

Home Care Dietitian Intervention Effectiveness in Reported Enteral Nutrition Intolerance

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Introduction

Many patients are sent home from the hospital with no additional enteral nutrition support. A portion of these discharged patients poorly tolerate their enteral feeds or have not yet reached their goal rate to test tolerance. The home care Registered Dietitian is a healthcare professional who addresses enteral nutrition intolerance and associated patient questions. Intolerance to enteral nutrition may change a patient's outlook and compliance with their home enteral nutrition regimen. Identifying and effectively addressing intolerance will increase a patient's compliance and improve nutrition outcomes. This review was completed to evaluate the efficacy of the home care Registered Dietitian's (RD) recommendations in addressing reported enteral nutrition intolerances.

Methods

A retrospective review was completed of the adult patient population of a nationwide home infusion company with service initiated over a four month period. Adult patient records were reviewed that reported enteral nutrition intolerance within 48 hours of the start of care and RD interventions were made. Patients were excluded if they were lost to follow up due to death, hospice, no returned calls or community RD involvement. The new start assessment was used to identify patients with reported intolerances. The 30- and 60-day follow up notes were reviewed to determine the effectiveness of the RD's intervention. Those interventions included education of proper feeding technique, formula changes, method of administration changes and changes to feeding schedules.

Results

Our study results are summarized to illustrate the nature and incidence of the reported intolerance, the RD intervention strategy, and the evaluation of the improvement reported after RD intervention was implemented.

Figure 1: Incidence Count of Reported Intolerance

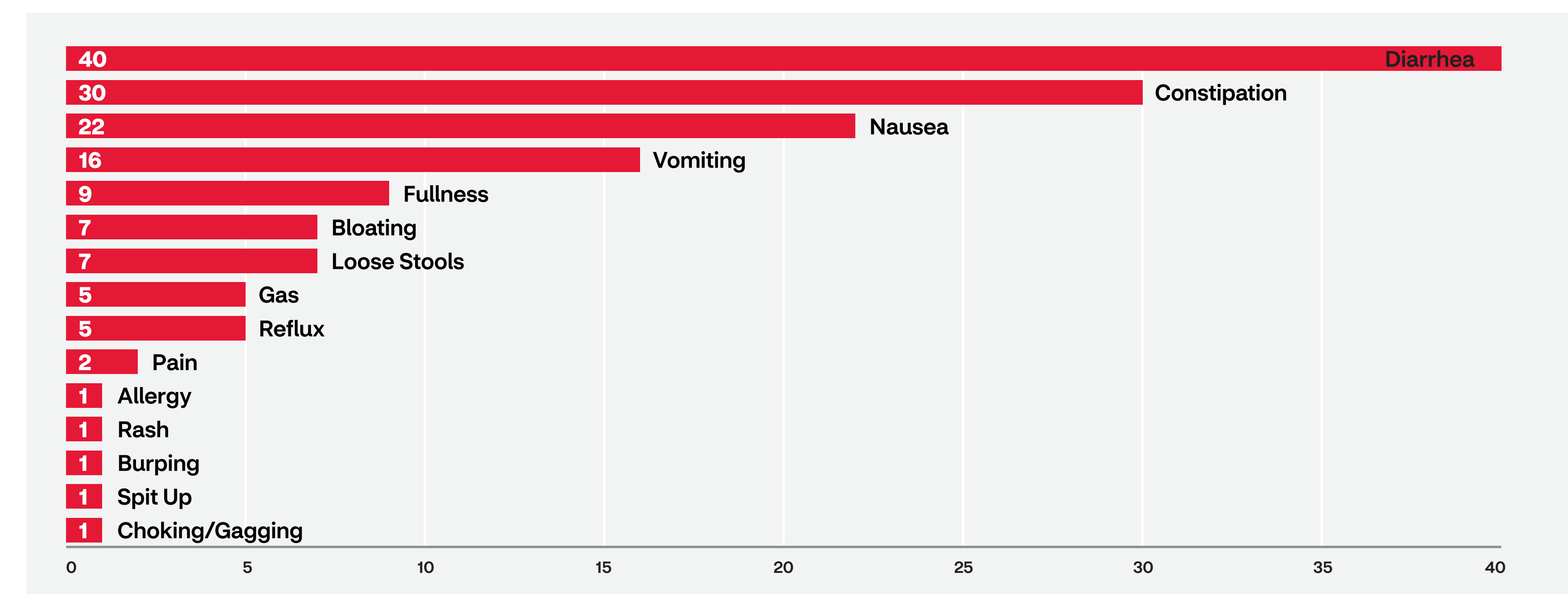


Figure 2: Examples of Registered Dietitian Intervention

Clinical Strategy by Intolerance Type				
Diarrhea	Constipation	Vomiting	Fullness	Bloating
<ul style="list-style-type: none"> Reduced Infusion Speed Increased or Decreased Fiber Intake Suggested C-diff Testing 	<ul style="list-style-type: none"> Increased or Decreased Fiber Intake Increased Water Suggested Prune Juice or Stool Softener 	<ul style="list-style-type: none"> Encouraged Compliance to Antiemetic Meds Reduced Pump Rate Recommended Lower Osmolality Formula 	<ul style="list-style-type: none"> Reassessed Nutrition Needs via Tube Adjusted Hydration Schedule Recommended a More Calorically Dense Formula 	<ul style="list-style-type: none"> Recommended Venting Tube Decreased Fiber Intake Reduced Infusion Speed

Figure 3: Intervention Effectiveness at 30-Day Follow Up

100% of intolerance was resolved by day 30 for patients with complaints of gas, pain, allergy, rash, burping, spit up, and choking/gagging. Loose stools were the most unresolved intolerance at 30-day follow up, with 43% of patients still complaining of loose stools. Overall, 72% of all patients with reported intolerance reported resolution of their intolerance at 30-day follow up.

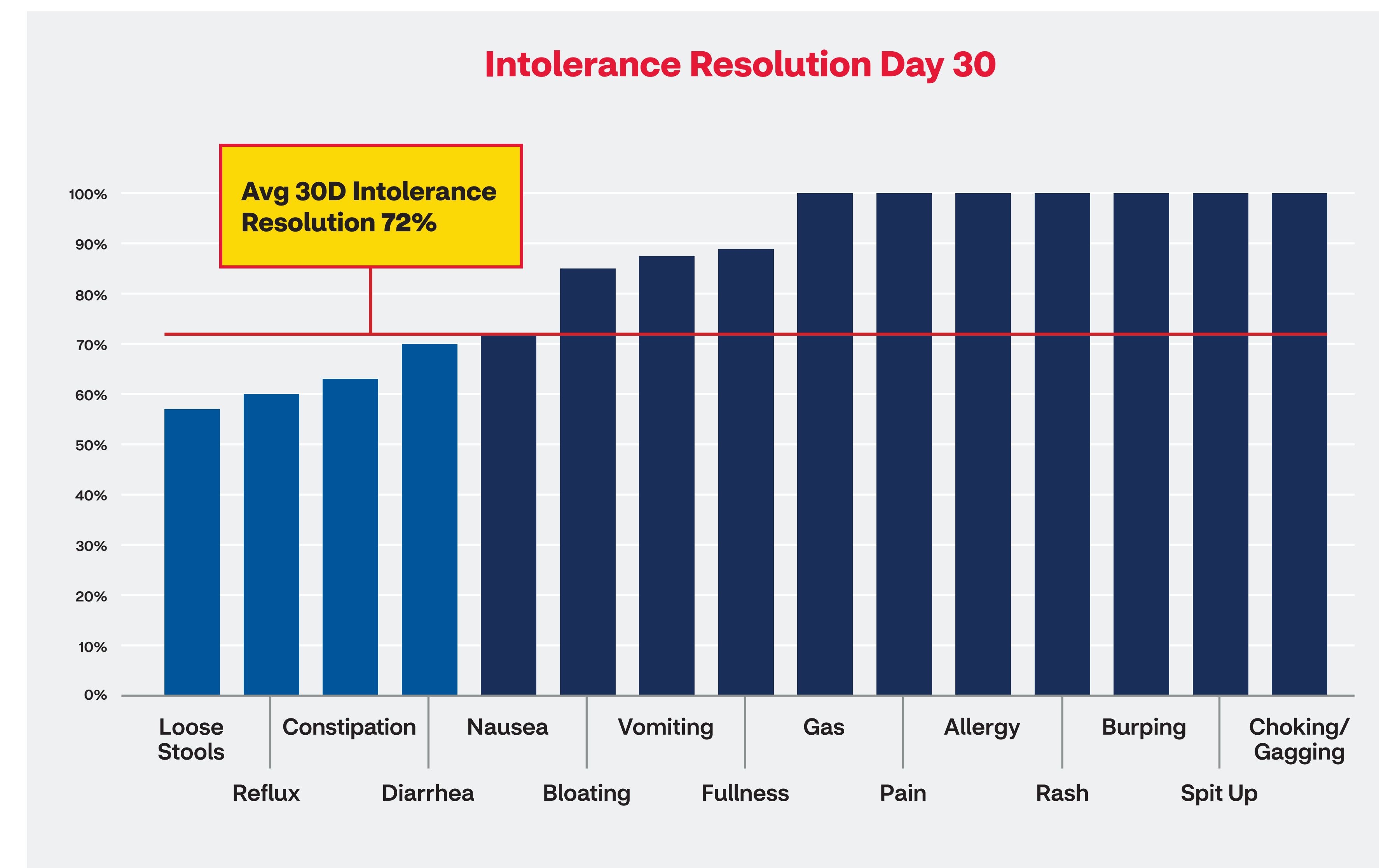
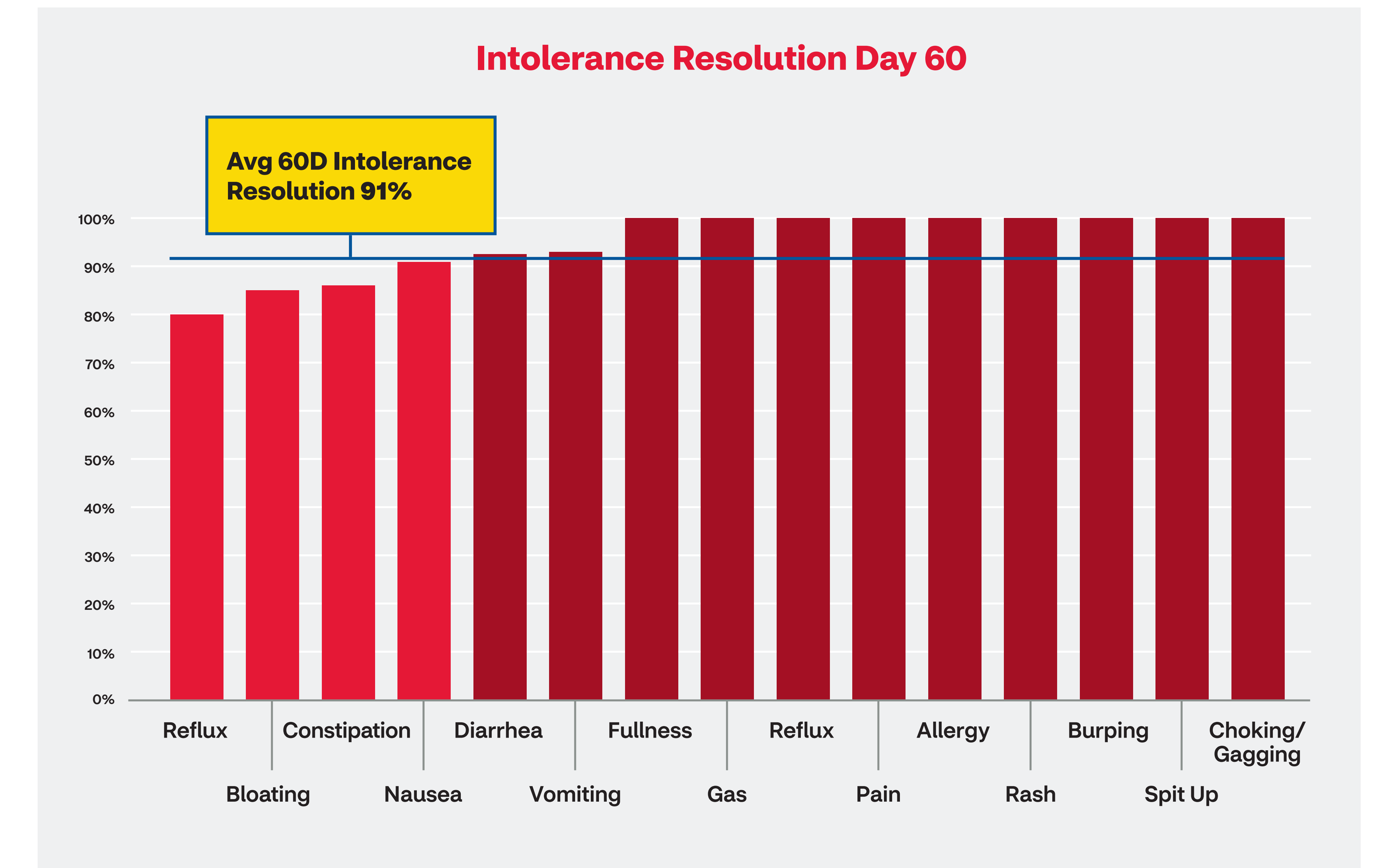


Figure 4: Intervention Effectiveness at 60-Day Follow Up

91% of all patients reported resolution of their intolerance by day 60. Patients that continued to report intolerance included: 20% with reflux, 15% with bloating, 14% with constipation, 9.1% with nausea, 7.5% with diarrhea and 7% with vomiting.



Conclusion

This retrospective review supported the role of the home care RD for intervention of enteral intolerance, with intervention effective for 72% of patients by day 30 and 91% of patients by day 60. The limitations of the study included that the intolerance was self-reported and subjective to each patient and the RDs evaluation of that patient's symptoms, as well as some patients who reported intolerance had inconclusive follow up. Without appropriate intervention by a home care RD skilled in enteral nutrition, patients may be at risk for poor nutrition outcomes such as gastrointestinal intolerance, underfeeding, weight loss or malnutrition. Therefore, further evaluation is warranted to determine how many home care patients have access to a home care RD competent in the assessment and intervention of enteral nutrition intolerance.