Propagating logic-based Benders' decomposition approaches for distributed operating room scheduling

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Highlights

- We develop a new Benders' feasibility cut and show it expedites convergence.
- Incorporation of both feasibility and optimality cuts results in faster convergence.
- The new Benders' feasibility cut is as strong as the optimality cut in some cases.
- We develop a Benders' cut propagation mechanism and quantify its computational value.
- We show four novel Benders' implementations: minimal, maximal, combinatorial, and ideal.