

American Society of Hematology Request for Proposals

Development of a Return on Investment (ROI) Calculator for the Treatment of Acute Pain in Sickle Cell Disease

The American Society of Hematology (ASH) is accepting proposals from academic and methodological teams to support the development, testing, and dissemination of a public facing web-based return on investment (ROI) calculator focused on the timely treatment of acute pain in sickle cell disease (SCD).

The calculator will be informed by the [ASH SCD clinical practice guidelines](#) and the [ASH quality performance measure](#) that measures the median time to pain medication for patients with SCD and vaso-occlusive episode (VOE) who present to the emergency department for care. The calculator is intended to translate improvements in practice performance into measurable financial and operational outcomes for healthcare institutions. The consultant will work in close collaboration with ASH staff and an ASH volunteer expert group.

Project Overview

ASH seeks to develop a public-facing web-based ROI calculator that enables health systems to model the financial impact of implementing timely treatment of pain (≤ 60 minutes from emergency department arrival) for patients with SCD presenting with VOE.

The calculator will allow end-users to input institution-specific data to model projected changes in admissions, length of stay, bed capacity, and financial performance. The anticipated primary intended users of the calculator are hospital administrators, emergency department leaders, quality improvement leaders, and hematology program directors responsible for operational and financial decision-making. Secondary users may include policymakers and researchers evaluating the value of implementing guideline informed care processes and quality improvement initiatives.

The calculator will be owned and hosted by ASH and will link to the associated ASH guideline and quality performance measure.

Task 1 – Defining the ROI Calculator Scope

The consultant will support ASH in defining the calculator development process to ensure methodological rigor and usability by health systems.

In consultation with an ASH-convened volunteer expert group (“expert group”), this task includes:

- Conducting an environmental scan of existing healthcare calculators and financial modeling tools (e.g., by AHRQ, IHI, other specialty societies).
- Identifying the key drivers of financial outcomes related to timely SCD pain treatment, including but not limited to avoidable admissions and readmissions.
- Establishing standardized definitions for the calculator inputs (e.g., cost per inpatient day, marginal revenue per admission, occupancy rate) and outputs (e.g. cost avoidance, cost savings, incremental revenue).
- Establishing user guidance for the interpretation of inputs and outputs.
- Establishing default parameter input values where appropriate.

Deliverables for Task 1

- A summary describing the rationale and process by which key financial drivers, inputs, and outputs were selected.

Task 2 – Developing the ROI Calculator Economic Model

The consultant will lead the development of a financial model capable of estimating financial impacts associated with the timely treatment of pain.

In consultation with the expert group, the consultant will:

- Develop or adapt an economic model that clearly links process improvement (time-to-analgesia ≤ 60 minutes) to downstream operational and financial outcomes.
- Develop both conservative and optimal scenario modeling to reflect different implementation approaches to timely treatment.
- Conduct sensitivity analyses (e.g., admission reduction rate, LOS reduction, occupancy levels, payer mix).

- Document limitations of the model, including assumptions that may vary by institutional setting.

Deliverables for Task 2

- A summary describing the development of the financial model that clearly describes the model's assumptions and data sources.

Task 3 – Designing and Developing the ROI Calculator

The consultant will design and develop a web-based calculator designed for clarity, accessibility, and institutional specificity.

The calculator should:

- Guide users through stepwise data entry that differentiates between required and optional inputs, providing default values based on published literature or national databases where appropriate.
- Provide scenario comparisons (e.g., baseline vs. guideline-directed performance).
- Link to ASH guideline and quality measure resources.
- Allow users to download or export summary results in a format suitable for sharing (e.g., PDF summary or slide-ready output).

Inputs may include:

- Annual VOE visits volume (ED visits and admissions).
- Baseline metrics, including median time to analgesia, admission rate, average length of stay (LOS), readmission rate, and baseline cost per ED visit and inpatient day.
- Target metrics aligned with ASH guidelines.
- Implementation costs (one-time and recurring).
- Capacity data, including occupancy rates and average margin per admission.
- Patient-level variation inputs (e.g., payer mix, demographic factors).
- Sensitivity analyses to address uncertainty in assumptions.

Outputs may include:

- Reductions in admission rates and LOS.
- Bed days saved.

- Direct cost avoidance.
- Net savings after implementation costs.
- ROI ratio and payback period.
- Potential incremental revenue from backfill capacity.

Deliverables for Task 3

- Prototype of the calculator ready for pilot testing.
- Document describing the development process that is suitable for public dissemination.

Task 4 – Pilot Testing and Refinement

Pilot testing will assess usability, feasibility of required inputs, credibility of outputs, and institutional decision-making utility. The consultant will support pilot testing of the calculator with 2–3 volunteer healthcare institutions identified by ASH.

The consultant will conduct usability testing with hospital administrators, ED leaders, and quality improvement stakeholders, including structured feedback sessions to:

- Identify barriers to use, including data availability, feasibility of use, acceptability of assumptions and projected outputs.
- Understand if and how projections will influence decision making about implementing changes and investing resources.
- Refine calculator assumptions, interface design, and user guidance based on pilot findings.

Deliverables for Task 4

- Summary describing pilot testing methods, findings, and refinements made to the calculator.
- Final web-based calculator ready for dissemination.

Task 5 – Dissemination and Implementation Support

ASH will own and host the calculator. The consultant will support dissemination and sustainability planning by:

- Developing a user guide describing intended use cases, assumptions, and limitations.

- Providing suggestions for performance tracking metrics (e.g., usage analytics, institutional adoption).
- Providing recommendations for long-term sustainability, including potential updates, sponsorship considerations, or integration into broader ASH digital tools.
- Provide recommendations for scholarly dissemination through publications and presentations.

Deliverables for Task 5

- Summary of recommendations for dissemination and sustainability.

Proposal Requirements

Proposals should include the following components:

- Description of the consultant teams' relevant expertise in health economics, financial modeling, quality improvement, and digital tool development.
- Proposed technical approach to completing the tasks described above.
- Preliminary project timeline and milestone plan.
- Budget and budget justification.

Evaluation Criteria

Proposals will be evaluated based on:

- Demonstrated expertise in health financial modeling and ROI methodology.
- Experience developing user-friendly digital analytic tools.
- Clarity and feasibility of the proposed approach.
- Competitiveness of budget and timeline.
- Experience working with professional societies and clinical expert groups.

Intellectual Property and Use of Work Product

The calculator will be owned and hosted by ASH. The calculator and associated materials developed will be publicly accessible. ASH will retain rights to use, distribute, and adapt the work product for educational and quality improvement purposes. Academic use for non-

commercial scholarly activities and publications will be permitted with ASH approval and appropriate acknowledgment of ASH.

Anticipated Timeline

ASH anticipates issuing this RFP in May 2026, with project initiation shortly after selection. The project timeline is subject to final scope and contracting.

Submission Instructions

Proposals should be submitted in PDF format to:

Email: quality@hematology.org

Subject line : “RFP – SCD ROI Calculator”

Deadline for submission: June 25, 2026, 5:00PM ET

Vendors may submit clarification questions until June 12, 2026, 5:00PM ET