Impact of Distributing an Opioid Safety Guide at Prescription Pick Up

Florida Blue
Walgreens
PRIME THERAPEUTICS®

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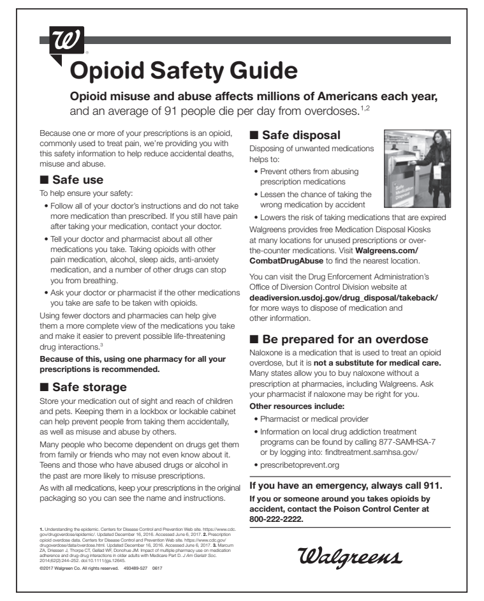
Background

- Opioid overdose deaths continue to rise in the United States.[1]
- The U.S. Surgeon General encourages high-dose opioid utilizers to have the opioid overdose reversing drug — naloxone — available.[2]
- As stated by the Centers for Disease Control and Prevention (CDC), "collaboration is essential for success in preventing opioid overdose deaths."[1]
- In an encouraging collaboration, Prime Therapeutics (Prime), a pharmacy benefit manager (PBM) working with Florida Blue and their insured members, identified high-risk opioid utilizers who were filling most of their opioid prescriptions at Walgreens pharmacies.
- A list of identified members was sent to Walgreens so the pharmacist could consult with the patient and provide an Opioid Safety Guide discussing opioid safe use, disposal, storage and the overdose reversal agent naloxone at the next opioid prescription pick up.



Opioid Safety Guide

Opioid misuse and abuse affects millions of Americans each year, and an average of 91 people die per day from overdoses.[1,2]

Because one or more of your prescriptions is an opioid, commonly used to treat pain, we're providing you with this safety information to help reduce accidental deaths, misuse and abuse.

■ Safe use

To help ensure your safety:

- Follow all of your doctor's instructions and do not take more medication than prescribed. If you still have pain after taking your medication, contact your doctor.
- Tell your doctor and pharmacist about all other medications you take. Taking opioids with other pain medication, alcohol, sleep aids, anti-anxiety medication, and a number of other drugs can stop you from breathing.
- Ask your doctor or pharmacist if the other medications you take are safe to be taken with opioids.

Using fewer doctors and pharmacies can help give them a more complete view of the medications you take and make it easier to prevent possible life-threatening drug interactions.[3]

Because of this, using one pharmacy for all your prescriptions is recommended.

■ Safe storage

Store your medication out of sight and reach of children and pets. Keeping them in a lockbox or lockable cabinet can help prevent people from taking them accidentally, as well as misuse and abuse by others.

Many people who become dependent on drugs get them from family or friends who may not even know about it. Teens and those who have abused drugs or alcohol in the past are more likely to misuse prescriptions.

As with all medications, keep your prescriptions in the original packaging so you can see the name and instructions.

■ Safe disposal

Disposing of unwanted medications helps to:

- Prevent others from abusing prescription medications
- Lessen the chance of taking the wrong medication by accident
- Lowers the risk of taking medications that are expired

Walgreens provides free Medication Disposal Kiosks at many locations for unused prescriptions or over-the-counter medications. Visit **Walgreens.com/CombatDrugAbuse** to find the nearest location.

You can visit the Drug Enforcement Administration's Office of Diversion Control Division website at **deadiversion.usdoj.gov/drug_disposal/takeback/** for more ways to dispose of medication and other information.

■ Be prepared for an overdose

Naloxone is a medication that is used to treat an opioid overdose, but it is **not a substitute for medical care.** Many states allow you to buy naloxone without a prescription at pharmacies, including Walgreens. Ask your pharmacist if naloxone may be right for you.

Other resources include:

- Pharmacist or medical provider
- Information on local drug addiction treatment programs can be found by calling 877-SAMHSA-7 or by logging into: findtreatment.samhsa.gov/
- prescribetoprevent.org

If you have an emergency, always call 911.

If you or someone around you takes opioids by accident, contact the Poison Control Center at 800-222-2222.

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Walgreens

- Little is known of the impact a targeted patient Opioid Safety Guide distributed at the pharmacy has on opioid utilization and obtaining naloxone.

Objective

- To assess the impact of the Opioid Safety Guide on naloxone claims and opioid utilization.

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Methods

- The study design was a prospective cohort with a concurrent control comparison utilizing administrative pharmacy claims data.
- The Florida Blue PBM, Prime, identified members during a 3-month period (April – June 2017) who had high opioid and controlled substances utilization and filled most of their opioid claims at either Walgreens pharmacy in Florida (intervention group) or a non-Walgreens retail pharmacy chain in Florida (control group).
- The list of intervention group members was sent to Walgreens pharmacy chain in July 2017 to provide the Opioid Safety Guide at the member's next opioid prescription dispensing.

Study population

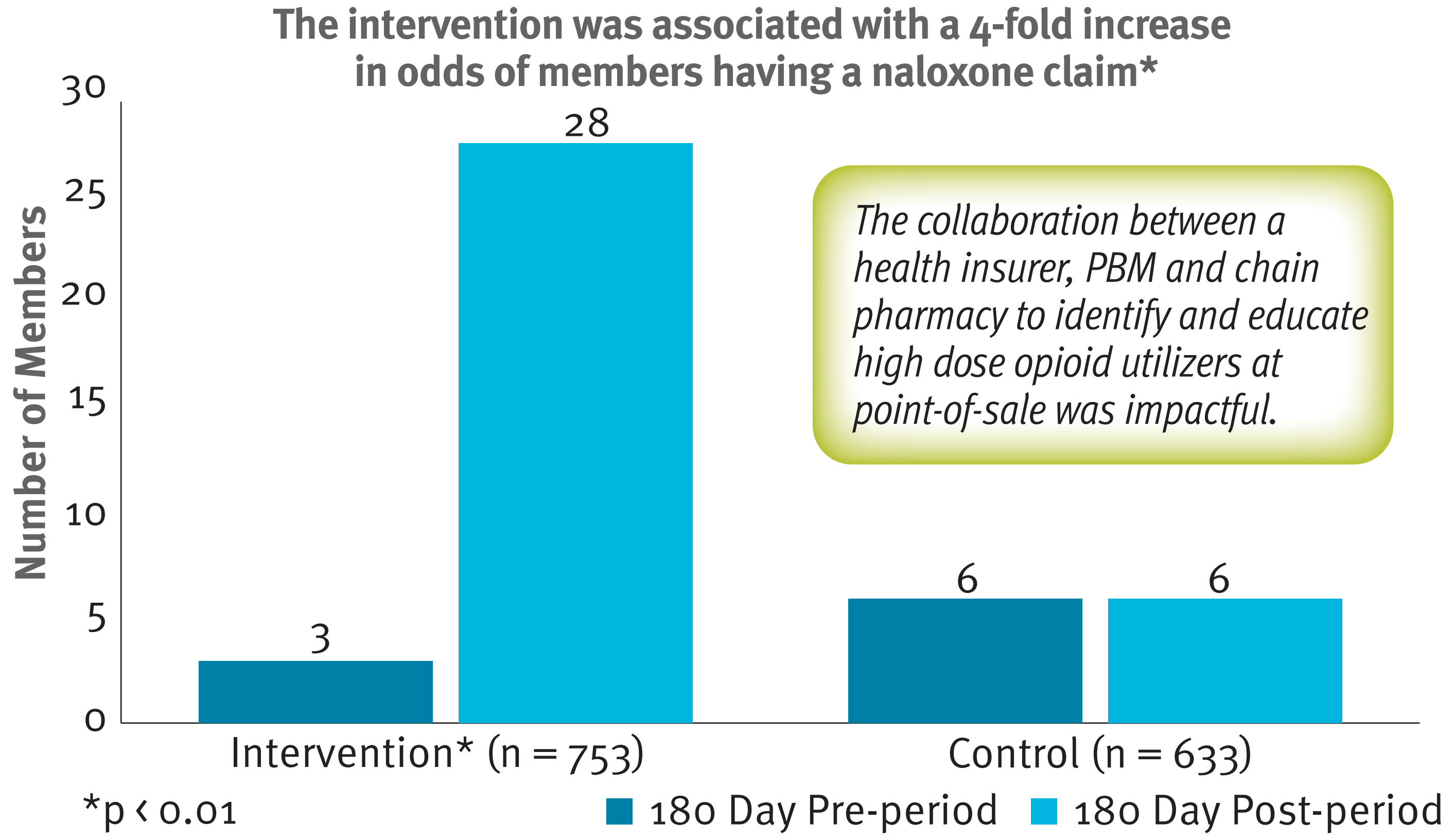
- As an intent-to-treat design, all members identified for the Walgreens intervention, whether or not they receive an Opioid Safety Guide and pharmacist consultation were analyzed. If a member did not receive a consultation, an index date was assigned based on their first opioid claim. If a member did not have an opioid claim, an index date was assigned at random.
- A control group was created using identical Florida Blue member identification methods for members who filled most of their opioid claims at a non-Walgreens retail pharmacy chain. Member information was not sent to the non-Walgreens retail chain pharmacies.
- Members were included in the analysis if they had a controlled substance score[3] greater than 12 for two consecutive quarters, more than one opioid claim, and were continuously enrolled during a 180-day pre- and post-period.
- Opioid claims were identified by Generic Product Identifier (GPI) from the Pharmacy Quality Alliance (PQA)'s list of opioids.[4]
- A pre-post difference-in-difference analysis was implemented to examine the intervention group's change in study outcomes from the pre-index (baseline) period to the post-index period and compared them to changes in the control group.[5]

Outcomes measurement

- Naloxone claims in all forms were compared in the pre-period versus the post-period.
- Opioid utilization was assessed by opioid discontinuation, morphine milligram equivalents (MME), and overall opioid claim count. MME was calculated using the Centers for Medicare & Medicaid Services (CMS) overutilization monitoring system (OMS) method. Note: all buprenorphine products were excluded.[6,7]
- Opioid discontinuation was defined by a member who did not have opioid drug supply in the last 45 days at the end of the post-period.
- Overall opioid claim count was assessed by the average number of claims per member in the pre- versus post-period.
- Average number of opioid prescribers per member and whether a member had a long acting opioid claim were also examined.
- SAS 9.4 (SAS Institute Inc., Cary, NC) was used for all analyses.
- Generalized linear models were fit to measure the outcome changes in the 180 days post-index date (follow up) compared to the 180 days pre-index date between the intervention and control group members, with adjustment for age, gender, Charlson Comorbidity Index score and ZIP code derived sociodemographics.
- Statistical significance for all analysis was set at $p < 0.01$.

Results

Figure 1. Members with a Naloxone Claim

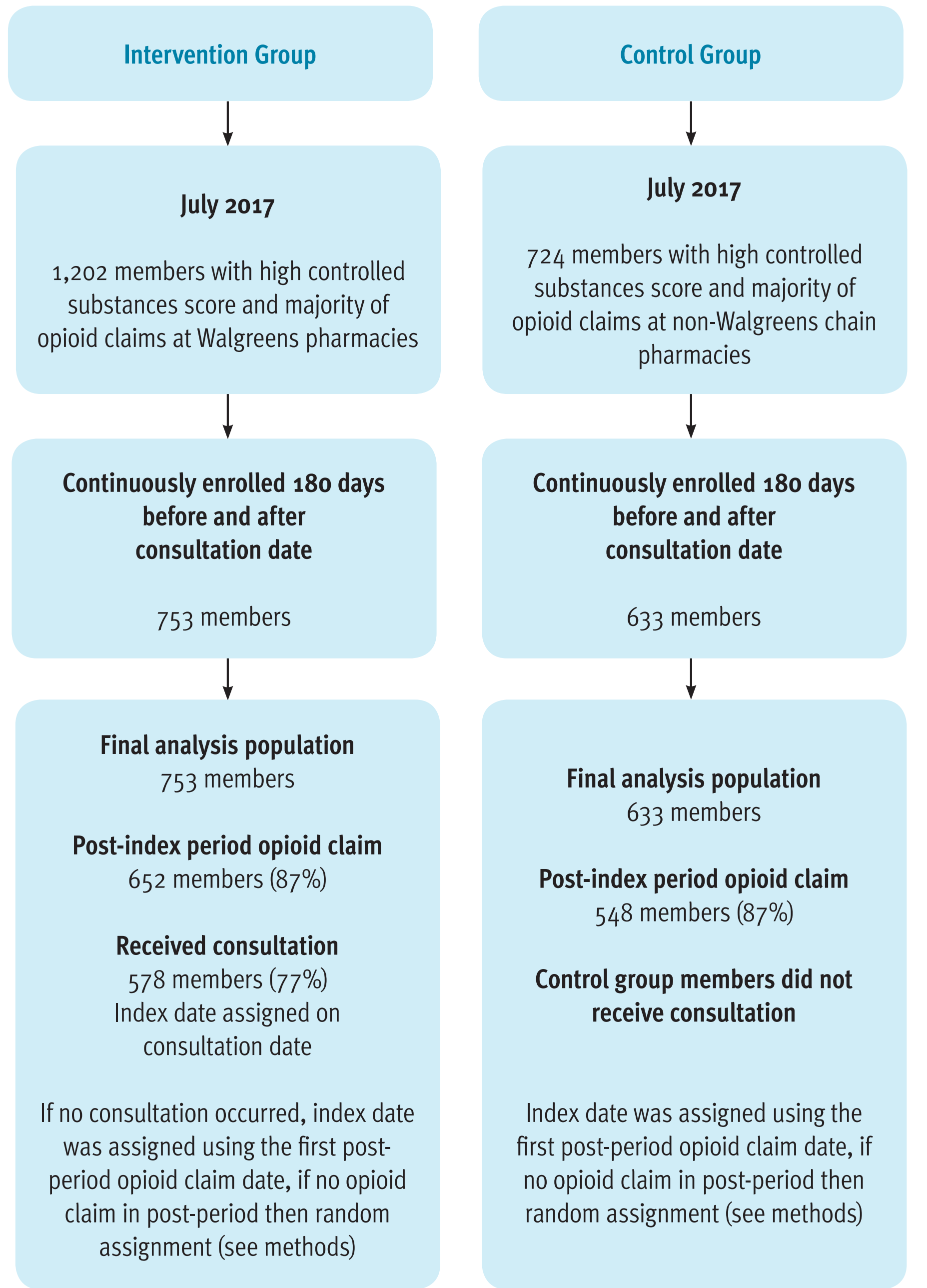


- This pilot program began Aug. 15, 2017 with 59 percent of the initial consultations occurring in the first two weeks of program launch. The program has continued with monthly identifications sent to Walgreens pharmacies.
- After all analytic criteria were applied, the intervention group consisted of 753 members and there were 633 members in the control group (Figure 2).
- A total of 578 (77%) of 753 members in the intervention group received a pharmacist consultation and Opioid Safety Guide from Aug. 15, 2017 – Nov. 15, 2017.
- An identical 87% of members in the intervention and control groups had an opioid claim in the post period (Figure 2).
- Baseline characteristics between the intervention and control groups were similar (Table 1).
- Opioid discontinuation was 21.7% for the intervention group compared to 18.5% for controls, $p = 0.13$. The adjusted odds of discontinuation were non-significant (Table 2).
- The intervention group had an additional 25 members with a paid naloxone claim in the 180-day post period compared to no change in the control group, $p < 0.01$ (Figure 1 and Table 2).
- The odds of a member receiving a naloxone claim were 3.98 (1.42 to 11.18) times higher compared to controls, adjusting for baseline characteristics (Table 3).

Conclusions

- This study found a 4-fold increase in odds of a member receiving naloxone, consistent with the U.S. Surgeon General's Advisory recommending naloxone access for high dose opioid utilizers.[2]
- Results suggest the collaboration was impactful between a health insurer, pharmacy benefit manager and chain pharmacy to identify high dose opioid utilizers and message them with an Opioid Safety Guide at prescription pick up.
- Additional work is needed to determine successful opioid dose reduction interventions.

Figure 2. Analysis Population Identification



Intervention Group

July 2017

1,202 members with high controlled substances score and majority of opioid claims at Walgreens pharmacies

Continuously enrolled 180 days before and after consultation date

753 members

Final analysis population
753 members

Post-index period opioid claim
652 members (87%)

Received consultation
578 members (77%)
Index date assigned on consultation date

If no consultation occurred, index date was assigned using the first post-period opioid claim date, if no opioid claim in post-period then random assignment (see methods)

Control Group

July 2017

724 members with high controlled substances score and majority of opioid claims at non-Walgreens chain pharmacies

Continuously enrolled 180 days before and after consultation date

633 members

Final analysis population
633 members

Post-index period opioid claim
548 members (87%)

Control group members did not receive consultation

Index date was assigned using the first post-period opioid claim date, if no opioid claim in post-period then random assignment (see methods)

Limitations

- Administrative pharmacy claims have the potential for miscoding and include assumptions of member's actual opioid use.
- Identification incorporated controlled substance score users which is not limited to opioid use.
- Not all members in the intervention group received a pharmacist consultation.
- It is unknown what opioid specific pharmacist patient counseling was or was not being provided in the control population.
- This study was unable to control for external factors that may have influenced naloxone or opioid prescribing, however, Florida Blue commercially insured opioid users were assessed in both the intervention and control group. These members would have identical benefit designs and are under the same state controlled substance rules, particularly for naloxone prescribing.

Table 1. Baseline Characteristics: Intervention and Control Groups Pre- versus Post-Period 180-day Change

Characteristics (at a member level)	Intervention (n = 753)	Control (n = 633)
Age, average in years (SD)	48.3 (±10.7)	49.5 (±10.5)
Gender (% Female)	491 (65.2%)	417 (65.9%)
Charlson Score at index date	0.4 (±1.2)	0.6 (±1.4)
ZIP code derived		
median household income	$54,344	$55,044
% high school degree	88.4%	88.4%
% race white	80.7%	82.5%

SD = standard deviation

Table 2. Unadjusted Outcomes: Intervention and Control Groups Pre- versus Post-Period 180-day Change

	Intervention (n = 753)			Control (n = 633)		
Outcomes (at a member level)	180 day pre-period	180 day post-period	Unadjusted change	180 day pre-period	180 day post-period	Unadjusted change
Naloxone member claim (yes/no)*	3 (0.4%)	28 (3.7%)	+ 25	6 (0.9%)	6 (0.9%)	0
Overall opioid claims per member	9.4 (± 4.8)	8.1 (± 5.6)	− 1.3	9.8 (± 4.7)	8.6 (± 6.0)	− 1.3
Average MME	81.9 (± 112)	78.7 (± 112)	− 3.2	95.2 (± 132)	87.9 (±1 28)	− 7.3
Average number of opioid prescribers	2.6 (± 1.6)	1.8 (± 1.0)	− 0.8	2.6 (± 1.6)	1.8 (± 1.3)	− 0.9
Long acting opioid claim (yes/no)	249 (33.2%)	242 (32.6%)	− 7	212 (33.6%)	202 (32.0%)	− 10
Opioid discontinuation (defined no opioid drug supply in 45 days at the end of the post period)	163 (21.7%)			117 (18.5%)		

MME = Morphine milligram equivalents
*$p < 0.01$

Table 3. Adjusted Outcomes: Logistic Regression — 180 day Results

Outcome	Estimate (99% confidence interval)	Intervention group, change pre to post period compared to controls	P value
Member claim for naloxone (yes/no)	**Odds ratio difference**	**3.90 (1.42–11.18)**	**$p < 0.01$**
Opioid discontinuation	Odds of discontinuation	1.18 (0.83–1.70)	$p = 0.23$

Model was controlled for baseline member characteristics

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