Most pediatric patients should be treated at proton therapy centers

Yes, because proton therapy is technically superior to photon therapy

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Protons are more suitable than photons for children in need of radiation treatment
Progress in radiotherapy means less dose to non-target tissue.
Proton are ‘technically’ better than photons because they treat the target while irradiating less of non-target tissue or to lower doses

Water phantom example
* Irradiated Volume: Volume of phantom receiving dose greater than 5% of prescribed dose in units of target volume
** Integral dose: Volume\(_\text{Cylinder}\) \cdot Dose\(_\text{Cylinder}\), in units of target integral dose (Volume\(_\text{Target}\) \cdot Dose\(_\text{Target}\))

Single proton field treats target with homogenous dose while irradiating less volume and depositing less energy outside the target
For 2 fields, photons treat the target almost as well as protons but do not spare non-target tissues.
With 4 fields photons are improving
Photon state of the art treatments are delivered by arcs. Similar field arrangement with protons still deposits less dose outside the target.
Accepting similar proximal non-target dose, protons can deliver the same target dose with partial arcs and spare completely tissues (full photon arc versus 130 degree proton arc).
Superior proton distribution holds not only for the simple example but also patients. It is very difficult to find a dosimetric comparison study that photon dose is better. This is a recent review of dosimetric comparisons between protons and photons for pediatric CNS. Protons better on everything but conformity.
Pediatric HL dose comparison. State of the art plans for both modalities
This dose comparison includes daily setup errors and their dosimetric effects.
Not pediatric specific but this study includes integral dose and out of field dose.
Another inherent quality of protons is our ability to modulate them in depth, an additional dimension compared to photons
There are uncertainties, but proton planning is more advanced than photon planning and takes care of them efficiently. 4D robust optimization is just an example.
From PTV optimization we moved to robust optimization and soon to LET-optimization.
Remember what progress in radiotherapy means!