(non-bypass (LVO)). Population-weighted median and inter-quartile range were calculated for each at the national level.

Results 72,539 census tracts, 2,388 certified stroke hospitals, and 371 certified EVT-capable centers were included. The population-weighted median distance for non-bypass (non-LVO), bypass, and non-bypass (LVO) routing was 8.5 km (IQR: 4.6, 18.2), 24.8 km (IQR: 10.4, 69.3), and 31.1 km (IQR: 13.4, 83.3), respectively. The population-weighted median difference in between bypass and non-bypass routing was 11.8 km (1.8, 42.8) for non-LVO patients and 3.2 km (0.4, 9.9) for LVO patients.

Conclusions Bypass incurs a modest distance penalty for non-LVO patients and offers a modest distance benefit for LVO patients. These differences in distance are likely insignificant to intra-hospital delays that contribute greatly to delays in EVT treatment in non-bypass transport. Based on current guidelines, bypass of the nearest stroke center for an EVT-capable center may be warranted for a majority of Americans.

Disclosures C. Yu: None. P. Panagos: None. A. Kansagra: None.

E-103 PEDIATRIC HOSPITAL PROXIMITY TO ENDOVASCULAR THROMBECTOMY CENTERS IN THE UNITED STATES

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Introduction Endovascular thrombectomy is an emerging, time-sensitive intervention for children with acute ischemic stroke, but this treatment is not commonly available within pediatric hospitals. Access to this therapy often requires inter-hospital transfer to an adult thrombectomy center. Although many pediatric hospitals employ this model of care, the proximity of pediatric hospitals to thrombectomy centers has not previously been characterized. This cross-sectional study quantifies the distance and travel time between pediatric hospitals and their nearest thrombectomy centers by road and aerial routes throughout the contiguous United States to determine the feasibility of transferring pediatric patients for thrombectomy.

Materials and Methods We included pediatric acute care hospitals from the Children's Hospital Association database and thrombectomy centers certified by a national or state organization in the contiguous United States. Distances from each pediatric hospital to its nearest thrombectomy center were calculated using road networks from a public mapping service for road routes and spherical geodesic distance for aerial routes. Road travel times were estimated by dividing road distance by two different average speeds to reflect travel on both smaller roads and highways. Air travel times were estimated by dividing aerial distance by the average speed of the most commonly used medical helicopters. The main outcome is travel time from pediatric hospitals to their nearest thrombectomy centers.

Results 202 pediatric acute care hospitals and 371 thrombectomy centers were included. Median road and aerial distance from a pediatric hospital to the nearest thrombectomy center was 0.80 km and 0.35 km, respectively. At a road speed of 65 km/hr (about 40 mi/hr), 182 (90%) and 183 (91%) pediatric hospitals were within 30 minutes and 60 minutes, respectively, of a thrombectomy center. By air, 187 (93%) and 199

(99%) pediatric hospitals were within 30 minutes and 60 minutes of a thrombectomy hospital.

Conclusions The vast majority of pediatric hospitals are located near thrombectomy care. These results suggest that partnerships between pediatric hospitals and thrombectomy centers can assure pediatric access to thrombectomy without unreasonably lengthy transfers.

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E-104 YOUNG MAN WITH OSTEOGENESIS IMPERFECTA PRESENTING WITH ACUTE STROKE FROM CAROTID DISSECTION AND SUBSEQUENT CONTRALATERAL PSEUDOANEURYSM

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Background Osteogenesis Imperfecta (OI) is a hereditary disease that affects connective tissues causing symptoms such as bone fragility, among other connective tissue ailments. OI has four primary classifications: dominant inherited with blue sclerae, lethal prenatal, progressively deforming and dominantly inherited with normal sclerae. The connective tissue disease has been primarily associated with dominant autosomal mutations in collagen coding genes COL1A1 and COL1A2. Likely related to the collagen defects, these patients are at risk for vessel dissection with sequelae related to the affected vessel and degree of injury.

Methods We describe the case of a 33 year-old man with autosomal dominant hereditary OI that presented with acute stroke from left cervical carotid artery dissection causing occlusion. He had significant right sided deficits that persisted despite administration of TPA and he was taken for emergent endovascular intervention.

Results Cerebral angiography showed poor collateral circulation to the left hemisphere, and complete occlusion of the cervical left internal carotid artery from dissection, with the distal vessel supplied by small external carotid collaterals

Abstract E-104 Figure 1