Purdue Pharma L.P.

Selected Investigation Documents
Part I

Committee on Oversight and Reform
U.S. House of Representatives

October 2020
oversight.house.gov

To: Sackler, Dr Kathe; Sackler, Dr Richard; Gasdia, Russell; Stewart, John H. (US); sdb; Rosen, David; edm; Sackler, Jonathan; Sackler, Mortimer JR;
From: Mahony, Edward
Sent: Sun 3/16/2008 10:41:52 PM
Subject: RE: Card program

Dr Kathe,

The pressures that I refer to are all the tools that payors use to save money. These can be prior authorization, tablet limits, preferred copay for lower cost meds and more. The payors are in the business of reducing the cost of healthcare and one of their targets is high priced meds.

When there were generic oxycodone ER's available those pressures were relaxed. Now that there are no generics available Russ and his team are up against those pressures once again.

Best Regards,
Ed Mahony

Redacted

-----Original Message-----
From: Sackler, Dr Kathe
Sent: Tuesday, March 11, 2008 12:17 AM
To: Mahony, Edward; Sackler, Dr Richard; Gasdia, Russell; Stewart, John H. (US)
Cc: sdb; Rosen, David; edm; Sackler, Jonathan; Sackler, Mortimer JR
Subject: Re: Card program

Ed,
Please identify which "pressures" you refer to in your email below and provide some quantification of their negative impact on projected sales which you have built into your Proposed Budget for 2008 and the developing new five year plan.
Thanks
Kathe
K. A. Sackler, M.D.

Redacted

Redacted

Redacted

----- Original Message -----
From: Mahony, Edward
To: Sackler, Dr Richard; Gasdia, Russell; Stewart, John H. (US)
Cc: sdb; Rosen, David; edm; Sackler, Dr Kathe; Sackler, Jonathan; Sackler, Mortimer JR
Sent: Sun Mar 09 13:59:12 2008
Subject: RE: Card program

Dr Richard I understand that you have "reserved the right to challenge the sales forecast but a few points:

1. The current patient savings card extended to the end of 2007 is in our revised budget.
2. The sales in our revised budget assumed that the patient savings card is extended.
3. In addition to higher rebates than OxyContin (reported separately by Russ) Opana also offers an "Instant Savings Card" program per a recent press release.

So ... as I see it the extended Purdue Patient Savings Card Program is part of the mix that enables Purdue to counter the forces that would try to drive OxyContin scripts down in the face of competition and payor pressures. The Purdue Patient Savings Card Program is one of the tools that we are relying on to meet John's challenge, which was to keep OxyContin scripts at the same level as 2007 in spite of all the pressures.

Ed

From: Sackler, Dr Richard
Sent: Saturday, March 08, 2008 9:17 PM
To: Gasdia, Russell; Stewart, John H. (US)
Cc: sdb; Rosen, David; edm; Sackler, Dr Kathe; Sackler, Jonathan; Sackler, Mortimer JR
Subject: RE: Card program

OK to defer the presentation, but I don't understand why you say "we know that it works." Just how do we know that it works? In fact, I thought that the % of cards used was very small. So it may work in the physician's mind, but does it work for the patients?

Richard S. Sackler, M.D.

Redacted

-----Original Message-----
From: Gasdia, Russell
Sent: Saturday, March 08, 2008 7:27 PM
To: Sackler, Dr Richard; Stewart, John H. (US)
Cc: sdb; Rosen, David; edm; Sackler, Dr Kathe; Sackler, Jonathan; Sackler, Mortimer JR
Subject: Re: Card program

Dr Richard

It is to early to know whether the McKesson program makes sense, would replace our program or supplement it. We are gathering data, analyzing everything you lay out on you other email and hope to be able to make a recommendation to the board. Until I am back in the office and follow up with individuals responsible for this, I can not committ to how fast we can arrive at a recommendatioin. We realize this is a priority and of significant importance.

I would suggest we do noy present the current card program Monday at board meeting. We know it works and we do know we want some extension to aide patients transitioning from generic as well as gaining new patients to OxyContin.

It is important to remember that copays alone are not the only issue impacting growth. We operate in a very competitive market. Opana ER is gaining more favorable formulary status, they are adding three

new strengths as well. Kadian is growing and continues to be heavily promoted. Both Endo and Alpharma have sales forces larger than ours.

I am confident that our additional reps will have a positive impact, our new strengths will have a positive impact and we will identify programs to increase the likelyhood of patients who are prescribed OxyContin will fill the Rx and pay for the brand.

I need a few days to get data together and asses the McKesson program. It will not be done over the weekend.

Russ

----- Original Message -----
From: Sackler, Dr Richard
To: Stewart, John H. (US); Gasdia, Russell
Cc: sdb; Rosen, David; edm; Sackler, Dr Kathe; Sackler, Dr Richard; Sackler, Jonathan; Sackler, Mortimer JR
Sent: Sat Mar 08 17:12:45 2008
Subject: Card program

I would suggest that based upon Russ' description of the McKesson program that would replace the existing program, we limit the presentation on this part of the agenda to the budget that you want to be in principle be allocated to extending a program. This will shorten the presentation to a simple set of slides showing budget and + Rx's above the existing provisional plan. Please give these Rx's on an adjusted or KG basis. Ed and David Rosen can help here.

Please identify this as a means to reach for the increasing trajectory of Rx's and exceeding 2007 Rx numbers on an adjusted basis (adjusted for strength and average number of tablets per Rx).

Please indicate your agreement or disagreement with this proposal.

Richard S. Sackler, M.D.

Redacted

From: Stewart, John H. (US)
To: Sackler, Dr Richard; Boer, Peter; Lewent, Judy; Sackler Lefcourt, Ilene; Sackler, David A.; Sackler, Dr Kathe; Sackler, Dr Mortimer; Sackler, Dr Raymond R; Sackler, Jonathan; Sackler, Mortimer JR; Sackler, Theresa
Cc: [redacted]; Gasdia, Russell; [redacted] Landau, Dr. Craig; Mahony, Edward
Sent: Wed Aug 12 17:29:28 2009
Subject: Re: Meetings Monday next

Richard

The [redacted] Meeting is indeed set for Monday afternoon at 1330h. However, the OxyContin review is set for Wednesday at 1000h - and it is just not possible to advance the Oxy meeting to Monday.

John
Sent via BlackBerry

From: Sackler, Dr Richard
To: Boer, Peter; Lewent, Judy; Sackler Lefcourt, Ilene; Sackler, David A.; Sackler, Dr Kathe; Sackler, Dr Mortimer; Sackler, Dr Raymond R; Sackler, Dr Richard; Sackler, Jonathan; Sackler, Mortimer JR; Sackler, Theresa
Cc: Stewart, John H. (US); [redacted]; Gasdia, Russell; [redacted]
Sent: Wed Aug 12 10:22:30 2009
Subject: Meetings Monday next

We are having two interesting meetings next week and I'm sharing this with Board members who are interested in attending. Both will inform the Board on matters that will come to the Board in the coming weeks and months.

Scheduled now at 1330 is a meeting with [redacted] to understand their perception of value of the US rights for forodesine and the entire forodesine program. I emphasize *program* because this includes many other possible diseases beyond cancer. currently our rights are limited to neoplastic diseases, but if we buy out all the rights, we and [redacted] agree that we

should get all compounds and all indications. [redacted] is interested in all the diseases, both malignant and non-malignant. If we acquire WW rights and then cleave the US rights (malignant only or malignant and non-malignant) to [redacted], we will be in a very complex negotiation indeed. [One possibility is for us to take more stock in [redacted] as part of the compensation for granting the license.]

<<Non-malignant uses of forodesine T-cell diseases.xls>>

The second meeting – and this meeting is next week but isn't yet confirmed for Monday morning – will be a presentation of all the efforts Sales and Marketing is doing and planning to do to reverse the decline in OxyContin tablets market, that is the oxycodone ER market. In addition, it will be a look at the update sales for 2009 and a budget target for 2010. We now can say with some assurance that OxyContin tablets will be the entire market when one takes account of the settlement stocks, which will be 10 or 20% of the current trend of the total marketplace. Thus the value to us of reversing the current declines of 5-8% and converting them to a 5% growth is worth $ ¼ B ($243M) in going from -6.5% to +5.0%; before the decline began, we were growing closer to 10%/yr in the oxycodone ER market. Of no small matter is the profit associated with the incremental sales which at 80% would be ~$200M!

If both meetings were on Monday, which Board members would attend??

I assume if they are not on the same day, then our attendance will be lighter.

John is doing his best to get the OxyContin tablets meeting on Monday morning in advance of the [redacted] meeting, or late Monday afternoon after the [redacted] meeting.

Richard S. Sackler, M.D.

Redacted

Message

From: Sackler, Dr Richard [redacted]
Sent: 2/15/2011 4:05:59 PM
To: Gasdia, Russell [redacted]
Subject: Re: Week Ending 2/4/11 - Butrans Rxs
Attachments: image004.png

Thank you.
I had hoped for better results. But it is only one week.

Richard S. Sackler, MD

Redacted

From: "Gasdia, Russell" [redacted]
Date: Tue, 15 Feb 2011 10:12:15 -0500
To: "Dr. Richard S. Sackler" [redacted]
Cc: John Stewart [redacted], Mortimer Sackler [redacted], "Sackler, Dr Kathe" [redacted], Raymond Sackler [redacted], "Sackler, Jonathan" [redacted], Judy Lewent [redacted], Ed Mahony [redacted], "Landau, Dr. Craig" [redacted]
Subject: Week Ending 2/4/11 - Butrans Rxs

Dr. Richard

As requested here is the most recent update on Butrans Rxs:

- January Rx forecast was 484 Rxs, we generated 997 Rxs
- February forecast is 10,744 Rxs
- For the most recent week (wk ending 2/4/11 0- 2nd full week of promotion), we had 1,274 Rxs for Butrans
- We are tracking well ahead of other product launches (See comparison to other extended-release product launches)
- Reports from the field continue to be very positive

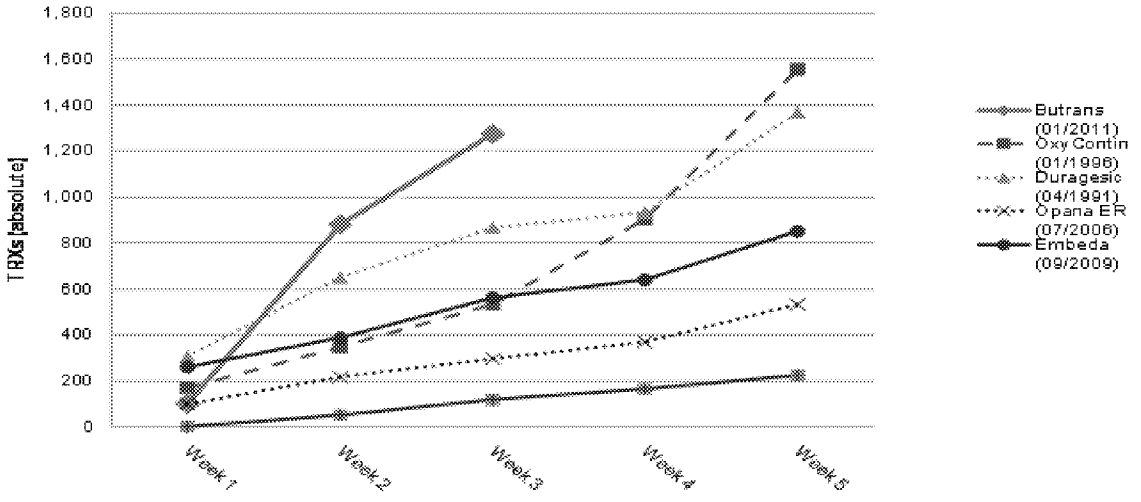
Russ

Sales & Marketing

Launch Comparisons

Select Extended-Release Opioids

Post-Launch Comparison - Butrans versus Long-Acting Opioids



To: Gasdia, Russell[redacted]
From: Sackler, Dr Richard
Sent: Wed 3/16/2011 9:49:16 AM
Subject: Re: Butrans Weekly Report for the week ending March 4, 2011

What else more we can do to energize the sales and grow at a faster rate?

Richard S. Sackler, MD

Redacted

From: "Gasdia, Russell" [redacted]
Date: Wed, 16 Mar 2011 09:06:54 -0400
To: "Dr. Richard S. Sackler" [redacted], Raymond Sackler [redacted], Mortimer Sackler [redacted], "Sackler, Jonathan" [redacted], "Sackler, Dr Kathe" [redacted], "F. Boer" [redacted], Judy Lewent [redacted], Cecil internet [redacted] Stuart Baker [redacted]
Cc: Ed Mahony [redacted], "Lundie, David" [redacted], "Landau, Dr. Craig" [redacted], "Silbert, Richard W" [redacted], Robin Abrams [redacted], "Strassburger, Philip" [redacted], John Stewart [redacted] Bert Weinstein [redacted]
Subject: Butrans Weekly Report for the week ending March 4, 2011

Colleagues

- Attached please find the most recent weekly report for Butrans. This will be provided weekly
- Note that we continue to track well ahead of other Class II/III extended-release opioid launches through the first seven weeks of promotion, when compared to their launch results.
- We are providing a "Target Total" prescription line on the second graph in section 1 below. This is not a weekly forecast per se. Instead, it is a trajectory that reflects what we need to obtain to hit the 2011 Rx objective of 529k Rxs
- We conducted a District Sales Manager meeting this week:
    - Spirits are high, successes continue to come in, training appears to be effective and confidence level is high.

- The selling cycle is taking somewhat longer due to a "new" opioid in the eyes of many physicians, "new" technology in a seven-day Transdermal system and we want to ensure physicians identify the appropriate patient for their first prescription to ensure success and that their managed care coverage, coupled with our Patient Savings Program, will increase likelihood the patient will have an out-of-pocket co-pay level that they will accept.

- We are just starting to see refill prescriptions since we are coming to the end of the first six full weeks of promotion and prescriptions are written for 30 day supply. As we see more results in March, we are expecting an increase in refill prescriptions leading to an increased growth rate for total prescriptions. Please note that if a patient is titrated from a 5mcg/hr Butrans to a 10mcg/hr Butrans that does not show as a refill, but we can track that as a "continuing" patient.

- The current trajectory of weekly prescriptions places us on target, in fact a little ahead, of the 2001 objective. However, it is early and the next two months should provide a clear trajectory for us.

Let me know if you have questions

Russ

Weekly Prescriptions and Stocking Report for the Week Ending March 4, 2011

Please note:

- *Prescriptions are inclusive of retail, long term care, and mail service channels.*
- *Stocking data reflects the week ending February 25th.*
- *The store count and patches ordered data reflect all channels of trade.*
- *The store count reflects the number of outlets that ordered products during the given time period.*
- *Wal-Mart, Target and Kroger data are not included in the stocking data.*

1. ***Weekly Rx Snapshot for Week 6 of Butrans Launch***

- Overall, Butrans TRxs grew by 9.5% (or 263 Rxs) to 3,017 in the current week in comparison to 2,754 in the previous week. Share of overall LA opioids was basically unchanged from last week.

To: Sackler, Dr Richard[redacted]; Sackler, Mortimer D.A.[redacted]; Sackler, Dr Raymond R[redacted]; Sackler, Dr Kathe[redacted]; Sackler, Jonathan[redacted]; Sackler, Theresa[redacted]; Pickett, Cecil[redacted]; Boer, Peter[redacted]; Lewent, Judy[redacted]; Baker, Stuart D.[redacted]; Stewart, John H. (US)[redacted]
Cc: Mahony, Edward[redacted] Landau, Dr. Craig[redacted]; Lundie, David[redacted]; Weinstein, Bert[redacted]; Abrams, Robin[redacted]; Silbert, Richard W[redacted]; Strassburger, Philip[redacted]; Haddox, Dr. J. David[redacted] Must, Alan[redacted]
Bcc: Stewart, John H. (US)[redacted]
From: Gasdia, Russell
Sent: Wed 5/25/2011 7:36:57 AM
Subject: Butrans Weekly Report for the week ending May 13, 2011
Butrans Weekly Report 05-13-11.xlsm

Colleagues

While we experienced a small increase (29) from the previous week, based on total Rxs, we gained market share and reached 1.07%, the highest level since launch. Also, we are seeing increases in utilization of the 10mcg/hr and 20mcg/hr strengths.

The regional management team in here this week. A great deal of focus has been on Butrans and what needs to be done to increase growth at a faster pace. The major areas of focus are:

- Improving physician "targeting" to ensure representatives are calling on the highest potential physicians
- Increasing call frequency on a select "super core" of physicians. We are seeing a direct correlation between call activity and results. The results indicate it is taking more calls than expected to generate a first prescription (buprenorphine is "new" to many physicians, the 7-day transdermal system is a "new" concept and identifying a patient who's managed care plan covers them are all contributing factors to a longer selling cycle)
- Improving selling skill effectiveness to:
    - Improve specific patient focus on calls and effective positioning of Butrans for specific patient types
    - Improve identification of managed care access for patients within the physician's practice
    - Improving "closing" skills to gain commitment to prescribe Butrans for appropriate patients

The regional management team indicates that the biggest challenge thus far has been managed care access. We knew that this would be a challenge at launch, but it has had a greater impact than anticipated. Many physicians see a role for Butrans in elderly, yet we do not have formulary coverage in Medicare D plans. They are currently developing their 2012 formularies and we have lined up meetings with Medicare Part D providers to present Butrans with the objective of gaining formulary support for 2012. We are starting to get good support via commercial managed care providers and this should start to have a positive impact on prescription growth.

Finally, the regional management team has indicated that they are hearing about positive results with

Butrans. When used in the appropriate patient, physicians are reporting good results. As a result, the representatives remain positive and committed to improving upon current results and remain positive about Butrans.

There are some additional "leading indicators", such as shipments from wholesalers to retail pharmacies and Patient Savings Program, that are a week ahead of IMS prescription data. In both cases, we see a nice increase which should lead to an improved increase with next week's IMS prescription data.

Weekly Prescriptions and Stocking Report for the Week Ending May 13, 2011

Please note:

- *Prescriptions are inclusive of retail, long term care, and mail service channels.*
- *Stocking data reflects the week ending May 6th.*
- *The store count and patches ordered data reflect all channels of trade.*
- *The store count reflects the number of outlets that ordered products during the given time period.*
- *Wal-Mart, Target and Kroger data are not included in the stocking data.*

1. Weekly Rx Snapshot for Week 17 of Butrans Launch

- Butrans total prescriptions grew by nearly 1% or 29 Rxs to 5,271 from 5,242 in the previous week.
- The overall LAO market (495,000) declined by 7.2% from 534,000 Rxs last week. The Butrans share of LAOs reached a new high – 1.07%. This is an increase from last week's share of 0.98%.

Key Metrics	Actual
Latest weekly Butrans TRx volume	5,271
Latest weekly Butrans NRx volume	4,707
Year to date TRxs	56,955

From: Sackler, Dr Richard
Sent: Thursday, June 16, 2011 4:46 PM
To: Gasdia, Russell
Cc: JHS (US)
Subject: Re: Feedback from District Manager Advisory Council - FYI

Russ,
One more thing. Who have you chosen for me to go to the field with the week after the budget meetings? Where are they? Can we conveniently do two reps each day especially if I travel to get to the right place as I probably should do.

From: Richard Sackler [redacted]
Date: Thu, 16 Jun 2011 16:44:58 -0400
To: "Gasdia, Russell" [redacted]
Cc: "JHS (US)" [redacted]
Subject: RE: Feedback from District Manager Advisory Council - FYI

Nothing is quantitative. May all be true but insignificant. How have you tried to quantify these elements?
What is missing or misleading in our message that causes physicians to think of Duragesic? I thought that we were careful to make clear this is not for the most severe pain patients.

1. • The manager's all felt that we can improve in our call focus and frequency on high-potential prescribers

1 Above suggests that we are calling on non-high potential prescribers. How can our managers have allowed this to happen?

1. ○ We are seeing that where we focus our efforts with greater call frequency, we see a great number of Rxs per MD. This is not a surprise, but now that we have a few months of call data as well as Rx data, we see a pretty clear correlation. (This will be presented next week at the Mid-Year meeting)

What is the evidence that calling on more physicians with higher frequency will produce more sales? I must say that I don't find this convincing as a major cause of our underperformance. Isn't it the case that reps call more frequently on their

best customers, so maybe the higher frequency is caused by higher use, not the other way around. What about poor reps? Are they not calling on some docs with high frequency who still are poor to zero users?

The notion that newer reps are poorer reps is believable, but a couple of scatter plots would show this better. Chart 1 would have results from Jan through Mar with tenure of reps on the x-axis and results on the y-axis. Then Apr (with May, if available) would do it again. Not only would you be able to show the evidence of the observation, but the magnitude of the discrepency would be evident, and some reason to hope for progress moving forward would be show by comparing the two graphs.

It is reassuring to know that the managers think that some corrective programs will be productive, but more telling would be the reasons that managers disagreed, or thought that other actions would be more productive. If you had no disagreements with the course of action or no alternative courses proposed, then say that. But this would be disappointing.

Richard Sackler, M.D.
Redacted
Office
iPhone
UT Locus
[redacted]

From: Gasdia, Russell
Sent: Thursday, June 16, 2011 9:24 AM
To: Sackler, Dr Richard
Cc: Stewart, John H. (US)
Subject: Feedback from District Manager Advisory Council - FYI

Dr Richard

I received the message that you weren't able to join us for the District Manager Advisory Council luncheon yesterday.

I'm providing a top-line overview of the feedback received on the Butrans launch results from this group of DMs:

- The primary issue facing the physicians right now is patient access through managed care plans.
    - This is consistent with recent market research conducted at the American Academy of Pain Management conference (John forwarded you a presentation on this research for your review)
    - Representatives are improving their ability to focus the physicians on managed care plans where Butrans is available and we are also increasing our messaging on the Patient Savings Program to reduce the patient's out-of-pocket costs until we can

achieve improved formulary status for Butrans.

- The managers all indicated that proper patient selection is key.
    - Some physicians think of Duragesic when we present Butrans
    - The Butrans doses available are not considered to be "equianalgesic" to the available doses of Duragesic. Therefore, a patient who requires Duragesic has pain that is "beyond" Butrans and if they convert a patientfrom Duragesic to Butrans there is a risk on "failure" on Butrans. This has occurred in some areas, but the representatives are improving in their ability to focus the physicians on more appropriate patients (low dose Vicodin , Percocet, or tramadol, as well as opioid naïve who now require an opioid analgesic)
- The manager's all felt that we can improve in our call focus and frequency on high-potential prescribers
    - We are seeing that where we focus our efforts with greater call frequency, we see a great number of Rxs per MD. This is not a surprise, but now that we have a few months of call data as well as Rx data, we see apretty clear correlation. (This will be presented next week at the Mid-Yearmeeting)
    - They discussed tactics managers can take to assist representatives with call planning and physician selection for their call lists.
- As you know we expanded by 125 new territories during the 4th quarter 2010. With additional expansion at the management level, we actually hired approximately 147 new representatives into the Sales Force between October 2010 and March 2011.
    - The managers all see that the newer representatives are not having the same level of impact as our veteran representatives.
        - While some of the newer representatives are doing well, most of the newer representatives are behind our more experienced representatives in performance.
        - This is not a surprise as relationships need to be developed to be effective at selling. Also, many of the representatives we hire do not have a pain management background, since there are only a few companies who are in this market.
        - All the manager's were confident that with our training focus for these new representatives we will see improvement. They also felt that as we progress into the second half of2011 they will increase effectiveness as they build more relationships withtheir physicians.
- We have some representatives who are underperforming and the managers all indicated the value of a program we initiated called the "Performance Enhancement Plan".
    - This is designed to focus the manager's efforts on representatives who are not performing to expectations. It is not probation. Instead it is designed to improve performance before a representative is performing so poorly they need to be placed onto probation.
    - The program focuses on selling skills, call activity focus, product knowledge and any other areas that require improvement. It also requires the manager to devote more time to the representative, beyond the normal field contact rotation.
        - All managers reported successes with this program. All had examples of representatives placed onto this program who have demonstrated significant improvement.
- The positioning and messaging is effective. However, all the managers felt we need to

continue to train the representatives on how to more effectively deliver the messages and reinforce appropriate positioning for Butrans.

- They all felt that the workshops we've developed for the June two-day district meetings are on target and will help to elevate the skills of the representatives in regards to effective messaging around Butrans.

Overall, the managers reported that they hear from physicians that Butrans is an effective product, as long as it was prescribed for the appropriate patient and those who have access through their managed care plan. They also indicated that they feel the second half of the year should be strong, based on what they see in the field and how call activity relates to results. They also feel the newer representatives will increase effectiveness as we get further into 2011.

I'll provide more lead time to you and John prior to our nextfeedback session. We will most likely conduct the next one via a phone conference and you are more than welcome to join us.
Russ

From: Sackler, Dr Richard
Sent: Wednesday, December 31, 2014 11:35 PM
To: Motahari, Saeed; Timney, Mark; Paulo Ferraz ATT Costa

Subject: Re: Price

And a Happy New Year for you.

From: <Motahari>, Saeed Motahari [redacted]
Date: Wednesday, December 31, 2014 at 4:15 PM
To: dr [redacted] "Timney, Mark" [redacted] Paulo Ferraz ATT Costa [redacted]
Subject: RE: Price

Dr. Richard,
As Mark indicated, he and I evaluated this a number of times and fundamentally agree with you that there are opportunities to optimize price for the entire portfolio (not only OxyContin) and hence our recommendations for the 2015 budget. We spent a lot of time looking at the pricing strategy for the entire portfolio, particularly as we gear up to launch Hysingla. Generally, payers' feedback was that they want a similar price to OxyContin, but an equal analgesic pricing schedule would have limited the potential for Hysingla based on dose strengths and projected daily cost. Our recommendation was to use a sliding scale. I am happy to take you through the pricing strategy, and could I suggest that we meet in person the week of Jan 5th? There are a lot factors involved here in terms of competition, patient OOP and positioning of brands which require more in-depth discussion. You will see that what we are doing in 2015 will optimize the price not only for OxyContin but the entire portfolio.

Pls also note two other factors:

- Purdue has been somewhat conservative on price vs our direct competitors and also pricing actions taken by the broader industry.
- We have price protection in place across many commercial plans for OxyContin which limits the incremental value of price increases above 6 %. However, there are still some opportunities which I will outline for you.

Thanks and have a very happy New Year.
Saeed

From: Sackler, Dr Richard
Sent: Wednesday, December 31, 2014 12:10 PM
To: Timney, Mark; Motahari, Saeed; Paulo Ferraz ATT Costa
Subject: Price

Confidential

Dear Mark and Saeed,
Now that we have settled all the outstanding patent challenges (with more to come, no doubt), I would like to explore very confidentially with you, Paolo and Saeed our longer range price plan for OxyContin tablets. I have a notion that we could do ourselves a world of good by considering a plan for more

aggressive pricing increases, but I don't have the basic facts at my disposal.
Would you and Saeed discuss this with me on the 2nd if possible to agree on the information that you have that I should be appraised of so that we can later have a much more fulsome discussion?
Best wishes for a great New Year's eve on the heels of a robust years. I would like this year past, 2014, to be actually the year of the turnaround, and I believe it will be so.
Very truly yours,
Richard

Richard Sackler, MD

Redacted

Redacted

<November 2014 - Monthly ERO Topline.pptx>

Purdue US

Sales and Budget Update

June 2013

CONFIDENTIAL

Agenda:

Opening Remarks	John Stewart
Sales Update	Russ Gasdia
	David Rosen
Budget Update	Edward Mahony

2

Net Sales are forecasted to end 2013 $303.1 million and $93.7 million below budget and prior year, respectively. Details and corrective actions follow:

Product	2010 Actual	2011 Actual	2012 Actual	2013 Budget	2013 Forecast	$ Variance 2013 Budget vs 2013 Forecast
OxyContin - 10MG	$ 121.3	$ 146.8	$ 152.7	$ 157.0	$ 142.5	$ (14.5)
OxyContin - 15MG	29.6	27.1	34.0	37.8	35.8	(2.0)
OxyContin - 20MG	361.3	404.1	402.5	419.9	377.7	(42.2)
OxyContin - 30MG	161.0	171.7	205.3	237.4	214.5	(22.9)
OxyContin - 40MG	683.0	633.7	618.7	622.3	555.8	(66.5)
OxyContin - 60MG	315.7	300.7	340.7	388.8	338.3	(50.5)
OxyContin - 80MG	1,331.8	1,096.8	1,023.1	1,053.1	888.5	(164.6)
OxyContin	$ 2,997.8	$ 2,781.0	$ 2,777.1	$ 2,916.5	$ 2,553.1	$ (363.4)
Butrans	-	73.5	112.9	160.0	160.0	-
Intermezzo	-	-	16.6	57.6	13.9	(43.7)
Dilaudid	35.1	24.8	23.8	17.0	17.0	-
MS Contin	15.1	13.3	13.0	11.6	11.6	-
Laxatives	48.1	51.1	51.5	49.3	49.3	-
Betadine\Betasept	10.9	11.1	11.6	11.1	11.1	-
Slow Mag	4.6	5.4	5.6	5.3	5.3	-
Ryzolt	16.5	11.2	(6.9)	-	-	-
Uniphyl	(0.2)	(0.3)	(0.0)	-	-	-
All Other	(0.0)	(0.1)	(0.1)	-	-	-
					-	-
Total Gross Sales	**$ 3,127.9**	**$ 2,971.2**	**$ 3,004.9**	**$ 3,228.5**	**$ 2,821.4**	**$ (407.1)**
Fee for Service	$ (79.2)	$ (74.5)	$ (69.3)	$ (65.3)	$ (58.0)	$ 7.4
Sales Discounts & Allowances	(48.8)	(56.2)	(134.0)	(88.2)	(54.1)	34.1
Patient Savings Card Discounts	(15.7)	(15.6)	(25.1)	(34.5)	(41.3)	(6.8)
Rebates on Branded Sales	(621.6)	(545.9)	(517.6)	(554.9)	(488.6)	66.3
Proposed regulation adj for Medicaid rebates	(40.0)	(68.9)	(60.4)	(76.8)	(73.9)	2.9
Other	27.6	12.4	2.5	1.7	1.7	-
Total Rebates & Deductions $	**$ (777.8)**	**$ (748.7)**	**$ (804.0)**	**$ (818.1)**	**$ (714.2)**	**$ 103.9**
Rebates and Deductions %	24.9%	25.2%	26.8%	25.3%	25.3%	25.5%
Total Net Sales	**$ 2,350.1**	**$ 2,222.5**	**$ 2,200.9**	**$ 2,410.3**	**$ 2,107.2**	**$ (303.1)**

3

OxyContin® Sales Update

Year to date April sales were below budget by $162 million:

- $61 million attributed to lower demand
  - $21 million due to lower numbers of tablets per prescription than assumed in budget
  - $11 million due to lower overall prescription volume than budgeted
  - $25 million due to higher strengths prescriptions declining more rapidly than lower strength prescriptions
- $101 million attributed to trade inventory changes

5

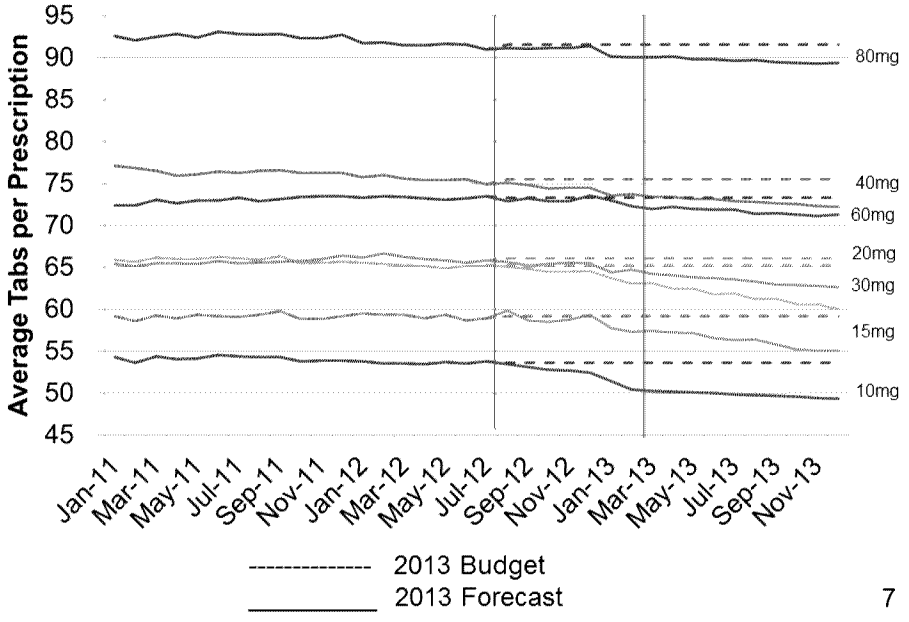
Reconciliation of OxyContin sales from Budget to Forecast

	Year to Date April		Full Year Forecast vs. Budget		
	$ millions	%	$ millions		%
Budget	**$961**	**100%**	**$2,916**		**100%**
Number of Tablets per prescription lower than Budget	($21)	(2.2%)	($79)		(2.9%)
Lower total prescriptions than Budget	($11)	(1.2%)	($110)		(3.4%)
Impact of mix and in particular lower sales of higher strengths	($25)	(2.5%)	($79)		(2.8%)
Other	($4)	(0.5%)	$0		(0.1%)
Sub-total demand	**($61)**	**(6.4%)**	**($268)**	(1)	**(9.2%)**
Impact of Trade Inventory Contraction	($101)	(10.5%)	($95)		(3.3%)
Total Variance to Budget	**($162)**	**(16.9%)**	**($363)**		**(12.4%)**
Actual / 2013 Forecast	**$799**	**83.1%**	**$2,553**		**87.6%**

(1) Includes the estimated demand impact of $65 million of losing formulary coverage on the United Healthcare AARP Medicare Advantage Prescription Drug program effective January 1st 2013.

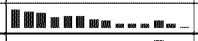
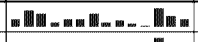
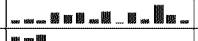
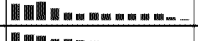
6

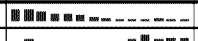
In January there was a reduction in the number of tablets per prescription, which we project will continue.



7

The decline in tablets per prescription is also impacting major competitors.

Product	Jan 12 - Feb 13 Tab Per Rx Trend	Avg Tab Per Rx Jan - Feb 2012	Avg Tab Per Rx Jan - Feb 2013	Difference
OxyContin		69.4	66.8	-2.6
Generic 2x per day morphine		69.4	68.1	-1.2
Kadian + generics		59.1	58.9	-0.2
Avinza		44.2	44.4	0.2
Opana ER + generics		67.3	65.1	-2.2
Methadone		148.6	143.0	-5.7
Exalgo		46.0	43.5	-2.6
ERO Market (oral solids)		86.0	82.5	-3.4

Product	Jan 12 - Feb 13 Tab Per Rx Trend	Avg Tab Per Rx Jan - Feb 2012	Avg Tab Per Rx Jan - Feb 2013	Difference
IR oxycodone		106.3	101.4	-4.8
oxycodone combos		63.4	63.7	0.3
hydrocodone combos		57.0	58.3	1.3

8

IMS NPA

The decline in tablets per prescription is projected to reduce 2013 gross sales by $78.8 million vs. budget.

	Tablets per Prescription			Variance Budget versus Forecast			
		Full Year					
	YTD April	Budget	Forecast	Tablets	%	Millions	%
10mg	50.7	53.6	50.2	-3.4	-6.3%	$ (8.9)	-6.3%
15mg	57.4	59.2	56.5	-2.6	-4.5%	(1.7)	-4.5%
20mg	63.3	65.3	63.0	-2.3	-3.5%	(13.5)	-3.4%
30mg	64.4	66.1	63.8	-2.2	-3.4%	(7.7)	-3.2%
40mg	73.5	75.5	72.9	-2.6	-3.5%	(20.5)	-3.4%
60mg	72.4	73.3	71.7	-1.6	-2.2%	(7.8)	-2.0%
80mg	90.1	91.6	89.7	-1.8	-2.0%	(18.6)	-1.8%
Total*	66.6	69.0	66.1	-2.9	-4.2%	$(78.8)	-2.8%

*Tablets per prescription total is a weighted average.

9

Causes of the decline in tablets per prescription are being researched to quantify impact and identify corrective actions.

- Potential increased and more aggressive enforcement of quantity limits by managed care organizations.
- Potential impact of PROP's messaging and other factors discouraging use of opioids.
- Medicare Part D opioid drug utilization review program for 120mg morphine equivalent prescriptions.
- Increased DEA/law enforcement scrutiny of physicians, pharmacies and wholesalers.
- Impact of Walgreens pharmacists calls to physicians to verify C2 prescription details.

10

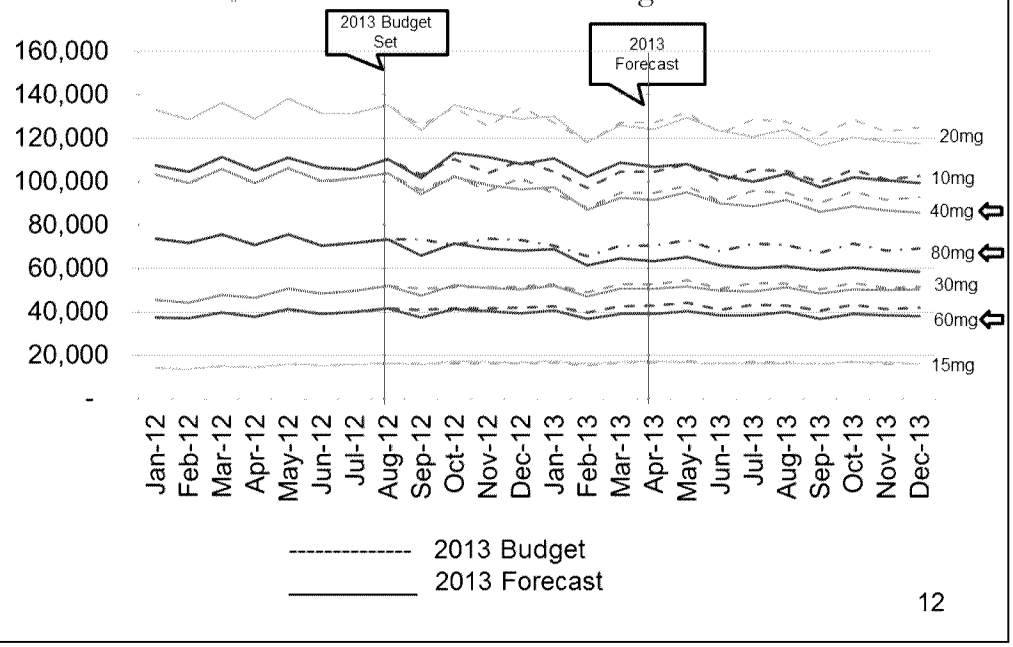
Year to date prescriptions are 1.2% behind budget. By the end of the year prescriptions are forecast to be 3.9% behind budget. At the budgeted average value per prescription, this is projected to result in a $110 million shortfall from budget.

	Year to Date April 2013			Full Year				
	Actual	Budget	Variance	2011 Actual	2012 Actual	2013 Budget	2013 Forecast	Variance Budget vs Forecast
Prescriptions	1,978,294	2,001,958	(23,664) -1.2%	6,481,879	6,197,937	6,037,235	5,804,624	(232,611) -3.9%
Budget price per prescription			$468.70					$472.89
Variance Due to Lower prescriptions			$ (11,091,451)				Note 1	$ (109,998,419)

(1) Includes the estimated demand impact of $65 million of losing formulary coverage on the United Healthcare AARP Medicare Advantage Prescription Drug program effective January 1st 2013.

11

Prescriptions of the higher strengths are declining most rapidly. This is changing the mix of prescriptions by strength, and is projected to result in an additional $79 million shortfall from budget.



12

Potential Causes of the decline in prescriptions --- especially the higher strengths

- Direct switches from other products to the 80mg strength (in particular) are declining (6 months ended Feb 2013 versus previous 6 months showed a decline of 30.8%).
- Titration up to higher strengths, especially to the 40mg and 80mg strengths is declining.
- Potential causes which are being researched:
  - State and Medicare mg equivalent limits
  - Increased coinsurance/higher deductibles for employees
  - Increased DEA/law enforcement scrutiny of physicians, pharmacies and wholesalers
  - OxyContin primary sales calls below budget. This is likely impacting prescriptions, because calls have a positive impact. For example,
    - The loss in higher strengths in called on physicians is 33% lower than those not called on.
    - High dose prescribing grew in physicians we began calling over the last year.

13

Planned Analyses

- Potential impact of reducing number of calls/quarter on highest prescribing physicians, and initiation calls on physicians not currently reached.
- Analysis to determine what physician characteristics are associated with lower tabs/prescription and lower strength prescriptions.
- Health Plan analysis to determine the extent to which individual plans are driving changes in number of tablets/prescription, lower prescriptions, strength mix.
- Impact of generic Opana ER
- How lack of patient access to pain medications impacts healthcare costs. For example, reports of an increase in ER visits.

14

Planned Actions

- Ensure the sales force delivers the budget number of primary OxyContin sales calls.
- Implement Marketing Initiatives
  - "Individualize the Dose" campaign
  - Titration – via iPad case studies
  - Reiterate patient savings programs/managed care formulary messaging
- Continue publishing information on the impact of the abuse deterrent formulation.
- Actions will be implemented where analyses indicate.

15

Trade Inventory contraction in 2013 is now estimated at $131 million versus budgeted contraction of $36 million

- We estimate that wholesaler inventory will return to 28 days by the end of 2013. The result is a reduction from $296 million at end of 2012 to $250 million at end of 2013 (inventory at the end of April was $246 million).
- Pharmacy inventory is expected to reduce from $239 million (31 days) at the end of 2012 to $154 million (20 days) at the end of 2013. Inventory at end of April 2013 was $192 million. Reductions are due to:
  - CVS and Walgreens have made public announcements targeting inventory reductions.
  - Walgreens switch to ABC to improve store service levels. As a result, Walgreens closed their Perrysburg distribution center. ABC is moving Walgreens pharmacies from a 3 times to a 6 times a week delivery schedule.
  - Like Walgreens other chains are increasing their reliance on wholesaler just in time deliveries to reduce carrying costs.
  - Fewer stores are purchasing / stocking OxyContin -- in 2011, 2012 and YTD 2013 -- 28,817, 24,744 and 22,823 stores, respectively, purchased OxyContin.
  - Consultants have reported other clients having similar levels of inventory contraction.

16

Message

From: Stewart, John H. (US) [redacted]

Sent: 7/7/2013 11:06:43 AM

To: Sackler, Mortimer D.A. [redacted]

CC: Boer, Peter [redacted]; Lewent, Judy [redacted]; Pickett, Cecil [redacted]; Costa, Paulo [redacted]; Sackler, Beverly [redacted]; Sackler, David [redacted]; Sackler, Dr Kathe [redacted]; Sackler, Dame Theresa [redacted]; Sackler, Dr Raymond R [redacted]; Sackler, Dr Richard [redacted]; Sackler, Jonathan [redacted]; Sackler Lefcourt, Ilene [redacted]; Snyderman, Ralph [redacted]; Baker, Stuart D. [redacted]; Gasdia, Russell [redacted]; Mahony, Edward [redacted]; Rosen, David (Sales and Marketing) [redacted]; JHS (US) [redacted]

BCC: Stewart, John H. (US) [redacted]

Subject: June Flash Report - McKinsey OxyContin Project

Attachments: 20130707104023657.pdf

Mortimer

McKinsey is performing an independent, detailed analysis of the of the factors that are affecting/driving OxyContin's current sales/prescription performance – including such factors as the performance of the overall market, OxyContin positioning and messaging, prescriber segmentation and targeting, salesforce execution, MCO coverage of Oxy and its impacts, medical/scientific support, S&P spend levels and characteristics of new to brand patients. I have attached a copy of a document that describes the workplan in greater detail.

McKinsey was selected on the basis of the quality of the work they have already do for us with respect to OxyContin, and also because of their great familiarity with us, the product and the issues it is facing – as well as the positive factors such as the abuse-deterrent properties and findings of the epidemiologic studies. As a result, they were able to begin the analytics substantially earlier – and we are very interested in receiving a report in time to take action to positively influence 2013 performance of the product.

The cost for the project is $850,000.00, and there is a potential to add a second phase in which McKinsey would work with us to develop and oversee the execution of a plan to pursue the greatest opportunities for boosting growth – that arise out of the current project. The cost of Phase 2, should we proceed, would be approximately $1 million .

John

From: Sackler, Mortimer D.A.
Sent: Saturday, July 06, 2013 11:14 PM
To: Mahony, Edward
Cc: Boer, Peter; Lewent, Judy; Pickett, Cecil; Costa, Paulo; Sackler, Beverly; Sackler, David; Sackler, Dr Kathe; Sackler, Dame Theresa; Sackler, Dr Raymond R; Sackler, Dr Richard; Sackler, Jonathan; Sackler Lefcourt, Ilene; Snyderman, Ralph; Baker, Stuart D.; Stewart, John H. (US)
Subject: Re: June Flash Report

Ed,

How much is the McKinsey work costing and how were they selected vs say Bain? What are they specifically doing for us?

Regards,

Mortimer

On Jul 5, 2013, at 3:12 PM, "Mahony, Edward" [redacted] wrote:

Colleagues,

The following is a flash financial report. This report focuses on sales, cash and material financial developments, if any. The report focuses on variances to the 2013 Mid-Year Forecast presented in June which projected a reduction in net sales from budget of $303.1 million, as a result in lower forecasted sales for OxyContin and Intermezzo.

Full financial statement for June will be published next week.

NET SALES

Net Sales for the six months ending June were $981.2 million --- $83.6 million lower than the same period last year and $52.0 million or 4.3% under the mid-year forecast. The reason for the under mid-year forecast sales performance is temporary fluctuations in trade stocking, discussed below. The underlying demand is tracking at or very close to the mid-year forecast.

OxyContin

OxyContin net sales for the six months ending June total $878.9 million --- $42.1 million below the mid-year forecast and $96.4 million lower than the same period last year. The variance vs. mid-year forecast is due to:

a. OxyContin demand – as reported by IMS -- is running in line with the mid-year forecast.

b. OxyContin trade inventory is running $40.9 million below the mid-year forecast. At the end of June, trade inventory was low – 1.6 months for wholesalers and pharmacy combined. Trade inventories should be back closer to 1.8 months when orders in house at the end of June were shipped earlier this week (net sales value $32 million).

Other influences of future demand:

a. The 2013 budget assumed that the analgesic sales force would have OxyContin as the primary focus in 50% of all calls up from 30% at the end of 2012. That would have resulted in 181 thousand primary OxyContin sales calls in the first 6 months of 2013. Due to vacancies and a slower than expected implementation of this change, OxyContin was the primary focus in about 117 thousand sales calls through the end of June, 64% of target. Q3 target lists have been issued to the field force and OxyContin primary sales calls are increasing to 44% of all calls --- approaching the 50% target when secondary calls are added at ½ the value of a primary.

b. McKinsey has been engaged to work with Sales & Marketing to identify opportunities to improve performance of OxyContin. A preliminary report of this work will be made at the July 25th Board meeting.

Butrans

Butrans net sales for the six months ending June were $51.1million --- $8.0 million below the mid-year forecast and $10.5 million above the same period last year. The net sales miss is driven by contraction in trade inventory and prescriptions running slightly below the mid-year forecast. The mid-year forecast assumes full year Butrans net sales of $127 million, the same as budget. The analgesic sales force made 213 thousand primary Butrans sales calls through the end of June vs. budget of 182 thousand calls, or 117% of target.

Intermezzo

The mid-year forecast assumes full year Intermezzo net sales of $10.6 million versus budget of $44 million. Prescriptions as reported by IMS are in line with forecast.

Cash and Short Term Investments

At the end of June, unrestricted cash and short term investments totaled $839 million --- which is $15 million higher than forecast. This temporary higher-than-forecast cash balance is due to timing of payments. Actual cash payments during the month included Board approved payments related to **Redacted** the Better Medicine Awards ($9.1 million).

Material Financial Event in the Month

None noted.

Best Regards,
Ed

Message

From: Baker, Stuart D. [redacted]

Sent: 8/21/2013 12:03:18 PM

To: Sackler, Dr Raymond R [redacted]; Sackler, Beverly [redacted]; Sackler, Dame Theresa [redacted]; Sackler Lefcourt, Ilene [redacted]; Sackler, Dr Kathe [redacted]; Sackler, Jonathan [redacted]; Sackler Hunt, Samantha [redacted]; Sackler, Mortimer D.A. [redacted]; Sackler, David A. [redacted]; Boer, Peter [redacted]; Boer, Peter [redacted]; Lewent, Judy [redacted]; Pickett, Cecil [redacted]; Costa, Paulo [redacted]; Snyderman, Ralph [redacted]

CC: Sackler, Dr Richard [redacted]; 'Christopher.Mitchell [redacted]; Roncalli, Anthony [redacted]

Subject: McKinsey Report Regarding Purdue Pharma L.P.

Attachments: 20130808 Addendum to Board Memo v14.docx

Dear All:

Dr. Richard has arranged a face to face meeting with McKinsey on Friday, August 23, 2013 commencing at 2:00pm to discuss the McKinsey report. This report was included in the Board book for the Thursday, August 15, 2013 meeting. For ease of reference, a copy is attached hereto. Any Directors who would like to attend the meeting can do so. If you would like to attend telephonically, the following are the call in details:

U.S. Participants: **Redacted**

International Participants: **Redacted**

Passcode: **Redacted**

Stuart

CONFIDENTIAL

Memorandum to
John Stewart
Russ Gasdia

From
McKinsey & Company

August 8th, 2013

Identifying granular growth opportunities for OxyContin: Addendum to July 18th and August 5th updates

This addendum highlights two additional findings since our July 18th and August 5th updates and specific actions we believe Purdue should take to begin to increase sales.

1. Prescriber Targeting

Our refined analyses confirm significant opportunity to improve sales through better targeting. We believe the upside is >$100 million in annual sales.

Today Purdue spends as much effort detailing the lesser value prescribers (decile 0-4) as it does on the higher value prescribers (decile 5-10). To put this in perspective, the average prescriber in decile 5-10 writes 25 times as many OxyContin scripts as a prescriber in decile 0-4. In Q1 2013 the majority (52%) of OxyContin primary calls were made to decile 0-4 prescribers. Including the secondary calls, 57% of the primary detail equivalents (PDEs) were made to decile 0-4 prescribers. Best practice in the industry is over 80% of effort on higher value prescribers. (Exhibit 1)

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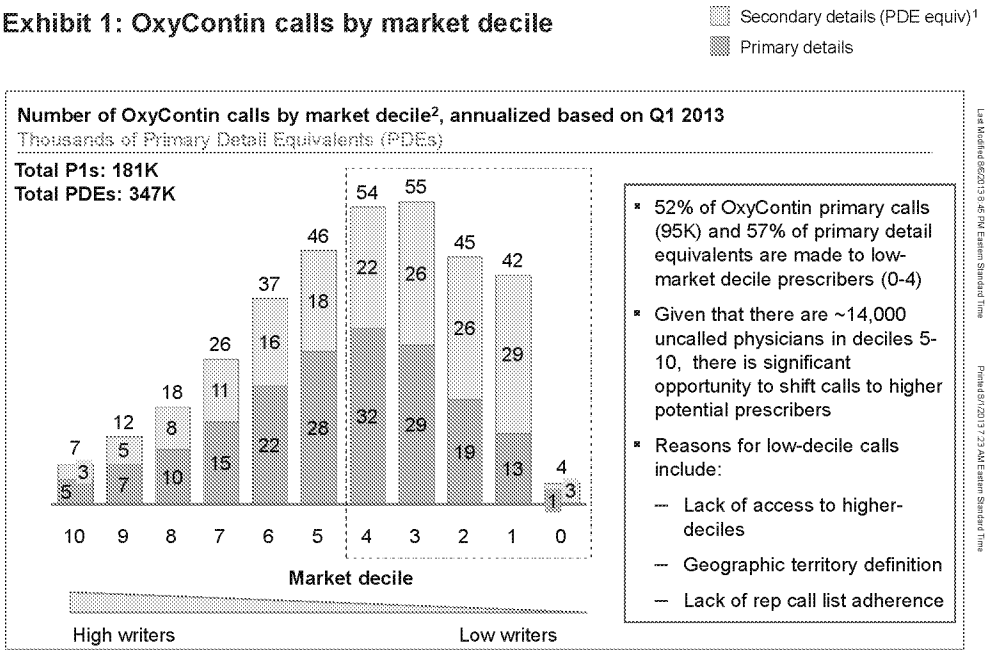
Exhibit 1: OxyContin calls by market decile



1 PDEs calculated as 1.0 x P1 calls + 0.5 x P2 calls
2 Market decile based on ER-IR market basket as defined by ZS Associates

SOURCE: IMS, Purdue call data

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Furthermore, 75% of the decline in OxyContin sales comes from prescribers that Purdue is not calling upon. Two thirds of this decline is from prescribers in deciles 5-10. (Exhibit 2) In addition, the field sales force primary OxyContin calls are running at 65% of goal.

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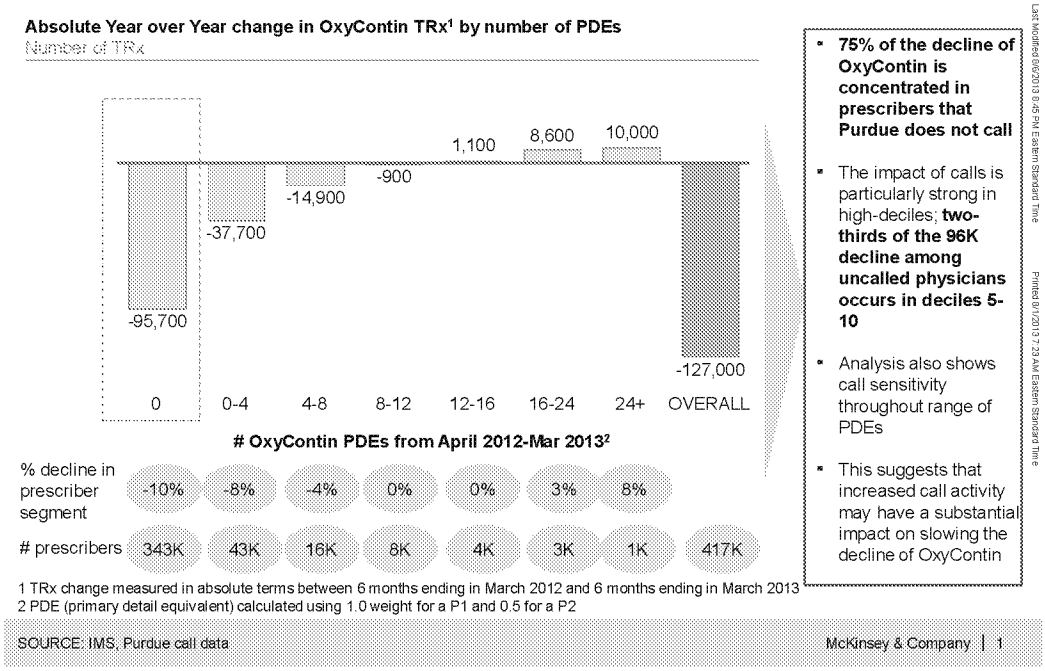
Exhibit 2: OxyContin TRx change at different levels of call activity



Collectively these findings show significant opportunity to improve targeting and also emphasize the upside from improvement as OxyContin's responsiveness to calls appears significant.

2. Retail access

Access to OxyContin for some patients has become quite challenging in specific local markets. This is due to a combination of factors including: regulations, DEA initiatives, PROP, wholesaler initiatives and local pharmacist perceptions.

There is direct evidence of this reduced access through patient calls to Purdue's Medical Information line which have recorded a 300% increase in instances of patients reporting difficulty filling opioid prescriptions, often needing to travel to multiple pharmacies in an attempt to fill their prescription.

There are reports of wholesalers stopping shipments entirely to an increasing number of pharmacies, causing temporary supply disruptions. Although, it appears that pharmacies are able to secure alternative distributors.

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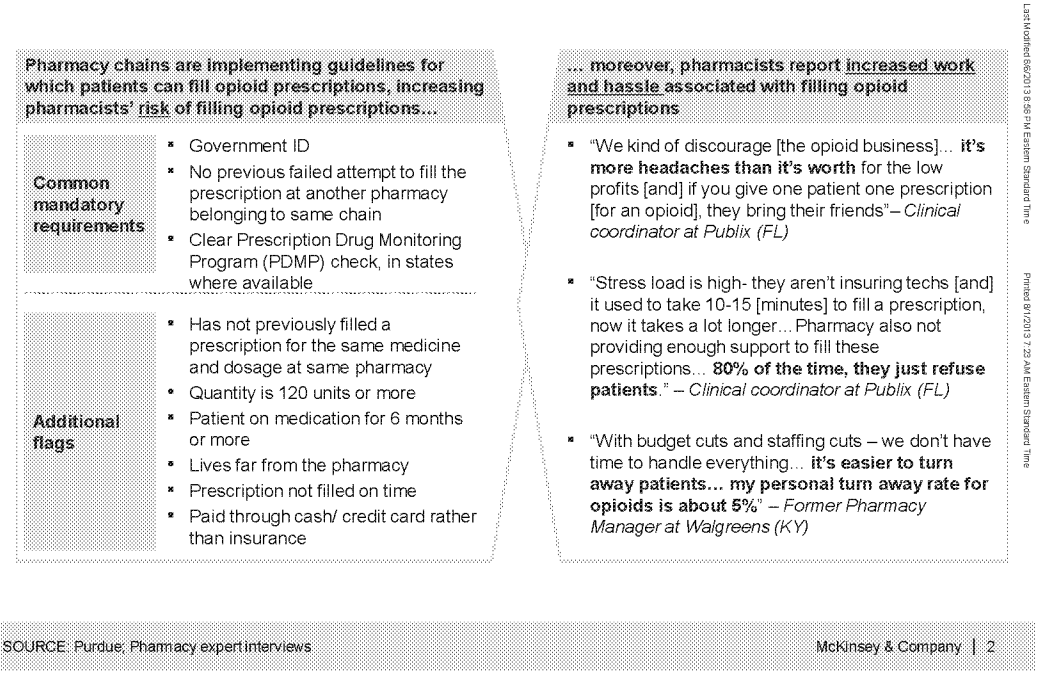
Many wholesalers are also imposing hard quantity limits on orders based on prior purchase levels. This restricts access for new and existing patients, especially in situations when an access challenge arises in a local pharmacy, the wholesaler quantity limits restrict the ability of other local pharmacies to pick up the displaced patients.

While the wholesaler issues are quite visible and real, we believe the daily decisions being made at local pharmacies, while less publicly visible, are in fact creating far greater access issues.

Walgreens, in particular, is having material impact on patients. In April, Walgreens rolled out national opioid dispensing guidelines. These guidelines are quite extensive and include 'flags' for new patients and dose limits which can clearly impact appropriate patient access. (Exhibit 3)

Exhibit 3: Guidelines established by major pharmacy chains for opioid dispensing



Separately, as part of their agreement with the DEA, Walgreens eliminated controlled substances from their bonus calculations for pharmacists. Thus individual pharmacists effectively lose money every time they accept the work of fulfilling an opiod prescription. Thus there is a strong dis-incentive for pharmacists to dedicate the extra time needed to maintain patient access to opiods, even independent of the chain's national guidelines on opioid dispensing.

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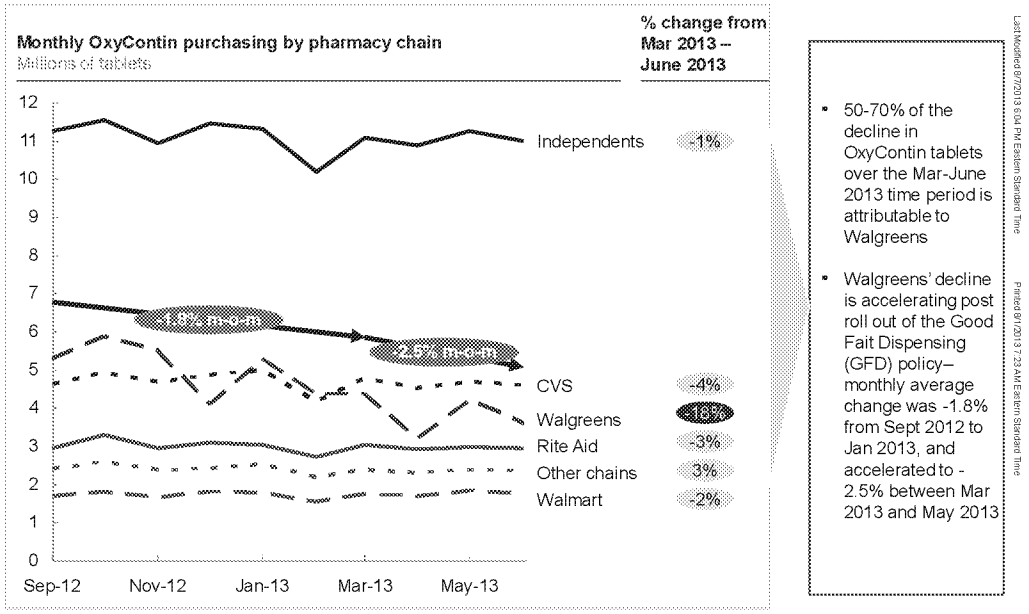
Deep examination of Purdue's available pharmacy purchasing data shows that Walgreens has reduced its units by 18% in just the last three months. In March – June, the Walgreens reduction alone can account for 50-70% of the total OxyContin decline in units. (Exhibit 4)

Exhibit 4: OxyContin purchasing by pharmacy chain PRELIMINARY - IN VALIDATION



SOURCE: Market Visibility dataset; OMS

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We have examined multiple zip codes where Walgreens is a major supplier, and the other local pharmacies have not seen offsetting increases in purchases – thus it appears that many of these patients are either going untreated or being forced to find alternatives.

Further, the Walgreens data also shows a significant impact on higher OxyContin dosages. Among Walgreen stores that stock OxyContin 20mg, in the last three months there has been a 21% reduction in the number of stores also purchasing the 80mg. It is also important to note that Walgreen's reduction in the 80mg far exceeds the national trend. Their share of national purchases of the 80mg has fallen by nearly 20%. Thus Walgreens is not simply reflecting lower demand, but apparently taking independent action to further reduce 80mg purchasing.

While Walgreens is currently having the most dramatic impact, there is reason to believe that many of the chains either have implemented (e.g., CVS in 2012) or are considering similar policies. Thus the pharmacy access issue is both urgent and broad.

The magnitude of today's patient access issues underscores the need to: (1) take immediate actions to address issues at pharmacies (e.g., ensure appropriate senior level dialogue with Walgreens, increase patient advocacy efforts); and (2) accelerate exploration of potential

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innovative alternatives such as direct-to-patient mail order which was described in our prior memo.

3. Specific actions to begin to increase Purdue's sales[1]

When combined with prior findings, the scale of change required in Purdue's sales force model is significant. Rather than addressing the pieces individually, we recommend you take actions to 'Turbocharge Purdue's Sales Engine' and optimize across all elements of the winning sales model – from targeting to territories to incentive compensation.

The rationale to for addressing Purdue's sales model holistically is strong. These findings demonstrate the breadth of issues and how they are inter-related. For example, despite the significant value in improving Purdue's targeting, the value cannot be captured unless the field achieves a higher level of adherence to Purdue's call plan.

While the behavioral and process changes described here are significant, and some incremental investments may be required (e.g., additional reps, Sales analytics capabilities), overall the financial investments are moderate relative to the upside sales potential.

Therefore, we recommend Purdue approve five actions immediately:

1. Create a senior leadership team to lead this effort (no more than three executives within and outside sales) and task them to develop a detailed workplan within 30 days.
2. Establish a revenue growth goal (e.g., $150M incremental stretch goal by July 2014) and set monthly progress reviews with CEO and Board.
3. Shift Purdue's sales targeting from decile to workload (industry norm that more precisely defines the value of physicians)
4. Re-balance field effort dramatically toward OxyContin by increasing field force activity where needed and closely measuring changes in sales
5. Mandate field compliance with targets and align the incentive program to match OxyContin prioritization

Our experience with other pharmaceutical companies suggests that such a comprehensive Sales transformation program takes nine months, although positive impact will be seen within 2-3 months. It is critical that Purdue commits to addressing sales as an organizational journey, not an event. Success requires not only the analytic answer, but even more importantly winning the hearts and minds of the sales force and permanently changing how the company operates, from

[1] Recommended actions to address "retail access" will be included in our final report

[PAGE * MERGEFORMAT]

HQ to the field. New capabilities will need to be learned and reinforced on a daily basis. The organizational mindset, behavior and culture will all need to evolve along with journey.

Purdue should start work immediately. Additional analytics are needed (e.g., workload and Champions need to be identified). As mentioned above, a detailed workplan needs to be developed within 30 days. While this effort would be focused on OxyContin, the approach and capabilities built would likely have positive spillover to Butrans and the rest of the portfolio.

While it is challenging to quantify the exact impact of such changes in a dynamic marketplace, we are confident that the value at stake is significant – hundreds of millions, not tens of millions. Analysis done during the prior sales force alignment and our own retrospective analysis both showed over $200M of potential opportunity in a single year, even more in cumulative terms. While this did not take into account the negative landscape drivers such as pharmacy access challenges, it also did not consider the positive drivers such as the recent label change. The substantial size of the opportunity is reassurance that the significant effort required will be well rewarded.

Closing

We emphasized this 'Sales Engine' recommendation because we believe it is fundamental to Purdue's near term and longer term success. We strongly believe that a comprehensive approach is the right answer. Success will require real commitment from Purdue leadership and also significant effort from the organization. This program requires substantial capability building at HQ and in the field. The program office described above will require support of an internal cross-functional working group, likely with executive committee engagement, possibly as co-chairs. Our experience is that these kinds of sales transformations are not easy and require real work but the end result is quite rewarding, both for individuals and for the organization.

Our experience makes clear that one fundamental 'must have' for execution success is strong leadership alignment upfront.

Therefore our recommendation is that Purdue makes a clear go-no go decision to 'Turbocharge the Sales Engine'.

[PAGE * MERGEFORMAT]

Message

From: Sackler Lefcourt, Ilene [redacted]

Sent: 10/28/2013 4:28:48 PM

To: Sackler, Mortimer D.A. [redacted]

Subject: Re: Purdue 2014 Budget Proposal

Hi Mortimer, I don't understand why no Board member has responded to your strong, thoughtful objections to the budget. What do you think?

On Oct 27, 2013, at 3:14 PM, "Sackler, Mortimer D.A." [redacted] wrote:

I have to say in advance of the meeting that this budget is totally unacceptable to me. I don't know what others think but to me this is a non-starter. In my opinion we would be better off laying everyone off and milking the business than doing this! They even admit that the total growth in Butrans next year is driven entirely from the price increases! Then why assign ANY S&P against it if they can't grow volumes?

Seems like the organization has just fully given up and is resigned to declining volume sales for all our products which bodes really badly for our business and our pipeline (and I would again question the value of investing so heavily in an R&D pipeline whose future is very questionable given the dramatic changes that have happened in the market). And just this past week the FDA approved Zogenix's non-AD controlled release Hydrocodone which our group felt had no chance of approval, which further calls into question our AD strategy and pipeline.

What is clear to me is two things:

1. We MUST cut costs even further than proposed here in this budget.
2. We need to spend time focusing on and discussing how we will reverse this trend and what the future truly holds for our pipeline given the current realities of the market (both managed care and AD protections from generics).

Clearly bringing in our new CEO is key, but what can we do in the meantime? Do we really want to spend this week debating a budget or should we focus on pushing for further cuts in spending and not agree a current top line budget saying it is simply unacceptable at their proposed sales level. They must figure out how to do more with less and if they can't, which seems to be the case, then they should say so and maybe they should retire as well. We are still spending WAY too much money in areas where we are getting no return for it (btw, I see Dilauded is way behind budget, did we ever look back to see if we made money on that acquisition or if it was a big loss?) and probably too little money in areas where we could get a much better return. I am not convinced that our rebate/managed care strategy is benefiting us sufficiently given the cost of it (and maybe we can't do any better) and it also is not clear to me from the proposals Redacted

Redacted

Lots of questions, and very few answers that I have seen in the information so far.

Regards,

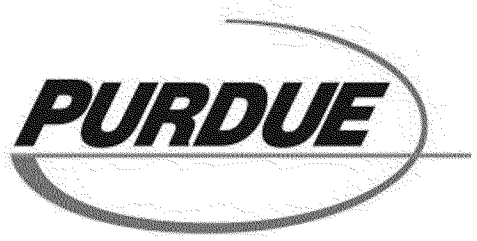
Mortimer

On Oct 23, 2013, at 7:05 PM, "Mahony, Edward" [redacted] wrote:

Purdue 2014 Budget Proposal
Narrative

WORKING DRAFT
Last Modified 9/13/2013 11:49 AM Eastern Standard Time
Printed 9/13/2013 12:29 PM Eastern Standard Time

OxyContin growth opportunities



Phase I Final Report: Diagnostic
Sept 13, 2013

McKinsey&Company

Detailed contents (1/3)

Detailed contents (2/3)

Detailed contents (3/3)

Contents

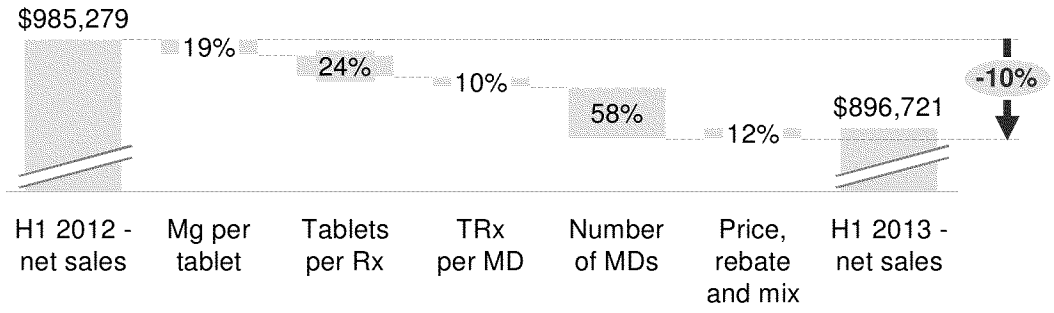
Findings on market landscape & demand forecast

PRELIMINARY

- A number of factors have contributed to the decline in OxyContin sales, including pharmacy access, DEA actions, negative media/PROP, state legislation, managed care access, and sales force execution
- Despite an overall decline in OxyContin TRx, **greater geographical granularity reveals variation in OxyContin performance**
  - There is substantial variability in OxyContin TRx change by zip code
  - There is also substantial variability in Oxycontin share of ERO market by state
- **In the past year, about ~85% of OxyContin's decline is in-line with the decline of the overall market (branded EROs), with 15% attributable to loss of branded ERO market share**
  - Maintaining a constant share of the forecasted branded ERO market could be worth ~$3.4B of revenue over 4 year
- OxyContin performance also differs significantly across specialties
  - OxyContin TRx written by **NPs and PAs are growing quickly, while PCPs are one of the fastest declining** segments
  - OxyContin has **high share of ERO market among orthopedic specialists, surgeons, and rheumatologists**
  - There is some variability in NBRx share of TRx by specialt
  - Pallative medicine, orthopedics, and emergency medicine experienced the largest decline in OxyContin tablets/TRx in the last year
- OxyContin has a slightly lower share of the ERO market among younger prescribers, accounting for decile
- **Tablets/ Rx and strength are declining** and a significant portion of the decline can be attributed to **changing prescriber behavior**
  - Tablet per prescription has fallen steadily over the past two years
  - High dosage prescriptions are falling at a faster rate compared to low dosage tablets
  - **Tablets per prescription is declining in 47 states**, even those with a TRx increase
  - In interviews, **prescribers report writing for fewer pills and lower strengths**, and increasingly referring patients to pain specialists **due to increased time/ hassle of managing opioid patients (due to pharmacy issues, managed care access and fear of legal consequences/ DEA)**

OxyContin performance has been driven by a number of factors

Weak driver
Strong driver



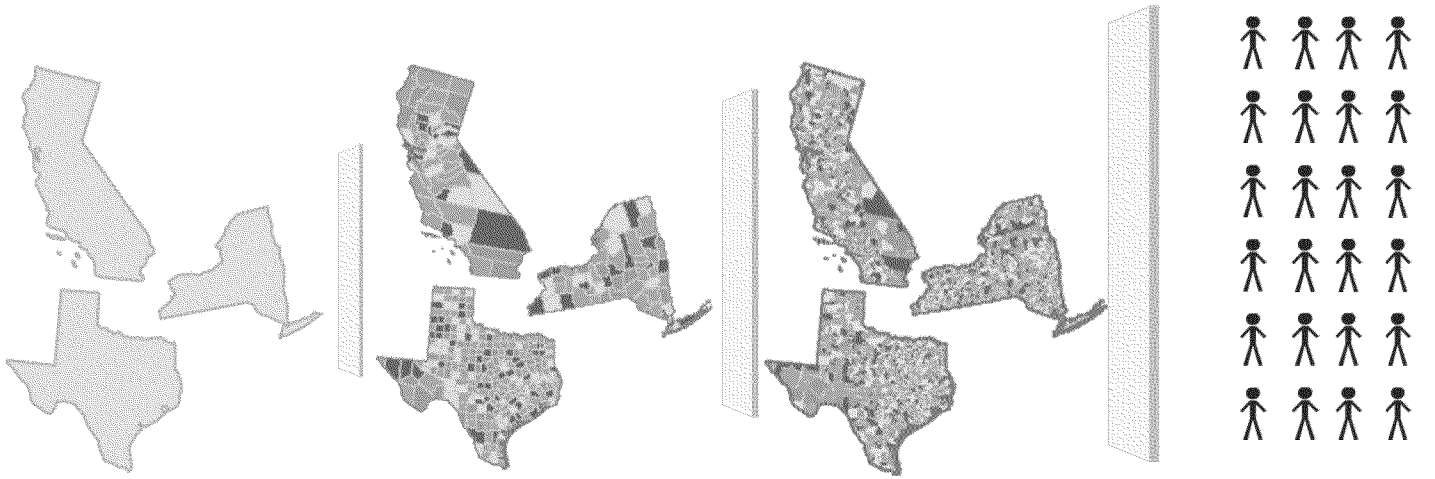
OxyContin Mgs $ 000s; % share of decline accounted for

Drivers of Oxy-Contin perform-ance

Sales force execution	▪ Only making 67% of target OxyContin P1s [1] ▪ >50% of OxyContin calls made to low-decile[2] ▪ 75% of TRx loss from doctors not called on (for 12 mos ending in Mar 2013)
Pharmacy access	▪ National pharmacies implemented policies to restrict filling of opioid prescriptions ▪ Walgreens alone accounted for 50-70% of OxyContin unit decline between Mar-Jun2013
DEA/ litigation risk	▪ 'Chilling effect' on prescribers, pharmacies and wholesalers by investigating targets but not releasing written guidance ▪ More hassle for doctors to prescribe opioids ▪ No differentiation between AD and non-AD
Neg. media/ PROP	▪ CDC names drug overdose as leading cause of injury death in US, with 45% involving prescription painkillers
State legislation	▪ States passing regulations for prescribing and dispensing of opioids (e.g., PMP use, licensing, dosing levels)
Managed care	▪ Positive impact from average rebate rate declining from 26% to 24.7%, price increase and mix shift ▪ Formulary status lost for several Part D plans[3]

1For H1 2013
2Low decile refers to deciles 0-4; based on Q1 2013
3 Over past 3 years

Despite an overall decline in OxyContin TRx, greater granularity reveals pockets of growth



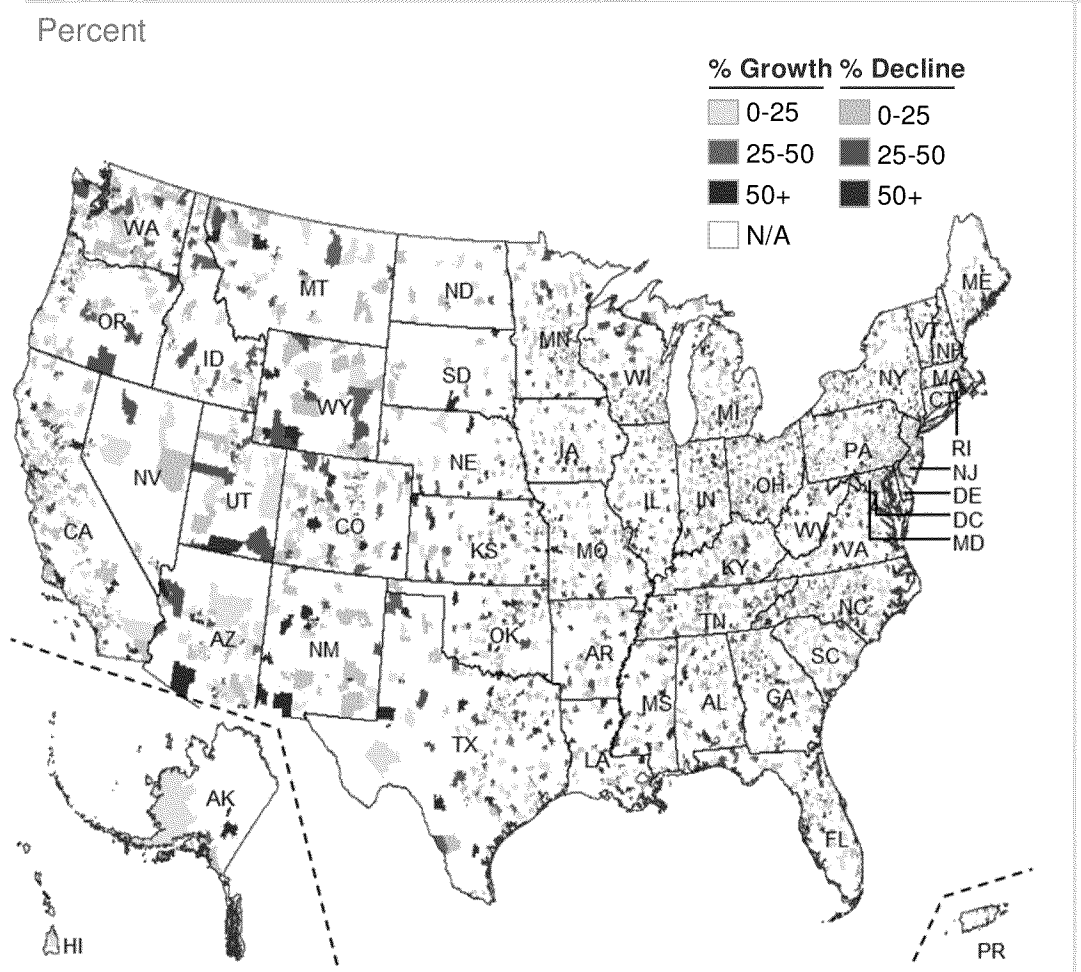
	States	Territories	Zip codes	Prescribers
Total #	50	525	9,000	200,000
% increasing TRx	20%	26%	39%	47%
% decreasing TRx	80%	74%	61%	53%
% increasing Tabs/ TRx	7%	17%	43%	n/a
% decreasing Tabs/ TRx	93%	83%	57%	n/a

Note: Calculations are for 12 mos ending in March 2013 vs 12 mos ending in March 2012

SOURCE: IMS

There is substantial variability in OxyContin TRx change by zip code

TRx change by zip code, Apr 2011-Mar 2012 v. Apr 2012-Mar 2013



Number of growing and declining zip codes[1]

Number of zipcodes

	40%	60%
	3,318	5,067
	Growing zipcodes	Declining zipcodes
Avg TRx/zip	669	538
Example zip codes	Fort Wayne, IN (+5.1K) Pinehurst, NC (+3.2 K) Fayetteville, NC (+2.6K)	Knoxville, TN (-1.9K) Tampa, FL (-1.9K) Renton, WA (-1.5K)

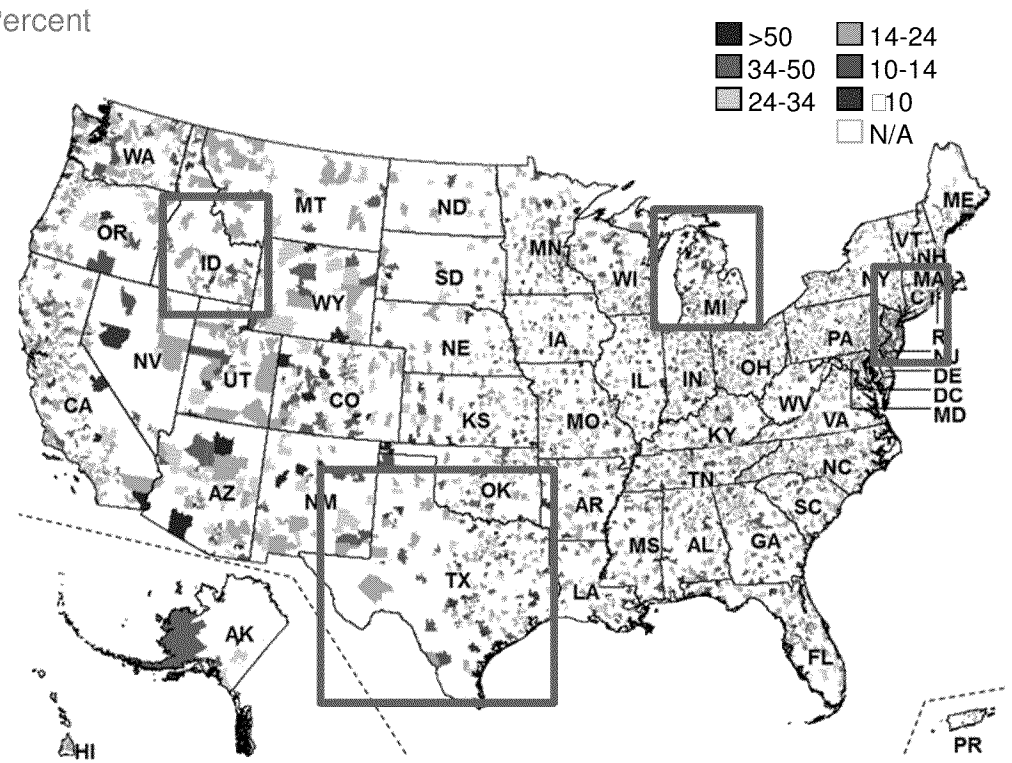
1 Zip codes with fewer than 60 Oxycontin TRx in both 2011 and 2012 were not considered, accounting for approximately 100,000 TRx in 2011 and 2012

SOURCE: IMS; Purdue Sales and Marketing; Team analysis

There is also substantial variability in Oxycontin share of ERO market by state

PRELIMINARY

Oxycontin share of ERO market by zip, 2012[1]



- There are potentially state level factors influencing OxyContin market share

States with highest & lowest OxyContin share of ERO market, 2012

State	Oxy Share	Gx Share
Highest		
Rhode Island	43	50
New Jersey	41	47
Connecticut	41	47
D.C.	37	52
Minnesota	37	60
Lowest		
Nevada	14	74
Michigan	16	77
Mississippi	17	71
Texas	18	68
Idaho	18	72
US Average		
US	24	65

1 April 2012 to March 2013

SOURCE: IMS

In states where OxyContin has low share of ERO market, generics have higher share

2012[1] share of ERO market, highest and lowest share states
Percent

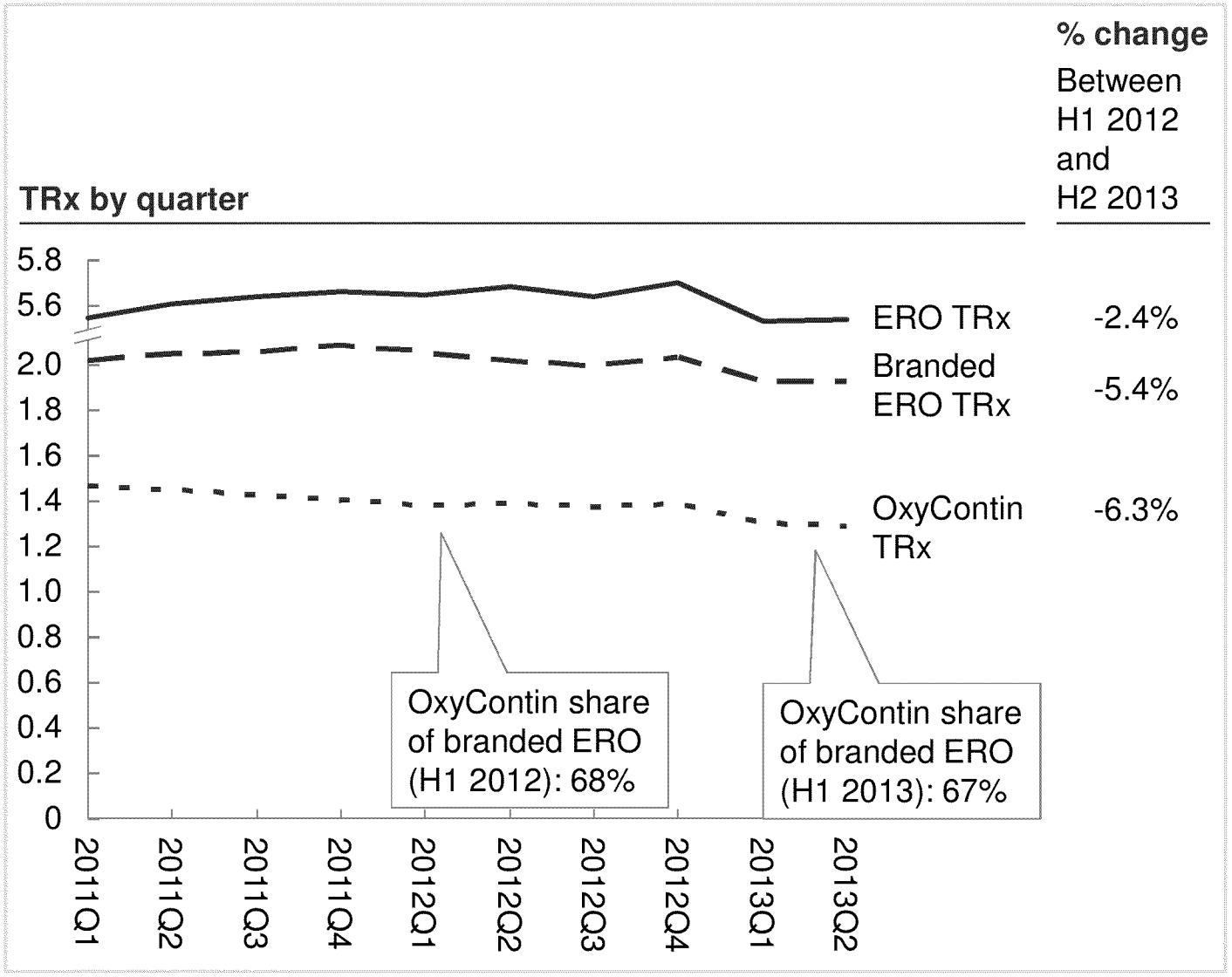
	State	All Other Branded	BUTRANS	OPANA ER	OXYCONTIN	Generic
Highest Share of ERO	RI	3%	2%	2%	43%	50%
	NJ	6%	2%	4%	42%	47%
	CT	6%	2%	4%	41%	47%
	DC	5%	3%	3%	37%	52%
	MN	1%	1%	1%	37%	60%
Avg		4%	2%	3%	40%	51%
Lowest Share of ERO	NV	4%	1%	7%	14%	74%
	MI	4%	1%	3%	16%	77%
	MS	6%	2%	5%	17%	71%
	TX	6%	5%	4%	18%	68%
	ID	5%	3%	2%	18%	72%
Avg		5%	2%	4%	17%	72%
	All 50 States	5%	2%	4%	24%	65%

- In states where OxyContin has low share of ERO market, generics have higher share
- **Among states where OxyContin has low share of ERO:**
  - **NV** and **MS:** Opana share of market is above national average
  - **TX** and **ID:** Butrans share of market is above national average

1 April 2012 to March 2013

SOURCE: IMS

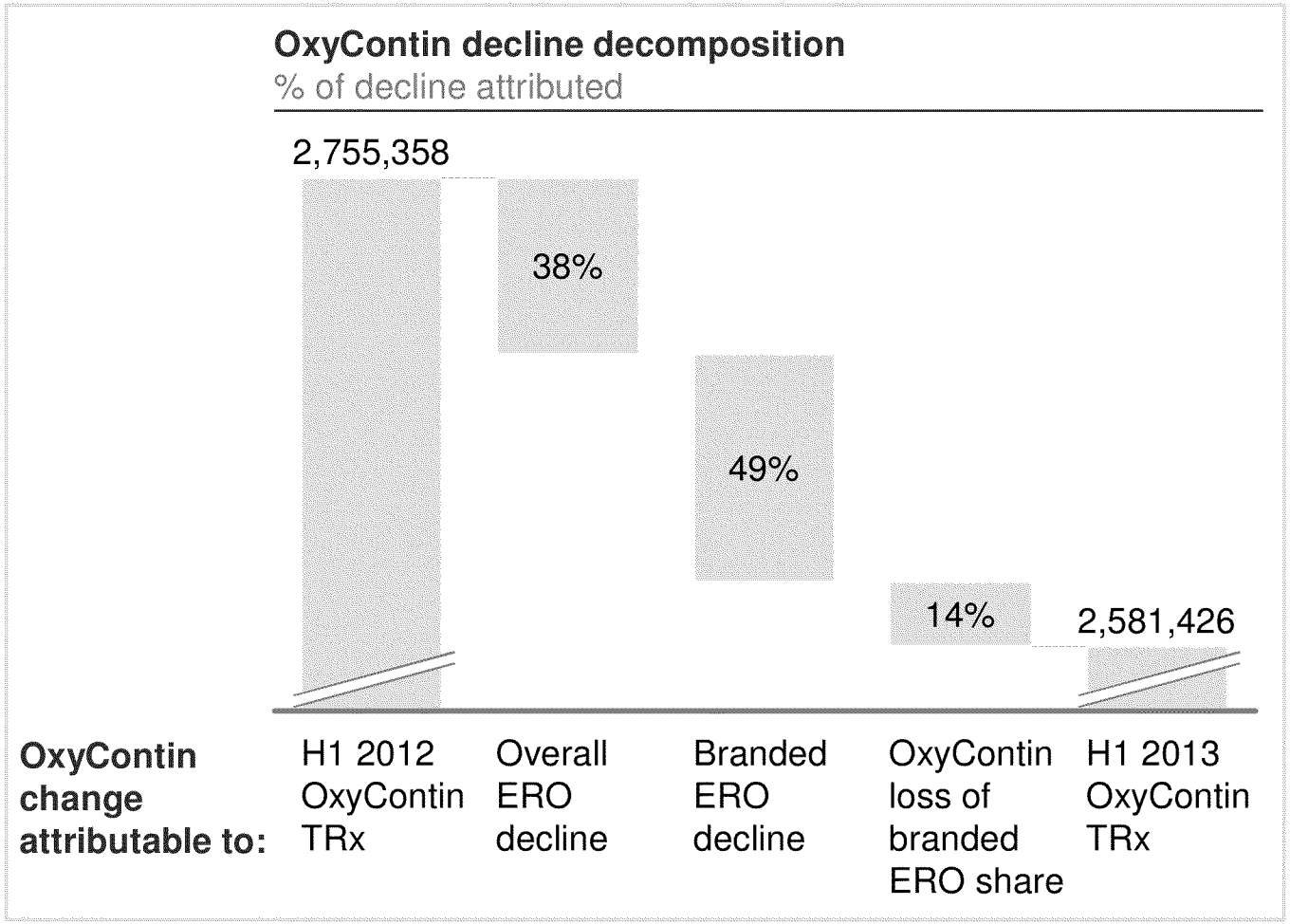
OxyContin's decline has been faster than decline of branded ERO products



OxyContin decline has been faster than overall ERO market and branded ERO market, indicating that OxyContin has lost share of branded EROs

SOURCE: IMS

OxyContin's recent decline can largely be attributed to decline in branded ERO market

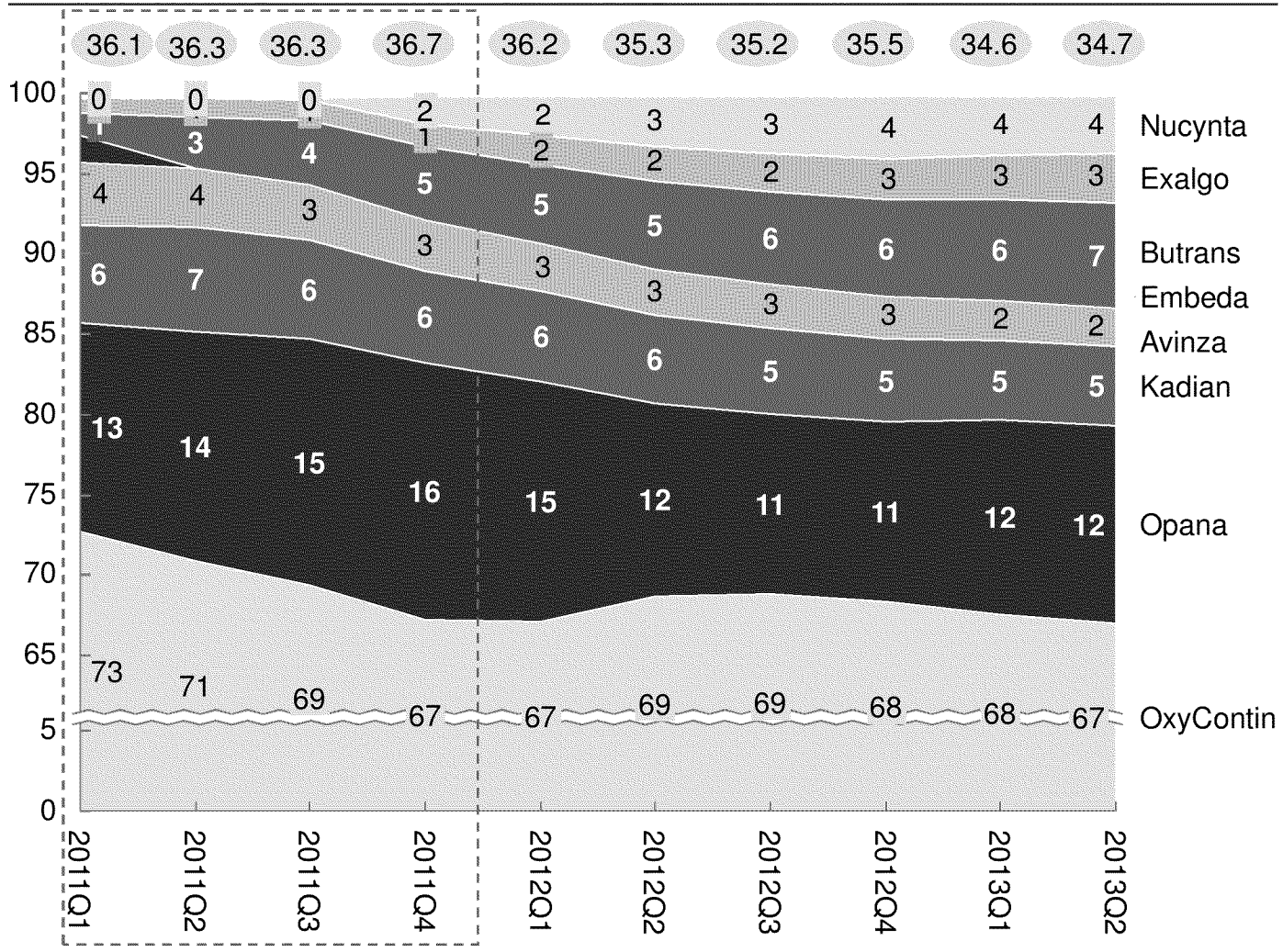


While OxyContin has lost share of branded ERO, the largest portion of OxyContin's decline can be attributed to overall decline in ERO and branded ERO

SOURCE: IMS

While branded drugs overall lost share in the ERO market, OxyContin also lost share to other branded products

Share of ERO branded market, by TRx



Branded share of ERO market

Period of reformulation introduction and OxyContin generics exiting market

- OxyContin share of branded EROs has fallen from 73% to 67%
- Butrans, Exalgo, and Nucynta have increased share of the branded ERO market

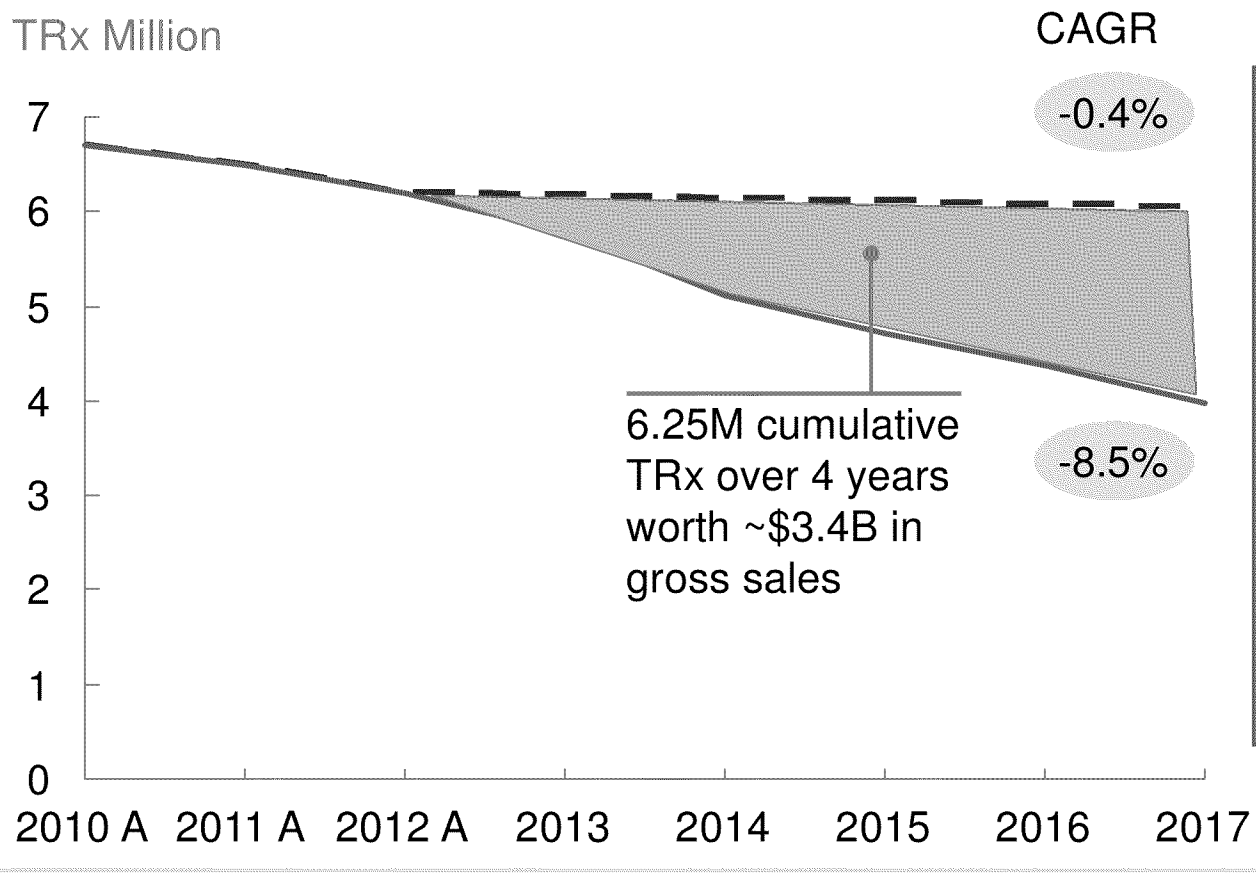
SOURCE: IMS

Maintaining a constant share of the forecasted branded ERO market would be worth ~$3.4B of revenue over 4 years

Forecast @ constant share of branded ERO market

Purdue forecast[1]

Projected OxyContin TRx

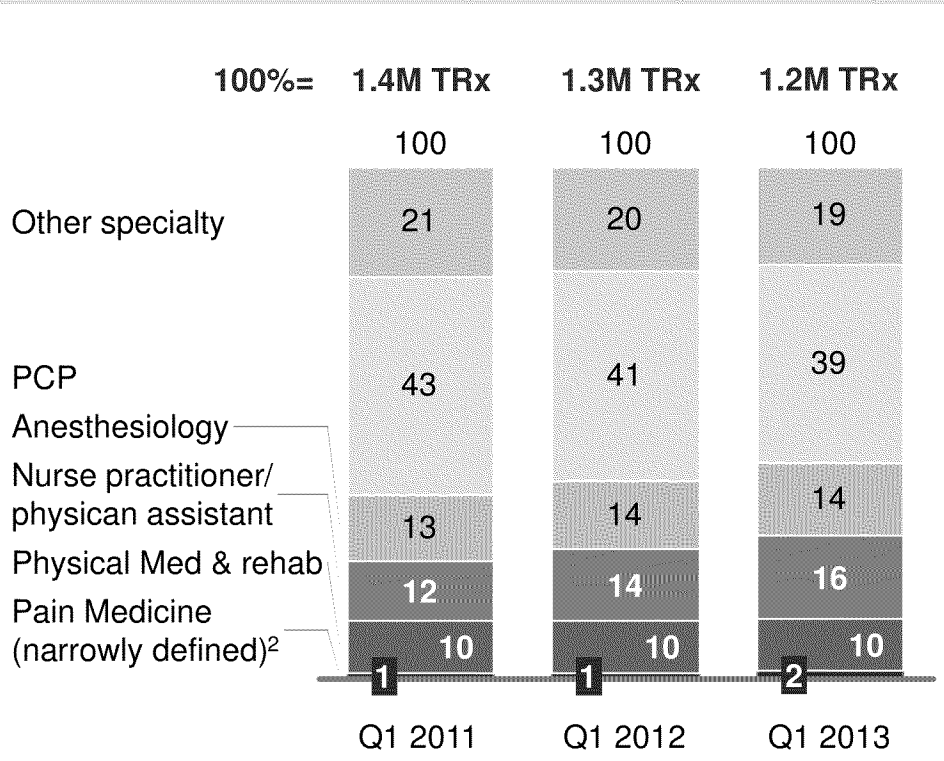


- 2012-17 external forecast growth rates
  - All Opioids: 1.8%
  - EROs: -0.4%
  - Branded EROs: -0.4%
  - OxyContin: -8.5%
- How much can be captured/retained by Oxy? At what cost?

SOURCE: Cowen and Company "Therapeutic Categories Outlook" report, October 2012, Purdue mid-year revised forecast, Purdue mid-year update 2013 forecast; McKinsey analysis

NPs and PAs are growing quickly, while PCPs are one of the fastest declining segments

OxyContin % TRx by prescriber specialty



2011-13 TRx CAGR (%)	Number of prescribers 2012 (% Purdue Reach)	TRx/prescriber (2012)
-11	68,400 (12%)	15
-10	92,724 (31%)	24
-2	4,842 (66%)	153
11	30,206 (25%)	26
-4	4,976 (57%)	111
5	373 (73%)	207

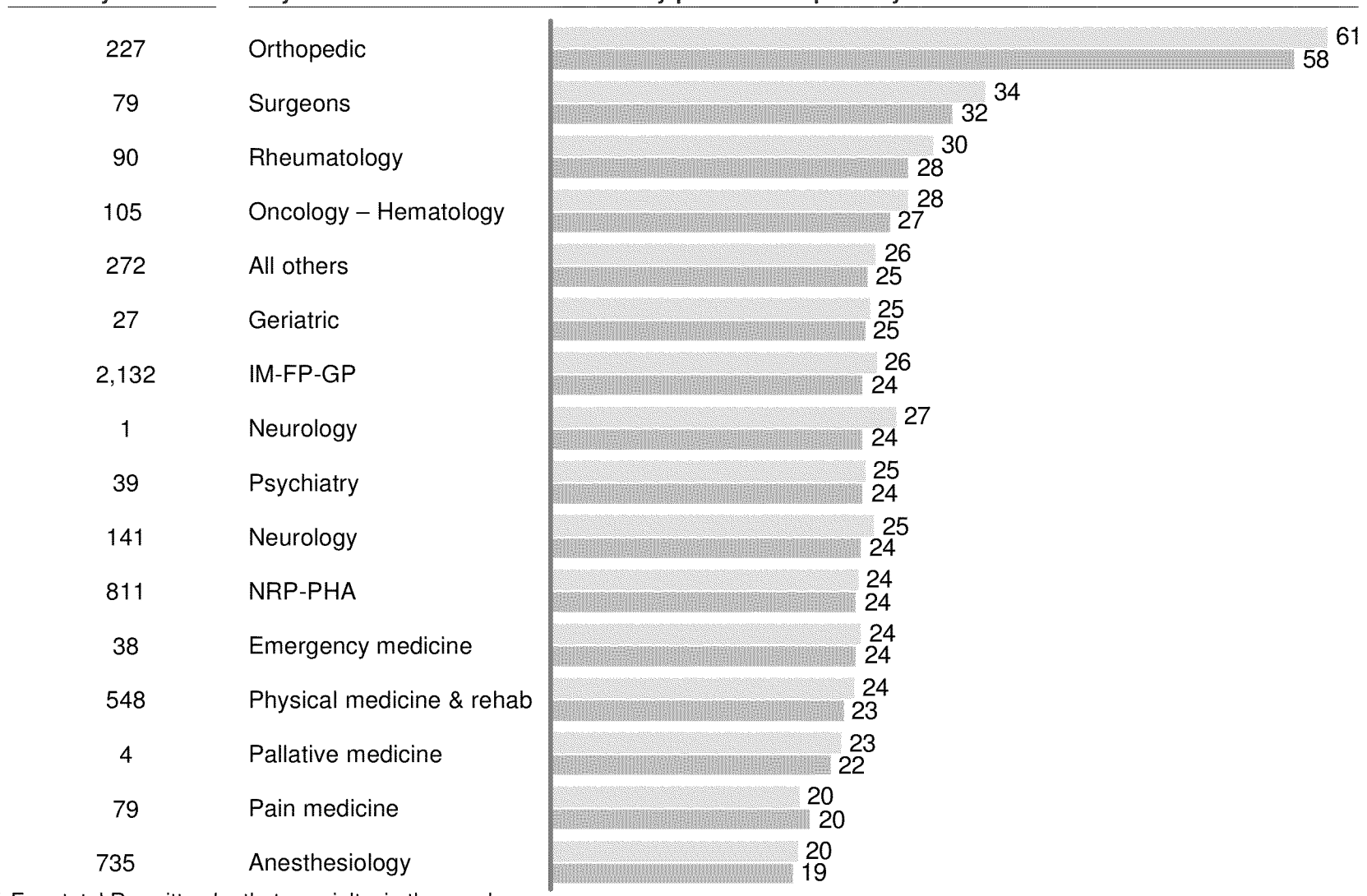
- Nurse practitioner/assistant TRx growing at double-digit rates[1]
- PCPs are one of the fastest declining segments of the market
- Narrowly defined pain specialists account for <2% of TRx

1 NPs can prescribe controlled substances in 41 states
2 Does not include pain medicine as a subspeciality

SOURCE: IMS; NP Central; Team analysis

OxyContin has high share of ERO market among orthopedic specialists, surgeons, and rheumatologists

PRELIMINARY

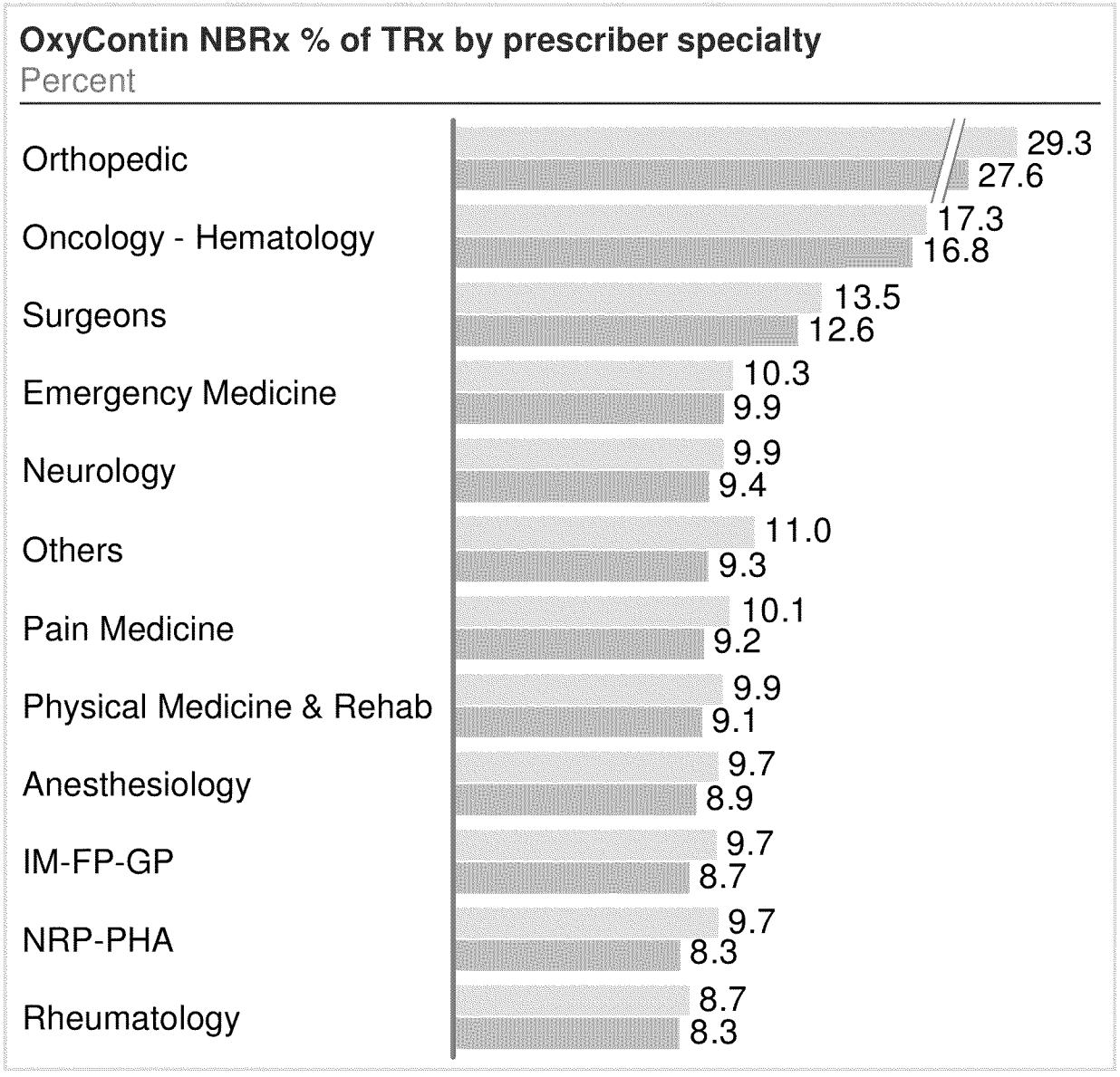


1 E.g., total Rx written by that specialty, in thousands

SOURCE: IMS

There is variability in NBRx share of TRx by specialty

PRELIMINARY



- Orthopedic and Oncology-Hematology, and Surgeons have the highest NBRx % share of overall TRx
- NP/PA segment has a very low NBRx % of TRx
- Average NBRx share of TRx across all specialties was **9.4%** in Q4 2012 – Q1 2013, down from **10.4%** Q4 2011 – Q1 2012

Last Modified 9/13/2013 11:49 AM Eastern Standard Time

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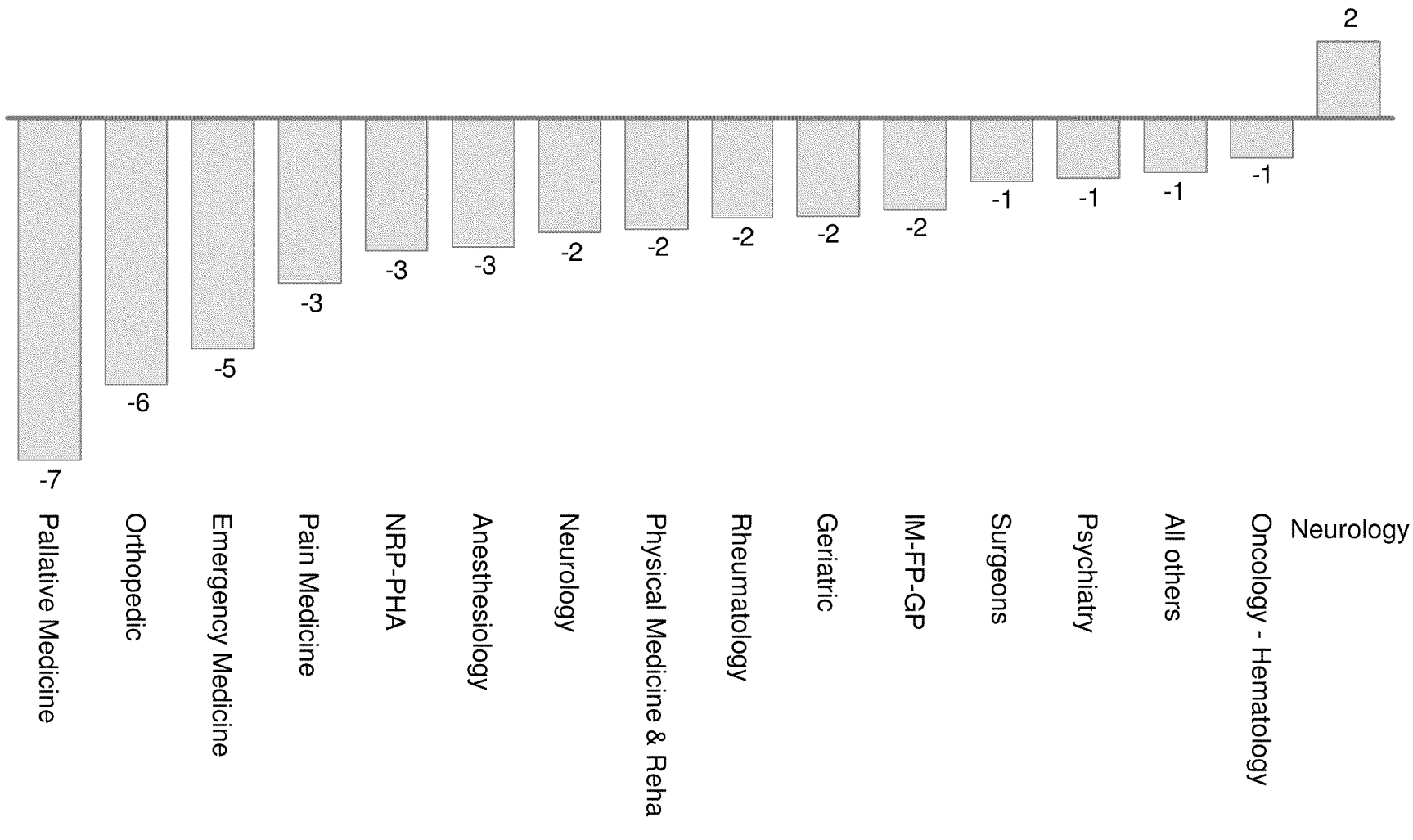
SOURCE: IMS

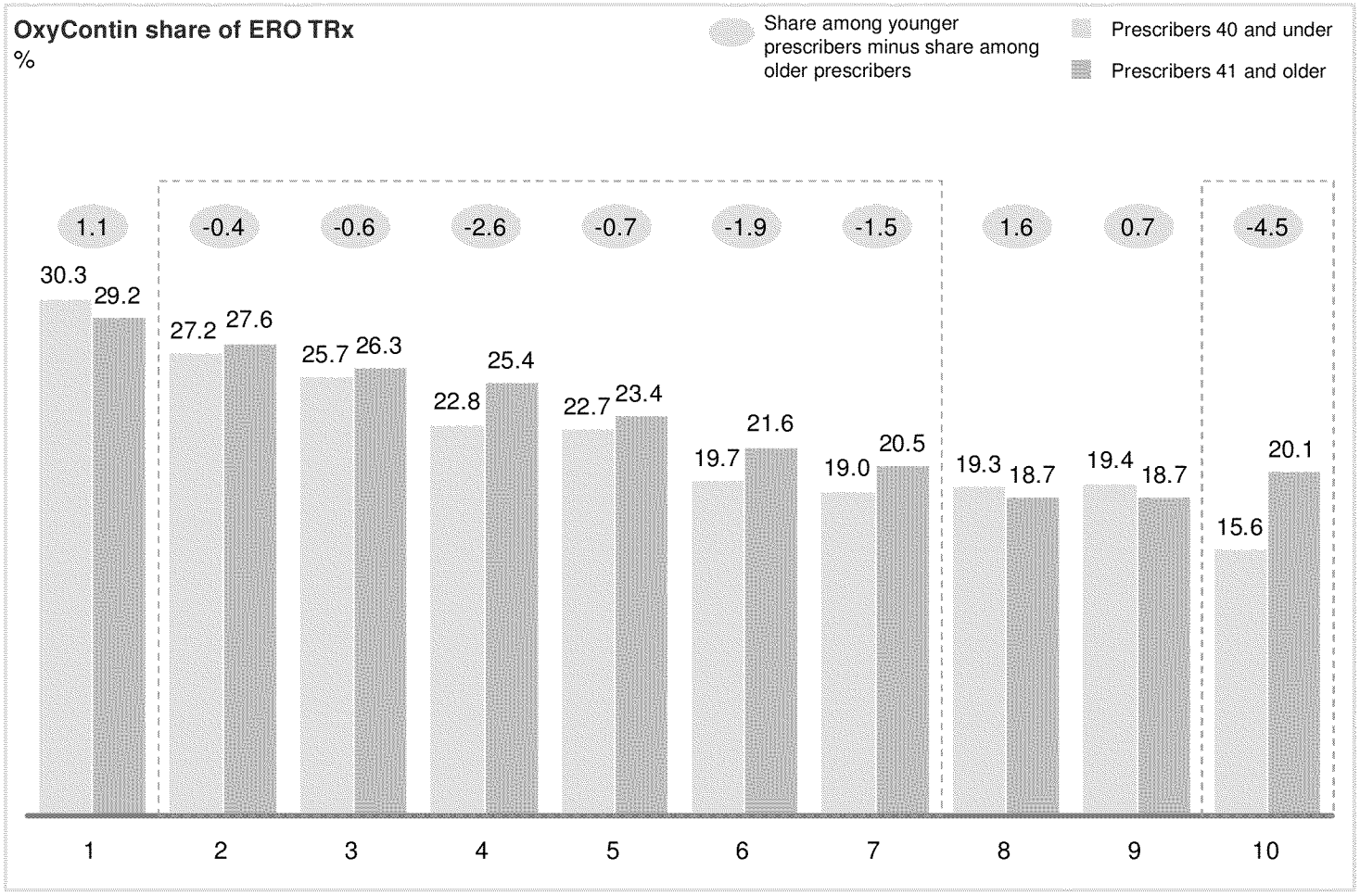
Pallative medicine, orthopedic, and emergency medicine experienced the largest decline in OxyContin tablets/TRx in the last year

% Change in Units/TRx by Specialty, 1H 2012 vs 1H 2013



SOURCE: IMS

OxyContin tends to have a lower share of ERO among younger prescribers, even after controlling for decile



- If OxyContin had same share of ERO among younger prescribers as older prescribers, this would imply ~20k incremental scripts or $6.9mn in net revenue
- However, bigger challenge may be that younger prescribers with different prescribing habits will eventually fill the market

Note:ERO decile and OxyContin share of ERO is based on Jan-Jun 2013 data. AMA and AOA profile information is not comprehensive and does not cover all HCPs who have prescribed for ERO in the last 6 months.

SOURCE: IMS; AMA; AOA; Purdue marketing team; Teamanalysis

Prescribers report writing for fewer pills and lower strengths, and increasingly referring patients to pain specialists

Prescribers are writing for **fewer pills and lower strengths, and increasingly referring patients to pain specialists…**

- "I try to use more long-acting opioids (to reduce pill count) and **try to prescribe fewer pills and lower strengths**… because it's less to worry about… less potential for addiction and diversion"- *Primary care physician in Family Practice*
- "[There's] increased review of physician practice. **Many of my colleagues are hesitant and prescribe less**. I do too. **I just don't want to take up with the task**" – *Family Practitioner*
- "**Made decision about 9 months ago to funnel patients to pain clinics** for patients taking medication for chronic use"- *Primary care physician in larger practice*

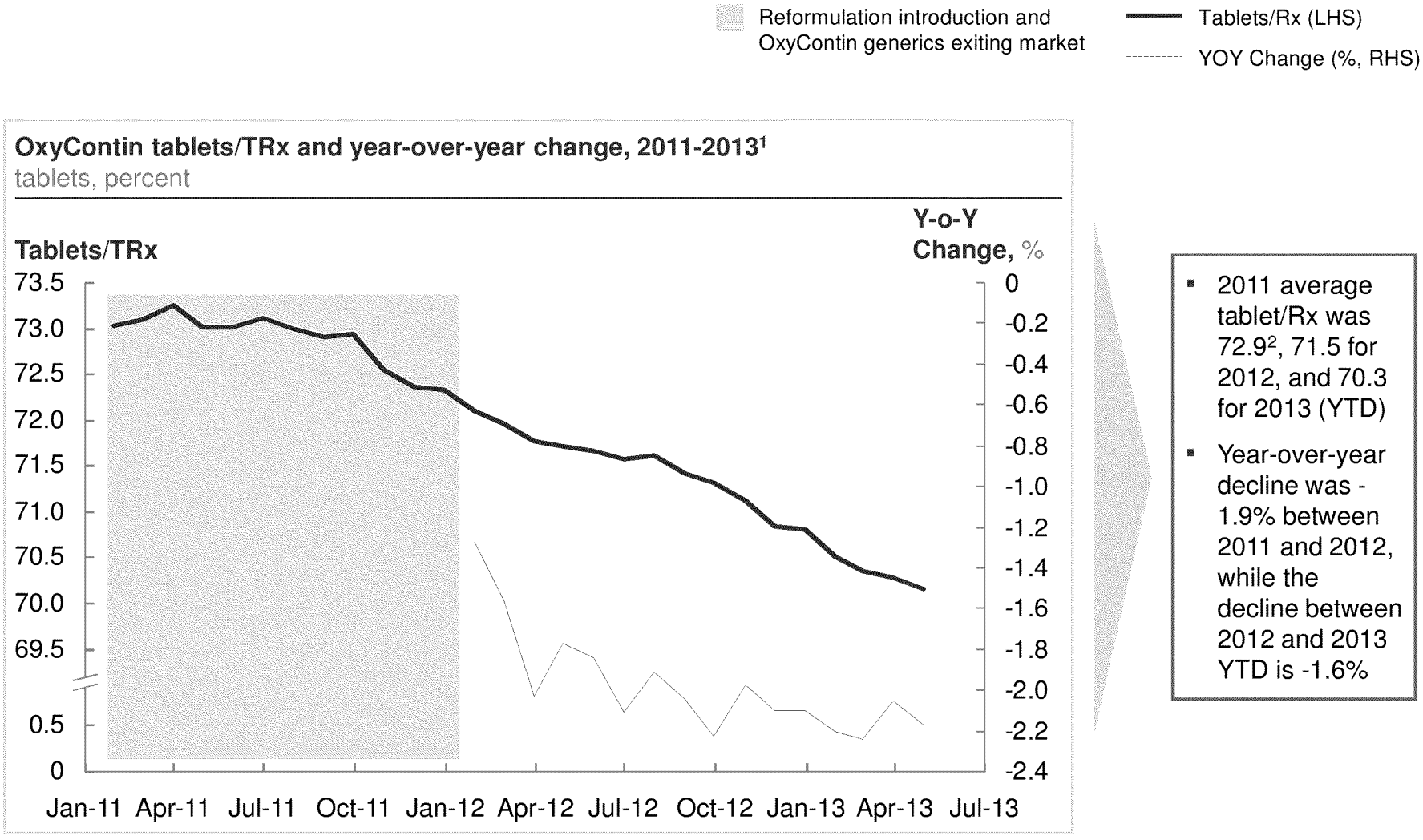
… because managing **opioid patients takes increasing amount of time and resources due to pharmacy issues, managed care access and fear of legal consequences/ DEA**

Pharmacy issues	"I think [pushback from pharmacies] does impact my prescribing behavior… I will think I don't want to prescribe this because I'm going to get pushback … then I will prescribe something that will get less push back… **a different drug and/or lower doses**" – *Primary care physician in small group practice*
Managed care access	"Cost is a main driver of deciding what drug to prescribe to patients…Outpatients are still largely driven by cost and tiers, which makes **prescribing generics and narcotics the easier choice**" – *Primary care physician*
Legal/ DEA concerns	"There seems to be a **growing trend of referrals to pain specialists** today- Doctors **prescribe lower doses of narcotics**, and **even pain specialists move away from opiates**. This is likely driven by increased media attention, high abuse rates, and prescribers fearing regulatory and legal complications" – *Medical Director of major pain center*

Note: Full prescriber interview summaries are available in the appendix

SOURCE: Prescriber interviews

Tablet per prescription has fallen steadily over the past two years



- 2011 average tablet/Rx was 72.9[2], 71.5 for 2012, and 70.3 for 2013 (YTD)
- Year-over-year decline was -1.9% between 2011 and 2012, while the decline between 2012 and 2013 YTD is -1.6%

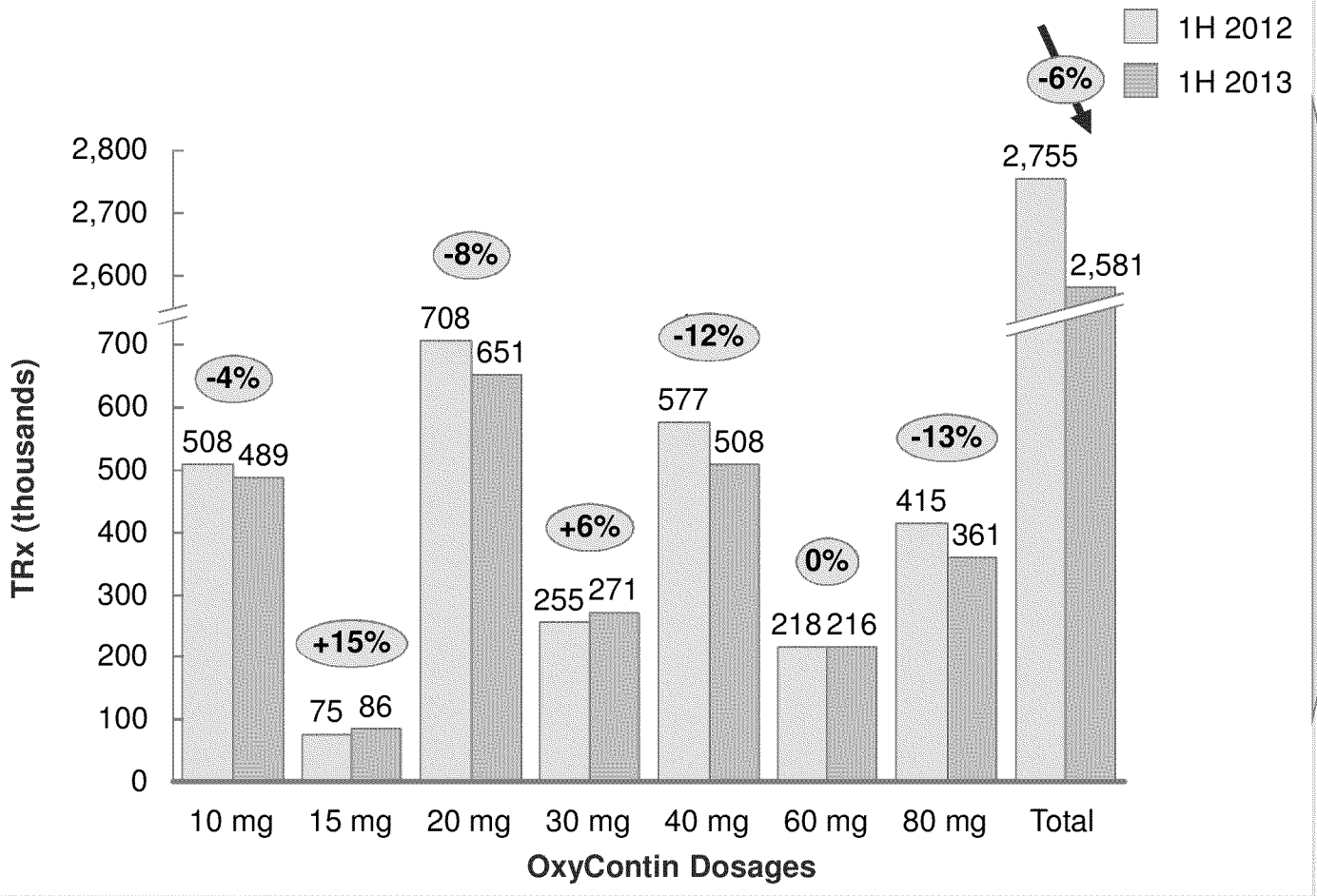
1 Data from Jan 2011 to April 2013

2 January to December calendar year, same applies for 2012 figure

SOURCE: IMS

High dosage prescriptions are falling at a faster rate compared to low dosage prescriptions

OxyContin TRx by dosage, 1H 2012 vs 1H 2013

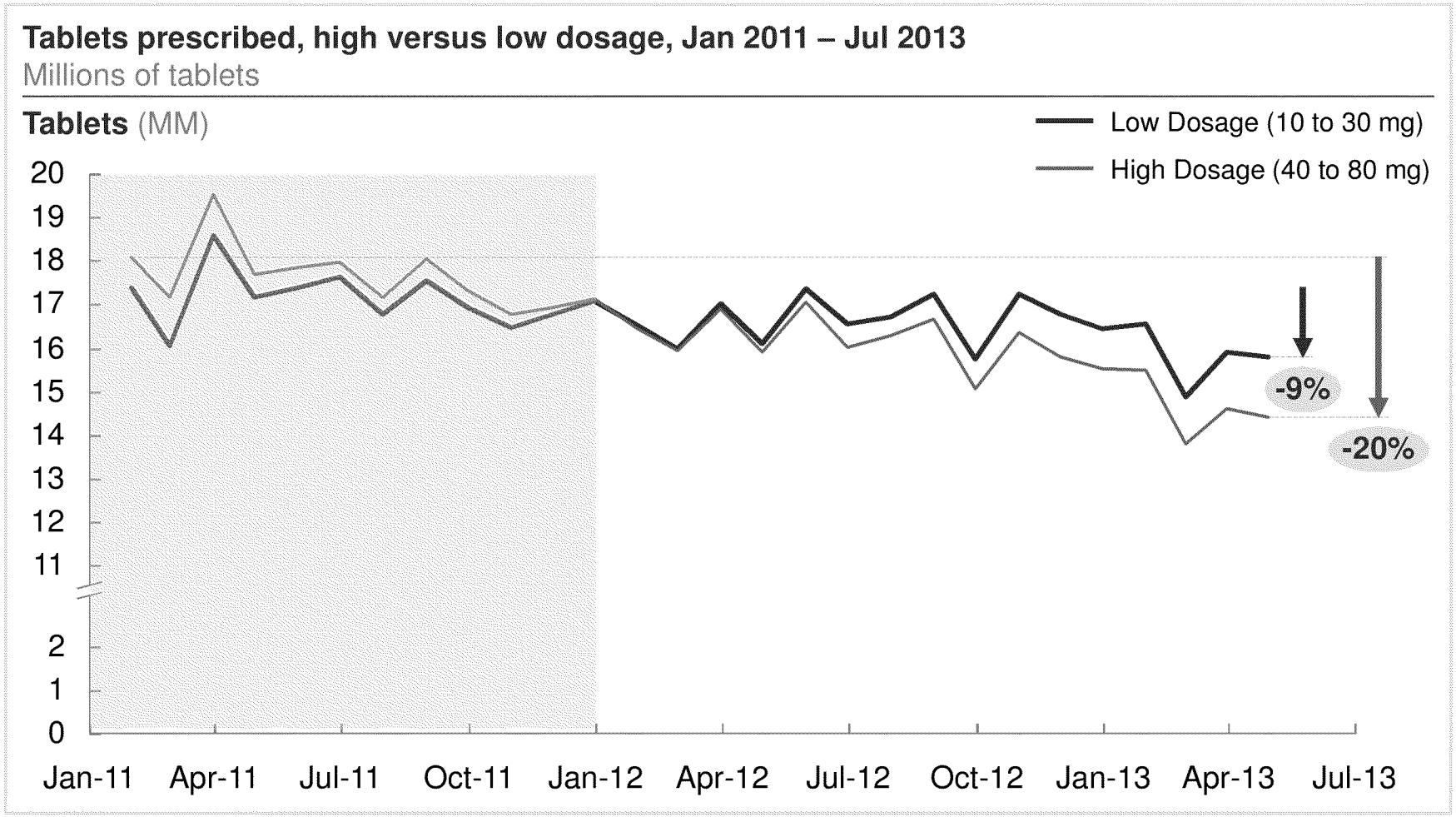


- 80 mg and 40 mg prescriptions are declining most rapidly
- 15 mg and 30 mg prescriptions have the highest rate of growth
- Low dosages (10-30 mgs) declined at 3%, while high dosages (40-80 mgs) declined at 10%

SOURCE: IMS

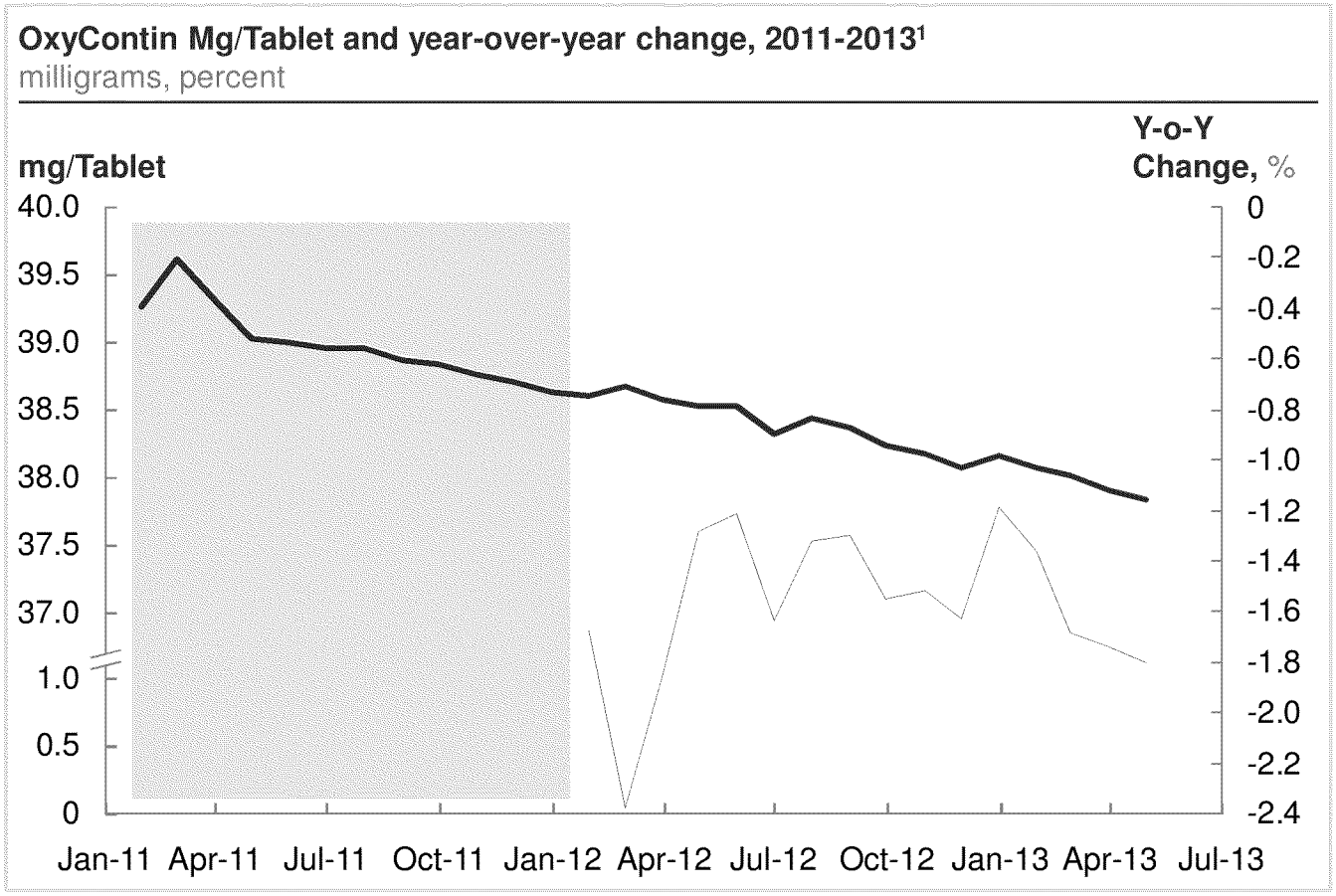
Tablets with higher dosage are declining at a highe rate compared to low dosage tablets

Reformulation introduction and OxyContin generics exiting market



SOURCE: IMS

Milligram per tablet has fallen steadily over the past two years, with rate of decline remaining relatively constant in the past year



- Average mg/tablet was 39.0 for 20112, 38.4 for 2012, and 38 for 2013 (YTD)
- Rate of decline of average mg/tablet was -1.6% between 2011 and 2012, and -1.1% between 2012 and 2013 (YTD)

1 Data from Jan 2011 to April 2013

2 January to December calendar year, same apples for 2012 figure

SOURCE: IMS

Tablets per prescription declined in 47 states, even those with a TRx increase

	Tablets (mn)			TRx			Tablets/ TRx				Tablets (mn)			TRx			Tablets/ TRx		
State	H1 2012	H1 2013	% change	H1 2012	H1 2013	% change	H1 2012	H1 2013	% change	State	H1 2012	H1 2013	% change	H1 2012	H1 2013	% change	H1 2012	H1 2013	% change
FL	11.7	9.7	-17%	164,196	139,348	-15%	71.2	69.3	-3%	LA	2.0	1.9	-5%	28,669	27,962	-2%	68.8	66.7	-3%
NV	1.6	1.3	-16%	20,779	17,896	-14%	77.5	75.3	-3%	ID	0.9	0.9	-5%	13,670	12,819	-6%	66.5	67.1	1%
KY	2.8	2.4	-14%	42,523	37,013	-13%	66.1	65.1	-2%	SD	0.6	0.5	-5%	8,395	8,263	-2%	66.9	64.3	-4%
RI	1.2	1.0	-14%	16,149	14,203	-12%	72.1	70.5	-2%	MS	1.1	1.1	-5%	16,288	15,755	-3%	68.3	67.0	-2%
NM	1.5	1.3	-13%	20,278	18,291	-10%	72.3	69.6	-4%	NH	1.5	1.4	-5%	23,275	22,277	-4%	63.7	63.2	-1%
OH	8.5	7.4	-13%	120,769	107,151	-11%	70.4	68.9	-2%	NY	10.9	10.3	-5%	140,208	137,538	-2%	77.7	75.2	-3%
WA	4.8	4.2	-13%	69,738	61,510	-12%	68.5	67.8	-1%	PA	11.3	10.8	-5%	161,796	156,234	-3%	70.1	69.0	-2%
WV	1.0	0.9	-12%	15,529	13,636	-12%	66.7	66.5	0%	CT	4.1	3.9	-5%	56,894	55,493	-2%	72.3	70.8	-2%
TX	7.6	6.7	-12%	98,162	86,656	-12%	77.8	77.2	-1%	TN	6.1	5.8	-4%	85,140	84,941	0%	71.6	68.7	-4%
UT	1.9	1.7	-12%	26,238	23,763	-9%	72.2	70.0	-3%	NJ	7.9	7.5	-4%	114,460	112,143	-2%	68.7	67.3	-2%
CO	4.6	4.0	-12%	70,162	62,989	-10%	65.2	64.2	-2%	MD	4.2	4.1	-4%	60,452	59,344	-2%	70.2	68.7	-2%
OR	3.4	3.0	-12%	48,787	43,368	-11%	70.7	70.3	-1%	DC	0.4	0.4	-3%	6,767	6,680	-1%	61.3	60.0	-2%
AZ	6.9	6.1	-11%	90,549	82,124	-9%	76.0	74.2	-2%	NC	7.5	7.3	-3%	104,418	104,941	1%	72.2	69.7	-3%
HI	0.7	0.6	-11%	10,614	9,574	-10%	69.0	67.8	-2%	VA	4.3	4.1	-3%	60,577	60,926	1%	70.2	67.9	-3%
IA	1.3	1.2	-11%	19,919	18,091	-9%	65.9	64.4	-2%	AR	1.6	1.6	-3%	24,576	23,257	-5%	66.2	68.2	3%
MI	5.2	4.7	-11%	68,249	61,550	-10%	76.5	75.7	-1%	SC	2.9	2.8	-3%	40,849	41,017	0%	70.6	68.5	-3%
CA	18.5	16.6	-11%	218,838	201,602	-8%	84.6	82.1	-3%	AK	0.5	0.5	-2%	6,958	6,903	-1%	70.2	69.6	-1%
MN	4.0	3.6	-10%	61,036	56,581	-7%	64.9	62.8	-3%	MA	4.7	4.7	-1%	67,588	67,549	0%	69.9	69.0	-1%
WI	5.2	4.7	-10%	72,739	66,266	-9%	71.5	70.5	-2%	PR	0.1	0.1	3%	2,934	2,874	-2%	46.0	48.5	6%
VT	0.4	0.4	-9%	6,842	6,172	-10%	61.0	61.2	0%	DE	0.9	1.0	8%	14,209	15,709	11%	66.5	65.3	-2%
IL	3.7	3.4	-9%	53,903	50,036	-7%	69.2	67.8	-2%	Grand Tot	197.8	181.2	-8%	2,755,391	2,581,457	-6%	71.8	70.2	-2%
KS	2.3	2.1	-9%	34,857	32,296	-7%	66.6	65.5	-2%										
ME	1.3	1.2	-8%	18,780	17,757	-5%	68.3	66.3	-3%										
MT	0.8	0.8	-8%	12,662	11,770	-7%	64.8	63.9	-1%										
ND	0.4	0.3	-8%	6,090	5,612	-8%	59.9	59.8	0%										
IN	4.7	4.4	-7%	65,539	63,080	-4%	72.1	69.6	-3%										
GA	4.3	4.0	-7%	63,725	59,739	-6%	67.6	67.2	-1%										
MO	4.9	4.6	-7%	70,566	67,082	-5%	69.6	68.3	-2%										
OK	3.7	3.4	-7%	51,173	48,529	-5%	71.4	70.4	-1%										
AL	3.7	3.5	-6%	54,750	52,548	-4%	68.4	66.8	-2%										
NE	0.9	0.9	-6%	14,895	14,308	-4%	62.8	61.5	-2%										
WY	0.4	0.4	-6%	6,203	5,939	-4%	65.8	64.6	-2%										

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- **TRx has decreased in 46 of states** while units/TRx has decreased in every state except Idaho, Arkansas, and Puerto Rico
- States with the **highest percentage decrease in TRx are Florida, Nevada, Kentucky, and West Virginia**

SOURCE: IMS

Contents

Findings on messaging and positioning

PRELIMINARY

- **Opioids overall are still viewed as effective and necessary class of painkillers**, though side effects and addiction are concerns

- Key themes from prescriber interviews on abuse deterrents include:
  - Prescriber awareness of abuse deterrence and label change is mixed
  - Opinions on impact/efficacy of abuse deterrence var
  - Most prescribers are concerned about abuse, but attempt to establish measures to protect themselves
  - Concerns remain that technology does not address oral abuse
  - Less informed prescribers ask for additional information and education around abuse deterrent formulations

- Existing market research suggests that **most physicians do not feel that reformulation positively impacts their prescribing behavior**, and that **diversion, abuse and regulatory concerns continue to weigh on prescribers**

Opioids overall are still viewed as effective and necessary class of painkillers, though side effects and addiction are concerns

"Short term use of opiates is highly efficacious, however concerns about safety arise for longer-term use"

- Medical Director of major pain center

"If you remove opioids totally from the picture there's no way to treat a lot of types of pain patients"

– Anesthesiologist and pain specialist

"Opioids are often the preferred choice for long-term treatment, as side effects for NSAIDs can be more severe"

– Primary care physician

"Very good, strong medications, very good relief, only problem is they don't want them to be first line of treatment"

– Medical Director of major pain center

Note: Full prescriber interview summaries are available in the appendix

SOURCE: Prescriber interviews

Awareness of abuse deterrence and impact on prescribing varies amongst prescribers (1/3)

Key themes	Supporting evidence
Prescriber awareness of abuse deterrence and label change is mixed	▪ "I am only vaguely aware of abuse deterrence"- *Primary care practitioner* ▪ "In the end it doesn't really hurt anyone, to the extent that I understand the technology" – *Private practitioner and assistant professor at large medical school* ▪ "I know (abuse deterrent reformulations) exist"- *Family practitioner* ▪ "For some people (abuse deterrence) probably matters, such as first time prescribers and non-specialists, but for specialists, (the label change) probably doesn't make much of a difference because they were already aware of the reformulation (before the label change)- *Anesthesiologist and Head/Neck surgeon* ▪ "I knew already since 2010 about (OxyContin's abuse deterrence), so the new labeling doesn't make big difference" – *Physical Rehabilitation and Pain specialist*
Most prescribers are concerned about abuse, but attempt to establish measures to protect themselves	▪ "(Concern about abuse) hasn't changed that much, because (prescribers in practice) follow preferred and recommended guidelines- *Chief of Interventional Spine and Pain Management at major hospital* ▪ "(Abuse is) main concern in every practice…and we need (abuse monitoring) resources because of the nature of our practice" – *Pain specialist in private practice* ▪ "I'm always worried about (abuse) and definitely see it"- *Internist* ▪ "If I get an inkling, I check immediately and warn the patient" – *Family doctor in family group practice* ▪ "I worry about diversion…same thing for Adderall, valium, etc…"- *Family practitioner in private practice*

SOURCE: McKinsey prescriber interviews

Awareness of abuse deterrence and impact on prescribing varies amongst prescribers (2/3)

Key themes	Supporting evidence
Opinions on impact/efficacy of abuse deterrence vary	▪ "Abuse deterrence is a good thing…I would choose abuse deterrent drugs every time, if patient insurance covers it" – *Anesthesiologist and Pain Management Physician at major hospital* ▪ I had extremely curtailed the prescription for OxyContin, but now that I see the clinical difference, I am much more comfortable writing for it"- *Private practitioner with pain management fellowship* ▪ "It's a win-win for everyone, as long as the price is ok" – *Physician at major hospital* ▪ "(I would) certainly (prescribe abuse deterrent formulations)…you never know who you're dealing with"- *Internist* ▪ "(OxyContin reformulation is a) much better reformulation…but having said that, many pain doctors are still humans and suffer from emotional inhibition bc of all the bad press it had, bc it still has the name OxyContin"- A*nesthesiologist with fellowship in pain management* ▪ "(Abuse deterrent formulations) are good faith effort to show reasonable response to the abuse issues"- *Chief of Interventional Spine management at large hospital* ▪ "These are (nonetheless) control substances, whether they can be abused or not, we have to assume they are abused"- *Family practitioner in private practice*

SOURCE: McKinsey prescriber interviews

Awareness of abuse deterrence and impact on prescribing varies amongst prescribers (3/3)

Key themes	Supporting evidence
Concerns remain that technology does not address oral abuse	▪ "I don't know how effective abuse deterrence is in practice…Just because you can't crush something, doesn't mean you can't eat all your pills at once" –*Primary care physician specializing in internal medicine* ▪ "No formulation on the market that is overdose resistant" - *Pain Management and Physical Medicine and Rehabilitation* ▪ The only abuse deterrence I would put any stake in is when you add niacin (to prevent oral abuse)"- *Anesthesiologist and Pain Management Physician at major hospital*
Less informed prescribers ask for additional information and education around abuse deterrent formulations	▪ "The FDA decision [on OxyContin] should carry weight...data would very valuable...should be incentive to use this medicine"- *Addiction specialist* ▪ "There are several studies on abuse deterrence out there…what we need is information from trustworthy sources" – *Anesthesiologist and Head/Neck surgeon* ▪ "(It would be good) if pharma companies made it more clear that this drug is now a preferred medicine"- *Private practitioner and assistant professor at large medical school* ▪ "I haven't seen any data that shows effectiveness of abuse deterrence… not statistics" – *Family practitioner* ▪ "I want to see that (the drug) is not diverted and used on the street…I don't find the (existing) data all that compelling"- *Anesthesiologist and Pain Specialist at large hospital* ▪ "If there is enough education, we may be using them more frequently, to mitigate abuse" – *Family doctor in family group practice*

SOURCE: McKinsey prescriber interviews

OxyContin specific prescriber market research shows regulatory concerns and media/press weigh on prescribers, despite reformulation

Topic	Key take-aways	Study	Source	Timing/when
Market dynamics	▪ Prescribers with increasing TRx stated **increase in patients with pain, leading to increases in OxyContin prescriptions** ▪ Prescribers with **decreasing TRx stated regulatory concerns and media/press** as key drivers	OxyContin prescriber comparison	PJ Quinn	May, 2012
	▪ **Duragesic and MS Contin considered main competitors** ▪ **Key market drivers**: safety, tolerability, efficacy, good patient satisfaction, and favourable dosing	OxyContin Brand Health Tracker	Synovate Healthcare	July, 2011
Abuse awareness and prescribing behavior	▪ **Abuse and diversion are main deterrence** factors; class wide issue, with higher salience for Oxy	ONU/Oxy Copositioning	PJ Quinn	November, 2012
	▪ Majority of prescribers stated that **prescribing behavior is unlikely to change**	OxyContin new formulation awareness	Synovate healthcare	October, 2010
Awareness on abuse deterrence	▪ **Little awareness and perceived impact** on crush-resistant formulation ▪ **OxyContin seen as "fallen Hero"-** powerful drug, dampened by concerns around diversion, abuse and regulatory restrictions	ONU/Oxy Co-positioning	PJ Quinn	November, 2012
	▪ **3 in 5 physicians aware** of reformulated OxyContin	OxyContin new formulation awareness	Synovate healthcare	October, 2010

No new market research on OxyContin (e.g. abuse deterrence awareness) has been conducted since the April 2013 FDA ruling

Contents

Findings on segmentation and targeting

- Analysis of sales force reach suggests **calls are insufficiently focused on high deciles**
  - Cumulative reach is 47% by market basket volume and 53% by OxyContin volume
  - While reach is >70% for market decile 10, 9, and 8, it declines sharply for decile 7 (65% reach), decile 6 (57% reach), and decile 5 (47% reach)
  - ~7500 prescribers in market decile 5-10 were not called on in Q1 2013

- Sales force reach is also **insufficiently focused on NBRx**
  - Sales force reaches less than 40% of OxyContin NBRx by volume (44% if orthopedic surgeons are excluded)
  - ~9600 NBRx decile 5-10 prescribers were not called on in Q1 2013

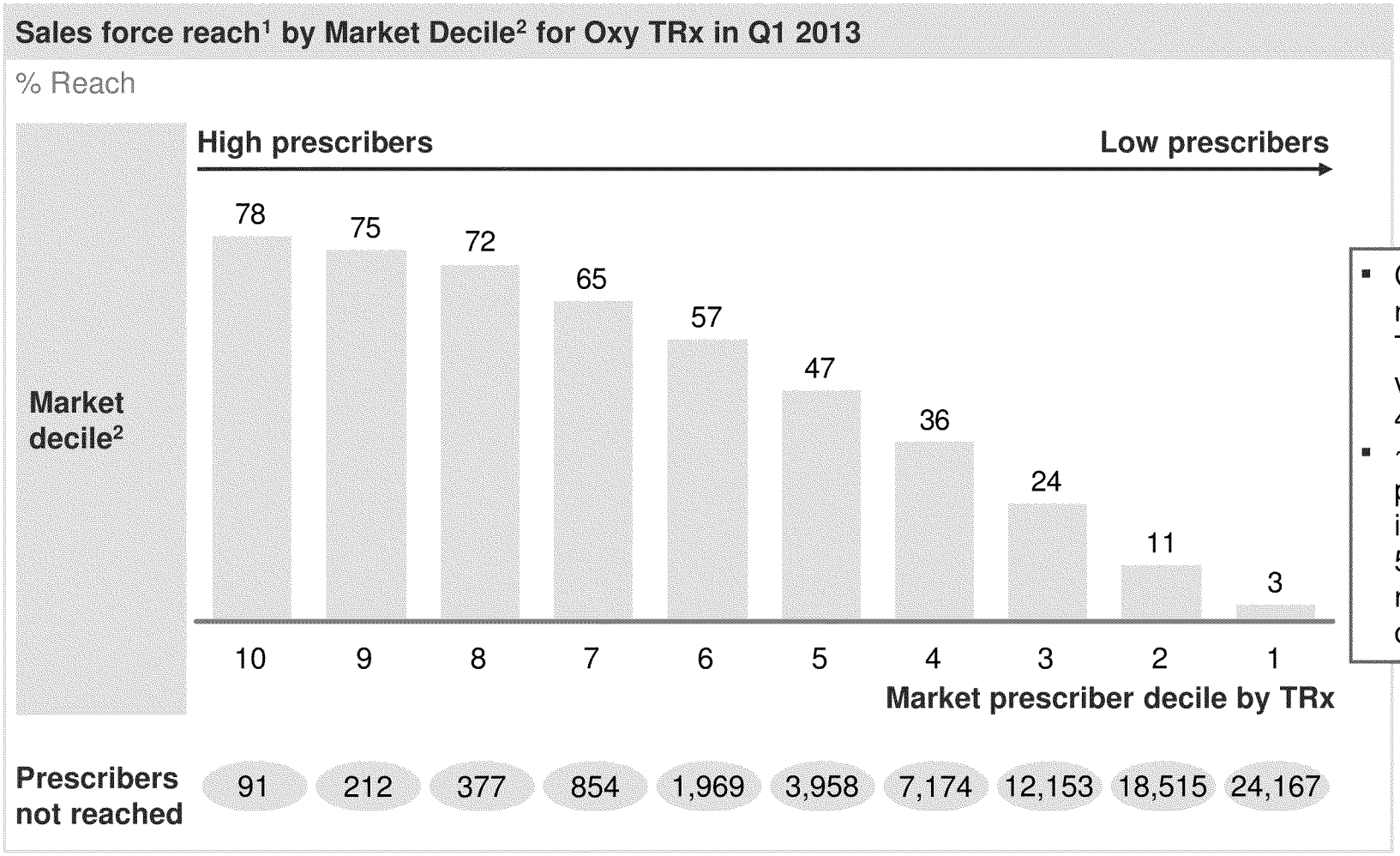
- Initial analysis shows no difference in OxyContin market share among identified corporatized providers

- **Prescribers who do not receive calls account for 75% of the overall OxyContin decline**

- **OxyContin is still promotionally sensitive**
  - Vacancy and retrospective call responsiveness analyses show that OxyContin is promotionally sensitive across deciles
  - Promotional sensitivity is further evidenced by physician-level 'natural pilots'

- **At the territory level, OxyContin performance is largely driven by external market attractiveness factors including ERO growth, Gx penetration, household income, and managed care access**

There are ~ 7,500 Decile 5-10 prescribers that the sales force is not reaching

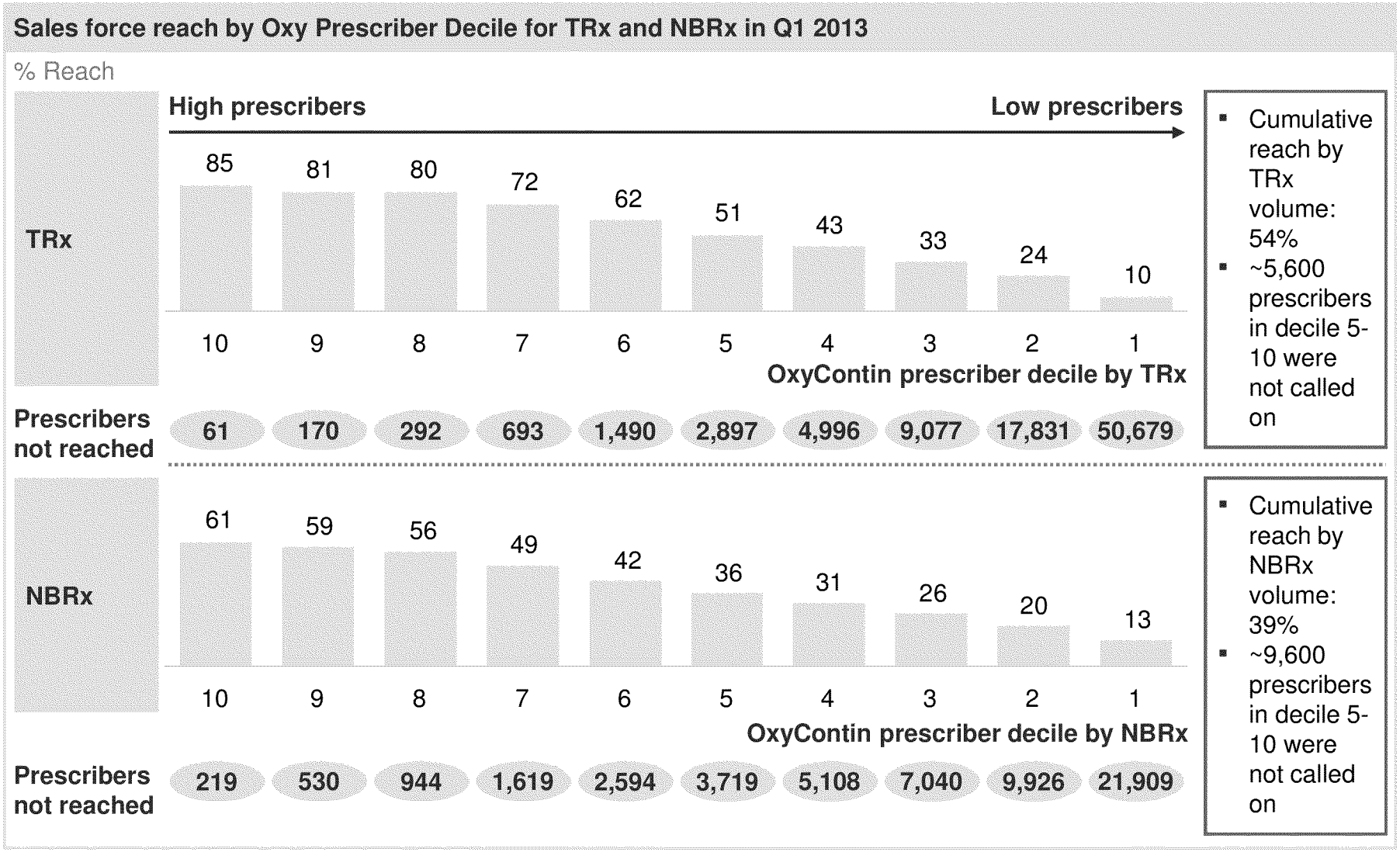


1 Reach defined as at least 1 P1 or P2 in Q1 2013

2 Market decile based on ER-IR market basket as defined by ZS Assosciates

SOURCE: IMS; Purdue Sales and Marketing; Team analysis

Sales force reach is lower by NBRx decile compared to reach by Oxy decile

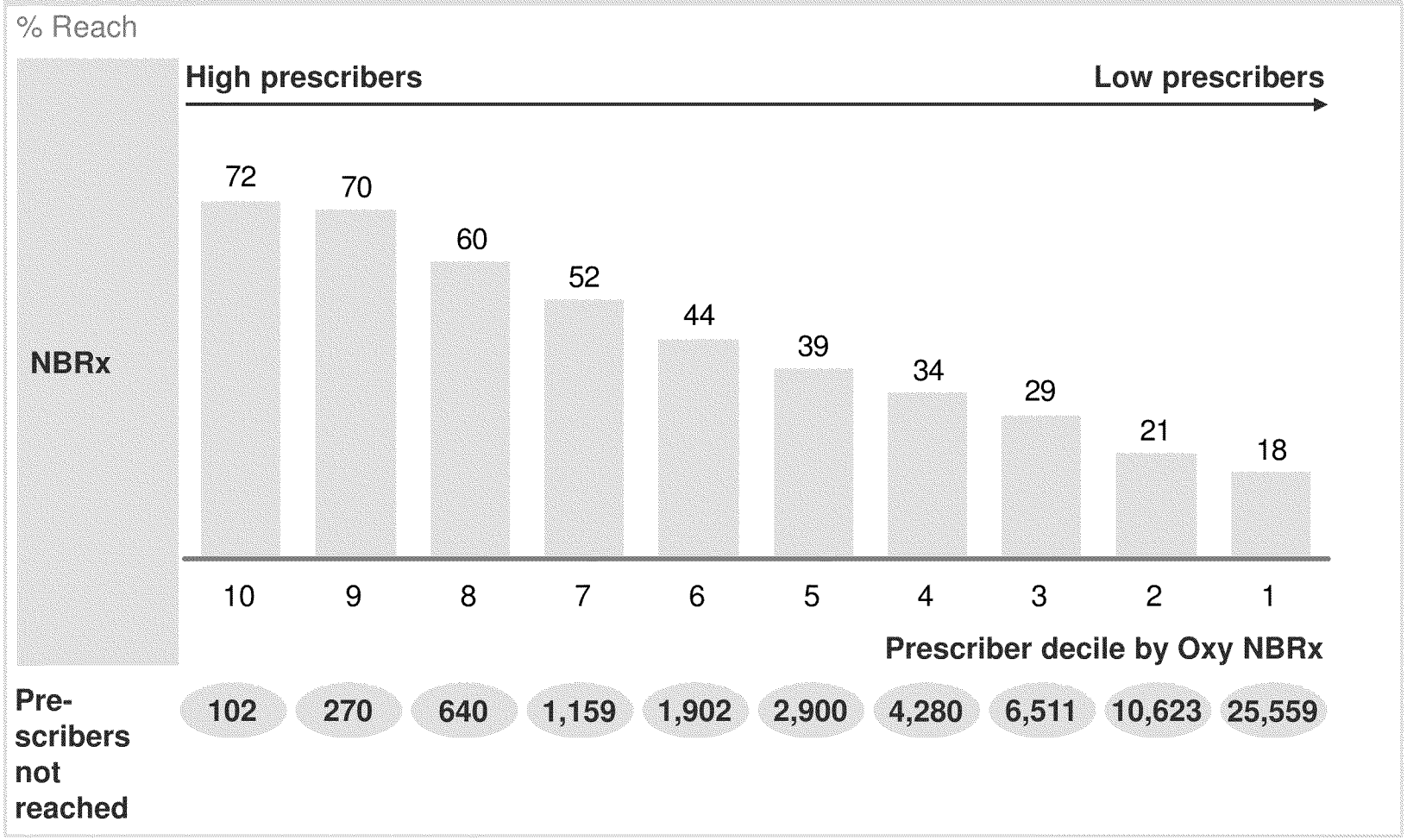


1 Reach defined as at least 1 P1 or P2 in Q1 2013

SOURCE: IMS; Purdue Sales and Marketing; Team analysis

Reach by NBRx is higher when orthopedic surgeons are excluded from the sample, as they tend to be higher NBRx and reach is lower

Sales force reach[1] by Oxy Prescriber Decile for NBRx (excluding orthopedic surgeons[2]) in Q1 2013

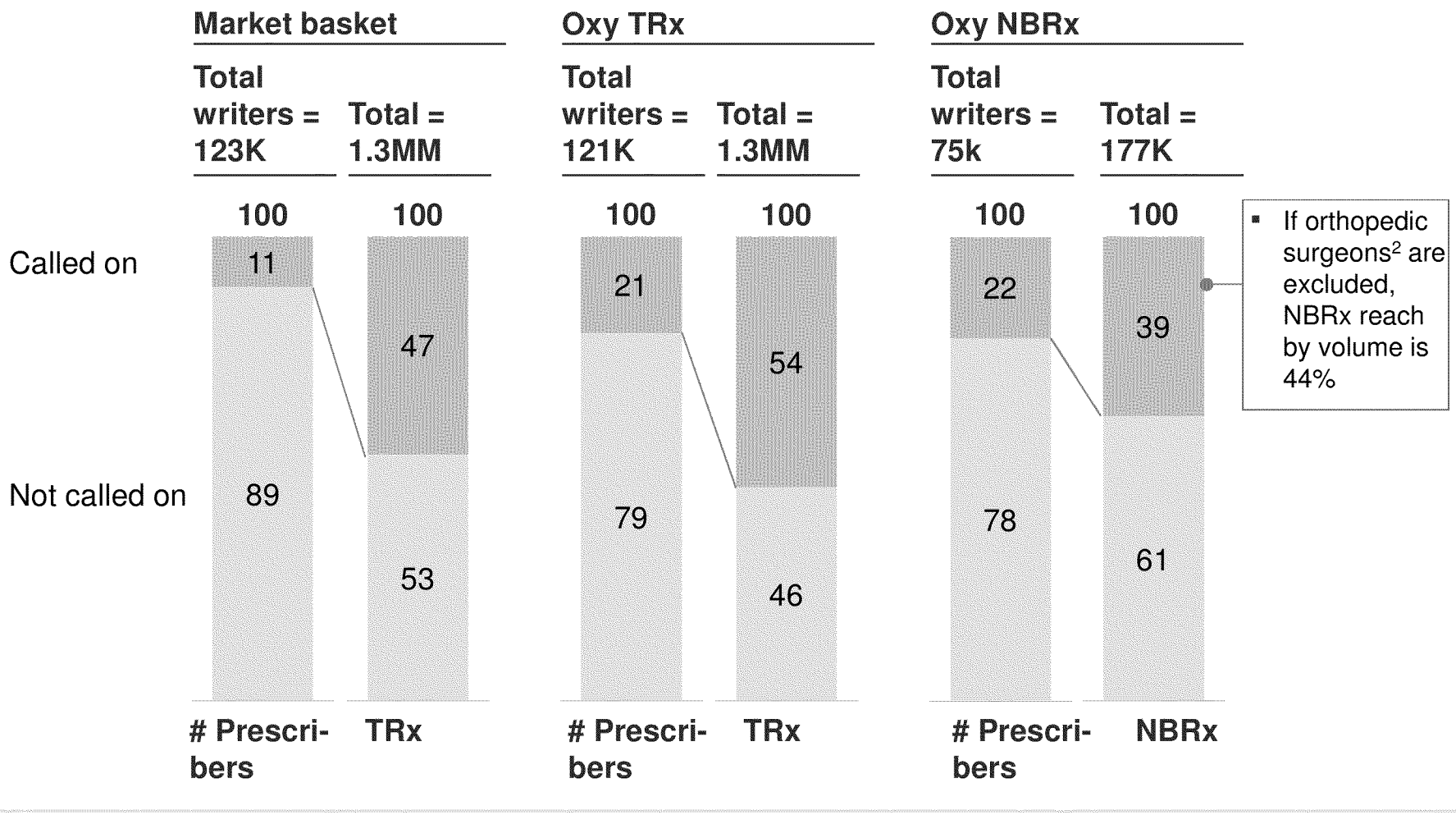


1 Reach defined as at least 1 P1 or P2 in Q1 2013
2 Many orthopedic surgeons are high NBRxwriters due to the acute nature of the pain they treat

SOURCE: IMS; Purdue Sales and Marketing; Team analysis

The sales force reach of OxyContin NBRx is ~40% by volume

OxyContin sales force reach in Q1 2013 (including P1 or P2 calls)



1 For 3-month period ending in March 2013; Reach defined as any physician who received at least one call (P1 or P2) in the time period specified
2 Many orthopedic surgeons are high NBRx writers, due to the acute nature of the pain they treat

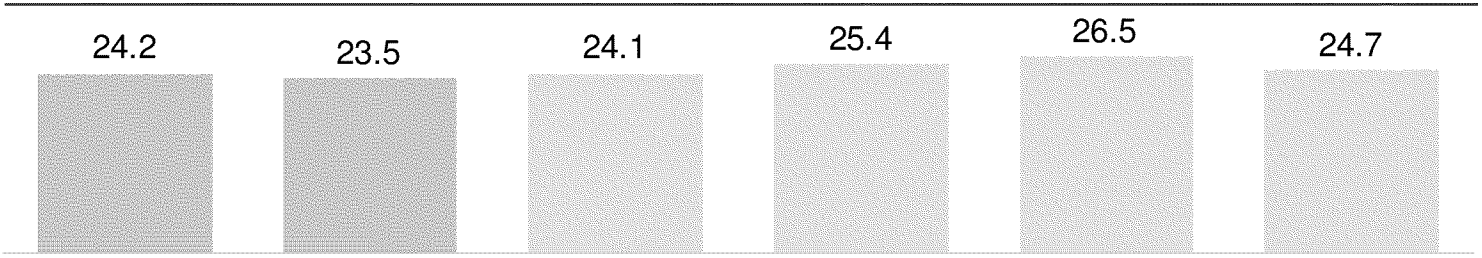
SOURCE: IMS; Purdue Sales and Marketing; team analysis

Initial analysis shows no difference in OxyContin performance among identified corporatized providers

Baseline
Focused on corporatized providers

- 18% of all OxyContin scripts written by prescribers identified as affiliated
- 3% of all OxyContin scripts written by prescribers identified as Top 300 affiliate

2012 OxyContin share of ERO scripts
%



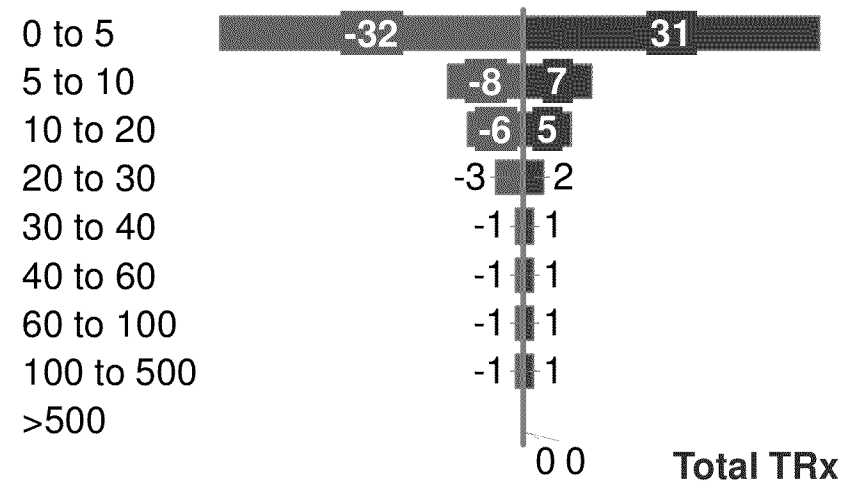
Scope of prescribers considered	Total	On call list	Identified as affiliated	Identified as Top 300	Identified as Top 300 - expanded[1]	Zipcodes w/ heavy corp. provider presence[2]
Total 2012 ERO script (mns)	22.2	12.6	3.6	0.73	0.98	4.6
Total OxyContin script (mns)	5.4	3.0	0.88	0.19	0.26	1.1
Total prescribers	332341	50041	14347	3906	12140	-

1 Matching on addresses, we identified additional p roviders who may also be affiliated with Top 300 co rporatized providers but who were not identified as such by the sales force.
2 Using McKinsey database of largest corporatized p roviders, which focuses on Greater Boston, Greater Los Angeles, Greater Pittsburgh, Pacific Northwest, and Greater Dallas

SOURCE: Affiliation data collected by Purdue salesforce; McKinsey database of largest corporatized providers

Overall, TRx increased for 47% of prescribers

Prescribers by change in TRx from 2011 to 2012
% prescribers

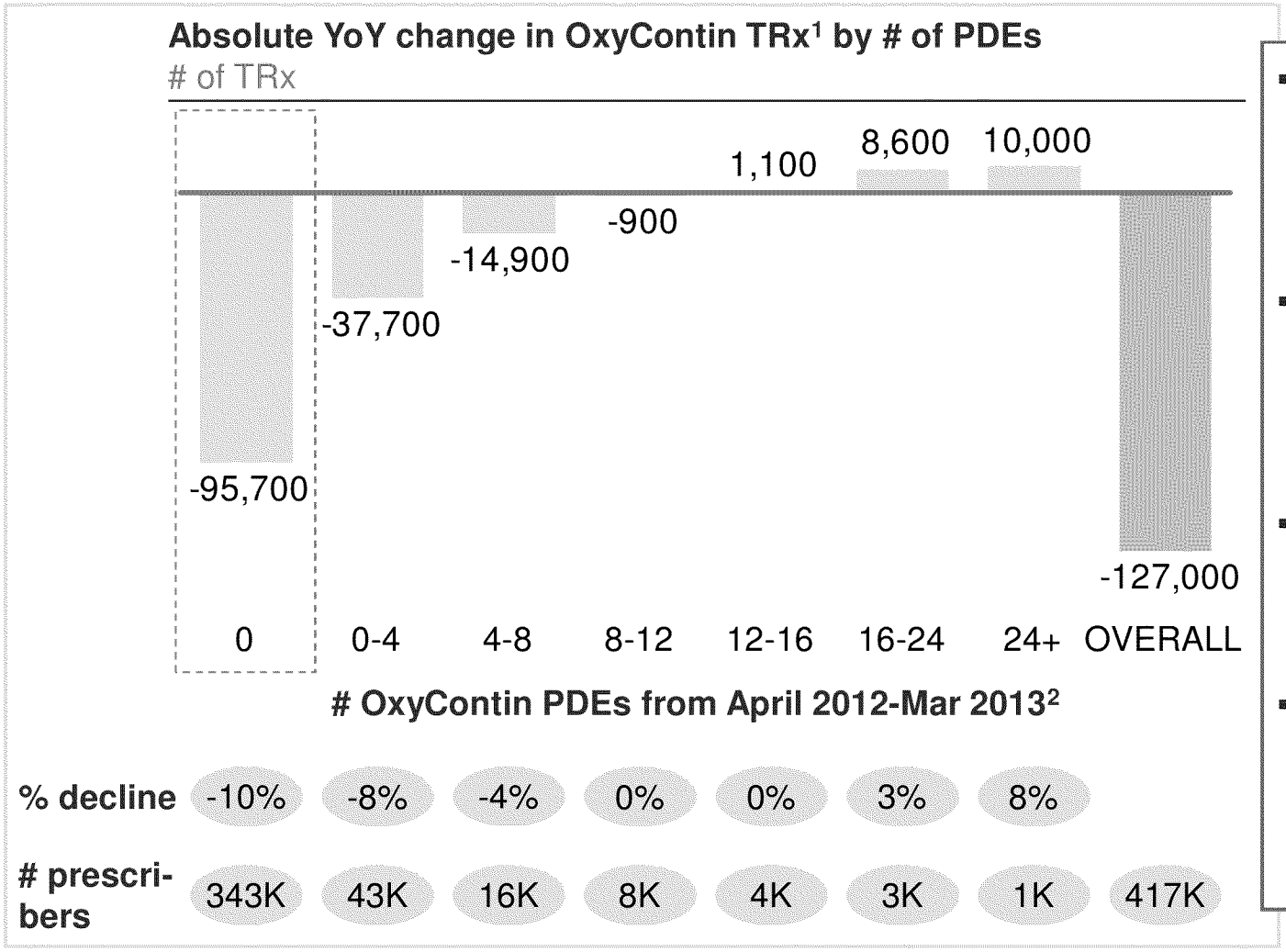


Change in TRx # TRx/MD	TRx impact for declining (Thousand)	TRx impact for increasing (Thousand)
0 to 5	214	204
5 to 10	158	138
10 to 20	252	202
20 to 30	169	126
30 to 40	115	86
40 to 60	148	106
60 to 100	146	123
100 to 500	468	429
>500	88	121
Total TRx Thousand	**~1,800**	**~1,500**

- 61% of declining prescribers fall into the 0 to -5 TRx decline category, and less than 5% fall into categories 40 to >500 decline
- 65% of prescribers with increasing TRx fall into the 0 to 5 TRx category
- TRx impact per prescriber is highest for highest Trx growth and decline categories

SOURCE: IMS

Prescribers who did not receive calls account for ~75% of OxyContin decline



- **75% of the decline of OxyContin is concentrated in prescribers that Purdue does not call**
- The impact of calls is particularly strong in high-deciles; **2/3rds of 96K decline is in deciles 5-10**
- Analysis also shows call sensitivity throughout range of PDEs
- This suggests that increased call activity may have a substantial impact on slowing the decline of OxyContin

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1 TRx change measured in absolute terms between 6 months ending in March 2012 and 6 months ending in March 2013
2 PDE (primary detail equivalent) calculated using 1.0 weight for a P1 and 0.5 for a P2

SOURCE: IMS

Prescribers who do not receive calls account for 75% of the overall OxyContin decline

Absolute change in OxyContin TRx[1] by # of PDEs and market decile

# of Rx

# of PDEs April 2012 – March 2013

Market Decile	0	0.5 to 4	4 to 8	8 to 12	12 to 16	16 to 24	>24	Totals
10	-5,345	-6,794	-7,383	-1,565	-3,976	-3,974	5,139	**-23,899**
9	-5,531	-9,632	-2,496	-1,501	-1,181	644	1,345	**-18,352**
8	-11,513	-5,071	-5,948	-471	-637	2,698	1,486	**-19,455**
7	-9,427	-7,135	-3,647	-1,879	1,492	1,729	940	**-17,926**
6	-11,700	-6,273	-78	-911	286	1,396	796	**-16,483**
5	-19,647	-8,896	-4,929	-1,359	187	1,375	-49	**-33,318**
4	-23,657	-6,857	-2,389	-197	721	1,047	55	**-31,278**
3	-29,980	-5,098	-45	1,632	1,027	733	208	**-31,523**
2	-20,812	4,505	2,817	991	1,252	840	14	**-10,394**
1	35,986	11,080	6,877	2,776	972	1,475	335	**59,501**
All	**-94,699**	**-36,674**	**-14,871**	**-890**	**1,141**	**8,567**	**10,397**	**-127,028**

1 TRx change measured in absolute terms between 6 months ending in March 2012 and 6 months ending in March 2013

SOURCE: IMS; Purdue sales

PDEs have a significant impact on TRx growth, controlling for decile

% Change in OxyContin TRx[1] by # of PDEs and market decile

Percent (# of prescribers)

# of PDEs April 2012 – March 2013

Market Decile	0	0.5 to 4	4 to 8	8 to 12	12 to 16	16 to 24	>24	Totals
10	-30% (41)	-41 (49)	-22% (76)	-4% (81)	-9% (98)	-6% (134)	10% (92)	**-9% (571)**
9	-26% (110)	-37% (126)	-7% (172)	-4% (190)	-3% (178)	1% (245)	4% (129)	**-7% (1150)**
8	-37% (240)	-16% (268)	-14% (337)	-1% (406)	-1% (314)	6% (282)	6% (141)	**-7% (1,988)**
7	-22% (654)	-17% (639)	-7% (711)	-4% (667)	3% (489)	5% (372)	8% (122)	**-6% (3,654)**
6	-17% (1660)	-11% (1429)	0% (1302)	-2% (1067)	1% (646)	6% (383)	11% (128)	**-6% (6,615)**
5	-19% (3,954)	-13% (2,672)	-8% (2,137)	-3% (1,309)	1% (631)	9% (391)	-2% (76)	**-11% (11,170)**
4	-16% (8,677)	-9% (4,548)	-5% (2,797)	-1% (1,447)	5% (608)	16% (278)	4% (60)	**-10% (18,415)**
3	-16% (19,956)	-7% (7,177)	0% (3,161)	10% (1,338)	17% (472)	24% (229)	38% (33)	**-10% (32,366)**
2	-11% (53,222)	12% (9,903)	24% (2,815)	21% (903)	79% (313)	133% (107)	- (10)	**-4% (67,273)**
1	30% (244,773)	134% (15,226)	448% (2,275)	582% (576)	800% (159)	7504% (61)	- (11)	**46% (263,081)**
All	**-10% (343,248)**	**-8% (42,883)**	**-4% (15,956)**	**0% (8,068)**	**0% (3,935)**	**3% (2,498)**	**8% (805)**	**(406,283)**

1 TRx change measured in percent terms between 6 months ending in March 2013 and 6 months ending in March 2012

SOURCE: IMS; Purdue sales

For all deciles, increased calls are associated with higher OxyContin TRx growth – a sign of promotional sensitivity

Absolute change in OxyContin TRx[1] per prescriber by # of PDEs and market decile

# of Rx

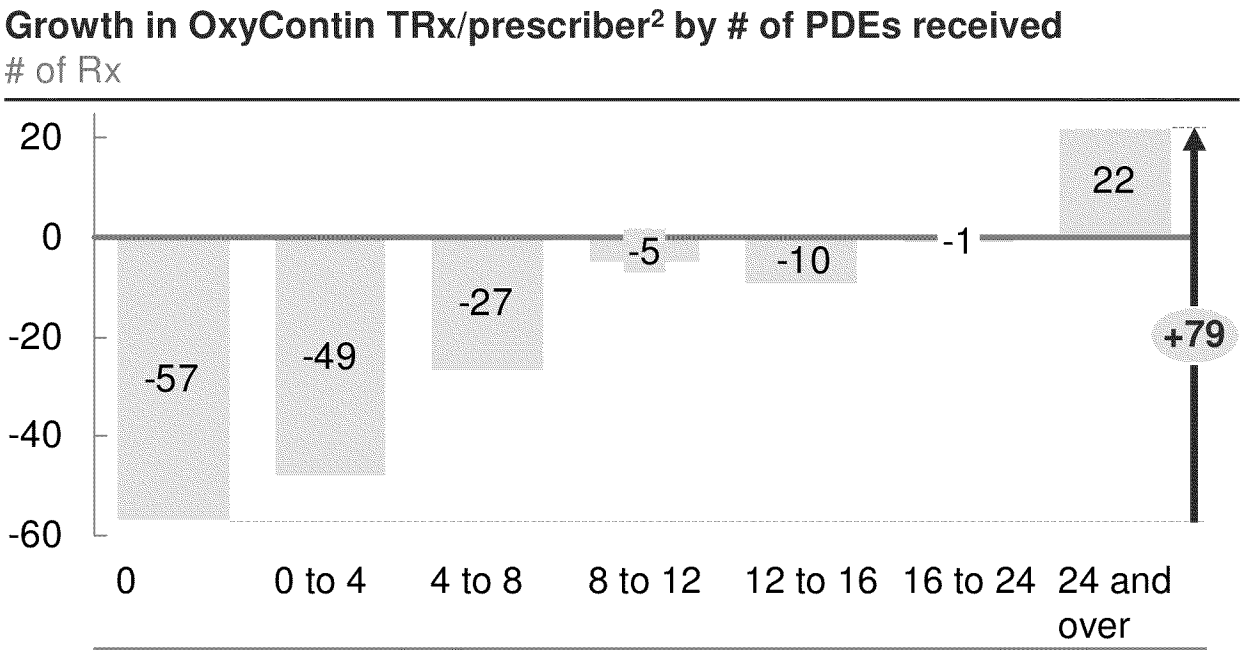
Change in OxyContin TRx per prescriber

Market Decile	# of prescribers	0	0.5 to 4	4 to 8	8 to 12	12 to 16	16 to 24	>24	Totals
10	571	(130.4)	(138.7)	(97.1)	(19.3)	(40.6)	(29.7)	55.9	**(41.9)**
9	1,150	(50.3)	(76.4)	(14.5)	(7.9)	(6.6)	2.6	10.4	**(16.0)**
8	1,988	(48.0)	(18.9)	(17.6)	(1.2)	(2.0)	9.6	10.5	**(9.8)**
7	3,654	(14.4)	(11.2)	(5.1)	(2.8)	3.1	4.6	7.7	**(4.9)**
6	6,615	(7.0)	(4.4)	(0.1)	(0.9)	0.4	3.6	6.2	**(2.5)**
5	11,170	(5.0)	(3.3)	(2.3)	(1.0)	0.3	3.5	(0.6)	**(3.0)**
4	18,415	(2.7)	(1.5)	(0.9)	(0.1)	1.2	3.8	0.9	**(1.7)**
3	32,366	(1.5)	(0.7)	(0.0)	1.2	2.2	3.2	6.3	**(1.0)**
2	67,273	(0.4)	0.5	1.0	1.1	4.0	7.9	1.4	**(0.2)**
1	263,081	0.1	0.7	3.0	4.8	6.1	24.2	30.5	**0.2**
All	**406,283**	**(0.3)**	**(0.9)**	**(0.9)**	**(0.1)**	**0.3**	**3.5**	**13.0**	**(0.3)**

1 TRx change measured in absolute terms between 6 months ending in March 2012 and 6 months ending in March 2013

SOURCE: IMS; Purdue sales

Increased calls have a significant impact on OxyContin TRx – Market deciles 8 to 10



	0	0 to 4	4 to 8	8 to 12	12 to 16	16 to 24	24 and over
# of Prescribers	391	443	585	677	590	661	362
% Change in TRx	-32%	-29%	-14%	-3%	-4%	0%	7%

Key insights

- There is significant call sensitivity of Oxy for high-decile physicians particularly through 12 calls/yr
- There are 362 high-value physicians to whom >24 calls were made per year – these increased substantially more than physicians

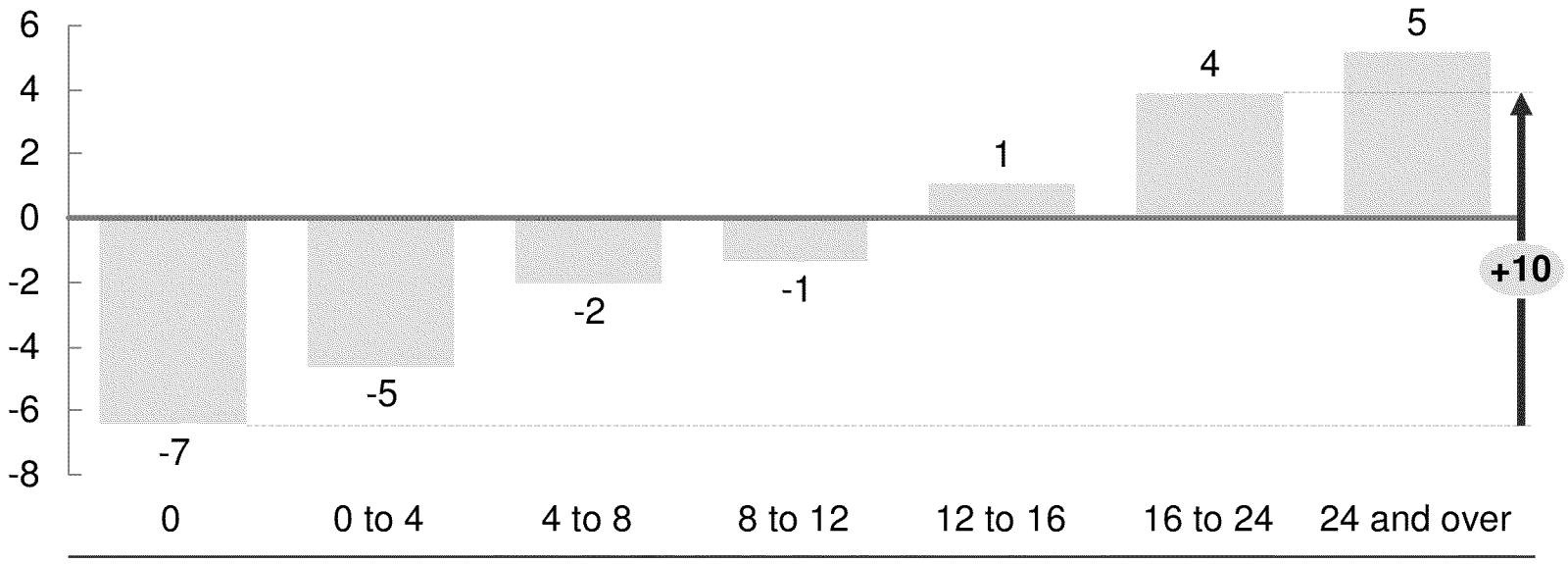
1 Market decile based on ER-IR market basket as defined by ZS Associates
2 TRx change measured in percent terms between 6 months ending in March 2013 and 6 months ending in March 2012

SOURCE: IMS; Purdue sales

Increased calls have a significant impact on OxyContin TRx – Market deciles 5 to 7

TRx/prescriber change[2] by # of PDEs

# of Rx



 # PDEs April 2012 – March 2013

	0	0 to 4	4 to 8	8 to 12	12 to 16	16 to 24	24 and over
# of Prescribers	6,268	4,740	4,150	3,043	1,766	1,146	326
% Change in TRx	-19.3%	-13.2%	-5.2%	-2.8%	1.9%	6.2%	7.7%

1 Market decile based on ER-IR market basket as defined by ZS Associates

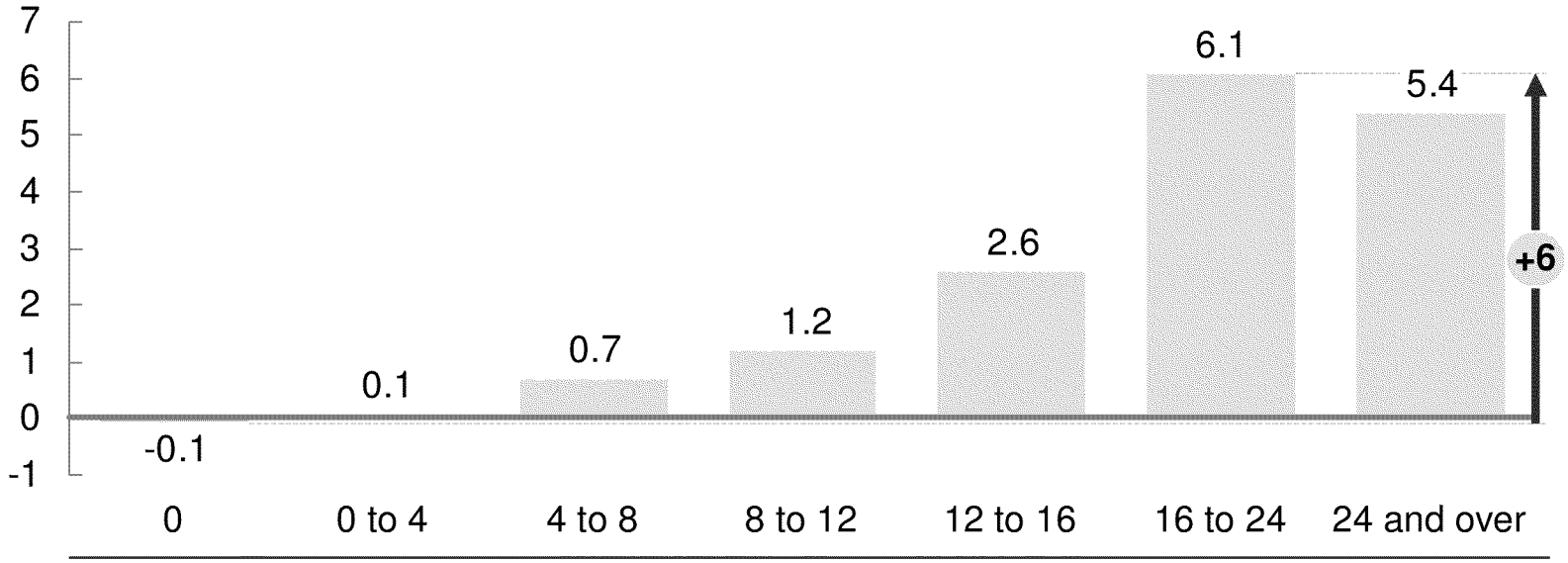
2 TRx change measured in percent terms between 6 months ending in March 2013 and 6 months ending in Mach 2012

SOURCE: IMS; Purdue sales

Increased calls have a significant impact on OxyContin TRx – Market deciles 1 to 4

TRx/prescriber change[2] by # of PDEs

# of Rx



 # PDEs April 2012 – March 2013

	0	0 to 4	4 to 8	8 to 12	12 to 16	16 to 24	24 and over
# of Prescribers	326,628	36,854	11,048	4,264	1,552	675	114
% Change in TRx	-5.9%	1.9%	7.5%	10.2%	18.4%	38.9%	29.6%

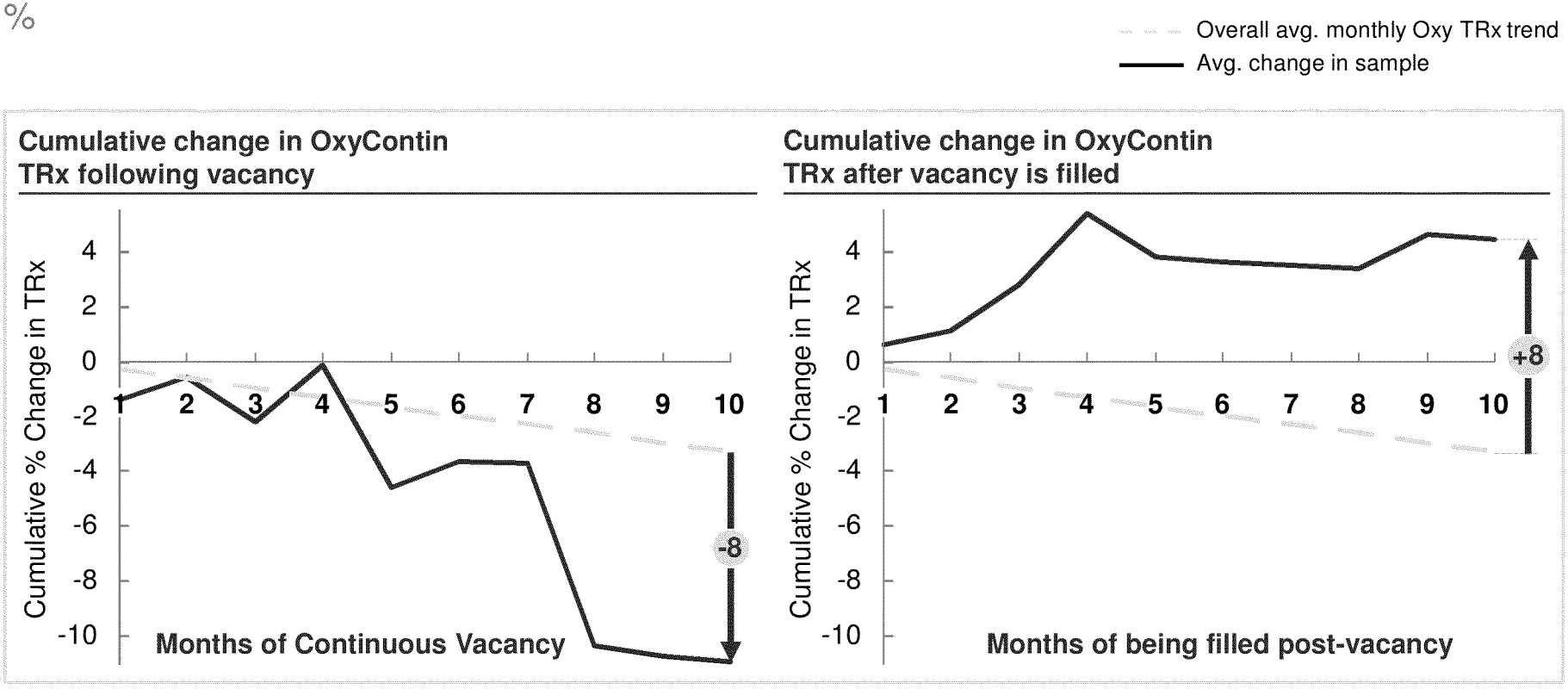
1 Market decile based on ER-IR market basket as defined by ZS Assosciates

2 TRx/prescriber change measured between 6 months ending in March 2013 and 6 months ending in March 2012

SOURCE: IMS; Purdue sales

Vacancy analysis suggests that OxyContin is still responsive to calls

%



- After 10 months of vacancy, Oxy TRx falls an average of 8% v. the overall trend; the effect is similar when zips are filled post- vacancy
- Given that the sales force calls on ~54% of OxyContin volume, this is **consistent with a ~15% impact on prescribers actually called**

1 % changes calculated using a weighted average ofmonth TRx change for 8373 zip codes with >100 totalTRx in a 28 month period (Jan 2011 to April 2013)

SOURCE: IMS; Purdue Sales Operations; team analysis

Calling on high decile physicians with appropriate frequency can have major impact on OxyContin TRx: physician "natural pilot"

True physician example

Specialty : **Anesthesiology**

Location : **Wareham, Massachusetts**

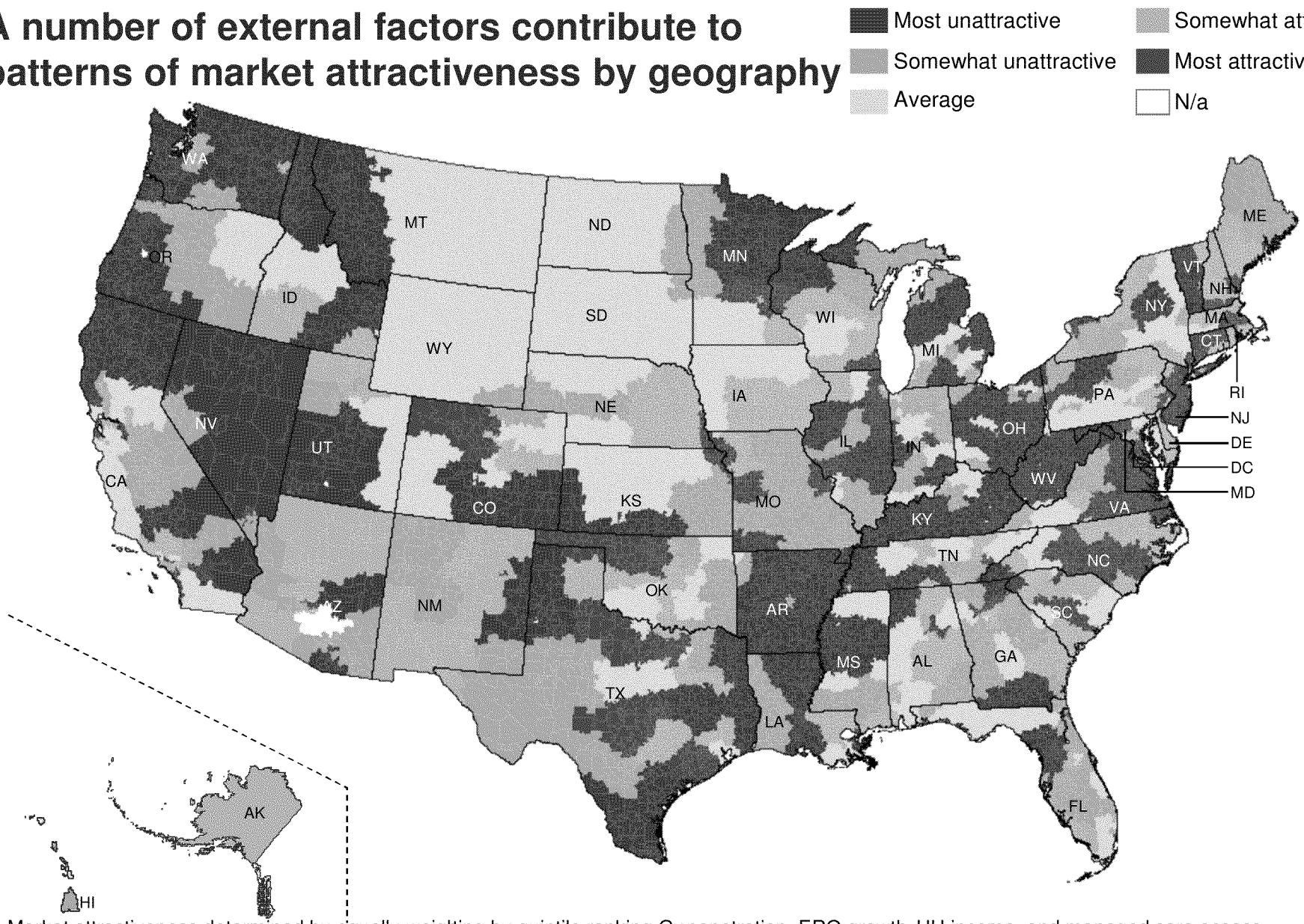
Market Decile : **8**

	12 months ending March 2012		12 months ending March 2013
Calls made on physician	**0 P1** **1 P2**	→	**18 P1** **1 P2**
OxyContin scripts written during 2nd half of year	**177**	→	**344**
OxyContin share of ERO Market	**26%**	→	**43%**

- This physician went from receiving 0 P1s to 18 P1s – this resulted in a 94% increase in TRx
- This is not an isolated case
  - **84 physicians** in deciles 7-10 went from receiving <4 PDEs to >14 PDEs
  - These physicians **increased** OxyContin TRx by **39%**, compared to a **17% decline** in physicians that continued to receive <4 PDEs

SOURCE: IMS; Purdue Sales Operations; team analysis

A number of external factors contribute to patterns of market attractiveness by geography



1 Market attractiveness determined by equally weighting by quintile ranking Gx penetration, ERO growth, HH income, and managed care access
2 Analysis conducted on year ending in March 2012 v. year ending in March 2013

SOURCE: IMS; I-gallery data; team analysis

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OxyContin performance is largely driven by external market attractiveness factors

Territories (examples)

Market Attractiveness[1]	OxyContin TRx Growth 2011-2012[2]	
	Above Average	Below Average
Most attractive	**74** New Haven, CT East Suffolk, NY Virginia Beach, VA	**31** Jersey City, NJ Lowell, MA North Chicago, IL
Somewhat attractive	**68** San Jose, CA Drexel Hill, PA Charleston, SC	**37** North Atlanta, GA Appleton, WI Dallas South, TX
Average	**61** Boston South, MA Mankato, MN Westminster, CO	**42** East Queens, NY Park City, UT Ann Arbor, MI
Somewhat unattractive	**36** Pittsburgh Central, PA Louisville East, KY Oklahoma City, OK	**72** Milwaukee South, WI East Baltimore, MD Seattle, WA
Most unattractive	**22** Detroit, MI Bakersfield, CA Las Vegas East, NV	**80** Tampa Metro, FL Dayton South, OH Bellingham, WA

1 Market attractiveness determined by equally weighting by quintile ranking Gx penetration, ERO growth, household income, and managed care access
2 Analysis conducted on year ending in March 2012 v. year ending in March 2013

SOURCE: IMS; I-gallery data; team analysis

Contents

Sales force focus and execution findings and implications

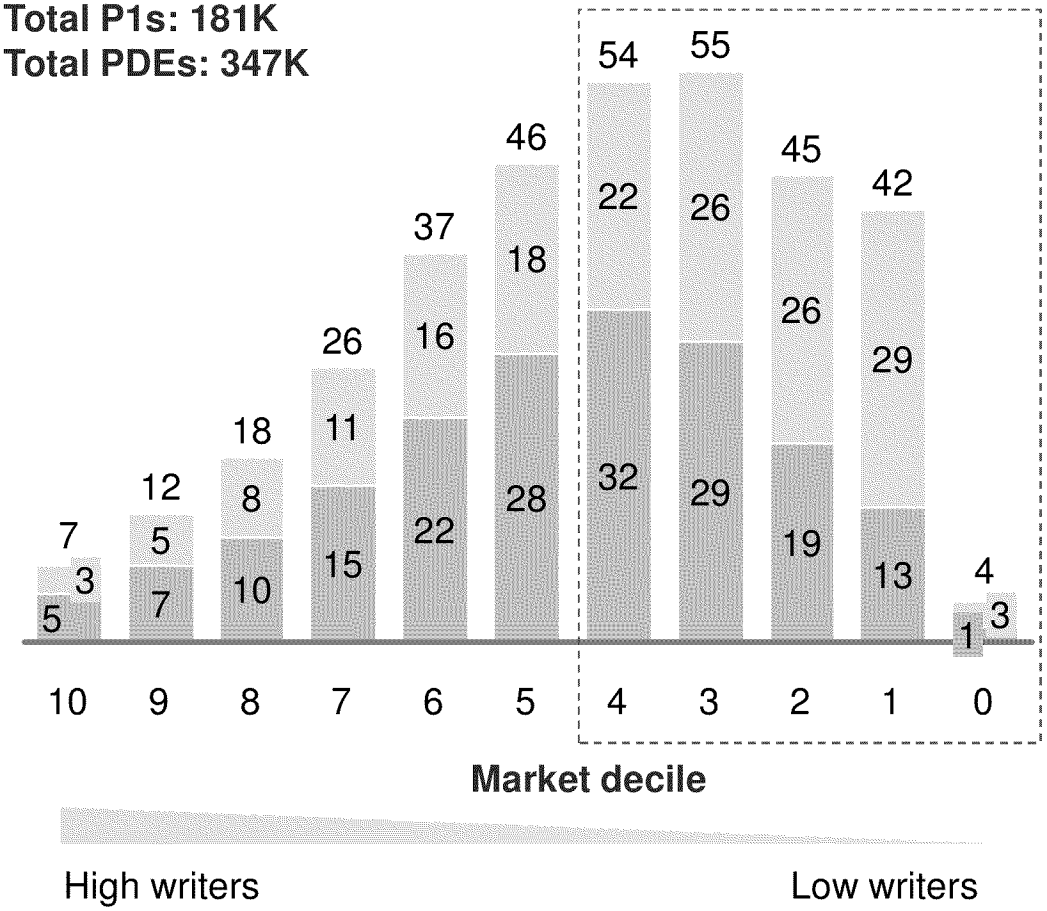
Key Findings	Implications/Opportunities
▪ 75% of total OxyContin decline is concentrated in prescribers than Purdue does not call on — 2/3 of these prescribers are in high market deciles (5-10) ▪ More than 50% of OxyContin primary calls are to low-decile (0-4) prescribers ▪ Decile 5-10 prescribers write on average 25 times more scripts per prescriber than decile 0-4, indicating that a call on decile 5-10 prescribers is likely higher-impact than a call on decile 0-4 ▪ Analysis shows call sensitivity throughout range of PDEs	▪ There is significant opportunity to slow the decline of OxyContin by **calling on more high-value physicians**
▪ Purdue sales force is making only 67% of OxyContin budget P1s (1H 2013) ▪ Purdue call volume is lower than industry benchmark ▪ P1 call attainment varies widely across territories	▪ Total OxyContin calls could be increased substantially if all reps **performed the budgeted # of OxyContin calls**
▪ 45% of OxyContin calls are off-list	▪ Any change in targeting will need to accompanied by a cultural change toward greater **adherence**
▪ Incentive comp structure for reps is misaligned with Purdue's economics	▪ Revision to incentive comp could better align reps to Purdue's economics
▪ The revenue upside from sales re-targeting and adherence could be well over $100M	▪ A comprehensive change program for the sales force can capture significant incremental value for Purdue

Currently, over 50% calls are made to low decile prescribers

Secondary details (PDE equiv)[1]
Primary details

Number of OxyContin calls by market decile[2], annualized based on Q1 2013

Number of Primary Detail Equivalents (PDEs); thousands



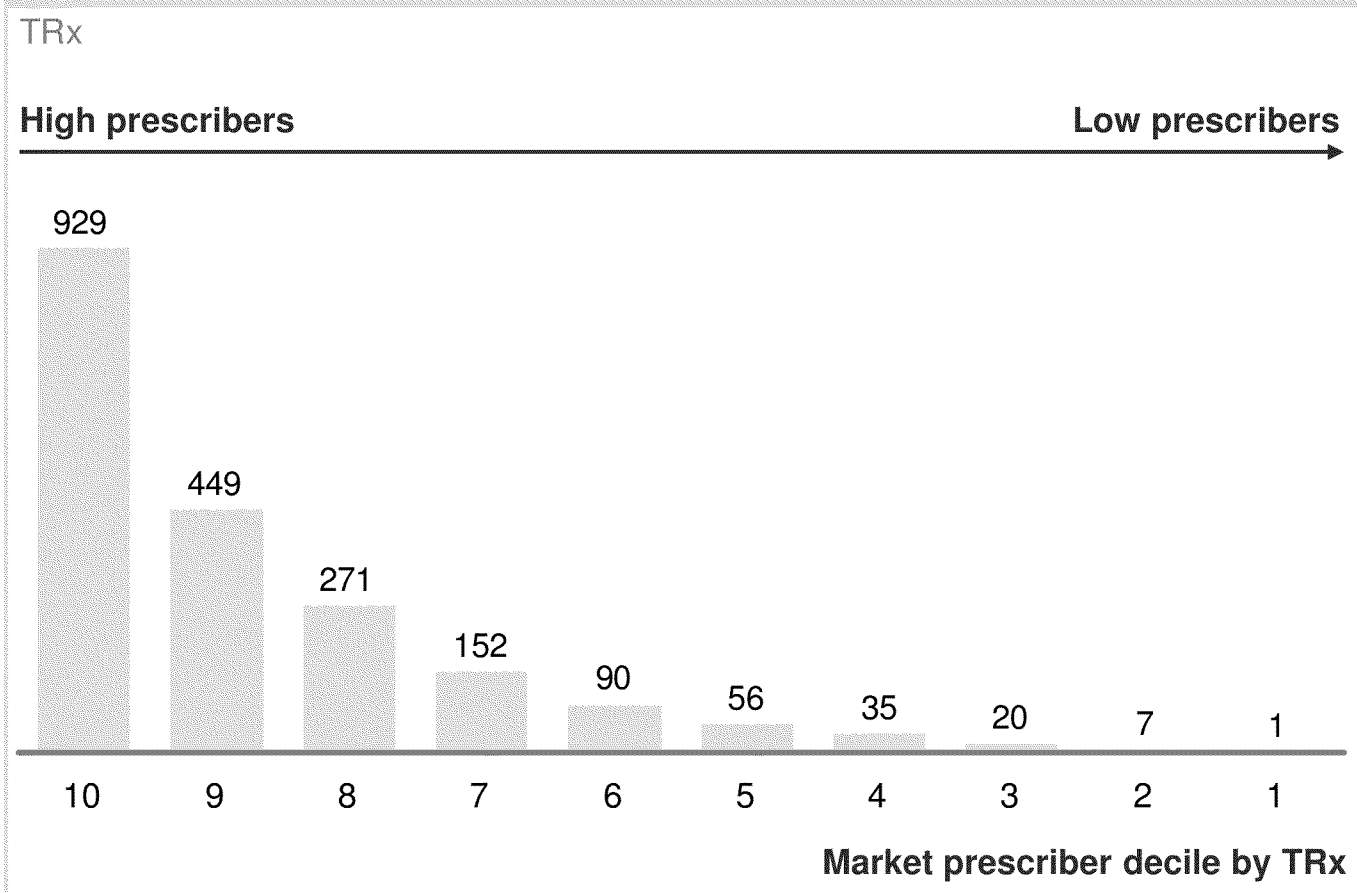
- 52% of OxyContin primary calls (95K) and 57% of primary detail equivalents are made to low-market decile prescribers (0-4)
- Given that there are ~14,000 uncalled physicians in deciles 5-10, there is significant opportunity to shift calls to higher potential prescribers
- Reasons for low-decile calls may include:
  - Lack of access to higher decile prescribers
  - Opportunism
  - KOLs
  - Geographic territory definition
  - Lack of rep call list adherence

1 PDEs calcuated as 1.0 x P1 calls + 0.5 x P2 calls
2 Market decile based on ER-IR market basket as defined by ZS Associates

SOURCE: IMS, Purdue call data

Decile 5-10 prescribers write on average 25 times more scripts per prescriber than decile 0-4

Average TRx per prescriber, annualized[1]



- Decile 5-10 prescribers write 134 scripts on average, while decile 0-4 prescribers write 5.4 scripts on average
- Thus, targeting decile 5-10 prescribers is likely to have a much greater impact than targeting lower value prescribers[1]

1 Based on H2 2012 data

SOURCE: IMS; Purdue Sales and Marketing; Team analysis

The sales force is currently performing only 67% of the budgeted primary calls on OxyContin

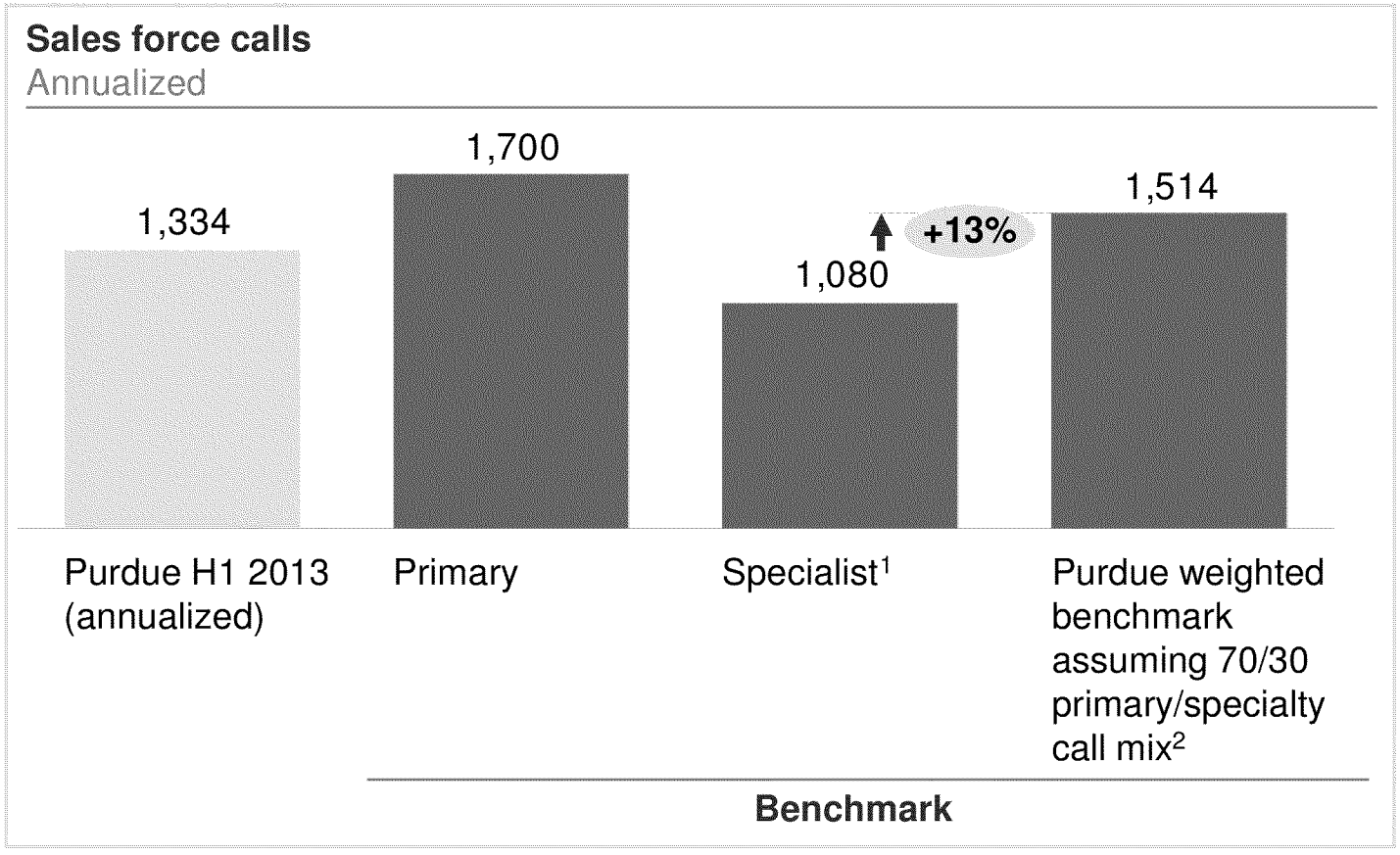
Average monthly OxyContin calls
Jan – June 2013

	P1	P2	Primary Detail Equivalents (PDEs)[1]
Per Rep			
▪ Target[2]	55	59	84
▪ Actual[3]	37	58	66
Field force total			
▪ Target	28,875	30,713	44,231
▪ Actual	19,600	30,400	34,800
▪ **% actual v. target**	**67%**	**99%**	**79%**

1 P1s plus 50% of P2s
2 Target based on published call plan (e.g. 2 calls/mo on Oxy Supercores and 1 call/mo on Cores)
3 Assuming 525 active sales reps

SOURCE: Purdue sales reports; Purdue internal interviews; team analysis

Purdue call volume is lower than benchmark

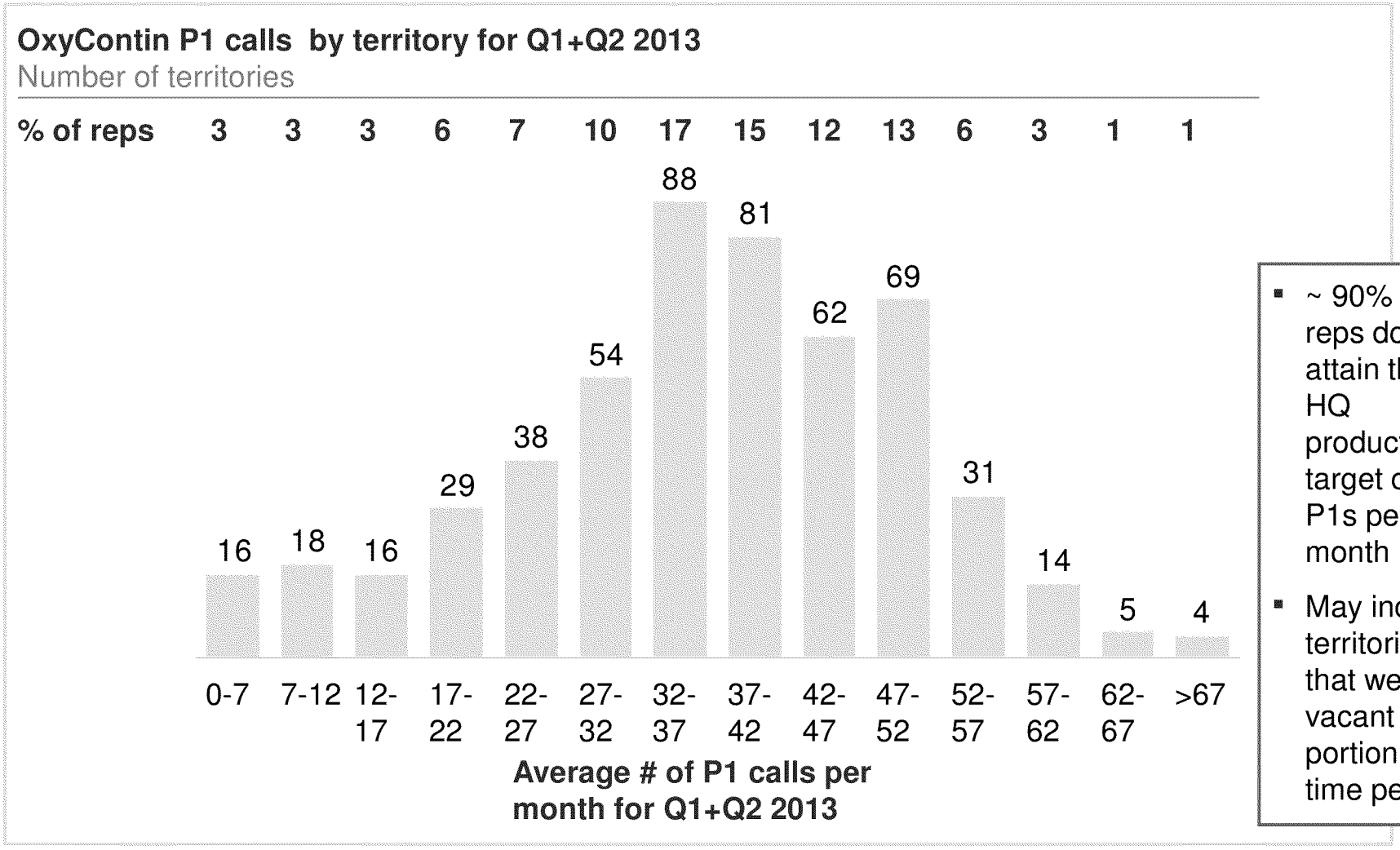


Making the incremental 180 calls per rep per year could result in incremental net revenue of ~$100 mn[3]

1 This is the lowest sales force call benchmark among specialties; this benchmark is for niche oncology drugs.
2 70% of Purdue OxyContin details are for GPs, which include GPs (52% of OxyContin details) and NRP (18% of OxyContin details). Specialty details include Phys Med & Rehab (7% of OxyContin details), Anesthesiology (7%), Rheum (2%), Orthopedic (2%), Neurology (2%), and other specialties that each make up 1% or less of OxyContin details.
3 Assuming 12 calls/ year/ prescriber, 39 incremental scripts per prescriber that is newly called upon (assuming Decile 5-7 sales responsiveness calculated by ZS Associates), 71 pills/ script, $6.2 average price per pill, with 25% rebate and other fees.

SOURCE: GP/Specialist mix from ZS report "M6 Alignment and Preliminary Placement Review v2.0", slide 74; McKinsey benchmarks; Purdue sales reports; Team analysis

There is a wide variance of actual P1 call attainment across territories



- ~ 90% of reps do not attain the HQ productivity target of 55 P1s per month
- May include territories that were vacant for portion of time period

SOURCE: IMS, Purdue call data

One possible way to attain benchmark ~1500 calls per year is to decrease training days by ~6 days and increase calls per day by 5%

One possible route to benchmark

Current call activity

Number of "on territory" days per year

Item		Days[1]
Number of working days		260
Holidays		-11.3
Vacation and other time off		-27.2
Trainings and meetings		-17.5
Other company-related time off of field		-4.3
Total days		199.7
Avg calls per day	x	7
Total calls per year		1398

Potential new allocation

Number of "on territory" days per year

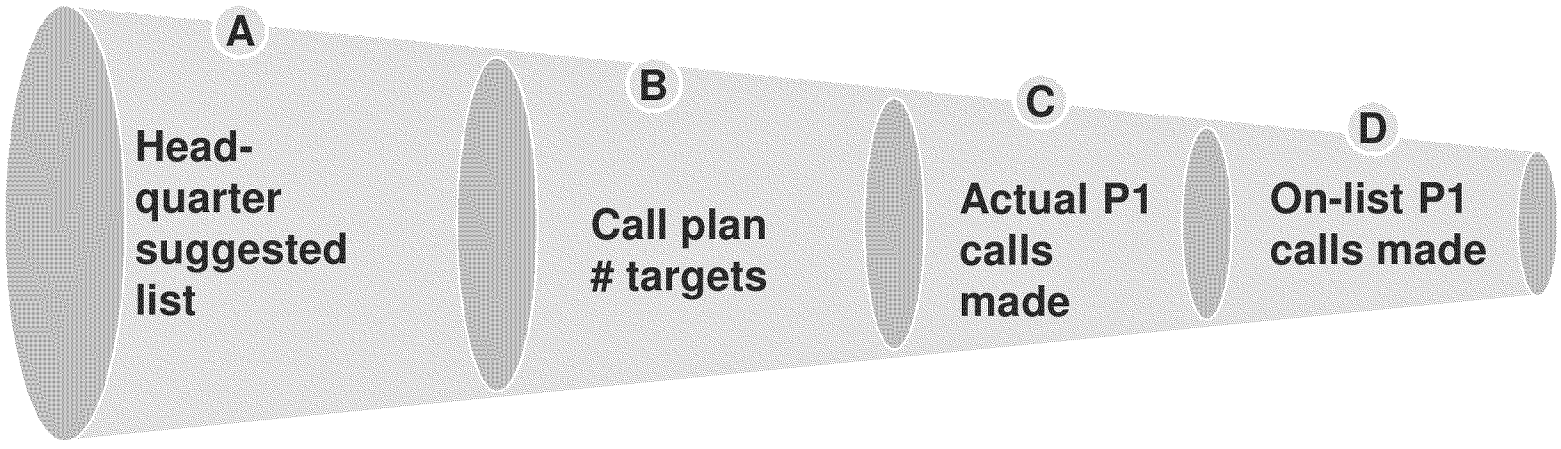
Item		Days[1]
Number of working days		260
Holidays		-11.3
Vacation and other time off		-27.2
Trainings and meetings		-11.5
Other company-related time off of field		-4.3
Total days		205.7
Avg calls per day	x	7.35
Total calls per year		1512

1 Purdue 2012 Actual data was used for this analysi

SOURCE: Purdue; team analysis

Adherence to the call list is only ~55%

Number of prescribers reached for OxyContin in Q1 2013



	A	B	C	D
# of Prescribers	42,000	26,000	18,000	10,000
Per rep	*80*	*50*	*34*	*19*

68%

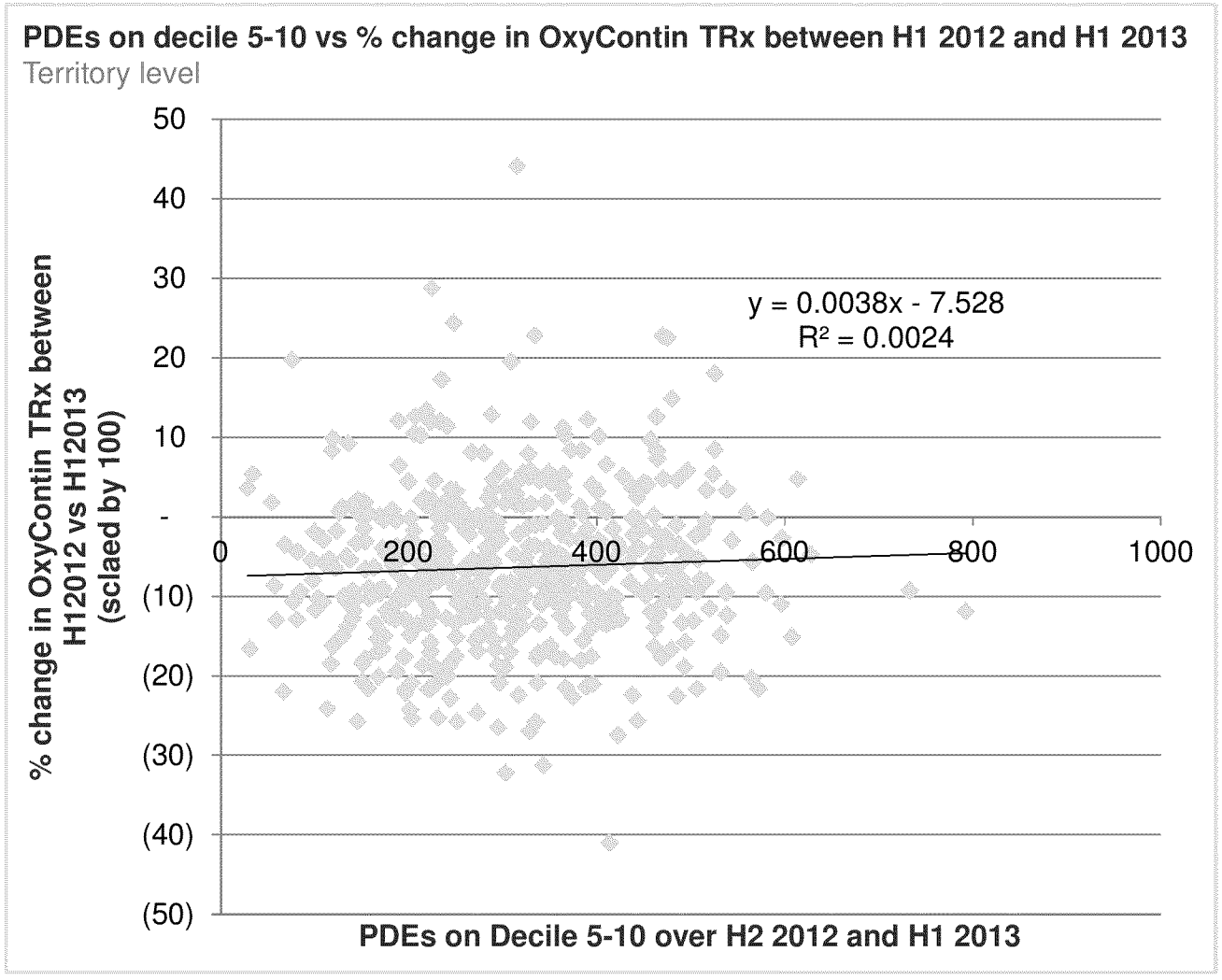
38%

Of the P1 calls made…

- 8,000 out of the 18,000 calls actually made were off-list (44%)

SOURCE: ZS Associates report; Purdue call data; Team analysis

Calls on decile 5-10 prescribers positively correlate with OxyContin growth



Implies that doing 175 more PDEs on deciles 5-10[1] is associated with 0.6 percentage point increase in OxyContin growth rate

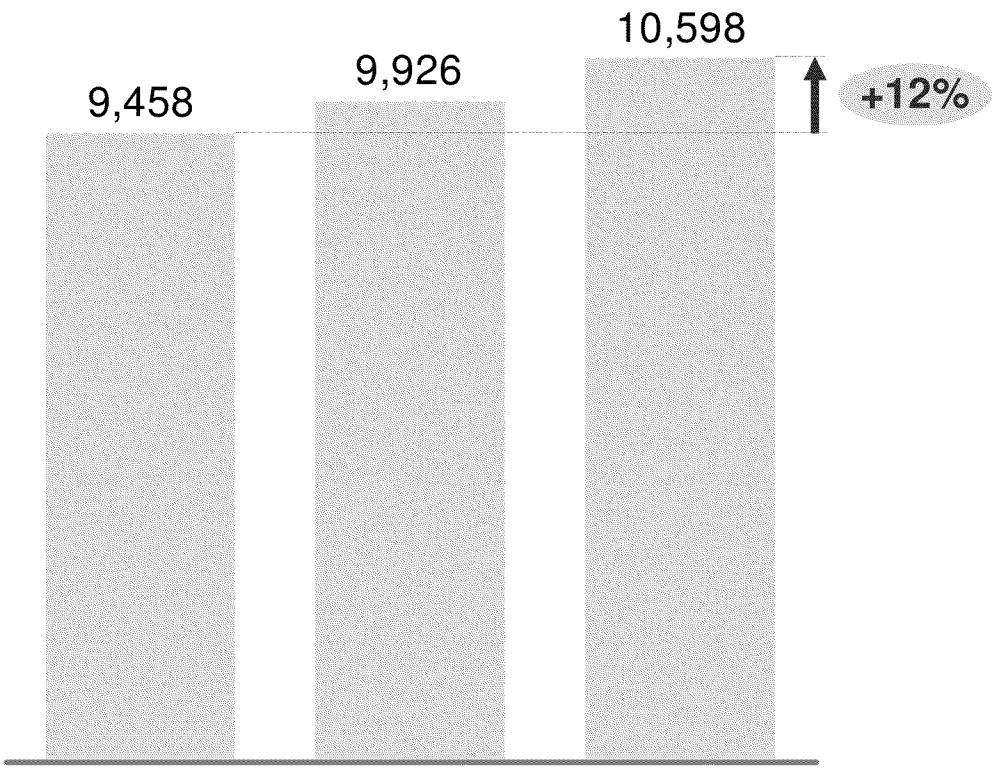
1 Which is going from 25th to 75th percentile of PDEs on deciles 5-10

SOURCE: Purdue call data; IMS; Team analysis

Some variability exists across tenure for average prescriptions per rep

OxyContin average TRx per rep by tenure

2011/2012 average TRx

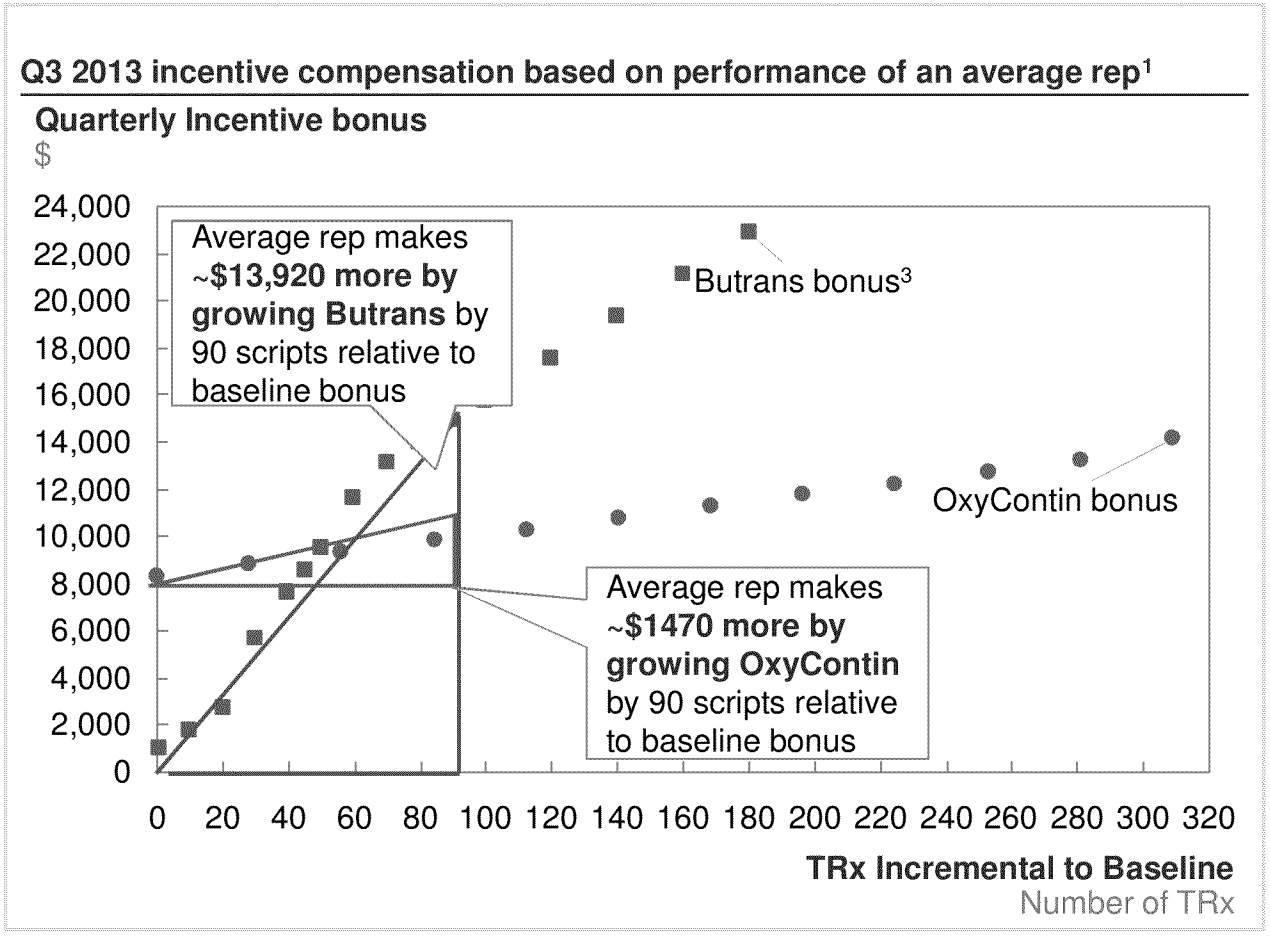


Tenure (years)	<3	3 to 5	>5
Number of reps	158	119	196

- Reps with >5 years tenure are in territories with average 12% higher TRx than reps <5 years (*not controlled for other factors)*

SOURCE: Purdue 2011-2013 OxyContin sales data, Zip to Terr file

Incentive comp structure is steeper for Butrans, making each incremental Butrans script more valuable to reps relative to OxyContin

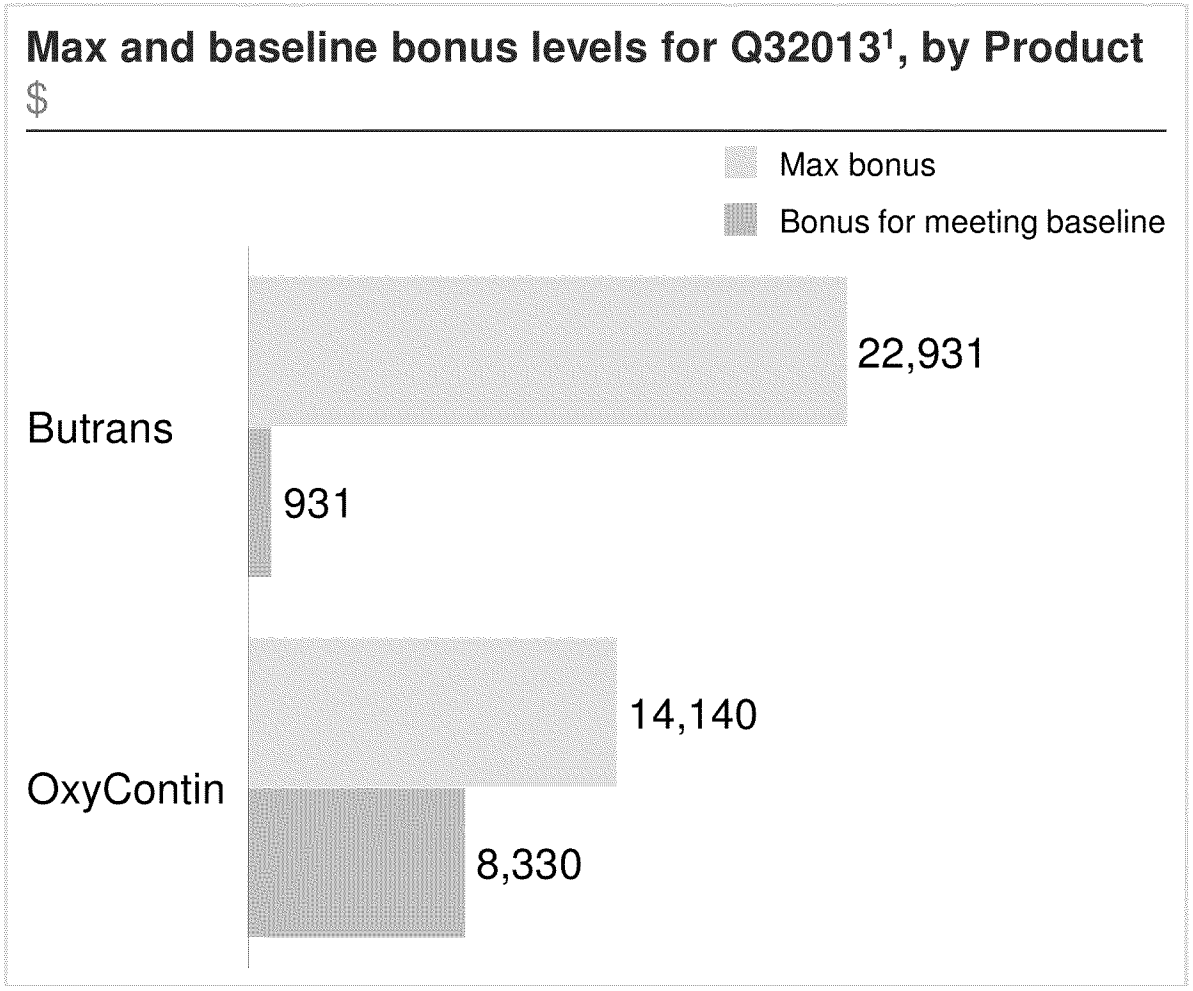


- For average rep, **incremental scripts relative to baseline worth far more for Butrans than for OxyContin,** because slope of bonus curve is steeper for Butrans
- **Purdue, in contrast, makes 67% more if rep sells 90 OxyContin incremental scripts than 90 Butrans incremental scripts** ($30k vs $18k)[2]
- Additionally, incentive comp could incorporate call list adherence and rep productivity

1 Uses Q3 2013 incentive plan. Assumes 232 Butransscripts/ quarter for average rep, and 2809 OxyContinscripts/ quarter for average rep.
2 Assumes average $267 gross price/ Butransscript and $447 gross price/ OxyContin script. Lastly assume net revenue (net of rebates and fees) is ~75% of gross price.
3 Balanced portfolio bonus included in Butransbonus calculation as is indexed to Butransscripts

SOURCE: Purdue sales; Purdue Budget; team analysis

Max level of bonus for Butrans at a higher level than for OxyContin



Max level of bonus for Butrans is 60% higher than for OxyContin

1 Uses Q3 2013 incentive plan. Assumes 232 Butransscripts/ quarter for average rep, and 2809 OxyContinscripts/ quarter for average rep. Balanced portfolio bonus indexed to Butransscripts

SOURCE: Purdue sales; Purdue Budget; team analysis

Reps who make more OxyContin P1s on high-decile prescribers generate more OxyContin growth in their territory

ACTUAL DATA

Relationship between TRx growth and P1s on high decile prescribers holds across territories

Sales rep A

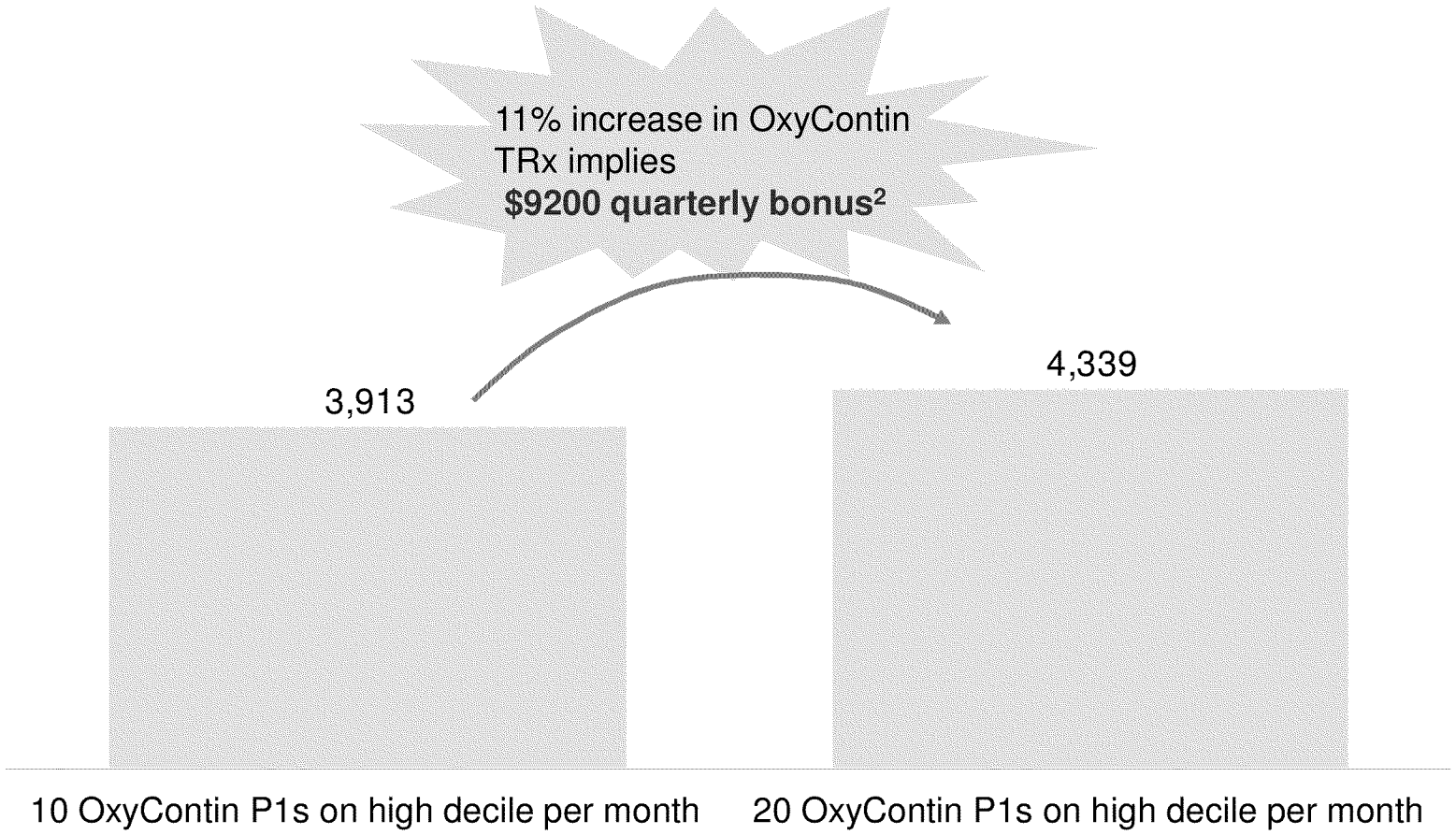
Sales rep B

		Sales rep A	Sales rep B	
Sales rep B generated 7% more growth…	**% change in Oxy TRx, H1 2012 vs H1 2013**	0%	7.3%	+7300 bp
by making more Oxy P1s on high decile doctors…	**Oxy P1s on high decile MDs (5-10) per mo**	23	28	+22%
*despite operating in a **similar territory to Sales rep A***	**State**	TN	TN	
	# of high-decile docs in territory	70	56	

SOURCE: IMS; Purdue sales data

Going from 10 to 20 OxyContin P1s on high-decile prescribers generates 11% increase in OxyContin scripts1 – a $9200 quarterly bonus for avg rep

OxyContin TRx per year, on average



1 Based on regression accounting for the number of high-decile prescribers in the territory
2 Under current Q2 2013 incentive plan

SOURCE: IMS; Purdue sales data; Purdue Q2 2013 Rep incentive plan

Observations from rep ride-a-longs

Challenges

- Reps given guidance to only speak about **abuse-deterrence label once** with each physician (guidance "not to make it a selling point")
- Reps **struggling to engage prescribers in focused conversations about OxyContin**
- Reps **overwhelmed by amount of data available, and unable to use it effectively** for call planning and focusing conversations with prescribers
- Observation that rep still had **old version of OxyContin label** without latest section on abuse-deterrence
- Prescribers "not asking" to talk to **MSL**
- Belief that **pharmacies occasionally switching patients** w/o physician call-back
- **Corporatized provider** in area wouldn't write anything unless "**dirt cheap**" – physician view
- **Abuse was seen as a real issue** for each practice and pharmacy visited; the new label was of interest among prescribers and office staff
- **Pharmacy call-backs seen as an unsustainable 'drag'** on practice economics

Opportunities

- Reps **trying to apply techniques and topics introduced at trainings** (e.g., "challenger" approach)
- One rep attributed extensive dropping of **co-pay cards** at pharmacies to increasing sales in territory
- Talking about availability of **newer strengths** (e.g. 15mg) seen as effective
- One rep able to generate new writers through **persistent calls** each month
- Use of **dinner programs** seen as effective
- Talked about **managed care 'wins'** (e.g. MedCo part D)
- Spending time with **office manager discussing managed care coverage and processes** useful
- Can use pharmacy stocking report to **ensure pharmacies are carrying all dosages** of OxyContin
- Engaging interested prescribers on the importance of using **tamper resistance formulations** could increase comfort in using OxyContin

SOURCE: Rep ride-a-long field observations

The revenue upside from sales re-targeting and adherence could be up to $250M

PRELIMINARY

Based on ZS Response curves

Lever	# of MDs		PDEs per MD: Current (Avg.)		PDEs per MD: Suggested	Total PDE change	TRx impact per MD[3]	Total impact[4]: TRx	Total impact[4]: Revenue
Increase reach on decile 5-10 MDs not currently called	*All*	8,700							
	Reachable	~70%[1]							
	MDs reached	6,000	0	⇨	12-24[2]	103k	69	**411k**	**$177M**
Increase frequency on decile 5-10 MDs with suboptimal call frequency		16,400	10	⇨	12-24[2]	152k	24	**387k**	**$166M**
Reduce calls on decile 0-4 MDs		43,000	5	⇨	0	(110k)	(5)	**(210k)**	**($90M)**
Total impact						**145k**		**587k**	**$250M**

- **145k incremental PDEs** could be achieved by *either*
  - Increasing current Oxy P1 calls from ~37/rep/month to the 50/rep/month (90% of target) *plus* adding an incremental 65 reps *or*
  - Keeping productivity at current level an adding ~190 reps. Typically an additional 10-20% reps are required given inefficiencies in real-world geographic deployment, thus the deployed total could be as many as 210-230 reps

- Opportunity for up to **$250M impact** from:
  - Targeting high value prescribers
  - Performing budgeted target Oxy P1s
- Assumes **no change to Butrans** call plan

NOTE: Purdue call numbers based on blended and annualized Q1+Q2

1 15% discount on access, 10% discount on territory misalignment, 11% discount on other MDs not reachable (e.g. Region 0, IR only)

2 24 calls decile 6-10, 12 calls on decile 5; 3 Based on ZS call responsiveness curves by decile ; 4 On annualized basis

SOURCE: ZS Associates, IMS, Purdue call data, team analysis

65 to 190 additional reps will be needed to capture full opportunity depending on the increase in productivity of the sales force

	Description	Additional reps[1]	Estimated impact[2]	Rationale/ What you have to believe
1 Optimize and expand[3]	a Shift calls to high-value prescribers and increase rep productivity to 90% of target (e.g. 50 v. 55 calls/rep/mo); add reps to fill gap	65+		▪ Desire to maximize potential opportunity ▪ Believe current field force can improve both productivity and adherence
	b Improve targeting, improve productivity by ~20%, and add reps to fill gap	115+	+$250M	▪ Sales force has potential to moderately improve productivity
	c Shift calls to high value prescribers, no change in rep productivity, add reps to fill gap	190-230		▪ Believe call list adherence can be improved but challenging to improve productivity ▪ Desire quick impact
2 Optimize with current capacity	▪ Shift calls to high-value prescribers and increase rep productivity to 90% of target (e.g. 50 calls/rep/mo); do not add reps	None	+$220M	▪ Believe current field force can improve both productivity and adherence simultaneously

- Estimates do not include haircut for execution
- Additional reps required could be larger to:
  - Account for territory alignment
  - Increase field force size ahead of new product launch

1 Does not account for territory mis-alignment
2 Pro-forma relative to 1H 2013 performance, annualzed
3 All scenarios assume 24 calls per year on deciles 6-10, 12 calls on Decile 5

SOURCE: IMS; Purdue call data; ZS Associates; McKinsey analysis

Contents

Findings on pharmacy and wholesale access

PRELIMINARY

- **A number of issues at the pharmacy and wholesale level are significantly impacting patient access:**
  - **Pharmacists are increasingly turning away opioid patients, especially at chain pharmacies**
  - Major pharmacies have implemented **stringent guidelines on opioid dispensing,** including pill count limits and requirements that patient must have filled same script at same pharmacy previously
  - **Walgreen's has eliminated incentives for pharmacists to dispense controlled substances** as part of its DEA settlement
  - **Pharmacists increasingly calling back physicians**, creating additional work and hassle for physicians
  - **Distributors are keeping a tight hold on supply of all controlled substances**, with pharmacies unable to order more than historical levels without risking being cut off
  - **There are reports of wholesalers cutting off pharmacies altogether**
- **Using available data, we have evaluated the extent of the access issue**
  - Patient calls to the **Medical Service line on access issues** have been increasing – though this represents only a fraction of the potential impact
  - Analysis of patient survey data collected by the Pain Care Forum shows **direct evidence of patients having difficulty filling opioid prescriptions**
  - Share of redeemed OxyContin savings cards **fell sharply for CVS in Q3 2012 and for Walgreens in Q2 2013**
  - **Walgreen's purchasing has been declining at a rate far faster than other pharmacies, with an acceleration in the March-June 2013 time period after the Good Faith Dispensing policy was rolled out in full**
    - Walgreen's estimated monthly retail purchasing of OxyContin declined ~2% (in units) from Q1 2013 to Q2 2013 compared to a 1% decrease over the same period for all other pharmacies
    - In addition**, fewer Walgreens stores are purchasing high-dosage** (60mg, 80mg) OxyContin and overall purchases of high-strength OxyContin is falling faster as Walgreen's relative to other pharmacies
  - There is little evidence that mail order is increasing to offset retail pharmacy access issues

Access issues at pharmacy and distributor level

PRELIMINARY

Low impact ● High impact

	Actions impacting access	Potential size of impact
1 Pharmacies	a Turn away patients who raise 'flags', which may include: – Living far from pharmacy, or prescription was written far from the pharmacy – Being new patients – Having a prescription for >120 units	●
	b Call back physicians to verify prescription and to discuss treatment plan	◕
	c Modify Rx to fewer tabs (must call back physician)	◑
	d Stock out of opioids (either because limited deliveries imposed by distributors or HQ)	◔
	e Choose not to carry opioids at all	◔
2 Wholesalers	a DEA actions have led to several wholesale distribution facilities being barred from shipment of class 2 drugs for periods of time	◔
	b Halt C2 shipments to pharmacies that order 'too much', as measured by dosing units and molecule type (compared to historical purchase levels and purchase of non-controlled substances)	◑
	c Limit volume of C2 shipments to pharmacies (e.g., only allow orders up to historical purchase levels +10%)	◑

SOURCE: Purdue interviews; Pharmacist interviews

Guidelines established by major pharmacy chains and increased work associated with filling opioid prescriptions have restricted patient access

Pharmacy chains are implementing guidelines for which patients can fill opioid prescriptions, increasing pharmacists' risk of filling opioid prescriptions…

Common mandatory requirements

- Government ID
- No previous failed attempt to fill the prescription at another pharmacy belonging to same chain
- Clear PDMP check, in states where available

Additional flags

- Has not previously filled a prescription for the same medicine and dosage at same pharmacy
- Quantity is 120 units or more
- Patient on medication for 6 months or more
- Lives far from the pharmacy
- Prescription not filled on time
- Paid through cash/ credit card rather than insurance

… moreover, pharmacists report increased work and hassle associated with filling opioid prescriptions

- "We kind of discourage [the opioid business]… **it's more headaches than it's worth** for the low profits [and] if you give one patient one prescription [for an opioid], they bring their friends"– *Clinical coordinator at Publix (FL)*
- "Stress load is high- they aren't insuring techs [and] it used to take 10-15 mins to fill a prescription, now it takes a lot longer…Pharmacy also not providing enough support to fill these prescriptions… **80% of the time, they just refuse patients**." – *Clinical coordinator at Publix (FL)*
- "With budget cuts and staffing cuts – we don't have time to handle everything… **it's easier to turn away patients… my personal turn away rate for opioids is about 5%**" – *Former Pharmacy Manager at Walgreens (KY)*

SOURCE: Purdue; Pharmacy expert interviews

Walgreens has eliminated pharmacists' incentives to fill opioid prescriptions as part of its DEA settlement

Settlement and Memorandum of Agreement
Addendum: Prospective Compliance
Section 6

"Beginning in 2014, Walgreens will **exclude any accounting for controlled substance prescriptions dispensed by a particular pharmacy from bonus computations** for pharmacists and pharmacy technicians at that pharmacy"

Possible that this has already been implemented, given other elements of the settlement (e.g., GFD) appears to have been implemented before the settlement was finalized and made public

SOURCE: DEA website (http://www.justice.gov/dea/divisions/mia/2013/mia061113_attach.pdf)

Pharmacies are calling back physicians to verify prescription and to discuss treatment plan

PRELIMINARY

Pharmacists are calling back physicians more frequently to verify and scrutinize prescriptions…

"It used to be that prescriber decided what drugs patients get, now pharmacists are now questioning the decision… for example, we had a case today where the patient was on IR, and we called the doctor back to suggest he change the prescription to 80/20 ER/IR"
– Former senior pharmacy director at CVS (FL)

"We are now asking doctors to modify prescriptions… for example, if we think the patient isn't opioid tolerant already, we will call the doctor."
– Former Walgreens Pharmacy Manager (KY)

"Pharmacist should look for different flags: In a certain market area? IR and ER? Days supplied? Proximity of the patient to the pharmacy and prescriber? Does the prescription look altered? Is this a valid DEA number? Is this a valid prescriber? … Then he calls the prescriber to validate for <u>every</u> TRx (requirement in the last year or two)"
- Former senior pharmacy director at CVS (FL)

… which leads to increased work and irritation for the physician, potentially decreasing OxyContin prescriptions

"Patients went to many pharmacies [in Manhattan] and most pharmacies don't dispense OxyContin"
– Physician specializing in pain control

Potential for negative feedback loop

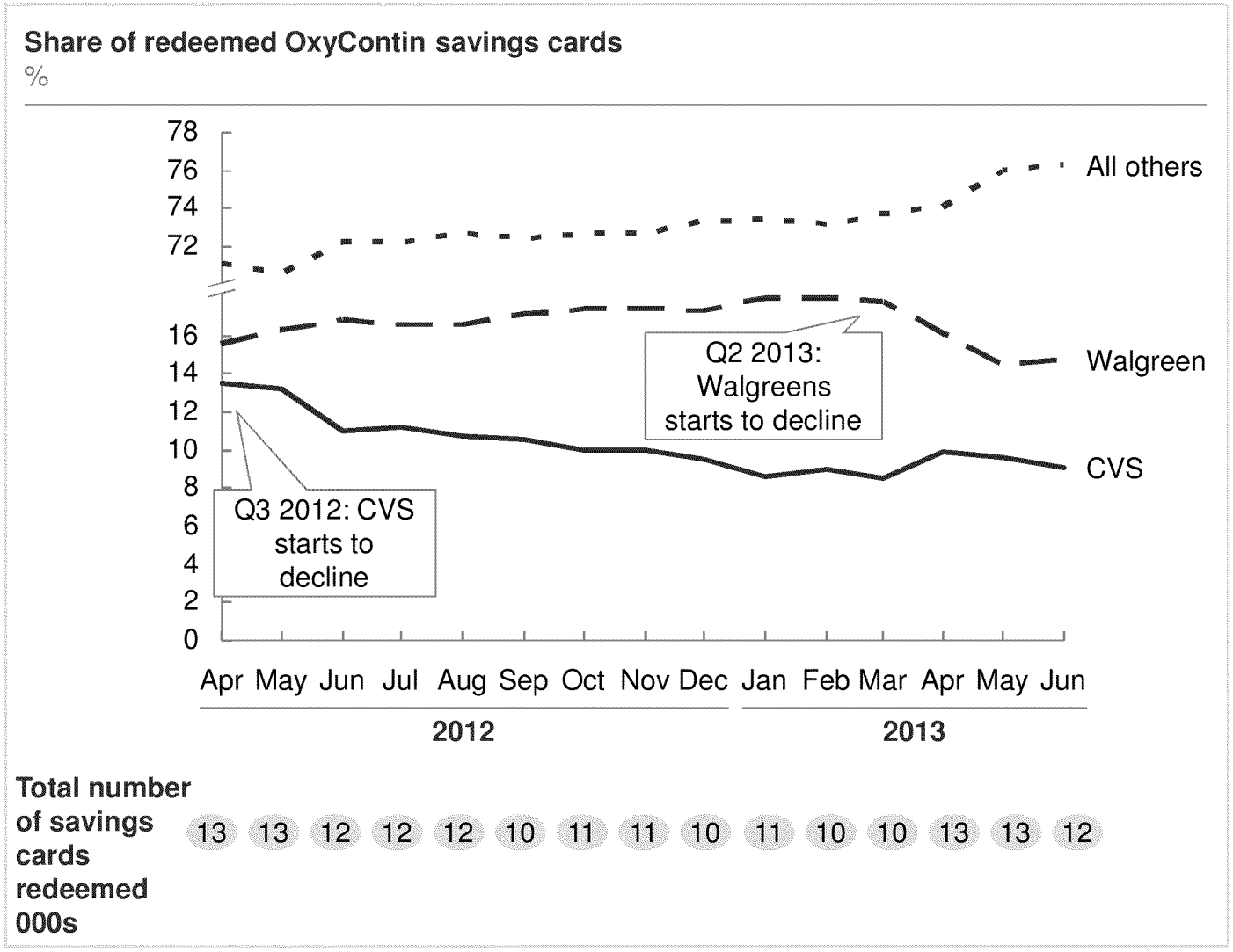
"The patient population is annoying, the documentation is annoying. A lot of my colleagues decide to stop doing opioid prescription later in their career (because they are tired of the hassle)"
- Anesthesiologist and Pain Management Physician at major hospital

"PCPS are increasing referrals to specialists, part because of the big hassle around drug testing, pain contracts, and patient monitoring"
– Anesthesiologist and Head/Neck surgeon

SOURCE: Pharmacist expert interviews during week of7/15/2013; Prescriber interviews during June and July 2013

Share of savings cards redeemed started to decline in Q3 2012 for CVS and Q2 2013 for Walgreens

PRELIMINARY - IN VALIDATION



- CVS' share of redeemed savings cards starts declining in Q3 2012, coinciding with its national rollout of dispensing policy for controlled substances
- Walgreens' share of redeemed savings cards starts to decline in Q2 2013, coinciding with the national rollout of GFD

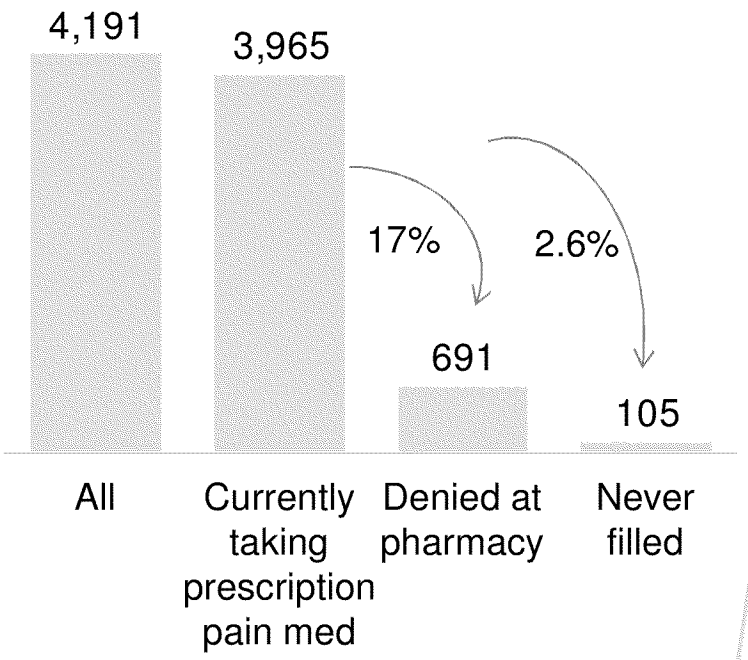
SOURCE: Purdue savings cards data

Analysis of patient data collected by the Pain Care Forum shows direct evidence of patients having difficulty filling opioid prescriptions

PRELIMINARY

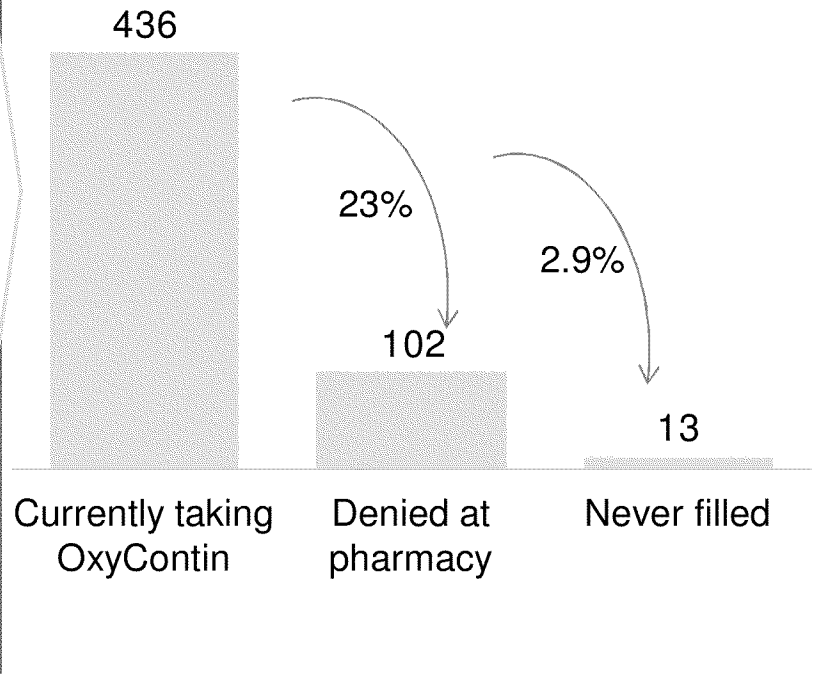
Among respondents, 95% are currently taking prescription pain meds and of those, **17% report having been denied filling a prescription**…

Number of respondents



…OxyContin patients, making up 10% of prescription drug patients in the survey, report **denial rates of 23%**

Number of respondents

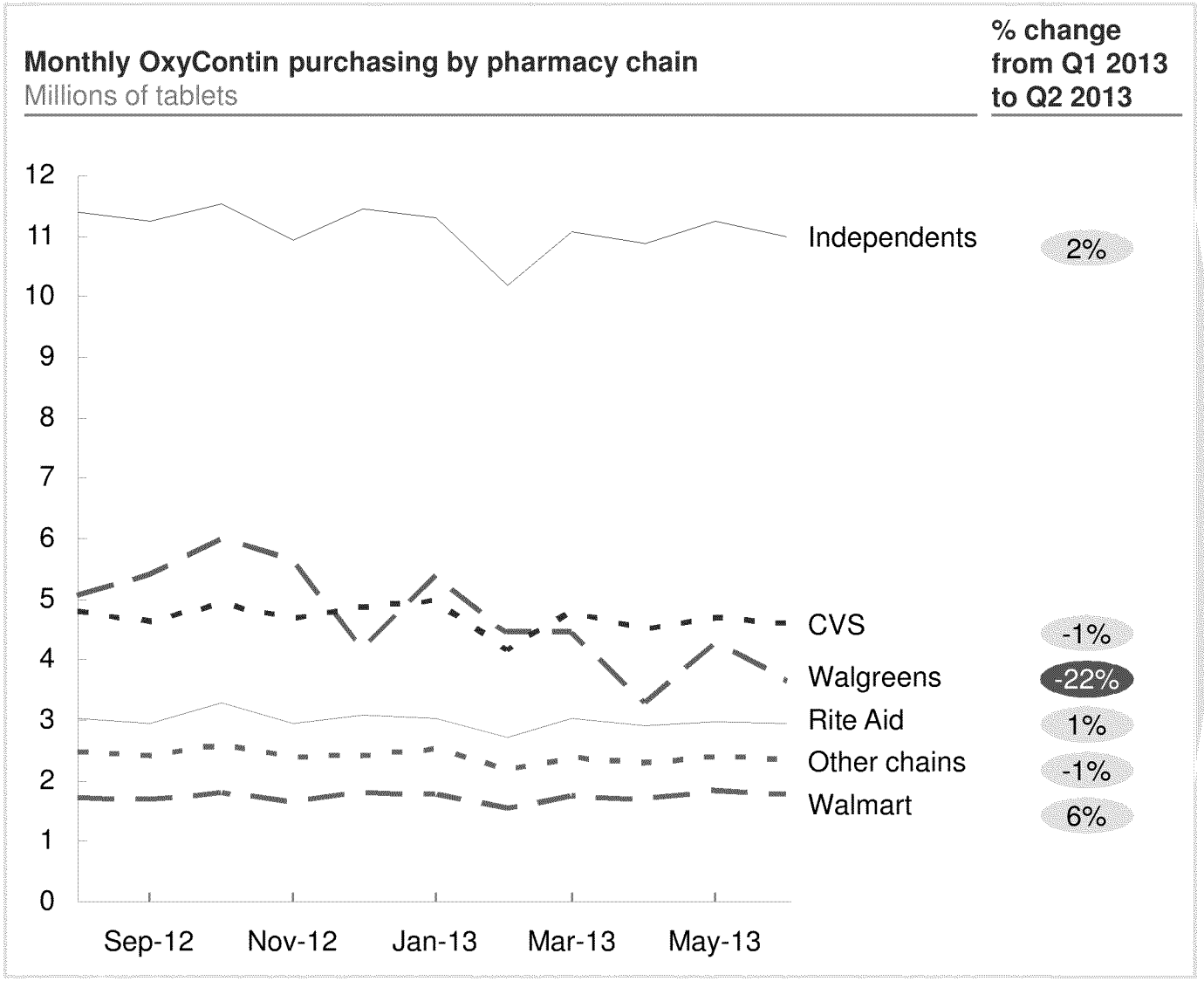


1 E.g., only including those who identified themselves as currently taking prescription pain medication

Note: Survey respondents were found by sending survey link to email list of National Fibromyalgia & Chronic Pain Association and other organizations; also posted via social media. Responses analyzed here were collected between 6/22/2013 – 8/9/2013, but survey collection still ongoing at the time of analysis. 40 states are represented in the survey

Source: Pain Care forum survey data

Walgreens purchasing of OxyContin has fallen more relative to purchasing by other chains and independent pharmacies



- Walgreens purchasing declined by 22% between Q1 and Q2 2013 (time of GFD implementation[1]), far outpacing the overall market decline of 3% over the same time period
- ~70% of the decline in OxyContin tablets over the Mar- Jun 2013 time period is attributable to Walgreens

Last Modified 9/13/2013

1 Good Faith Dispensing policy, elements of which are described in the previous slides in this section

SOURCE: Market Visibility; OMS

The number of Walgreens pharmacies purchasing high-dosage OxyContin has fallen significantly…

Number of WAG stores with any purchase of OxyContin, by dosage
# of stores

	Oct – Dec 2012	Apr – Jun 2013	Change	% Change
10 mg	4944	4331	-613	-12.4%
20 mg	5646	4993	-653	-11.6%
30 mg	3666	3044	-622	-17.0%
40 mg	4988	4299	-689	-13.8%
60 mg	3046	2399	-647	-21.2%
80 mg	3865	3190	-675	-17.5%
Any dosage	6943	6661	-282	-4.1%

- Number of stores purchasing have **fallen the most between Q4 2012 and Q2 2013 for the high dosages**

SOURCE: OMS

…and Walgreen's purchasing declined much more steeply for high-dosage OxyContin

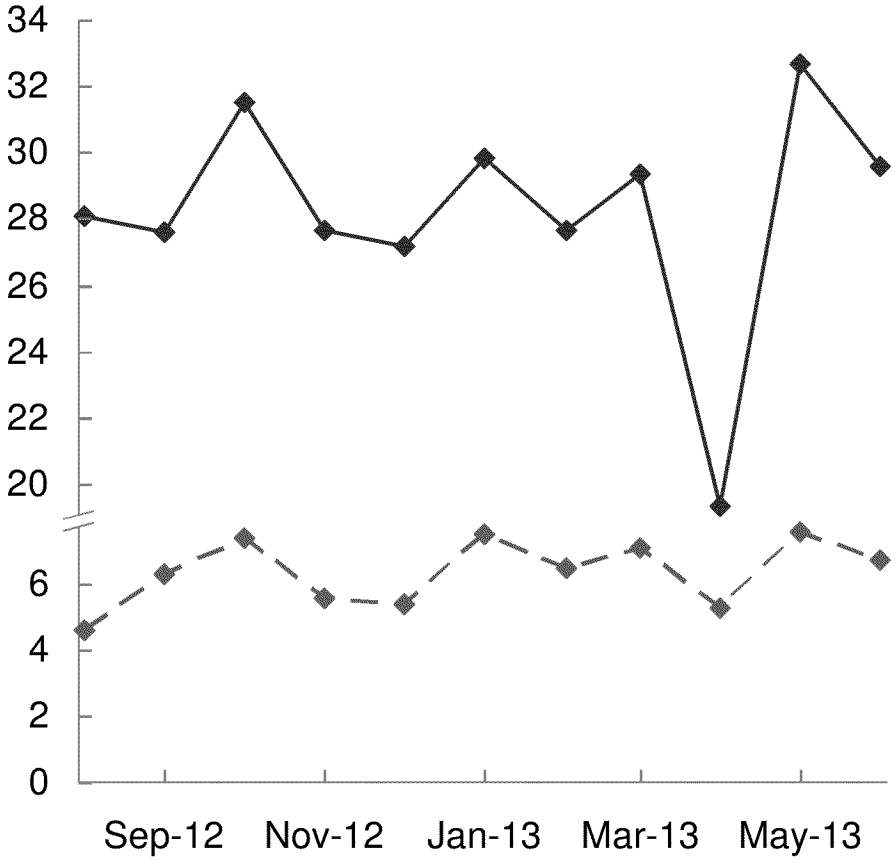
Change in bottles purchased by Walgreens and all others, by dosage
% change between Q1 2013 and Q2 2013

- 40, 60 and 80mg units declined ~25% faster than 10mg units
- Overall market tended to see faster declines in high-dosage units, but Walgreens showed a far faster decline in high dosage units

SOURCE: OMS

Walgreens' purchasing of Butrans also declined more compared other pharmacies, but not to same extent as OxyContin

Butrans Pharmacy Purchases, Walgreens vs. others
Thousands of Packages



% change from Q12013 to Q22013

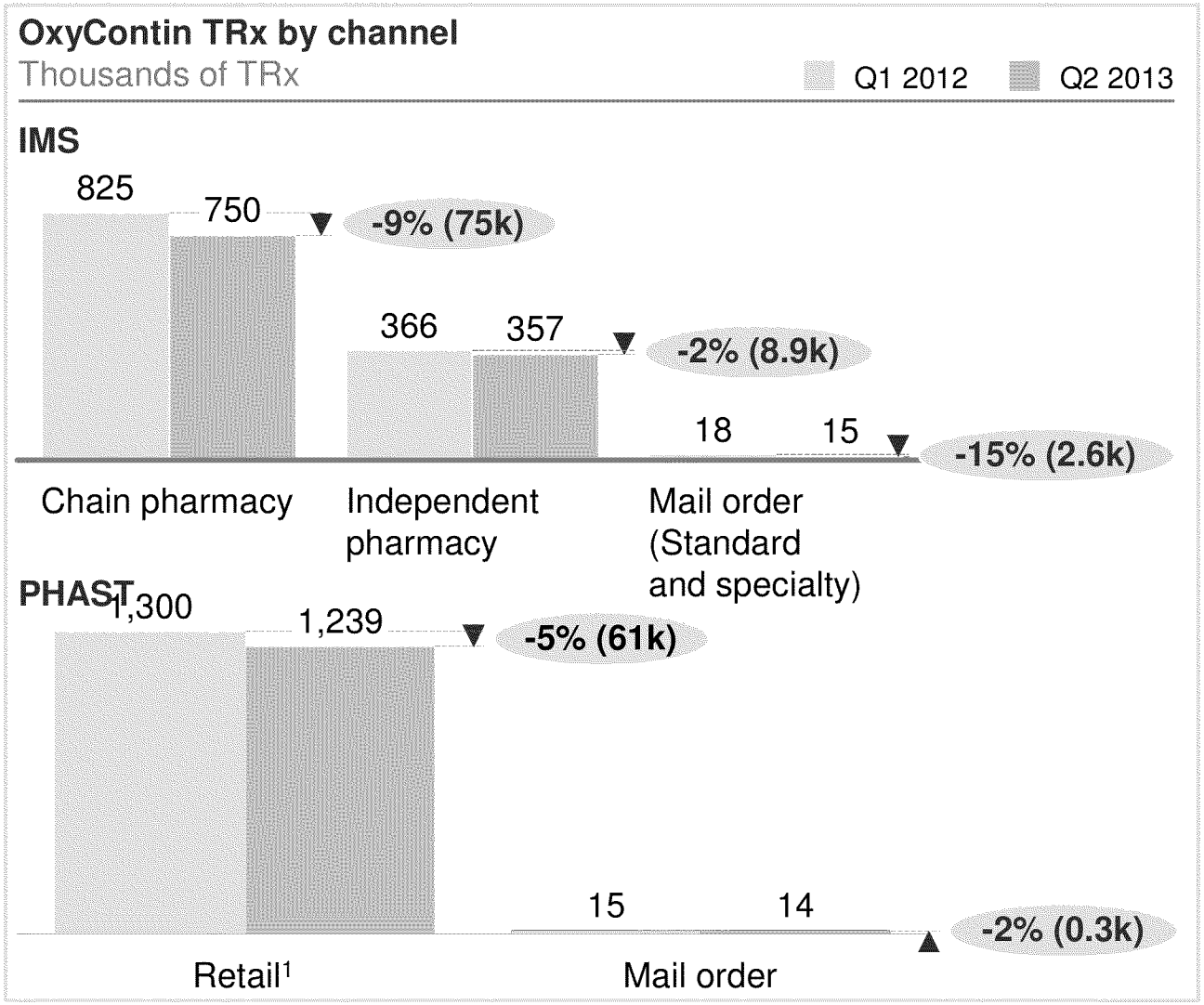
Others -6.0%

Walgreens -7.3%

- Walgreens' purchasing of Butrans has also declined more between Q1 and Q2 2013 compared to other pharmacies

SOURCE: OMS

IMS and PHAST data both show no evidence that mail order is offsetting TRx losses from chain pharmacies



- Chain pharmacy volume decreased by 9% (75k scripts), while mail order declined by 15% (2.6k scripts) – providing **no indication that mail order has offset declines in chain pharmacy volumes**
- This relationship **holds even when we focus on Q1 2013 vs Q2 2013 (e.g., time of Walgreen's GFD implementation)**

1 Retail in PHAST data includes chain pharmacies, independent pharmacies, and food stores

Source: IMS; PHAST

Even by dosage, there is little evidence that mail order is offsetting declines at the chain pharmacy level

OxyContin TRx by channel and dosage
Change between Q1 2012 and Q2 2013

Dosage	Channel	Q1 2012 TRx	Q2 2013 TRx	% change
10mg	Chain	160998	151210	-6.1
	Mail order	2571	2104	-18.2
20mg	Chain	217528	194323	-10.7
	Mail order	4868	3941	-19.04
30mg	Chain	75490	80619	+6.8
	Mail order	1347	1038	-23.9
40mg	Chain	171146	144114	-15.8
	Mail order	4285	3643	-14.9
60mg	Chain	61827	59931	-3.1
	Mail order	1204	1279	+6.2
80mg	Chain	115799	93401	-19.3
	Mail order	3307	2903	-12.3

- Mail order volume declined for all strengths, with the exception of 60mgs
- Even for 60mgs, increase in mail order volume (+75 TRx) does not significantly offset chain volume declines (-1896)

Source: IMS

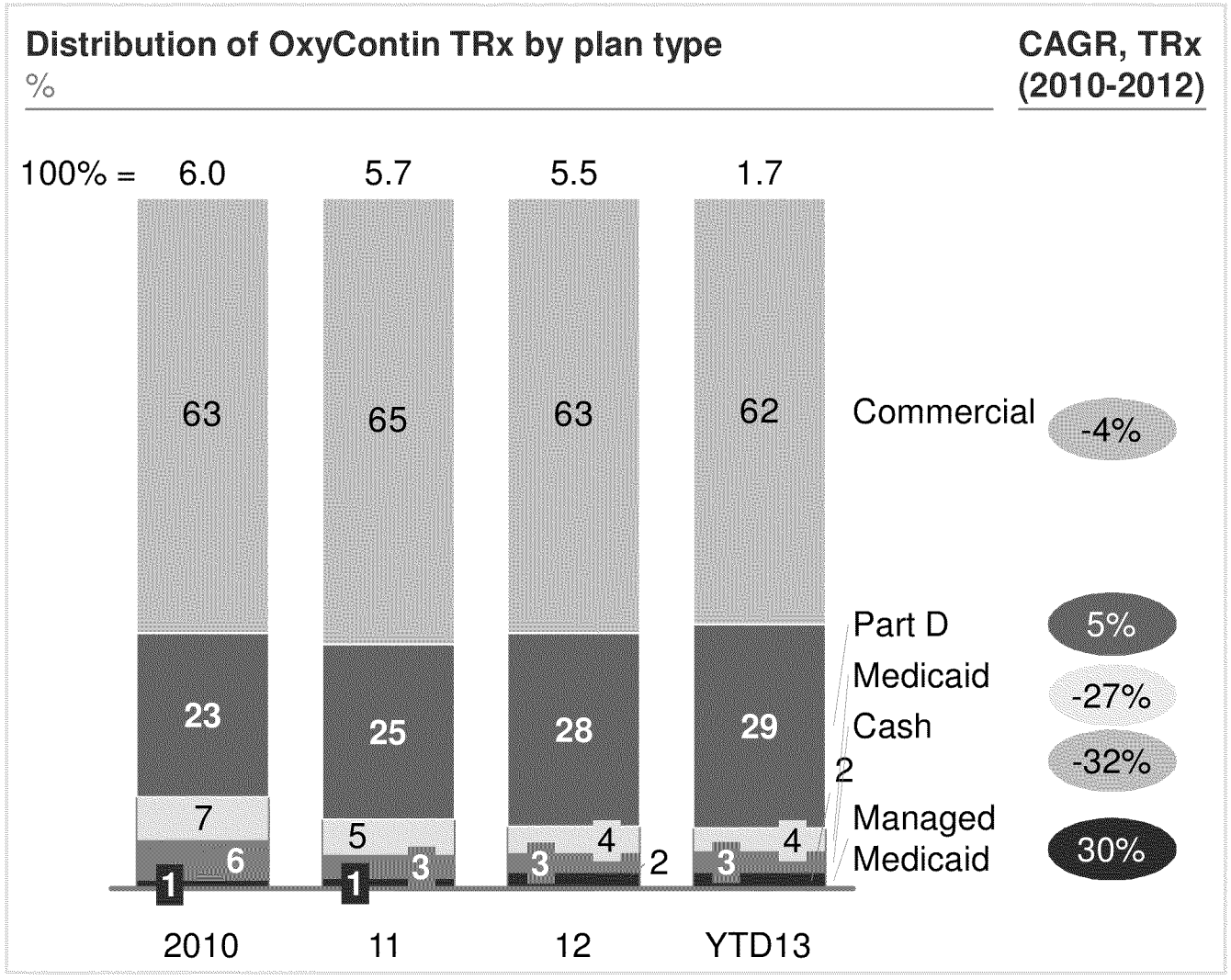
Contents

Managed care – executive summary

PRELIMINARY

- **To date, Purdue has successfully maintained strong tier and rebate position in Commercial plans though it faces a more challenging environment in Medicare Part D**
  - Medicare Part D is the only growing segment of the business, increasing from 23% to 29% of OxyContin TRx from 2010-12
  - OxyContin share in all market segments (Part D, Commercial, Medicaid) declined between 2010 and 2012
  - While Commercial has maintained a relatively high level of access, Part D plans have much more restricted access
- **Formulary status has a significant impact on OxyContin share of ERO, for both Commercial and Part D**
  - In Commercial, OxyContin has 32% share of ERO among plans with Pref. Branded Access and 22% share of ERO among plans with no formulary coverage. In Part D, OxyContin share is 28% in plans with Pref. Branded Access and 11% in plans with no formulary coverage.
  - In Part D, OxyContin is best keeping up with overall ERO growth in plans where OxyContin has Pref. Branded Tier access
- **There have been several key adverse changes in formulary status for OxyContin in recent years, mainly in Part D**
  - Changes in formulary status have substantially impacted OxyContin TRx volumes
  - Moreover, formulary changes in Part D can "spillover" into Commercial plans
- **However, substantial variation in share even for territories with similar levels of access suggests opportunities for better pull-through**
- While payors see pain as a relatively stable class, rebates mentioned as one reason why OxyContin continues to stay on Preferred Branded tier
  - Management of pain category overall is stable in outlook – rebates mentioned as one reason why OxyContin stays on Preferred Branded Tier
  - Lack of differentiation among opioids in the market, but wide range of options is important
  - Pain is a relatively important category in formulary, but behind oncology and other higher-cost drug types
  - Differing levels of awareness about AD reformulation
  - Even with AD benefits, cost savings of generics is heavy counterweight to using more expensive AD formulations

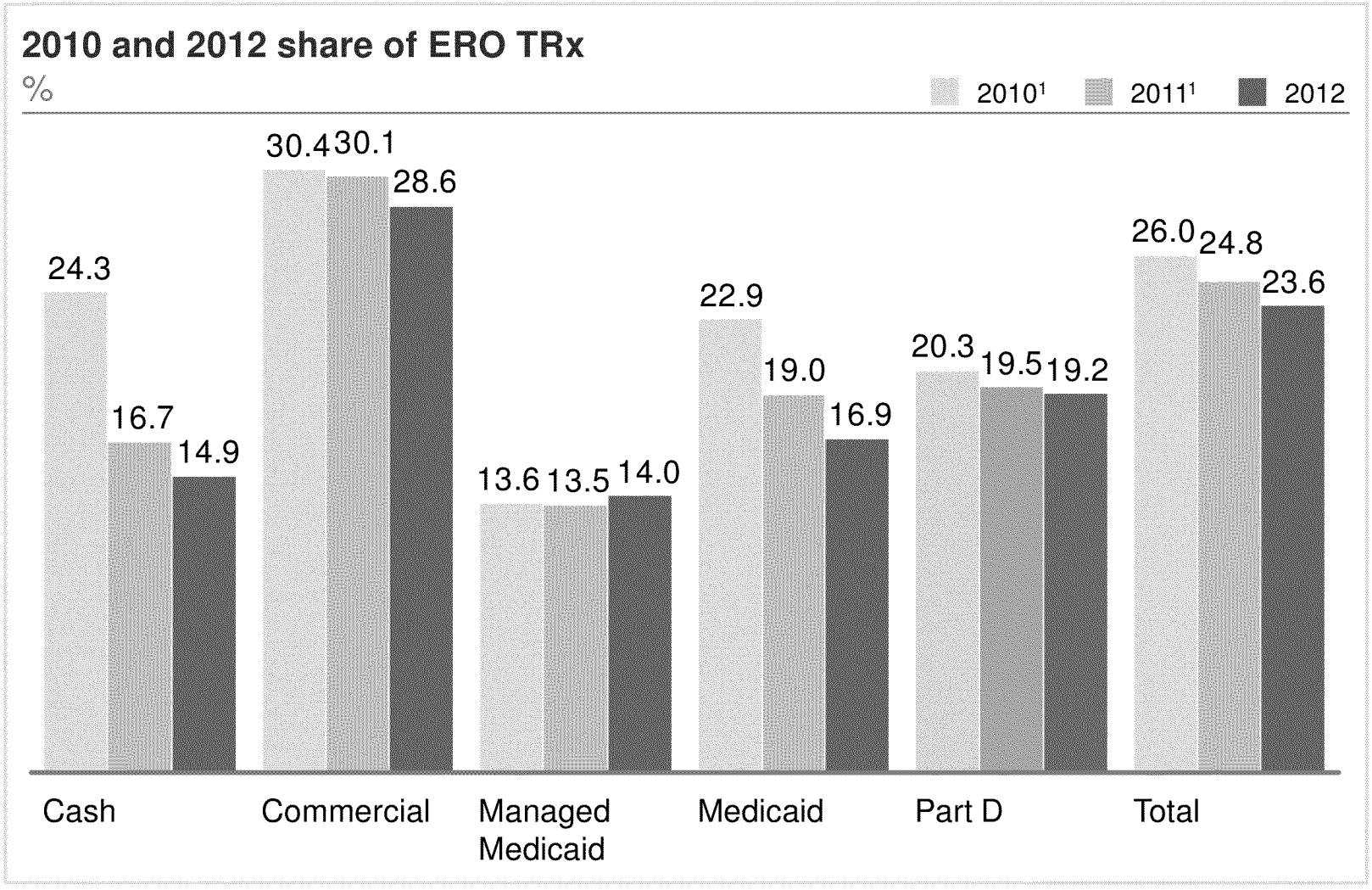
Medicare Part D is the only significant and growing book of business for OxyContin



- As Medicare's percent share of insured increases, Purdue will need to actively address reimbursement pressures
- Primary growth driver for OxyContin Part D was likely the increase in covered population

SOURCE: IMS

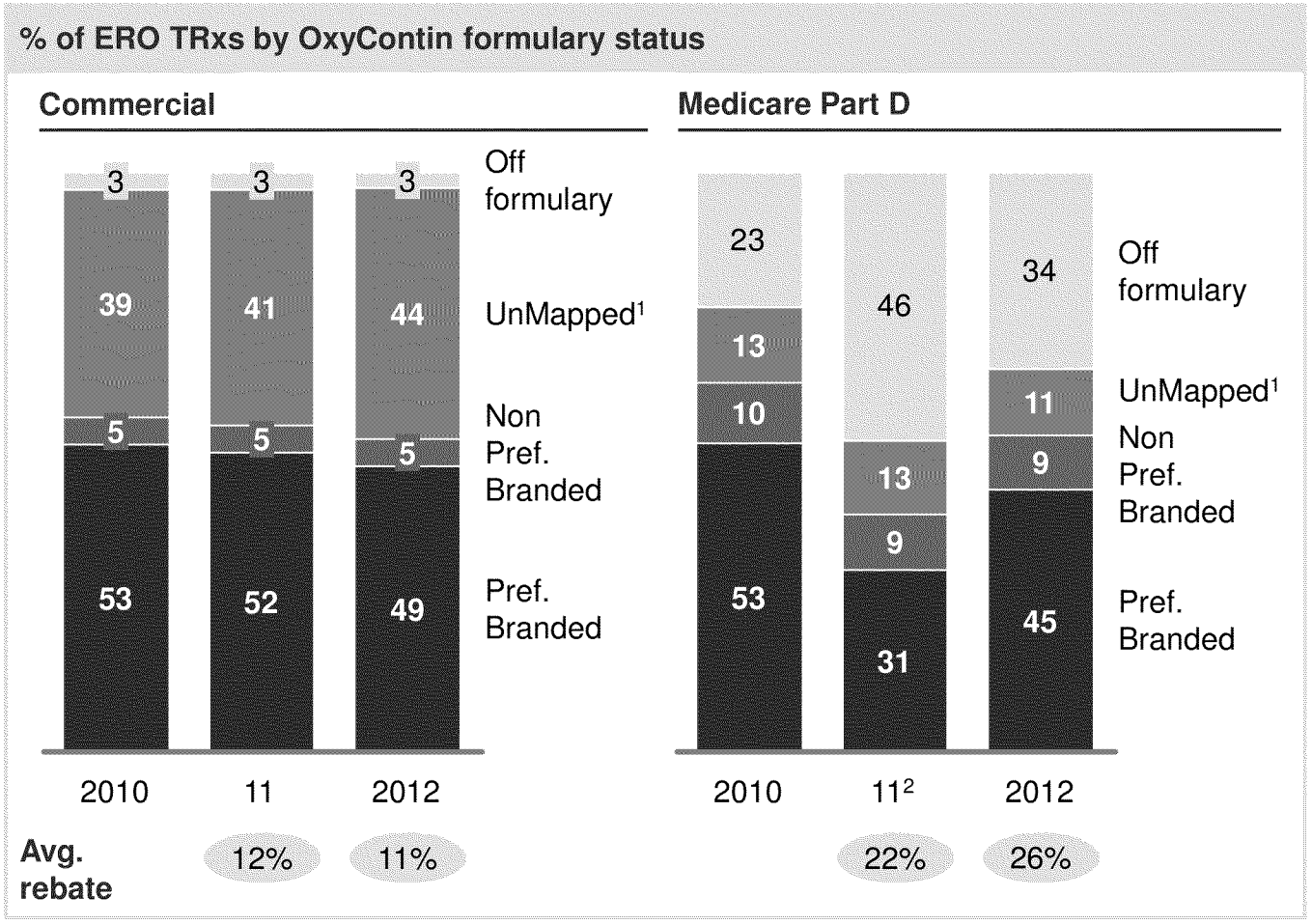
… but OxyContin's share of the ERO market is declining in all significant segments, including Part D



1 2010 and 2011 coincides with period of reformulaton rollout and exit of generic OxyContin from the market

SOURCE: IMS

To date, Purdue has maintained a strong tier and rebate position in commercial plans, but has faced a more challenging environment in Part D



- In Part D, a significant fraction of ERO Rxs fall under plans where OxyContin is not on formulary
- Assuming Medicare continues to grow at current rates and Commercial plans decline, significant value is at risk

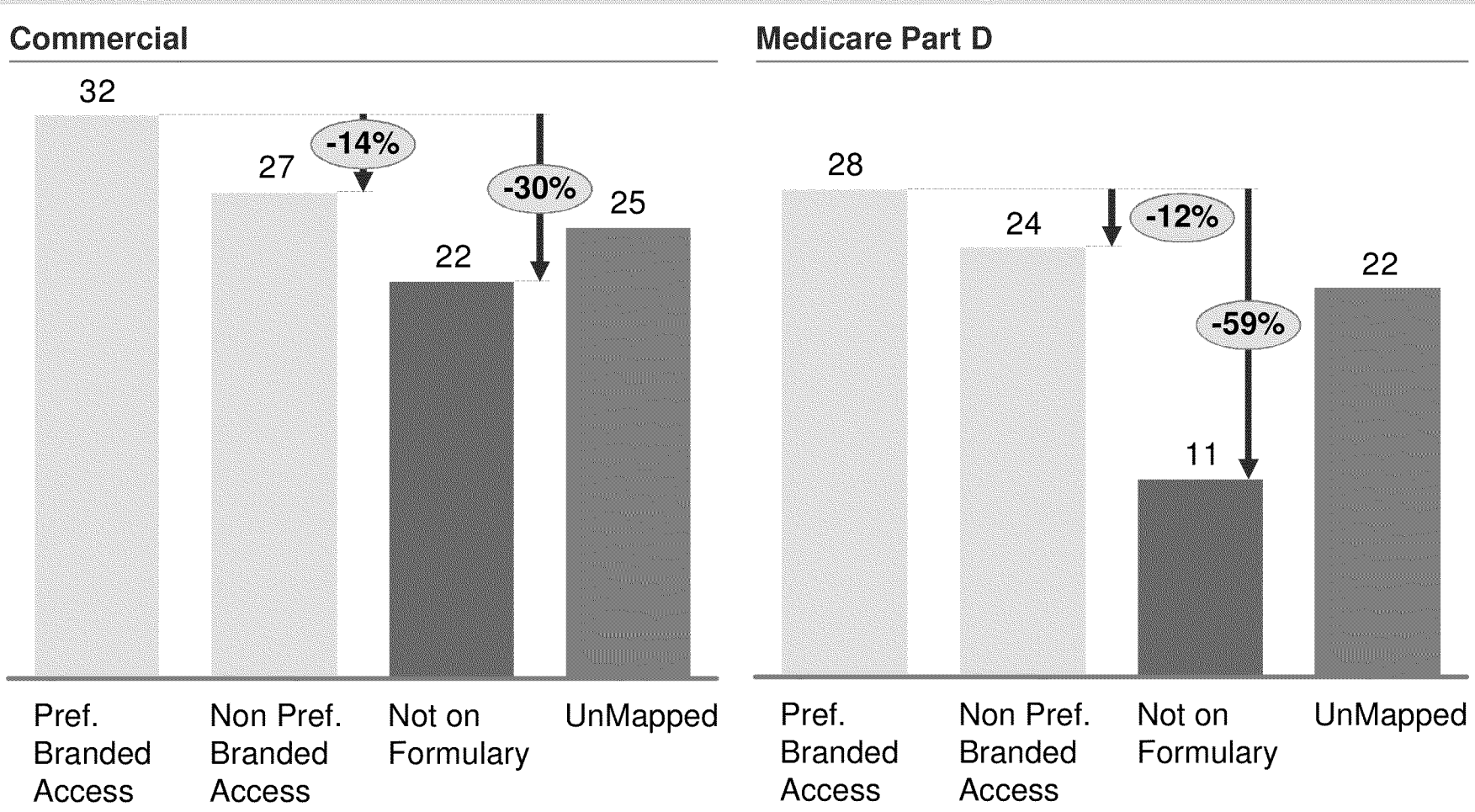
1 UnMapped refers to ERO TRxs written under plans where the formulary status of OxyContin is unknown or cannot be systematically matched into a database with formulary status information
2 Aetna Part D, Wellpoint Part D, and Silverscript go off formulary in 2011; Silverscript comes back on formulary at the end of 2011

SOURCE: IMS, IGallery, Managed care agreement logs

Coverage has an impact on market share in both Commercial and Part D

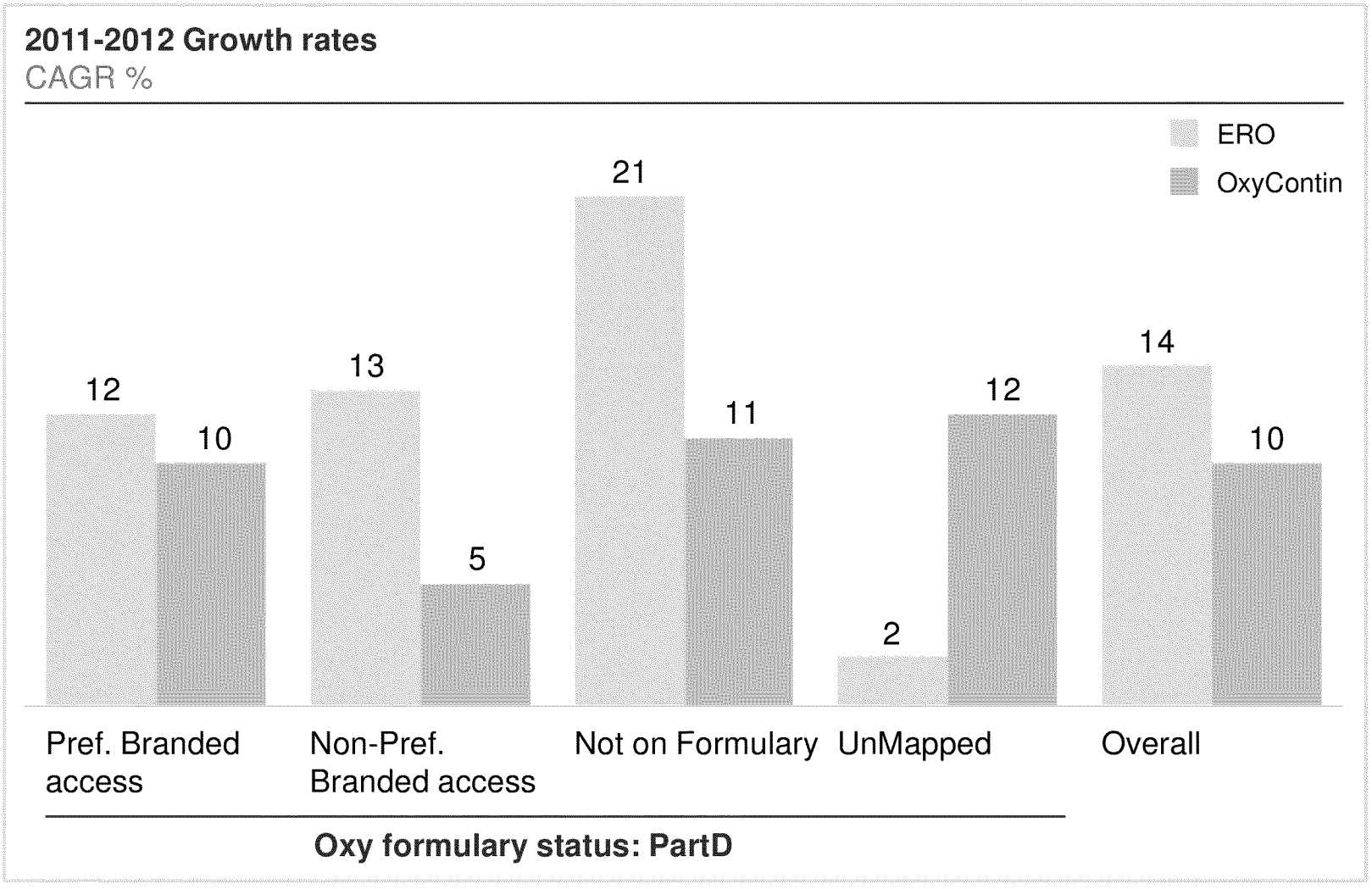
Oxycontin share of ERO TRxs, 2012

%



SOURCE: IMS data, IGallery data (Purdue internal data

In Part D, OxyContin growth is best keeping up with overall ERO growth in plans where OxyContin has Preferred Branded Tier access



SOURCE: IMS, IGallery

There have been several key adverse changes in formulary status for OxyContin in recent years

	Payor	Formulary change	Period	Rationale	ERO TRx 2012 (000s)	Percentage of overall ERO market with payor (%)
Finalized as of Jan 2013	Humana (Part D)	Removal from formulary	2009 - present	▪ Dissatisfied with rebate levels ▪ Decreasing service to dual-eligibles overall	107k (Comm) 863k (Part D)	0.5% (Comm) 3.7% (Part D)
	Aetna (Part D)	Removal from formulary	2010 - present	▪ Dissatisfied with rebate levels ▪ Desires to move away from perceived OxyContin patients	219k	1%
	Caremark (Part D)	Removal from formulary	Jan 2011 - Nov 2011	▪ Dissatisfied with rebate levels	1,213k (Silverscript)[1]	5.2% (Silverscript)[1]
	Wellpoint (Part D)	Removal from formulary	Jan 2011-present	▪ Dissatisfied with rebate levels ▪ Views class as very generic	168k	0.7%
	Kaiser (TBC)	Removal from formulary	-	▪ -	22k	0.1%
	Regence (Comm)	New PA requirement	Late 2011	▪ -	58k	0.2%
	UHC (Part D, MA)	Removal from formulary	Jan 2014	▪ Dissatisfied with rebate levels ▪ Lack of differentiation of OxyContin	146k	0.6%
Pending	UHC (Part D, PDP)	Removal from formulary	Pending	▪ Dissatisfied with rebate levels ▪ Lack of differentiation of OxyContin	1,280k	5.7%

1 In the IMS data, there is a dip in Oxycontin's share of ERO Rxs for Silverscript from 21% in 2010 to 18.7% in 2011, and back up to 22% in 2012. Oxycontin was placed back on formulary in Nov 2011, partially triggered by the acquisition of Member Health by CVS (Member Health had a previously negotiated contract with Purdue)

SOURCE: Internal interviews; Fingertip Formulary

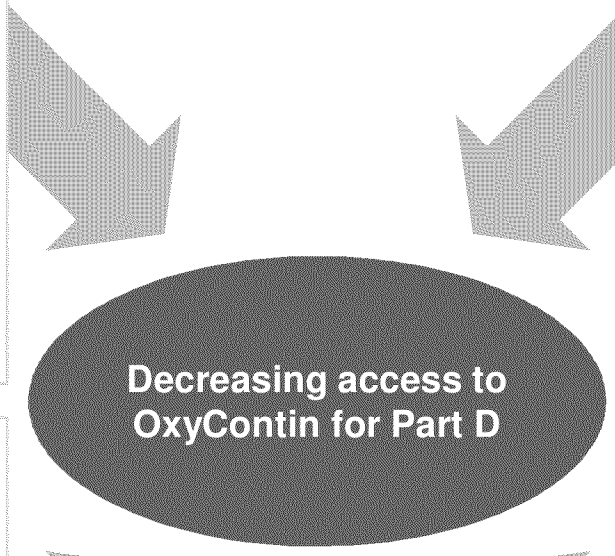
Changes in formulary status in Part D are driven by genericization, government actions, and perceived profile of OxyContin patients

Genericization of the class

- Branded products have gone off patent
- Majority of ERO scripts are written for generic products

Government actions

- Decline in reimbursement rates for MAPD and capitation for Medicare Advantage, combined with increased cost of managing elderly increases cost pressures
- Increased scrutiny of products with possibility of abuse



Perceived profile of OxyContin patients

- OxyContin patients seen as high-cost patients who are undesirable for many payors
- Payors see restricting access to OxyContin as way to avoid attracting these patients
- Even if patients may be shiftin abuse to other EROs, payors are more tolerant of this because drugs are cheaper

Perceived lack of differentiation of OxyContin

- Lack of head-to-head studies showing difference in clinical outcomes (e.g., pain management, ability to return to work)
- Lack of data showing financial benefit of OxyContin to payors (e.g., fewer emergency room visits, lower utilization of other services)

SOURCE: Internal and external interviews

Market share and growth of largest plans by volume – Commercial

Sorted by ERO market size

	2012 ERO TRx (000s)	Oxy TRx (000s)			Oxy share of ERO (%)		Formulary status[1]
		2011	2012	2011-2012 delta	2012	2011-2012 delta	
Medco Hlth Solutions Unsp.	1585	543	515	-28	32	-1	Pref. Branded
United Healthcare	500	179	173	-6	35	-1	Pref. Branded
Tricare	475	163	146	-17	31	-1	Pref. Branded
Express Scripts Unspec	422	132	131	-1	31	-2	Unmapped
Advancepcs Unspec	408	116	122	6	30	0	Pref. Branded/ Unmapped
Federal employees/ FEHB	353	105	110	5	31	-1	Pref. Branded/ Unmapped
BCBS Wellpoint/Anthem[2]	349	142	113	-29	32	0	Pref. Branded
Workers Comp – Employer[3]	310	119	109	-10	35	-1	Pref. Branded
Aetna Inc.	304	112	96	-16	32	-1	Pref. Branded
Cigna	254	78	83	5	32	-1	Pref. Branded
All other third party	243	39	40	1	16	-1	Unmapped
Walgreens Hlth Init Unspec	240	40	36	-4	15	-3	Unmapped
BCBS Healthcare Service	229	64	62	-2	27	-2	Pref. Branded/ Non Pref Access

1 Many payors have plans that vary somewhat in formu lary status. However, the dominant formulary status is listed here.
2 Wellpoint lost 7mn patients during this time perio d, helping to explain why OxyContin scripts fell significantly with this plan but share was not impacte d.
3 Worker's Comp does not have a formulary; however, the level of access appears to be most comparable to a Pref. Branded tier from internal interviews.

SOURCE: IMS data, Fingertips data

Market share and growth of largest plans by volume – Part D

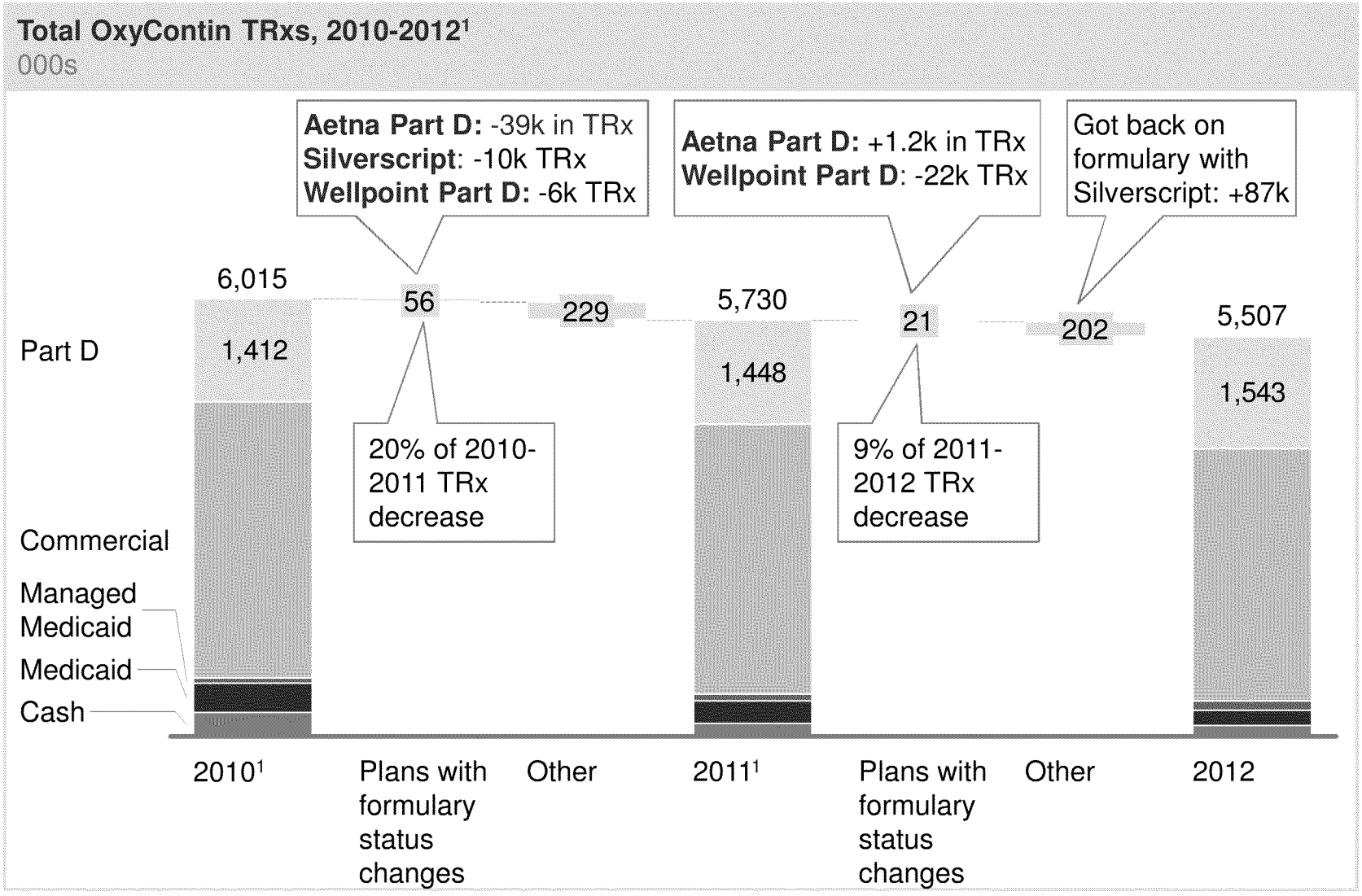
Sorted by ERO market size

	2012 ERO TRx (000s)	2012 Oxy TRx (000s)			2012 Oxy share of ERO (%)		Formulary status[1]
		2011	2012	2010-2012 delta	2012	2011-2012 delta	
UHC/Pacificare/AARPMedD	1,748	570	528	-42	30	0	Mixed
Silverscript	1,213	175	262	87	22	3	Pref. Branded
Humana	863	37	42	5	5	-1	NC
Universal American Corp	722	3	3	0	0	0	Unmapped
Coventry Health	431	56	69	13	16	-1	NC
Wellcare Health Plans	297	18	16	-2	5	-1	NC
Cigna	269	73	83	10	31	-1	Pref. Branded
Healthspring/Bravo	261	20	22	2	8	1	NC
Health Net Inc.	254	52	71	19	28	0	Non Pref Access/ Pref. Branded.
ESI/Medco Med PDP	239	70	80	10	34	0	Pref. Branded
Aetna Inc.	219	27	29	1	13	-5	NC
Bcbs Wellpoint/Anthem	168	56	34	-22	20	-3	Mixed
United American InsCo	79	13	21	9	27	-4	Mixed

1 Many payors have plans that vary somewhat in formulary status. However, the dominant formulary status is listed here.

SOURCE: IMS data

Changes in formulary status have substantially impacted OxyContin TRx volumes

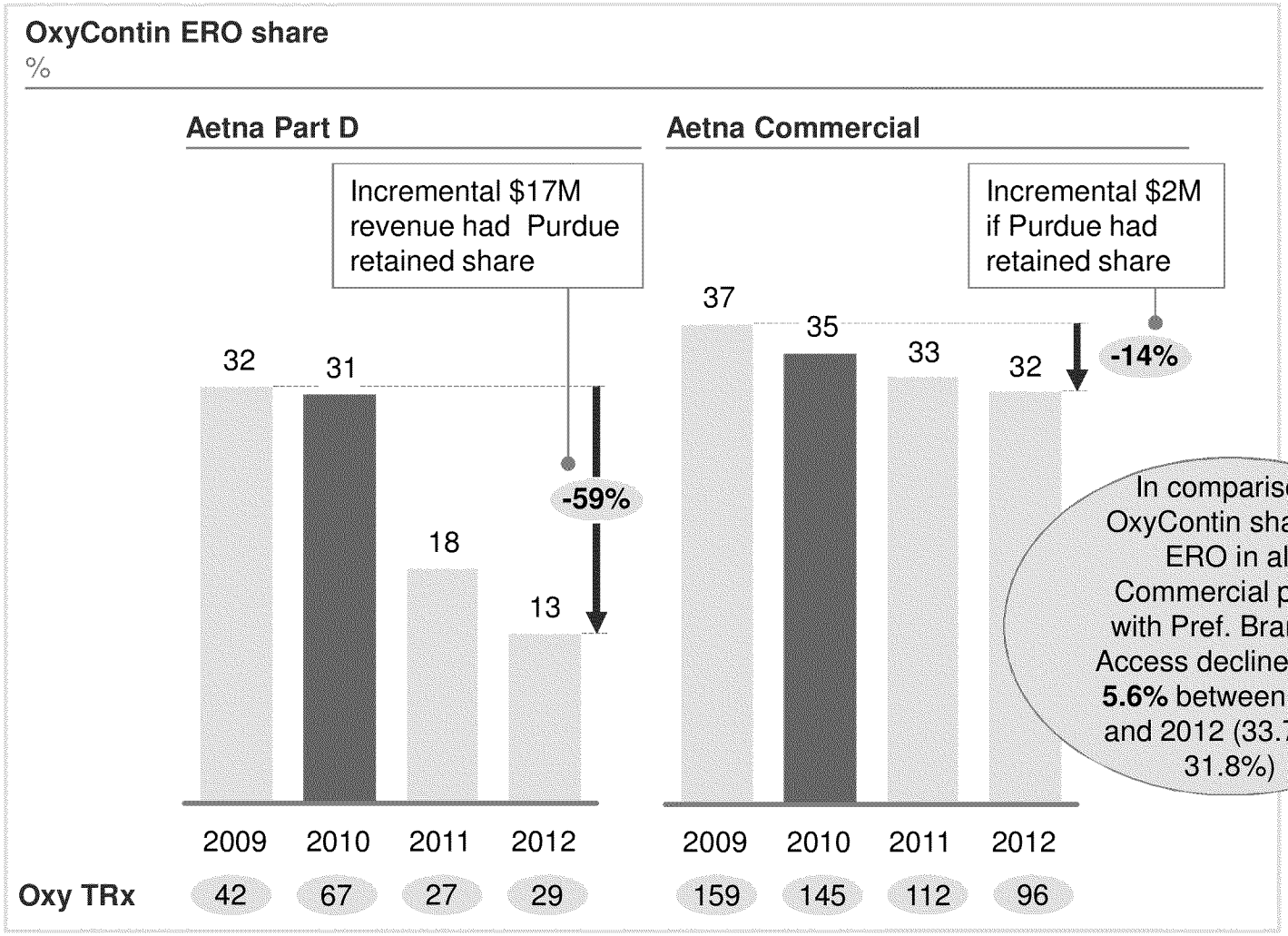


1 2010 and 2011 coincides with period of reformulaton rollout and exit of generic OxyContin from the market

SOURCE: IMS, Internal interviews

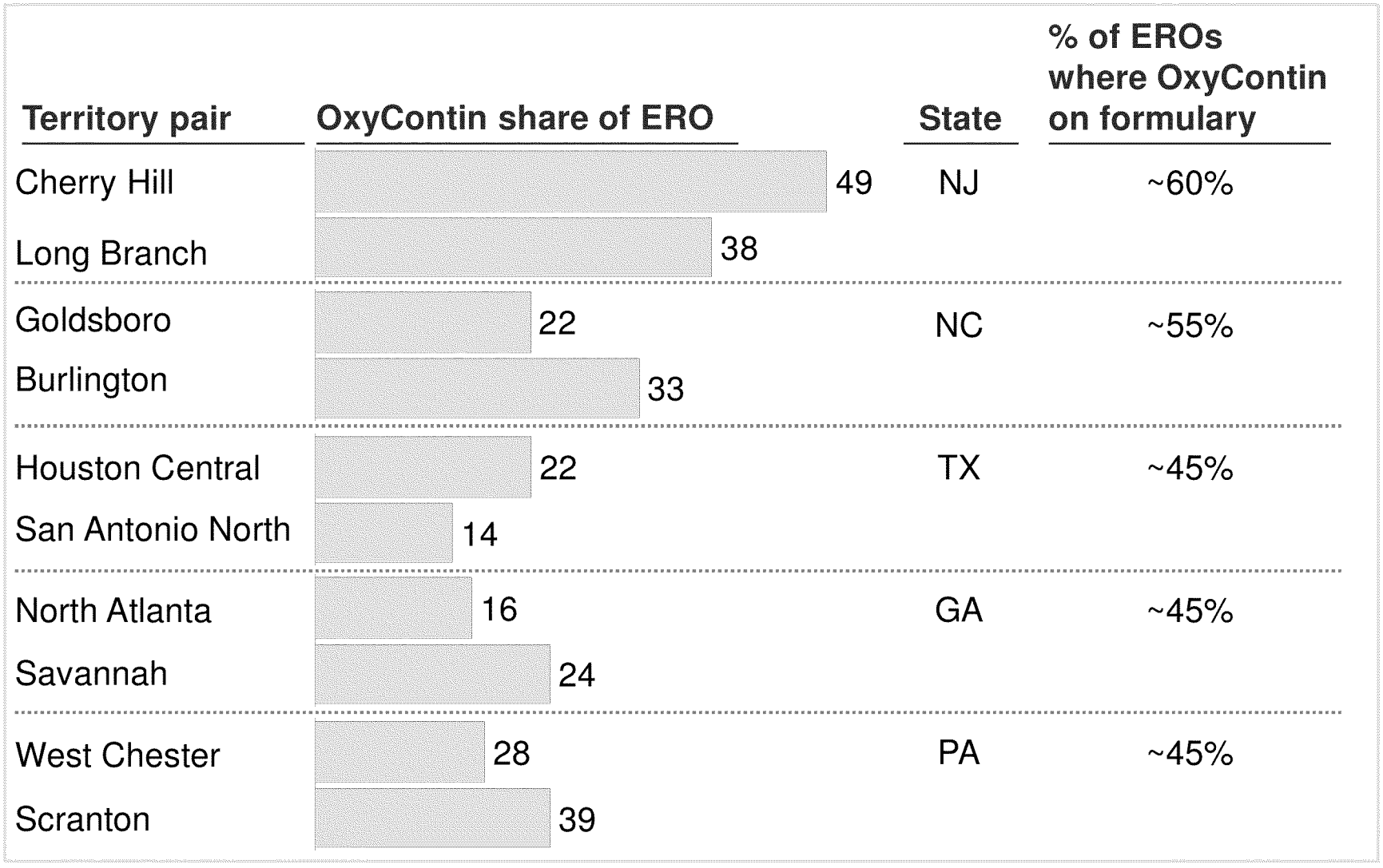
Loss of Part D formulary can spill over into Commercial

Summary of OxyContin performance in Aetna plans post loss of Medicare Part D formulary status



SOURCE: IMS PlanTrak; Purdue iGallery data; Purdue interviews; Team analysis

Even across territories with equal access situations, there is differential pull through



SOURCE: IMS, IGallery

While payors see pain as a relatively stable class, rebates mentioned as one reason why OxyContin continues to stay on Preferred Branded tier

Themes from interviews	Example quotes
Management of pain category overall is **stable in outlook – rebates mentioned as one reason why OxyContin stays on Preferred Branded Tier**	"I think this category is pretty much settled… we've only just added some step edits to increase generic utilization… OxyContin has been on preferred tier for very long time… really no plans to move it anywhere because we would lose rebates and also it was recently reformulated with abuse deterrence"
Lack of differentiation among opioids in the market, but wide range of options is important	"No products that really stand out/ differentiated… but important to have wide range of opioids available for prescribers… important from a clinical perspective because people react differently to pain medications and have allergies"
Pain is a relatively important category in formulary, but behind oncology and other higher-cost drug types	"Pain is 4-5% of my total spend – somewhat important but heavily driven by generics… [there's] no differentiation among pain medication – it's one big bucket"
Differing levels of awareness about AD reformulation	"I haven't seen anything that has blown me away… the jury is still out… I don't think the sample sizes are large enough for our kind of population"
Even with AD benefits, cost savings of generics is heavy counterweight to using more expensive AD formulations	"If it could be proven that the product decreases/ eliminates abuse, yes, payors would consider it… but bottom line is very important, just having clinical advantage might not be enough"

Interviewed experts attributes include:
- Perspectives from SE, West, and NE
- Experience in plans with 200k to 5.5mn lives
- Pharmacy Ops Manager, Regional Medical Director, and Pharmacy Director

Note: Refer to full summary of payor interview notes for details

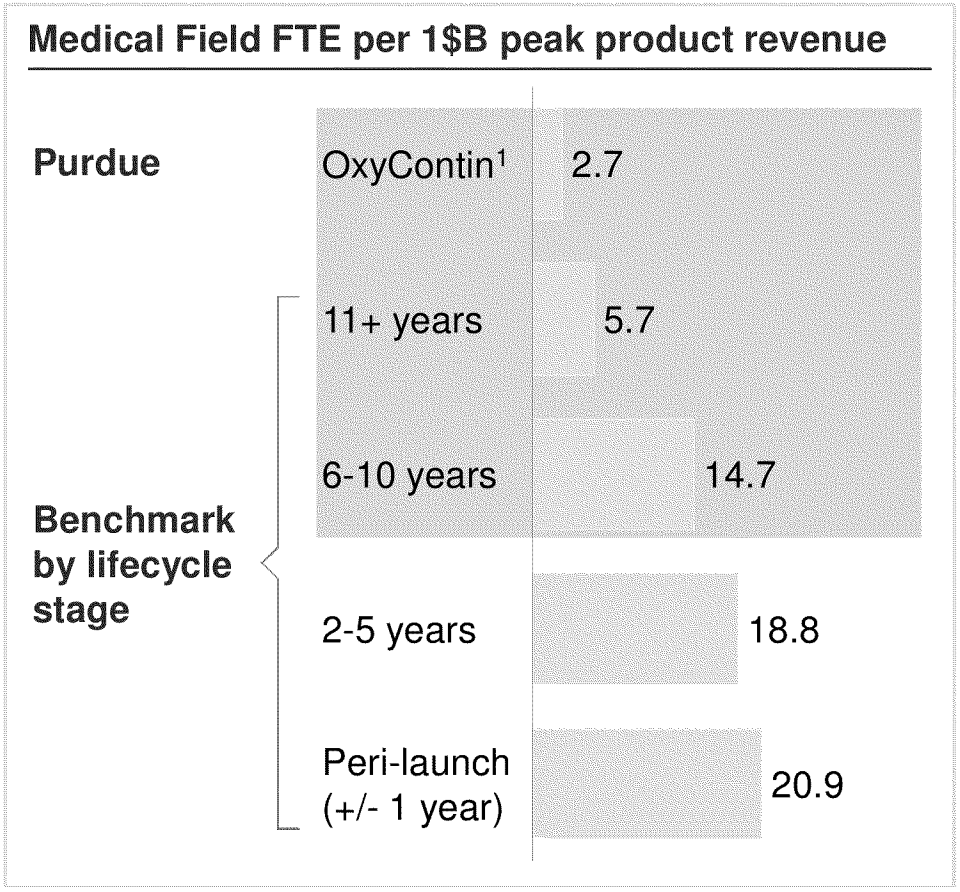
SOURCE: Payor expert interviews

Contents

- Market landscape & demand forecast
- Messaging & positioning
- Segmentation & targeting
- Field focus & execution
- Access & availability
- **Scientific support**
- Commercial spend levels
- Patient funnel
- Appendix

OxyContin appears somewhat under-resourced on MSLs compared to industry benchmarks

Most relevant comparisons



- Even compared to products 11+ years old, OxyContin seems under-resourced on MSLs who focus on building field support for products
- OxyContin may need higher level of MSL resources, even given its age, due to AD reformulation
- ~6-7 additional MSL FTEs would bring OxyContin to benchmark

1 6 MSLs for $2.2 bn net OxyContin sales in 2012. Only MSLs dedicated to field information dissemination were counted.

SOURCE: Purdue Medical Affairs; McKinsey benchmarks

Current Purdue MSL practices vs. industry practice

	Current Purdue practice	Industry practice
Payors	▪ Avoid bringing in MSLs unless payor makes unsolicited request	▪ MSLs target payors for delivery of medical content related to product
Prescribers	▪ MSLs do not target any prescribers (including KOLs) to deliver OxyContin-related medical information	▪ MSLs target KOLs for delivery of medical content related to product ▪ MSLs may also target other prescribers who have unmet medical information needs

SOURCE: Purdue HECON; Purdue national payor accounts; Purdue Medical Affairs; McKinsey experts

Potential leverage points to defend & bolster OxyContin position in the market

PRELIMINARY

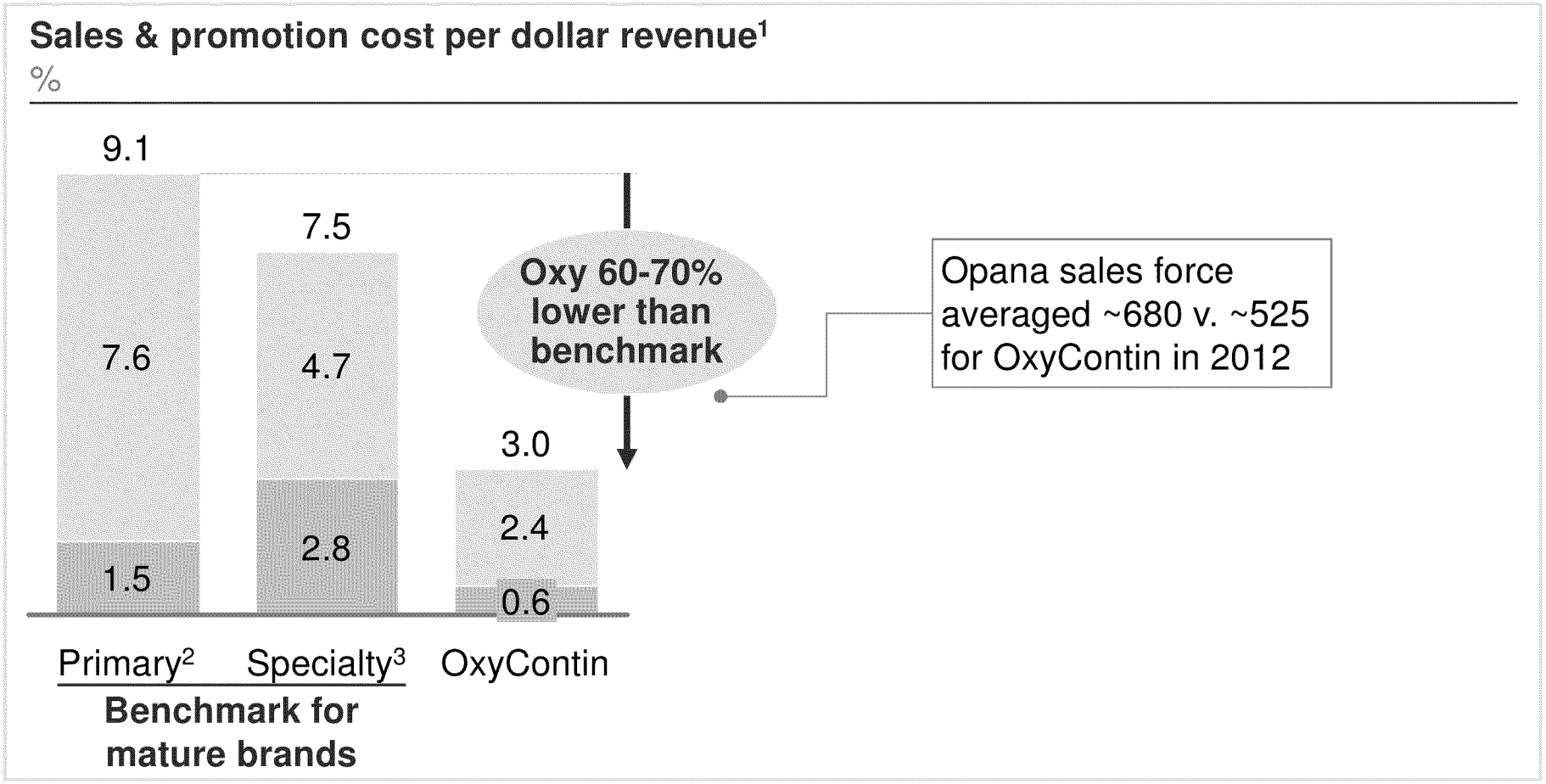
Current perceptions	Potential data to generate/disseminate
▪ Physicians believe OxyContin has equal or greater risk of abuse relative to other products	(a) Randomized trial analyzing abuse rates for OxyContin v. other ERO products (b) Real world IR v. Oxy abuse rates
▪ Physicians are unaware that certain types of abuse (injecting, snorting) are no higher with OxyContin relative to other products	(c) Poison control center cases by type relative to prevalence of product
▪ Unclear long-term efficacy	(d) Data showing lower rates of immune suppression, endocrinological problem (e) Lower switching v. comparators (e.g. ER morphine)
▪ Payors: Abuse-deterrent OxyContin does reduce costs of abuse but does not lower the overall formulary cost due to price v. Gx	(f) Estimates of cost of abuse (e.g. emergency room visits) and prevalence of abuse in particular payor's population

Key Questions to address

- How much of this data exists already but is not well understood by physicians?
- What additional data could support these and what would it take (resources, timing)?
- What are the best dissemination channels for different stakeholders? What resources (e.g. MSLs) are required?
- What is the overall message?

Contents

OxyContin is resourced well below benchmark



1 DTC cost removed from benchmark set; Sampling is included (~0.4% of revenues); 2012 numbers for Purdue – 2013 allocation may be different
2 N=6; average revenue of $1.9B; average of 3 years before LOE. Average time on market 11 years (range 7-18 years)
3 N=4; average revenue of $1.1B; average of 2 years before LOE

SOURCE: McKinsey Commercial and Medical benchmarking; Purdue Finance; Encuity research; Team analysis

Contents

Patients play a limited role in the treatment pathway (1/2)

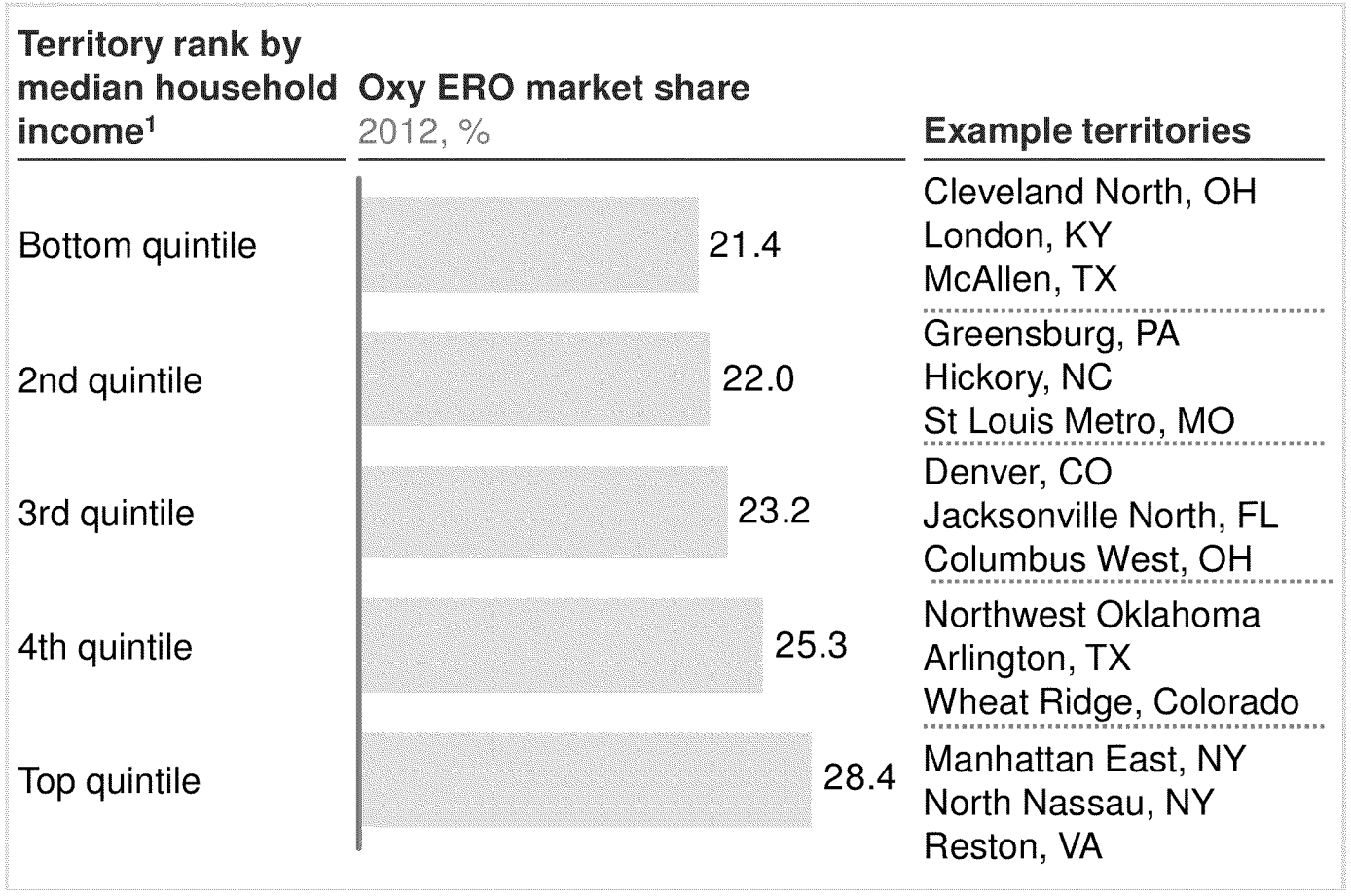
Key themes	Supporting evidence
Prescribers are concerned about cost to patients	▪ "I try to get all my patients on EROs, the problem is that going to EROs is a financial burden"- *Anesthesiologist* ▪ "I would love to use a long-acting narcotic, but (…) it's expensive- *Internist* ▪ "They're still expensive, and patients don't prefer them. At the end of the day, it's hard to push for them if you have cheaper drugs" – *Staff Anesthesiologist and Pain Specialist at large hospital* ▪ "Cost is (my) main driver of decision making"- *Primary care practitioner* ▪ "Insurance companies will pay…it's just a huge copay (for the patient). I often warn patients in advance"- *Private Practitioner* ▪ "The best deals (for patients) out there are where company give (copay) cards saying that patients will pay no more than certain amount" – *Orthopedic surgeon*
Some **patients are concerned about use of narcotic** drugs	▪ "Usually I don't have problems, patients have pretty good idea of what's out there as they were referred and have experience with many pain meds"- *Anesthesiologist* ▪ "Patient reaction to drug prescribed varies by patient, though usually strongest negative reaction to methadone, heroine, though they also have heard of OxyContin"- *Physical Rehabilitation and Pain specialist* ▪ "(Some) patients want to avoid narcotics at all cost, but need this to counter drug side effects (of other drugs like NSAIDs)- *Interventional Spine and Pain Management* ▪ "There are still some people out there who want to avoid narcotics"- *Internist* ▪ "Some patients are resistant to narcotics, but most want to just control pain. I explain to patients that they may need opioids to control pain"- *Anesthesiologist and Head/Neck surgeon*

Patients play a limited role in the treatment pathway (2/2)

Key themes	Supporting evidence
Prescribers consider a **variety of factors** specific to each patient when treating pain	▪ "I (typically) start with NSAIDs if I can, recognizing that NSAIDS are not benign drugs… I am anxious about treating (certain types of patients) with NSAIDS (due to side effects like stomach ulcers)"- *Primary care practitioner /internal medicine* ▪ "I start with NSAIDs; if (pain) becomes more chronic, I add Lyrica or Cymbalta, (especially) if pain is nerve related. Opioids are my last resort"- *Primary care practitioner* ▪ "(I consider) pain type, drug history, insurance coverage (when prescribing a drug). (I see) most economic issues for opioids"- *Anesthesiologist and pain specialist* ▪ "Patients will often have a preference- *Attending physician at major hospital*

SOURCE: McKinsey prescriber interviews

Oxy share of ERO market is significantly higher in territories in which median household income is higher



May be opportunity to better target programs aimed at co-pay assistance to patients in lower-income areas

1 Based on zip-level household income data weightedby population

SOURCE: IMS; Census

Contents

Overview of prescribers interviewed to date

Total # of prescribers interviewed: 20

Specialty split: PCPs (7), specialists (13)

Geographical split: CA (1), GA (1), IL (1), ME (2), MD (2), MO (1), NH(1), NJ (2), NV(1), NY(4), PA (3), VA (1)

Details by specialty

- Pain Management and Physical Medicine and Rehabilitation, Director of Pain Management at hospital
- Pain Specialist, private practice
- Medical Director and Principal Investigator at Cancer Pain Management and Palliative Care center, board certified in in Anesthesiology, Pain Medicine and Addiction Medicine
- Board certified in Physical Medicine and Rehabilitation and Pain Management
- Orthopedic surgeon
- Attending physician at major hospital
- Specialist in acute cancer, chronic pain, and anesthesiology
- Chief of Interventional Spine and Pain Management for regional health system
- Medical Director at pain center, trained in Anesthesiology and Head and Neck Surgery
- Physician of internal medicine
- Anesthesiologist and Pain Management Physician and major hospital
- Addiction specialist
- Pain specialist in private practice
- Internist with private practice
- Private practitioner with pain fellowship
- Primary care physician in Family Practice
- Family Practitioner and Assistant Professor at large University
- Primary care physician in larger practice
- Primary care physician in small group practice

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Opioids are an **effective class of painkillers**, although **side effects and addiction** are a concern	▪ "Very good, strong medications, very good relief, only problem is they don't want them to be first line of treatment" – *Medical Director of major pain center* ▪ "Even patients with acute post-surgery pain prefer pain to side effects of those meds" – *Physician specializing in pain control* ▪ "If you remove opioids totally from the picture there's no way to treat a lot of types of pain patients"– *Anesthesiologist and pain specialist* ▪ "Short term use of opiates is highly efficacious, however concerns about safely arise for longer-term use" - *Medical Director of major pain center* ▪ "Opioids are often the preferred choice for treating long-term treatment, as side effects for NSAIDs can be more severe" – *Primary care physician*
Mixed views on abuse deterrence highlight AD as positive factor, but caution that oral abuse is still possible	▪ "Win-win for everyone, as long as price is ok" – *Experienced internist and anesthesiologist* ▪ "The FDA decision [on OxyContin] should carry weight...data would very valuable...should be incentive to use this medicine"- *Addiction specialist* ▪ "For some people it probably matters, for example first time prescribers and non-specialists. For specialists it doesn't make much of a difference because they knew before" – *Medical Director of major pain center* ▪ "I don't know how effective abuse deterrence is in practice…Just because you can't crush something, doesn't mean you can't eat all your pills at once" –*Primary care physician specializing in internal medicine* ▪ "The only abuse deterrence I would put any stake in is when you add niacin (to prevent oral abuse)"- *Anesthesiologist and Pain Management Physician at major hospital* *(See next page for additional quotes)*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Mixed views on abuse deterrence highlight AD as positive factor, but caution that oral abuse is still possible	*(continued)* ▪ "Abuse deterrence is a good thing…I would choose abuse deterrent drugs every time, IF patient insurance covers it" – *Anesthesiologist and Pain Management Physician at major hospital* ▪ "There are several studies on abuse deterrence out there…what we need is information from trustworthy sources" – *Anesthesiologist and Head/Neck surgeon* ▪ I had extremely curtailed the prescription for OxyContin, but now that I see the clinical difference, I am much more comfortable writing for it"- *Private practitioner with pain management fellowship* ▪ "if there is enough education, we may be using them more frequently, to mitigate abuse (theft, family abuse, patient abuse), in the end it doesn't really hurt anyone to the extent that I understand the technology"- *Family Practitioner*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Prescribers **fear legal consequences** (DEA, revoked license) of prescribing opioids, leading to **more referrals to pain specialists and decline of prescriber pool**	▪ "The prescriber pool will most probably shrink, as fewer prescribers want to deal with the issues around opioid prescriptions, such as abuse" – *Director of Pain Management* ▪ "We see more fear and warnings about opioids, including concerns about legality" – *Primary care physician* ▪ "The DEA is always a concern. As long as you keep good records, drug test patients, take appropriate action, I don't think it's a problem. In the next few years I'm not sure what's going to happen though"- *Anesthesiologist and Pain Management Physician at major hospital* ▪ "The DEA hasn't really changed anything I do. I am trained and have the proper documentation and know how to monitor patients appropriately. I work with local DEA field agents"- *Pain specialist* ▪ "I've had investigators from district attorney's office to get information on patients… People get checked on all the time [by the DEA]…[there is] a lot more scrutiny." – *Pain specialist in private practice* ▪ "The new trend seems to be more PCPs referring pain patients to specialists to insure themselves against issues of overdosing and side effects" – *Attending physician at major medical center* ▪ "There seems to be a growing trend of referrals to pain specialists today- Doctors prescribe lower doses of narcotics, and even pain specialists move away from opiates. This is likely driven by increased media attention, high abuse rates, and prescribers fearing regulatory and legal complications" –*Medical Director of major pain center* ▪ "Treating chronic pain requires a specialist…on top of that, there are all the DEA and legal concerns about opioid use, (such that) PCPs want specialists to manage that" – *Primary care physician*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Prescribers report rising rate of pharmacy access issues, affecting their patients and prescribing behavior	▪ "[There's been] a big change in dispensing by pharmacies…Access to oxycodone has been extremely difficult, even for people who are fairly well known to pharmacists… patients get flat out denied several times a week" – *Private practitioner in state with tight opioid controls* ▪ "I think [pushback from pharmacies] does impact my prescribing behavior… I will think I don't want to prescribe this because I'm going to get pushback … then I will prescribe something that will get less push back… a different drug and/or lower doses" – *Primary care physician in small group practice* ▪ "Pharmacies are definitely getting more strict with pill counts too. Sometimes it feels like they're overstepping their boundaries a little"- *Pain specialist in private practice* ▪ "If the # of pills is greater than 120 pills, that generates a call back from the pharmacist"- *Private practitioner with pain management fellowship* ▪ "Patients went to many pharmacies [in Manhattan] and most pharmacies don't dispense OxyContin" – *Physician specializing in pain control* ▪ "There is much more communication today amongst pharmacies (on opioid prescriptions), which is becoming a limitation to patients"- *Primary care physician*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Managed care access limits prescription choice and available options	▪ "Older generic medications are usually better covered, for example methadone" – *Medical Director of major pain center* ▪ "OxyContin is a very good drug, good molecule, pretty well tolerated and has a very wide dosage range. It is less widely covered by insurance, which is sad because now it's actually less abuse-able" – *Experienced anesthesiologist* ▪ "Rejections happen more often every day…very frustrating, unclear what insurance will cover what drug" – *Physician specializing in pain control* ▪ "Insurance is biggest determinant; payers determine formulary, risk profile of patient, and potential medical problems. Won't pay for branded one-third of the time." – *Physician operating several pain practices* ▪ "About 20-25% of my chronic pain patients will come back to to tell me that insurance denied the script. Sometimes the pharmacy contacts the physician and asks for a supplemental script, or patients will pay cash difference" – *Attending physician at major hospital* ▪ "Physicians get slapped on the wrist (for prescribing more expensive drugs), and need to stay with generics" – *Primary care physician* ▪ "Cost is a main driver of deciding what drug to prescribe to patients…Outpatients are still largely driven by cost and tiers, which makes prescribing generics and narcotics the easier choice" – *Primary care physician*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Managing patients on **opioids takes increasing amount time and resources**	▪ "Treating patients with chronic pain now requires much more management, including contract agreements, drug testing, and patient record keeping to avoid legal complications" – *Attending physician at major* medical center ▪ "The patient population is annoying, the documentation is annoying. A lot of my colleagues decide to stop doing opioid prescription later in their career (because they are tired of the hassle)"- *Anesthesiologist and Pain Management Physician at major hospital* ▪ "PCPS are increasing referrals to specialists, partly because of the big hassle around drug testing, pain contracts, and patient monitoring" – *Anesthesiologist and Head/Neck surgeon* ▪ "There is a lot more work involved. At some point there will be too much work"- *Pain specialist in private practice* ▪ "We need these [drug screening] resources because of the nature of our practice"- *Pain specialist at major pain clinic* ▪ "I just don't want more paperwork…I want to use narcotics, but I use them less due to more oversight"- *Family Practitioner* ▪ "[Prescribing opioids] is a big burden, has made us a little worried…getting cumbersome for what it was worth"- *Primary care physician in larger practice* ▪ "I spend at least 2 hours per week receiving calls from pharmacies [about opioid prescriptions]… and that's not even counting the calls that my staff is handling… we talk about this often at our office meetings" - *Primary care physician in small group practice*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Prescribers are writing for **fewer pills and lower strengths, and increasingly referring patients to pain specialists**	▪ "I try to use more long-acting opioids (to reduce pill count) and try to prescribe fewer pills and lower strengths… because it's less to worry about… less potential for addiction and diversion*"- Primary care physician in Family Practice* ▪ "[There's] increased review of physician practice. Many of my colleagues are hesitant and prescribe less. I do too. I just don't want to take up with the task" *– Family Practitioner* ▪ "Made decision about 9 months ago to funnel patients to pain clinics for patients taking medication for chronic use"- *Primary care physician in larger practice*
Despite AD reformulation, **OxyContin brand still carries negative connotation** for some doctors	▪ "OxyContin is one of the less abuse able EROs on the market today, but the perceived fear on the street and confusion about abuse potential remains high" *– Medical Director of major pain center* ▪ "The OxyContin reformulation may be much better, but having said that, many pain doctors are still humans and suffer from emotional inhibition because of all the bad press it had, because it still has the name OxyContin"- *Medical Director of major pain center*

Summary of prescriber interviews

FOR DISCUSSION

Theme	Interview Quotes
Opioids are usually used after NSAIDs are tried or if NSAIDs pose risk to patient	▪ "Treatment decision depends on patient diagnosis, drug history and drugs currently taken, effect of pain on daily functioning" - *Medical Director of major pain center* ▪ "Opioids can be a good choice when patients have NSAID specific side effects, such as renal dysfunction or stomach ulcers" – *Medical Director of major pain center* ▪ "I start with NSAIDs if I can, recognizing that NSAIDS are not benign drugs… I may try something like Lyrica, then if it's still not working, try Vicadin or Norco… if they need to be on a maintenance drug, then I will give them an extended release plus breakthrough" - *Primary care physician in small group practice* ▪ "Start with NSAIDs… if becoming more chronic, then add Lyrica/Cymbalta if pain is nerve related; opiates are last resort." –*Primary care physician*
Additional comments	▪ "I see a Medical Science guy once in a while -always informative"- *Pain specialist* ▪ "Some reps direct me to sites that helps me navigate prior auths - covermymeds.com - it is helpful"- *Pain specialist* ▪ "I want help [from drug manufacturers] with knowing what the coverage status would be and getting prior authorizations" - *Primary care physician in small group practice* ▪ "Where things will really go: Knockout genes of pain reception- create a drug that will block the pain receptor and completely take away the pain without the euphoric effects of opioids- that will be really big target"- *Pain specialist in private practice*

Overview of pharmacists interviewed

Total # of pharmacists interviewed: 6

Chain affiliation: Walgreens (2), CVS (1), Rite-Aid (1), Publix (1), Independent

Geographical split: FL (2), IL (1), KY (1), MA (1), NJ (1)

Relevant experiences

- Former Pharmacy Manager for a top 3 retail pharmacy chain for 10+ years (until 2013)
- Pharmacy Manager for a major retail pharmacy chain
- Former National Director of Pharmacy Operations at a top 3 retail pharmacy chain
- Member of State Board of Pharmacy
- Clinical coordinator for regional pharmacy chain
- Former Director of Professional Practice at a top 3 retail pharmacy chain , oversaw mail order services (until 2013)

SOURCE: Pharmacist expert interviews during week of7/15/2013

Summary of pharmacist interviews

Key takeaways	Quotes
DEA actions have had a "**chilling effect**" on pharmacy chains, distributors, and pharmacists; this is made **even worse by lack of specific requirements**	▪ "DEA has taken a strong role in deciding how pain medications are dispensed, having a 'chilling effect' on pharmacists who fear losing their jobs or their license" – *Former senior pharmacy director at CVS (FL)* ▪ "No they have not [put out specific requirements or regulations]… that's the unfortunate part, if they specify the requirement, it would clarify things… they speak in riddles "corresponding responsibility" – *Former senior pharmacy director at CVS (FL)* ▪ "Walgreens [having] 7 pharmacies shut down sent shockwaves through the industry" – *Former senior pharmacy director at Walgreens (IL)* ▪ "[It's] somewhat sad – pharmacists now feel very vulnerable about their own pharmacy license and their jobs. They turn away patients who are looking for those controlled substances and pharmacists who work for chains don't have any incentive to take any risk whatsoever" – *Former senior pharmacy director at Walgreens (IL)*
Pharmacists **observe increasing fear among prescribers about quantity and dosage**	▪ "Doctors are afraid, so they stop prescribing" – *Clinical coordinator at Publix (FL)* ▪ "In Illinois – [the state board is] already writing letters to those who are prescribing more than their peers, making doctors more cognizant about how much and how many pills they are prescribing " – *Former senior pharmacy director at Walgreens (IL)* ▪ "OxyContin dropped off the map from where they were 5 years ago… Doctors are afraid to write them… a few are resistant but most are unwilling to write or go to morphines… they give least amount that they can, weakest dose that he can. He used to write 60, now he'll give you 30"- *Pharmacy Manager at RiteAid (MA)*
Significant increase in due diligence and paperwork associated with C2 drugs	▪ "Walgreens and CVS now need to fill in paperwork in triplicates [for opioid prescriptions]" – *Clinical coordinator at Publix (FL)* ▪ ""There's a lot more paperwork… need to check SS number, driver's license" – *Former Pharmacy Manager at Walgreens (KY)*

SOURCE: Pharmacist expert interviews during week of7/15/2013

Summary of pharmacist interviews

Key takeaways	Quotes
Pharmacists report **turning away patients,** especially those with suspicious prescriptions or new patients **because of risk associated with opioids, perception that patients will "bring their friends", and associated paperwork burden**	▪ "We kind of discourage [the opioid business]… it's more headaches than it's worth for the low profits [and] if you give one patient one prescription [for an opioid], they bring their friends"– *Clinical coordinator at Publix (FL)* ▪ "Stress load is high- they aren't insuring techs [and] it used to take 10-15 mins to fill a prescription, now it takes a lot longer…Pharmacy also not providing enough support to fill these prescriptions…80% of the time, they just refuse patients." – *Clinical coordinator at Publix (FL)* ▪ "With budget cuts and staffing cuts – we don't have time to handle everything… it's easier to turn away patients… my personal turn away rate for opioids is about 5%" – *Former Pharmacy Manager at Walgreens (KY)*
Walgreen's and CVS' internal memos on C2 drugs increases oversight and stresses "reasonable quantity", but may not be setting mandatory national limits on tablets/ Rx or strength mix	▪ "The 2 largest chains – [making up] 80% of total dispensing – released internal memos, 1.5 year ago for one, 6-8 months for the other – *Former senior pharmacy director at CVS (FL)* ▪ "Pharmacies would fill set number of prescriptions per day – if they reach that number of prescriptions for the day, they tell patients that they are stocked out. Similar limits on pills per script, or number of high-dosage pills" – *Former senior pharmacy director at CVS (FL)* ▪ "Walgreens looks at how much each pharmacy is purchasing, and controls by generating monthly reports and sending company reps out to pharmacy to scrutinize… I don't know of specific caps for tablets/ Rx or scripts per week, I don't think it wouldn't be automatic cap" – *Former senior pharmacy director at Walgreens (IL)* ▪ "There's not a [official] limit… technically it is up to pharmacists judgment… but the pharmacists are scared because they don't want to lose their job or their license… my supervisor says if you are not turning away some patients, you're not doing your job" – *Former Pharmacy Manager at Walgreens (KY)*

SOURCE: Pharmacist expert interviews during week of7/15/2013

Summary of pharmacist interviews

Key takeaways	Quotes
Some individual pharmacies or districts are likely **self-imposing TRx or pill limits per week**	▪ "It's possible that local District Manager is using a personal number for limit pills/ script" - *Former senior pharmacy director at Walgreens (IL)* ▪ " I won't fill an opioid until 2 days before the previous prescription runs out… "that's a personal/ professional standard, not a Rite-Aid policy" – *Pharmacy Manager at RiteAid (MA)*
Lack of flexibility in supply to the pharmacy, constricted both by chain HQ and distributor	▪ "Distributors only fills X of all scheduled II narcotics… this restriction from distributors became prominent when DEA took action against some CVS stores 2 years ago in Sanford – *Former senior pharmacy director at CVS (FL)* ▪ "There's an internal panel that look at patient utilization, prescribers pattern and recommend that they cut off some patients or prescribers - retail might be told to "back down" if orders go up too much" – *Senior pharmacy director at CVS (FL)* ▪ "You get to the end of the year, the Feds put a limit for a chain in the area, and if the stores reach that max, they can't get any more… we just know that they put limits (we can order 8 but we might get 2), but we don't have any visibility" – *Clinical coordinator at Publix (FL)* ▪ We are no longer allowed to increase orders for C2… corporate has policies on how much each pharmacy can get per week." – *Former Pharmacy Manager at Walgreens (KY)*
Questionable metrics seem to be used by DEA and distributors, **leading to anecdotal gross constrictions in supply**	▪ There are "war stories out there [about supply] … a small town in Illinois has only a Walmart, CVS, and an independent pharmacy… Walmart and CVS sat together and decided not to serve OxyContin anymore… the wholesaler sees volume driven up at the independent, and then the distributor cuts off the independent. This happened pretty recently" – *Former senior pharmacy director at Walgreens (IL)*

SOURCE: Pharmacist expert interviews during week of7/15/2013

Summary of pharmacist interviews

Key takeaways	Quotes
Pharmacists have a **positive view of AD technologies but cost is an issue**	▪ "These AD technologies are very costly for patients" – *Former senior pharmacy director at CVS (FL)* ▪ "The rub is that they are available but often insurance plan doesn't cover them… PAs often in place and then doctors are so stressed out … it all comes down to money" – *Clinical coordinator at Publix (FL)* ▪ "Robberies went down when deterrent formulations went down, they aren't going for the OxyContin AD" –*Pharmacy Manager at RiteAid (MA)*
Protocol for dispensing opioids has become more stringent	▪ "Pharmacist should look for different flags: In a certain market area? IR and ER? Days supplied? Proximity of the patient to the pharmacy and prescriber? Does the prescription look altered? Is this a valid DEA number? Is this a valid prescriber? Known to the pharmacy? What is the frequency? The Pharmacist goes to DEA website to verify if prescriber has a valid DEA number and whether there was a sanction against a prescriber). Then call the prescriber to validate for EVERY TRx (requirement in the last year or two)" - *Former senior pharmacy director at CVS (FL)*
Dimensions that pharmacies are conservative on	▪ **Quantity:** "First thing that we look at is the quantity… if you're starting, they are going to give you 20 or 30… if you bring in a prescription for 180 or 240 for the first time, then that's a flag." – *Clinical coordinator at Publix (FL)* ▪ **Dosage:** "If someone comes in with 80mgs, they aren't going to fill it unless they have a history of lower dosages" –*Pharmacy Manager at RiteAid (MA)*

SOURCE: Pharmacist expert interviews during week of7/15/2013

Summary of pharmacist interviews

Key takeaways	Quotes
Mail order is currently a more reliable channel for patients to access opioid drugs	▪ "Direct to channel opioids are already being done – the only issue is interstate commerce, because the dispensing state might differ from prescribing state; Typically the dispensing state's laws prevail but also have to consider the most stringent state" – *Former senior pharmacy director at CVS (FL)* ▪ "To get an opioid prescription filled by mail, patient needs to mail the prescription and it is scrutinized… [it takes] 5-7 days to fill. Mail order patients have more reliable access to drugs because mail order have more visibility into the supply – *Former senior pharmacy director at CVS (FL)*
Some see DEA as potential partner for AD manufacturers	▪ I don't see that AD is getting a differentiated treatment yet, but I do think that it might have a positive, differentiated effect down the road → DEA may be a driver – *Former senior pharmacy director at Walgreens (IL)*

SOURCE: Pharmacist expert interviews during week of7/15/2013

Overview of payors interviewed

Total # of payors interviewed: 3

Geographical split: Northeast (1), California (1), Southeast (1)

Details of payors interviewed

- Payor expert 1
  - In managed care for over 20 years
  - Pharmacy Operations Manager, RPh
  - Current payor:
    - Commercial only
    - 1.2 mn lives
    - Open 3-tier formulary design
- Payor 2
  - Worked in several large payors
  - Regional Medical Director, MD
  - Current payor:
    - 60% Commercial, 40% Med D
    - 212k lives
    - Very tight prior authorization system
- Payor 3
  - 10 years in managed care
  - Pharmacy Director, PharmD
  - Current payor:
    - 75% Commercial, 20% Medicaid, 5% Med D
    - 5.5 mn lives

Summary of Payor Interviews

FOR DISCUSSION

Theme	Interview Quotes
Management of the pain category overall is **stable in outlook – rebates mentioned as one reason why OxyContin stays on Preferred Branded Tier**	▪ "There isn't a lot of management [of this category right now]" – Payor 1 ▪ "I do think aggressive management towards generics leveling off in pain.. but I do see payors really looking for opioid-like analgesic that's not addictive" – Payor 2 ▪ "I think this category is pretty much settled… we've only just added some step edits to increase generic utilization… Oxycontin has been on preferred tier for very long time… really no plans to move it anywhere because we would lose rebates and also it was recently reformulated with abuse deterrance" – Payor 3
Lack of differentiation among opioids in the market, but wide range of options is important	▪ No products that really stand out/ differentiated… but important to have wide range of opioids available for prescribers… important from a clinical perspective because people react differently to pain medications and have allergies – Payor 3 ▪ Patients will perceive that the generics don't work as well… but as payors we haven't seen studies that show that generics don't work as well… we need to see studies that it doesn't work… that hasn't been borne out – Payor 2 ▪ All drugs are equivalent of pain relief but different levels of euphoria (morphine- low, oxy – high) – Payor 1
Pain is a relatively important category in formulary, but behind oncology and other higher-cost drug types	▪ "Pain is 4-5% of my total spend – somewhat important but heavily driven by generics… [there's] no differentiation among pain medication – it's one big bucket" - Payor 1 ▪ "Pain is somewhere in the middle… pain isn't the most expensive medication (except for OxyContin)… but it has high utilization… not like RA, MS, etc that are "budget busters" which require more attention" – Payor 3
Differing levels of awareness about AD reformulation	▪ "[OxyContin] did show that 'drug liking' among potential abusers [was lower]" – Payor 1 ▪ "There was some data about AD… but at best, I would say it was inconclusive… it showed that you can't do XYZ to the pill but it wasn't definitive from a real-world perspective" – Payor 3 ▪ "I haven't seen anything that has blown me away… the jury is still out… I don't think the sample sizes are large enough for our kind of population" – Payor 2

Summary of Payor Interviews

FOR DISCUSSION

Theme	Interview Quotes
Even with AD benefits, cost savings of generics is heavy counterweight to using more expensive AD formulations	▪ "We want most people to be on generics and selective use of AD for vulnerable populations" – Payor 1 ▪ "If it could be proven that the product decreases/ eliminates abuse deterrence, yes, payors would consider it… but bottom line is very important, just having clinical advantage might not be enough" – Payor 3 ▪ I could see access improving access to AD drugs… but it's difficult to know how these will be treated vs cost savings of generics – Payor 2
Payors **aren't looking at cost of opioid users separately**	▪ We don't track PMPM for opioid users… it's mostly generic, and we don't even do it for OxyContin – Payor 3 ▪ We haven't tracked PMPM costs for opioid users… we're more tracking ER visits [which are related] – Payor 2
Somewhat aware of pharmacy-level access issues	▪ [It's a pain for a] pharmacy to get C2s… a lot of pharmacies don't stock C2s…we can look at certain pharmacies and sometimes tell doctors which pharmacies carry certain medicines – Payor 1 ▪ No, haven't heard of pharmacy access issues for legitimate products – Payor 3 ▪ I have heard of pharmacies not filling prescription…. But they call the doctor that should take care of it – Payor 2
Mixed opinions on **whether prescribing behavior is changing**	▪ "Addictions are #1 public health issue in this country… Doctors don't want to prescribe as much opiates because of addiction… doctors are more judicious then they used to be…particullary in the area of back pain" – Payor 2 ▪ No change in prescribing patterns that [I've] noticed… maybe the change has been so slow – Payor 3
No strict criteria for categorizing drug classes as "genericized"	▪ Each category is unique… [there is] no blanket "genericized" class" – Payor 1 ▪ No blanket label for completely "genericized"… case by case basis – Payor 3

Summary of Payor Interviews

FOR DISCUSSION

Theme	Interview Quotes
Some variation in how payors use step edits vs PAs vs tiers	▪ "[We impose] step edits if trying to encourage physicians to follow a logical process… PAs are much more restrictive… ensures that the patient has the right clinical condition for the expensive drug" – Payor 1 ▪ If we have 2+ products with comparable clinical efficacy, then we might put in step edits… step edits are used to steer patients to generics" – Payor 3 ▪ Higher tier is 1st option, then prior auth, step edit – Payor 2
Payors work with PBMs to flag potential opioid abusers in their patient population	▪ "We work with PBMs to combat it as best as we can, to track patients and physicians who might be abusing" – Payor 3 ▪ "PBM does claims processing, runs the reports (but we do pharmacy design)… identifies potential abusers by looking at number of prescriptions, doctor shopping, pharmacy-shopping… but not measuring abuse costs" – Payor 1
Mixed responses to novel contracting arrangements between manufacturers and payors, with pay-for-performance having highest appeal	▪ "I haven't actively participate in any collaborations [with manufacturers]… our lawyers don't allow it*" – Payor 1* ▪ "Innovative contracting [is] not a good opportunity because pharmacos are restricted in what they can do, and payors are restricted in what they can accept… even for pay-for-performance, there needs to be significant collaboration and integration to track data…[and I'm] not very optimistic about it" – Payor 3 ▪ "Pay for performance always works… if they put some performance guarantee in there" – Payor 2

Summary of Payor Interviews

FOR DISCUSSION

Theme	Interview Quotes
Open to considering a **flat pricing approach from branded drugs**	▪ "Lots of drugs have flat pricing – we like it because [it's] easier to model pricing" – Payor 1 ▪ "Going to flat pricing is quite common… especially drugs used in Primary Care… we try to take advantage of that sometimes by splitting the pill in half… give the patient a pill cutter and have them pay only half the copay" – Payor 3
Other	▪ "[We are] concerned if every drug has to go AD [due to regulations]… then drug cost will go up 15-20%.. what I don't want to see is that we are required to write AD for a 75-year old cancer patient… a doc might say I'm only going to prescribe AD because I want to say that I'm being careful." – Payor 1 ▪ "[There will be] pharmacy access challenges in bringing new drugs onto the market, [because] pharmacies don't want to stock unless there is a use." – Payor 1