



# Stroke center certification and performance metrics task forces help reduce Door-to-Needle (D2N) times in community hospitals within a regional stroke network



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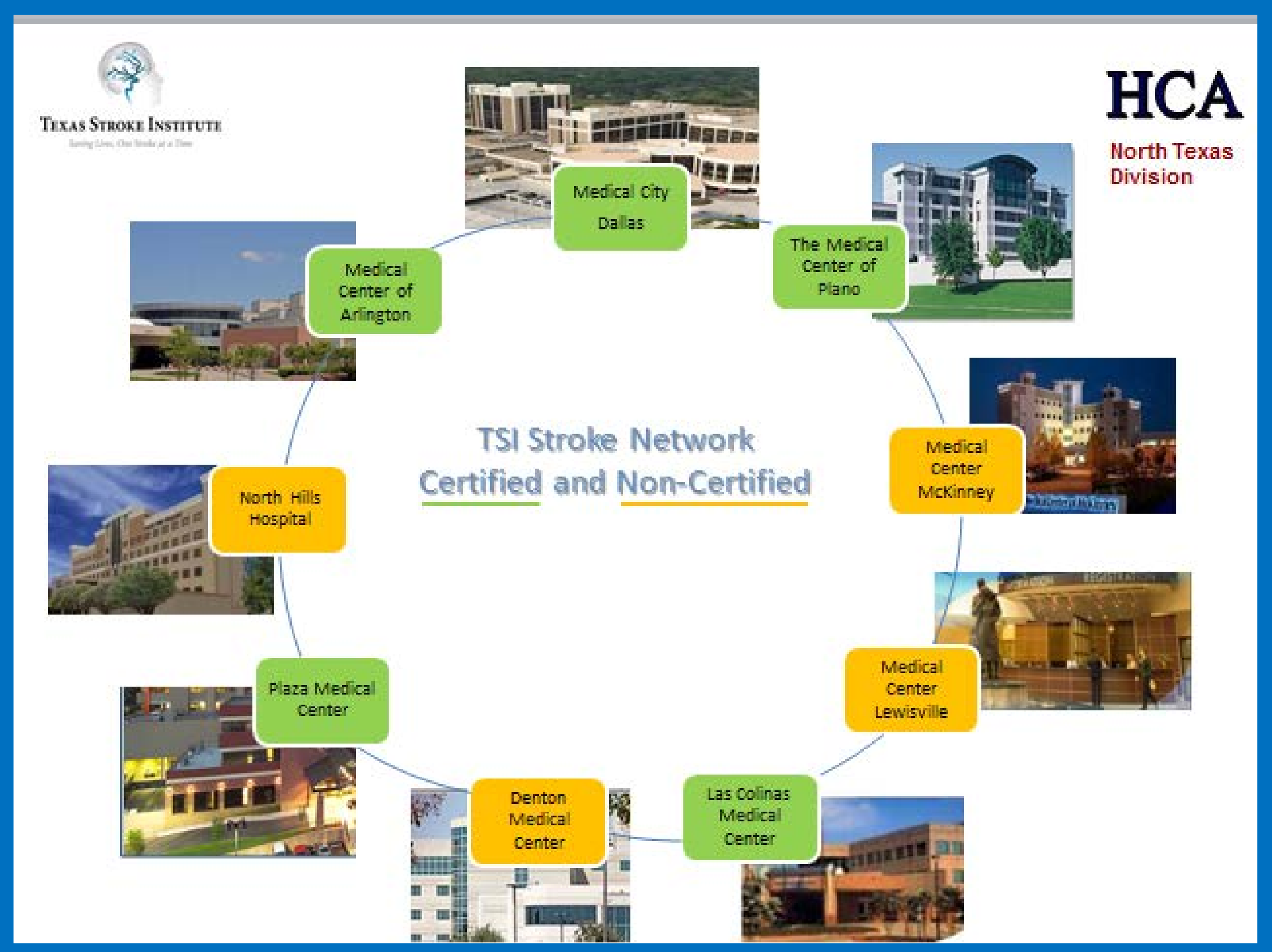
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## INTRODUCTION

The number of stroke centers being certified by The Joint Commission (TJC) or Det Norske Veritas (DNV) is rapidly growing. The importance of stroke centers becomes relevant when performance metrics such as D2N times improve.

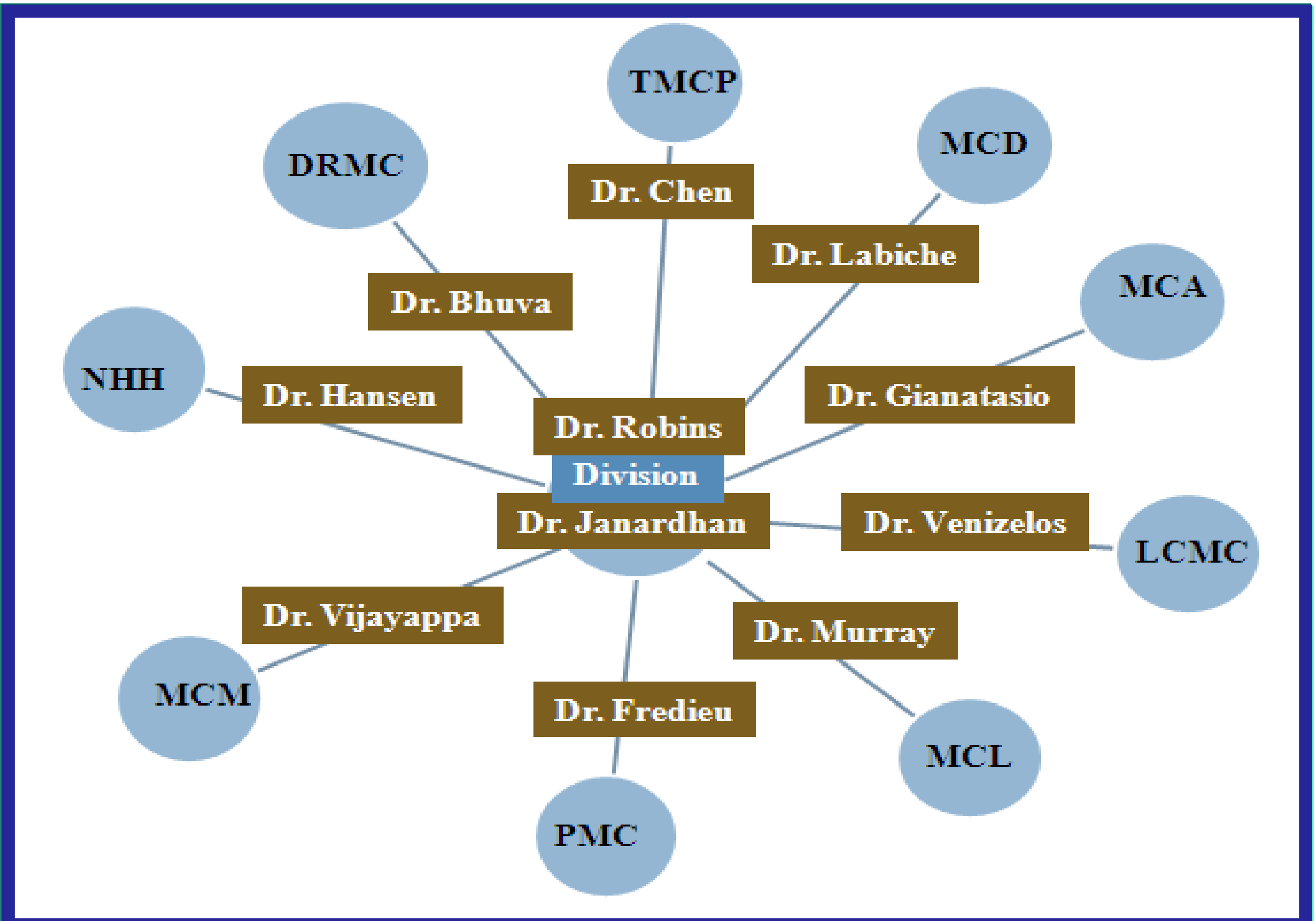
## METHODS

We evaluated the relationship between stroke center certification and D2N times in four (4) hospitals undergoing certification (non-certified hospitals) compared with five (5) certified stroke centers. D2N times were compared one (1) year before (year 1) and 1 year after (year 2) establishing a performance metrics task force.



## TEXAS STROKE INSTITUTE CORE NETWORK

Texas Stroke Institute (TSI) is a network of nine hospitals within HCA North Texas Division. TSI physicians had representation on each facility's D2N taskforce as well as members from the stroke team.



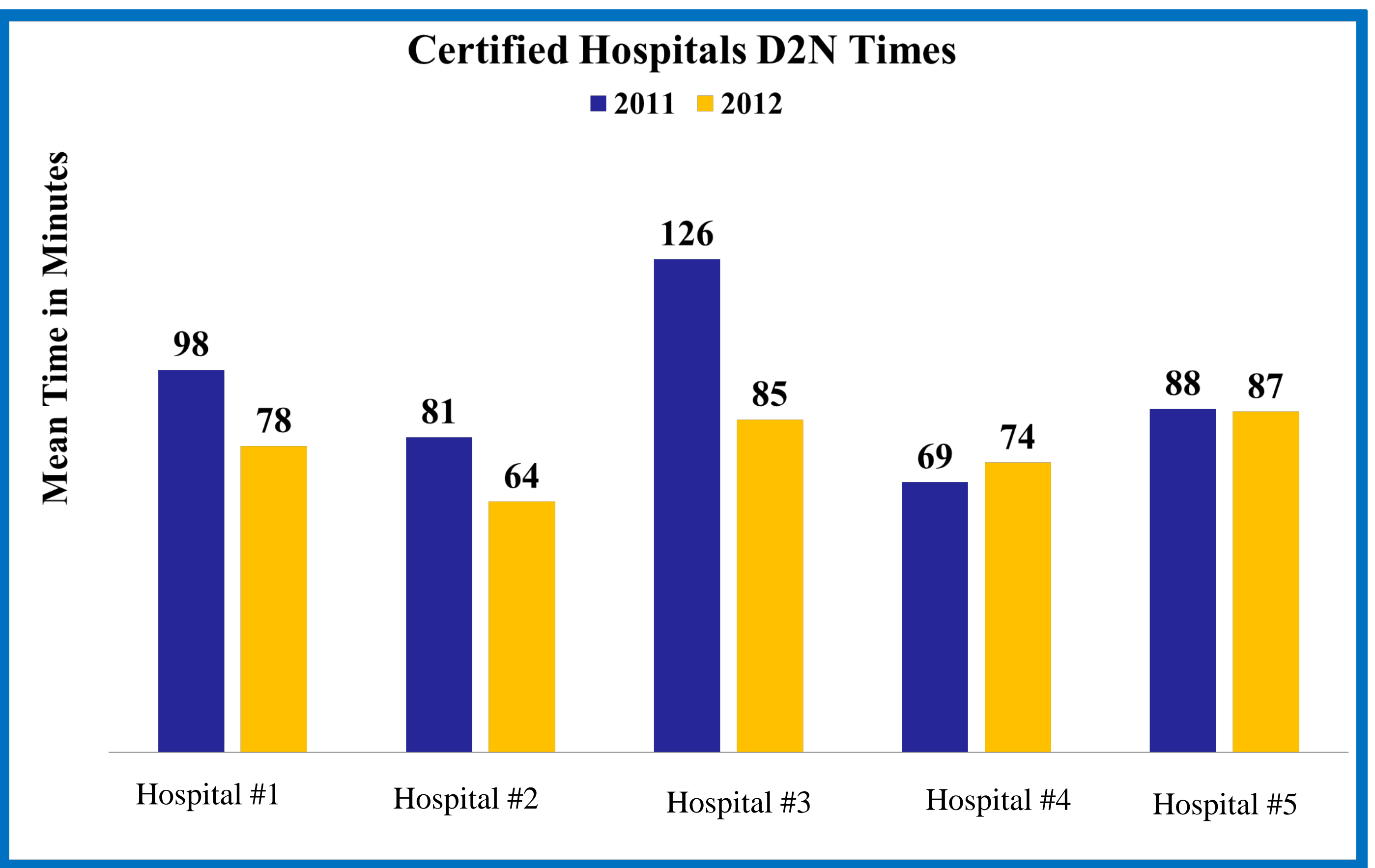
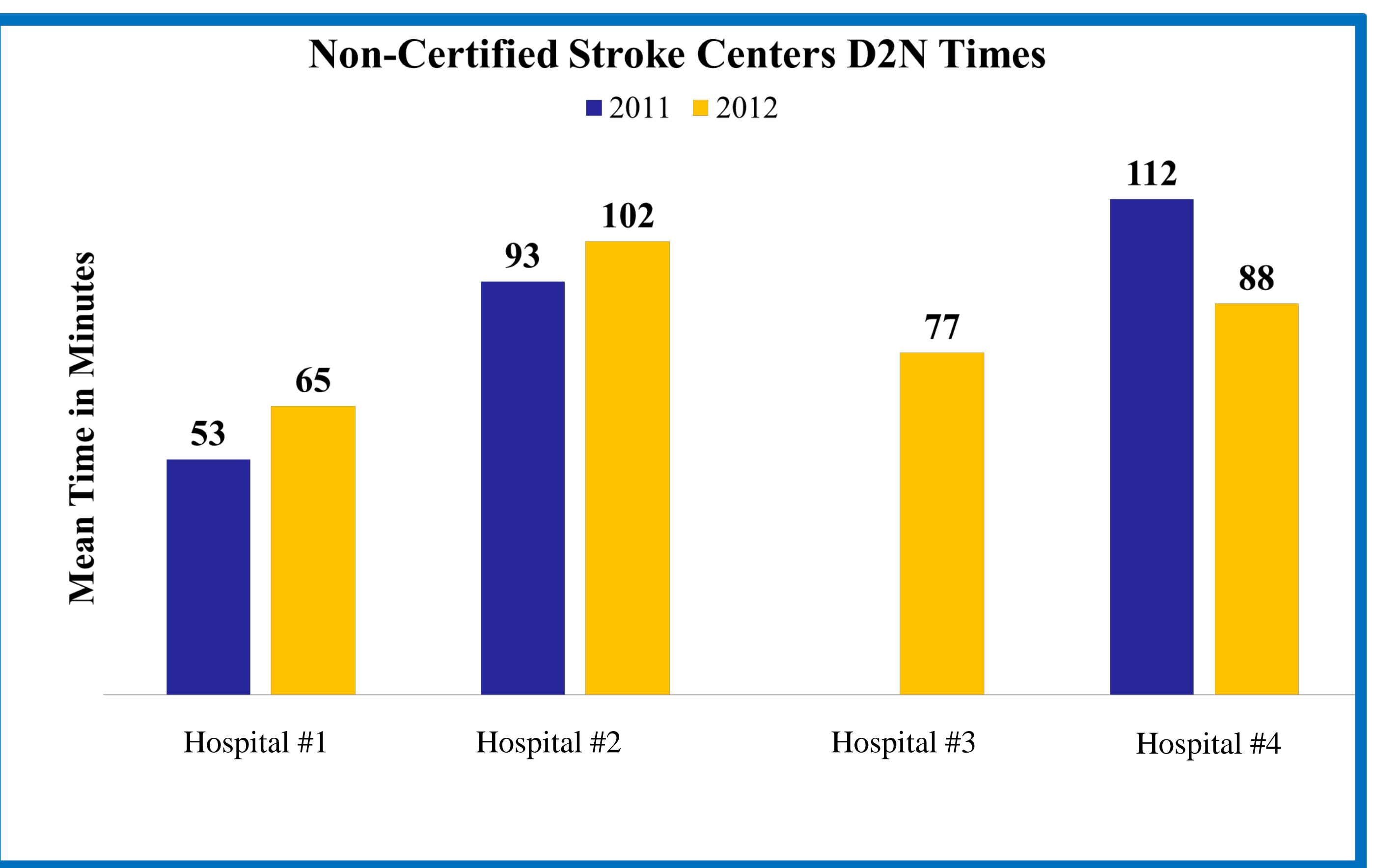
## D2N Task Force Members

- Service
  - Stroke Medical Director
  - Emergency Department Medical Director
- People
  - Stroke Coordinator
  - Stroke Data Abstractor
- Quality
  - Vascular Neurologist
  - Emergency Department Director/Manager
- Financial
  - Emergency Department Educator
  - Emergency Department Staff Nurse
- Growth
  - CT Technician
  - Laboratory Director
  - Patient Registration
  - Quality Director
  - Pharmacy Director
  - EMS



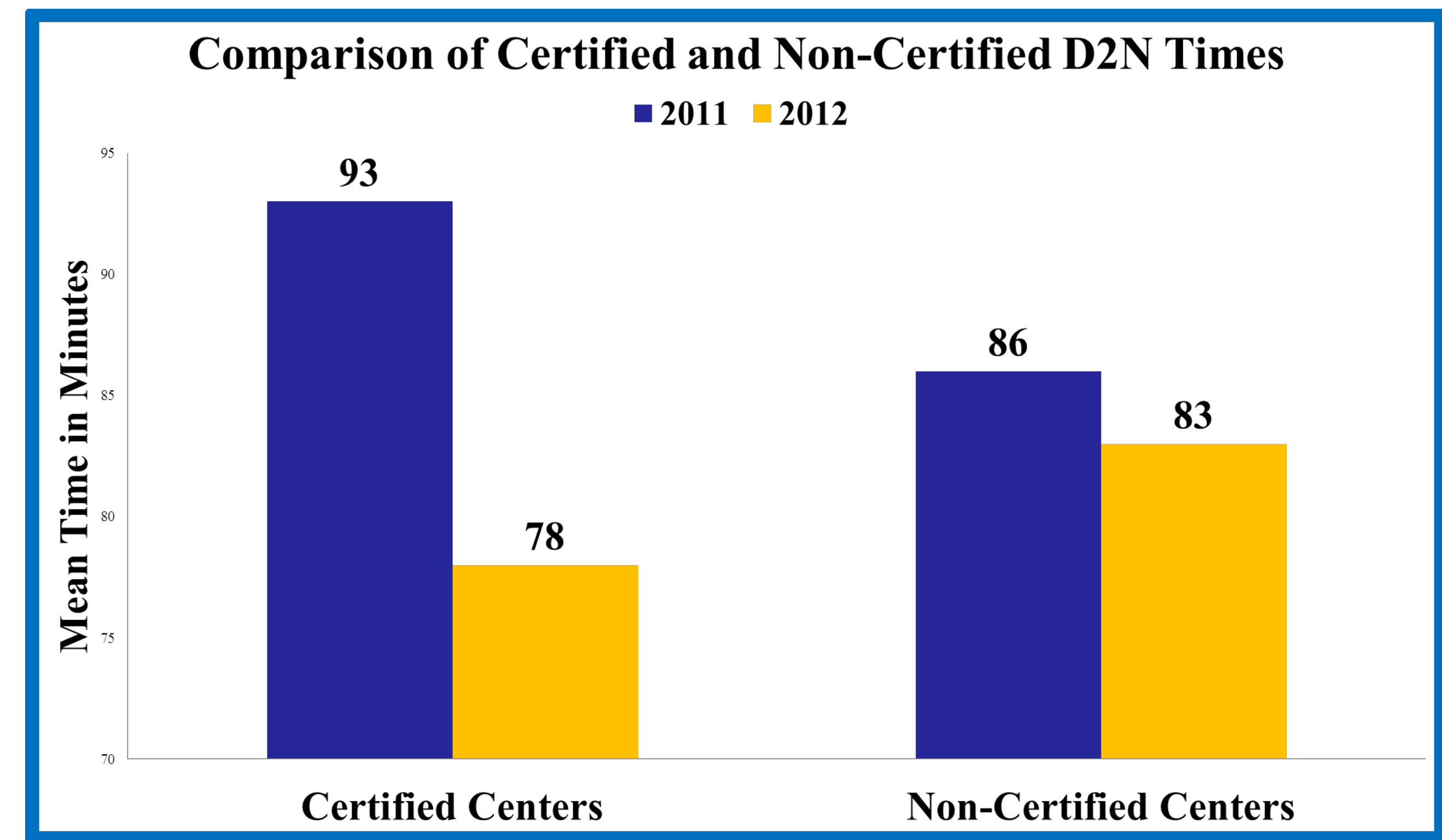
## RESULTS

The non-certified hospitals had mean D2N times of 86 minutes in year 1 and 83 minutes in year 2. (Decrease in D2N time of 3 minutes); the certified hospitals had a mean D2N times of 92.8 minutes in year 1 and 78.2 in year 2 (Decrease in D2N of 14.6 minutes).



## CONCLUSION

The certified stroke centers had a more dramatic lowering of D2N times. This highlights the importance of stroke center certification, need for establishing stroke performance metrics task forces, having dedicated stroke coordinators and implementing standardized stroke algorithms in improving the quality of stroke care.



## DISCUSSION

Multidisciplinary D2N Taskforces were implemented throughout the TSI network. Improvements noted in D2N mean times for all hospitals.

### Contributing factors to our successes were the following:

- Administrative support
- Multidisciplinary team collaboration
- Establish unified goal
- Frequent meetings
- Concurrent review of processes
- Mock stroke drills
- Practitioner accountability
- Healthy competition
- Case reviews
- Departmental accountability and ownership
- Detailed analysis of processes and willingness to change
- EMS involvement
- Adoption of point of care testing for BMP and coagulants



## REFERENCES

DNV Comprehensive Stroke Center Certification (2013)  
Texas Stroke Institute Stroke Dashboard (2011-2013)