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# Pediatric Proton Therapy in the United States: Patterns of Care 2011



pediatric proton foundation



The **National Association** for **Proton Therapy**

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# Survey Methodology

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- All 9 operating US proton facilities in 2011 were surveyed.
  - Anonymous patient age range, tumor site, and histology collected for every pediatric patient treated from January 1, 2011 through December 31, 2011
- All facilities responded for a 100% response rate

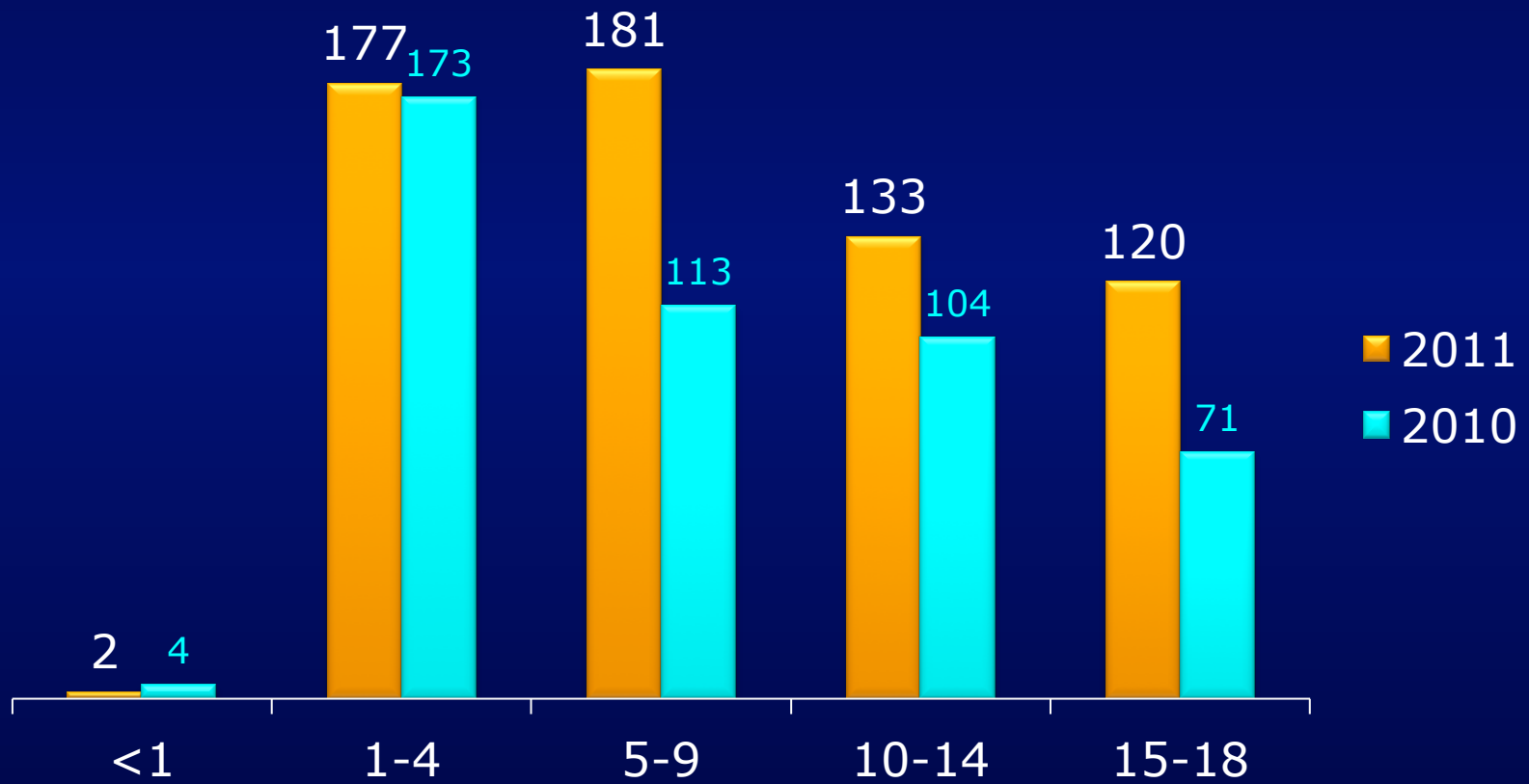
# Results

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- 613 children and adolescents treated with proton therapy in 2011
  - In 2010, 465 children and adolescents were treated.
  - This represents a 31.8% increase
- All facilities treated  $\geq 1$  pediatric patient

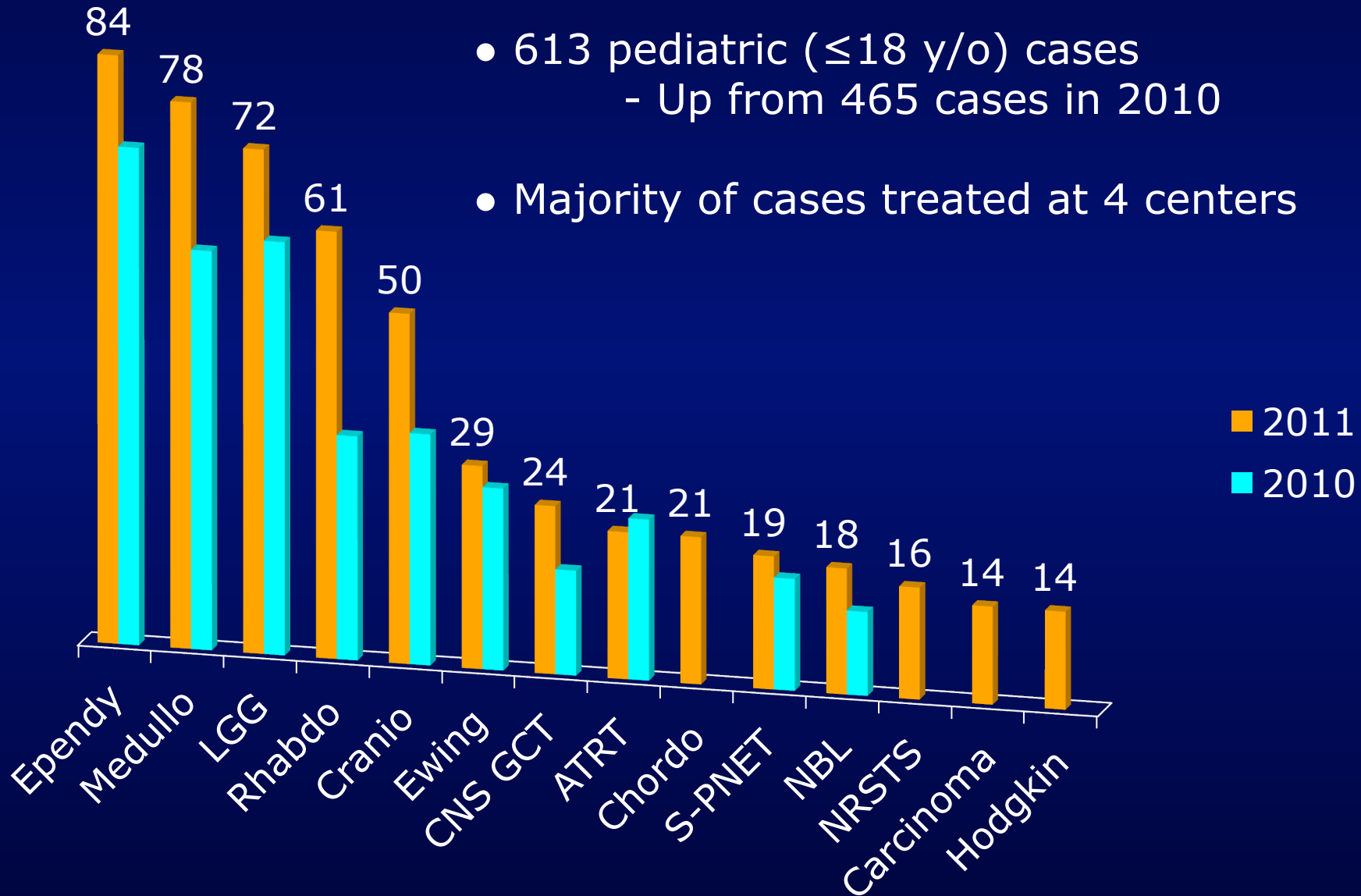
# Peds Proton Patterns of Care

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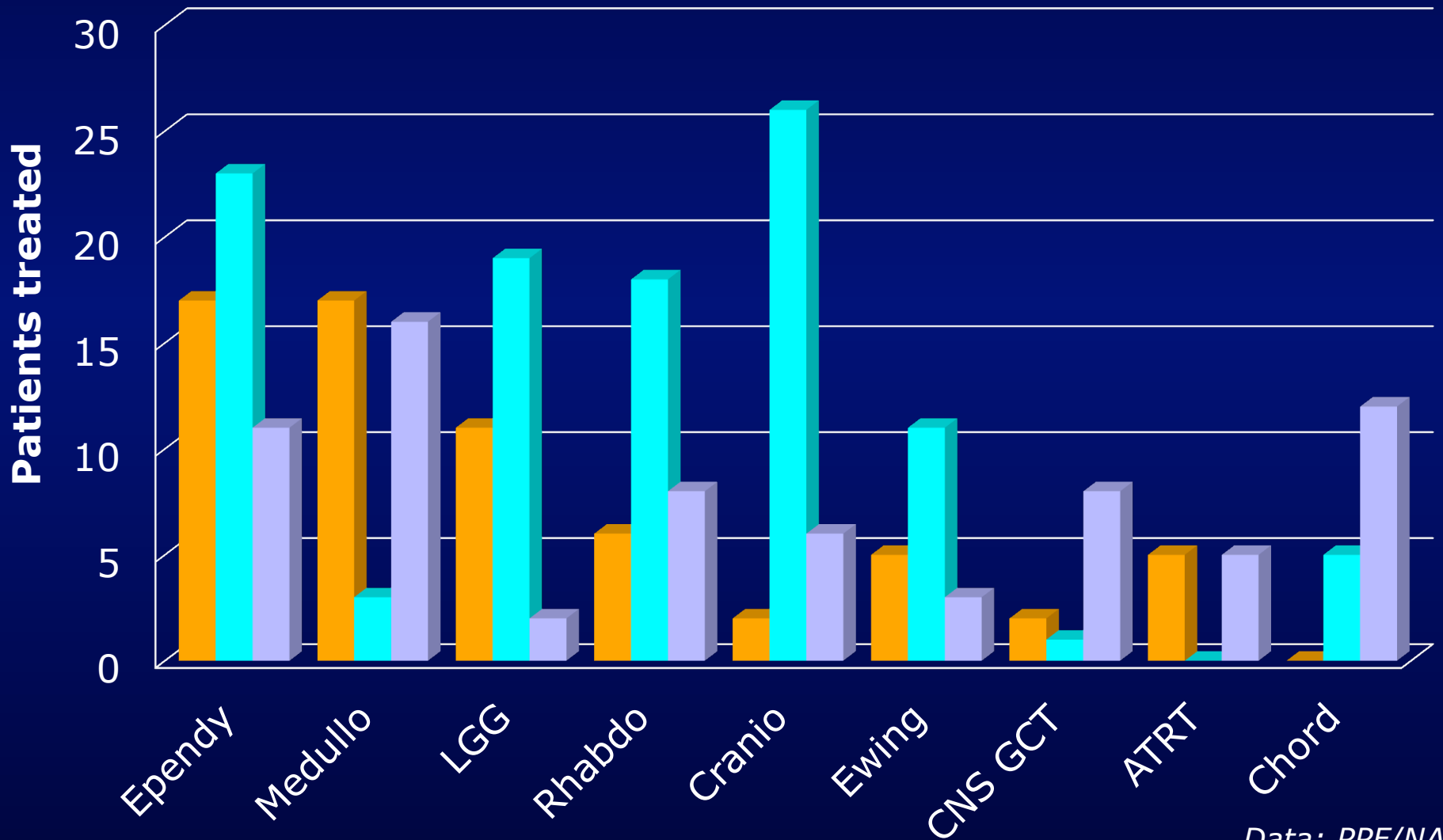
# Peds Proton Patterns of Care

- 613 pediatric ( $\leq 18$  y/o) cases
  - Up from 465 cases in 2010
- Majority of cases treated at 4 centers



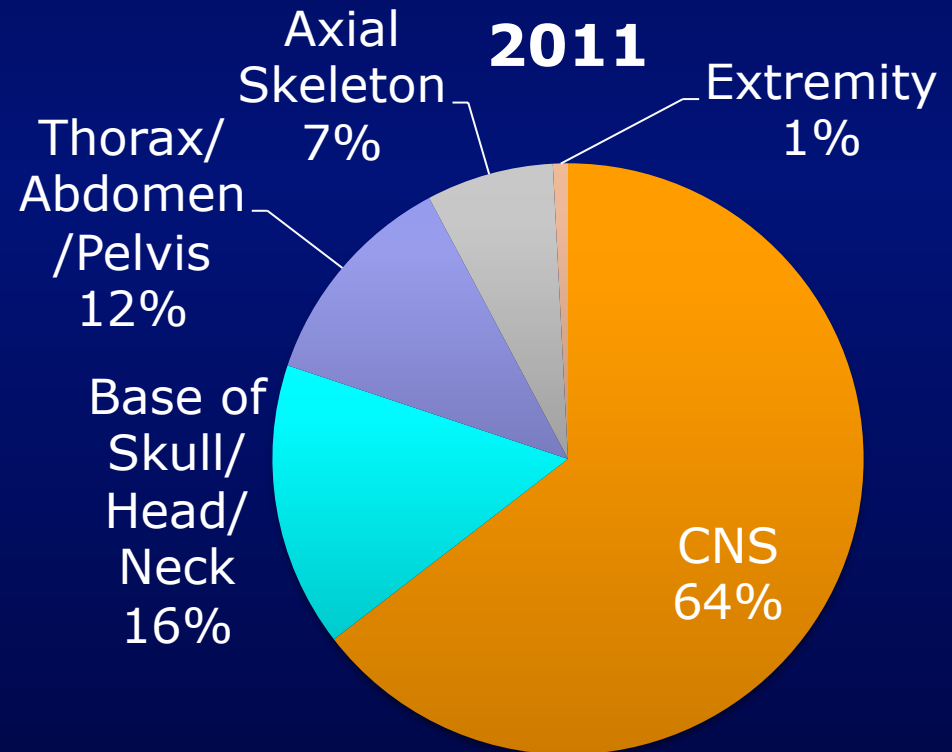
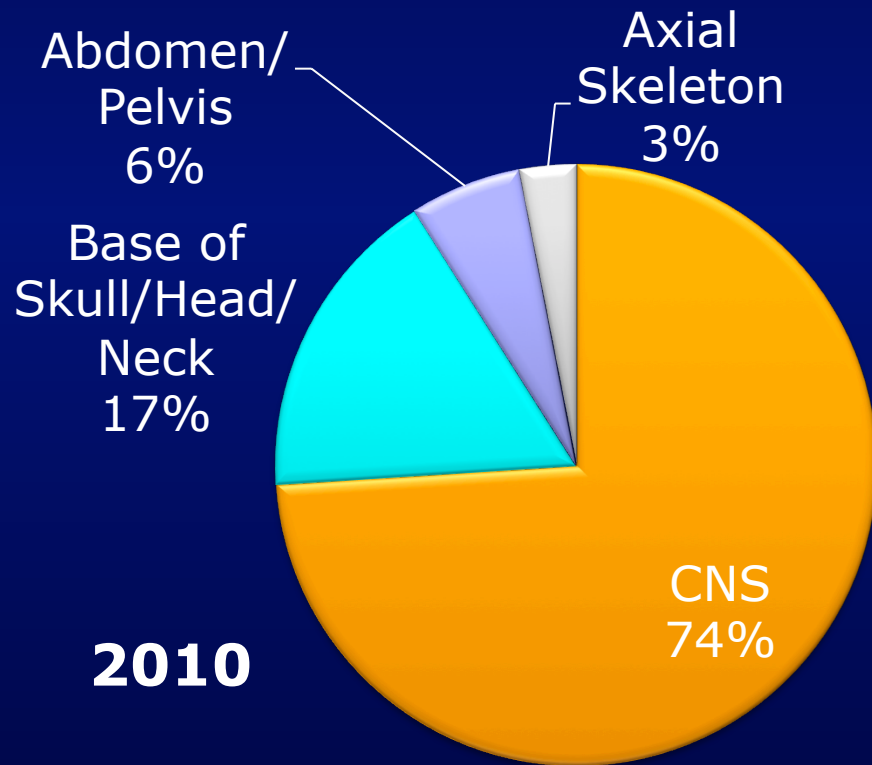
# Peds Proton Pattern of Care 2011:

Variation of histology at the 3 largest pediatric programs



# Peds Proton Patterns of Care

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# Conclusion

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- In 2011, all operating proton centers were treating children
  - 31.8% increase in number of pediatric patients treated
- Wide variety of diagnoses treated, but younger patients with CNS tumors make up the majority of patients



# Looking Ahead

- Over the next 5 years, another 5-10 proton centers are expected to open in the United States
- With an increasing number of pediatric patients treated, the importance of an experienced multidisciplinary pediatric team cannot be understated
  - $\frac{1}{2}$  of the top tumors require concurrent chemotherapy
  - $\sim\frac{1}{2}$  of patients require anesthesia support