	STEMI (n = 53,417)	NSTEMI (n = 132,551)	Unadjusted P-Values
Median Age (yrs)	69 (56, 80)	75 (63, 83)	< 0.0001
Female Sex (%)	40.4	45.8	< 0.0001
Diabetes (%)	26.5	34.0	< 0.0001
Acute Aspirin (%)	88.0	84.9	< 0.0001
Acute Heparin (%)	84.2	72.6	< 0.0001
Acute *B*-Blocker (%)	77.8	72.2	< 0.0001
Discharge Aspirin (%)	88.9	83.8	< 0.0001
Discharge *B*-Blocker (%)	83.4	78.3	< 0.0001
Discharge ACE-Inhibitor (%)	58.0	51.2	< 0.0001
Discharge Lipid Lowering Agent (%)	86.7	85.7	0.073
In-Hospital Mortality (%)	14.5	12.3	< 0.0001

11:30 a.m.

885-5 **Opportunities to Improve Outpatient Compliance of Evidence-Based Therapy in Patients With Known Prior Coronary Artery Disease Admitted for Acute Coronary Syndrome**

Richard F. Otten, Eva M. Kline-Rogers, Bruce Rogers, Prasanth Lingam, Yassar Almanaseer, Fauziya Hassan, Firas Al-Marayati, Kim A. Eagle, Jianming Fang, University of Michigan, Ann Arbor, MI

Background: Aspirin (ASA), beta blockers (BB), ace-inhibitors (ACE), and lipid lowering agents (LL) decrease morbidity/mortality in eligible patients with coronary artery disease (CAD). We assessed use of these medications among patients with known CAD admitted for acute coronary syndromes.

Methods: 443 of 700 consecutive patients admitted to our health system 6/22/00 to 12/4/01 had known CAD at admission and were contacted for 6 month follow up after discharge. We evaluated ASA, BB, ACE and LL among 'ideal' patients (no contraindications) at admission, discharge, and 6 months post discharge.

Results: At admission, a substantial percentage of patients with known CAD were not on evidence based therapies. While 80-98% of patients were given these agents at discharge, by 6 months a considerable fraction were no longer on therapy.

Overall Adherence & Adherence at 6 mo. comparing patients on/not on medication at admission

	ASA*	BB	ACE	LL
On admission (all)	68.9%	55.7%	57.6%	60.6%
At discharge (all)	98.1%	91.6%	82.8%	86.8%
At 6 mo. (all)	84.1%	76.5%	57.6%	82.5%
At 6 mo. (on med at admission)+	81.4%	81.3%	72.1%	81.3%
At 6 mo. (not on med at admission)+	80.1%	76.5%	64.6%	75.5%

*Includes ASA or other anti-platelet and/or warfarin.
+% among patients who were discharged on the medication.

Conclusions: Among patients with known CAD admitted for an acute coronary syndrome, a substantial fraction are not on evidence based medications when admitted. Despite efforts to optimize treatment goals at discharge, adherence to BB, ACE, and ASA falls substantially by 6 months. There is a non-significant trend for non-adherence to be more common among patients with prior CAD not taking these agents prior to acute coronary syndrome admission. Further studies are needed to identify methods of increasing adherence to key therapies in patients after acute coronary syndrome.

11:45 a.m.

885-6 **Relationship Between Time of Day/Day of Week and Outcomes in Patients Undergoing Primary Percutaneous Coronary Intervention for Acute Myocardial Infarction**

Mauro M. Moscucci, Dean Smith, Debabrata Mukherjee, Cecelia Montoye, Michael J. O'Donnell, Anthony C. DeFranco, William L. Meengs, Ann Maxwell-Eward, John G. McGinnity, Kirit Patel, David Share, for the Blue Cross Blue Shield of Michigan Cardiovascular Consortium (BMC2), University of Michigan Health System, Ann Arbor, MI

Objective: To determine if outcomes of primary PCI for acute myocardial infarction (AMI) are affected by the time of procedure (time of day, day of week). Methods: Clinical procedural and outcome data on 25,144 consecutive PCIs were prospectively collected between July 1997 and September 2001 in a consortium of 8 hospitals. Of these, 3,908 primary PCI were performed in patients with AMI (within 24 hours). Clinical outcomes of patients undergoing PCI during the night and weekends were compared with those of patients undergoing PCI during the day and weekdays. Nighttime was defined as between 6 PM and 8 AM. The primary endpoint was a composite major adverse cardiac event (MACE) including death, CABG, stroke and re-infarction. Results: The unadjusted MACE rate was significantly higher for patients treated during weekends or nighttime when compared with patients treated during weekdays or daytime (Table). After adjustment for comorbidities, patients treated during weekends had a 41% increased risk of MACE (adjusted OR 1.41, 95% CI 1.08-1.84, p=0.01), and a 45% increased risk of death in the hospital (adjusted OR 1.45, 95% CI 1.01-2.07, p=0.045). A non-significant trend toward worse MACE was also observed in patients undergoing PCI during nighttime (Adjusted OR 1.20, 95% C.I. 0.95-1.53, p=0.13). Conclusions: Patients with AMI undergoing primary PCI during weekends have a higher risk of major adverse cardiac events and in hospital mortality. It needs to be determined whether this might be related to process of care.

	Nighttime	Daytime	p	Weekend	Weekdays	p
Any CABG	4.4	3.0	0.03	4.4	3.2	0.09
Stroke	1.4	1.0	0.24	0.7	1.2	0.26
re-infarction	2.2	1.5	0.12	2.6	1.6	0.05
Death	7.3	6.1	0.17	8.4	6.0	0.02
MACE	13.9	10.4	0.001	15.1	10.6	0.0004