Daily Routing and Scheduling Problems / Combined Multi-Day Plans

Figure 1: Two-fold Decomposition of Problem Structure

The small boxes represent daily routing and scheduling problems for each caregiver. The daily solutions for each caregiver are combined to create multi-day solutions, represented by the large boxes. The corresponding combination process ensures that the required number of treatments is met, and the minimum number of days between two visits is satisfied. The multi-day plans for each caregiver are further combined to ensure strict continuity of care and minimize overall cost.