

UCLA Cardiovascular Care Performance Update

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To: UCLA Medical and Nursing Staff

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The UCLA Cardiovascular Hospitalization Atherosclerosis Management Program (CHAMP) was implemented to improve treatment rates and outcomes for patients hospitalized at UCLA with atherosclerotic vascular disease. This program was designed to ensure that AMI/ACS patients as well as other cardiovascular disease patients are treated with and discharged on medical therapy which reduce mortality and prevent atherosclerosis progression. As part of this effort, the UCLA Medical Center has been participating in the National Registry for Myocardial Infarction (NRMI) to track AMI/ACS treatments, timing, and patient outcome compared to a national data set of over 100,000 patients/yr.

Attached is a summary of the current data from NRMI IV regarding utilization of therapy and clinical outcomes. As part of our continuous quality improvement program, we will periodically provide feedback regarding our consistency in treating this patient population and AMI patient outcome at the UCLA Medical Center.

This data shows that statin use in AMI/ACS patients remains below goal. The Heart Protection Study demonstrated that patients with atherosclerosis or diabetes have significant reductions in cardiovascular events with statin treatment, even in patients with baseline LDL < 100 mg/dl. Therapy was as well tolerated and safe as placebo. The CHAMP protocol recommends that all patients with atherosclerosis or diabetes be started on statin treatment regardless of baseline LDL, within 24 hours of hospitalization, and for treatment to be continued indefinitely. There is also room for improvement in ACE inhibitor and beta blocker use. Documentation of smoking cessation counseling in current smokers has somewhat improved as a result of a cardiac nursing quality improvement project. Physician documentation remains well below desired levels.

The utilization of beneficial therapies and the documentation of the medical care, counseling, and discharge plan at UCLA are being monitored by NCQA (National Committee for Quality Assurance), JACHO, and other organizations. It is essential that each physician and nurse that cares for these patients make every effort to ensure appropriate therapies are implemented and documented.

Medications Prescribed in First 24 Hours of Hospitalization

	UCLA 10/00-9/01 n=190	NRMI 10/00-9/01 n=150 645
ASA	98%	91%
Beta Blockers	92%	74%
ACE Inhibitors	61%	40%
Calcium Blockers	14%	22%
Heparin	73%	76%
Statins	68%	28%

Medications Prescribed at Hospital Discharge

	UCLA 10/00-9/01 n=158	NRMI 10/00-9/01 n=97 405
ASA	93%	85%
Beta Blockers	88%	78%
ACE Inhibitors	81%	55%
Statins	86%	41%
Smoking Cessation	82%	40%

Clinical Outcomes (October 2000 – September 2001)

	All Patients		ST elevation MI		Non-ST MI	
	UCLA	Nation	UCLA	Nation	UCLA	Nation
Length of Stay (d)	3.8	4.0	3.2	3.6	4.1	4.3
Mortality	8.9%	9.8%	3.6%	10.9%	13.2%	9.2%

For the JCAHO/ORYX quality indicator of aspirin within 24 hours of arrival UCLA was in the 92nd percentile of the Nation. For the quality indicator of beta blocker within 24 hours of arrival UCLA was in the 89th percentile. While the quality of care performance at the UCLA Medical Center is substantially better than most of the 1210 medical centers participating in NRMI IV, there is still room for improvement. The following treatment rate goals were set by the UCLA Cardiology Care Quality Improvement Committee accounting for contraindications and medication intolerance:

	All patients	Ideal candidates
ASA	99%	100%
Beta blocker	90%	100%
ACE inhibitor	98%	100%
Statin	98%	100%
Smoking cessation	100%	100%
Calcium blocker	0%	NA

Specific Recommendations

Aspirin and Clopidogrel: *All patients with acute myocardial infarction/ACS should be treated with aspirin and clopidogrel unless absolute contraindications exist. Therapy should be begun immediately upon presentation and continued indefinitely. Clopidogrel alone represents an alternative treatment for patients with an aspirin allergy. The combination of aspirin and clopidogrel has been demonstrated to be superior to aspirin alone in CURE.*

Beta Blocker: *All patients with acute myocardial infarction/ACS should be treated with a beta blocker, unless absolute contraindications exist. Therapy should be initiated after initial assessment for cardiogenic shock, symptomatic bradycardia, and high degree heart block with IV therapy. Patients should then be converted to oral beta blockers with treatment continued indefinitely.*

ACE inhibitor: *All patients with acute myocardial infarction/ACS should be treated with an ACE inhibitor, unless absolute contraindications exist. Therapy should be begun in the first 24 hours, if possible, and advanced to target doses as tolerated. This recommendation applies to patients with normal or reduced left ventricular function / normal or elevated blood pressure. There is no renal function/creatinine threshold at which an ACE inhibitor should not be started. Treatment should continue indefinitely.*

HMG CoA reductase inhibitor: *All patients with acute myocardial infarction/ACS should be treated with a statin, regardless of baseline LDL, unless absolute contraindications exist. The benefits of statins have been demonstrated in patients with baseline LDL < 100 mg/dl. Therapy should be begun in the first 24 hours, and adjusted to achieve LDL < 100 mg/dl and HDL > 40 mg/dl. Treatment should continue indefinitely.*

Smoking Cessation: *All patients with acute myocardial infarction/ACS that are current smokers should receive counseling regarding smoking cessation. Provision of this counseling and specific recommendations should be documented in the medical record.*

See CHAMP protocol and other UCLA Cardiology Clinical Practice Guidelines for further details and scientific justification of the above recommendations. The guidelines are available online at:

www.med.ucla.edu/champ