

2018 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 5,947 patients with Level One STEMI. This program, which was 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, 2018

STEMIs

Total¹	5,947
Zone 1 ²	2573
Zone 2 ³	1570
Abbott Northwestern ED ⁴	1804
Male/Female	71%/29%
Average Age	63.8
Anterior MI or LBBB	38.8%
Cardiogenic Shock	11.9%
Pre-PCI cardiac arrest	10.5%
Transport ground/air	64%/46%

Median Elapsed Time

Zone 1	97 mins
Zone 2	122 mins
Abbott Northwestern ED	55 mins
Cath lab to balloon	15 mins

Overall Program Outcomes

In-Hospital Mortality	5.9%
Median hospital length of stay	2 days
TIMI major bleeding	2.8%

Mortality at 30 days/1 year

Zone 1	6.2%/8.7%
Zone 2	6.0%/9.5%
ANW	6.9%/10.5%
Overall mortality	6.7%/9.5%
Stroke at 30 days	1.1%
Reinfarction at 30 days	1.5%

Outcomes with exclusions⁵

Mortality at 30 days	0.7%
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- 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 with cardiac arrest, cardiogenic shock, age ≥80, or non-cardiac related death; (n=3565 patients remaining)

LEVEL ONE HEART ATTACK OUTCOME REPORT – JANUARY 1, 2018 THROUGH DECEMBER 31, 2018

STEMIs

Total¹	312
Zone 1 ²	112
Zone 2 ³	52
Abbott Northwestern ⁴	148
Male/Female	69%/31%
Average Age	65.1
Anterior MI or LBBB	32.4%
Cardiogenic Shock	15.8%
Pre-PCI cardiac arrest	12.2%
Transport ground/air	73%/27%

Median Elapsed Time

Zone 1	100 mins
Zone 2	122 mins
Abbott Northwestern ED ⁵	60 mins
Abbott Northwestern EMS Activated ⁶	44 mins
Abbott Northwestern Non-EMS Activated ⁷	74 mins
Cath lab to balloon	18 mins

Overall Program Outcomes

In-Hospital Mortality	7.1%
Median hospital length of stay	2.0 days
TIMI major bleeding	4.9%

30 Day Outcomes

Overall Mortality	7.1%
Zone 1	8.8%
Zone 2	1.9%
ANW	8.8%
Stroke at 30 days	1.4%
Reinfarction at 30 days	1.4%

- 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 by EMS or Self/Family Driven (n=118)
- Patients presenting directly to Abbott Northwestern Hospital via EMS whose STEMIs were activated prior to arrival (n=62)
- Patients presenting directly to Abbott Northwestern Hospital via EMS whose STEMIs were not activated prior to arrival (n=23)



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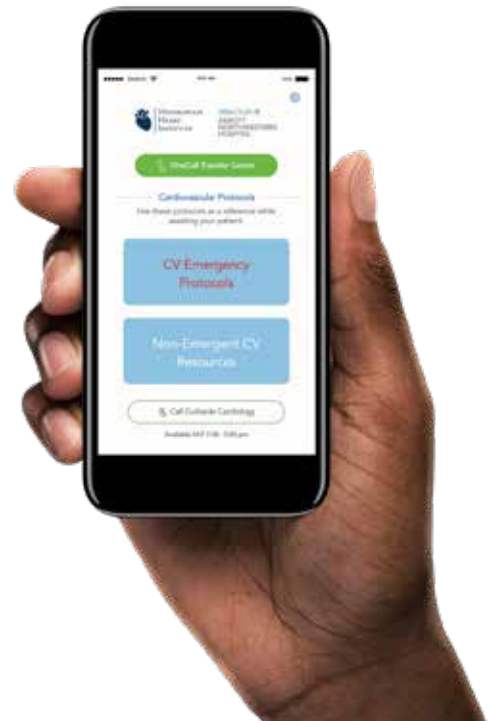
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Mobile App

The latest cardiovascular protocols are always at your fingertips with this convenient mobile app. It's free, easy to use and features both emergency and non-emergent protocols.

The app features:

- Protocols for anticoagulation, statin therapy, CAD testing and eCPR
- Which Test When evaluation tool
- One-touch access to Cardiology Curbside, OneCall Transfer Line, anticoagulation clinic and CV test scheduling



Visit the app store on your mobile device and search MHI/ANW CV Emergencies.



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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 – Ridgeview 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 Health
Le Sueur – Ridgeview Le Sueur Medical Center
Litchfield – Meeker County Memorial Hospital
Minneapolis – Abbott Northwestern Hospital
Mora – FirstLight Health System
Morris – Stevens Community Medical Center
New Prague – Mayo Clinic Health System New Prague

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
Allina Health Emergency Medical Services
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Life Link III
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Northfield Emergency Medical Services
North Memorial Health Air Care
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