The Performance Game Overview

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Hospitals face conflicting expectations of good ‘health care’

Sick people should get the best possible care

We don’t want to waste our hard-earned taxes

Healthcare should be fair and open for all

What do you feel is most important?
Hospital managers can use different tools to steer doctors

What do you think will work best?

- Watch their every move and decision
- Give awards to the best doctors and nurses
- Reward them with financial benefits
This game puts players in the driving seat of a hospital, challenging them to make choices and satisfy demands.

- Give doctors more time per patient
- OR
- Save money by reducing patient time
- OR
- Eliminate waiting lists by increasing workload
What is the setting of the game?
• You are the manager of a hospital department and have to meet different expectations from different stakeholders. If you get it wrong, you’ll be fired

What is the target audience for the game?
• Graduate students in public management or professional disciplines
• Professionals and managers working in professional organizations (e.g. hospitals, schools)

What are the key learning objectives?
• Explore multiple and often conflicting expectation of professional services
• Explore positive and negative effects of management on outcomes
• Explore importance of match between organizational context and performance management design

What are the key scientific objectives?
• Gathering data on performance management preferences of graduate students, professionals and managers
Team will consist of international experts, with experience with hospitals, management, and gaming

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Player shapes throughput through management instruments and gets information through different sources

### PERFORMANCE INSTRUMENTS

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<td>Target Ranking Intelligence</td>
<td>Top-down Interactive Bottom-up</td>
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### THROUGHPUT

**Administration**
- Time (hours spent),
- Productivity (# of forms),
- Quality (errors in forms)

**Treatment**
- Time (hours spent),
- Productivity (# of treatments),
- Quality ((patient complaints)

**Coordination**
- Time (hours spent)

**Playtime**
- Time (hours spent)

### OUTCOME

**Balanced performance**
- Satisfied patients, insurance companies, and staff

**Biased performance**
- One group is very satisfied, rest is not satisfied

**Failed performance**
- No group is satisfied

### PERFORMANCE INFORMATION

- **Coffee chats**
- Informal staff insights beyond indicators

- **Reports**
- Formal reports on selected indicators

- **Newspapers**
- Public reports on satisfaction of patients, quality issues, etc.

### EXTERNAL SHOCKS

- # patients
- # staff capacity
- # management capacity

### ORGANIZATIONAL CULTURE

- Attitude to targets, ranking, intelligence
- Attitude to top-down, interactive, bottom-up style

### LEGEND

- T = Amount of hours spend per week
- P = Amount of forms/patients processed
- Q = Amount of errors made in processing forms or patients complaints received
Key assumptions to simplify professional performance

- Performance of a hospital department is a combination of the care provision as experienced by patients, financial sustainability as required by the health insurance companies, and professional satisfaction as experienced by medical staff.

- Performance in professionals organizations is shaped by how professionals divide their time, how productive they are within this time, and the quality of their work within this time.

- The behaviour of professionals can be influenced by managers through performance management instruments which track, reward, and/or punish behaviour.

- Performance management systems can increase performance by stimulating focus and learning, but also decrease performance by encouraging output distortion and professional dissatisfaction.

- The performance of the department is also influenced by factors beyond management control, such as external shocks or organizational culture.
Game play centers on four rounds of improvement, complimented by off-line reflection in classroom setting

**Round 1, month 0: First encounter with the hospital department**
• The player is appointed as the new manager of the hospital department and learns about the different stakeholders which have to be satisfied; patients, insurance companies, and medical staff
• The starting briefing details the challenges of the department: Waiting lists for patients and poor financial results due to lagging administration
• The player gets the option to implement three different performance management instruments, using targets, benchmarks and/or indicators to focus on different aspects of professional performance

**Round 2, month 3: The first results after three months**
• Through various information streams, the players learn how the management instruments played out
• The players get the chance to tinker with the instruments to improve the results

**Round 3, month 6: The adjusted results**
• Through various information streams, the players learn how the management instruments played out
• The players get another chance to tinker with the instruments to improve the results

**Round 4, month 9: The adjusted results after an external shock**
• An external shock hits the department between round 3 and 4; e.g. an epidemic bringing more patients to the department or drastic cuts in the staff capacity due to central budget cuts
• Through various information streams, the players learn how the instruments held up during the shock
• The player gets another chance to tinker with the instruments to improve the results

**End result, month 12: The final judgement of different stakeholders**
• Based on the end-of-year results, the player finds out how the different stakeholders rate the performance of the department and what the impact on the player’s career will be

**Off-line reflection**
• The game results serve as input for an off-line, classroom reflection on the experiences of the player
Parameters for variables are based on Utrecht hospital, detailing balanced performance outcome and start position

**Balanced performance satisfying all stakeholders**
Each of 20 staff members spend 25 hr treating 3 patients per hour getting 5% complaints, 15 hr processing 5 forms per hour getting 0% errors, plus 5 hr Coordination time and 5 hr Playtime
Patients: Satisfied – 1,500 patients treated, 20 min per patient, 5% complaints
Insurers: Satisfied – All 1,500 patients treated have been billed, with no errors
Staff: Satisfied – Acceptable level complaints, limited admin. time, sufficient coordination and playtime

*If their relevant parameters are better, stakeholders will be Happy (+10%) or Very Happy (+20%) or if the parameters are worse the stakeholders will be Unhappy (-10%) or Very Unhappy (-20%).*

**Default performance without management intervention at start of the game**
Each of 20 staff members spend 30 hr treating 2 patients per hour getting 4% complaints, 5 hr processing 5 forms per hour getting 0% errors, and spend 10 hr Coordination time and 5 hours in Playtime
Patients: Satisfied – 1,200 patients treated, leaving 300 on waiting list, time complaints per patient good
Insurers: Very unhappy – Productivity is 300 patients too low, admin backlog of 700 patients per week
Staff: Very happy – Good level of complaints, tiny admin. time, a lot of coordination and playtime

**Rules for impact of management instruments**
- The player can apply a maximum of four management instruments every turn
- Applying Target to a parameter will move that score to the level desired by the player over two turns
- Applying Ranking to a parameter will increase the parameter score with 20% every turn
- Applying Intelligence will increase the parameter with 10% every turn
- Applying Topdown moves coordination to 2 hours, if Interactive to 5 hours, if Bottomup to 10 hours
- Every patient treated more per hour equals 1% extra complaints, with minimum of 2% complaints
- Every form processed above 5 per hour equals 1% extra errors
- External events and org. culture are fixed in this game edition. Extra patients flood in before Round 3.
- Cheat: If player applies Intelligence on Playtime for two turns, innovation halves required admin time
Different scenario’s are possible, challenging player to seek optimal balance between instruments

**Example 1: Poor performance because of focus on Productivity over Quality (output distortion)**
- **Instrument:** The player chooses to focus on Treatment Productivity and Administration Productivity, setting a Target of 100 patients per week and 100 forms per week in a Top-down Style.
- **Throughput:** Staff spend 25 hours on Treatment Time to hit 100 patient Treatment Productivity, but Quality falls as they make errors. They spent 15 hours on Administration and none on Coordination.
- **Output:** Care provision is moderate as there is a high Treatment Productivity but low Quality. Financial sustainability is moderate as there is high Productivity but too many errors in the financial forms. Staff satisfaction is low due to poor Treatment Quality and high Administration Time.
- **Information:** Through chats over coffee, the players learn that the staff dislike the management style. The formal indicators show high Productivity, but the newspaper report Quality issues at the hospital.
- **Outcome:** Unless the player changes management instruments, patients and management will be moderately happy, while the staff are unhappy. Insurance companies keeps you in the job until retirement, but none of your colleagues come to your retirement party.

**Example 2: Biased performance because of singular focus on quality**
- **Instrument:** The player chooses to focus on Treatment Quality alone through Intelligence indicators in a Bottom-up management style.
- **Throughput:** Staff spend 30 hours on Treatment, but Productivity is low as they focus on Quality treatment. They spend 8 hours a week on Coordination to talk about the information. They spend only 2 hours a week on Administration, creating a backlog in billing forms.
- **Information:** Through coffee chats the player learns that the staff are very relaxed and motivated, if a little tired of all the coordination talks. The formal reports show high quality treatment outcomes. The newspaper report long waiting lists and financial problems at the hospital department.
- **Outcome:** Unless the player changes instruments, the insurance companies will intervene and fire the player from the job due to underperformance. The staff however nominate the player for a knighthood for services to the medical profession, and love to visit at home to talk about the good old time when hospitals were all about quality.
Classroom reflection wraps up learning experience

Which different interests were at stake?

Have you recognized the following effects?
• Output distortion (overemphasize targets at expense of others)
• Ratchet effects (coffee chats will always cite low expectations)
• Threshold effect (not yet in the game)

What can innovation do to improve the trade-offs?