EMS Performance Management

Alan Murray
### Some translations

<table>
<thead>
<tr>
<th>Category</th>
<th>Standard</th>
<th>Percentile</th>
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<tbody>
<tr>
<td>A – life threatening</td>
<td>8 minute resuscitation response</td>
<td>75\textsuperscript{th}</td>
</tr>
<tr>
<td>Urgent</td>
<td>Admission to hospital no more than 15 minutes after time requested</td>
<td>95\textsuperscript{th}</td>
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- \textit{sfn} – Signals from Noise: a performance management system
- Query IT – an open-ended data extraction and reporting tool
- Trusts – corporate entities used by the NHS for healthcare providers
Implementing a Performance Management Process at Mersey Regional Ambulance Service

What was the problem?

Mersey Regional Ambulance Service (MRAS) had fallen from being a strong player to being awarded a zero star rating in 2004/5. Alan Murray, the new interim Chief Executive, reviewed the service and found a lack of performance management and accountability. Leadership was confused and the culture didn’t support personal responsibility. “Alan and the senior management team at MRAS produced a ‘Strategic Director’ for recovery, a key goal being the introduction of a continual improvement culture, enabled through an effective performance management framework.”

What were the benefits of the joint project?

- Improvement in the key indicator of clinically effective response to Category A (life-threatening) emergencies.
- Reduced time when ambulances are unavailable to take next call.
- Better operational performance over Christmas / New Year 2005/6 than any previously recorded year.
- Improved management attention on the things that really affect performance.
- Renewed confidence in the organisation that MRAS can be successful.
- Epidemiology information available to others in the local Health Economy.

Approach

MRAS had already begun to look at performance management supported by a new generation of performance monitoring software from Lightfoot Solutions based on Statistical Process Control (SPC). The Information Centre was invited to bring their perspective on performance management and led to a period of joint working between the Information Centre, MRAS and Lightfoot Solutions. While MRAS have a very capable senior management team in place, they were keen to learn from the Information Centre and the Local Support Centre role was to guide them in the best way of implementing performance management to make a rapid yet sustainable difference to the operational service.

As a team the Local Support Service has extensive experience from the private and public sectors in performance management and, as with most techniques, a good understanding of where things go wrong. It also happens that organisations successfully implementing technology have some sense of presenting information in a way which can be presented in a format that is meaningful to organisations and makes a difference to operational service.

Implementing a Performance Management Process at Mersey Regional Ambulance Service

What were the benefits of the joint project?

- Improved care during the key indicator of clinically effective response to Category A (life-threatening) emergencies.
- Reduced time when ambulances are unavailable to take next call.
- Better operational performance over the recent Christmas and New Year holiday than any previously recorded year.
- Improved management attention on the things that really affect performance.
- Renewed confidence in the organisation that MRAS can be successful.
- Epidemiology information available to others in the local Health Economy.

The approach

MRAS had already begun to look at performance management supported by a new generation of performance monitoring software from Lightfoot Solutions based on Statistical Process Control (SPC). The Information Centre was invited to bring their perspective on performance management and led to a period of joint working between the Information Centre, MRAS and Lightfoot Solutions. While MRAS have a very capable senior management team in place, they were keen to learn from the Information Centre. The Local Support Centre role was to guide them in the best way of implementing performance management to make a rapid yet sustainable difference to the operational service.

As a team, the Local Support Service has extensive experience from the private and public sectors in performance management and, as with most techniques, a good understanding of where things go wrong. It often happens that organisations successfully implement new technology and have some success with presenting the right information in the right format but achieve poor results in terms of making a difference to operational service management.

To kick off the implementation at MRAS rapidly and effectively, some simple but powerful constructs for the Performance Review methodology and for the style of implementation were introduced, to the knowledge that they would need to be adapted and detailed quickly as the operational change took effect.

A partnership between The Health and Social Care Information Centre and Dr Foster LLP.
What is Performance Management?

- Performance *measurement* is the process of assessing progress toward predetermined goals

- Measuring performance requires you to look backwards

- Performance *management* is about:
  - using good information to identify issues affecting performance
  - making informed decisions about how to manage these issues
  - acting on your decisions

- Managing performance requires you to look forward

- This is about operations, not strategy
What is a Performance Management Framework?

Performance monitoring

Performance measures → Performance information → Performance Reports

→ Board and External Stakeholders

Performance analysis and review

Proactive performance planning

Performance decisions and actions

Performance meeting structure

Performance Management
A word of warning

You have to have a well thought-out strategy in place before you introduce your performance management framework.

It’s always a good idea to manage performance in the right direction.
What was the problem?

• Mersey Regional Ambulance Service (MRAS) had fallen from being a strong player to being awarded a zero star rating in 2004/05

• My review of the service found—
  – a lack of performance management and accountability
  – confused leadership and a culture that didn’t support personal responsibility

• We produced a strategic direction for recovery (Time to Make a Difference)

• A key goal was the introduction of a continuous improvement culture, enabled through an effective performance management framework.
How did we approach it?

• We procured a new generation of performance management software (sfn) based on statistical process control (SPC)

• We worked with the Health & Social Care Information Centre to develop the framework and processes to bring in experience from other organisations

• We were keen to learn from others’ mistakes such as:
  – successful implementation of technology
  – good quality information
  – but little impact on operational service management
How did we approach it?

• To kick off rapidly and effectively we introduced some simple but powerful constructs for~
  – the Performance Review methodology
  – the style of implementation

• We knew that they would need to be adapted and detailed quickly as the organisational change took off

• We tasked each team with achieving eight outcomes for better service

• We gave them~
  – the freedom to use their own initiative, agree & plan local milestones
  – flexibility in the methods they used to achieve the outcomes.
Methodology - Overview

• Plan-Do-Study-Act is the core of the review process

• This routine needs to become the heartbeat of the management teams

• Measures are not just for reporting, they are for informing decision making at all levels

• No more than three levels of review hierarchy, given an organisation of this size, complexity and nature of work

• This was regarded as the optimum between having too many reviews leading to confusion, or worse, leaving all operational performance issues to escalate to the Executive team
Methodology - IDA

• IDA = Issue–Decision–Action

• The only point in having information is for improved decision-making on specific issues

• The only purpose in making decisions is to act on those decisions and follow through

• The operational benefit comes from the Action stage
Methodology - ABC

- ABC = Authority-Beneficial-Compliant

- Any manager is empowered to make a decision to act if it is:
  - within their authority
  - beneficial to the service and patients
  - complies with legislation and policies of the Trust

- If it meets the ABC rule, why aren’t you doing it?
**Level 3**: Director of Service Delivery with Asst. Directors, Sector Managers, etc
- Work to improve the value that the service delivers to stakeholders
- Set operational priorities – what to improve

**Level 2**: Sector Managers with Operational Service Managers
- Work on service effectiveness
- Optimise performance
- Fundamental improvements
- Put people and resources in the right place at the right time

**Level 1**: Operational Service Managers with Team Leaders
- Best job possible with resources available
- Ideas for improving how the work gets done

*Aggregated Measures to Exec*

*Top down overview of service*

*Bottom-up engagement in improvements*
• Start with the performance review process and work backwards—
  – creating management pull for performance information
  – avoiding the trap of trying to push performance reports at the organisation

• Kick off with one group of managers and work out from there - don’t try to bring everyone on board all at once

• Managers will not be left to “just get on with it”. There will be coaching support until the review process has run at least 5 cycles

• If there is a quick way to implement, then do it
Statistical Process Control

Urgent Performance by Week

Week Ending

03/07/2005
17/07/2005
31/07/2005
14/08/2005
28/08/2005
11/09/2005
25/09/2005
08/10/2005
22/10/2005
05/11/2005
19/11/2005
03/12/2005
17/12/2005
03/01/2006
17/01/2006
03/02/2006
17/02/2006
03/03/2006
17/03/2006

%
1. Focus on the review process rather than reports
2. Issues-Decisions-Actions is the core concept
3. All levels of management have a role to play
4. Aim for rapid implementation and support
Reviews are short and focused

- 60 minutes maximum
- Well prepared
  - Performance issues investigated prior to meeting
  - Maximum 3 issues addressed in any meeting
- Team based problem solving environment
  - Engage in solution, not blame
  - Decision making rather than further analysis
- Empowered to act
  - Authority, Beneficial, Compliant
  - Escalation as a last resort
- Follow through
  - Actions allocated with timescales & targets – recorded on IDA
  - Action and outcome reviewed at next meeting
### Welsh Ambulance Services NHS Trust
#### South East Region

**Delay Escalation IDA**

**Present:** Dave Parry (RMT), Cliff Randal (NSO) Tony Cowley (FM) Mark Ellis (ECL)

**Venue:** S E Region HQ November 22nd & 23rd 2007- and ongoing

**Next Meeting:** Ongoing daily meetings including telephone conferences and L4 VC.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Decision</th>
<th>Action</th>
<th>By Whom</th>
<th>By when</th>
<th>Completed /Notes</th>
</tr>
</thead>
</table>
| Severity and frequency of severe hospital delays effecting service delivery in the SE Region. | Develop contingency plans to support region. | o Take part in daily teleconferences with Trust ECL.  
 o Reinforce escalation triggers with control managers  
 o Provide ambulance stretchers in UHW & other as needed  
 o Investigate contracting Red Cross staff to look after patients in corridors. (see memo section 1) | D Parry  
 D Parry  
 C Randall  
 C Randall | Commenced 22nd and continuing 23rd onwards.  
 23rd Nov  
 22nd Nov 1800hrs  
 As required | Ongoing  
 Completed  
 Achieved  
 On Hold. (see memo section 1) |
Analysis available to all managers

• Allows Managers to drill down and find root causes of issues as needed
  – Avoids huge reports being generated as standard

• Managers can investigate by combinations of:
  – Geography, hospital
  – Stage in cycle
  – Time of day, day of week
  – Category of incident
  – Vehicle, crew, etc

• Also for examining the impact of decisions made
8 minute response time reliability to life threatening emergencies rose from 67% to 77% at the 75th percentile in 6 weeks – and settled in 20 weeks.
Benefits

Punctuality against the 95th percentile urgent admission standard rose from 49% to 89% in 15 weeks
Benefits

• More unit hours available to the plan

• Better operational performance over Christmas/ New Year 2005/06 than in any previously recorded year

• Prioritised management attention on the things that really affected performance

• Renewed confidence in the wider NHS that MRAS could be successful

• Epidemiological information available to partners in the local Health Economy
Key reasons for success

- MRAS had good quality managers and team leaders – they just didn’t have a good framework to operate within or the authority to make decisions.
- The Information Centre brought best practice experience from other successes (and failures).
- Rapid implementation demonstrated commitment and got an enthusiastic response.
- Easy to use information analysis revealed the true issues.
- Empowered managers used evidence rather than anecdote to inform decisions.
Post-implementation review

• A thorough post-implementation review was conducted in late-August 2006
  – by means of telephone and face-to-face interviews
  – covering multiple management levels and roles in the former MRAS organisation, plus others involved in the project

• The purpose was to identify lessons learned and opportunities for improvement
  – both to maintain momentum in the Cheshire and Merseyside Area; and
  – to capture experience, particularly for the potential benefit of other ambulance trusts that may wish to go down a similar route

• The review examined four inter-related areas
  – performance planning and review architecture and operation
  – information provision and use
  – implementation and support
  – impact on organisational culture
Performance planning & review architecture

- Original objective to introduce an improvement culture, enabled through a rigorous performance planning and management framework had clearly been achieved.

- Managers consistently credited the performance framework with two key things:
  - the remarkable turnaround in performance achieved since its roll-out started on 28 Nov 05
  - the introduction of a more ‘can-do’ culture across the service

- The review process itself was clearly understood and widely supported.
• The information from *sfn* was seen to be helpful
  – and also complementary to information obtained from other sources

• The approach taken to implementation was perceived to be highly appropriate

• There is a strong desire both to continue and to extend the application of the new ‘performance framework’
Performance planning & review architecture

• The ‘three-tier’ review architecture was seen to:
  – be absolutely appropriate
  – have facilitated a completely different sort of communication between different functions and levels of management

• “At last, we feel engaged and briefed on performance issues”

• The right issues were clearly being addressed

• The weekly review cycle of review was felt to be spot-on
• The structured review meetings were seen to be effective and efficient
  – previously, meetings were reported to take longer than 4 hours, with no tangible results
  – the new review meetings took about one hour and yet produced clear decisions and actions
  – there was evidence of a new level of ‘open communication’, with people reporting that they ‘feel safe” to make suggestions and experiment sensibly, in a culture they had never experienced before

• Managers, at all levels, valued the extra time that had been made for them to “do the jobs we ought to have been doing”

• Methods and tools had been put in place to enable reviews with staff who couldn’t meet physically
  – for Team Leaders with staff on the road
  – for shifts in the Emergency Medical Dispatch Centre
Information provision and use

- The *sfn* system facilitated:
  - visual presentation of performance data in time-series SPC chart format
  - shared identification of and agreement about key issues to be tackled
  - issues to be explored to actionable level, just by clicking a mouse button, rather than needing expert assistance
  - instant feedback which was seen to have been instrumental in generating confidence and enthusiasm

- The more computer-literate managers were actively exploring performance information for themselves
  - preparing for performance reviews and monitoring the impact of changes made
  - as one interviewee said, “This is infinitely better than pages and pages of data”
Implementation and support

- The pace was right
- The design “did exactly what it said on the tin”
- The initial project-based introduction proved very helpful
- Executive-level support had a major, positive contribution to confidence in the new approach
Implementation and support

• The involvement of first line managers and supervisors in the review process greatly assisted its beneficial impact on the culture
  – more senior managers were seen to be taking action and setting standards for the rest of the organisation
  – this was unprecedented within the memory of staff in the former MRAS

• Managers were confident they could bring new people on board in future
  – the review meeting process, and the linkage between levels, were seen to be easy to adopt
  – the organisation had built a commendable, self-sustainable capability in administering sfn and training new staff in its use
Impact on organisational culture

- The ABC and IDA concepts appeared to have changed attitudes fundamentally and sustainably
  - there was even evidence of adoption by individuals not yet involved in the formal performance management framework

- The framework created a role for middle managers which they had not previously experienced

- The framework was credited with bringing back “stability, direction and accountability” to the organisation

- The organisation associated higher achievement against national response-time standards with better clinical outcomes
  - the philosophy of “Time to Make a Difference” had a profoundly beneficial effect
  - there was a wish to see clinical measures added to the initial ‘dashboards’ and being subject to the same disciplined attention, informed by sfn
Recommendations for other adopters

- Establish and maintain a strong project team
- Ensure implementation is rigorously and regularly monitored
- Plan for a faster, wider roll-out – the small, extra investment in management time will create a much faster pay-back
- In particular, get to cross-functional impact faster (production, utilisation, shift management, fleet care, etc), while still not overwhelming the initial reviews
Recommendations for other adopters

• Be very clear and pragmatic about linking implementation timescales to changes in management roles and responsibilities

• Don’t miss opportunities to link performance management to ‘organising for performance’

• Avoid holding-back progress pending organisational change

• Ensure an on-going ‘updraught of management attention’
  – Level 3 reviews are critical to create the pull-through effect, right down to Level 1 reviews and conversations about individual performance with front-line staff

• Add appropriate clinical measures from the outset
So how did it go in Wales?
Focus on night shift
Adding rapid response vehicles

- More Cat A calls allocated to RRVS
- And improving RRV performance

Results in higher overall Cat A performance
Introducing intermediate crews
The next challenge is to engage our key partners in a *joint* performance management framework.
Hospital turnarounds >50 min

South East Wales

<table>
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<tr>
<th>Month</th>
<th>2006</th>
<th>2007</th>
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<tbody>
<tr>
<td>Jan</td>
<td>1,075</td>
<td>1,205</td>
</tr>
<tr>
<td>Feb</td>
<td>1,038</td>
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<td>956</td>
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<tr>
<td>May</td>
<td>877</td>
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</tr>
<tr>
<td>Jun</td>
<td>653</td>
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<td>Jul</td>
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<td>Aug</td>
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<td>Oct</td>
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<td>Nov</td>
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</tr>
<tr>
<td>Dec</td>
<td>903</td>
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Another way of looking at it

Delays >50 minutes South East Wales

<table>
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<tr>
<th>Percentage Variance</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tr>
<td>2007 vs 2006</td>
<td>12%</td>
<td>27%</td>
<td>-38%</td>
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<td>7%</td>
<td>60%</td>
<td>44%</td>
<td>44%</td>
<td>32%</td>
<td>63%</td>
<td>45%</td>
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And another

Delays >50 minutes University Hospital of Wales

Percentage Variance

<table>
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<tr>
<th>Month</th>
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<tbody>
<tr>
<td>Jan</td>
<td>-47%</td>
</tr>
<tr>
<td>Feb</td>
<td>-8%</td>
</tr>
<tr>
<td>Mar</td>
<td>-57%</td>
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<td>Oct</td>
<td>160%</td>
</tr>
<tr>
<td>Nov</td>
<td>112%</td>
</tr>
<tr>
<td>Dec</td>
<td>64%</td>
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Impact on Category A compliance

![Graph showing percentage compliance over time for 2006/07 and 2007/08, with a standard line.

- 2006/07 line
- 2007/08 line
- Standard line]

- April to March 2007/08
- Percentage compliance ranges from 48% to 68%

- Comparison between two years
Impact on equity

Category A 8 minute compliance by local government area

Feb-08  Jan-08  Dec-07  Nov-07  Oct-07  Sep-07  Aug-07  Jul-07  Jun-07  May-07  Apr-07  Mar-07  Feb-07

<60%  50%-60%  >60%
Diwedd

Diolch yn fawr