**Sections within each organ paper:**

**1. Anatomy and developmental dynamics**

* Define anatomy as it impacts normal tissue damage
* Describe anatomic and physiologic development according to age as it impacts tissue sensitivity to damage and repair

**2. Clinical significance**

* Describe the clinical situations where the organ is irradiated
* Briefly describe the frequency, characteristics, significance of injury.

**3. Endpoints and Toxicity Scoring**

* Address strengths and limitations of existing systems
* Recommend how to score organ injury
* Describe the different endpoints often considered when assessing injury, the impact of endpoint-selection on the reported injury rates, the challenges/utilities of different endpoints, and the time course of organ injury.

**4. Challenges defining volumes: pediatric imaging issues**

* Describe recommended imaging modality and acquisition methods (e.g. contrast enhanced, slice thickness/spacing, slice orientation, pulse sequence).
* Discuss the impact of intra-/inter-fractional organ movement or volume change during the course of treatment.
* Discuss the need for contouring planning organ-at risk volumes (PRV).
* Note normal organ contouring atlases or reference existing publically available atlases. Give specific guidance on difficult organs to contour, like the hippocampus.

**5. Review of Dose Volume response data and risk factors**

* **Review of dose-volume data –** For each organ site or tissue, published data on toxicity risks, as correlated with dosimetric parameters and other relevant variables (i.e. age, developmental status), are reviewed. From the available data, meaningful dose/volume limits with associated risk rates are presented. Include data on various dose fractionations, adequacy, quality, and bias.
* **Dose Volume Endpoints:**
  + **Organ Function:** Lab/subclinical endpoints, imaging endpoints, physiologic/functional issues
  + **Organ Development:** Impact of age
  + **Second malignant neoplasms: dose response data looks different in each organ section).**
* **Risk Factors:** genetic predispositions, gender, race, age, co-medical conditions
* **Chemotherapy/Combined modality:** Relevant chemo data impacting radiation sensitivity
* **Mathematical/Biologic models + Epidemiologic issues**: For each organ, models that have been used to relate dose/volume data to normal tissue complications and second malignancies in the organ are summarized, along with associated model parameters, limitations and uncertainties.

**6. Recommended dose volume** (Dose per fraction)

* **Recommended Dose/Volume Limits**- The available information is condensed into meaningful dose/volume limits, with associated risk rates, for clinical application. Limits are according to endpoints and age.
* **Special situations**: most of the data discussed relates to conventional fractionation. This section describes situations where the presented data/models may not apply (e.g. hypofractionation)

**7. Toxicity scoring recommendations**

* Recommendations on how to score organ injury and toxicities.

**8. Interventions and Management**

**9. Contrast Pediatric and Adult NTCP data**

**10. Future investigations**

* Describes areas in need of future study