

BRAIN METASTASIS PROGRAM: “NIMBLE” – NETWORK FOR THE INTEGRATED MANAGEMENT OF BRAIN METASTASIS: LINKING EXPERTS



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PROBLEM/BACKGROUND

Brain metastases are the most commonly diagnosed intracranial malignancy; more than 200,000 cases will be diagnosed this year alone, and the incidence is on the rise. This is a very diverse group of patients, involving complex medical decision making and diverse prognoses

CURRENT STATE

The current state is for patients with brain mets to be discussed at the FH/MCW Brain Tumor Board, which meets once/week on Wednesday mornings to review each patient’s unique case and collaboratively come up with an appropriate, evidence-based treatment plan. Present are representatives from Neuro Oncology, Neurosurgery, Radiation Oncology, Neuro Pathology, Neuro Radiology, and Neuro Psychology. Patients will often present to the hospital with brain mets and will have to wait several days to a week until the following Wednesday morning discussion, causing a delay in patient care and, at times, prolonged hospital stays. Making this process more efficient will decrease length of stay and transition much of the process to the outpatient setting.

GOALS

Education

- Tool for inpatient and outpatient providers to understand a comprehensive, data driven algorithm for brain metastasis management

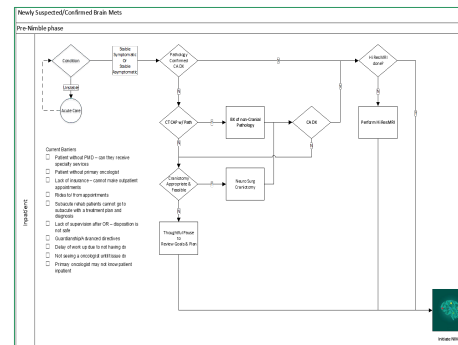
Mechanism for Discussion

- Inpatient and outpatient providers can submit a patient for consideration of a “virtual” tumor board discussion

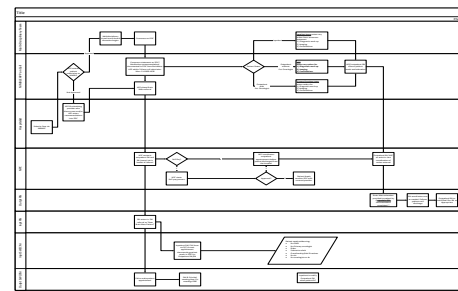
Timely Treatment Recs

- Providers can communicate in “real time” to generate a consensus opinion to guide the optimal management of the patient in question

PROCESS



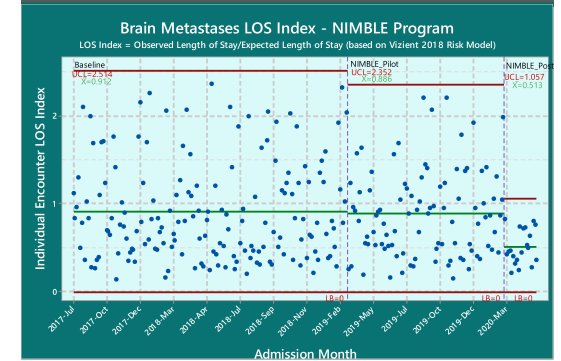
PROCESS



NEXT STEPS

- NIMBLE app roll out
- Education of Inpatient teams
- Formal launch – 2020

PROOF OF CONCEPT



- LOS Index = ratio of Observed LOS : Expected LOS per Vizient 2018 Risk Model (AMC)
- Each admission is plotted individually, in time order.
- During each period we calculate an average (green line) and upper control limits (red)
- The mean of LOS Index Baseline is greater than LOS Index NIMBLE_Post at the 0.05 level of significance. (44% reduction)
- The standard deviation of LOS Index Baseline is greater than LOS Index NIMBLE_Post at the 0.05 level of significance. (65% reduction)

Future State

