

Improving response times with Response Profiler (incorporating XIMES)

Increasing demand and the implications of 'call connect' are just two of the challenges facing ambulance trusts seeking to meet national emergency response standards.

Department of Health guidance on improving response times recognises the need to reduce process times throughout the 'call management cycle'.

Process Evolution's Response Profiler helps ambulance services to align resources with demand where and when it occurs.

Using a proven approach developed with the police and fire services, initial applications in the ambulance service have shown significant opportunity for performance and efficiency gains.

Why Response Profiler?

The ambulance service deals with a range of categories of incident requiring response in line with national response standards. The demand for each category is highly time dependent with peaks on Friday and Saturday nights for Category A incidents in particular.

Failure to match resources to where and when demand occurs can cause excess capacity at certain times of the week with bottlenecks and delays at others. The result can be backlogs of un-resourced incidents, inefficiency and undue stress for the workforce.

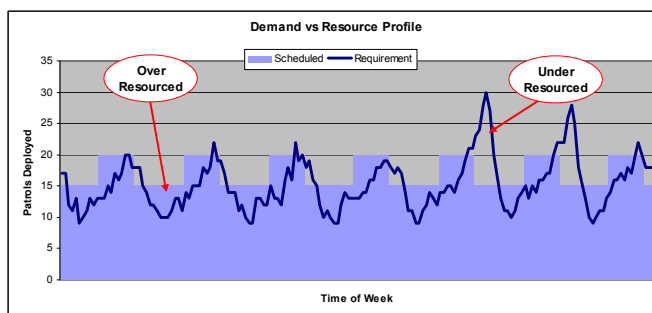


Figure 1 – sample deployment showing mismatched resources

Planning to meet demand is not straightforward, however. Different incident categories have different response standards, delays in hospital turnaround may be experienced and there is a range of vehicle and crewing options available to deploy.

The Response Profiler approach

Response Profiler is designed to deal with this complexity. It combines the powerful 'what-if?' capability of computer simulation with the optimising capability of the XIMES shift pattern and roster design software.

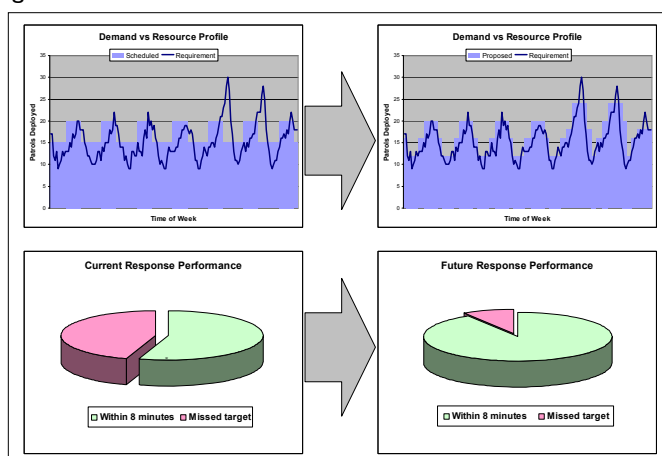


Figure 2 – improved performance from matching resources to demand

It enables the creation of demand led shift patterns to crew an appropriate vehicle fleet mix. This ensures the right resources are available at the right time and place to meet incident demand, driving up response performance.

Sample benefits

The Response Profiler approach has been deployed across fire, police and ambulance services, resulting in significant benefits such as:

- Reduced overtime costs
- Increased attendance rate
- Improved response times
- Accurate quantification of resource requirements
- Transparency of how solutions have been derived enabling faster 'buy-in' to change
- Reduced risk when making change

Testing solutions with simulation

The Response Profiler simulator accurately mimics the behaviour of real life ambulance emergency response processes. Its purpose is to enable what if scenario testing in a low risk environment leading to right first time implementation of change.

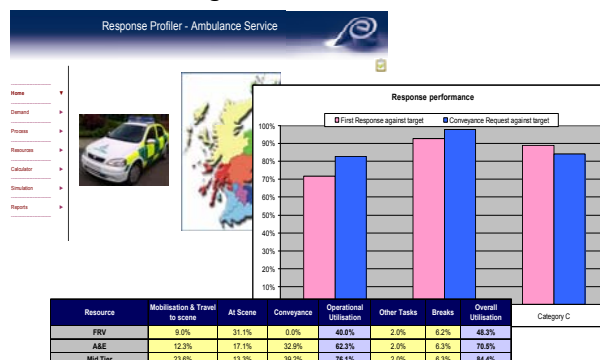


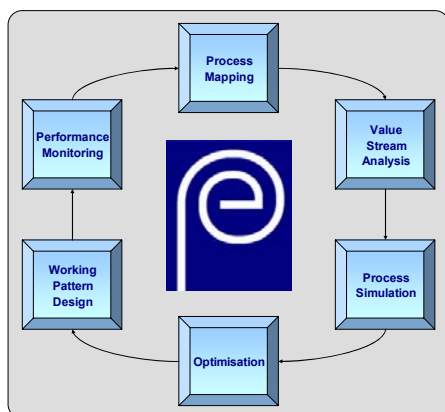
Figure 3 – Response Profiler main screen and sample outputs

Examples of scenarios that can be tested include:

- Front loaded model design
- Changes to fleet mix
- Optimising hourly vehicle availability profiles
- Changes to demand

Integration with shift pattern design

We recognise that designing shift patterns and rosters to meet a desired resource profile is in itself a complex task. That's why we've integrated Response Profiler with the XIMES shift pattern and roster design software.



For further information

Simulation and Shift Pattern Design are just two of the techniques comprising the Evidence Based Decision Making approach (shown above) pioneered by Process Evolution.

To find out more, visit our website or contact us via phone or email.

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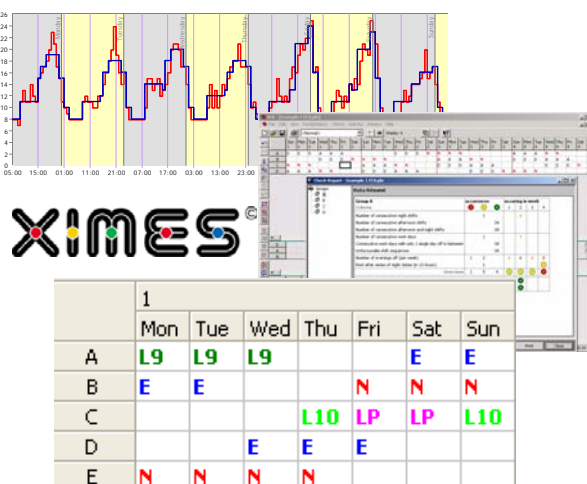


Figure 4 – designing rosters with XIMES

Often it is not possible to create a solution that meets demand exactly; the benefit of integrating XIMES with Response Profiler is that several shift patterns which may be close to the optimal profile can be compared to see which performs best.

Implementation

Process Evolution offers both consulting services and a full training and support solution to enable your ambulance service to benefit from the Response Profiler approach.