



THE LONDON SCHOOL  
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# Severe asthma care and treatment

Indicators and data for performance management  
across ten countries

*Executive Summary*

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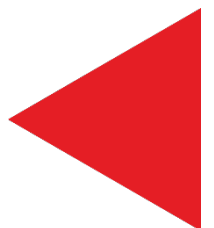
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## Overview of environment

### **Severe asthma (SA) is characterised by unmet need and has significant implications for health systems**

- *Impact on people living with SA:* Greater asthma severity is associated with relatively significant decreases in asthma-related quality of life. Frequent exacerbations and hospital admissions may affect individuals' quality of life through isolation and loneliness, frequent oral steroid use, general fear and/or anxiety, and not being able to work. Those with SA are more likely to suffer from comorbidities, often linked to worse outcomes. Treatment with oral corticosteroids (OCS) can result in the development of further OCS-related comorbidities.
- *Avoidable mortality:* SA remains associated with substantial mortality. Asthma-related deaths still occur in many settings, but are often avoidable. Mortality rates may be higher for people living with SA who are treated with OCS. Improvements in asthma mortality have stagnated in many countries.
- *Financial impact on health systems:* people living with SA have increased levels of healthcare resource use. SA is estimated to account for a larger portion of direct and indirect asthma costs than mild or moderate asthma, despite being less prevalent.

### **Quality of care and treatment for severe asthma must be improved immediately**

Evidence suggests that more effective care, treatment and management of people living with SA results in noticeably reduced mortality, improved outcomes, with effects on individual quality-of-life. There are also direct implications for costs as well as overall impact on healthcare utilization and budgets.

The COVID-19 pandemic has highlighted the needs of those suffering from respiratory conditions in light of the threat of novel viruses. There is an urgent need to better understand SA care and improve care practices at national and international level.

### **Unlocking improvement through performance measurement**

In order to understand where deficiencies in care and treatment exist, healthcare systems should implement a measurement system to enable better assessment of quality of care.

Performance management is especially relevant for conditions where there is a direct link between disease management and overall mortality.

## Methods and aims

The complexity of SA, and asthma more generally, is not widely reflected in data collection or performance assessment of national healthcare systems. In this report we evaluate current capabilities and means of assessing performance in severe asthma care and practice.

The report creates a set of health system performance indicators in SA care and treatment, and reviews public data sources to identify the current state of health systems' performance management in SA care and treatment.

### Geographic scope

The geographic scope of the research covers Australia, Brazil, Canada, France, Germany, Italy, Japan, Spain, Sweden, and the United Kingdom.

## Results

### Current data availability for performance assessment of severe asthma is scarce

Evidence from the literature reveals few efforts at assessing health system performance for respiratory disease, let alone for SA, across all countries in scope. Specifically, key findings on current data availability include:

- There are limited data on indicators or performance assessment for specific diseases.
- There is a lack of information on SA. Where data was available, it was only for asthma but not SA, across both national international sources.
- Available information on SA is often prevalent for primarily factual metrics, and not directly conducive to comprehensive performance assessment due to variation.
- There is a reliance on literature produced by research groups, asthma stakeholders, or universities, with a large portion of information only available through these sources.
- An extensive number of metrics, such as care delivery processes or outcomes, had no data source or collection effort.

## Recommendations

There is an urgent need for governments to collect data on SA on a more systematic and consistent basis for use in performance assessment. This will help to ensure data collection is

conducted appropriately, frequently, and for the right indicators, enabling it to be subsequently used to review suitable targets and monitoring.

A review of current data collection efforts suggests there is an atmosphere of readiness and willingness for the collection of data. However, the actual collection processes and application of health data, especially for disease-specific outcomes, is not yet present.

It is strongly recommended that the points of focus for governments should be:

## **1 Building strong technological infrastructure**

- Efforts to improve technological infrastructure may need to be part of a larger system overhaul or re-design in order to collect meaningful data and information.
- Electronic health records could be leveraged as a means of collecting clinician-reported data points. Adequate clinical data is key in addressing the absence of available information from a clinical setting on OCS use and other treatments.

## **2 Designing a system with effective communication and management**

- Strong infrastructure needs to be accompanied by clear communication and prompting to encourage of physicians (and possibly of people living with SA) to collect the necessary data with sufficient regularity.
- The inclusion of all stakeholders in performance measurement is considered essential to ensure a) all necessary components are captured, b) data collected for disease-specific efforts are useful, relevant, and appropriate, and c) measurements of the functioning of health care provision focus on efficiency and effectiveness.
- The type of prompt or incentive that may work in a given setting will need to be considered in context by decision-makers.

## **3 Identifying and measuring appropriate metrics and targets**

- The characteristics of each national health system will need to be considered, as the need for or design of certain indicators will invariably depend on the existing norms, pathways and treatments.

- Governments should look to reflect the needs and experiences of people living with SA, physicians and other stakeholders in performance metrics, in addition to system-based indicators.
- Tailoring performance measurement to specific disease areas through condition or disease-specific indicators is key to ensuring the right information is collected and reflects the full reality of the care and treatment individuals receive.

## 4 *Establishing political will*

- There must be political will to drive change and review performance on a wider scale. The effective combination of appropriate infrastructure, data sources, encouragement of data collection, and the identification and the setting of targets and prioritization of indicators requires stable leadership. Countries have extended commitments to strengthening healthcare and healthcare system resilience in light of the COVID-19 pandemic, which provides an initial foundation for further action to be taken.
- Policy-makers need to consider prioritization of key indicators, to ensure the feasibility of the system and a suitable dataset.
- Cross-border collaboration is desirable to improve country comparisons and place international best practices in context.

## Conclusion

Given effective management of SA can dramatically reduce avoidable mortality and improve individuals' quality of life, there is an essential and urgent need to improve SA care and practices at national and international level.

Governments should take advantage of the general atmosphere of readiness and willingness for the collection of health data, and the effects of the COVID-19 pandemic to maintain political willingness and traction. A database of relevant, and accurate information allows:

- a) countries to conduct improved performance reviews and to identify key bottlenecks which contribute to high avoidable mortality and low quality of care;
- b) decision-makers to make quality decisions to ensure appropriate interventions and changes are enacted where necessary to improve health outcomes and allow optimal care for people living with SA, and;



c) the healthcare system to feedback on performance to practicing clinicians.

Governments should consider a number of aspects in designing data collection efforts for SA with a view to improving quality of care in this disease area: effective policy efforts and target setting, appropriate infrastructure and data collection methods, stakeholder involvement, and suitable indicators and metrics. Where governments are currently constrained in collecting and assessing suitable data, they should look to instituting a mid- to long-term plan. In the meantime, the burden remains with other stakeholders to contribute to the understanding of quality of care and treatment in SA.

## Further research

This research is part of a wider initiative looking at current policy and practices in SA care and treatment. The aims of the initiative are threefold:

- to provide insight into the value of performance assessment for improved outcomes and an overview of current country practices in performance assessment for SA;
- to create a list of metrics which are key to assessing performance in SA care;
- to supplement current knowledge on current policy and practices in SA care across these metrics through insights from clinicians practicing in the SA field and people living with SA.

The findings of the research are relevant for policy-makers in designing improved performance measurement structures and in understanding current limitations of healthcare systems in SA care.