

# Real time resource locator for Acute Neonatal Transfer Service (ANTS): LocANTS, a combined tool and system for efficiency gains in acute neonatal transfer

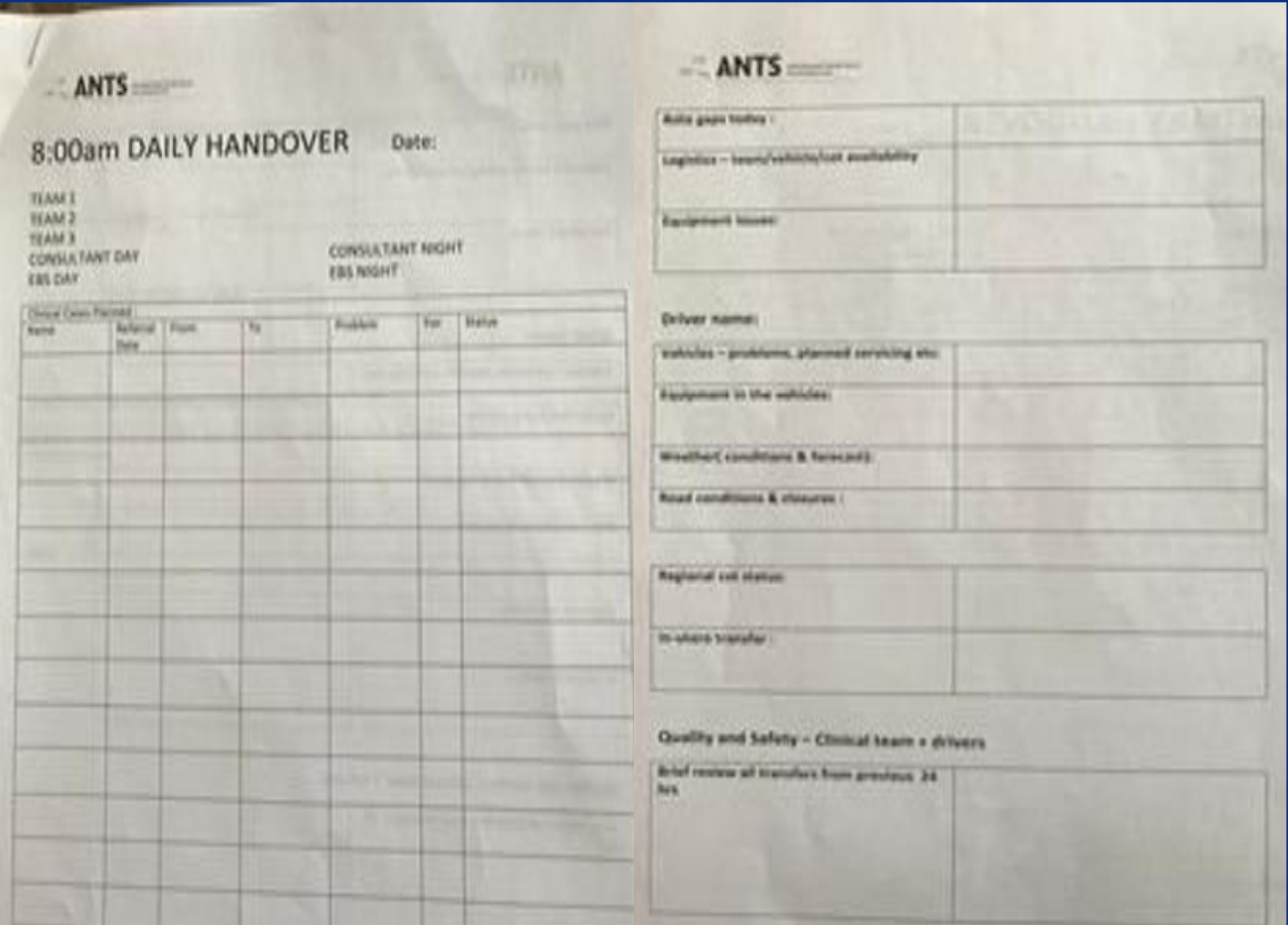
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### Aims

Technological improvement remains a constant need in neonatal transport. ANTS is responsible for a large geographical area (6 counties, 10% of UK landmass) with a large population density (> 6.168 million people, > 68,000 deliveries/year). 13 out of 14 neonatal transfer services in UK are unable to meet nationally agreed key performance indicator (KPI) of mobilisation of 60 min for time critical transfers. Time taken to complete the clinical referral, collating and checking all resources including drugs, vehicle and availability of teams are the main contributory factors for this delay. To improve the efficiency of transport services we are developing a tool - LocANTS ; to validate the concept, in January 2019, we introduced a manually updated tool (paper/screen) which is revised 08:00 daily to localise much of the available resource information for the day.

### Method:

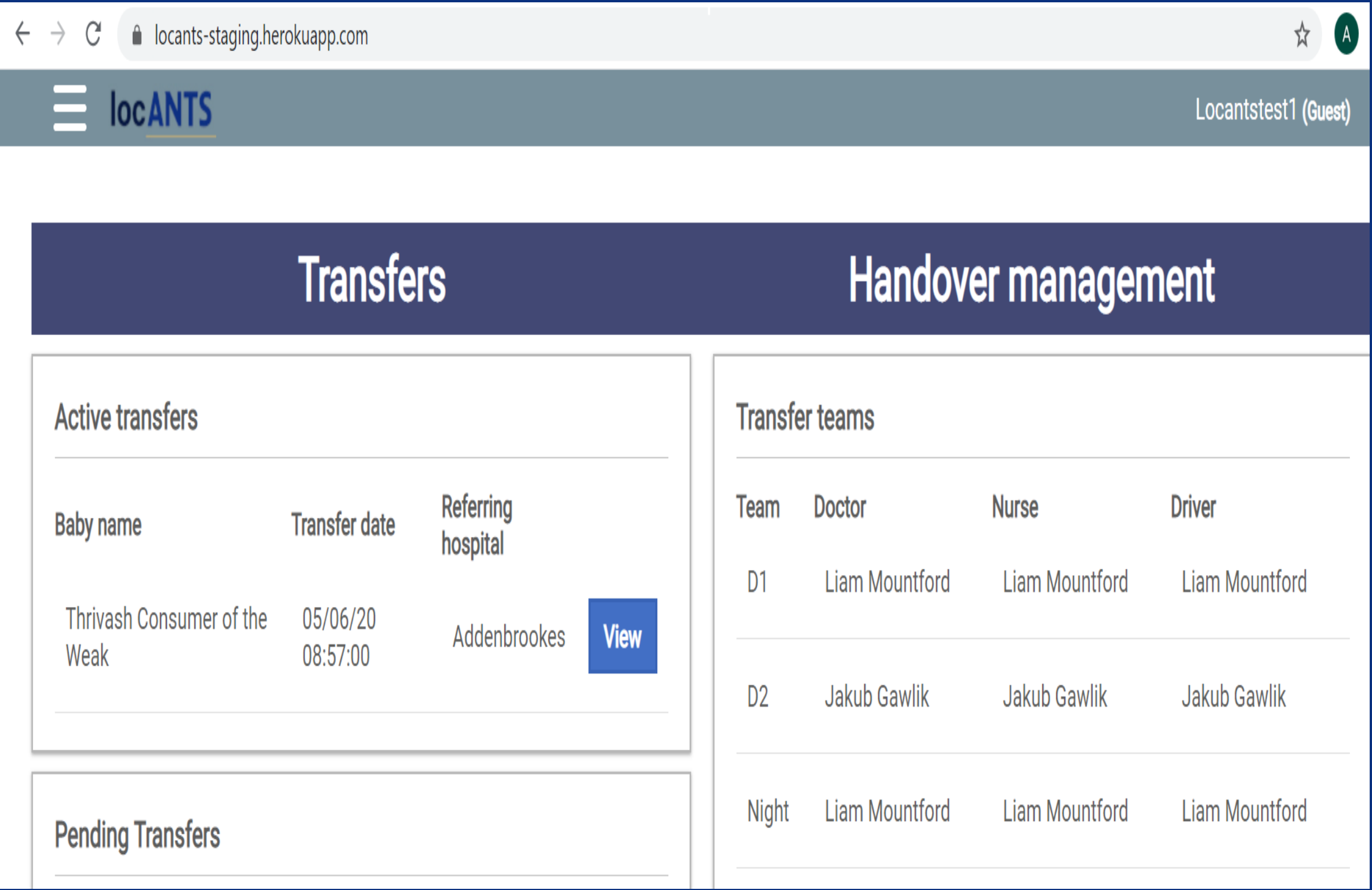
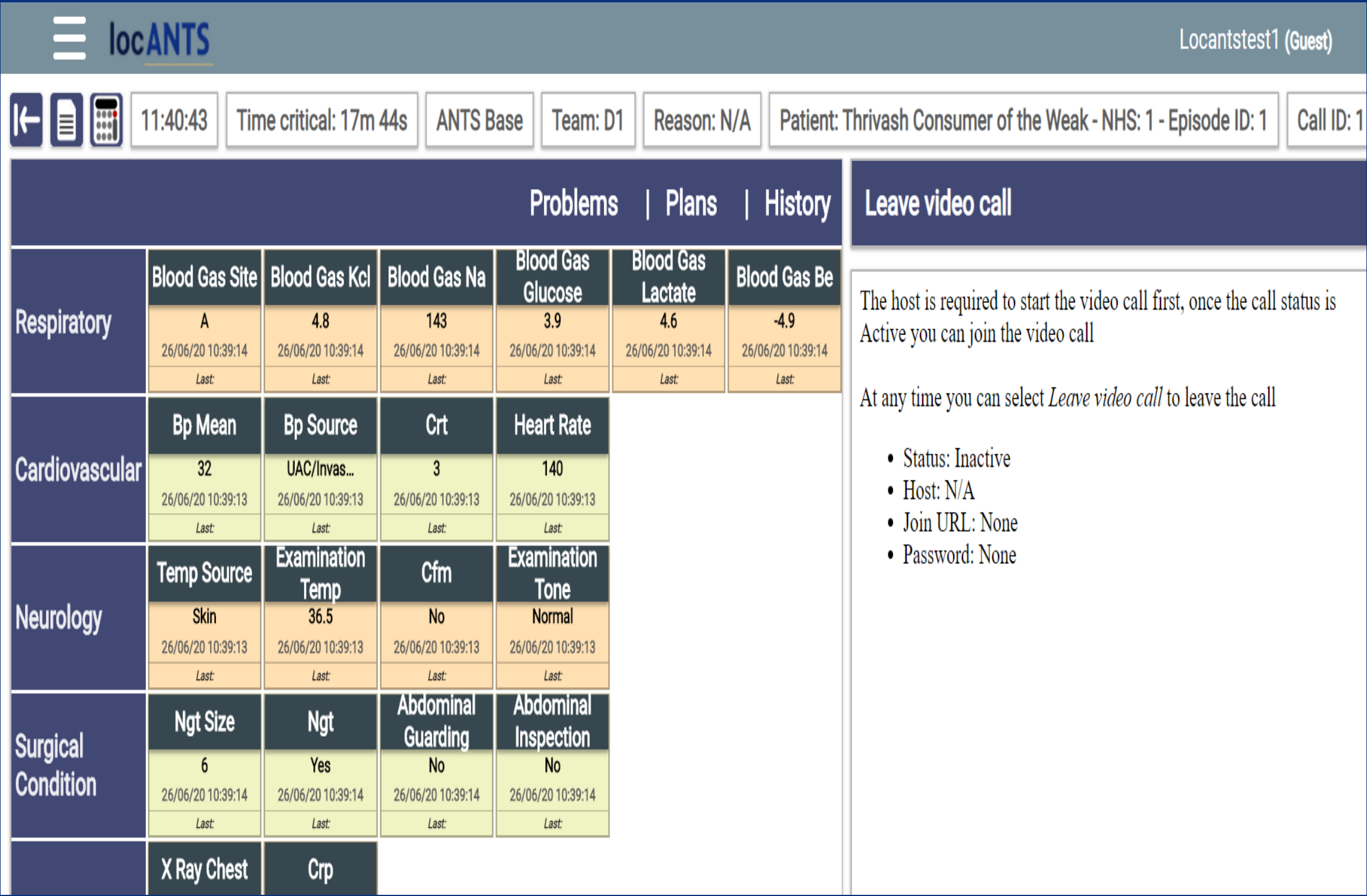
The paper copy includes on-call team/shift, pending transfers, vehicle, equipment, stock medication related updates, road and weather conditions, regional cot status, review of transfers (for shared learning) and in-utero transfers in the previous 24 hrs.



Current manual and paper based system

### Results

Data from 4 months showed a reduction of mean dispatch time for emergency transfers (including time critical) from 39 to 35 min (prior to the introduction of automation). As part of the shared learning component, 14 cases were identified and discussed with referring hospitals over the 4months compared to 3, 4 and 3 cases in each of the previous years respectively. The mean time of return of equipment after repair reduced from 31.3 to 9.8 days.



Proposed LocANTS digital platform in test environment

### Conclusions

By locating some available resources just once daily we observed significant positive changes in a number of measurable parameters. With this validation, we are now building a dynamic real time platform (LocANTS) as proof of concept to show all the available resources (including clinical parameters) required for neonatal transfer in one consolidated electronic dashboard alongside videoconferencing replacing the current telephone bridge, so that the teams are ready to dispatch “time to roll” immediately following the call for a transfer. This will significantly improve key metrics, handover quality and shared learning opportunities across the region, eventually leading to efficient improved patient care.