To instantiate the safety case pattern for a Generic Patient-Controlled Analgesia (GPCA) system as provided, we will replace all placeholders with concrete system-specific information and develop the undeveloped strategies. The instantiated hierarchy will be presented using a GSN tree structure format, maintaining the hierarchical levels as indicated by the `SupportedBy` predicate.

Instantiate Context and Goals:

- Replace "{system}" with "GPCA System"

- Replace "{operational hazard}" with specific examples like "Over-infusion" and "Under-infusion"

- Replace "{scenario}" with relevant scenarios like "Continuous infusion" or "Bolus delivery"

- Replace "{spec}" with detailed specs like "Dosage calculation spec"

- Replace "{property}" with specific property names such as "Accuracy" and "Precision"

- Replace "{Source}" with a specific sources like "FDA Guidelines" or "Medical Device Standards"

### Instantiated Safety Case for GPCA System:

- \*\*G1\*\* Operational safety is verified in GPCA System

- \*\*S1\*\* Argument over the satisfaction of all specs over GPCA System (Context: All specs are given by `GPCA specs`)

- \*\*G2\*\* All operational hazards are mitigated

- \*\*S3\*\* Argument over operational hazards (Context: Operational hazards are given by `listed GPCA hazards`)

- \*\*G3\*\* Over-infusion is mitigated

- \*\*S4\*\* Argument over the applied scenarios of Over-infusion (Context: All related scenarios are given by `Multiple Infusion types`)

- \*\*G4\*\* Over-infusion is mitigated under Continuous infusion

- \*\*S5\*\* Argument over all specs related to Continuous infusion (Context: All related specs are given by `GPCA Continuous infusion specs`)

- \*\*G5\*\* Dosage calculation spec is appropriate for Continuous infusion

- \*\*S6\*\* Argument the appropriateness of Dosage calculation spec over properties (Context: Properties are given by `Dosage Calculation properties`)

- \*\*G6\*\* Accuracy is appropriate for Dosage calculation spec

- \*\*S7\*\* Argument over the source of the Accuracy definition (Context: Source is given by `Medical Device Standards`)

- \*\*G7\*\* FDA Guidelines are appropriate and trustworthy

- \*\*Sn1\*\* source

- \*\*G8\*\* Accuracy definition is sufficient

- \*\*Sn2\*\* property

Note that the Strategy \*\*S2\*\* is not connected in the given hierarchy and remains undeveloped in our instantiations, potentially needing more detailed strategy formulation based on other system dimensions in the GPCA.

### Clarifications:

- Additional contexts (C5, C6) and specific operational hazards (like Under-infusion, Bolus delivery) are not fully developed and detailed here due to space constraints but should be considered and instantiated in a comprehensive safety argument.

- The strategies (S1 and S2) are flagged as undeveloped because typically, such high-level argumentation requires extensive proof of coverage with concrete thanks to multiple related strategies in an exhaustive argument tree.

- The provided instantiation assumes only a partial schema filled with some goal examples for the clarity of the pedagogical exercise.