A Look Back and a Look Ahead
by Artemis Emslie, President

On behalf of the entire myMatrixx team, I want to thank our clients and vendors for their partnerships. 2015 was another very successful year, and we are looking forward to building on these valued relationships in 2016.

By staying true to our core values and focusing on technology, data analytics and the customer experience, myMatrixx has continued to experience steady organic growth. To accommodate the specialized needs of our growing client base, we increased our workforce by more than 20% in 2015, and we moved our corporate office to a new, class A facility to attract and retain the best and brightest in the industry.

We are honored to be recognized as an important part of the conversation about challenges facing the workers’ comp industry by offering innovative solutions. This past year, myMatrixx earned 8 industry awards and our leadership team participated in 87 continuing education and conference speaking engagements. myMatrixx also provided extensive support to the Women Executives in Workers’ Compensation (WEIWC) organization, expanding the conversation to a diverse, national audience by participating on panels at several conferences.

Our annual employee and client satisfaction surveys both provide valuable feedback that we use to set goals and act on them. In response, we are continuing to develop and refine our offerings, focusing on efficiency, simplicity, and positive injured worker outcomes. In 2016, we will continue to invest heavily in human capital and in business intelligence—leveraging technology while providing the customized, personal service our clients have come to expect.

Here’s to another prosperous and successful year!

Artemis
The Opioid Pipeline

By Phil Walls, RPh, Chief Clinical Officer and Michael Nguyen, PharmD, Director of Clinical Pharmacy

Once upon a time, there was a pipeline through the south of France that originally connected opium fields in countries like Turkey and Lebanon in the 1930s and then faraway places like China and Vietnam by the 1960s to heroin distribution in the United States. Known as the French Connection, it moved as much as 44 tons of heroin into the United States each year, fueling the illegal drug trade.

Today 92% of the world’s licit opium originates in Afghanistan. Meteorological, political and religious reasons notwithstanding, Afghanistan is the world’s primary illegal supplier of this drug, yielding about $4 billion dollars in exports each year.

Now let’s compare that revenue to the illicit opioid trade – prescription opioid products – which originate from Australia, France, India, Spain and Turkey. This market generated $15.7 billion for the pharmaceutical companies in 2014, with the United States consuming 80% of this trade! That’s almost four times the size of the illicit market, and demand for prescription painkillers has created an entirely new pipeline: the development pipeline for new brand-only prescription opioids.

Keep in mind during the remainder of this discussion that these products do not represent truly new opioids. For those of you who have read the recent white paper titled “A Brief History of Heroin Use in the United States,” you already know that morphine was first introduced in 1806, followed by diacetyl morphine (heroin) in 1874, arguably launching the modern day pharmaceutical industry through the genesis of pharmaceutical giants Bayer and Merck.

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Opium poppy field in Gostan valley, Nimruz Province, Afghanistan

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To complete the opioid story for workers’ compensation, the following chart lists the various opioids the industry typically considers compensable along with their date of isolation or discovery and a typical modern day brand name version:

<table>
<thead>
<tr>
<th>OPIOID</th>
<th>YEAR</th>
<th>EXAMPLE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>1832</td>
<td>Tylenol with Codeine® (tablets)</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1917</td>
<td>OxyContin® (long-acting); Oxy IR® (immediate release)</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1920</td>
<td>Vicodin® (tablets combined with acetaminophen); Zohydro® (single ingredient long-acting tablet)</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1924</td>
<td>Dilaudid® (tablets)</td>
</tr>
<tr>
<td>Methadone</td>
<td>1937</td>
<td>Dolaphine®, Methadose® (both tablets)</td>
</tr>
<tr>
<td>Meperidine</td>
<td>1939</td>
<td>Demerol® (tablets/injectable)</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>1960</td>
<td>Duragesic® (patches); SubSys® (nasal spray)</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>1965</td>
<td>Suboxone® (sublingual film); Butrans® (patches)</td>
</tr>
</tbody>
</table>

Although the above chart does not include all opioids, it does provide a good basis for the argument that there really have been no truly new opioids for about fifty years—yet in the past two years there have been more new brand name products developed for this category of drugs than for NSAID, skeletal muscle relaxant and the neuropathic pain med categories combined! To see the impact of this new opioid pipeline, examine an overall generic substitution rate on all your claims versus the generic substitution rate for only those prescriptions in the opioid category. Don’t be surprised if the rate is cut in half!

Of course, with increased brand prescribing comes a corresponding increase in cost, so let’s examine what payers are actually getting for their money. The following charts list the new agents, the approved indication, and the average wholesale price (AWP) per tablet/capsule or unit (EA):

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>DATE EFFECTIVE</th>
<th>FDA INDICATION</th>
<th>STRENGTH</th>
<th>DOSE-FORM</th>
<th>LABELER NAME</th>
<th>HOW SUPPLIED</th>
<th>NDC</th>
<th>AWP per EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hysingla® ER (hydrocodone ER)</td>
<td>1/5/2015</td>
<td>Pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate.</td>
<td>20 MG</td>
<td>Tablet ER 24 Hour Abuse-Deterrent</td>
<td>PURDUE PHARMA LP</td>
<td>60 EA Bottle</td>
<td>59011027160</td>
<td>$7.8840</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 MG</td>
<td>Tablet ER 24 Hour Abuse-Deterrent</td>
<td>PURDUE PHARMA LP</td>
<td>60 EA Bottle</td>
<td>59011027260</td>
<td>$11.5080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40 MG</td>
<td>Tablet ER 24 Hour Abuse-Deterrent</td>
<td>PURDUE PHARMA LP</td>
<td>60 EA Bottle</td>
<td>59011027360</td>
<td>$15.5040</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>60 MG</td>
<td>Tablet ER 24 Hour Abuse-Deterrent</td>
<td>PURDUE PHARMA LP</td>
<td>60 EA Bottle</td>
<td>59011027460</td>
<td>$21.4680</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>80 MG</td>
<td>Tablet ER 24 Hour Abuse-Deterrent</td>
<td>PURDUE PHARMA LP</td>
<td>60 EA Bottle</td>
<td>59011027560</td>
<td>$28.9440</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100 MG</td>
<td>Tablet ER 24 Hour Abuse-Deterrent</td>
<td>PURDUE PHARMA LP</td>
<td>60 EA Bottle</td>
<td>59011027660</td>
<td>$36.8280</td>
</tr>
</tbody>
</table>

continued on page 4
<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>DATE EFFECTIVE</th>
<th>FDA INDICATION</th>
<th>STRENGTH</th>
<th>DOSE-FORM</th>
<th>LABELER NAME</th>
<th>HOW SUPPLIED</th>
<th>NDC</th>
<th>AWP per EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zohydro® ER (hydrocodone ER)</td>
<td>3/11/2015</td>
<td>Pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate.</td>
<td>10 MG</td>
<td>Capsule ER 12 Hour Abuse-Deterrent</td>
<td>PERNIX THERAPEUTICS</td>
<td>60 EA Bottle</td>
<td>43376031060</td>
<td>$7.3680</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 MG</td>
<td>Capsule ER 12 Hour Abuse-Deterrent</td>
<td>PERNIX THERAPEUTICS</td>
<td>60 EA Bottle</td>
<td>43376031560</td>
<td>$7.8720</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 MG</td>
<td>Capsule ER 12 Hour Abuse-Deterrent</td>
<td>PERNIX THERAPEUTICS</td>
<td>60 EA Bottle</td>
<td>43376032060</td>
<td>$8.1240</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 MG</td>
<td>Capsule ER 12 Hour Abuse-Deterrent</td>
<td>PERNIX THERAPEUTICS</td>
<td>60 EA Bottle</td>
<td>43376033060</td>
<td>$8.3760</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40 MG</td>
<td>Capsule ER 12 Hour Abuse-Deterrent</td>
<td>PERNIX THERAPEUTICS</td>
<td>60 EA Bottle</td>
<td>43376034060</td>
<td>$8.6280</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50 MG</td>
<td>Capsule ER 12 Hour Abuse-Deterrent</td>
<td>PERNIX THERAPEUTICS</td>
<td>60 EA Bottle</td>
<td>43376035060</td>
<td>$9.0000</td>
</tr>
<tr>
<td>Verdrocet® (hydrocodone-acetaminophen)</td>
<td>7/7/2014</td>
<td>Moderate to moderately severe pain</td>
<td>2.5-325 mg</td>
<td>Tablet</td>
<td>VERTICAL PHARMACEUTICALS, INC.</td>
<td>100 EA Bottle</td>
<td>68025006910</td>
<td>$3.3691</td>
</tr>
<tr>
<td>Oxaydo® (oxycodone)</td>
<td>9/11/2015</td>
<td>Acute and chronic moderate to severe pain where the use of an opioid analgesic is appropriate.</td>
<td>5 mg</td>
<td>Tablet Abuse-Deterrent</td>
<td>EGALET USA</td>
<td>100 EA Bottle</td>
<td>69344011311</td>
<td>$5.1000</td>
</tr>
<tr>
<td>xartemis xR® (oxycodone-acetaminophen)</td>
<td>3/17/2014</td>
<td>Acute pain severe enough to require opioid treatment and for which alternative treatment options are inadequate.</td>
<td>7.5-325 mg</td>
<td>Tablet Extended Release</td>
<td>MALLINCKRODT BRAND PHARMA</td>
<td>100 EA Bottle</td>
<td>23635011501</td>
<td>$2.7600</td>
</tr>
</tbody>
</table>
Opioid Pipeline  continued from page 4

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>DATE EFFECTIVE</th>
<th>FDA INDICATION</th>
<th>STRENGTH</th>
<th>DOSE-FORM</th>
<th>LABELER NAME</th>
<th>HOW SUPPLIED</th>
<th>NDC</th>
<th>AWP per EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lazanda® (fentanyl citrate spray)</td>
<td>4/11/2014</td>
<td>Breakthrough pain in cancer patients 18 years of age and older who are already receiving opioids and who are tolerant to opioid therapy for their underlying persistent cancer pain.</td>
<td>100 mcg/1 spray</td>
<td>Nasal spray</td>
<td>DEPOMED, INC.</td>
<td>1 EA Bottle</td>
<td>13913000901</td>
<td>$494.9800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>400 mcg/1 spray</td>
<td>Nasal spray</td>
<td>DEPOMED, INC.</td>
<td>1 EA Bottle</td>
<td>13913001001</td>
<td>$706.1800</td>
</tr>
</tbody>
</table>

All of these new drugs are basically reformulations of existing products that contained oxycodone, hydrocodone or fentanyl—certainly no new drugs there. A common theme among these drugs is the introduction of abuse-deterrent technology (ABT) in most of them. This is an important component and is largely the result of the FDA’s Risk Evaluation and Mitigation Strategy (REMS). However, ABT can be applied to reformulations of existing opioids, so let’s look at these new entities in terms of any therapeutic advantage.

Two of the new drugs – Zohydro and Hysingla - are very similar in that they contain hydrocodone as a single ingredient instead of combining it with acetaminophen. The manufacturers claim this makes the drugs safer because of the potential for liver damage from the acetaminophen. However, this risk can be managed by limiting the dose of the acetaminophen, which in turn limits the dose of the hydrocodone in the combination products like generic hydrocodone with acetaminophen. In actuality, the single ingredient products actually create a new risk because without the acetaminophen component, there is no limit on the daily dose a doctor may now prescribe.

The launch of these two drugs brings up an interesting question – if we truly should move to single ingredient hydrocodone products, why do we need the new Verdracet? This is very similar to the older, generic combination products with simply a lower amount of hydrocodone.

Oxaydo, other than the abuse deterrent properties, really offers no therapeutic advantage over the older, generically available Oxy IR® (oxycodone immediate release).

Xartemis is an interesting new entry. Think of it as a long-acting Percocet. That begs the question "do we really need a long-acting Percocet"?

That brings us to Lazanda. A very powerful opioid that has only one approved use: cancer pain. Restrictions imposed by the FDA’s REMS should limit the use of this drug to cancer patients only. However, be on guard for its use in comp claims. We should never see it, but another similar drug known as Subsys is receiving widespread attention because of allegations that the maker of the drug is marketing it for other types of pain.

So what is the impetus for these new formulations? One can assume that it all boils down to economics. As previously mentioned, the licit opioid market is four times the size of the illicit market. A market this big is always begging for players. Pharmaceutical companies can either develop a new chemical entity or reformulate an already approved chemical entity. The latter decision is by far much easier, less expensive, and less risky--and let us not forget that once these new formulations are developed, they have to be marketed and sold. So along comes the claim-to-fame, the therapeutic advantage, the why-our-drug-is-better-than-their-drug pitch. This presents a problem for payers. Once drug patents expire and generic versions are developed, they cease to be marketed to prescribers. Instead, these newer, more expensive, supposedly better versions are pushed.

It is estimated that a third of the US population suffers from chronic pain. The problem (or should we say market) is huge. As pharmacists, we long for the days of true innovation for this condition—for a pain medication that does not cause addiction and wreak havoc on the body’s ancillary organ systems. Until that day comes, we will be diligently waiting for the next best (but not better) thing.

So what does this mean for you?

- Be aware of these new drug names
- Be prepared to deny coverage for some
- Engage one of our clinical pharmacists if you need further intervention with the prescriber!
This is the third article in a series illustrating the benefits of a Business Intelligence (BI) practice in the workers’ compensation domain. The myMatrixx BI solution provides timely insights into the key metrics that drive savings, utilization and network penetration, using dashboards and advanced analytics.

In prior posts, we discussed the benefits of developing a well-designed data integration and data warehouse strategy. These make up two of the most critical components of a successful BI practice. Also, many would agree that they constitute the “heavy lifting” portion of a typical BI solution. Another critical component is Analytics. For a lot of us, this is where the fun begins. The ability to tell a story with visual analytics is the big payoff when you have taken the time and effort to institute a sound BI practice. I would like to share how we leverage both our BI infrastructure and analytical approach to provide insights into the data which drives our business domain.

We’ve seen this before: someone in the organization has a specific question about the business but needs a “report” to verify or validate an assumption being made. The most classic example of the solution involves someone pulling raw data into a spreadsheet program. The next step is to shape the raw data into a pivot table and/or chart to reveal trends, outliers and critical measures. This approach can be time-consuming if you aren’t exactly sure what you are looking for. This method will get the job done but doesn’t offer the benefits that can be realized from using a visual analytics solution. But more importantly, we have developed a robust BI infrastructure with a data integration strategy and data warehouse – why not take advantage of that?

Using a visual analytics solution, along with a robust BI infrastructure, is a great way to get to answers quickly while limiting the amount of manual intervention needed to “shape” data. A visual analytics solution is a program or web application that connects directly to a source of data, such as a data warehouse. By consuming data directly from a warehouse, we aren’t hampered by the inefficiencies inherent when working with raw data files. A common term used to describe this process is “slicing” and “dicing.” In addition, with visual analytics tools you are usually in a “drag and drop” environment, which accelerates the process of prototyping different visualizations.

At myMatrixx, we are able to rapidly develop useful visualizations that can help our clients quickly determine opportunities for savings and measure performance.

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Although this is a very simple example, a good visual analytics tool will enable you to view data in many different ways – on demand.

At myMatrixx, we utilize a best-in-class data visualization tool from Tableau (www.tableau.com). When used with our robust data warehouse, we are able to rapidly develop useful visualizations for our clients. We can build dashboards on-the-fly that provide insights that otherwise would take much longer to develop in a traditional database reporting system. With the capabilities of this software and our BI infrastructure, we can help our clients quickly determine opportunities for savings, measure performance, and most importantly, drive toward better outcomes for injured workers.

There are other software vendors with outstanding products in the space. You will find differences in how these products interact with data as well as other feature sets. You may already be using them in your organization. Otherwise, if you are looking to build out your own BI practice and infrastructure, I recommend looking at several vendors to make sure you find the right fit.

Our approach when developing visual analytics for clients is to remember that at some point a question was asked. Answering that question will require a story, a narrative that is dictated by understanding the business perspective of the person asking that question. We like to say we want to know the “why” and “what,” instead of focusing on the “how.” This is exactly why developing a BI practice is valuable. We are supporting the business to make informed decisions.

To really understand what’s causing this growth, we need to “look” at the data another way. That is, we need to change our visualization to better expose what factors are causing the upward trend. We need to “slice” the data in a different way. In the example below, we can see that the counts in “FL” grew in the time periods and drove up the overall growth.

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**Drive Toward Better Outcomes for Injured Workers**
Prescribing the appropriate medication for the appropriate duration is key to reaching maximum medical improvement and return to work. Overprescribing leads to excessive claim costs for employers and worse outcomes for injured workers.

Legislators and regulators balance the pros and cons of changes to the workers’ compensation system when deciding to support or oppose legislative and regulatory changes. While there are many stakeholders in the system, the employer and injured employee are the lynchpins.

There are several regulatory solutions that deserve consideration during the 2016 legislative sessions.

Compounds – Since compound medications are not FDA approved, the medical necessity of these medications should be determined before the medication is dispensed. States that have a current rule or statute listing medical services requiring prospective review should consider adding compound medications to the list. States considering adoption of a formulary have the opportunity to require that the medical need for a compound medication is determined prospectively rather than retrospectively. Watch for an update to CompPharma’s “Compounding is Confounding Workers’ Compensation” study in early 2016.

Physician Dispensing – State efforts to control price have helped lower drug spend, but other initiatives should also be considered. In states that permit physician dispensing, workers’ compensation regulators should consider limiting the duration and supply using the date of injury as the baseline for limiting duration.

Formularies/Treatment Guideline – As more states consider adopting a formulary, legislators and regulators are looking to other states for guidance. The Work Loss Data Institutes’ Official Disability Guidelines’ (ODG), Appendix A, has been adopted in Texas and Oklahoma and is expected to be adopted in Tennessee. When considering formularies, factors such as preauthorization turnaround times and the role of the PBM and utilization review agents will be reviewed.

All eyes will be on California as the Division of Workers’ Compensation implements AB 1124 adopted by the Legislature in 2015. Also closely watched in 2016 will be the Centers for Disease Control and Prevention’s (CDC) process for developing Guidelines for Prescribing Opioids for Chronic Pain. The draft guidelines were published December 14, 2015, and will be open for public comment until January 13, 2016. The CDC will also convene the National Center for Injury Prevention and Control’s Board of Scientific Counselors (BSC), a federal advisory committee, to review the draft guidelines. At a public conference call on January 7, 2016, the CDC will ask the BSC to appoint a workgroup to review the draft guideline as well as the comments received on the guideline, and present recommendations about the guideline to the BSC.

Click here to see the dates for 2016 state legislative sessions.
2015 RECOGNITION

At myMatrixx we are always honored to receive recognition for what we do best – serving our clients and helping them succeed. In 2015 we received the following awards:

Artemis Emslie, myMatrixx President, was recognized by Business Insurance as a 2015 “Women to Watch” honoree. The annual list spotlights 25 women who are doing outstanding work in commercial insurance, reinsurance, risk management, employee benefits and related fields.

Phil Walls, myMatrixx Chief Clinical Officer, was recognized as CompPharma’s “2015 Person of the Year.” This is the second consecutive year that a member of the myMatrixx management team received this industry award.

Artemis Emslie, myMatrixx President, was honored by WorkCompCentral for her outstanding contributions to the workers’ compensation industry. Artemis was recognized with Leadership Comp Laude and President’s Honor Roll awards.

The Tampa Bay Business Journal recognized myMatrixx on its list of the largest privately held companies headquartered in the Tampa Bay area.

Inc. Magazine has recognized myMatrixx for seven consecutive years as one of the fastest growing private companies in the nation.

myMatrixx was recognized as a 2015 USF Fast 56 Company. The Fast 56 identifies, recognizes and celebrates the 56 fastest growing University of South Florida alumni-led businesses in the world.

The company’s 50% revenue growth over the past three years earned myMatrixx the 8th spot on the Business Journal’s “top dollar growth” list of Tampa Bay area companies for 2015.
Upcoming Events

myMatrixx will be attending the following events:

**New York Self Insurers Association (NYSIA) Annual Meeting**
January 13 - 15
NYC, NY

**Florida Association of Self-Insureds (FASI) Winter Meeting**
February 4 - 5
Lake Mary, FL

**Arizona Workers’ Compensation Claims Association (AWCCA) Spring Seminar**
February 5
Phoenix, AZ

**Division of Workers’ Compensation (DWC) 23rd Annual Educational Conference**
February 25 - 26
Los Angeles, CA

**Public Agency Risk Managers Association (PARMA) 2016 Annual Conference**
February 23 - 26
Indian Wells, CA

**South Carolina Workers’ Compensation Educational Association (SCWCEA) - 2016 Medical Seminar**
Feb 28 - March 1
Myrtle Beach, SC

**13th Annual Workers’ Compensation Insurance ExecuSummit**
March 1 - 2
Uncasville, CT

**Division of Workers’ Compensation (DWC) 23rd Annual Educational Conference**
March 3 - 4
Oakland, CA

**Combined Claims Conference**
March 8 - 9
Orange County, CA

**32nd Workers’ Compensation Research Institute (WCRI) Annual Issues & Research Conference**
March 10 - 11
Boston, MA

**California Self-Insurers Association (CSIA) 2016 Annual Meeting and Educational Conference**
March 14 - 15
Anaheim, CA

**International Association of Rehabilitation Professionals (IARP) of the Carolinas— Educational Conference**
March 17 - 18
Greensboro, NC

**Self-Insurance Institute of America (SIIA) Self-Insured Workers’ Compensation Executive Forum**
May 24 - 26
Scottsdale, AZ

**Texas Association of Responsible Nonsubscribers (TXANS) 25th Annual Nonsubscriber Conference & Exhibition**
March 26 - 27
Austin, TX

**National Rx Drug Abuse & Heroin Summit**
March 28 - 31
Atlanta, GA

**North Carolina Association of Self-Insurers (NCASI) Annual Conference**
March 30 - April 1
Wrightsville Beach, NC

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marketing@mymatrixx.com

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for news, trends and updates in workers’ compensation.