

# The Real-World Value of Medically Integrated Dispensing

## What is Medically Integrated Dispensing (MID)?<sup>1</sup>

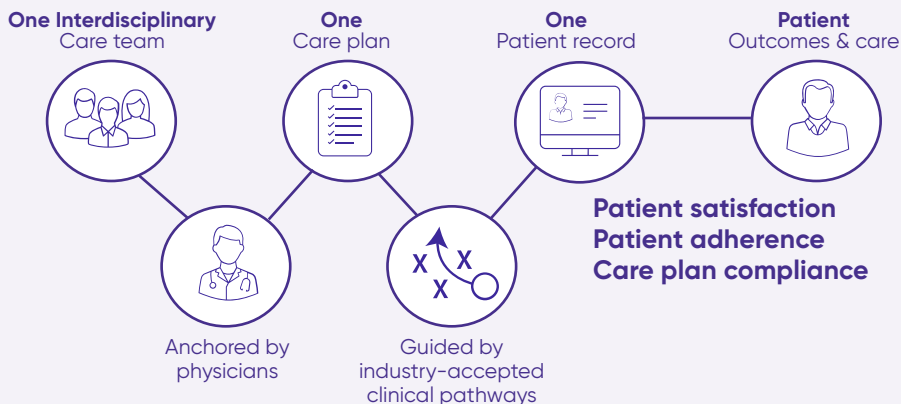
**Integration** of prescriptions by processing them at a primarily onsite physician dispensing practice in a healthcare system, such as an oncology clinic

**Dispensing** team has a holistic view of the health record to review patients' lab results and current and previous medications, verify insurance coverage, which allows **personalized follow-up**

**Direct communication** between prescribing physician and dispensing team via face-to-face interaction

## Medically Integrated Dispensing - Value<sup>2</sup>

True Integration of Pharmacy/Medical Care



## Who is Hematology-Oncology Associates of Central New York (HOA-CNY)?<sup>3</sup>



- Private practice established in 1982 with 4 locations in New York state
- Multi-disciplined staff of clinicians, nurse practitioners, physician assistants, pharmacists, physical therapists, radiology technicians, and social workers
- **Certified for quality by the American Society of Clinical Oncology, for quality, as an Oncology Medical Home, and as a Specialty Pharmacy with Oncology Distinction**

## Medical integration has been shown to improve quality of care and reduces costs for oncology, allowing for a proactive interaction between patients and the dispensing team

### Prescriber

- **Coordinated management** of patient with improved communication between prescriber and the dispensing team<sup>1,4,5</sup>
- For example, IntegratedRx – Oncology™ allows prescribers to communicate changes in the dosage or medication regimen through the electronic medical record, which can be viewed by the MID practice<sup>6</sup>

### Payer

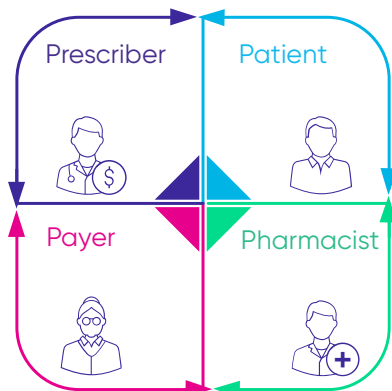
- MID's may help **reduce waste and avoid costs**<sup>9,10</sup>
- MID's do not use automated refill or autoship, as MID dispenses on current status of patient instead of previous fill<sup>11</sup>
- In-office dispensing of oral chemotherapy provided **>\$1,000,000 in cost avoidance** annually in a group of 5 outpatient cancer centers<sup>9</sup>

### Patient

- More **personalized follow-up** for patients, increasing patient satisfaction<sup>7</sup>
- **Better adherence**, which could lead to lower total healthcare, inpatient, and outpatient costs<sup>8</sup>
- Patient has **immediate access** to dispensing team which can coordinate medication changes
- Less overfilling of prescription leads to less confusion for managing excess medication


### Pharmacist/Dispensing Team

- Easier to respond to dose changes so the **most accurate dose and amount is filled**<sup>4,5</sup>
- MID allows **pharmacists to evaluate issues that could affect adherence**, such as adverse events reported by the patient, need for financial assistance, and ensuring patient's understanding of the treatment regimen<sup>4,5</sup>
- Use of integrated medical and pharmacy claims data may help pharmacists identify issues with adherence and **opportunities for intervention**<sup>12</sup>



1. Dillman MS et al. *JCO Oncol Pract*. 2020;16(6):344-347. 2. Doshi G. Medically integrated pharmacy quality initiatives in large multi-site oncology networks. ASCO Quality Care Symposium; Sept 6-7, 2019. 3. HOA-CNY. Accessed Feb 24, 2022. <https://www.hoacny.com/about> 4. Bonner L. *Pharmacy Today*. 2019;25(9):P31-P32. 5. Wimibiscus B, Doshi GK. Accessed Feb 24, 2022. <https://www.targetedonc.com/view/the-benefits-of-medically-integrated-dispensing-for-cancer-drugs> 6. AmerisourceBergen to now offer Prime Therapeutics' IntegratedRx – Oncology to eligible hospital, health system & oncology practice customers. News release. AmerisourceBergen; Accessed March 2, 2022. <https://www.amerisourcebergen.com/newsroom/press-releases/prime-therapeutics-integrated-rx> 7. Hanna K. Targeted Oncology. Accessed Feb 24, 2022. <https://www.targetedonc.com/view/ncoda-patient-surveys-support-the-need-for-medically-integrated-pharmacies> 8. Cutler RL, et al. *BMJ Open*. 2018;8:e016982. 9. Howard A et al. *J Oncol Pharm Pract*. 2019;25(7):1570-1575. 10. Hellemss SS et al. *J Manag Care Spec Pharm*. 2022;28(2):244-254. 11. Lester CA, Chui MA. *J Am Pharm Assoc* (2003). 2016;56(4):427-432. 12. Burke JP et al. Real-world analysis of C5 inhibitor administration characteristics, resource utilization and total cost of care among ravulizumab-treated PNH patients using integrated medical and pharmacy claims. AMCP Annual Meeting; March 30, 2022.

# A Real-World Patient-Focused Study: Medically Integrated Dispensing at HOA-CNY




**Study objective:** Demonstrate the value of medically integrating dispensing, specifically on adherence to orally administered oncolytic therapies for 3 cancer types




**Data source:** InfoDive Rx claims data merged with Medicare oral dispensing data from the HOA-CNY practice from July 2016–November 2020

**InfoDive®**



**Study design:** Retrospective study of patients aged ≥18 years receiving

- Ibrance (palbociclib) for breast cancer
- Imbruvica (ibrutinib) for chronic lymphocytic leukemia (CLL)
- Xtandi (enzalutamide) or Zytiga (abiraterone acetate) for prostate cancer

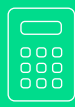


**We compared:**

**Medically integrated (MID):** Received all oral oncolytic therapies through HOA-CNY onsite integrated physician dispensing practice

**VS**

**Not medically integrated (Non-MID):** received ≥1 Rx for oral oncolytic therapy outside of HOA-CNY non-integrated physician dispensing practice




**Outcomes:**

**Adherence** was measured as adjusted medication possession ratio (MPR):

- MPR measures the number of days a patient has medication on hand; however, this can be skewed if the patient is obtaining early refills
- Adherence was measured over total follow up period for each drug among those with ≥2 prescriptions
  - Sensitivity analyses was conducted using up to 6 and 12 months of follow up

$$MPR = \left( \frac{\text{Sum of days' supply for all fills in period}^a}{\text{Number of days in period}} \right) \times 100\%$$

<sup>a</sup>Sum of days' supply was adjusted to not exceed the number of days in the period.

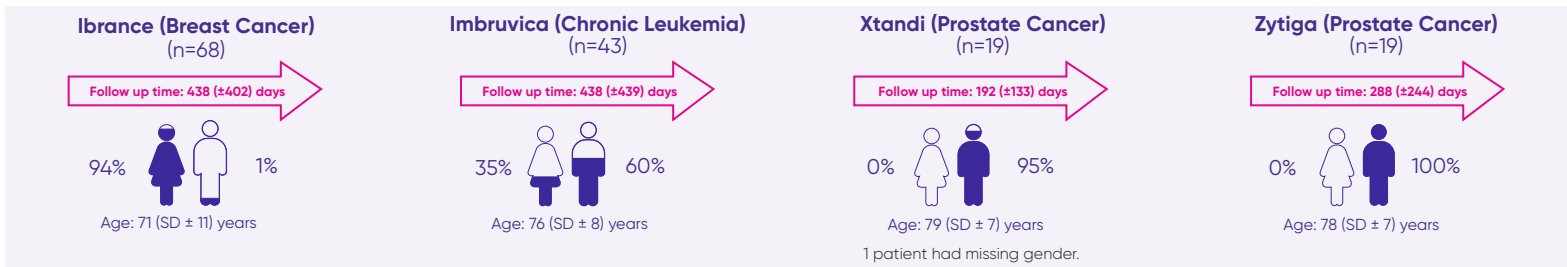


**Statistical comparison - Percent difference:** (standardized mean difference) was used to assess differences between the MID and non-MID populations

- A percent difference (PD) greater than 20% indicated a meaningful difference between groups

## Study Results

- The mean age range for all groups was 71 to 79 years of age
- Most patients receiving Ibrance were female; for Imbruvica, 35% of the patients were female
- Follow up time ranged from ~6 months (192 days) for Xtandi to 16 months (483 days) for Imbruvica



- Out of 138 total patients, 134 had ≥2 prescriptions and were included in the adherence calculation
- Patients were more adherent in the MID group vs the non-MID group
  - The sensitivity analyses showed similar results with the MID group having similar or better adherence vs the non-MID group
- The adherence results in the MID group suggest the benefits of MID for oncology patients, though larger studies with more sites are needed to confirm this result

