### Elequil Aromatabs<sup>®</sup> Aromatherapy Alleviates Negative Emotions and Improves Patient Experience:

# How Aromatherapy Can Increase Patient Volumes and Boost Satisfaction Scores

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#### Introduction

It will come as no surprise to most healthcare professionals that medical procedures and hospital visits can trigger a wide array of emotions in patients, with numerous factors at the root cause of these emotions.<sup>2,3,4</sup>

Alleviating negative emotions and improving the well-being of patients is important for physical and mental health as well as overall patient satisfaction and may lead to higher patient satisfaction ratings for healthcare facilities.

A simple and cost-effective solution is to employ aromatherapy, a non-pharmacological approach that uses pure essential oils to promote physical, psychological, and emotional balance. Aromatherapy has been shown to be a viable option for addressing these emotions and improving the patient experience.<sup>5</sup>

### **Patient Survey**

To better understand the prevalence and causes for these emotions and explore the benefits of using aromatherapy in a clinical setting, a blind, random, anonymous online survey was conducted on July 1, 2021. Survey respondents were as follows:

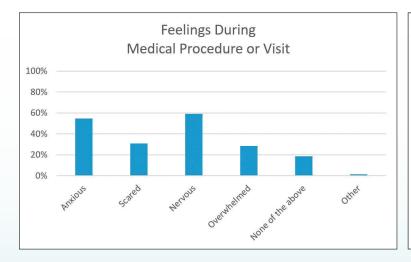
- Males and females age 18 and over from across the United States
- Had at least one of the following medical procedures or visits: MRI exam, surgery, emergency room visit, hospital stay
- Questions addressed aromatherapy in general as well as Elequil Aromatabs<sup>®</sup>, an aromatherapy product made for the clinical setting that adheres to the patient's clothing or gown to provide personal aromatherapy
- · Total of 275 responses included in the analysis

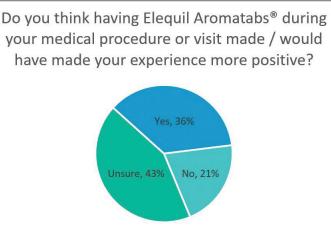
### **Key Discoveries**

Emotions During Medical Procedure or Visit	Responses About Elequil Aromatabs Aromatherapy	
<b>59%</b> of respondents said they felt nervous.	Of those who received Elequil Aromatabs, 83% said it made their experience more positive.	55% of all respondents said being offered Elequil Aromatabs would make them feel cared for.
<ul><li>55% of respondents said they felt anxious.</li><li>31% of respondents said</li></ul>	Of those who received Elequil Aromatabs, 59% said it helped with their feelings of anxiousness, being scared, nervous, or overwhelmed.	36% of all respondents thought Elequil Aromatabs would help with their feelings of anxiousness, being scared, nervous, or overwhelmed.
they felt scared.  28% of respondents said they felt overwhelmed.	Of those who received Elequil Aromatabs, 72% said they would be more likely to go to a medical facility because they offer Elequil Aromatabs.	36% of all respondents said they would be more likely to go to a medical facility because they offer Elequil Aromatabs.

#### A Deeper Dive into the Survey Data

The charts below illustrate the responses from all 275 survey<sup>7</sup> participants to several key questions.





## What Causes These Emotions and What Are the Effects?

Medical procedures and hospital stays can cause people to feel anxious, scared, nervous and overwhelmed — or worse. Medical trauma, i.e., trauma experienced as a result of medical procedures, illnesses, and hospital stays can have lasting effects. Those who experience medical trauma can develop clinically significant reactions such as post-traumatic stress disorder (PTSD), anxiety, depression, complicated grief, and somatic (sleep) complaints. In addition to clinical disorders, secondary crises — including developmental, physical, existential, relational, occupational, spiritual, and of self — can lead people to seek counseling for ongoing support, growth, and healing.8

There's a wide variety of causes for these feelings. For some, the illness is the primary cause of the traumatic reaction while for others, the medical setting is a contributing factor.<sup>9</sup>

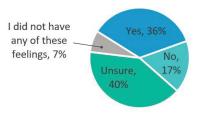
### In particular, MRI patients can experience fear and anxiety for many reasons, such as:10

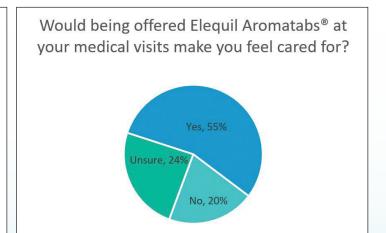
 Fear of enclosed spaces (claustrophobia). This is a common reason people have for fear and anxiety or even avoiding an MRI.

- Fear of the unknown. Many people do not understand what an MRI is or how it works.
- Fear of loud noises. Although most people tolerate
  the thumping noise made by an MRI machine, those
  with PTSD, especially military veterans, sometimes say
  it reminds them of helicopters or gunfire.
- Fear of radiation. Some people fear that an MRI uses radiation that is harmful to their health.
- Fear of contrast dye. Some people have an allergic reaction to the dye, although this is rare.
- Fear of being left alone. Although the MRI technologist is always nearby, patients may have this fear.
- Fear of embarrassment. People often dread medical tests because they have to change into a medical gown or because other people may see how nervous they are.

The anxiety or worry patients often feel before undergoing a scan or receiving the results of an examination is sometimes referred to as "scanxiety." This fear is common among patients and is often related to the fact that many have already dealt with negative results from scans, and this memory can fuel feelings of uncertainty and intensify feelings of fear and anxiety.<sup>11</sup>

Do you think having Elequil Aromatabs® during your medical procedure or visit helped / would have helped with your feelings of anxiousness, being scared, nervous, or overwhelmed?





### Similarly, there are numerous reasons why someone may be scared or fearful about surgery, including:<sup>12</sup>

- · Fear of the unknown
- Worrying about the surgery not being successful
- · Fear of the anesthetic
- · Having to recover around strangers
- · Fear of losing control
- Pain
- · Not being able to recover
- · Being in an unfamiliar environment

While the procedures themselves can certainly elicit serious psychological reactions in patients, the environment in which medical treatment takes place can also influence their emotional well-being. For many people, the hospital or other clinical setting is an environment that is very different from their own and the physical surroundings can contribute to stress.<sup>13</sup>

#### Survey Respondents Talk About Their Emotions

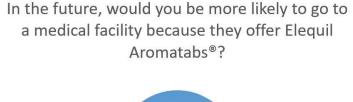
Respondents to the survey<sup>14</sup> expressed a wide variety of reasons for why they felt the way they did during their medical procedure or visit.

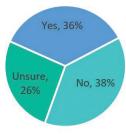
"The [MRI] test itself is anxiety-provoking for me due to being slightly claustrophobic, but the height of my worry is centered on what the test results will show. The way my mind works, I start speculating the worst and all that can come of it from more testing to procedures and such. This becomes overwhelming and it takes great effort to bring it under control."

"The thought of being 'put out' and having no idea what's happening to me makes me cringe. I hope I don't have to ever be put to sleep again!"

"[I was] not sure of the results of surgery [and] anticipating the resulting pain after surgery."

"I feel anxious inside hospitals and around doctors, even for a checkup. I have never worried about the surgeries or recovery themselves."





In comparing the responses from all survey respondents vs. those who received Elequil Aromatabs®, the percentage of respondents who said they would be more likely to go to a medical facility because they offer Elequil Aromatabs increases from 36% to 72%, which may be attributable to their familiarity with Elequil Aromatabs compared to those who were unfamiliar with the product.

"I have White Coat Syndrome. ER's scare me, doctors scare me, and I'm always feeling like they're either not going to care or give me horrible news."

"[There was] little empathy from staff, poor interpersonal interactions."

"[I felt anxious] because I was not sure what and how bad my situation was when I entered the emergency room."

"The [MRI] procedure made me nervous. The process and the environment."

"[I felt anxious and scared because of] the loud [MRI] machine noises and being alone in the room."

"[I am] always nervous with surgery, worrying about what 'could' happen."

"I was alone and thought the results would be dire."

"[I was] unsure what to expect. Nervous about allergic reaction to the [MRI] dye. Nervous about results."

"I had an undiagnosed problem and was worried it might be terminal."

"[l] was in pain, confused, worried about medical expense, and concussed."

"I was worried [about the] finances to pay for it, anxiety of the [MRI] procedure, and worry of the outcome results."

"Being in a loud [MRI] tube feels a bit claustrophobic."

"The anesthesia was scary for me."

"[I felt the way I did because of the] long time waiting for test results and long needles."

"[It was my] first time staying overnight in a hospital."

"[I felt overwhelmed] waiting for the MRI plus the pain I was experiencing was too much."

### **Summary and Conclusions**

Aromatherapy has been shown to improve patient satisfaction, reduce perceived stress levels, and provide a sense of well-being for patients.<sup>15</sup> Although the survey<sup>16</sup> showed only a small percentage of patients (12%) were offered aromatherapy, there is growing adoption among medical practitioners and administrators.<sup>17</sup>

Based on survey<sup>18</sup> responses from those who received Elequil Aromatabs® and those who did not, there's a significant opportunity to improve the patient experience and alleviate patients' feelings of anxiousness or being scared, nervous or overwhelmed during their medical procedure or visit. Notably, with 83% of respondents who received Elequil Aromatabs saying it made their experience more positive and 72% saying they would be more likely to go to a medical facility because they offer Elequil Aromatabs, patients who have used Elequil Aromatabs clearly welcome and appreciate the product and its benefits.

Furthermore, improving the patient experience may lead to higher patient satisfaction ratings and thus result in higher reimbursements.

- Hospital Consumer Assessment of Healthcare
   Providers and Systems (HCAHPS) inpatient survey.
   HCAHPS patient satisfaction scores play a pivotal role in hospital reimbursement through the Hospital Value-Based Purchasing Program: the higher a hospital's HCAHPS scores, the higher their reimbursements will be, and vice versa.<sup>19</sup>
- The Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery (OAS CAHPS) survey. The OAS CAHPS survey, implemented in January 2016 as a voluntary program, was designed to produce data on the patient's perspective that allows objective and meaningful comparisons between hospital outpatient departments (HOPDs) and free-standing ambulatory surgery centers (ASCs).<sup>20</sup> CMS plans to continue voluntary implementation of the OAS CAHPS survey through CY 2023, with participation linked to reimbursement beginning with CY 2024.<sup>21</sup>

The use of Elequil Aromatabs has the potential to not only improve patient satisfaction and well-being but may also result in increased volumes and higher reimbursements for healthcare facilities.

### Elequil Aromatabs® Aromatherapy

Elequil Aromatabs aromatherapy is a simple nonpharmacological intervention that uses 100% pure essential oils. Elequil Aromatabs have a unique controlled delivery system with easy hands-free application, adheres to the patient's gown or clothing, and allows minimum and maximum aroma exposure.

Lavender-Peppermint promotes relaxation during pain, helps comfort and calm anxiousness, and soothes queasiness



Lavender-Peppermint
Lasts up to 8 hours

Lavender and Lavender-Sandalwood promote relaxation during pain, help comfort and calm anxiousness



Lavender Lasts up to 8 hours



Lavender-Sandalwood Lasts up to 24 hours

Orange-Peppermint and Orange-Ginger uplift and can soothe queasiness



Orange-Peppermint Lasts up to 8 hours



Orange-Ginger Lasts up to 8 hours

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