



Fluzone Vaccine and Influenza Market Update

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Fluzone[®] High-Dose
INFLUENZA VIRUS VACCINE

Fluzone[®]
INFLUENZA VIRUS VACCINE

Fluzone[®]
intradermal
INFLUENZA VIRUS VACCINE

Small. Simple. Smart.

sanofi pasteur

The vaccines division of sanofi-aventis Group



Agenda

- **2010 Fluzone Vaccine Campaign**
- **Influenza Disease Update and Vaccination Recommendations**
- **Sanofi Pasteur's Commitment to Driving Immunization**



Sanofi Pasteur: A Unique Partner in the Fight Against Influenza

Heritage

- 40 years of experience producing Fluzone vaccine
- Continually meets all customer commitments

Largest Supplier

- Two US influenza vaccine manufacturing facilities
- Capacity to manufacture up to 150 million total doses of trivalent inactivated vaccine
- Continuing to transition to 100% no-preservative presentations

Diverse Portfolio

- Indication down to 6 months of age
- High-Dose: First to address unmet need for a more robust immune response in persons 65 years of age and older
- Robust pipeline including quadrivalent and universal vaccines
- Continued investigation of new technologies, innovative products, and manufacturing efficiencies



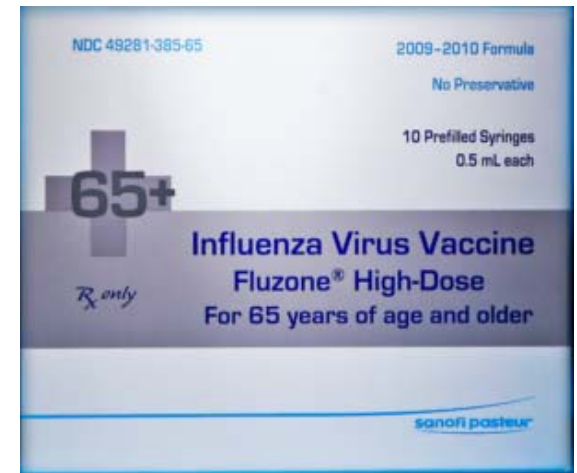
2010 Fluzone Vaccine Campaign Highlights

- **Over 70 million doses of Fluzone vaccine were delivered**
 - Delivery completed >1 month earlier than in 2009
 - Increased pediatric dose production due to becoming sole provider of pediatric indication
 - Managed latex-free labeling change
- **Sanofi Pasteur continued longstanding commitment to deliver every dose reserved by customers across all segments**
- **Launched Fluzone High-Dose vaccine for people 65 years of age and older**



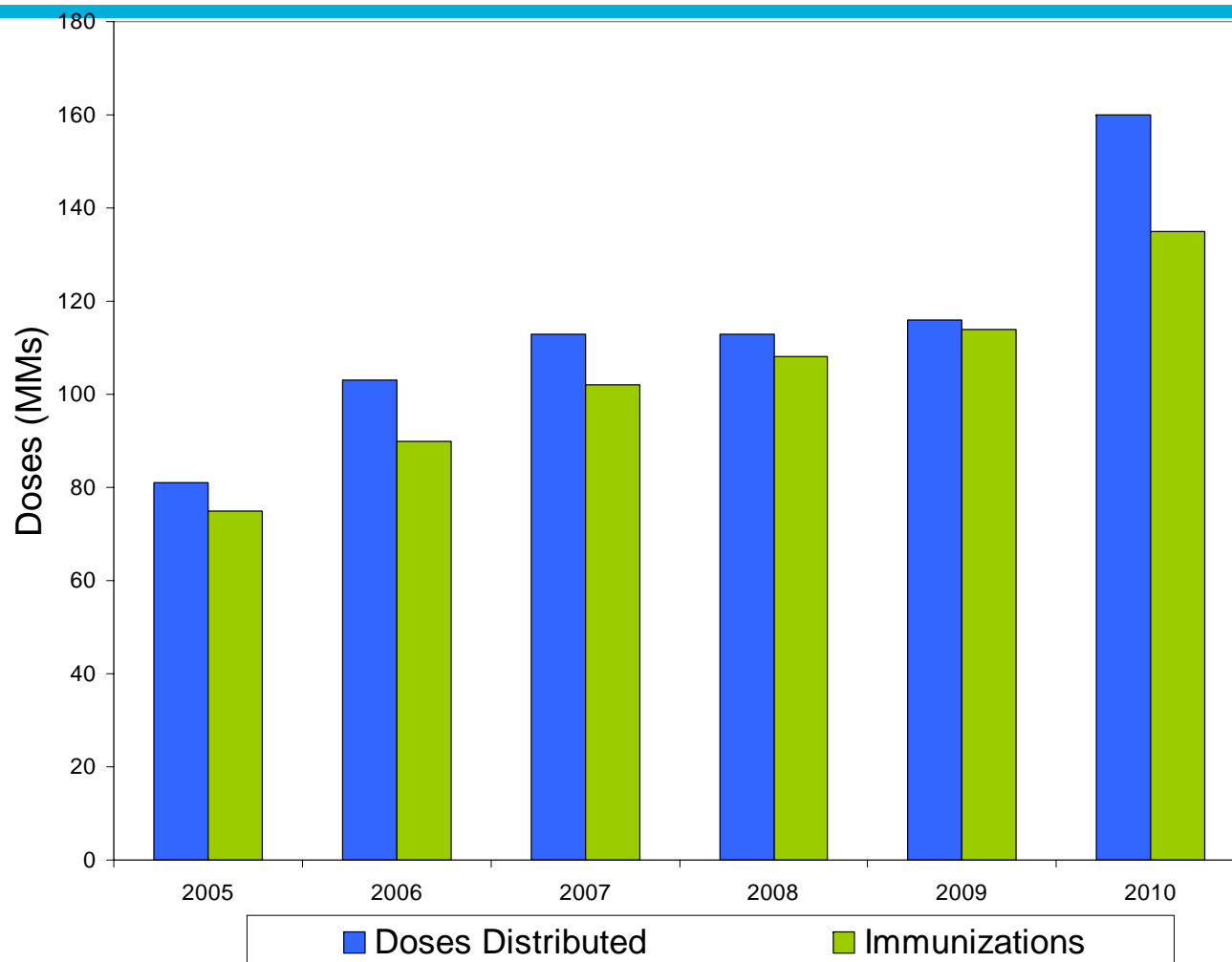
First Season Fluzone High-Dose Vaccine Available to Help Prevent Influenza



- ▶ People 65 years of age and older suffer disproportionately from influenza
 - Account for 90% of deaths and 63% of hospitalizations
- ▶ Aging, weakened immune systems do not allow them to respond as well to standard-dose influenza vaccine as younger adults
- ▶ Fluzone High-Dose vaccine was designed to generate a more robust immune response in people 65 years of age and older
 - Up to 80% greater response compared to Fluzone vaccine
 - Does not require introduction of an adjuvant
- ▶ ~10% of people 65 years of age and older who were immunized received Fluzone High-Dose vaccine





2010-2011 Season Immunization Rates Reached Highest Level Since Recovery from 2004 Shortage

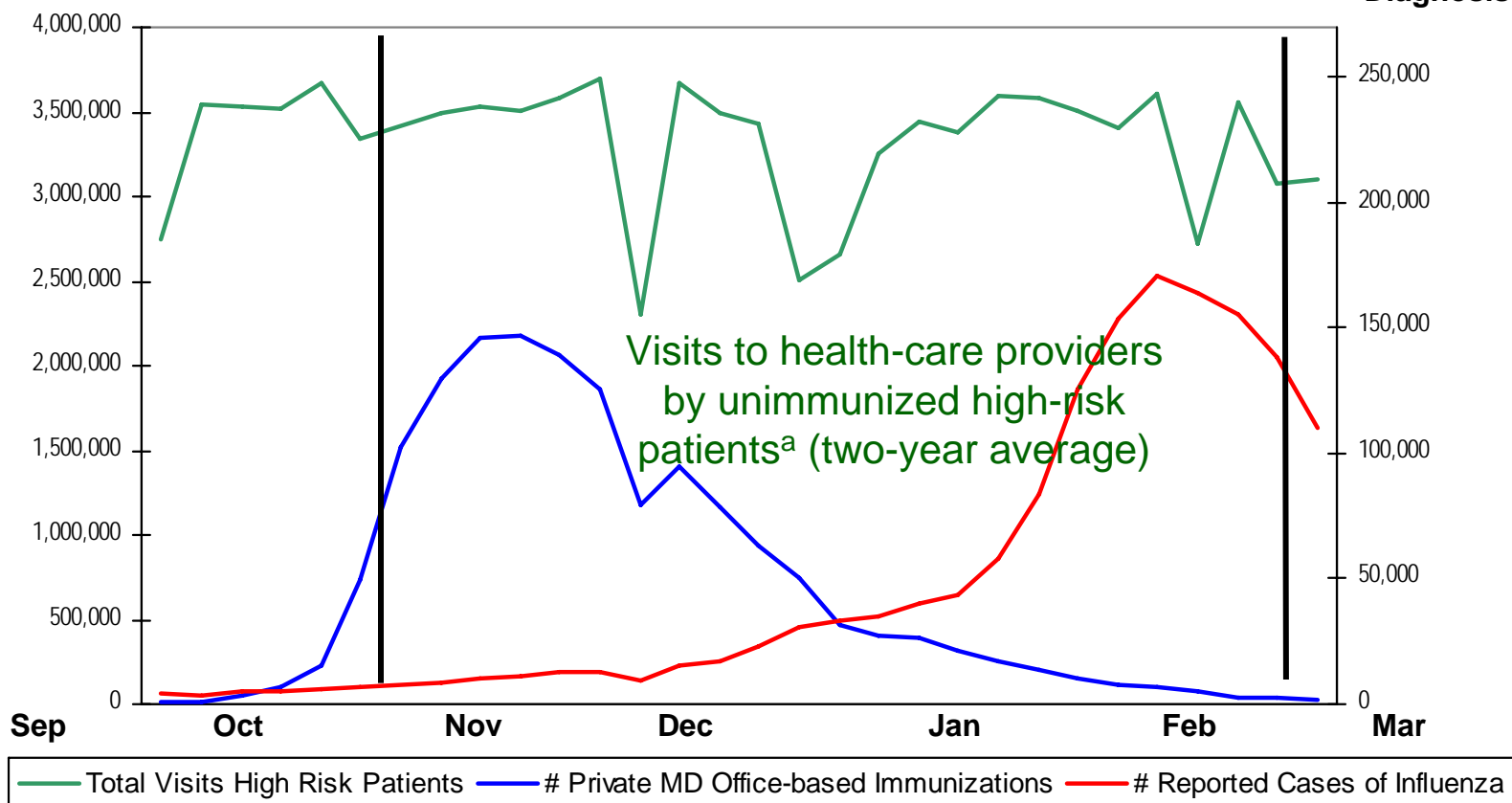


-  Pediatric and adult immunization rates increased 18% and 24% compared to last season
-  With universal recommendation in place, opportunity exists to grow immunization rates



Visits to Health-Care Providers by Unimmunized Persons During Influenza Season

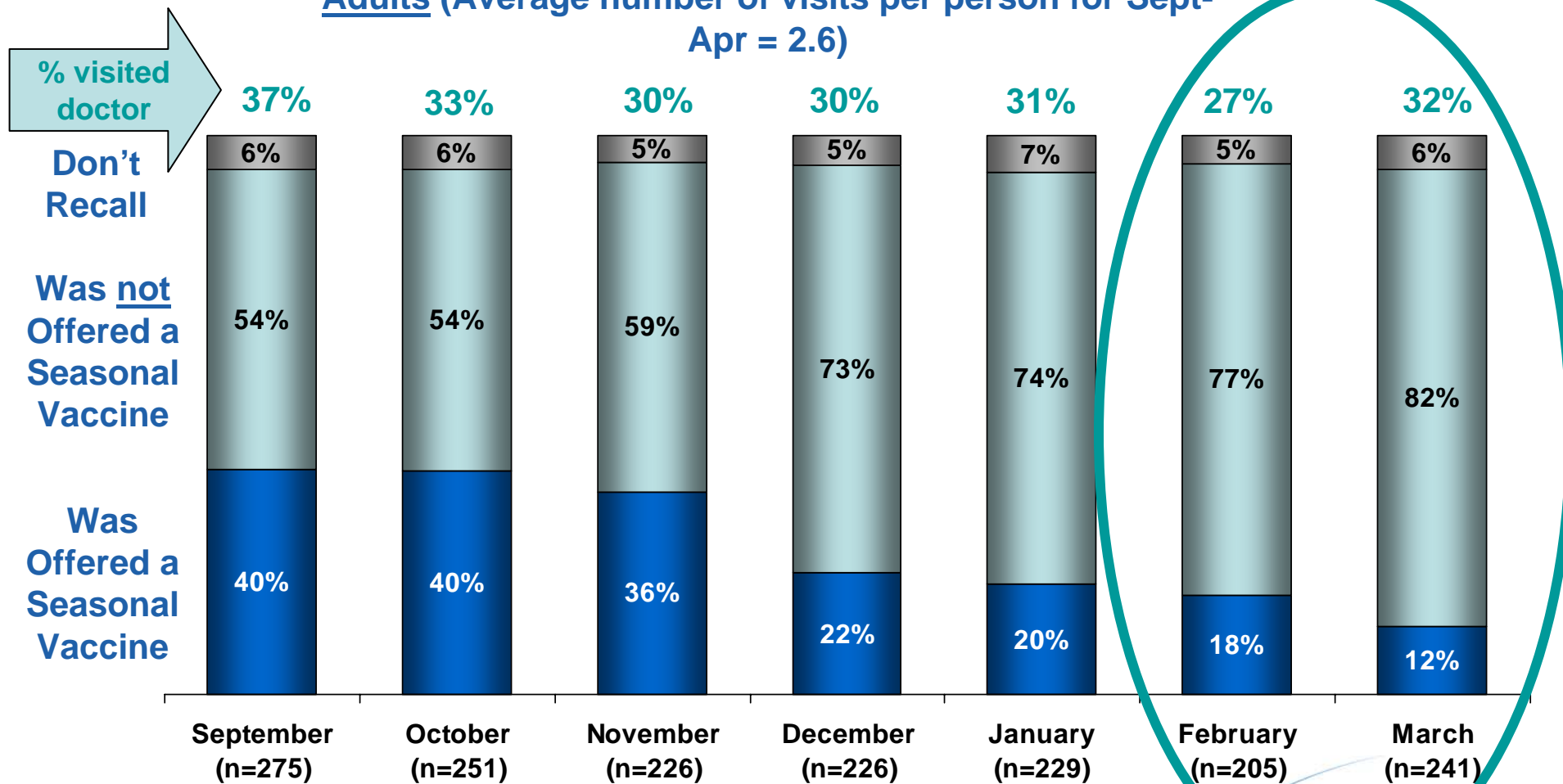
Patient Visits





Immunization Offered More Frequently Earlier in Season, but Decreases Significantly by December

Doctor Visits and Immunization Recommendations for Adults (Average number of visits per person for Sept-Apr = 2.6)



BASE: Those who visited their doctor's office during <month>.



Sanofi Pasteur Committed to Driving Immunization

- ▶ ***Faces of Influenza* campaign has reached billions of people since 2006**
 - For 2011-12 Season the *Faces* campaign will continue to aid with driving awareness nationally
- ▶ ***NBA Vaccines for Teens* continues to gain attention helping to drive teens to be immunized against influenza**
- ▶ **Continue to provide education and policy support regarding need for health care worker immunizations**



Fluzone Intradermal (Influenza Virus Vaccine)

A New Option for Influenza Prevention





Fluzone Intradermal - Influenza Protection in The First and Only Microinjection System

1.5mm, 30-gauge microneedle

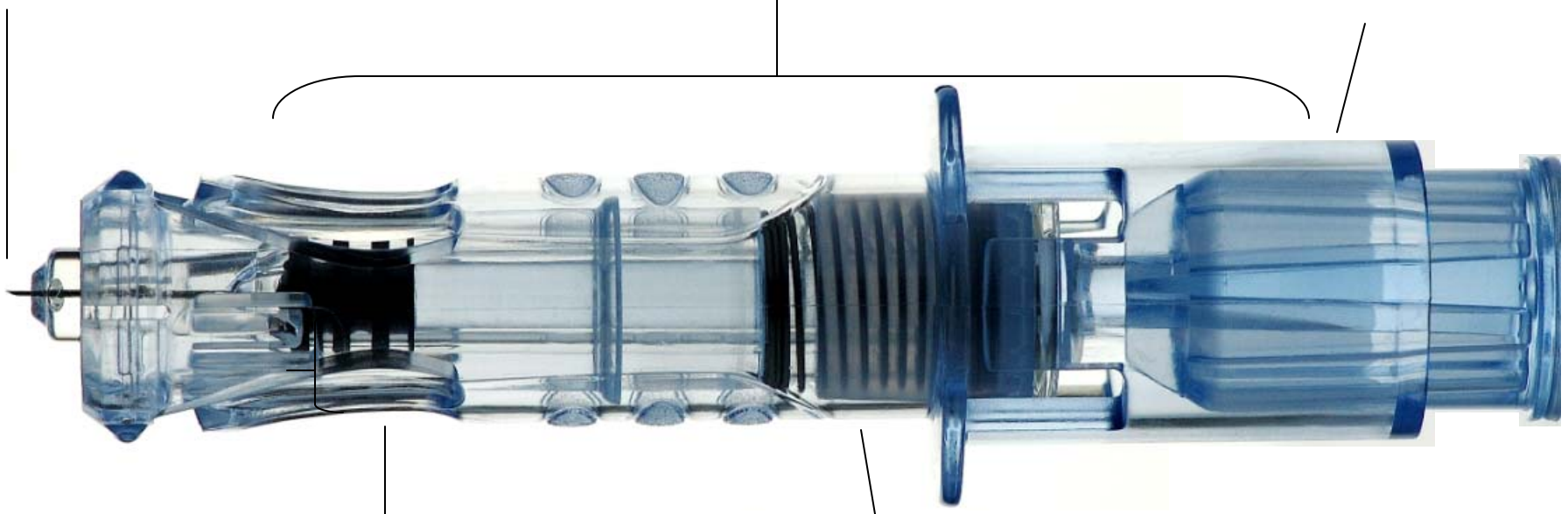
90% smaller than intramuscular (IM) needle, ensures consistent administration regardless of patient characteristics

Ready-to-use prefilled syringe

Requires no preparation or air purging

Peel-off lot stickers

Makes charting easier and could help save storage space



0.1mL dose, 9mcg HA of each strain

5X less volume and 40% less antigen than IM

Integrated needle-shield

Activated post-administration to cover needle and prevent re-use



Characteristics of the Microinjection System

Compact delivery

- Short needle (1.5mm) reduces possibility of damage to nerves and blood vessels
- 90% smaller than traditional needles
- Volume injected is 0.1mL: 5 times less than an IM injection

Consistent depth of injection

- Ensures reliable and easy delivery of an accurate dose of antigen into the dermal layer
- No need to vary needle length or injection technique by patient age, gender, muscle mass, or body mass index of adult vaccinees



Characteristics of the Microinjection System

✦ Ease of administration

- No air bubble purging of syringe is required
- Minimal training needed
- Well-accepted by clinicians

✦ Patient acceptance

- Needle is shorter, thinner, not readily visible
- May enhance compliance in needle-averse individuals

✦ Needle shield feature, activated post-vaccination

- Helps reduce risk of contamination, injury, and infection in health-care personnel
- Also helps prevent illicit re-use of needles





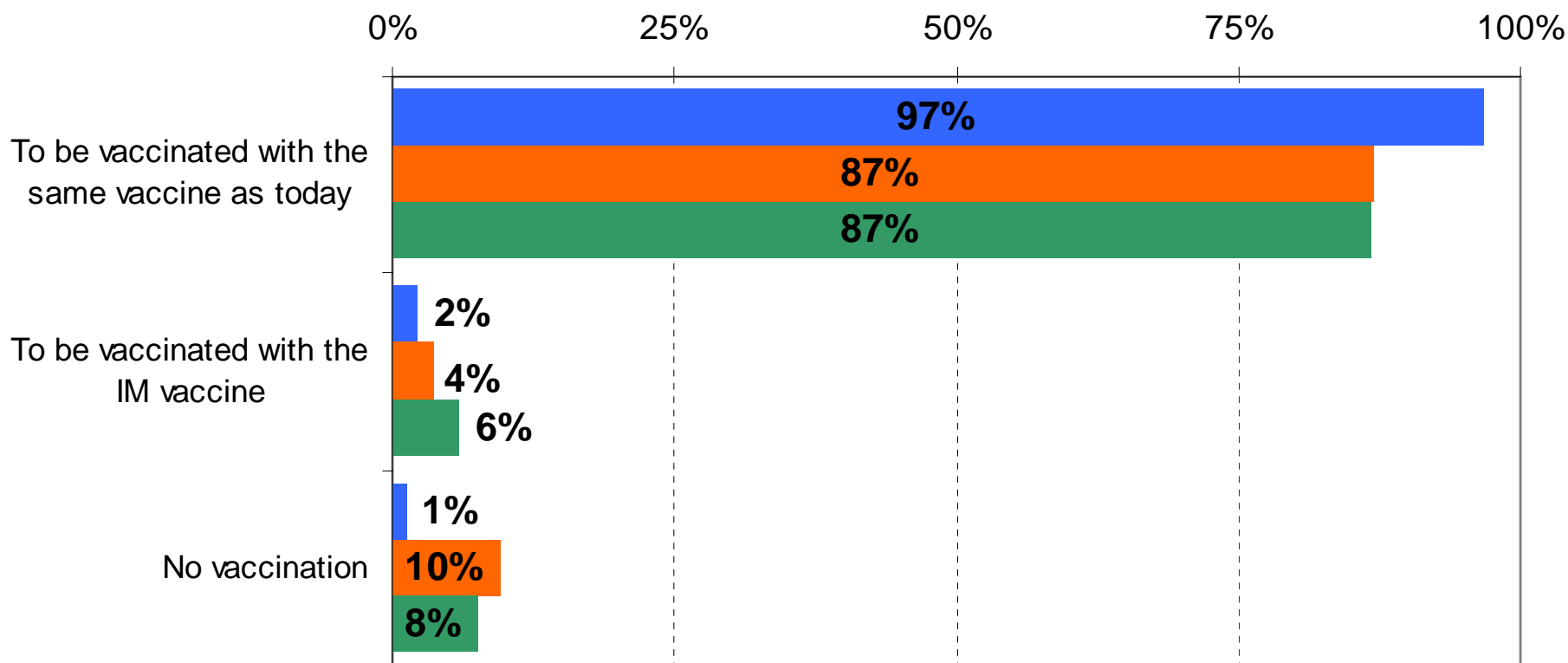
Post-Vaccination Survey of Patients Receiving Intradermal Vaccine in Australia and Argentina

Q. For next year's flu vaccine, would you consider the following?

■ Australia: Intanza (n=1382), Day 0

■ Argentina: Istivac ID (n=253), Day 0

■ Argentina: Istivac ID (n=208), Day 7-10





The National Influenza Vaccine Summit Mission is More Important Than Ever

- **Education will be critical to increasing immunization rates**
 - **Market research indicates that consumer demand for vaccination may be less than what providers are anticipating**
 - **Continue to raise awareness regarding universal recommendation**

- **To ensure that we achieve growth in immunization rates, we must make sure our messages are clear**
 - **Influenza is a serious disease and everyone is at risk**
 - **Vaccination is a safe and effective way to help prevent influenza**
 - **Vaccination must begin as soon as vaccine becomes available and continue throughout the full season**