Mobile Clinics Deployment for Humanitarian Relief: A Multi-period Location Routing Problem

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What are Mobile Clinics?
TEMPORARY HEALTHCARE SOLUTIONS

The Mobile Clinic Application
A COLLABORATION WITH PREMIÈRE URGENCES INTERNATIONALES

Managerial Insights
FROM PUI'S DEPLOYMENT IN IRAQ

Multiperiod Location Routing
WHAT DEPOTS SHOULD CLINICS DEPART FROM?
WHAT LOCATIONS WILL BE VISITED?
WHAT ROUTES SHOULD BE USED?
WHEN WILL THE LOCATION BE VISITED?

The Mathematical Model
A SET PARTITIONING MODEL

Objective
Constraints
Decisions

Contribute
USING OR/MS FOR MOBILE CLINIC DEPLOYMENT

First to propose a Mobile Clinic Deployment solution approach using an MLRP
Real world data and direct collaboration with the NGO
Derived managerial insights:
• benefit function models
• number of clinics
• continuity and coverage trade-offs