Oh, The Places You Won't Go: The Impact of COVID-19 to Intra-Hospital Patient Transfers

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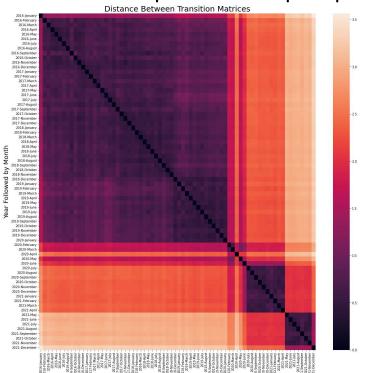
Question: How did the COVID-19 pandemic impact patient transfers within a single hospital?

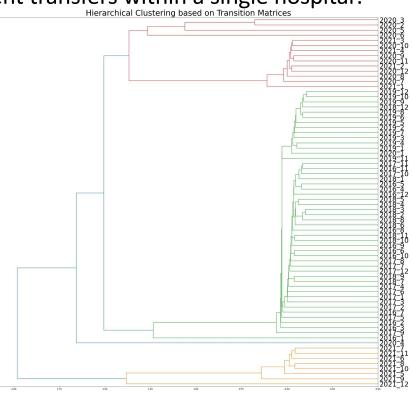
Data

Unit to unit inpatient transfers within Duke University Hospital between January 2016 and December 2021. These individual transfers were aggregated into monthly unit-level weighted adjacency matrixes representing a 36-node network

Analysis

The pairwise L2 distance for all 72 monthly networks was calculated, and a clustering algorithm applied to those distances to examine if there were notable temporal changes in patient transfer patterns





Conclusions

Several shifts in patient transfer patterns occurred during the COVID-19 pandemic, with distinct temporal clusters. This may impact modeling hospitals and may passively let us estimate "when" the pandemic impacted specific hospitals

Acknowledgements

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