

A Two-Year Assessment of Home Infusion Patient Satisfaction

Danell Haines, PhD ^{1,2} Ryan Garst, PharmD, MBA, BCSCP¹ Connie Sullivan BSPharm¹

1. National Home Infusion Association, Alexandria Virginia; 2. D.J Haines Research Consulting, Columbus, Ohio

INTRODUCTION

In 2017, the National Home Infusion Foundation (NHIF) developed and validated the Uniform Patient Satisfaction Survey for Home Infusion Providers¹ (see Exhibit 1). From quarterly data collections, annual patient satisfaction benchmarks were determined and shared industry wide. To date, 2 years of patient satisfaction data has been collected from participants in the benchmarking program. To determine data trends, a comparison of 2019 and 2020 data was completed. Cross tabulations were performed by age group and therapy category. Since anti-infective patients account for almost half of home and specialty infusion patients, their results are highlighted in this abstract and was cross tabulated by "overall patient satisfaction" to describe this patient population.

PURPOSE

The purpose was to review and analyze 2 years of home infusion patient satisfaction data and understand how patients perceive their home infusion services.

METHODS

Two years of quarterly patient satisfaction data has been collected, benchmarked, and reported. The next step was publishing the 2020 benchmarks and compare 2019 and 2020 annual results. With the majority of home infusion patients receiving anti-infective therapy, additional analysis was conducted on this subcategory. "Overall Patient Satisfaction" (Q11) data was cross tabulated with "Age Group (0-64 and 65+)" and "Patient Status (Active versus Discharge)" was performed using Chi-square analysis. The large data sets in 2019 (n=6,353) and 2020 (n=7,381) allowed for a multivariable analysis.

RESULTS

The sample size of administered surveys in 2019 and 2020 was 32,921 and 36,129 respectively, with an average return rate of 19.3% and 20.43%. The survey question result in 7 composites which become benchmarks and the 2019 and 2020 data is reviewed in Exhibit 2 using top box results. Benchmarking results were reported as 7 composites which grouped questions by common themes. "Patient instructions" received the highest rating with 98.69% responding "yes" to their understanding of how to wash hands, self-administer infusions, and care for the IV access device. For the question, "I was satisfied with the overall quality of the services provided," 81.77% of patients in 2019 and 82.15% of patients in 2020 responded "strongly agree." Analysis revealed a statistically significant difference for overall satisfaction (Q11) between age groups 0-64 and 65+ (2019: p= .023, 2020: p= .001). Further investigation into this variable revealed that financial understanding (Q7) contribute to this result (see Exhibit 3). Anti-infective patient satisfaction top box percent is higher than what is shown in aggregate data (see Exhibits 4 and 5). Chi square analysis was conducted to determine if a significant difference (p≤ .05) existed between anti-infectives overall satisfaction by age group in 2019 and 2020 (Exhibit 6). Both groups were highly satisfied, but patients 0-64 were significantly more satisfied. Finally, when "active" and "discharged" patients are compared and little difference for "Overall satisfaction with the quality of services provided" (see Exhibit

Exhibit 1. NHIF Uniform Patient Satisfaction Survey for Home Infusion Providers

Q1. The home infusion pump was clean when it was delivered.
Q2. The home infusion pump worked properly.
Q3. The home infusion medications and supplies arrived before I needed them.
Q4. I knew who to call if I needed help with my home infusion therapy.
Q5. The response I received to phone calls for help on weekends or during evening hours met my needs.
Q6. The home infusion nurse or pharmacist informed me of the possible side effects of the home infusion medication.
Q7. I understood the explanation of my financial responsibilities for home infusion therapy.
Q8a. The delivery staff was always courteous.
Q8b. The billing staff was always courteous.
Q8c. The pharmacy staff was always courteous.
Q8d. The nursing staff was always courteous.
Q9a. The delivery staff was always helpful.
Q9b. The billing staff was always helpful.
Q9c. The pharmacy staff was always helpful.
Q9d. The nursing staff was always helpful.
Q10a. I understood the instructions provided for how to wash my hands.
Q10b. I understood the instructions provided for how to give home infusion medication(s).
Q10c. I understood the instructions provided for how to care for the IV catheter.
Q10d. I understood the instructions provided for how to store the home infusion medication(s).
Q10e. I understood the instructions provided for how to use the home infusion pump.
Q11. I was satisfied with the overall quality of the services provided.
Q12. I would recommend this home infusion company to my family and friends.

Exhibit 2. 2019 and 2020 Industry Benchmarks for Home Infusion Patient Satisfaction

Composite Category	Survey Question(s)	2019 Results (n = 6,353)	2020 Results (n = 7,381)
1. Equipment and Supplies	1-3	95.28	95.50
2. General Communication	4-7	89.51	89.66
3. Staff Courtesy Questions	8a,b,c,d	92.59	93.35
4. Staff Helpfulness Questions	9a,b,c,d	91.48	92.21
5. Patient Instruction Questions	10a,b,c,d,e	98.36	98.69
6. Overall Satisfaction	11	81.77	82.15
7. Would Recommend	12	79.06	90.84

Exhibit 3. Comparison of 2019 and 2020 Scores for 0-64 and 65+ for Q7, Understanding of Financial Responsibility

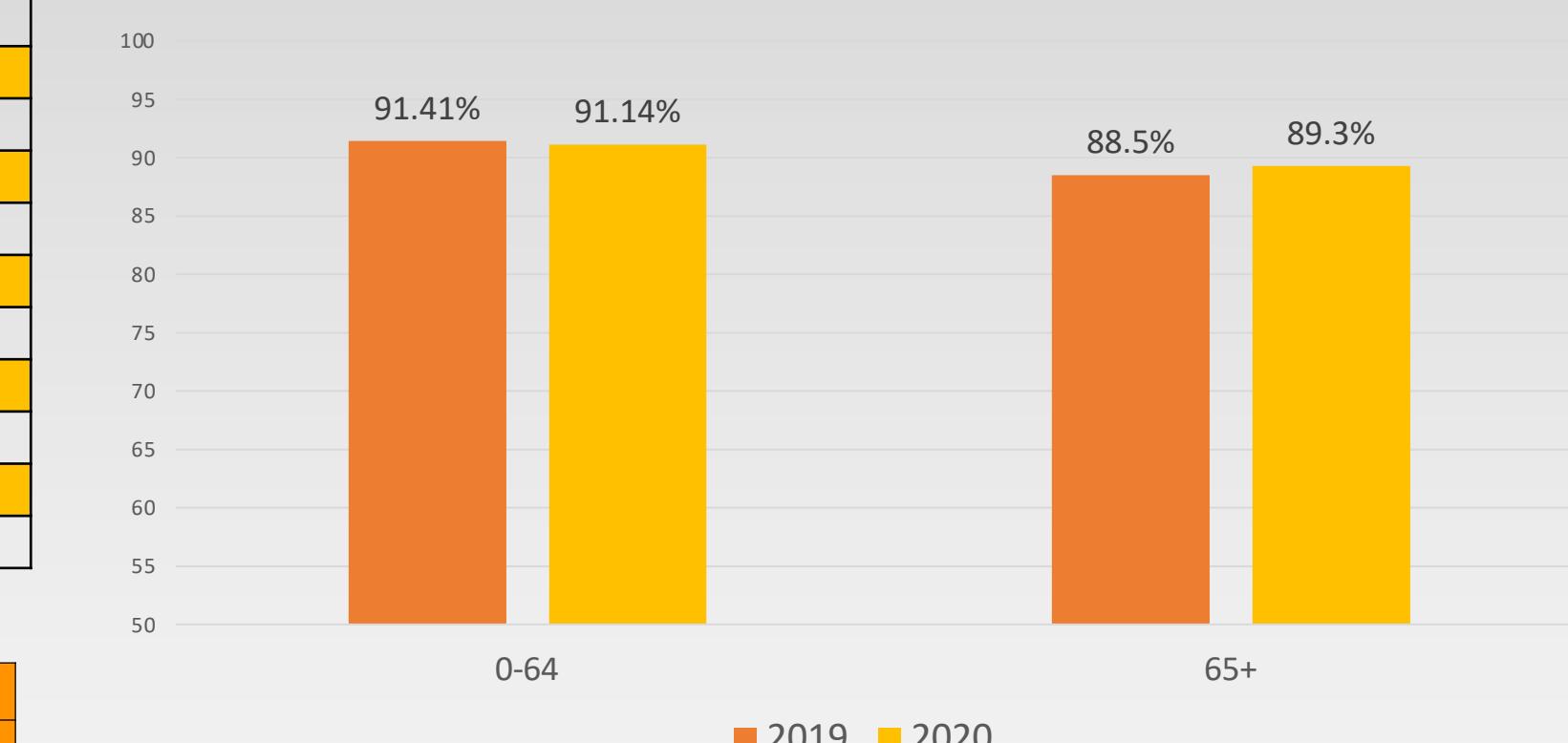


Exhibit 4. Anti-infective Patients: "Overall Satisfaction"

	2019	2020
	(n=1,874)	(n=3,683)
Top Box %	83.03%	83.16%

Exhibit 5. Comparison of Overall Patient Satisfaction: Anti-Infective versus All Patients (Strongly agree)

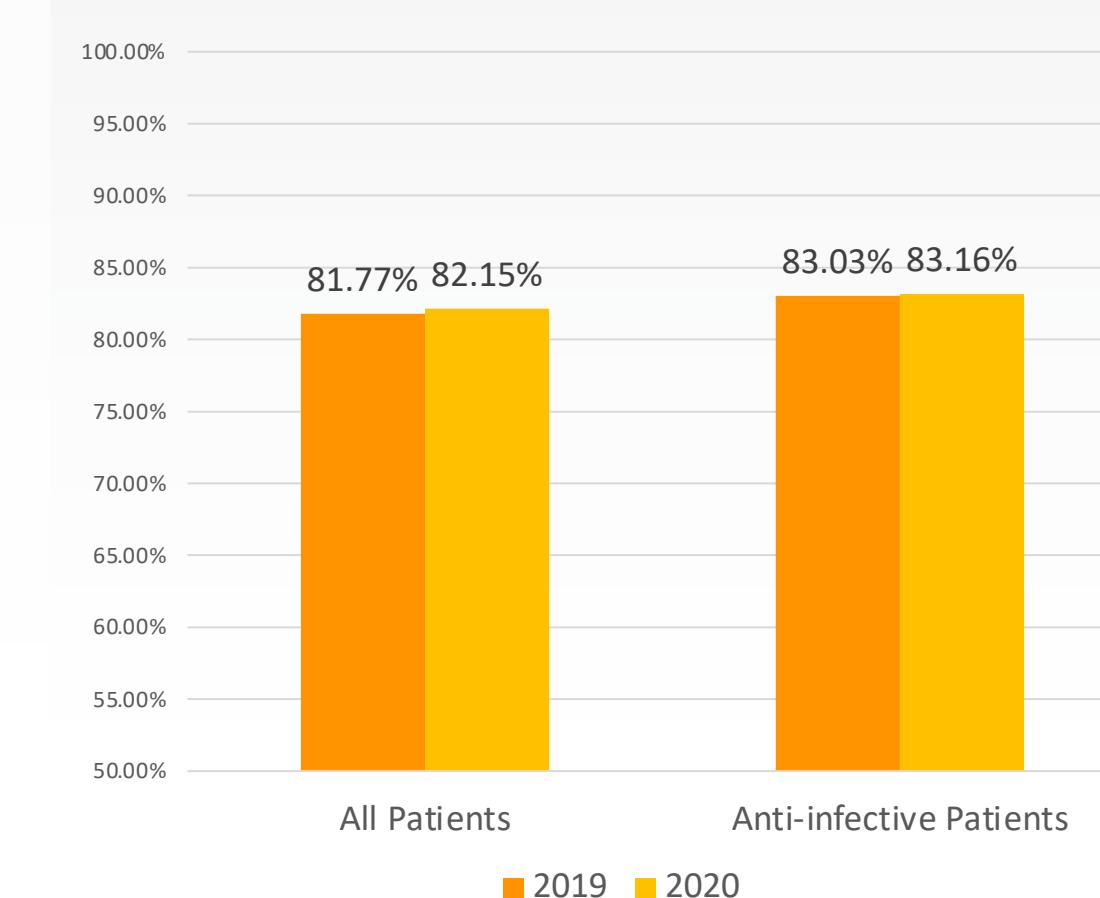


Exhibit 6. Anti-infective Patients: Age Group by "Overall Satisfaction with quality of services provided" (Strongly agree)

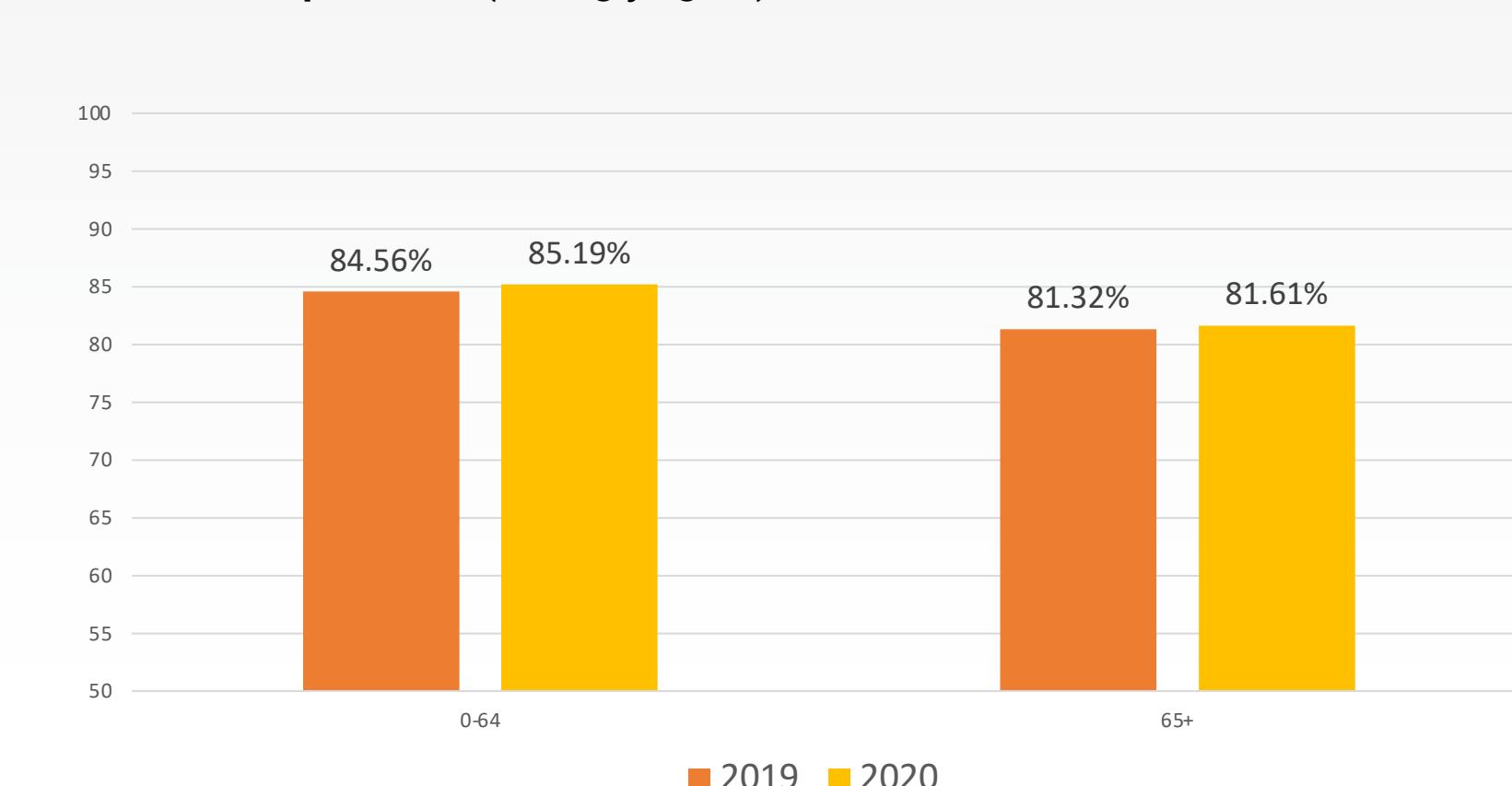


Exhibit 7. Anti-infective Patient Status (Active/Discharged) by "Overall satisfaction with services provided" (Strongly agree)

2019 Patient Status		2020 Patient Status	
Active	Discharged	Active	Discharged
82.48%	83.51%	82.44%	83.41%

DISCUSSION

The annual patient satisfaction survey data answers many questions about the home and specialty infusion industry through the eyes of patients.. Overall, the 2019 and 2020 annual data shows an industry-wide commitment to high quality care. Quality describes the patient experience, from the instructions that are given to patients by home infusion clinicians to the helpfulness and courteousness of the entire staff. The value of any benchmarking program is to allow for comparisons amongst external organizations.

CONCLUSIONS

Home infusion patients are very satisfied with their home infusion services. Despite high rates of satisfaction there are opportunities for providers to improve. For example, the financial benefits are more complex for patients over the age of 65. When comparing anti-infective patient age groups, the 0-64 was significantly more satisfied in both 2019 and 2020 with their home infusion services. Even though both age groups had high top box scores, additional research needs to be conducted to determine why the scores in the 65+ age group are lower . Industry-wide there is a high proportion of anti-infective patients, thus data analysis specific to this population was justified. When "Overall satisfaction with the quality of services provided" was cross tabulated by "Therapy Type," results showed the anti-infective patients were more satisfied in both 2019 and 2020 than the overall established benchmarks for those years.

ACKNOWLEDGEMENTS

NHIF would like to thank Strategic Healthcare Programs for their partnership in collecting and deidentifying the patient satisfaction survey data.

DISCLOSURES

NHIF received grant funding from Melinta Therapeutics and CSL Behring to support the patient satisfaction program in 2019.

REFERENCES

1. NHIF Uniform Patient Satisfaction Survey for Home Infusion Providers