

# Identifying Early Signs of Depression in Post Stroke Patients: A Pilot Project Using the PHQ9

Northern Light Health

Heather Sanborn, BSN, RN

### Background

- Depression can develop weeks, months, or even years after a stroke.
- It can stop the progression of recovery and even rehabilitation and impact patients quality of life.
- The National Stroke Association states "more than 30% of stroke survivors experience these emotions" 2018.
- By using the PHQ9 took we will be able to identify risk factors that are associated with depression and will be able to provide appropriate intervention and suggest early referrals for treatment.

### Goal

Improved patient outcomes who have experienced a stroke that may also be experiencing depression.

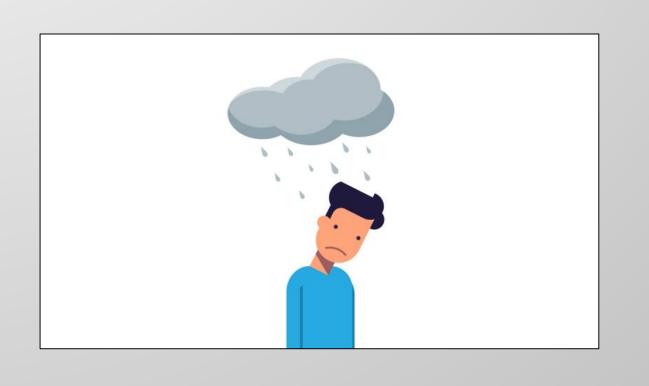
## Methods Results are not Available

- Identify stroke patients
- Provide staff with educational material to understand the PHQ9 tool.
- Use PHQ9 tool for twenty post stroke patients within a two week time period.
- Analyze data collected using the tool.
- Notify staff of the project outcomes.

### Measure

Over the past two weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3
Total Score =	+		+ +	
If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	Somewhat difficult	Very difficult	Extremely Difficult

# RIGHT side damaged LEFT side affected



### **Summary/Discussion**

- Our work was the first step, but in during the project there were limitations in the results:
- While implementing the project, two of the project members left during this time and all of the results were not completed and returned to the remaining group member.
- The project was not completed.
- In order to complete the project, more time will be needed.

### Conclusion

Post stroke depression is a very important topic. This project has a great opportunity to change how we care for post stroke patients and identify early signs of depression. If this tool becomes used, we will be able to identify patients and implement ways to improve their outcomes.

References

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author. de Man-van Ginkel, J.M., Hafsteinsdottir, T. B., Lindeman, E., Ettema, R.G.A., Grobbee, D.E., Schuurmans, M.J. (2013). In hospital risk prediction for post-stroke depression, development and validation of the post-stroke depression

Karamchandani, R.R., Vahidy, F., Bajgur, S., Vu, K.Y.T., Choi, A., Hamilton, R.K., Rahbar, M.H., Savitz, S.I. (2015). Early depression screening is feasible in hospitalized stroke patients.

Kroenke, K., Spitzer, R.L., Williams, J.B.W. (2001). The PHQ-9 validity of a brief depression severity measure. Journal of General Internal Medicine, 16: 606-613.

National Stroke Association. (2018). Depression. www.Stroke.org
Ojagbemi, A., Owolabi, M., Akinyemi, J., Ovbiagele, B. (2017). Proposing a new stroke-specific screening tool for depression: examination of construct validity and reliability. eNeurologicalSci, 9, 14-18.

http://dx.doi.org/10.1016/j.ensci.2017.10.002.
Wang, S., Wang, C.X., Zhang, N., Xiang, Y-T., Yang, Y., Deng, Y-M., Zhu, M-F., Liu, F., Yu, P., Ungvari, G.S., Ng, C.H. (2018). The association between post-stroke depression, aphasia, and physical independence in stroke patients at 3-month follow up. Frontiers in Psychiatry, August 2018, Volume 9, Article 374.