



Iron Deficiency

2026 Strategic Blueprint

<https://www.hematology.org/iron-deficiency-initiative>

This blueprint summarizes the outcomes of the ASH Iron Deficiency Summit, a one-day cross-disciplinary, multi-stakeholder summit held in September 2025, and defines a focused workplan to reduce the burden of iron deficiency (ID) and iron-deficiency anemia (IDA).

Iron deficiency and iron-deficiency anemia are among the most prevalent yet neglected global health problems.

ID occurs when the body lacks sufficient iron to maintain normal physiological function, while IDA develops when depleted iron stores impair red blood cell production. Together, these conditions affect an estimated 2 billion and 1.24 billion people worldwide, respectively.



**About 1 in 4
are affected by
iron deficiency**

Underdiagnosis and undertreatment compromise energy, cognition, physical health, pregnancy outcomes, and survival. **Anemia alone is associated with an estimated annual global economic cost of \$275 billion.**



**More than 1 in 7
are affected by
iron-deficiency anemia**

The burden falls disproportionately on women, children, individuals with chronic disease, those in low-resource settings, and socially vulnerable populations. IDA is the leading cause of years lived with disability among women globally.

Up to 30% of premenopausal women are iron deficient, with even higher prevalence (37%) in pregnancy.*

**The estimated prevalence of iron deficiency varies according to the ferritin threshold used to define deficiency.*

This initiative focuses on populations with high vulnerability, which will be early priorities for screening, education, and policy proposals.

These populations include:

- Premature or low birth weight infants, toddlers, and preschool children
- Menstruating adolescents and women, especially with heavy menstrual bleeding
- Pregnant individuals, particularly with co-morbid conditions
- Hospitalized and institutionalized patients, including those in long-term care or correctional settings
- People with food insecurity (e.g., refugees, recent migrants)
- Individuals with bleeding disorders, chronic liver, kidney, rheumatologic, or cardiac disease, inflammatory bowel disease, autoimmune gastritis, celiac disease, or malabsorption, as well as those receiving antithrombotic therapy or at risk for malaria
- Post bariatric surgery patients
- Older adults, especially perioperative patients



Additional populations affected include individuals with restrictive diets, regular blood donors, and endurance athletes.

Despite being easy to diagnose and treat, progress on ID/IDA has stalled for 25 years.

Drivers of stalled progress include:



- Lack of sustained ownership and leadership
- Fragmented understanding of prevalence and impact
- Inconsistent diagnostic thresholds and practices
- Limited awareness of best practices and inequitable access to care
- Significant evidence gaps that impede guideline and policy progress

Our Vision

ASH's ambition is to convene a multi-sector consortium (professional societies, clinicians, patients, laboratories, regulators, payers, and industry) to drive collective action on ID/IDA. The consortium would coordinate education, implementation, research, and advocacy anchored to measurable outcomes and shared accountability.

Three Overarching Priorities

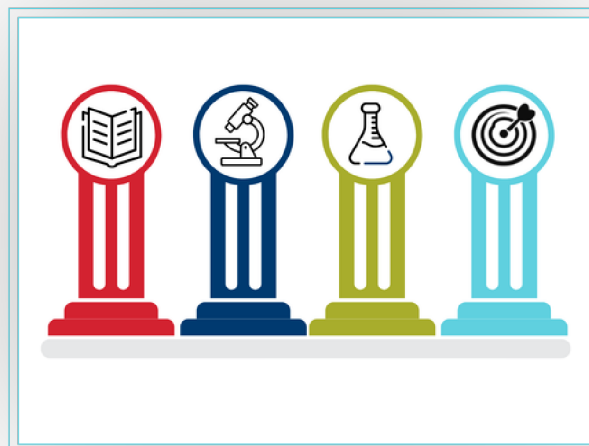
The blueprint is guided by the following priorities:

1. Comprehensive, evidence-based education on recognition, diagnosis, and management of ID/IDA for clinicians, systems, and the public
2. Implementation of clinical protocols and policies that expand equitable access to accurate screening and evidence-based care
3. A coordinated research and policy agenda to identify and close critical knowledge and practice gaps

Four Strategic Pillars and Workstreams

Recommended actions in support of the priorities have been organized into four workstreams, detailed on the following pages:

- Education, training, and awareness
- Diagnosis and care delivery
- Research, evidence, and innovation
- Accountability and impact





Education, Training, and Awareness

Goals: Elevate ID/IDA in clinical practice, professional education, and public discourse; empower healthcare professionals to provide, and patients to access, appropriate care.

Health Systems and Clinician Education

- Broad dissemination of ASH ID/IDA diagnosis and treatment guidelines and related quality measures
- Practical educational resources and toolkits (e.g., summaries, checklists, order set examples) to support guideline implementation at the institutional level
- A concise clinical algorithm highlighting decision points, management pathways, and expected outcomes
- Content tailored for high-risk subpopulations, with explicit attention to equity and access

Professional Society Engagement

- Scientific and educational sessions on ID/IDA at society meetings, including specialty-specific sessions (e.g., OB/GYN protocols incorporating ferritin testing and postpartum screening)
- Companion commentaries and perspectives in relevant journals to promote multidisciplinary awareness and collaboration
- Proposals to integrate ID/IDA topics into board certification preparation, question banks, and certification assessments where appropriate

Multidisciplinary Professional Education

- Core content on prevalence, impact, diagnosis, and management of ID/IDA for multiple specialties
- Education on the strengths and limitations of diagnostic tools and management approaches, including indications, safety, and efficacy of IV and total dose iron infusion
- Guidance on referral pathways for preoperative anemia screening
- Resources specifically designed for community-based providers to support screening, diagnosis, and management in primary care and other frontline settings

Public and Patient-Facing Education

- Educational materials for patients and advocacy organizations explaining ID/IDA, diagnosis, and treatment options in accessible language
- Self-advocacy tools to help individuals discuss symptoms, screening, and treatment choices with their clinicians, with an emphasis on “heavy menstrual bleeding” definitions and examples
- Guidance to recognize signs and symptoms, request appropriate tests, and understand results with plain-language explanations of lab results for patient portals to support shared decision-making
- A public awareness campaign featuring patients’ stories, emphasizing the impacts of delayed diagnosis and normalization of heavy menstrual bleeding, that engages social media influencers and menstrual product manufacturers
- Support and promotion of an ID/IDA Awareness Day

“It started when I was 16. My OB-GYN said that I had low iron. Since then, it's sort of been an ongoing battle. Some doctors paid a little bit of attention. Most doctors did not. That's when I realized I really needed to be my own advocate.

I finally feel like what I'm supposed to feel like, what I could have been feeling all of this time.”



Nija Phelps
*Iron Deficiency Patient
Representative*



Diagnosis and Care Delivery

Goal: Standardize and simplify pathways from suspicion to diagnosis to treatment, with a focus on high-risk groups and equitable access.

Screening

- Standardized screening practices across specialties and regulators, including universal laboratory screening of women, girls, and menstruating individuals
- Ferritin included as a standard component of initial prenatal labs regardless of hemoglobin level
- Pre-visit questionnaires and structured assessments capturing menstrual bleeding, other sources of blood loss, and ID symptoms
- Harmonized lab reporting for ferritin with tiered interpretation ranges (deficient/insufficient/sufficient/normal), brief interpretive comments endorsed by specialty societies, and embedded links to educational resources to address gaps in ferritin assay methodologies on cutoffs for diagnosis
- Defined criteria for expanded screening in high-risk subgroups based on systematic risk assessment
- An assessment of the risk and impact of overutilization of diagnostic tests
- Practical tools for clinicians and patients to select and interpret appropriate diagnostic tests
- Tools and processes to increase ID screening in specialty clinics (e.g., maternal-fetal medicine, GI, bariatric surgery)

Access to Treatment

Advocacy for policy and payment changes to improve access to affordable IV iron, including:

- Sufficient infusion center capacity and consideration for safe and effective approaches for in-home IV iron
- Improved reimbursement and streamlined prior authorization
- Patient assistance programs and robust Medicaid/insurance coverage
- Telehealth and e-consults to expand specialist input

Care Coordination and Workflow

- Coordinated care pathways among hematology, primary care, OB/GYN, and infusion centers with clear roles for follow-up and monitoring
- Triage pathways that enable advanced practice providers and primary care to manage uncomplicated ID in collaboration with infusion services
- Partnerships with EMR vendors, labs, and industry to build standardized order sets, documentation templates, protocols, and decision support tools
- Harmonized assay choice and reference ranges across systems
- Automated clinical prompts for diagnosis and treatment
- Longitudinal tracking of ID/IDA using structured data and ICD-10 coding

Quality Measures and Policy Advocacy

- Advocacy for adoption and alignment of quality measures through the Centers for Medicare and Medicaid Services (CMS) and partnership with state health departments

Donor Safety and Blood Supply

- Policy and regulatory changes allowing blood centers to routinely recommend iron supplementation as a non-clinical intervention for frequent donors, reducing ID while maintaining a strong blood supply

“Most patients with iron deficiency may not even know they have iron deficiency because they've never been tested, or they have been tested and their results have not been interpreted in the correct manner.”



Sarah O'Brien, MD
Co-Chair, ASH Iron Deficiency Working Group



Research, Evidence, and Innovation

Goal: Close priority evidence gaps that limit guideline strength, implementation, and policy advocacy.

Key Research Domains

- Adherence to oral iron therapy and strategies to improve it
- Optimal treatment response measures and time to repletion
- Clinical outcomes, quality of life, and patient-reported outcomes, including neurocognitive and mental health effects
- Patient education on dosing frequency and timing relative to food, drugs, and side effect management
- Symptom burden (e.g., pica) and its impact
- Maternal and infant outcomes, including NICU admission in relation to ID treatment in pregnancy
- Comparative effectiveness analysis of the strengths and limitations of diagnostic tools and platforms for ferritin and other tests related to the workup for iron deficiency
- Comparative effectiveness of oral vs IV iron (across formulations) in diverse populations
- Assessment of the risk and impact of overutilization of diagnostic tests
- Decision science, economic feasibility, and health state utility values for ID/IDA in high- and low/middle-income settings



Research Agenda and Funding Mechanisms

- A focused research agenda for ID/IDA
- Dedicated RFPs (e.g., via the ASH Treating Fairly Award, co-sponsored with industry) to stimulate work on highest-impact questions

Data Infrastructure and Technology

- Development and validation of point-of-care ferritin testing, including ability to detect inflammation as well as cost effectiveness studies to expand diagnostic access

Specialty-Specific Guidance

Potential advocacy for relevant societies to develop guidelines and statements on:

- Iron screening in abnormal uterine bleeding and heavy menstrual bleeding
- Thresholds for endoscopy/colonoscopy in reproductive-age women
- Use of IV iron instead of blood transfusion in hemodynamically stable emergency department patients with anemia

"Iron plays a role all throughout your body; it's in your muscles, it's a required co-factor to make serotonin and dopamine. There's definitely associations with iron deficiency and mood disorders, as well as other neurocognitive issues."



Angela Weyand, MD
Co-Chair, ASH Iron Deficiency Working Group



Accountability and Impact

Proposed Impact Metrics

These metrics provide a framework for tracking progress and evaluating impact of efforts to reduce the burden of iron deficiency and iron-deficiency anemia.

Domain	Example Metrics
Public awareness	Population-level understanding of ID/IDA; confidence in self-advocacy
Provider capacity	Provider proficiency and confidence in ID/IDA diagnosis and management; training rates among healthcare providers
Screening	Screening rates among high-risk populations; availability of point-of-care ferritin testing; community testing sites
Treatment access	Time from diagnosis to treatment; rates of IV and oral iron use; referrals to infusion centers; time to iron repletion
Care delivery	Adoption of ID/IDA guidelines and algorithms; harmonized lab protocols; longitudinal tracking; EMR order set use
Policy and coverage	Utilization of insurance coverage and assistance programs for IV iron; transparent prior authorization
Research	Research funding; closure of priority evidence gaps
Blood donors	Sustained/increased donation rates with reduced ID incidence among frequent donors



Limitations and Future Scope

This blueprint focuses on strategies applicable to high-resource healthcare systems (North America and Europe). A subsequent phase will develop recommendations for low- and middle-resource settings.

“Hopefully we will move the needle on a more proactive method of identifying iron deficiency with routine screening, which is long, long overdue.”



Michael Auerbach, MD, FACP
Georgetown University School of Medicine

Actionable Items Summary

The following actionable items provide a roadmap for implementing the blueprint's priorities.

Immediate (Year 1)

- Publish and broadly disseminate ASH clinical practice guidelines for ID/IDA diagnosis
- Develop and release clinician toolkits and clinical algorithms supporting guideline implementation
- Launch a public awareness campaign with patients' stories and social media outreach
- Propose inclusion of ferritin testing in standard prenatal lab panels via ACOG collaboration (if not already done)
- Initiate harmonized laboratory reporting standards for ferritin with tiered interpretation ranges

Near-Term (Years 1-3)

- Deliver multi-disciplinary educational content across specialty society meetings and journals
- Develop and distribute patient self-advocacy tools and plain-language test-result resources
- Partner with EMR vendors to build standardized order sets and clinical decision support for ID/IDA
- Advocate for CMS adoption of ID/IDA quality measures
- Publish RFPs for priority research areas through the ASH Treating Fairly Award
- Propose ID/IDA topics for specialty board certification materials

Medium-Term (Years 2-5)

- Expand care access through policy advocacy for IV iron reimbursement, home infusions, and prior authorization reform
- Establish an iron treatment registry and data-sharing consortium
- Support development and validation of a point-of-care ferritin test
- Develop specialty-specific guidelines (AUB/HMB screening, endoscopy thresholds, ER IV iron use)
- Promote cost-effectiveness and comparative effectiveness research across diverse subpopulations
- Enable blood donation centers to recommend iron supplementation to donors



Conclusion

Those affected by ID and IDA live in a persistent state of deficit, not because the problem or its solution is unknown, but because global systems have failed to prioritize their needs. This is more than a clinical gap; it is a profound inequity in whose health is prioritized and whose care is deferred or neglected. ASH is resolute: it is time to disrupt the status quo, dismantle outdated frameworks, and demand overdue change.

ASH intends to pursue the full set of strategies and activities outlined in this blueprint as funding becomes available and will actively and continuously seek financial support from all appropriate and feasible sources to make this work possible.

Our patients are not simply “tired,” they are being systemically denied the health, dignity, and opportunity they deserve, and they are depending on us.

Acknowledgements

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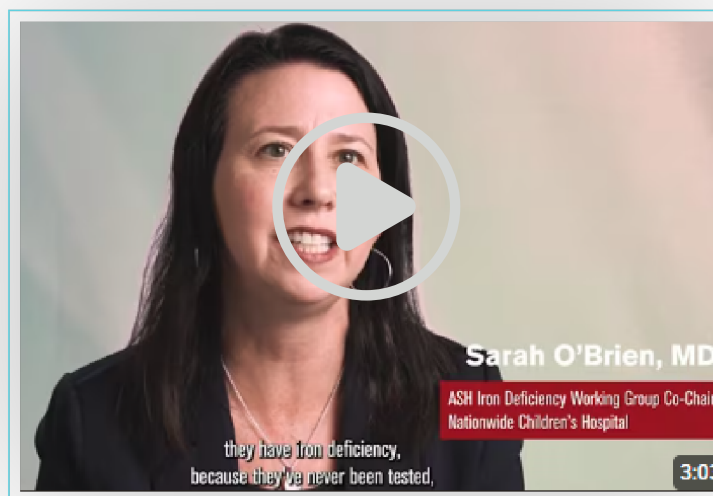
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