

# 2015 Level One Heart Attack Program Outcome Report

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Level One Heart Attack Program interventional therapies are available 24 hours a day, 365 days a year.

## INNOVATIVE LEVEL ONE HEART ATTACK PROGRAM: NO PATIENT EXCLUDED FROM TREATMENT\*

Since implementing the Level One Heart Attack Program in March 2003, Minneapolis Heart Institute® at Abbott Northwestern Hospital has treated 4,918 patients with Level One STEMI. This unique treatment, which is the first of its kind in the United States to coordinate community emergency

departments with trained emergency transportation professionals and an expert angioplasty team, is available 24/7. When compared to benchmarks, the Level One program shows a significant reduction in mortality rates.

\*No patients excluded based on age, cardiogenic shock, cardiac arrest, comorbidity, etc.

### LEVEL ONE HEART ATTACK OUTCOME REPORT – MARCH 1, 2003 THROUGH DECEMBER 31, 2015

#### STEMIs

<b>Total<sup>1</sup></b>	<b>4,918</b>
Zone 1 <sup>2</sup>	2,183
Zone 2 <sup>3</sup>	1,363
Abbott Northwestern ED <sup>4</sup>	1,372
Male/female	71%/29%
Average age	63 years
Anterior MI or LBBB	35.7%
Cardiogenic shock	11.5%
Pre-PCI cardiac arrest	10.2%
Transport ground/air	52.8%/47.2%

#### Median Elapsed Time

Zone 1	95 min
Zone 2	122 min
Abbott Northwestern ED	57 min
Cath lab to balloon	15 min

#### Overall Program Outcomes

In-hospital mortality	5.8%
Median hospital length of stay	3 days
TIMI major bleeding	2.8%

#### Mortality at 30 days/1 year<sup>5</sup>

Zone 1	6.3%/8.9%
Zone 2	6.3%/9.8%
ANW	7.4%/10.8%
Overall mortality	6.6%/9.7%
Stroke at 30 days	1.0%
Reinfarction at 30 days	1.5%

#### Outcomes with exclusions<sup>6</sup>

Mortality at 30 days	1.2%
Mortality at 1 year	2.3%

- Total number of STEMIs treated at Abbott Northwestern Hospital
- Zone 1: Hospitals 22-60 miles from Abbott Northwestern Hospital. No thrombolytic therapy. Immediate transfer and PCI.
- Zone 2: Hospitals 61-190 miles from Abbott Northwestern Hospital. Half-dose thrombolytic therapy followed by immediate transfer and PCI.
- Patients presenting directly to Abbott Northwestern Hospital or who were already admitted
- Excludes patients who presented in 2015 for which 1 year follow-up was unavailable.
- Excludes patients with cardiac arrest, cardiogenic shock, age ≥80, or a non-cardiac related death (n=3172 patients remaining)

### LEVEL ONE HEART ATTACK OUTCOME REPORT – JANUARY 1, 2015 THROUGH DECEMBER 31, 2015

#### STEMIs

<b>Total<sup>1</sup></b>	<b>402</b>
Zone 1 <sup>2</sup>	176
Zone 2 <sup>3</sup>	78
Abbott Northwestern ED <sup>4</sup>	148
Male/female	68%/32%
Average age	64.8 years
Anterior MI or LBBB	34.6%
Cardiogenic shock	12.9%
Pre-PCI cardiac arrest	14.9%
Transport ground/air	68.1%/31.9%

#### Median Elapsed Time

Zone 1	103 min
Zone 2	128 min
Abbott Northwestern ED	50 min
Abbott Northwestern EMS activated <sup>5</sup>	40 min
Abbott Northwestern Non-EMS activated <sup>6</sup>	66 min
Cath lab to balloon	18 min

#### Overall Program Outcomes

In-hospital mortality	8.7%
Median hospital length of stay	2 days
TIMI major bleeding	4.0%

#### 30 Day Outcomes

Overall mortality	10.0%
Zone 1	9.7%
Zone 2	6.4%
ANW	12.2%
Stroke at 30 days	1.7%
Reinfarction at 30 days	1.7%

- Total number of STEMIs treated at Abbott Northwestern Hospital
- Zone 1: Hospitals 22-60 miles from Abbott Northwestern Hospital. No thrombolytic therapy. Immediate transfer and PCI.
- Zone 2: Hospitals 61-190 miles from Abbott Northwestern Hospital. Half-dose thrombolytic therapy followed by immediate transfer and PCI.
- Patients presenting directly to Abbott Northwestern Hospital or who were already admitted
- Patients presenting directly to Abbott Northwestern Hospital whose STEMIs were activated by EMS prior to arrival (n=52)
- Patients presenting directly to Abbott Northwestern Hospital whose STEMIs were not activated by EMS prior to arrival (n=71)

**One Call Transfer Center** Any patient. Any time. **612-863-3911** | Fax 1-844-206-0071

Abbott Northwestern's One Call Transfer Center, available 24/7, ensures a streamlined process for transferring and admitting patients for all referring hospitals and physicians. All of Minneapolis Heart Institute's protocols and other helpful resources are available 24/7 at [mplsheart.com](http://mplsheart.com). Contact Mark Ebeling, Manager-CV Emergencies Program at 612-775-3694 with questions about any of Minneapolis Heart Institute's emergency protocols.



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The Level One Heart Attack Program relies upon a high degree of collaboration between community hospitals, Abbott Northwestern Hospital and the Minneapolis Heart Institute®.

Aitkin – Riverwood Healthcare Center  
Alexandria – Douglas County Hospital  
Arlington – Sibley Medical Center  
Blue Earth – United Hospital District  
Brainerd – St. Joseph’s Medical Center  
Cambridge – Cambridge Medical Center  
Chaska – Two Twelve Medical Center  
Crosby – Cuyuna Regional Medical Center  
Faribault – District One Hospital  
Glencoe – Glencoe Regional Health Services  
Grantsburg, WI – Burnett Medical Center  
Hutchinson – Hutchinson Medical Center  
LeSueur – Minnesota Valley Health Center  
Litchfield – Meeker County Memorial Hospital

Minneapolis – Abbott Northwestern Hospital  
Mora – FirstLight Health System  
Morris – Stevens Community Medical Center  
New Prague – Queen of Peace Hospital  
New Ulm – New Ulm Medical Center  
Northfield – Northfield Hospital  
Olivia – RC Hospitals & Clinics  
Owatonna – Owatonna Hospital  
Plymouth – Abbott Northwestern-WestHealth  
Shakopee – St. Francis Medical Center  
Sleepy Eye – Sleepy Eye Medical Center  
Waconia – Ridgeview Medical Center  
Willmar – Rice Memorial Hospital

[mplsheart.com](http://mplsheart.com)