Disclosures

- Steve, Richard and Phil work for Rocky Mountain Health Plans.
- Phil works for the Mesa County Health Department.
- Kayla, Kyra and Alivia are BSN students at CMU.
- We do not have any financial interest in the medications we are discussing today.
- We have no intention to malign any person, business or product.
When Immunizing Persons >65 years this fall, I’ll use:

- A) the High Dose (HD) quadrivalent vaccine
- B) the standard quadrivalent vaccine
- C) Flu Mist
- D) Fluad, the new flu vaccine with an adjuvant
- E) I’m forgoing prescribing all flu vaccines and treating all influenza with Tamiflu.
Regarding Tamiflu, I believe

- A) the FDA who indicates that Tamiflu does not prevent hospitalizations or influenza associated deaths
- B) the CDC who indicates that Tamiflu prevents hospitalizations and influenza associated deaths.
- C) the CDC and Big Pharma are in a very expensive bed together
- D) Chicken noodle soup works better than Tamiflu for influenza
- E) A and C
Flu Season 2016–2017

- Vaccine antigens this year in the northern hemisphere are similar to those in the 2016 vaccine in the southern hemisphere
  - A/California/7/2009 (H1N1)
  - A/Hong Kong/4801/2014(H3N2)
  - B/Brisbane/60/2008
  - B/Phuket/3073/2013

- Up to Date recommends the quadrivalent over trivalent flu vaccines; ACIP has made no statement.
Flu vaccines

- Flu Mist
- Fluad
- HD
Advisory Committee on Immunization Practices (ACIP) in June 2016 recommended:

- The live attenuated influenza vaccine (LAIV) nasal spray Flu Mist should not be used during the 2016–2017 flu season.
- In May, 2016 data from the US Influenza Vaccine Effectiveness Network became available and showed that during the 2015–16 flu season the vaccine effectiveness (VE) of Flu Mist was 3% (CI – 49% to 37%) for kids 2 through 17 years.
- In comparison, flu shots’ VE was 63% (52% to 72%) for the same age group.
<table>
<thead>
<tr>
<th>Study Details</th>
<th>Inactivated IM vaccine</th>
<th>Live Attenuated Vaccine (FluMist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5210 healthy kids &gt;5 years</td>
<td>76%</td>
<td>85%</td>
</tr>
<tr>
<td>* effective against H1N1</td>
<td>74%</td>
<td>58%</td>
</tr>
<tr>
<td>1247 healthy adults 2004–2005</td>
<td>74%</td>
<td>74%</td>
</tr>
<tr>
<td>Season with poor match vaccine &amp; virus</td>
<td>80%</td>
<td>40%</td>
</tr>
<tr>
<td>NEJM 2006, 355(24):2513</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1952 adults 2007–2008</td>
<td>68%</td>
<td>36%</td>
</tr>
<tr>
<td>* effective against serotypes A &amp; B</td>
<td>72%</td>
<td>29%</td>
</tr>
<tr>
<td>JAMA 2009; 301(9):945</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All studies used culture proven influenza</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fluad

- FDA approved via fast track, Fluad (trivalent, 2 As and a B) November 2015 for use in prevention of seasonal influenza in people 65 years of age and older. It is the first flu vaccine with an adjuvant.
- Remember adjuvants are added to vaccines to enhance or direct the immune response of the vaccinated individual.
- The adjuvant is M59, an oil in water emulsion of squalene oil, a naturally occurring substance found in humans, other animals and plants. Uncertain how M59 affects the immune system.
- There is some feedback to the FDA that this fast track approval is all about getting the adjuvant on the market to use in other vaccines and less about the flu vaccine itself.
Fluad

- The international studies that brought Fluad to market compared it with a standard non-adjuvant trivalent flu vaccine in 7,082 participants.
- Results:
  - Fluad induced antibody levels were comparable to the levels induced by the non-adjuvant vaccine.
  - No clinical trials of efficacy in preventing the flu.
Fluad

- What is problematic with this study?
  - Of the 7,000+ participants, only 1,000 were from the US and over 2,400 of the participants were from countries with a high percentage of Asian and Hispanic peoples. Responses to vaccines are significantly affected by genetic factors.
  - The trial exclusion criteria created a much healthier study group than the over 65 year population in the US, two thirds of whom have two or more chronic conditions.
  - Fluad recipients had more local reactions and more systemic reactions than those given the non-adjuvant vaccine.
  - No data to suggest that it is safe to give seniors multiple doses of this new vaccine nor is there safety data regarding giving Fluad with other vaccines.
  - ACIP has not made a recommendation on this vaccine.
HD Fluzone

- Third season for this quadrivalent high dose (4 times as much antigen as standard flu vaccine) approved for patients over 65.
- Clinical studies show that 220 persons need to immunized with HD vaccine vs standard flu vaccine to prevent one more case of influenza.
- HD vaccine is associated with significantly more local reactions than standard vaccine, but no more serious reactions. Up to Date recommends this vaccine for seniors. ACIP has made no statement.
- HD Fluzone cost is 1/3 greater than that of the standard influenza vaccine.
Anti–virals for flu:
Why the FDA and CDC do not agree

- CDC urges patients with influenza to take Tamiflu, claiming that the action could “save lives.”
- The FDA claims that Tamiflu does not prevent hospitalizations or save lives.
Anti–virals for flu: Why the FDA and CDC do not agree

- Lancet, (Dobson et al, May 2, 2015), 3 of 4 authors have financial relationship with Roche and Gilead, the manufacturer and patent holder of oseltamivir, claim NNT to prevent one hospitalization is 100. Shortening of illness by 24 hours.

- BMJ (Jefferson et al, April 9, 2014), Tamiflu reduces duration of symptoms by 16 hours in adults and 29 hours in kids. Tamiflu had no effect on hospitalizations or complications, like pneumonia or death.
Finally, a third meta-analysis Health Technol Assess May 2016 looking at many of the same studies concludes that neither Tamiflu (oseltamivir) nor Relenza (zanamivir) have any protective effect on mortality. The use of Tamiflu is associated with significant vomiting in both adults and children, NNH 22 and 19, respectively. Tamiflu reduced the time to first alleviation of symptoms by 16.8 hrs. Relenza, by 14 hours.
Jeannie Lenzer, an associate editor of the BMJ (Feb 5, 2015) points out that the CDC Foundation was created by Congress to "connect the CDC to the private sector to advance public health." The CDC has received financial contributions from Gilead, Genetech and Roche, part of which have been funneled directly to the public campaign to promote Tamiflu for influenza.

Ms. Lenzer suggests that these data merely “scratch the surface” of the complex interrelationships between BIG Pharma and the CDC.

In Happy Valley, Tamiflu costs a cash paying customer $150 (Walmart) to $160 (Kmart) for 5 day supply of 10 capsules (GoodRX 8/5/16)
Pinworm

*Enterobius vermicularis* (pinworm)
Treatment

- Albendazole 400 mg x1, repeat in 2 weeks
- Ivermectin 200mcg/kg X, repeat in 2 weeks
- Mebendazole 100mg x 1, repeat in 2 weeks
- Pyrantel Pamoate 11mg/kg x 1, repeat in 2 weeks
Cost

- Albendazole 400 mg $241 per dose
- Ivermectin 3 mg $5 per dose
  - www.jailmedicine.com
- Mebendazole 100 mg $442 per dose
- Pyrantel pamoate $9 per dose
Ivermetin–Pyrantel
Tasty flavored chewable tablets
- 0–25# $26
- 26–50# $34
- 50–100 $40
Albendazole

- NEJM Article 2014
- GSK 1996 FDA approval
- Patent expired, no generic manufacturer ever sought FDA approval
- Amedra 2010 buys albendazole
- Mebendazole stop manufacturing 2011 TEVA
- Ameda 2013 buys mebendazole

Albendazole

- 400mg x 1
- Repeat in 2 weeks
- Close to 100% cure rate
Albendazole

- Albendazole pricing
- 2010: 5$ per dose US, 1$ overseas
- 2013: 119$ per dose
- 2014: 241$ per dose
Ivermectin

- 200mcg/kg
- Repeat in 2 weeks
- 100% cure rate
- “not generally used”
Mebendazole

- Mebendazole
  - 100mg once
  - Repeat in 2 weeks
  - Teva discontinued in 2011—No reason given
- Impax– Emverm(mebendazole) 100mg
  - 2016
- Cost $442 per dose
Impax approval of Emverm(mebendazole)

- Investors press release 1/2016
- "We are pleased to announce the approval of EMVERM, a new prescription product for the treatment of pinworm and certain worm infections," said Fred Wilkinson, President and Chief Executive Officer of Impax.
- "As part of our life cycle plan to enhance our anthelmintic franchise in addition to ALBENZA® (albendazole), with this approval, we can now offer an anthelmintic to treat the most common worm infections in the United States. Additionally, the approval of ENVERM further leverages the strategic benefits of the Tower Holdings acquisition4," Mr. Wilkinson concluded.
Pyrantel Pamoate
- 11mg/kg
- Repeat in 2 weeks
- OTC
- Walgreens
- Efficacy close to 100%

- Less than 25 lbs. or under 2 years old: Do not use unless directed by a doctor
- 25–37 lbs.: 1/2 teaspoonful (as a single dose)
- 38–62 lbs: 1 teaspoonful (as a single dose)
- 63–87 lbs: 1 1/2 teaspoonfuls (as a single dose)
- 88–112 lbs: 2 teaspoonfuls (as a single dose)
- 113–137 lbs: 2 1/2 teaspoonfuls (as a single dose)
- 138–162 lbs: 3 teaspoonfuls (as a single dose)
- 163–187 lbs: 3 1/2 teaspoonfuls (as a single dose)
- 188 lbs and over: 4 teaspoonfuls (as a single dose)

In October 2010, GlaxoSmithKline sold U.S. marketing rights for albendazole to Amedra Pharmaceuticals. In October 2011, Teva Pharmaceuticals ceased to manufacture mebendazole. Data are from the Centers for Medicare and Medicaid Services.
Pyrimethamine (Daraprim)

- Treat toxoplasmosis
- Turing Pharmaceuticals
  - Martin Shkreli
- Acquired rights
- 62 y drug
- 5000% increase
- 13.50$ a pill to 750$ a pill
Nanoparticles

“a particle is defined as a small object that behaves as a whole unit with respect to its transport and properties”
"We solved a chemistry problem by using physics," explained Iroko Chairman Osagie Imasogie, who founded the company in 2007.

SoluMatrix fine particle process that pulverizes drug molecules into nano-sized particles, enabling low doses of a drug to be better absorbed by the body, thus providing faster and far more effective pain relief.
IROKO

Low dose SoluMatrix NSAIDS were developed by Iroka to align with recommendations from FDA, medical organizations, and advocacy groups:

- Had greater pain reduction compared to placebo
Tivorbex

- Indomethacin 20mg and 40 mg
  - CVS 20 mg # 30 $125
  - CVS 40 mg # 30 $125

- Generic IR 25 mg and 50 mg
  - CVS 25 mg IR $4, 50 mg IR $4

- Generic SR 75mg
  - CVS $45 # 60
IROKO

Iroko Pharmaceuticals, LLC, specifically developed VIVLODEX™ to align with recommendations from FDA, medical organizations, and advocacy groups.

Had greater pain reduction compared to placebo.
Vivlodex
(meloxicam capsules)

- Vivlodex 5mg and 10 mg
  - CM 5 mg # 30 $600
  - CM 10mg # 30 $600

- Generic
  - CM 7.5 mg # 30 $4
  - CM 15mg #30 $6
IROKO

- Iroko is a global specialty pharmaceutical company dedicated to scientific innovation in responsible pain management. Based in Philadelphia, the company develops and globally commercializes pharmaceutical products that significantly improve patient lives. By using breakthrough, proprietary technologies, strategic acquisition and the extensive expertise of our employees and specialist partners, Iroko continually delivers significant added value to patients, healthcare professionals and other stakeholders.
Zorvolex
(diclofenac capsules)

- Zorvolex 18mg and 35mg
  - CM 18mg #30 $105
  - CM 35mg $30 105

- Generic
  - CM 50mg #30 $23
<table>
<thead>
<tr>
<th>Drug</th>
<th>Use</th>
<th>Average Market Price Oct. 2013</th>
<th>Average Market Price April 2014</th>
<th>Average Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxycycline Hyclate (bottle of 500, 100 mg tablets)</td>
<td>antibiotic used to treat a variety of infections</td>
<td>$20</td>
<td>$1,849</td>
<td>8,281%</td>
</tr>
<tr>
<td>Albuterol Sulfate (bottle of 100, 2 mg tablets)</td>
<td>used to treat asthma and other lung conditions</td>
<td>$11</td>
<td>$434</td>
<td>4,014%</td>
</tr>
<tr>
<td>Glycopyrrolate (box of 10 0.2 mg/mL, 20 mL vials)</td>
<td>used to prevent irregular heartbeats during surgery</td>
<td>$65</td>
<td>$1,277</td>
<td>2,728%</td>
</tr>
<tr>
<td>Divalproex Sodium ER (bottle of 80, 500 mg tablets ER 24H)</td>
<td>used to prevent migraines and treat certain types of seizures</td>
<td>$31</td>
<td>$234</td>
<td>736%</td>
</tr>
<tr>
<td>Pravastatin Sodium (bottle of 500, 10 mg tablets)</td>
<td>used to treat high cholesterol and to prevent heart disease</td>
<td>$27</td>
<td>$196</td>
<td>573%</td>
</tr>
<tr>
<td>Neostigmine Methylsulfate (box of 10 1:1000 vials)</td>
<td>used in anesthesia to reverse the effects of some muscle relaxants</td>
<td>$25</td>
<td>$121</td>
<td>522%</td>
</tr>
<tr>
<td>Benazepril/Hydrochlorothiazide (bottle of 100, 20-25 mg tablets)</td>
<td>used to treat high blood pressure</td>
<td>$34</td>
<td>$149</td>
<td>420%</td>
</tr>
<tr>
<td>Drug</td>
<td>Use</td>
<td>Average Market Price Nov. 2012</td>
<td>Average Market Price Sept. 2014</td>
<td>Average Percentage Increase</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Isuprel (box of 25, 0.2 mg/mL vials)</td>
<td>used to treat heart attacks and irregular heartbeat</td>
<td>$916</td>
<td>$4,489</td>
<td>390%</td>
</tr>
<tr>
<td>Nitropress (50 mg vial)</td>
<td>used to treat congestive heart failure and reduce blood pressure</td>
<td>$44</td>
<td>$215</td>
<td>388%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug</th>
<th>Use</th>
<th>Average Market Price Oct. 2012</th>
<th>Average Market Price June 2014</th>
<th>Average Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digoxin (single tablet, 250 mcg)</td>
<td>used to treat irregular heartbeats and heart failure</td>
<td>$0.11</td>
<td>$1.10</td>
<td>884%</td>
</tr>
</tbody>
</table>
Long Acting ADHD drug review

Adzenys XR-ODT™
Extended-Release Orally Disintegrating Tablets
3.1 mg, 6.3 mg, 9.4 mg, 12.5 mg, 15.7 mg, 18.8 mg
Long acting ADHD drugs

- Daytrana (methylphenidate)
- Quillichew ER (methylphenidate)
- Quillivant XR susp (methylphenidate)
- Aptensio (methylphenidate)
- Focalin XR (dextmethylphenidate)
- Adzenys XR ODT (amphetamine)
- Evekeo (amphetamine)
- Dynavel XR (amphetamine)
- Strattera (atomoxetine)
Long acting ADHD drugs

- Concerta (methylphenidate)
- Metadate CD (methylphenidate)
- Metadate ER (methylphenidate)
- Methylin ER (methylphenidate)
- Ritalin LA (methylphenidate)
- Vyvanse (lisdextroamphetamine)
- Intuniv (guanfacine)
- Kapvay (clonidine)
Newer ADHD meds

- **Aptensio XR (methylphenidate ER)**
  - Approved April, 2015 for kids ≥ 6 yo
  - First 12 hour sprinkle cap
  - Capsules filled with multilayer beads. 40% IR, 60% ER
  - Peaks at 2 and 8 hours
  - Duration is about 12 hours
  - Consider for kids that cannot swallow generic Concerta
  - Can open and sprinkle capsule on applesauce
  - Efficacy didn’t look great in the two studies submitted to FDA:
    - Study 1 (n=26) RCT crossover, Aptensio was better than placebo in SKAMP assessment tool by 0.55 point on a 39 point scale
    - Study 2 (n=230) Aptensio was better than placebo on ADHD RS–IV tool for 20mg and 40mg doses only, by 6.0 and 7.4 points, 10mg and 15mg were not different than placebo.
  - Cost: ~$202 per month (flat priced across all doses)
Newer ADHD meds

- Quillichew (methylphenidate ER)
  - Approved late 2015
  - First 8 hour chewable tab
  - 30% IR, 70% ER
  - Consider generic Ritalin LA or Metadate CD sprinkle caps instead
  - Cost: ~ $280 per month (flat priced)
Newer ADHD meds

- **Adzenys XR–ODT (amphetamine)**
  - Launched May, 2016
  - First orally disintegrating tab
  - 50% IR, 50% ER
  - Doses are 3.1mg, 6.3mg, 9.4mg, 12.5mg, 15.7mg, and 18.8mg
  - FDA approval based on Adderall XR data
    - Serum concentration time curves are identical to Adderall XR
  - Pro: has an X, Y, and Z in its name
  - Consider generic Adderall XR when long-acting amphetamine needed.
    It can be sprinkled on applesauce
  - Cost: ~$280 per month
Newer ADHD meds

- Dyanavel XR
  - First suspension amphetamine salt
  - Approved Oct. 2015
  - Approval based on one unpublished study, n=108
  - Cost: $240 to $480 per month (10mg to 20mg)
  - Consider generic Adderall XR when long acting amphetamine needed. It can be sprinkled on applesauce.
  - Phil Mohler’s take: “We all recognize that “navel gazing” is associated with aberrant introspection, self-absorption and excessive concentration on mindless issues.”
Newer ADHD meds

- **Evekeo**
  - Approved Sept. 2014
  - Indications: ADHD, narcolepsy, exogenous obesity.
  - Scored tablet
  - 1:1 combination of dextroamphetamine and levoamphetamine
    - Adderall XR is 75% dextro and 25mg levo
  - May hear that it lasts longer or has fewer adverse effects on appetite and sleep. No evidence for this exists.
  - Cost: ~ $165 per month
## Chart by duration of effect

<table>
<thead>
<tr>
<th>Duration</th>
<th>Generic?</th>
<th>Comment</th>
<th>Cost/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 hours or greater</td>
<td>Concerta (methylphenidate ER)</td>
<td>Yes. Actavis is authorized generic</td>
<td>$178 (generic)</td>
</tr>
<tr>
<td></td>
<td>Daytrana (methylphenidate ER)</td>
<td>No</td>
<td>$310</td>
</tr>
<tr>
<td></td>
<td>Quillivant XR (methylphenidate susp)</td>
<td>No</td>
<td>$200 to $600</td>
</tr>
<tr>
<td></td>
<td>Aptensio XR–ODT</td>
<td>No</td>
<td>$202</td>
</tr>
<tr>
<td></td>
<td>Dyanavel XR (amphetamine susp)</td>
<td>No</td>
<td>$240–$480</td>
</tr>
<tr>
<td>8 to 12 hours</td>
<td>Generic?</td>
<td>Comment</td>
<td>Cost per month</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Focalin XR (dextromethorphan ER)</td>
<td>Yes. Sandoz is authorized generic.</td>
<td>Can sprinkle</td>
<td>$129</td>
</tr>
<tr>
<td>Adderall XR (mixed amphetamine salts)</td>
<td>Yes</td>
<td>Can sprinkle</td>
<td>$85</td>
</tr>
<tr>
<td>Kapvay (clonidine ER)</td>
<td>Yes</td>
<td>Swallow whole</td>
<td>$175</td>
</tr>
<tr>
<td>Intuniv (guanfacine)</td>
<td>Yes</td>
<td>Swallow whole. Must slow taper when D/C</td>
<td>$32</td>
</tr>
<tr>
<td>Strattera (atomoxetine)</td>
<td>No</td>
<td>Swallow whole</td>
<td>$377</td>
</tr>
<tr>
<td>Vyvanse (lisdexamphetamine)</td>
<td>No</td>
<td>Can dissolve in water, OJ, yogurt</td>
<td>$253</td>
</tr>
<tr>
<td>Adzenys XR–ODT (amphetamine salts)</td>
<td>No</td>
<td>Same as Adderall XR.</td>
<td>$280</td>
</tr>
</tbody>
</table>
# Chart by duration of effect

<table>
<thead>
<tr>
<th>Duration</th>
<th>Generic?</th>
<th>Comment</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 to 9 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ritalin LA (methylphenidate ER)</td>
<td>Yes</td>
<td>Can sprinkle</td>
<td>$135</td>
</tr>
<tr>
<td>Metadate CD (methylphenidate ER)</td>
<td>Yes. Kremers Urban is authorized generic.</td>
<td>Can sprinkle</td>
<td>$195</td>
</tr>
<tr>
<td>Quillichew ER (methylphenidate ER)</td>
<td>No</td>
<td>8 hour duration</td>
<td>$275</td>
</tr>
<tr>
<td>Evekeo (amphetamine salts)</td>
<td>No</td>
<td>Give at 4–6 h intervals</td>
<td>$168</td>
</tr>
<tr>
<td>Liquid</td>
<td>Generic?</td>
<td>Duration</td>
<td>Cost/month</td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>Quillivant XR suspension (methylphenidate)</td>
<td>No</td>
<td>12 hours</td>
<td>$200–$600</td>
</tr>
<tr>
<td>Dyanavel suspension (amphetamines)</td>
<td>No</td>
<td>12 hours</td>
<td>$240–$480</td>
</tr>
<tr>
<td>Patch Generic?</td>
<td>Duration</td>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>Daytrana</td>
<td>No</td>
<td>12 hours +</td>
<td>$310</td>
</tr>
<tr>
<td>Dissolvable/chewable tablet</td>
<td>Generic?</td>
<td>Duration</td>
<td>Cost</td>
</tr>
<tr>
<td>Quillichew ER</td>
<td>No</td>
<td>8 hours</td>
<td>$275</td>
</tr>
<tr>
<td>Adzenys XR–ODT</td>
<td>No</td>
<td>10 to 12h</td>
<td>$280</td>
</tr>
</tbody>
</table>
# Chart by dosage form

<table>
<thead>
<tr>
<th>Capsule can be sprinkled</th>
<th>Generic?</th>
<th>Duration</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focalin XR</td>
<td>Yes</td>
<td>8 to 12 h</td>
<td>$129</td>
</tr>
<tr>
<td>Ritalin LA</td>
<td>Yes</td>
<td>6 to 9 h</td>
<td>$135</td>
</tr>
<tr>
<td>Metadate CD</td>
<td>Yes</td>
<td>6 to 9 h</td>
<td>$195</td>
</tr>
<tr>
<td>Adderall XR</td>
<td>Yes</td>
<td>10 to 12 h</td>
<td>$85</td>
</tr>
<tr>
<td>Aptensio XR</td>
<td>No</td>
<td>12 h</td>
<td>$202</td>
</tr>
<tr>
<td>Vyvanse</td>
<td>No</td>
<td>10 to 12h</td>
<td>$253</td>
</tr>
<tr>
<td>Concerta</td>
<td>Yes</td>
<td>12 h</td>
<td>$178</td>
</tr>
<tr>
<td>Intuniv</td>
<td>Yes</td>
<td>8 to 12 h</td>
<td>$32</td>
</tr>
<tr>
<td>Evekeo</td>
<td>No</td>
<td>9 h</td>
<td>$168</td>
</tr>
<tr>
<td>Strattera</td>
<td>No</td>
<td>10 to 12 h</td>
<td>$377</td>
</tr>
<tr>
<td>Kapvay</td>
<td>No</td>
<td>10 to 12h</td>
<td>$175</td>
</tr>
</tbody>
</table>
Rx Count, 2016 through June

- Generic Adderall: 3,700
- Vyvanse: 800
- Evekeo: 500
- Strattera: 300
- Guanfacine ER: 200
- Intuniv: 100
- Clonidine ER: 50
- Methylphenidate CD: 50
- Generic Concerta: 300
- Dextmethylphenidate ER: 30
- Daytrana: 20
Choose the correct statement

- A) Evekeo is essentially a copy of Adderall XR
- B) Adderall XR (and generic) capsules can be opened and sprinkled on applesauce for patients with difficulty swallowing
- C) Strattera capsules can be opened and sprinkled on applesauce
- D) NO capsule should ever be opened and sprinkled
Umbilical Cord Care: Best Practice

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Objectives: The medical staff will...

- Identify and understand best practice protocol for topical umbilical cord care
- Determine the importance of maintaining one standard throughout Mesa County regarding umbilical cord care
- Clarify why dry cord care is best practice in the US in comparison with other topical agents
- Explain each step of cleaning the umbilical cord, including s/sx of when to seek additional medical care.
What is the protocol for topical umbilical cord care at St. Mary’s Hospital in Grand Junction, CO?

- A: Alcohol swabs
- B: Triple dye
- C: Dry cord care
- D: Olive oil
What percentage of infants will contract omphalitis in the US?

- A: 0.05%
- B: 0.5%
- C: 5%
- D: 15%
What is considered best practice for topical umbilical cord care in the US?

- A: Alcohol swabs
- B: Triple dye
- C: Dry cord care
- D: Olive oil
Healthy Umbilical Stump

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 5</th>
<th>Day 9</th>
<th>Day 12</th>
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Omphalitis
Literature Review

- Alcohol prolongs cord separation time, therefore increasing risk for omphalitis
- Dry cord care reduces cord separation time