



# COSMETIC INJECTABLES: A PRIMER FOR NURSE PRACTITIONERS

## Introduction & Gaps

**Introduction:** Nurse practitioners in primary care and other settings frequently care for patients with cosmetic issues, and they are well-positioned to perform a variety of injectable cosmetic procedures independently or with some degree of physician involvement, depending on state requirements. However, outside of those already trained as aesthetic nurse practitioners, they may lack knowledge of the many available treatment options, patient motivations, and safety considerations.

### Knowledge Gaps

- Nurse practitioners may not be familiar with the range of cosmetic injectable products available and their varied uses and effects.
- Beyond fundamentals first learned in nursing school and graduate programs, nurse practitioners may require a greater understanding of facial anatomy to improve patient outcomes with cosmetic injectables for facial rejuvenation.
- Nurse practitioners may not be familiar with the range of factors motivating patients to seek injectable cosmetic procedures and how these may better inform assessment and treatment plans.

## Program Information & Methods

**Programs:** Training occurred through an accredited on-demand video presentation. It was accredited for 5.25 contact hours of CE. A detailed provider workbook was created and hosted on the AANP website for download.

**Data Collected:** Changes in knowledge, competence, self-reported changes in confidence and practice habits, and identification of remaining gaps.

**Measurements and analysis:** Questions were asked before and immediately after the activity. A 60-day follow-up survey was sent to participants who completed the activity to identify any practice changes made.

- A paired analysis of pre/post results was conducted. These included all learners who completed the activity (n=5,457). N=120 for the follow-up survey, of which 60 self-report seeing a combined total of 633 patients who were positively impacted by the education.
- Demographics (pre), evaluation (post), and follow-up survey results shown here use descriptive statistics
- Tests used to identify statistically significant differences pre- to post:
  - McNemar test for each of 11 multiple choice knowledge/case questions
  - Wilcoxon test for % correct knowledge/case questions, and the confidence rating scale questions
- $P \leq 0.05$  indicates a statistically significant difference
- Effect Size (ES), to indicate the size of the change, was also calculated as appropriate (Cohen's  $d$ ): 0.20 = small, 0.50 = medium, 0.80 = large.

## Executive Summary

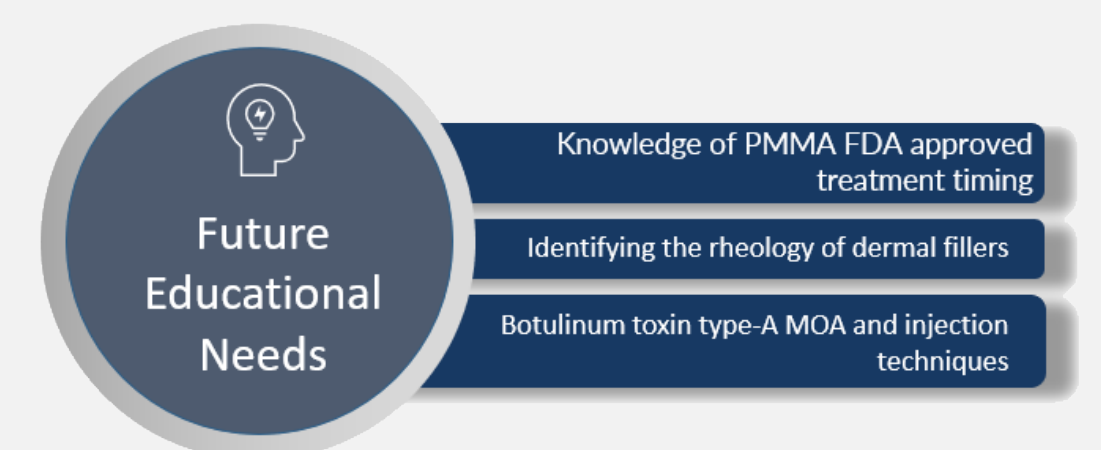
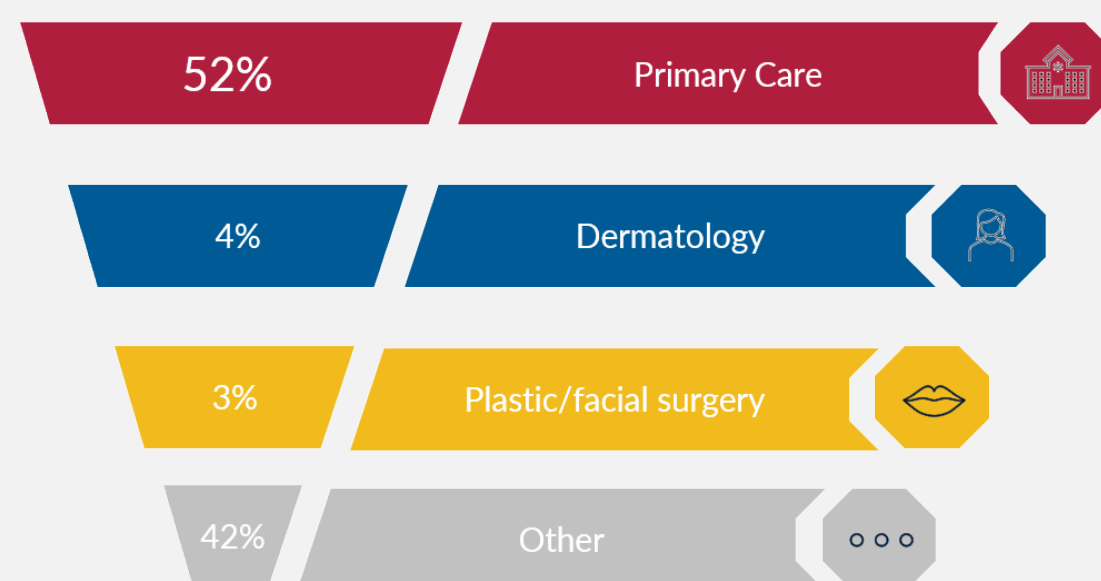
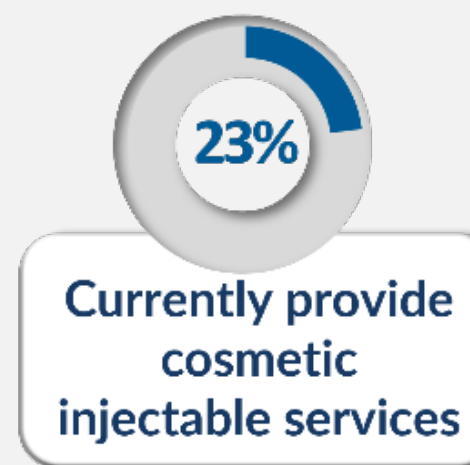
### Knowledge/competence increased significantly:

- Overall 16% absolute increase in correct answers to 11 knowledge/case questions from pre (46%) to post (62%) with a large effect size (Cohen's  $d = 0.75$ ).

### Confident (pre) to (post) increased significantly:

- There was a 41% absolute increase from pre (20%) to post (61%) for those reporting very and somewhat confident about "differentiating the mechanism of action (MOA) of biostimulators (collagen stimulators) from dermal fillers."
- There was a 39% absolute increase from pre (23%) to post (62%) for those reporting very and somewhat confident in "managing aesthetic patient expectations."
- There was also a 39% absolute increase from pre (20%) to post (59%) for those reporting very and somewhat confident in "selecting a hyaluronic acid filler based on the rheology of the product and desired effect."

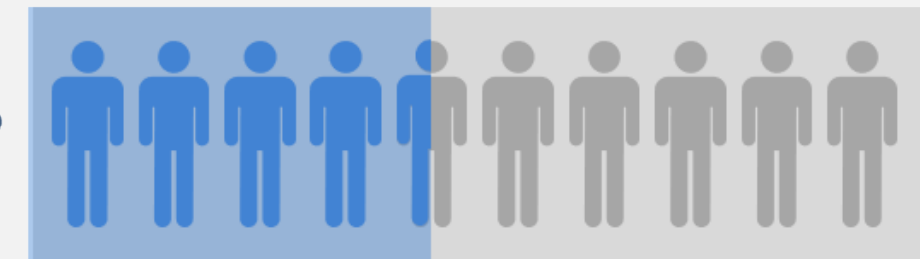
## Learner Demographics



## Change in Knowledge – Pre to Post

### Overall mean percent correct Pre to Post (11 multiple-choice questions)

**45.7%**  
Pre-Activity



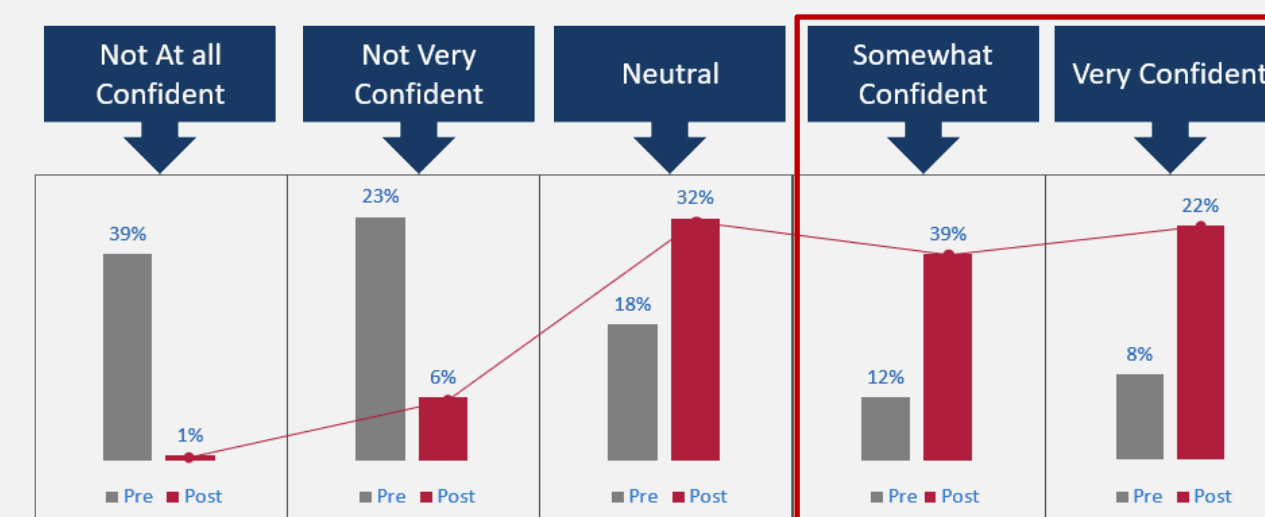
16.4% absolute increase in mean percent correct answers for 11 pre to post,  $P < 0.001$ ,  $ES = 0.75$  (large),  $n = 5,457$ , paired data.

**62.1%**  
Post-Activity

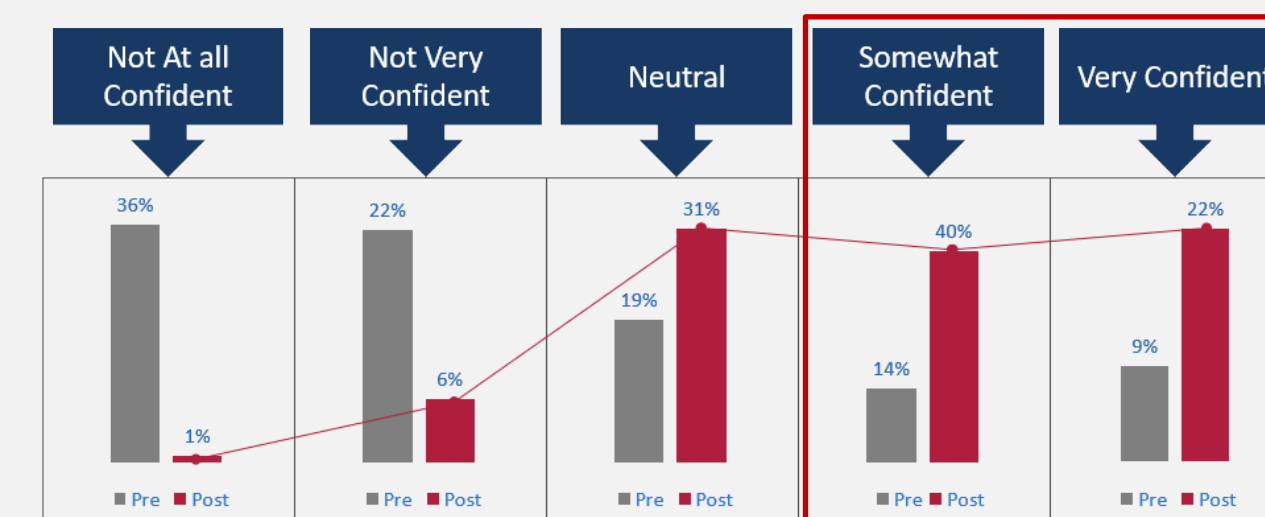


## Change in Confidence

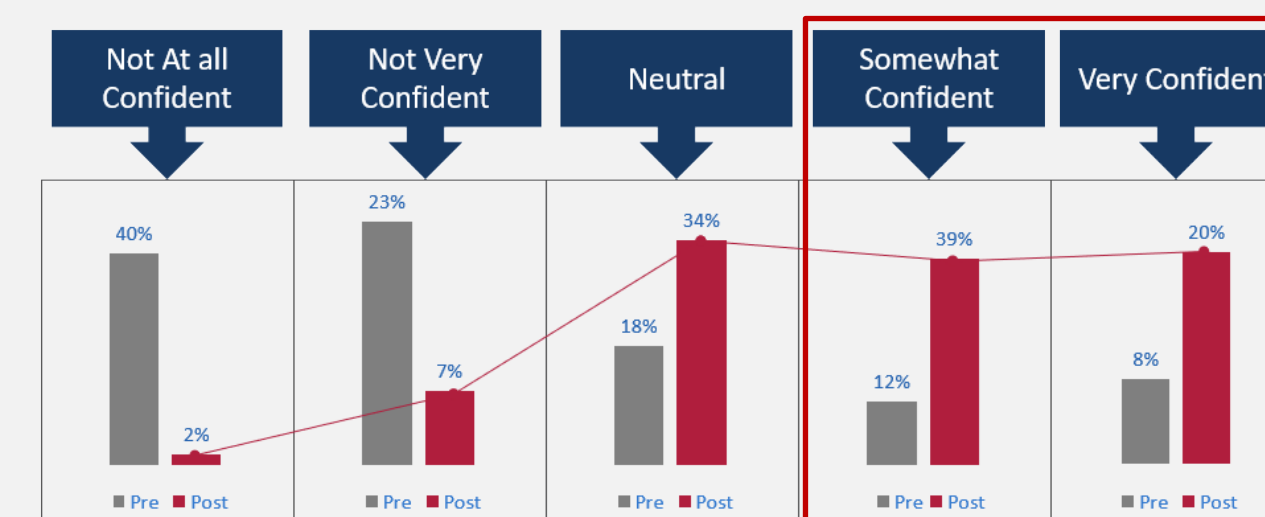
How would you rate your level of confidence in doing the following:



Differentiating the mechanism of action (MOA) of biostimulators (collagen stimulators) from dermal fillers



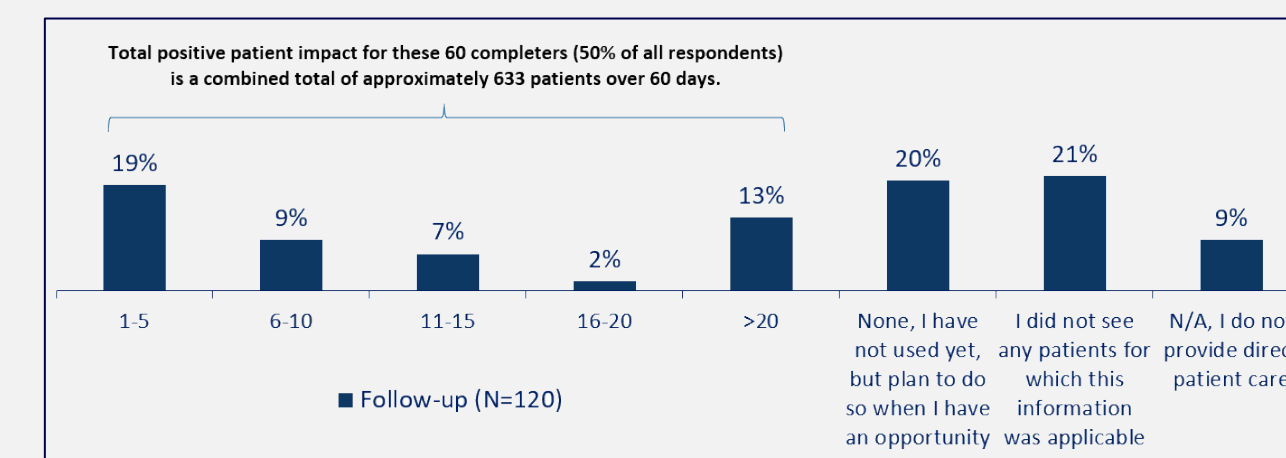
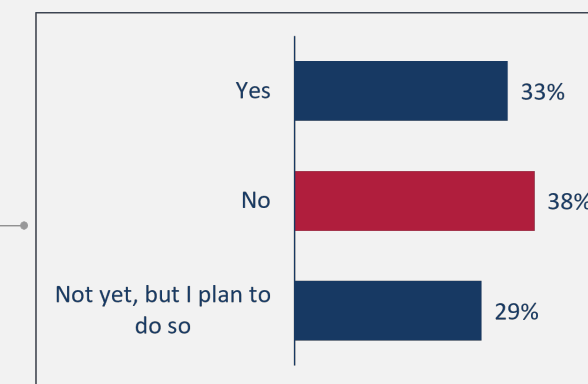
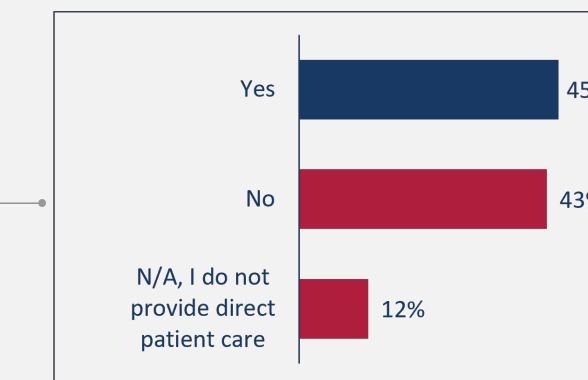
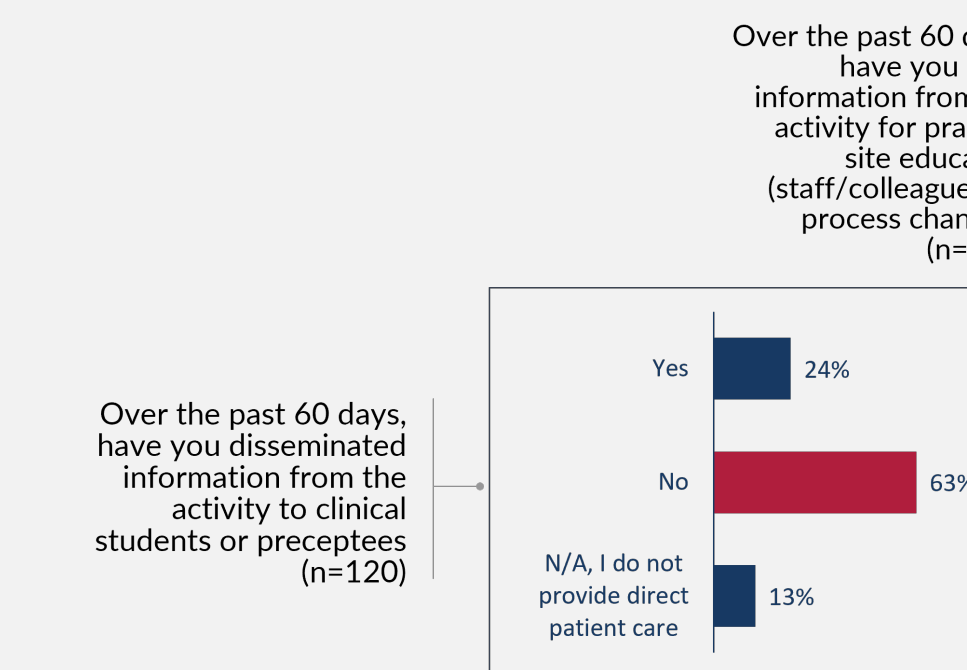
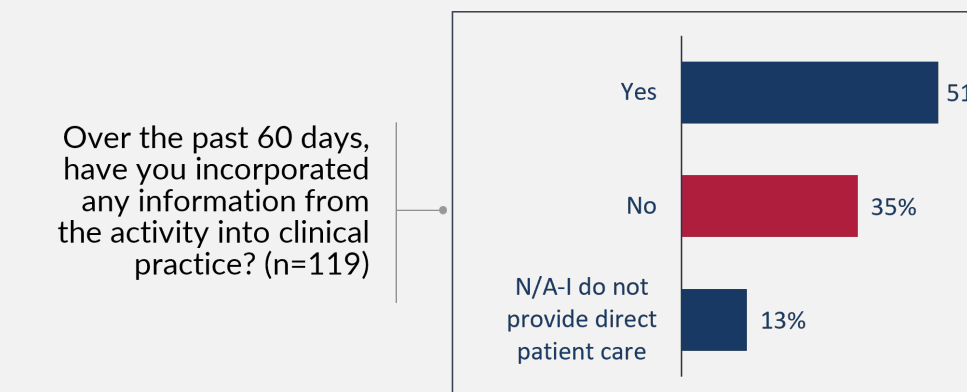
Managing aesthetic patient expectations



Selecting a hyaluronic acid filler based on the rheology of the product and desired effect

## 60-Day Follow-up (n=120)

### Practice Changes



### As a result of this activity, I have done the following:

