<table>
<thead>
<tr>
<th>Pain Reliever</th>
<th>Cost/Use $USD</th>
<th>Prep Time</th>
<th>Ease for Nursing</th>
<th>Ease for Pharmacist</th>
<th>Duration after Discontinuation</th>
<th>Pain Effectiveness</th>
<th>Ease of Cannulation†</th>
<th>Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buzzy®</td>
<td>$0.20/ $2.20 w/ dispos-able ice wings</td>
<td>1 Minute</td>
<td>***</td>
<td>*****</td>
<td>30 Seconds</td>
<td>*****</td>
<td>1,2,4,5,6,8,10,24,25</td>
<td>Introduce to patient before applying; clean reusable wings between patients</td>
</tr>
<tr>
<td>Buffered Lidocaine</td>
<td>$2.00</td>
<td>1 Minute</td>
<td>**</td>
<td>***</td>
<td>10 Minutes</td>
<td>*****</td>
<td>***</td>
<td>Nurses personally prefer to LMX; more waste.</td>
</tr>
<tr>
<td>c 30g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Spray</td>
<td>$0.50</td>
<td>10 Seconds</td>
<td>*****</td>
<td>*****</td>
<td>30 Seconds</td>
<td>*</td>
<td>*</td>
<td>Not recommended under age 18y</td>
</tr>
<tr>
<td>DistrACTION® Cards</td>
<td>$0.01</td>
<td>10 Seconds</td>
<td>*****</td>
<td>*****</td>
<td>N/A</td>
<td>*****</td>
<td>7,11</td>
<td>97% say better phlebotomy experience</td>
</tr>
<tr>
<td>EMLA®</td>
<td>$6.00</td>
<td>60 Minutes</td>
<td>*</td>
<td>***</td>
<td>2 Hours</td>
<td>*****</td>
<td>**</td>
<td>Vasoconstricts until 90 min; improved IV success after 2 hours</td>
</tr>
<tr>
<td>J-Tip®</td>
<td>$3.90 unit/ $2-5 Pharmacy Filling</td>
<td>1 Minute</td>
<td>***</td>
<td>*</td>
<td>10 Minutes</td>
<td>*****</td>
<td>14</td>
<td>Warn about loud pop</td>
</tr>
<tr>
<td>L.M.X.4®</td>
<td>$4.00</td>
<td>20 Minutes</td>
<td>*</td>
<td>**</td>
<td>20 Minutes</td>
<td>*****</td>
<td>1</td>
<td>Try plastic cling wrap instead of Tegaderm for comfort.</td>
</tr>
<tr>
<td>Synera®</td>
<td>$15.00</td>
<td>20 Minutes</td>
<td>**</td>
<td>**</td>
<td>90 Minutes</td>
<td>*****</td>
<td>*****</td>
<td>Toxic if chewed; hot; best depth (8.11mm)</td>
</tr>
<tr>
<td>Zingo®</td>
<td>$14.00</td>
<td>1 Minute</td>
<td>***</td>
<td>***</td>
<td>10 Minutes</td>
<td>***</td>
<td>**</td>
<td>Most Waste</td>
</tr>
</tbody>
</table>

*=least | ***=intermediate | *****=best | Non-prescription products underlined | †: (Compared to nothing)
**Value Analysis**

**Save Time, Same Relief** – Delay in obtaining labs is the major barrier to ED flow. Buzzy® improves IV success on the first stick 3x. An IV with Buzzy takes 3.5 minutes, while an IV with LMX takes 40.5 minutes, but both have equivalent pain relief. 81% of phlebotomists found Buzzy made lab draws easier, 0% said it made it harder.

**Improve Patient Satisfaction** – Patients love Buzzy and have mentioned it by name on Press Gainey Surveys (“Tell Buzzy I love him”). In an inpatient trial in an adult ward, using Buzzy raised HCAHPS scores to achieve the 82% positive goal, which fell below goal again when Buzzy was discontinued for a “quiet on the ward” initiative.

**How Buzzy Increases HCAHPS satisfaction scores.** In this adult medical ward, the green line represents the goal of 82% of patients saying the staff “always” do everything to help with pain. The black line represents the actual percentages. After the Buzzy® initiative was introduced, satisfaction with helping with pain crested to an all-time high. A second initiative to quiet the ward replaced the Buzzy® initiative in September.

**Safety** – Buzzy does not alter lab values when used in compliance with lab collection standards. Vaccines, antibodies, and biologic products are stable to -80F, so injections are not affected by ice. Prolonged application of ice can trigger cold agglutinins when used for phlebotomy. Buzzy is FDA cleared to “control pain associated with injections, venipuncture, IV starts, cosmetic injections” and other pain indications.
Bibliography


20: Wallace MS, Kopecky EA, Ma T, Brophy F, Campbell JC. Evaluation of the depth and duration of anesthesia from heated lidocaine/tetracaine (Synera) patches compared with placebo patches applied to healthy adult volunteers. Reg Anesth Pain Med. 2010 Nov-Dec;35(6):507-13 PMID:


