

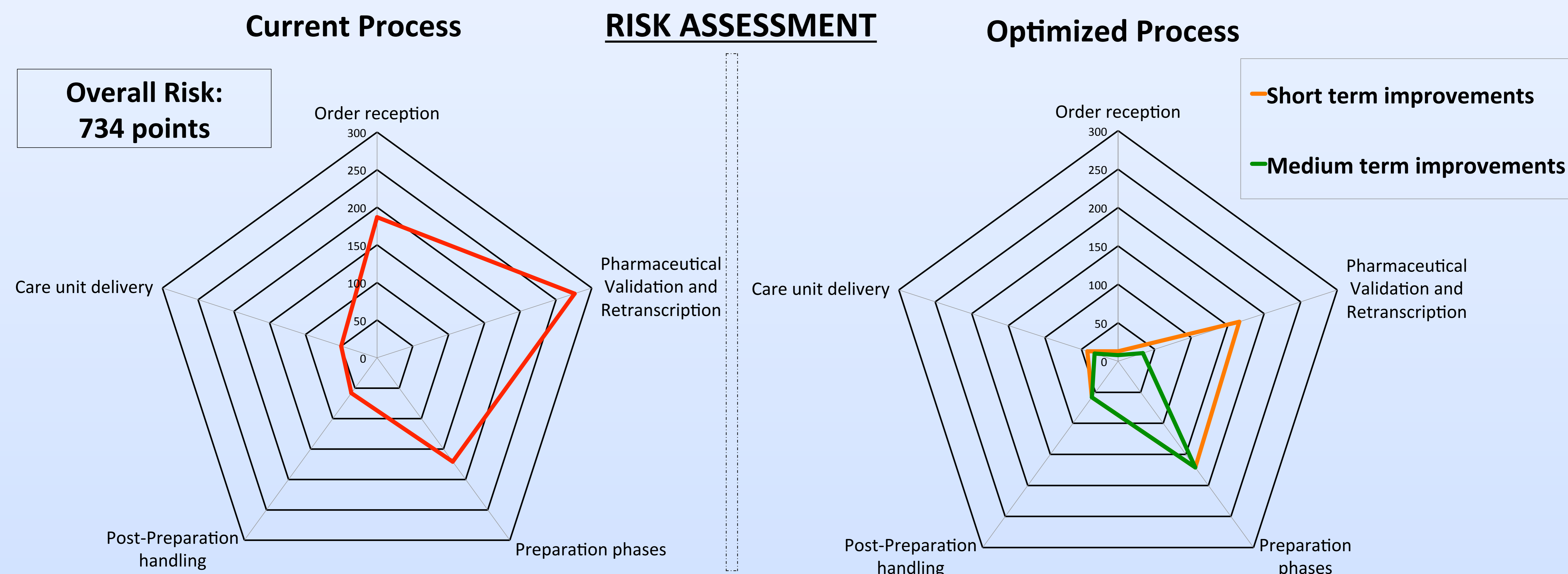
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**Background and purpose:** Chemotherapy compounding is a highly critical activity. Therefore, risk management of related processes is compulsory. Given the complexity of local process including multiple retranscriptions and no e-prescribing, an *a priori* risk assessment was conducted. Considering the results, corrective actions were elaborated and their impacts on overall risk were evaluated.

**Material and methods:**

- **Process analysis:** « Handling preparation requests »
- **Criticality evaluation** of sub-processes following **FMEA** method (Failure Modes and Effects Analysis)  
 $Cr = \text{Probability (P)} \times \text{Severity (S)} \times \text{Detection capability (D)}$
- **Elaboration and a priori** evaluation of **corrective actions**

**Results:**



Step	Risk	Security barrier to be implemented
ORDER RECEPTION	Omitted prescription	<b>Weekly programming of cycles</b>
	Identity monitoring errors	<b>Patient ID tag on all prescriptions</b>
PHARMACEUTICAL VALIDATION	Undetected prescription errors	<b>e-Prescribing</b> and use of treatment history
SOFTWARE RETRANSCRIPTION	Incorrect protocol	<b>Protocol name must be written on the order in addition to molecule name</b>
	Patient weight not up to date	<b>e-Prescribing</b>
	Compounding modality errors	<b>Type and volume of the vehicle must be written on the order</b>
PREPARATION	Compounding errors: Wrong molecule, volume inaccuracy, vehicle mistakes...	Dosing or digital video systems appear to be unsuitable in regards to the activity volume in our department. Double control is confirmed as the main security barrier

**Conclusion:** The main issues related with current process are due to pre-preparation steps such as prescription modalities that can lead to misinterpretation by the pharmacist. This process assessment allowed us to determine which steps can be easily optimized in order to improve safety and quality of care associated with pediatric chemotherapies, pending e-prescription introduction.