# Article information:

The Diseconomies of Queue Pooling: An Empirical Investigation of Emergency Department Length of Stay | Management Science
<https://pubsonline.informs.org/doi/abs/10.1287/mnsc.2014.2118>

# Article summary:

1. Patients experience longer wait times and length of stay in emergency departments when physicians are assigned patients under a pooled queuing system with a fairness constraint compared to a dedicated queuing system with the same fairness constraint.

2. A dedicated queuing system is associated with a 17% decrease in average length of stay and a 9% decrease in average wait time, resulting in a 39-minute reduction in length of stay and a four-minute reduction in wait time for an average patient of medium severity.

3. The improved performance of the dedicated queuing system is attributed to physicians' increased ownership over patients and resources, allowing them to more actively manage the flow of patients into and out of emergency department beds.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "The Diseconomies of Queue Pooling: An Empirical Investigation of Emergency Department Length of Stay" presents an empirical investigation on the impact of queue management on patients' average wait time and length of stay in an emergency department (ED). While the study provides valuable insights into the effects of different queuing systems, there are several aspects that warrant critical analysis.

One potential bias in the article is the focus on a specific ED from 2007 to 2010. This limited scope raises questions about the generalizability of the findings to other healthcare settings and time periods. The authors should have acknowledged this limitation and discussed its implications for external validity.

Furthermore, the article claims that patients' average wait time and length of stay are longer under a pooled queuing system compared to a dedicated queuing system with the same fairness constraint. However, it does not provide sufficient evidence or explanation for why this difference occurs. The authors mention interviews and observations with physicians but do not present any direct quotes or specific examples to support their claims. This lack of supporting evidence weakens the credibility of their findings.

Additionally, while the article acknowledges that nonpooled queues may lead to longer wait times, it fails to explore potential benefits or trade-offs associated with pooled queuing systems. For example, pooling resources could potentially improve resource allocation efficiency or allow for better coordination among healthcare providers. By not considering these factors, the article presents a one-sided view that favors dedicated queuing systems without fully exploring alternative perspectives.

Moreover, there is no discussion about potential risks or drawbacks associated with dedicated queuing systems. For instance, dedicating physicians to specific patients may limit their ability to respond quickly to urgent cases or result in uneven distribution of workload among healthcare providers. By omitting these considerations, the article presents a biased view that only highlights the benefits of dedicated queuing systems.

Another concern is the lack of comparison between different types of pooled queuing systems. The article only compares a dedicated queuing system to a pooled queuing system with a fairness constraint, but there are other variations of pooled queuing systems that could have been considered. By not exploring these alternatives, the article misses an opportunity to provide a comprehensive analysis of different queue management strategies.

Furthermore, the article does not discuss potential cost implications of implementing dedicated queuing systems. While it claims that the benefits outweigh the longer wait times predicted in nonpooled queues, there is no evidence or analysis provided to support this claim. Without considering the financial feasibility and sustainability of dedicated queuing systems, the article presents an incomplete picture of their overall impact.

In conclusion, while the article provides insights into the effects of queue management on patients' wait time and length of stay in an ED, it has several limitations and biases that need to be critically analyzed. These include limited scope and generalizability, lack of supporting evidence for claims made, one-sided reporting favoring dedicated queuing systems, omission of potential risks and drawbacks, failure to explore alternative perspectives and variations of pooled queuing systems, and absence of cost considerations. Future research should address these limitations to provide a more comprehensive understanding of queue management strategies in healthcare settings.

# Topics for further research:

* Benefits and drawbacks of pooled queuing systems in healthcare
* Comparison of different types of pooled queuing systems
* Cost implications of implementing dedicated queuing systems in healthcare
* Efficiency of resource allocation in pooled queuing systems
* Coordination among healthcare providers in pooled queuing systems
* Impact of dedicated queuing systems on physician response time in emergency departments

# Report location:

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