Structured expert elicitation to generate estimates for the administrative workload associated with prior authorization in pulmonary arterial hypertension (PAH)

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Background

In the United States (US), access to specialty medications, including those used to treat pulmonary arterial hypertension (PAH), often require prior authorizations (PAs).[1] While intended to ensure appropriate use of treatments and manage associated costs, processes related to PAs may delay treatment initiation and reduce face-to-face time between healthcare professionals and patients. These effects can potentially divert time from direct patient care to administrative tasks, negatively impact clinical outcomes, and increase healthcare resource utilization (HCRU).[2-5] Given the severity of PAH, these barriers may have particularly harmful consequences, underscoring the need to better understand the real-world impact of PAs in this population.[5]

Study objective

This research seeks to understand the administrative workload associated with PAs, with a focus on the impact on the management of patients with PAH.

Methods

A structured expert elicitation (SEE) methodology will be employed; this is a formal, quantitative process used to capture and combine expert judgments when empirical data are limited, uncertain, or absent. SEE techniques use structured interviews and statistical weighting to quantify expert uncertainty, aggregate estimates, and generate probability distributions for key parameters.[6,7]

A double-blinded study consisting of three key stages will be conducted with 14 US-based healthcare professionals experienced in supporting patients with PAH:

- **Stage 1:** Qualitative interviews to explore key challenges of PA-related processes and contextual factors
- **Stage 2:** Structured quantitative SEE interviews to assess the burden of PA-related tasks
- **Stage 3:** A final consensus meeting to validate findings (Figure 1).

Stage 1 has been completed and the insights from the qualitative interviews are presented within this poster.

FIGURE 1: Overview of methodology.

Recruit

Initial recruitment
N=14 experts with experience in supporting patients with PAH

Qualitative

Individual qualitative interviews (1-hour)
An initial activity to help understand the topics and challenges of importance when considering the PA process in PAH to subsequently inform key questions to be included in the SEE interviews.

Thematic analysis of results

Quantitative

Individual quantitative SEE interviews (2-hours)
Use of SEE techniques to elicit point estimates relating to the administrative workload associated with PA-related tasks in PAH.

Mathematical aggregation of results

Consensus

Group consensus meeting (2-hours)
A group consensus meeting will be held to discuss points of variance between individual estimates and obtain group consensus on the aggregated estimates for outcomes associated with the administrative workload of PAs in PAH.

Results

Overview of the experts

A total of **14 experts** completed the qualitative interviews, including **physicians** (n=6), **pharmacists** (n=5), **nurse practitioners** (n=2) and a **physician assistant** (n=1).

Most experts (n=8) reported having over **10 years of experience** managing administrative processes such as PAs; 4 experts had **2–5 years** of experience, and 2 experts reported **6–10 years** of experience.

Practice settings included **academic medical centers** (n=6), **accredited pulmonary hypertension (PH) centers** (n=4), **community hospitals** (n=3), and a **specialty pharmacy** (n=1).

Experts were located across the **Midwest** (n=5), **Northeast** (n=4), **West** (n=3), **Southeast** (n=1), and **Southwest** (n=1).

Among the experts, 5 experts reported spending **≥25% of their time on PA-related tasks per week**, 4 reported **15–24%**, and 3 reported **6–14%**.

Experts had experience across insurers, including **Medicare** (14/14), **private insurance** (14/14), and **Medicaid** (13/14). One expert also had experience with **Tricare**.

Summary of qualitative interview findings

PA workflow and process

PA workflows for PAH therapies are **primarily initiated through EMR systems** and **rely on comprehensive clinical documentation**, with electronic submission methods preferred for efficiency. **Reliance on fax** by some insurers persists, creating **perceived inefficiencies** and risk of errors throughout the PA process.

"Portals [electronic submission methods] are highly preferred...You just know it went through, and it is received." **- *Nurse practitioner***

Administrative burden

The PA process for PAH therapies is **time-consuming** and **burdensome**, requiring significant **staff resources**, coordination, and often **dedicated personnel**, which may lead to frustration, inefficiency, and staff burnout. These administrative challenges may result in **treatment delays**, **patient confusion** and distress, and **less time for direct patient care**, negatively impacting patient outcomes and overall well-being.

"I think it is really burdensome. I think that it just takes up too much time, and there is just too many different factors and too many different insurance companies and too many cooks in the kitchen." **- *Pharmacist***

Factors contributing to delay

A variety of factors contribute to delays in the PA process for PAH therapies, including **insurer-driven requirements** (such as costs of therapy, step therapy [requiring patients to try lower-cost, often generic, therapies before gaining approval for higher-cost or newer alternatives], and plan-specific processes), **documentation gaps**, **inefficient clinical workflows**, **breakdowns in communication**, and **continued reliance on faxes** and **phone calls**.

"[With regards to step therapy]...That [step therapy] is probably one of our biggest issues...and then the patients just not wanting to sit there and have to fail the therapy to try and get something else. It is frustrating." **- *Physician***

Administrative tools & support

While **electronic portals** and **manufacturer support teams** have **improved the efficiency of PAs for PAH therapies**, **inconsistent digital adoption**, ongoing **reliance on manual tracking**, **variable manufacturer assistance,** and **workflow differences** between internal and external specialty pharmacies may **limit the effectiveness** of administrative tools and **contribute to delays**.

"If it is a very streamlined one [a PA] that can be done electronically, then those are pretty quick. It is the ones that force us to use their own portals or their own papers or own fax, those take a long time" **- *Pharmacist***

Impact of PA process

The PA process for PAH therapies **significantly increases the workload** for **clinical staff**, **diverting time away from patient care** for administrative tasks. For patients with PAH, the PA process can cause **substantial delays in therapy initiation**, create **financial burdens**, and **generate confusion, frustration**, and **anxiety**, especially when patients are unaware of the processes.

"[The PA] takes away from us being able to spend time on everything else with the patient, so whether it be following up on results that are coming in or patients calling with sick calls... we are given deadlines by insurance companies for doing these appeal letters...so all of that takes away from the actual patient care outside of getting their medications approved." **- *Nurse practitioner***

Single-tablet combination therapy (STCT) and PA processes

Experts view **STCTs for PAH** as **beneficial** for **streamlining the treatment regimen**, but they also report that these therapies often face greater administrative hurdles in the PA process. These include **increased insurer scrutiny**, **more documentation**, and potentially **higher denial rates**, which may offset potential workflow efficiencies unless insurance approval is readily obtained.

"[PAs for STCT] I do not have to fill 2 forms... I do not have to submit 2 PAs... The third thing is convenience, right? My patient knows just this one pill to take every day... If insurance does not create any hurdles, that is our number one go-to. That is a gift of heaven." **- *Physician***

Key takeaways and conclusions

- Qualitative interviews with US-based experts with experience in supporting patients with PAH highlighted that managing PAs demands considerable involvement from clinical staff.
- Experts believe that PAs may lead to delays in treatment initiation, create financial burdens, and subsequently lead to anxiety and frustration for patients.
- Experts emphasized the operational complexity of managing PAH-related PAs, including variability in insurer requirements and coordination with specialty pharmacies.
- Experts recommended that streamlining and standardizing PA processes, such as implementing unified electronic portals and more consistent insurer criteria, could help reduce administrative burden, accelerate treatment initiation, and improve patient outcomes in PAH.

Limitations

The limitations of this study are acknowledged:

- The qualitative findings are based on a limited number of participants overall, from diverse roles and practice settings, which may limit the generalizability of findings across institution types and US regions/states.
- Participants represented a range of professional backgrounds with varying degrees of involvement in PA processes, which may have influenced the emphasis and perspectives shared during interviews.

Next steps

Quantitative interviews using SEE methodology will be conducted to quantify the administrative workload associated with PAs.

Outputs from the SEE are anticipated in October 2025, the findings will quantify key PA-related challenges and define mitigation strategies based on physician input to reduce the PA-associated workload burden.

A consensus meeting will be held to discuss and validate the findings from the quantitative SEE interviews.

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Disclosures

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Abbreviations:

EMR: Electronic medical record; HCRU: Healthcare resource utilization; PA: Prior authorization; PAH: Pulmonary arterial hypertension; PH: Pulmonary hypertension; SEE: Structured expert elicitation; STCT: Single-tablet combination therapy; US: United States.

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