

# Pilot Study: MaxPlus PharmaPack SP™

## A Summary of Findings

### The Challenge

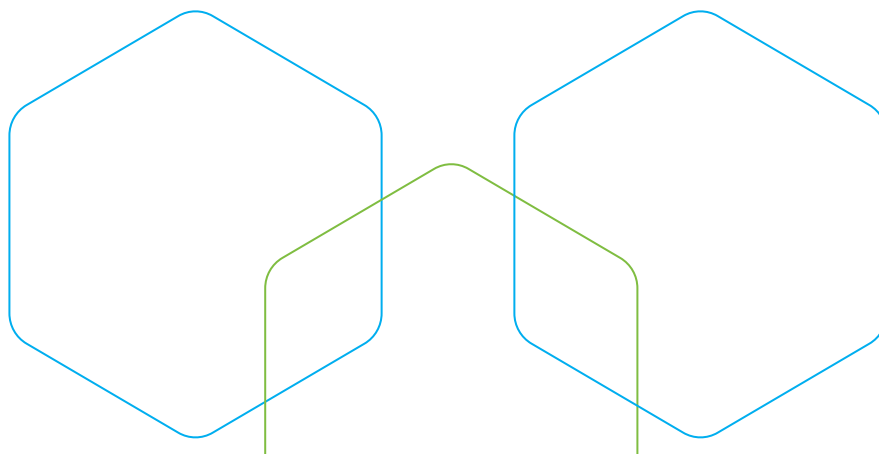
The trend toward direct-to-patient specialty medication delivery has been growing for several years, which has only been accelerated by COVID-19 restrictions. These medications are often biologics and must be kept within strict temperature ranges. For specialty pharmacies this has meant purchasing and storing bulky, expensive and single-use packaging solutions – cumbersome for both pharmacists and patients – and incurring increasing inbound and outbound freight costs, as well as negative environmental impact.

### The Solution

To help address these challenges, MaxQ designed a purpose-built thermal shipping system, with goals of making it:

- **As much as 50% lighter**
- **Up to 75% smaller**
- **Easier to store**
- **Returnable, reusable and recyclable**
- **Effective for all seasons**
- **URAC 4.0 compliant**

The result was the development of the MaxPlus PharmaPack SP shipper that met and exceeded the objectives.

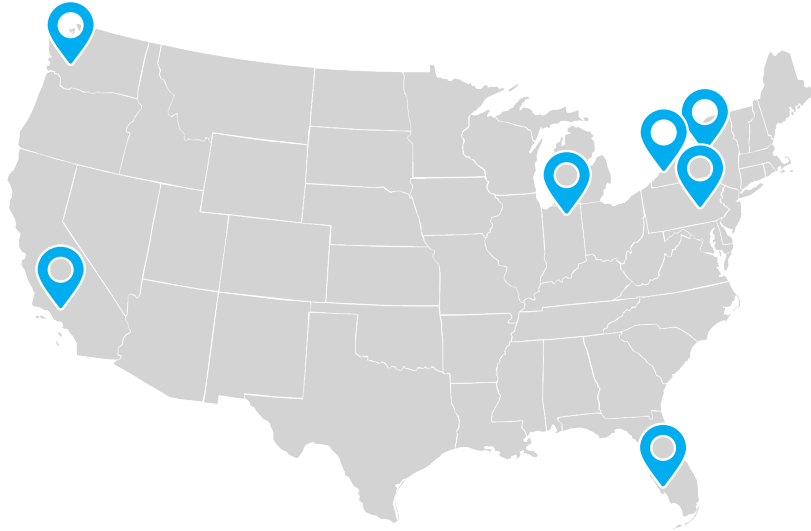


## The Pilot Study

To validate the efficacy of the packout, MaxQ conducted a pilot study with patients of specialty pharmacies strategically selected for their different climates and geography. **A total of 755 prototype MaxPlus PharmaPack SP systems were distributed to eight specialty pharmacies nationwide.**

Over an eight-week period, starting in late February 2022, pilot study participants used the MaxPlus PharmaPack SP for their refrigerated medication shipments.

- Rochester, NY
- Buffalo, NY
- Fort Wayne, IN
- Los Angeles, CA
- Vancouver, WA
- Fort Myers, FL
- Hershey, PA



**The MaxPlus PharmaPack SP is up to 75% smaller and 50% lighter than current specialty pharmacy logistics solutions**



## The Findings

Patient feedback was collected via an online survey, and pharmacies provided feedback to MaxQ by email and phone interviews.

### Specialty Pharmacy Feedback

#### Cost Savings

“Using the MaxQ packaging for 35 shipments, we have saved approximately 24% in shipping costs compared to our traditional coolers. This was for in state shipping and export shipping to all 50 states. The majority of our shipments are in state. If we only looked at our out of state shipments, our savings would be closer to 42%.”s

“When our current vendor ships us 1200 boxes it takes up 15 pallets on a truck. It looks like using the MaxPlus PharmaPack SP system it will only be three pallets. That is a cost savings as well as extra space in the pharmacy.”

#### Space Savings

“We can actually walk through our pharmacy now that there are not insulated boxes all over the place. We ship 40 boxes out per day and now that we tried the MaxPlus PharmaPack system we can fit all of them on a small desk to prepare for packout.”

#### Added Efficiency

“We don’t have to worry about bubble wrap or craft paper anymore. Just do the packout using the PCM’s and product and ship it.”

#### Temperature Assurance

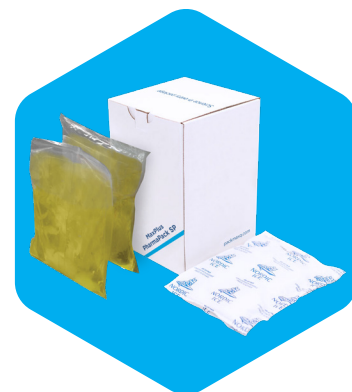
Many of the specialty pharmacy participants are required to conduct PQ (Performance Quality) testing bi-annually (twice yearly). In the past, it could take weeks or months to complete this testing. The MaxPlus PharmaPack SP was able to meet the necessary PQ tests in every trial on the first attempt.

“I could not believe it when we received the passing temperature data after only one attempt. I typically dread the time of year when we have to repeat this testing because it has taken us so long to get three passing results.”

#### Environmentally Friendly

While the pilot was focused on holding 2-8° C temperatures for up to 48 hours, a secondary finding was that the MaxPlus PharmaPack SP reduced insulation material going to landfills by up to 90%. That’s in part because MaxQ designed the system to maximize space. In addition to shrinking the size of the insulation materials to 1/4” in thickness, buffer materials – known pollutants typically used to keep frozen gel packs partitioned from the product and limit shifting during transit – were removed.

To encourage reuse over recycling, a pre-paid return label and a compostable bag was also included in every shipment – allowing patients to send various components of the shipper back after removing the drug product. This part of the program was well accepted by patients and pharmacies. Based on findings, plans are to build on the return and reuse aspect going forward.



## Patient Feedback

### What did you like best about the MaxPlus PharmaPack SP?

- Smaller size, 14%
- Reduced environmental impact, 36%
- Improved product protection, 0%
- All of the above, 43%

### Return and Reuse

100% of patients said they would send the shipper back to the specialty pharmacy if provided with a pre-printed return mailer bag.

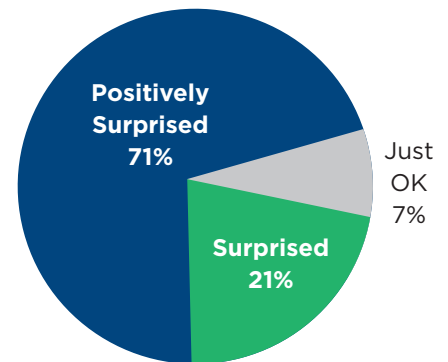
### Size and Weight

“This was the first time I could carry the box in from the front porch without help.”

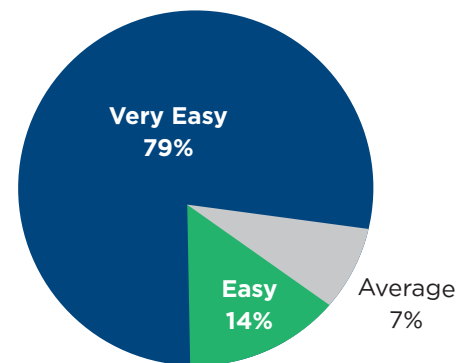
“I liked the smaller cooler, and especially that it can be recycled or reused.”

### Ease of accessing the medication in package

93% said they found the package easy to open.



**Overall impression of the PharmaPack SP package**



**Ease of accessing the medication in package**

