Closing the gap: A collaborative approach to IFT-HIP communication for timely home parenteral nutrition related interventions

Laryssa Grguric MS, RD, LDN, CNSC [1]; Hilary Catron, MS, RD, LMNT [2];
Crystal Wilkinson, PharmD [1]; Elena Stoyanova, MSN, RN [1]

[1] Nutrishare, LLC [2] Nebraska Medicine

BACKGROUND

- Home parenteral nutrition (HPN) management requires timely, coordinated communication between intestinal failure teams (IFTs) and home infusion pharmacies (HIPs).
- Fragmented communication and inconsistent processes between care teams may delay HPN-related interventions and contribute to variability in clinical response times.
- Optimizing IFT–HIP collaboration may improve the timeliness and reliability of HPN-related interventions.

Collaborative Care Model:

- The IFT and HIP utilize a structured patient management approach that includes:
  - — Shared electronic medical record (EMR) access
  - — Ongoing interdisciplinary communication
  - — Regular patient case review

PURPOSE

This project evaluated the impact of structured collaboration between an IFT and a HIP on the timeliness of HPN-related clinical interventions.

METHODS

Design:

- Retrospective EMR review conducted between January 1 and September 30, 2025, as part of the HIP quality assurance program.
- The workflow for laboratory review and HPN prescription revisions involving the HIP and IFT is shown in Figure 1.

Population:

- 29 pediatric and adult HPN patients managed by the IFT

Data Collected:

Patient characteristics (Table 1)

Turnaround time for HPN prescription revisions (electrolyte adjustments) based on laboratory results (Table 2), including:

- Time from lab draw to prescription adjustment (including laboratory processing time)
- Time from lab result to prescription adjustment

HPN prescription revisions (Table 3), including:

- Total number of prescription revisions
- Types of revisions

Definitions:

- HPN-related intervention: Macronutrient or micronutrient adjustment based on laboratory results or clinical assessment
- Miscellaneous prescription revisions: Modifications such as changes in infusion duration, number of infusion days, or addition of medication(s) to HPN (e.g., H2 antagonists)

Additional Notes:

- Two patients were weaned from HPN to IV fluids
- One patient was excluded following central venous catheter removal

DISCUSSION

- Structured collaboration between the IFT and HIP facilitated timely HPN prescription revisions following laboratory review.
- Most interventions occurred within two days of laboratory draw and frequently on the same day results became available.
- Delays in prescription revisions were primarily attributable to laboratory processing times and operational constraints (e.g., weekends, business hours), rather than breakdowns in communication.
- The frequency of HPN prescription revisions (Table 3) reflects the dynamic nature of HPN management.
- Electrolyte adjustments accounted for the majority of interventions.

CONCLUSION

- In this retrospective descriptive study conducted as part of a quality assurance program, coordinated management between the IFT and HIP resulted in an average 2-day turnaround from laboratory draw to HPN prescription adjustment.
- Structured collaboration facilitated timely and consistent HPN-related interventions through shared documentation and frequent interdisciplinary communication.
- These findings highlight the value of coordinated, team-based care models in the management of patients receiving outpatient HPN.
- Future research should evaluate whether collaborative models are associated with reductions in CLABSI, hospitalizations, and long-term complications.

TABLE 1

Patient Characteristics (n=29)	
Age (Years, Months) (median, range)	24y, 7m (0y, 8m–70y, 10m)
Adult patients, (n, %)	21 (72.4%)
Pediatric patients, (n, %)	8 (27.6%)
Weight (kg) (median, range)	49.1 (6.9–70.0)
BMI (kg/m²) (median, range)	20.8 (15.0–28.0)

TABLE 2

Turnaround Time for HPN Prescription Revisions: Electrolyte Adjustment Based on Laboratory Values	
Time from lab draw to prescription revision, days (mean, range)	2 (0-6)
Time from lab result to prescription revision, days (mean, range)	0 (0-3)
Median time from lab result to prescription revision, days	0
Interventions completed ≤1 day from lab result (n, %)	49 (90%)

TABLE 3

HPN Prescription Revisions	
Total HPN Changes (n)	152
Revisions per patient (mean)	5.2
Pediatric, n=8	
Total Revisions	42 (5.3 per patient)
Adult, n=21	
Total Revisions	110 (5.2 per patient)
Type of Revisions (n, %)	
Electrolyte	66 (43%)
Macronutrient	44 (29%)
Miscellaneous	42 (28%)

FIGURE 1. Workflow of Laboratory Review and HPN Prescription Revisions

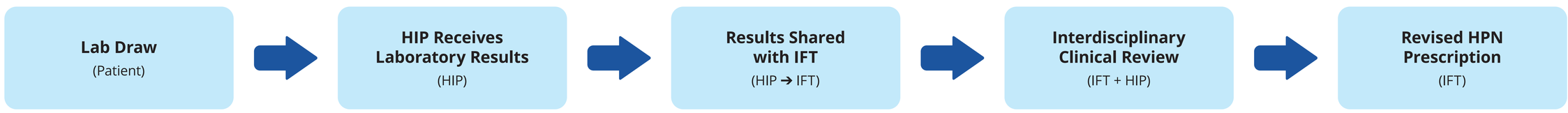

Figure 1. Workflow of laboratory review and HPN prescription revision. Laboratory values are received by the HIP, shared with the IFT, and followed by interdisciplinary clinical review leading to prescription adjustment.

Disclosures: No disclosures