

1 Problem

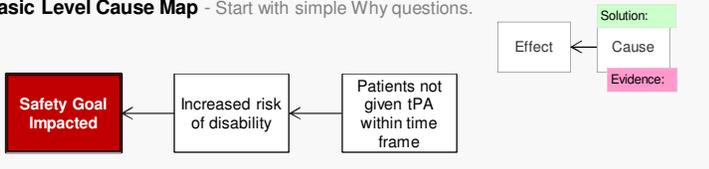
What	Problem(s)	Stroke victims not receiving adequate treatment
When	Date	Study based on 2011 data
	Different, unusual, unique	Only 4% of stroke victims treated with tissue plasminogen activator (tPA)
Where	Facility, site	Study of US hospitals
	Task being performed	Treatment of stroke victims

Impact to the Goals	
Patient Safety	Increased risk of disability
Patient Services	Inadequate treatment for stroke

Frequency	Stroke affects nearly 800,000 people every year in the US
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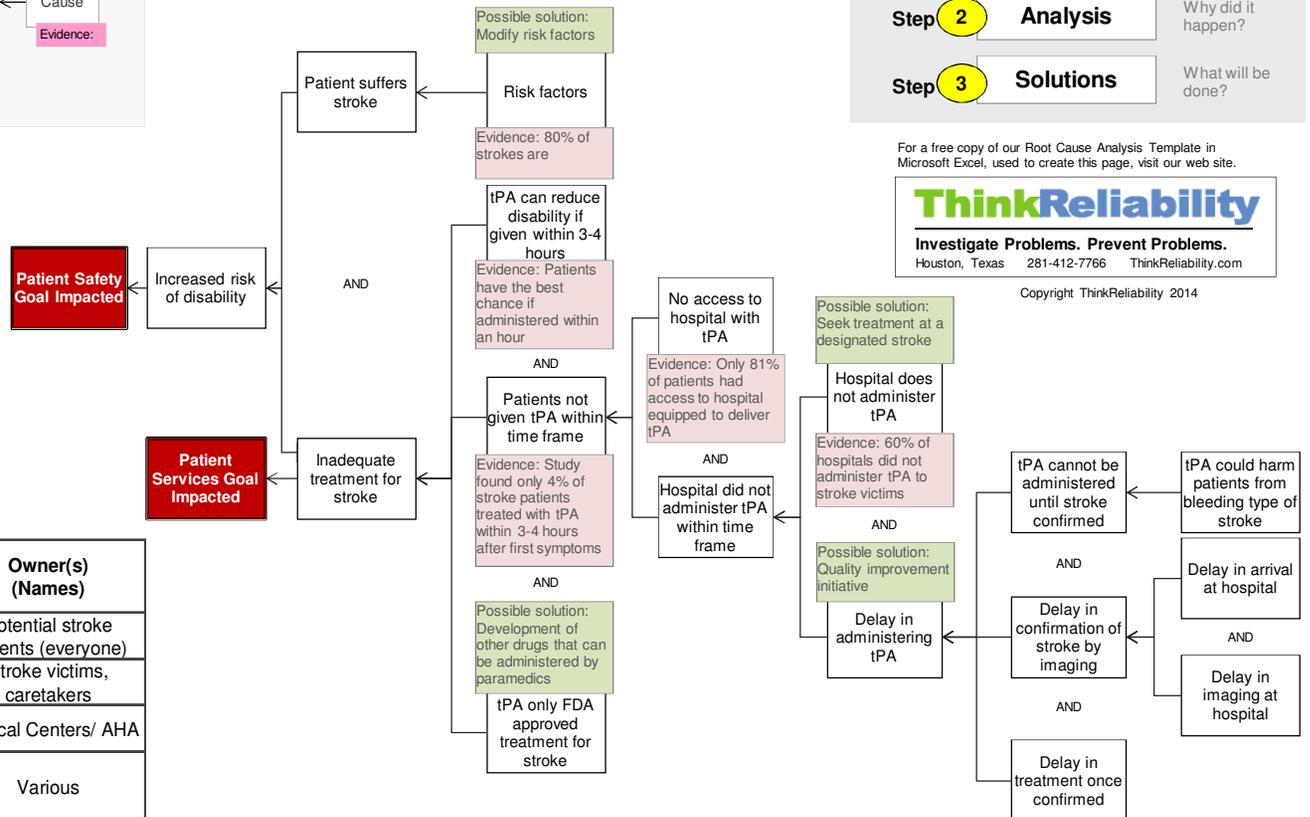
2 Analysis

Basic Level Cause Map - Start with simple Why questions.



More Detailed Cause Map

Add detail as information becomes available.



3 Solutions

For patients: the best way to reduce the risk of disability from stroke is to prevent having a stroke in by maintaining a healthy lifestyle. If you or a loved one suffers from a stroke, contact an ambulance or go to a designated stroke center.

For paramedics: the search is on for a drug that could be administered prior to imaging (unlike tPA) so that stroke treatment could be prior to arriving at a medical center. The median time for receiving the stroke treatment by ambulance was 45 minutes after symptoms began, and 74% of patients began treatment within an hour.

For medical centers: The American Heart Association/ American Stroke Association's national quality initiative aims to reduce the time between stroke symptoms and treatment. Since its initiation, the percentage of patients treated within 60 minutes or less from hospital arrival has increased. Additionally, the average time from arrival to treatment dropped from 74 to 59 minutes. These faster treatment times have reduced the percentage of stroke patients who died in the hospital from 9.9% to 8.3%, regardless of age, sex, or race.

No.	Action Item	Cause	Owner(s) (Names)
1	Modify risk factors	Risk factors	Potential stroke patients (everyone)
2	Seek treatment at a designated stroke center	Hospital does not administer tPA	Stroke victims, caretakers
3	Quality improvement initiative	Delay in administering tPA	Medical Centers/ AHA
4	Development of other drugs that can be administered by paramedics	tPA only FDA approved treatment for stroke	Various

INADEQUATE TREATMENT FOR STROKE

Study shows only 4% of US stroke victims get recommended treatment within key hours after a stroke Cause Map

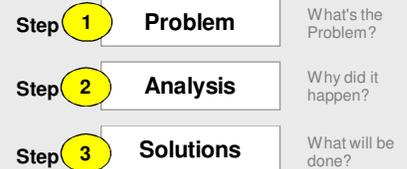
Research presented at the American Stroke Association's International Stroke Conference 2014 showed that although 81% of people in the United States lives within an hour's drive of a hospital equipped to treat acute stroke, only 4% received tPA, a drug which can reduce disability if given within 3-4 hours of the first stroke symptom, and the only drug approved by the FDA to treat stroke.

"Every 15-minute delay in getting treatment increases the odds of that patient not being able to go home."
- Dr. Opeolu Adeoye, M.D., M.S., lead author of study

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis



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