support during the first months of cessation.

TO-RTC READINESS TO CHANGE

OUTCOME: The patient/family will understand

STANDARDS

RTC 1 The patient has no interest in making the recommended change. Precontemplation (Ready in more than 6mos)

RTC 2 The patient has begun to show interest in making the recommended change. Contemplation (Ready in 1-6 mo)

RTC 3 The patient is beginning to make preparations to make the change. Preparation (Ready in 30 days or less)

RTC 4 The patient is actively making a change. Action (Quitting 0-6mo)

RTC 5 The patient has continued to Maintenance (quit for at least 6 months or more)

TO-SCR SCREENING

OUTCOME: The patient/family will understand the screening device.

STANDARDS

1. Explain why the screening is being performed.
2. Discuss how the results of the screening will be used.
3. Emphasize the importance of follow-up care.

TO-SHS SECOND-HAND SMOKE

OUTCOME: Provide the patient and/or family with an understanding of the adverse health consequences associated with exposure to second-hand tobacco smoke, and discuss methods for limiting exposure of nonsmokers to tobacco smoke.

STANDARDS:

1. Define "passive smoking", ways in which exposure occurs:
   a. smoldering cigarette, cigar, or pipe
   b. smoke that is exhaled from active smoker
   c. smoke residue on clothing, upholstery, carpets or walls.
2. Discuss harmful substances in smoke
   a. nicotine
   b. benzene
   c. carbon monoxide
   d. many other carcinogens (cancer causing substances).
3. Explain the increased risk of illness in people who are exposed to cigarette smoke either directly or via second-hand smoke. Explain that this risk is even higher for people with pulmonary diseases like COPD or asthma.
4. Explain that cigarette smoke gets trapped in carpets, upholstery, and clothing and still increases the risk of illness even if the patient is not in the room at the time that the smoking occurs.
5. Discuss factors that increase level of exposure to second-hand smoke and preventive methods for minimizing this exposure.
6. Discuss not smoking around infants and children, including in the home and in the car. Second hand smoke increases the risk of SIDS. Encourage smoking cessation.

TO-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in tobacco abuse and its effect on tobacco cessation.

STANDARDS:

1. Discuss that uncontrolled stress may increase tobacco use and interfere with tobacco cessation.
2. Explain that uncontrolled stress can interfere with the treatment of tobacco addiction.
3. Discuss that uncontrolled stress may exacerbate adverse health behaviors such as increased alcohol or other substance use, all of which can increase tobacco use and interfere with tobacco cessation.
4. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
5. Provide referrals as appropriate.

U

UTI—Urinary Tract Infection

UTI-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will understand basic anatomy and physiology as it relates to UTIs.

STANDARDS:

1. Discuss the basic anatomy and physiology of the urinary tract as it relates to UTIs. As appropriate, discuss the difference between male and female anatomy.
2. As appropriate, discuss the role of foreskin in recurrent UTIs.

UTI-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pathophysiology and symptoms of a urinary tract infection.

STANDARDS:

1. Discuss the basic anatomy and physiology of the urinary tract.
2. Discuss factors that increase the risk for developing a urinary tract infection, i.e., bladder outlet obstruction, hygiene factors, pelvic relaxation.
3. Discuss some signs and symptoms of urinary tract infection, i.e., dysuria, frequency, nocturia.

UTI-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up and make a plan to keep follow-up appointments.

STANDARDS:

1. Discuss the importance of follow-up care, including test of cure as appropriate.
2. Discuss the procedure for obtaining follow-up appointments.
3. Emphasize that appointments should be kept.

UTI-HY HYGIENE

OUTCOME: The patient/family will understand how personal hygiene affects acquiring UTIs and prevention of UTIs.

STANDARDS:

1. Review the aspects of good personal hygiene as it relates to prevention of UTIs:
   a. Wipe only from anterior to posterior (front to back).
   b. Avoid bubble baths.
   c. Keep the perineal region clean.
2. Discuss the role of foreskin hygiene as appropriate.
3. Discuss, as appropriate, the role of sexual intercourse in acquiring UTIs.

UTI-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about urinary tract infections.

STANDARDS:

1. Provide patient/family with written patient information literature.
2. Discuss the content of the patient information literature with the patient/family.

UTI-M MEDICATION

OUTCOME: The patient/family will understand their medication regimen and the importance of full participation with therapy.

STANDARDS:

1. Review proper use, benefits and common side effects of prescribed medications. **Refer to M**.
3. Discuss importance of full participation with the medication regimen in order to promote healing and assure optimal comfort levels.
4. Discuss the importance of completing the entire course of antibiotics to decrease the risk of development of resistant organisms.
5. Inform patient/family that kidney damage is irreversible and special care needs to be taken to reduce the risk of recurrent infections.

UTI-N NUTRITION

OUTCOME: The patient/family will understand the importance of a nutritionally balanced diet as related to UTIs.

STANDARDS:

1. Assess current nutritional habits and needs.
2. Emphasize the necessary component - WATER - in a healthy diet. Decrease consumption of colas and caffeinated beverages.

UTI-P PREVENTION

OUTCOME: The patient/family will understand precipitating factors for UTIs and will make a plan to minimize recurrence.

STANDARDS:

1. Discuss importance of fully participating in treatment plan.
2. Discuss the role of good hygiene in reducing the risk of UTIs.
3. Discuss the role of prophylactic medications in reduction of future UTIs as indicated.
4. Discuss other lifestyle factors that may help prevent UTIs, i.e., frequent urination, void after sexual intercourse, monogamy, drink plenty of water, eliminate bubble baths.

UTI-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the plan for pain management.

STANDARDS:

1. Explain that pain management is specific to the disease process of this particular diagnosis and patient and may be multifaceted. **Refer to PM.**
2. Explain that medications may be helpful to control the symptoms of pain, nausea and vomiting as applicable.
3. Explain that administration of fluids may be helpful with pain relief and resolution of symptoms.
4. Explain non-pharmacologic measures that may be helpful with pain control.

UTI-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in sexually transmitted infections.

STANDARDS:

1. Explain that uncontrolled stress is linked with an increased recurrence of symptomatic outbreaks with many sexually transmitted infections, such as genital herpes and human papilloma virus.
2. Explain that effective stress management may help reduce the frequency of outbreaks, as well as help improve the patient's health and well-being.
3. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals in small attainable increments
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation or prayer
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
4. Provide referrals as appropriate.

UTI-TE TESTS

OUTCOME: The patient/family will have basic understanding of the tests to be performed including indications, risks, benefits and consequences of non-intervention.

STANDARDS:

1. Explain the test ordered including indication(s), risks, benefits, information to be obtained and consequences of non-intervention.
2. Explain that the treatment decision will be made by the patient and medical team after reviewing the results of the diagnostic tests.
3. Explain any preparation that must be done prior to testing, i.e., NPO, have a full bladder, void prior to test.

W

WL—Wellness

WL-ADL ACTIVITIES OF DAILY LIVING

OUTCOME: The patient/family will understand how the patient's ability to perform activities of daily living (ADLs) impact the care plan including in-home and out-of-home care.

STANDARDS:

1. Define activities of daily living (ADLs) (i.e., the everyday activities involved in personal care such as feeding, dressing, bathing, moving from a bed to a chair (also called transferring), toileting and walking) and discuss how the patient's ability to perform ADLs affects their ability to live independently
2. Assist the patient/family in assessing the patient's ability to perform activities of daily living.
3. Provide the appropriate information and referrals for services needed to increase, maintain, and/or assist with activities of daily living.

WL-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, i.e., diet, exercise, sleep, stress management, hygiene, full participation to the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the health care provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

WL-EX EXERCISE

OUTCOME: The patient will relate exercise and/or physical fitness to health promotion and disease prevention.

STANDARDS:

1. Review the benefits of regular exercise.
2. Discuss the three types of exercise: aerobic, flexibility, and endurance.
3. Review the basic recommendations of any exercise program:
4. If any chronic health problems exist, consult with a health care provider.
5. Start out slowly.
6. Exercise a minimum of three times a week.
7. Review the exercise programs available in the community.

WL-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up care and develop a plan to make appointments as appropriate.

STANDARDS:

1. Emphasize the importance of follow-up care.
2. Review the procedure for obtaining follow-up care.
3. Emphasize the importance of keeping appointments.

WL-HY HYGIENE

OUTCOME: The patient will recognize personal routine hygiene as an important part of wellness.

STANDARDS:

1. Review bathing habits, paying special attention to face, pubic hair area and feet. Discuss hygiene as part of a positive self image.
2. Review the importance of daily dental hygiene, with attention to brushing and flossing.
3. Discuss the importance of hand-washing in infection control especially in relationship to food preparation/consumption, child care and toilet use.
4. Discuss the importance of covering the mouth when coughing or sneezing.
5. Review the risks of exposing immunocompromised and high-risk persons (infants and elderly) to communicable diseases.

WL-L PATIENT INFORMATION LITERATURE

OUTCOME: The patient/family will receive written information about wellness.

STANDARDS:

1. Provide the patient/family written information about wellness.
2. Discuss the content of the written information with the patient/family.

WL-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient will be able to explain at least one lifestyle change necessary to improve mental or physical health.

STANDARDS:

1. Review the concept that health or wellness refers to the whole person (mind, body and spirit) and is a positive state of health which results from appropriate habits and lifestyle.
2. Review lifestyle aspects/changes that the patient has control over - diet, exercise, safety and injury prevention, and avoidance of high risk behaviors (e.g. smoking, alcohol and substance abuse, sex with multiple partners).
3. Discuss wellness as an individual responsibility to:
    a. Learn how to be healthy.
    b. Be willing to change.
    c. Practice new knowledge.
    d. Get help when necessary.
4. Review the community resources available for help in achieving behavior changes.

WL-N NUTRITION

OUTCOME: The patient will relate diet to health promotion and disease prevention.

STANDARDS:

1. Assess current nutritional habits.
2. Discuss the importance of the food pyramid.
3. Review the relationship of calories to energy balance and body weight.
4. Emphasize the importance of limiting snack foods, fatty foods, red meats, reducing sodium consumption and adding more fresh fruits, fresh vegetables, and fiber to the diet.
5. Emphasize the necessary component —WATER— in a healthy diet. Reduce the use of colas, coffee and alcohol.
6. Review which community resources exist to assist with diet modification and weight control.
7. Stress the importance of being a smart shopper.

WL-S SAFETY AND INJURY PREVENTION

OUTCOME: The patient will be able to identify at least one way to reduce injury risk.

STANDARDS:

1. Discuss the importance of vehicle safety:
    a. regular use of seat belts and children's car seats, obeying the speed limit, and avoiding the use of alcohol while in a vehicle.
    b. wear personal protective equipment when operating recreational vehicles (i.e., boats, snow mobiles, sea dos, ATVs, skateboards, bicycles.), and horses.
    c. **never** leave children unattended in a vehicle.
    d. never ride on the hood, bumper, or in the cargo compartment of any vehicle.
2. Discuss the importance of poisoning prevention:
    a. Discuss poison prevention: i.e., proper storage and safe use of medicines, cleaners, auto products, paints.
    b. Discuss current recommendations for use of ipecac syrup.
    c. Discuss common poisonous plants.
3. Discuss the importance of fire safety and burn prevention:
    a. Review the dangers inherent in the use of wood-burning stoves, "charcoal pans", kerosene heaters, and other open flames.
    b. Encourage the use and proper maintenance of smoke detectors, carbon monoxide detectors, and fire suppression systems.
    c. Encourage routine practices of fire escape plans, chimney cleaning, and fireworks safety.
    d. Review the safe use of electricity and natural gas.
    e. Encourage hot water heater no hotter than 120 degrees Fahrenheit to avoid scalding.
    f. Cook on the backburners of the stove and turn panhandles toward the back of the stove.
    g. Avoid the use of kerosene or gasoline when burning debris piles.
4. Discuss the proper handling, storage, and disposal of hazardous items and materials:
    a. firearms and other potentially hazardous tools.
    b. waste, including sharps and hazardous materials.
    c. Chemicals, including antifreeze

d. lead based materials, i.e., pre-1970 paint, pottery, smelting, pre-1993 window blinds, solder, old plumbing

e. never store hazardous chemicals in food containers

5. Discuss the importance of water safety:

   a. Never swim alone

   b. Never leave a child unattended in a bathtub, swimming pool, lake, river, or other water source.

   c. Always close toilets, mop buckets, and other water containers to avoid toddler drowning.

6. Discuss the importance of food and drinking water safety:

   a. proper handling, storage, and preparation of food, i.e., original preparation, reheating to a proper temperature (165°F).

   b. importance of uncontaminated water sources. Discuss the importance of purifying any suspect water by boiling or chemical purification.

   c. prevention of botulism, salmonella, shigella, giardia, listeria, E-coli, etc.

7. Identify which community resources promote safety and injury prevention. Provide information regarding key contacts for emergencies, e.g., 911, Poison Control, hospital ER, police.

WL-SCR SCREENING

OUTCOME: The patient/family will understand the proposed screening test including indications.

STANDARDS:

1. Discuss the indication, risks, and benefits for the proposed screening test, i.e., guaiac, blood pressure, hearing, vision, development, mental health.
2. Explain the process and what to expect after the test.
3. Emphasize the importance of follow-up care.

WL-SM STRESS MANAGEMENT

OUTCOMES: The patient will understand the role of stress management in overall health and well-being.

STANDARDS:

1. Explain that uncontrolled stress may cause release of stress hormones which interfere with general health and well-being.
2. Explain that effective stress management may help prevent progression of many disease states, as well as help improve the patient's health and well-being.
3. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all of which can increase the risk of morbidity and mortality from many disease states.
4. Emphasize the importance of seeking professional help as needed to reduce stress.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
    a. becoming aware of your own reactions to stress
    b. recognizing and accepting your limits
    c. talking with people you trust about your worries or problems
    d. setting realistic goals
    e. getting enough sleep
    f. maintaining a reasonable diet
    g. exercising regularly
    h. taking vacations
    i. practicing meditation
    j. self-hypnosis
    k. using positive imagery
    l. practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
    m. spiritual or cultural activities
6. Provide referrals as appropriate.

WL-SX SEXUALITY

OUTCOME: The patient will understand how sexuality relates to wellness.

STANDARDS:

1. Review sexuality as an integral part of emotional and physical health.
2. Discuss how sexual feelings play a part in each person's personal identity.
3. Discuss sexual feelings as an important part of interpersonal relationships.
4. Discuss how sexuality varies with gender, age, life-stage, and relationship status.
5. Explain the preventive measures for STIs (**refer to STI-P**), including abstinence and monogamy.
6. Review the community resources available for sexual counseling or examination.

WL-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, including indications and impact on further care.

STANDARDS:

1. Explain the test ordered.
2. Explain the necessity, benefits and risks of the test to be performed, as applicable, including possible complications that may result from not having the test performed.
3. Explain how the test relates to the course of treatment.
4. Explain any necessary preparation for the test.
5. Explain the meaning of the test results, as appropriate.