

Tutorial for the Use of SETMA's "Lipids Treatment Audit"

The Lipids Treatment Audit can be found by following these steps:

- Go to **AAA Home**
- Click on **Lipids Disease Management Tool**
- Click on **Lipids Plan**
- Click on the **Treatment Audit** button which is the seventh button in the Navigation list to the right of the **Lipid Plan template**

Dm Lipids Audit ✕

Lipids Treatment Audit

Most Recent Values	Cholesterol	250	09/01/2009	HDL	10	09/01/2009
	Triglycerides	500	09/01/2009	LDL	160	09/01/2009

Has the patient had a lipid profile within the last year? Ordered Today

Has the Lipids Treatment Plan been completed within the last year?

Has the patient been assessed for Cardiometabolic Risk Syndrome within the last year?

If Cardiometabolic Risk Syndrome present, is it listed as a chronic condition?

If most recent LDL > 100, is the patient on a statin?

Have the following lifestyle changes been recommended if applicable?

Stop Smoking, Exercise, Lose Weight, Low Cholesterol Diet, Low Carbohydrate Diet

Has risk stratification for Lipids and Heart Disease been completed within the last year by using the Framingham Cardiovascular Risk Score AND one of the following?

Global Cardiovascular Risk Score, Frederickson Classification of Dyslipidemia, Lipid Disease Management Risk Assessment

Has the patient been referred to Medical Nutrition Therapy at least once?

Referral	Status
SETMA	Completed
Infectious	

Does the patient have Diabetes?

If most recent LDL > 70, is the patient on a statin?

Is the patient's HgbA1c below 7.0%?

Most Recent Result

Ordered Today

Does the patient have Hypertension?

Is the patient's blood pressure below 140/90?

Today's Blood Pressures

/ mmHg
 / mmHg
 / mmHg

As can be seen above, at the top of the template the current Lipid Values are displayed for

- Total Cholesterol
- HDL
- LDL
- Triglycerides

There are nine elements to the Lipid Audit

1. Has the patient had a lipid panel within the last year?

The first element in this data set is whether or not a Lipid Panel has been ordered in the current calendar year or in the past twelve months, whichever is longer. To the right of this measure is a button which is entitled “Click to Add.” If the Lipid panel has not been ordered, depressing this button will send the order to the lab, post it to the patient’s charges and place it on the current encounter.

2. Has the Lipids Treatment Plan been completed within the past year?

If not previously completed, this element is completed by the depressing of the “Click to Generate” button shown above. When this button is depressed the **Lipids Treatment Plan** is generated. In part this plan states:



SETMA I - 2929 Calder, Suite 100
SETMA II - 3570 College, Suite 200
SETMA West - 2010 Dowlen
(409) 833-9797
www.setma.com

Lipids Follow-Up Note Treatment Plan and Plan of Care

Patient Jonny1ZTest
Date of Birth 08/17/1940
Age
Ethnicity
Sex M

Cholesterol and Triglycerides (Lipid) Evidence-Based Measures

The current standards of care for cholesterol are based on the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III Final Report-ATP-III)

ATP-III Classifications

Total Cholesterol

<200	desirable
200-239	borderline high
>240	high

LDL Cholesterol

<100	optimal
101-129	near optimal/above optimal
130-135	borderline high
160-189	high
>190	very high

Serum Triglycerides

<150	normal
151-199	borderline high
200-499	high
>500	very high

3. Has the patient been assessed for the Cardio metabolic Risk Syndrome in the past year?

If the Risk Syndrome has not been assessed in the past year, clicking on the button entitled "click to Assess" will launch the following template which will automatically assess the presence or absence of the Syndrome by both the World Health Organization's definition and the ATP III definition.

Cardiometabolic Risk Syndrome Assessment

Last Updated/Reviewed:

	WHO Diagnostic Criteria <input checked="" type="radio"/> + <input type="radio"/> -	ATP III Diagnostic Criteria <input checked="" type="radio"/> + <input type="radio"/> -
Triglycerides <input type="text" value="500"/> mg/dL	>= 150 mg/dL	>= 150 mg/dL
Central Obesity wWaist <input type="text" value="32.50"/> inches Hip <input type="text" value=".00"/> inches Ratio <input type="text"/> BMI <input type="text"/> mg/m ²	Ratio Men > 0.90 wWomen > 0.85 BMI > 30	wWaist Men > 40 inches wWomen > 35 inches
Blood Pressure <input type="text" value="142"/> / <input type="text" value="82"/> mmHg	> 140/90 mmHg	> 130/85 mmHg
Glucose Abnormalities Fasting <input type="text"/> mg/dL 2 Hr GTT <input type="text"/> mg/dL Diabetes <input checked="" type="radio"/> + <input type="radio"/> - Insulin Resistance <input checked="" type="radio"/> + <input type="radio"/> -	Fasting > 110 mg/dL 2 Hr GTT > 140 mg/dL Diabetes Insulin Resistance	Fasting > 110 mg/dL
HDL <input type="text" value="10"/> mg/dL	Men < 35 mg/dL wWomen < 39 mg/dL	Men < 40 mg/dL wWomen < 50 mg/dL
Microalbuminuria Alb/Creat <input type="text"/> mg/g Spot A/C <input type="text"/> mg/dL	> 30 mg/g > 2.9 mg/dL	

4. If the Cardiometabolic Risk Syndrome is present, is it listed as a Chronic Condition?

If this fourth element is incomplete, depressing the button entitled “Click to Add” will allow you to add the Cardiometabolic Risk Syndrome from SETMA’s ICD-9 Code list. You will find it by typing “Met” and the following will be displayed which can then be selected, “Met Cardiometabolic Risk Syndrome. The benefit of listing this syndrome is that this is one of the elements in the risk stratification of the Lipid Treatment plan. Others are noted below.

5. If the most recent LDL is >100 is the patient on a statin?

If this fifth element of SETMA’s data set is not complete, depressing the button entitled “Click to Add Med,” will allow you to select a statin for this patient. Once the statin is added to the medication list, a “follow-up call” message can be created by going to the Master GP Plan which will allow our nurse to call the patient about the new medication. If the patient’s pharmacy is known, it can be e-prescribed.

If the patient has diabetes, this element will be greyed out and another standard will be indicated below;

6. Have the following lifestyle changes been recommended if applicable? Stop Smoking, Exercise, Lose Weight, Low Cholesterol Diet, Low Carbohydrate Diet

If the LESS Initiative has been completed on this patient in the past two months (Lose Weight, Exercise, Stop Smoking) the first three elements will have been fulfilled. If the appropriate diet for this patient has been selected on the Lipid Life Style template, then all of these issues will have been completed.

If any of the parts of this element have not been completed, completing the LESS Initiative from AAA Home, or the proper diet from the Lifestyle template will complete this element by depressing the “click to add” button which will launch the following:

Lifestyle Changes

Goals

<p>Recommended Actions</p> <p>Diets</p> <ul style="list-style-type: none"> <input type="checkbox"/> High Soluble Fiber <input type="checkbox"/> Low Carbohydrate <input type="checkbox"/> Low Cholesterol <input type="checkbox"/> Low Fat <input type="checkbox"/> Low Trans Fat <input type="checkbox"/> No Sugar <input type="checkbox"/> Weight Loss <input type="checkbox"/> 35 % Calories from Fat <p>Weight Loss Initiative</p> <p>BMR <input style="width: 50px;" type="text"/> cal/day</p> <ul style="list-style-type: none"> <input type="checkbox"/> Exercise Prescription <input type="checkbox"/> Recommend CPET <input type="checkbox"/> Change Dietary Habits <input type="checkbox"/> Smoking Cessation <div style="text-align: right;"><input type="button" value="Email"/></div>	<p>Patient Information (Automatically Prints)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td>Alcohol and Lipids</td></tr> <tr><td>BMR -- Changing It</td></tr> <tr><td>Dining Out</td></tr> <tr><td>Dyslipidemia and Inactivity</td></tr> <tr><td>Exercise and Weight Loss</td></tr> <tr><td>Foods to Eat, Avoid</td></tr> <tr><td>Inactivity and Cholesterol</td></tr> <tr><td>Step I, II Diets and Fiber</td></tr> <tr><td>Step I, II Diets - Description</td></tr> <tr><td>Training Intensity and Lipids</td></tr> <tr><td>Transfats and LDL</td></tr> </table>	Alcohol and Lipids	BMR -- Changing It	Dining Out	Dyslipidemia and Inactivity	Exercise and Weight Loss	Foods to Eat, Avoid	Inactivity and Cholesterol	Step I, II Diets and Fiber	Step I, II Diets - Description	Training Intensity and Lipids	Transfats and LDL
Alcohol and Lipids												
BMR -- Changing It												
Dining Out												
Dyslipidemia and Inactivity												
Exercise and Weight Loss												
Foods to Eat, Avoid												
Inactivity and Cholesterol												
Step I, II Diets and Fiber												
Step I, II Diets - Description												
Training Intensity and Lipids												
Transfats and LDL												

6. Has Risk Stratification for Lipids and Heart Disease been completed in the past year by using the Framingham Cardiovascular Risk Score and one of the following: Global Cardiovascular Risk Score, Fredrickson Classification of Dyslipidemia, or Lipid Disease Management Risk Assessment?

If the Framingham has not been completed, clicking on the button entitled “Click to update” will take you to the below where you can complete either the Framingham, or the Global Cardiovascular Risk score.

Both of these scores are developed from the Framingham Data, the only difference is the Global Score has eliminated the bias of the age and gender and added the glycohemoglobin rather than the presence or absence of Diabetes and Packs per day rather than the use or not of cigarettes.

Framingham Cardiovascular Risk Assessment

Last Updated/Reviewed

Date of Birth Sex

Stroke Risk Factor Prediction

The Stroke Risk Factor Prediction is for male and female patients between the ages of 54 and 86 with SBP ranges Male: 95-213, Female: 95-204

Coronary Heart Disease Risk Factor Prediction

The CHD Risk Factor Prediction is for patients between the ages of 20 and 80. The algorithm assesses the patient's 10 Year CHD risk based on age, systolic blood pressure, HDL cholesterol, total cholesterol, Diabetes, smoking, and LVH.

Age	<input type="text" value="69"/>	Pts.	<input type="text" value="5"/>
SBP	<input type="text"/>	Pts.	<input type="text"/>
HYP RX	<input type="text"/>	Pts.	<input type="text"/>
Diabetes	<input type="text"/>	Pts.	<input type="text"/>
CIGS	<input type="text"/>	Pts.	<input type="text"/>
CVD	<input type="text"/>	Pts.	<input type="text"/>
AF	<input type="text"/>	Pts.	<input type="text"/>
LVH	<input type="text"/>	Pts.	<input type="text"/>

Age	<input type="text" value="69"/>	Pts.	<input type="text" value="11"/>
SBP	<input type="text"/>	Pts.	<input type="text"/>
	<input type="checkbox"/> treated <input type="checkbox"/> untreated		
HDL - C:	<input type="text"/>	Pts.	<input type="text"/>
Total - C:	<input type="text"/>	Pts.	<input type="text"/>
Diabetes	<input type="text"/>	Pts.	<input type="text"/>
CIGS	<input type="text"/>	Pts.	<input type="text"/>
LVH	<input type="text" value="no"/>	Pts.	<input type="text" value="0"/>

8.2 points

Point Total
10 Year Risk Percent

Global Cardiovascular Risk Score

Last Updated/Reviewed

Enter each of the five parameters below and click "Calculate."
You may click "Import" to pull the values in from the physical exam.

Cholesterol	<input type="text"/>
HDL	<input type="text"/>
HgbA1C	<input type="text"/> <input type="button" value="Import >>"/>
Systolic BP	<input type="text"/>
Packs Per Day	<input type="text"/>

8.2 points

A Global Cardiovascular Risk Score below 4 is desirable. Above 4, the patient is at increased risk of a cardiovascular event.

Complete Formula

$$\frac{\text{Cholesterol}}{\text{HDL}} + (\text{HgbA1C} - 7.0) + \frac{\text{Systolic BP} - 130}{10} + \text{Packs Per Day}$$

The Fredrickson Classification of Dyslipidemia can be completed by the assessment on the Master Lipid Disease Management Template. The Classification is automatically selected based on the lipid results but if treatment has been instituted may have to be manually selected.

You can locate the Frederickson Classification at the bottom of the first column on the template below. The classification will automatically calculated when you depress the button “Assess from Labs,” but can be manually selected after treatment has been started.

Lipids Management
 SETMA's Lipid Philosophy

Patient: Jonny1 ZTest
Age: 69 **Sex:** M

Compliance
 Last Lipid: 09/01/2009
 Last CRP: / /
 Last Liver Panel: 04/17/2009
 Height: 70.00 inches
 Weight: pounds
 BMI:
 Body Fat: 19.6 %
 BMR: cal/day
 Protein Req: grams/day
 Waist: 32.50 inches

Blood Pressure:
 142 / 82 mmHg
 / / mmHg
 / / mmHg

Diabetes Mellitus: + -
 Metabolic Syndrome: + -

Most Recent Labs Goals
 Check for New Labs

Cholesterol	250	09/01/2009
HDL	10	09/01/2009
HDL 2	0	
HDL 3	0	
Cholesterol/HDL	25.00	
Triglycerides	500	09/01/2009
Trig/HDL	50.00	
Chylomicrons	+ - -	
CPK	/ /	
Lp(a)	0	
LDL	90	09/01/2009
IDL	0	
VLDL	0	
LDL-Remnant	0	
Homocystiene	0	/ /
hsCRP	.0	/ /
Apo A1	.0	
Apo B	.0	
Apo E2	.0	
Apo E4	.0	

Risk Factors
 Coronary Heart Disease
 MI (Heart Attack)
 Angina
 CABG
 Non-Coronary Atherosclerosis
 Peripheral Artery Disease
 Cerebrovascular Disease
 Aortic Aneurysm
 Fram. CVD 10-Year Risk: %
 Fram. Stroke 10-Year Risk: 0
 Global Cardio Risk: 8.2

Assessment Update
Aggressive measures must be taken to lower LDL to below 70.
 Last Updated/Reviewed: / /

Navigation
 Lipids General
 Home
 Lipids System Review
 Extremity Exam
 Eye Exam
 Cardio Exam
 Lifestyle Changes
 Lipids Plan

Lipoprotein Metabolism
 Summary of Lipid Studies
 Lipoproteins
 Significance
 Composition
 Classification
 Hyperlipoproteinemias
 Hypolipoproteinemias
 VLDLs
 IDLs
 LDLs
 HDLs
 LDL Receptors
 Chylomicrons
 Chylomicrons and Triglycerides

Secondary Causes of Abnormal Lipids
 Hypercholesterolemia
 Hypocholesterolemia
 Low HDL
 Hypertriglyceridemia

If you wish to review the details of the Classification which applies to the current patient, after select the Classification, depress the “Info” button and a document specific to that Frederickson Classification will be generated.

If you wish to review all of the Classifications and their relative atherogenicity, simple click on the left “help” button under Fredrickson Classification and the following will be displayed.

Dm Lipids Class ✖

Fredrickson Classification of Dyslipidemias

Phenotype	Lipoprotein(s) Elevated	Serum Cholesterol Level	Serum Triglyceride Level	Atherogenicity
<input type="radio"/> I	Chylomicrons	Normal to +	++++	None Seen
<input type="radio"/> IIa	LDL	++	Normal	!!!
<input type="radio"/> IIb	LDL and VLDL	++	++	!!!
<input type="radio"/> III	IDL	++	+++	!!!
<input type="radio"/> IV	VLDL	Normal to +	++	!
<input type="radio"/> V	VLDL and Chylomicrons	Normal to +	++++	!

+ = mildly increased ! = mild to moderate atherogenicity
 ++ = moderately increased !!! = severe atherogenicity
 +++ = severely increased
 ++++ = very severely increased

7. Has the patient been referred to Medical Nutrition Therapy at least once?

If the answer is no, it is possible to make a referral to MNT by double click on the referral template function to the right of this element. This displays the referral template as follows:

"referrals_pop" - [New Record]

Referrals Template

*** Indicates procedures done in house**

Patient: Jonny1, ZTest, Date: 20090928, Company: Cigna, Date of Birth: 08/17/1940, Time: 1:15 PM, Telephone: 8002510670, Phone: 4098339797, Status: In Progress, Policy #: 123456789

Routine Speciality Provider: [Redacted]
 Immediate Referring Provider: [Redacted]
 Stat Referred To: [Redacted]

Dx: [Redacted] Notes: [Redacted]

PLEASE FILL OUT ALL FIELDS IN RED

Special Procedures

- * Arterial Blood Gas
- Audiogram
- * Bladder Scan
- * Bone Density
- Bone Scan
- Breast Biopsy (Stereo)
- Bronchoscopy
- * Colonoscopy
- EEG
- EGD
- * EMG [Redacted]
- ENG
- Eye Exam
- Flex Sigmoidoscopy
- HIDA Scan
- IVP
- Liver Biopsy
- Mammogram
- Mod. Barium Swallow
- * Nerve Conduction Vel
- [Redacted]
- * PFT
- Postvoidal residual volume
- Renal Scan

Therapy

- Physical Therapy
- Speech Therapy
- Occupational Therapy
- Medical Nutrition Therapy

Medical Home

- Care Coordinator
- Financial
- Home Health
- Hospice
- Social Work

Cardiac Procedures

- Adenosine Cardioltie
- * CPET
- Dobutamine Echo
- * Echocardiogram
- * Holter Monitor
- Stress Echo
- * Stress Test
- Stress Thallium
- Ambulatory BP Monitoring

Common Referrals

- Beaumont Bone and Joint
- Dermatology - Dr. Vaughn
- ENT - Dr. Duplan
- General Surgery - Dr. Gonzales
- Healy Urologic Clinic
- Nephrology - Dr. Derderian
- Orthopedics - Dr. Marrero
- Podiatry - Dr. Carmack
- Southeast Texas Cardiology
- Southeast Texas Gastroenterology

SETMA Referrals

- Allergy
- Cardiology
- CHF
- Coumadin
- Diabetes Education
- Endocrinology
- Infectious Disease
- Neurology
- Ophthalmology
- Rheumatology

Other Specialist (If not in "Referred To" list)

Other Referral [Redacted] Required only if no procedure indicated with checkboxes.

Incomplete

Report: [Redacted]

InfoRecvd RefCom

Navigation: << < Clear for Add Delete Save Close > >>

Medical Nutrition Therapy is found in the third column under "Therapy" and is the fourth item in that column under that heading.

At the bottom third of the Audit template are two options: one addresses whether the patient has diabetes and the other if the patient has hypertension.

The screenshot shows two panels. The left panel is titled "Does the patient have Diabetes?" with a "Yes" button. It contains a question "If most recent LDL > 70, is the patient on a statin?" with a "Yes" button and a "Click to Add Med" button. Below that is "Is the patient's HgbA1c below 7.0%?" with a "No" button. A "Most Recent Result" section shows "7.2" and "05/13/2009" with a "Click to Order" button and the text "Ordered Today". The right panel is titled "Does the patient have Hypertension?" with a "Yes" button. It contains the question "Is the patient's blood pressure below 140/90?" with a "No" button. Below that is a section titled "Today's Blood Pressures" with three rows of input fields: "142 / 82 mmHg", two empty fields, and two more empty fields.

8. Does the patient have diabetes?

If the answer is “yes,” the following will be activated:

- If the most recent LDL is >70, is the patient on a statin?
“Click to add Med” – this allows a statin to be ordered.
- Is the patient’s most recent HgbA1C below 7.0%?
“Click to Order” – this allows for a HgbA1C to be ordered

9. Does the patient have hypertension?

If the answer is “yes” the following will be activated

- Is the patient’s blood pressure below 140/90?

Displayed are three trials which will show the blood pressure for the current or most recent visit.