A Practical Office-Based Cholesterol Management System

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Rolando L deGoma MD, Emil M deGoma MD

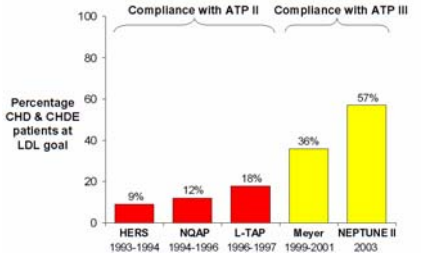
New Jersey Preventive Cardiology and Cholesterol Clinic, New Jersey

Implications for clinical practice

- A comprehensive, computer-assisted cholesterol management system composed of five core components can facilitate LDL goal attainment without additional investment in technology or human resources.
- In our single-center study, 85% of CHD and CHD-equivalent patients achieved an LDL < 100 mg/dl following implementation of the management system.

Statement of the problem

- Despite a wealth of data demonstrating the efficacy and safety of statins and other LDL-lowering therapies, a significant number of patients at high-risk for cardiovascular events remain untreated or undertreated.
- Numerous attempts to address the treatment gap have met with limited success, hindered by ever increasing demands on physicians' time and limited financial resources.



Objectives of the management system

1) To develop a simple yet comprehensive approach to enable busy primary care providers to achieve appropriate LDL-c reductions without additional investment in technology or personnel.
2) To evaluate adherence to National Cholesterol Education Panel Adult Treatment Panel III (NCEP ATP III) guidelines following implementation of the office-based cholesterol management system.

Description of the cholesterol management system

Five core components

1. A step-by-step algorithm simplifying NCEP ATP III guidelines
2. Customized templates for initial risk assessment and follow-up encounters
3. An evidence-based calculator to estimate the statin dose required to get to goal
4. Educational materials to address patient concerns and improve compliance
5. A rapid daily LDL-c auditing system

Visit sequence: The process of getting patients to goal

	Visit 1	Baseline laboratory studies (~ 6-8 weeks)	Visit 2	Initial pharmacotherapy (~ 6-8 weeks)	Visit 3
To do	• Perform history and physical exam • Order baseline laboratory studies • Discuss therapeutic lifestyle changes		• Complete risk evaluation • Determine lipid goals • Initiate statin therapy • Address patient concerns		• Assess response to therapy • Reinforce adherence to medications and lifestyle changes • Titrate pharmacotherapy • Answer patient questions
Forms	• New patient encounter form		• Initial risk assessment/treatment form • Follow-up encounter form		• Follow-up encounter form • Daily LDL chart audit form
Tools	• Patient educational materials		• Simplified NCEP ATP III algorithm • Statin dose calculator		• Simplified NCEP ATP III algorithm • Patient educational materials

Evaluating the cholesterol management system

Study design

- Single-center prospective chart analysis of all consecutive patients seen between January 4, 2005 and April 14, 2005 meeting the eligibility criteria below
- Inclusion criteria:
  - CHD and CHD risk-equivalent patients
  - ≥ 2 prior clinic visits to permit initial risk assessment and initiation of therapy
- Exclusion criteria: none

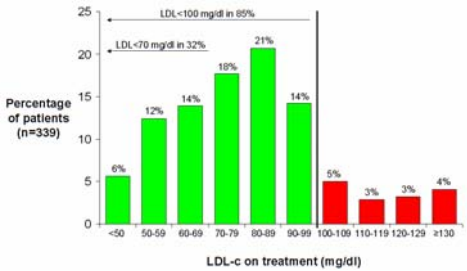
Baseline characteristics of 339 consecutive patients

	Characteristic	%	(n)
Demographics	Age	Mean: 72 yo	
	Men	60%	(205)
	Women	40%	(143)
	White	74%	(259)
	Black	22%	(75)
Diagnoses	CHD	70%	(239)
	CHD-equivalent	30%	(100)
Therapy	Statin monotherapy	92%	(312)
	Combination therapy†	31%	(105)
	No pharmacotherapy	4%	(13)

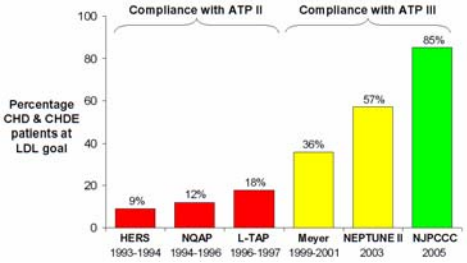
†Combination therapy: statin + ezetimibe, statin + niacin, or statin + fibrate

Results: LDL-c levels

85% of patients achieved an LDL-c < 100 mg/dl
Mean LDL-c on treatment: 82 mg/dl



A greater percentage of high-risk patients achieved their LDL-c targets compared to prior observational studies



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