The Real-World Value of Medically Integrated Dispensing

What is Medically Integrated Dispensing (MID)?[1]

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[2]

True integration of pharmacy/medical care • Patient satisfaction • Patient adherence • Care plan compliance

- One interdisciplinary care team
- Anchored by physicians
- One care plan
- Guided by industry-accepted clincial pathways
- One patient record
- Patient outcomes and care

Who is Hematology-Oncology Associates of Central New York (HOA-CNY)?[3]

Hematology-Oncology Associates of CNY

- Private practice established in 1982 with four 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[1,4,5]
- 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[6]

Patient

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

Payer

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

Pharmacist/dispensing team

- Easier to respond to dose changes so the most accurate dose and amount is filled[4,5]
- 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[4,5]
- Use of integrated medical and pharmacy claims data may help pharmacists identify issues with adherence and opportunities for intervention[12]

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 three cancer types

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 six and 12 months of follow up

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

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

Data source:

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

InfoDive®

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 percent indicated a meaningful difference between groups

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

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Ibrance (breast cancer) (n=68)

1% / 94%

Follow up time: 438 (±402) days

Age: 71 (SD ± 11) years

Imbruvica (chronic leukemia) (n=43)

60% / 35%

Follow up time: 438 (±439) days

Age: 76 (SD ± 8) years

Xtandi (prostate cancer) (n=19)

95% / 0%

Follow up time: 192 (±133) days

Age: 79 (SD ± 7) years

1 patient had missing gender

Zytiga (prostate cancer) (n=19)

100% / 0%

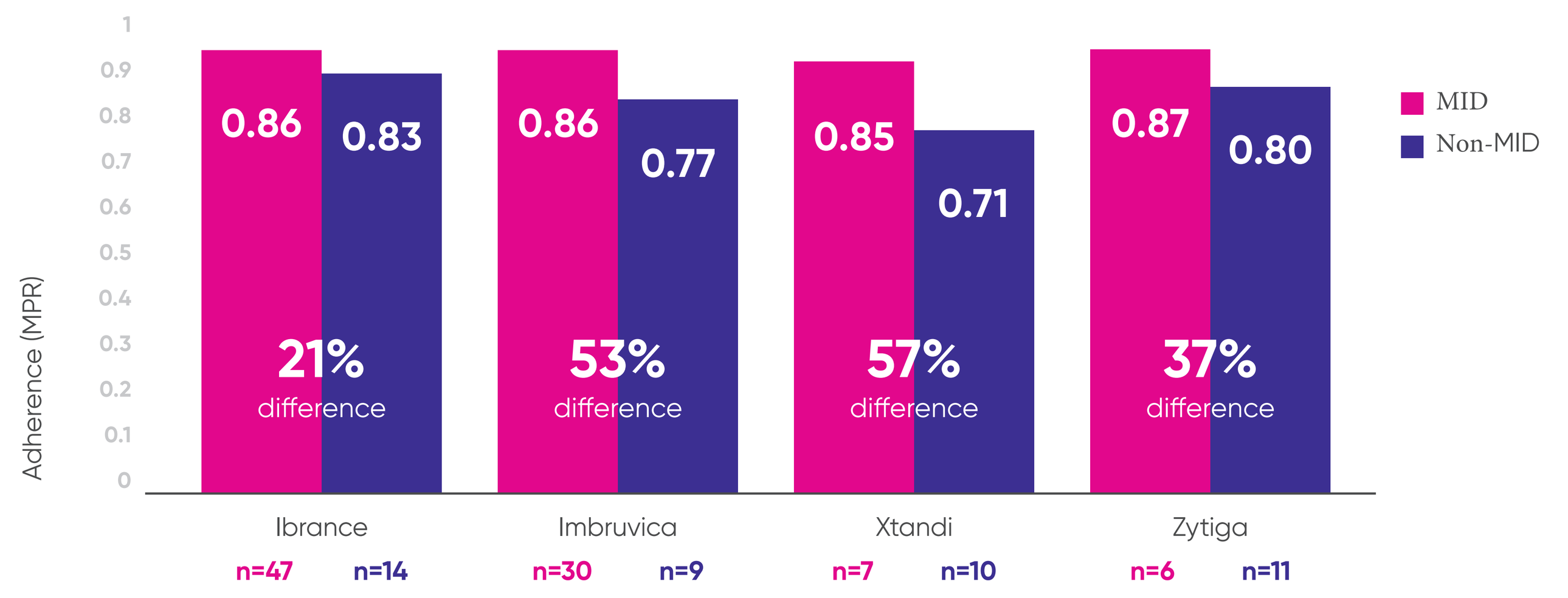
Follow up time: 288 (±244) days

Age: 78 (SD ± 7) years

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 percent 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 havingsimilar or better adherence vs thenon-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

Adherence was meaningfully higher in the MID group vs the non-MID group



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