

ENABLING AND MEASURING PERFORMANCE IN THE ERA OF NEW TECHNOLOGIES

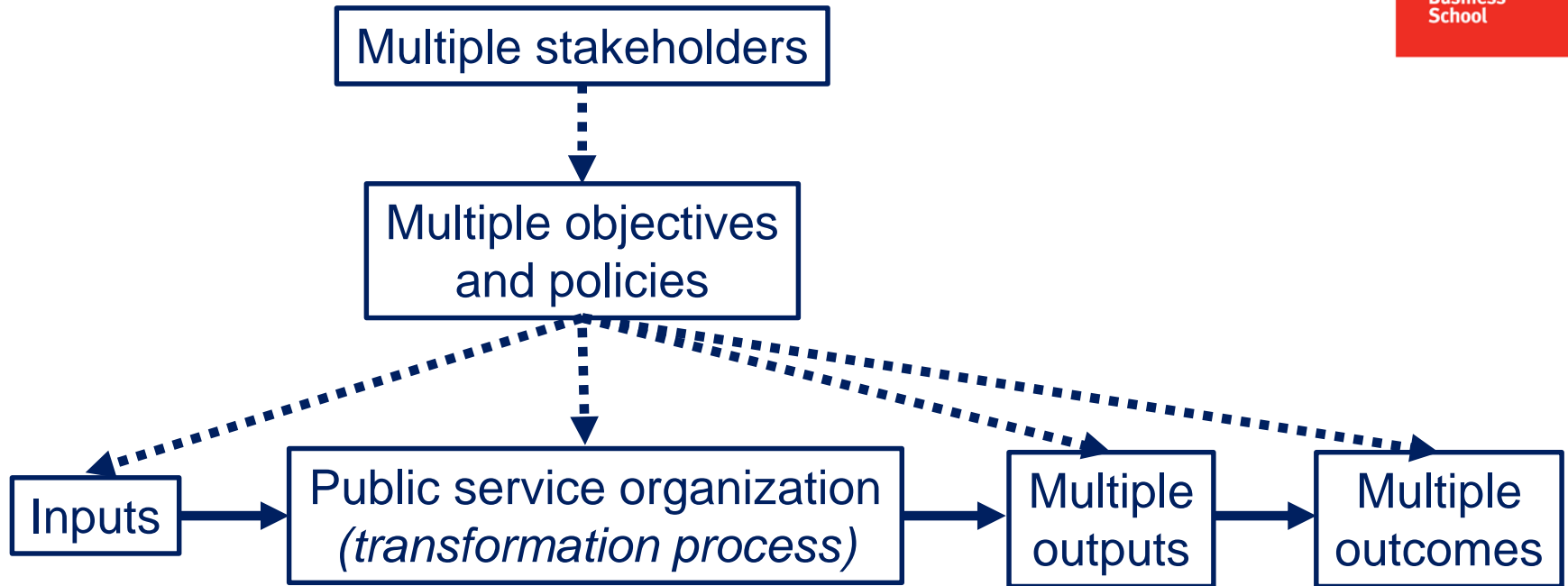
Strategic managerial approaches and tools to improve and measure performance

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Simple model of public sector performance



Summary measures of organizational performance:

- Economy – *within budget*
- Efficiency – *little or no waste*
- Effectiveness – *achieves objectives (within trade-offs implied by policies)*
- Equity – *fairness among stakeholders, including public service users*

Broad aims of public service analysis

(Bird et al. 2005)

1. To identify the functional competence of individual practitioners or organizations
 - This includes examining the scope for improvements in public service provision.
2. To establish ‘what works’ in promoting stated objectives of the public services
 - This is highly important for actually achieving performance improvements but is widely regarded as problematic.
3. Public accountability by Ministers and senior officials for their stewardship of the public services
 - This relates to the Government’s dual role of both monitoring public services and being monitored by performance indicators. The Government’s actions require independent scrutiny and well-informed public debate.

'New Public Management' (NPM) approach (Hood 1995)

1. Unbundling the public sector into corporatized units organised by product
2. More contract-based competitive provision, with internal markets and term contracts
3. Stress on private-sector styles of management practice
4. More stress on discipline and frugality in resource use
5. More emphasis on visible hands-on top management
6. Explicit formal measurable standards and measures of performance and success
7. Greater emphasis on output controls

Example of output standards: waiting time targets in the National Health Service (NHS) in the UK

- Key waiting time targets for the NHS in the UK:
 1. Following a referral from a general practitioner (family doctor) for a non-urgent condition, patients have a right to start receiving treatment from a specialist hospital consultant within a maximum of 18 weeks.
 2. Following an urgent referral from a general practitioner for suspected cancer, at least 93% of patients should be seen by a specialist hospital consultant within two weeks. The standard is the same for patients with breast symptoms (where cancer is not initially suspected).
 3. At least 95% of patients attending a hospital's Accident & Emergency (A&E) department should be admitted, transferred or discharged within four hours.

Performance against NHS waiting time targets (1)

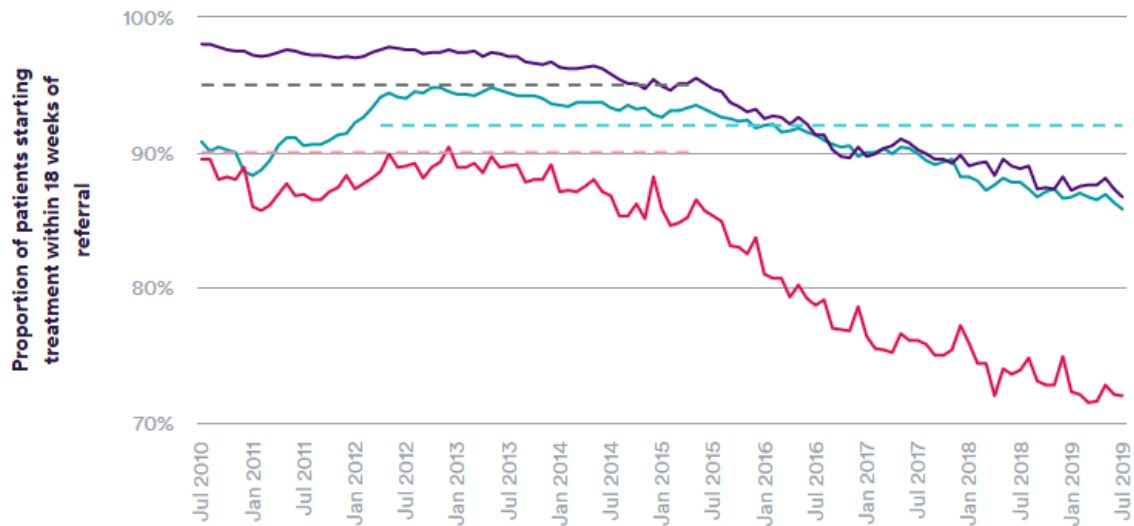
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How has the proportion of patients starting treatment within 18 weeks of referral changed over time?

27/09/2019

Chart • QualityWatch



Click on series name to show or hide

Patients still waiting	Admitted patients	Non-admitted patients
Still waiting target	Admitted target	Non-admitted target

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Source: [NHS England, Consultant-led Referral to Treatment Waiting Times](#)

Performance against NHS waiting time targets (2)

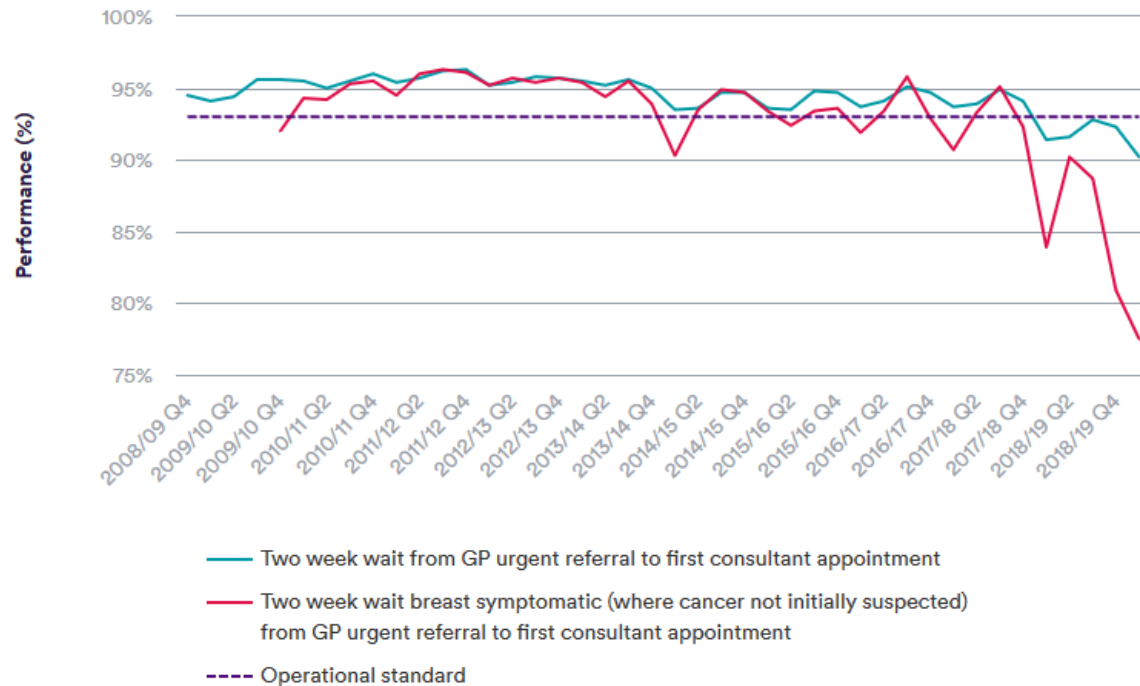
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How have waiting times for a first consultant appointment following an urgent GP referral changed over time?

27/09/2019

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Source: [NHS England, Cancer waiting times](#)

Performance against NHS waiting time targets (3)

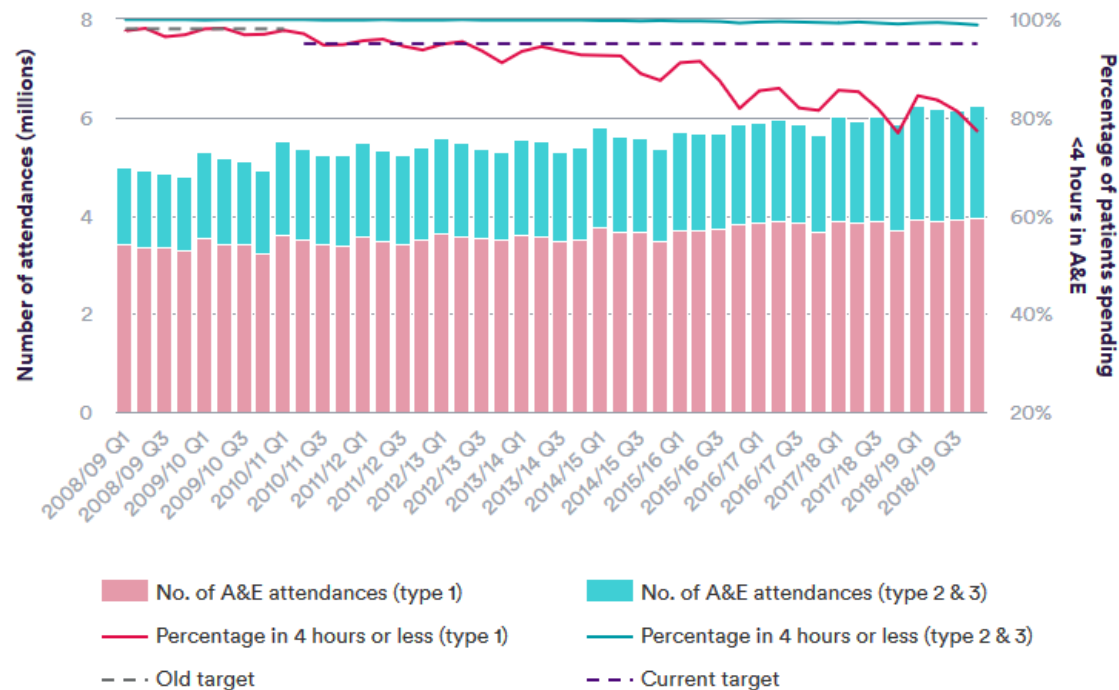
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How has performance against the four-hour A&E target changed over time?

24/04/2019

Chart • QualityWatch



Source: NHS England, A&E Attendances and Emergency Admissions

Issues with output controls (1)

1. Output controls require a negative feedback loop to keep performance on target. However, this may have unintended consequences as many (or possibly most) problems are not due to functional incompetence of employees. Instead, opportunities for improvement belong to the system and are the responsibility of management, not individual employees (*Deming, 2000*).
 - Output controls may lead to dysfunctional behaviour on the part of managers and employees in the form of 'gaming' – such as meeting output targets but not outcome targets, or reducing performance where targets do not apply (*Bevan & Hood, 2006*).

Issues with output controls (2)

2. Output controls do not, by themselves, help us to understand what works in delivering good performance.
 - We need to systematically, and where possible scientifically, model the cause-and-effect relationships between different policy interventions and performance outcomes (*Van Der Meer, 2008*).
 - Independent scientific advice and scrutiny can also support the public accountability of Ministers in charge of government policy.

What could be done?

Possible examples of good practice (1)

1. 'Collaborative innovation' in a case of new technology implementation (*Lindsay et al., 2018*)

- *Context:* large-scale automation using advanced robotics of medicines distribution, as part of a wide-ranging redesign programme of hospital pharmacy services.
- *Managerial challenge:* how to improve initial poor system performance resulting from two-way negative interaction between technical (robotics) problems and social (human resources) problems.
- *Approach taken:* supporting collaboration and innovation between staff to foster joint problem-solving, interdisciplinary working and mutual learning.

What could be done?

Possible examples of good practice (2)

2. Scientific modelling to support radical service redesign (*Anderson et al., 2017*)

- *Context:* radical redesign of the pathway for orthopaedic trauma patients in a large city hospital, involving the introduction of a new 'virtual' clinic, with the primary aim of improving patient care.
- *Managerial challenge:* given pressure on budgets, how to demonstrate the cost effectiveness of the redesigned pathway.
- *Approach taken:* developing a computerized simulation model to make a detailed comparison between the cost of the new virtual pathway and the previously standard pathway (the new pathway was shown to be 38% cheaper per patient).

Conclusions

- There remain important differences between public and private sector organizations. Performance management approaches such as New Public Management should not be applied uncritically.
- While measurable performance targets and output controls can play a useful role, they may lead to unintended adverse consequences. In any case, they do not, by themselves, help us to understand how to deliver good performance.
- Therefore, output controls should be complemented by scientific analysis of cause-and-effect relationships as well as new approaches to human resource management, such as collaborative innovation.

References

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