



Teaching Primary Care Nurses Best Practice for Insulin Injections

South Texas Veterans Health Care System

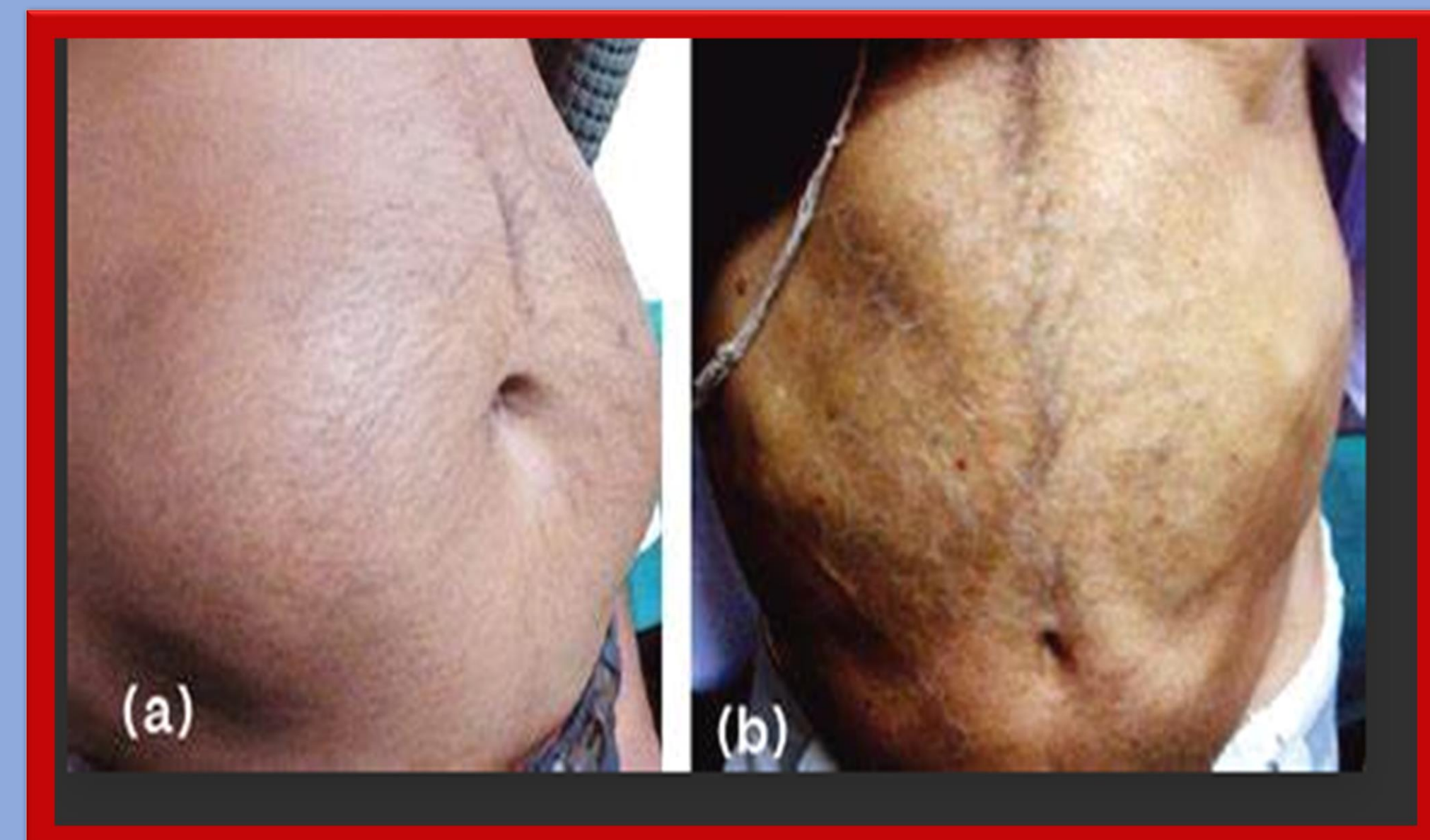
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BACKGROUND

- At the South Texas Veterans Health Care System (STVHCS), Veterans referred to the Diabetes Care & Education Specialist presented with increasing dosages of prescribed insulin, with unchanged blood glucose levels. Upon review of the Veterans' injection technique, and after a thorough abdominal assessment, non-visible scar tissue and marked signs and symptoms of lipohypertrophy (LH) were noted.
- Many Veterans complained of pain at the injection site and difficulty injecting their insulin.
- Veterans accumulate abdominal scar tissue from not rotating injection sites which prevents proper insulin absorption resulting in negative effects on glucose management.
- Most Veterans stated that they were taught to only inject their insulin into a small radius around the umbilicus, although current data shows that lack of site rotation promotes LH and inevitably poor insulin absorption.

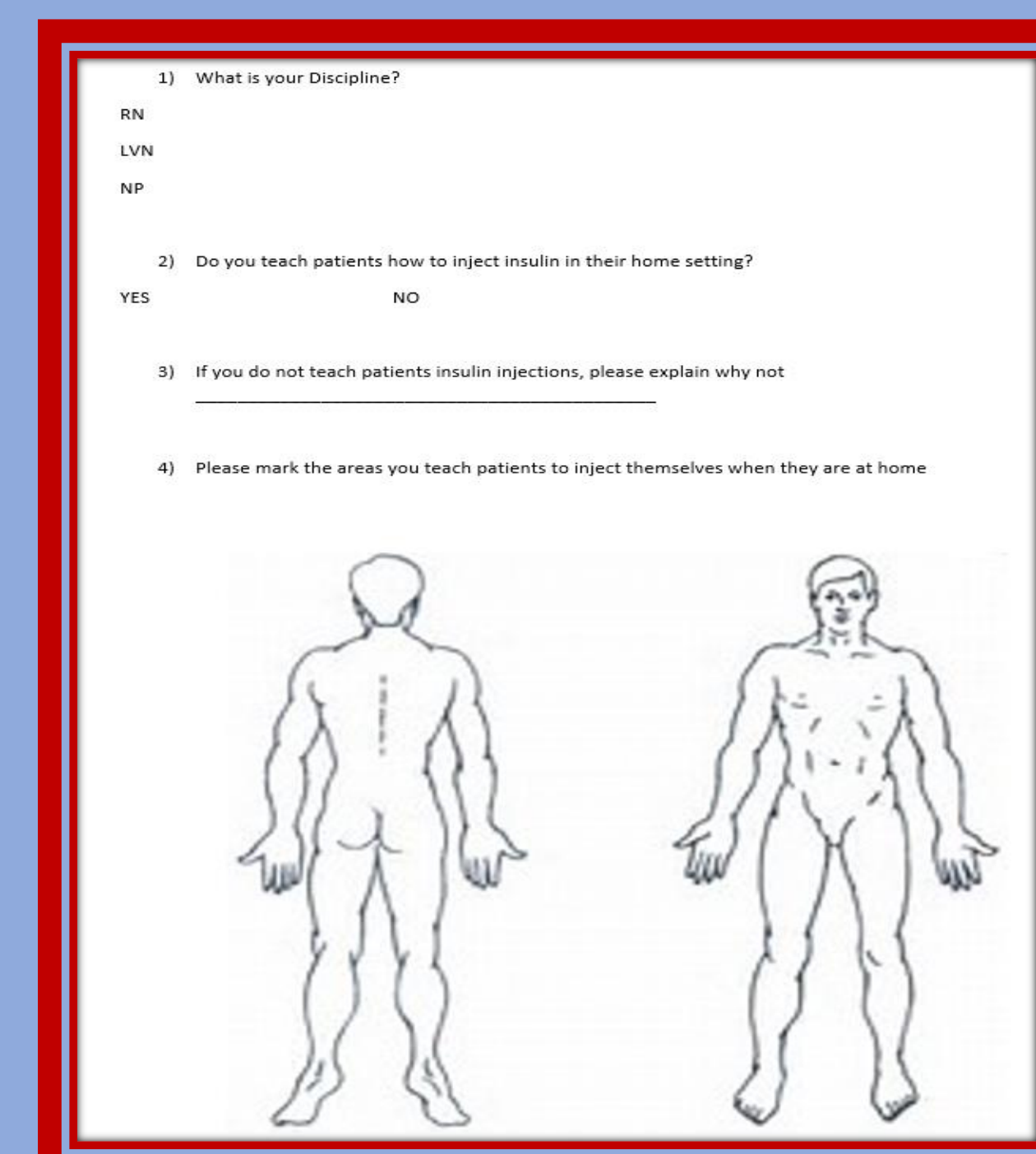


PICOT QUESTION

- P: Primary Care PACT nurses
- I: Will educating staff on best practice for insulin injection technique
- C: Compared to current teaching practices
- O: Empower staff to use best practice for insulin injection instruction

METHODS

- Surveys were distributed to Primary Care (PC) nurses to assess current knowledge of insulin injection technique.
- Created and distributed training toolbox to all PC clinics for nurses to use when training Veterans to administer insulin.
- Established Diabetes Champions in PC to serve as a resource and liaison to the Certified Diabetes Care and Education Specialist (CDCES).
- Created PowerPoint and educated staff on best-practices, with eight opportunities for attendance.
- Met with PharmD and Chief of Pharmacy, provided literature to validate that best practice is using 4mm needles, and 4mm needles are now the default selection.



PRE-IMPLEMENTATION

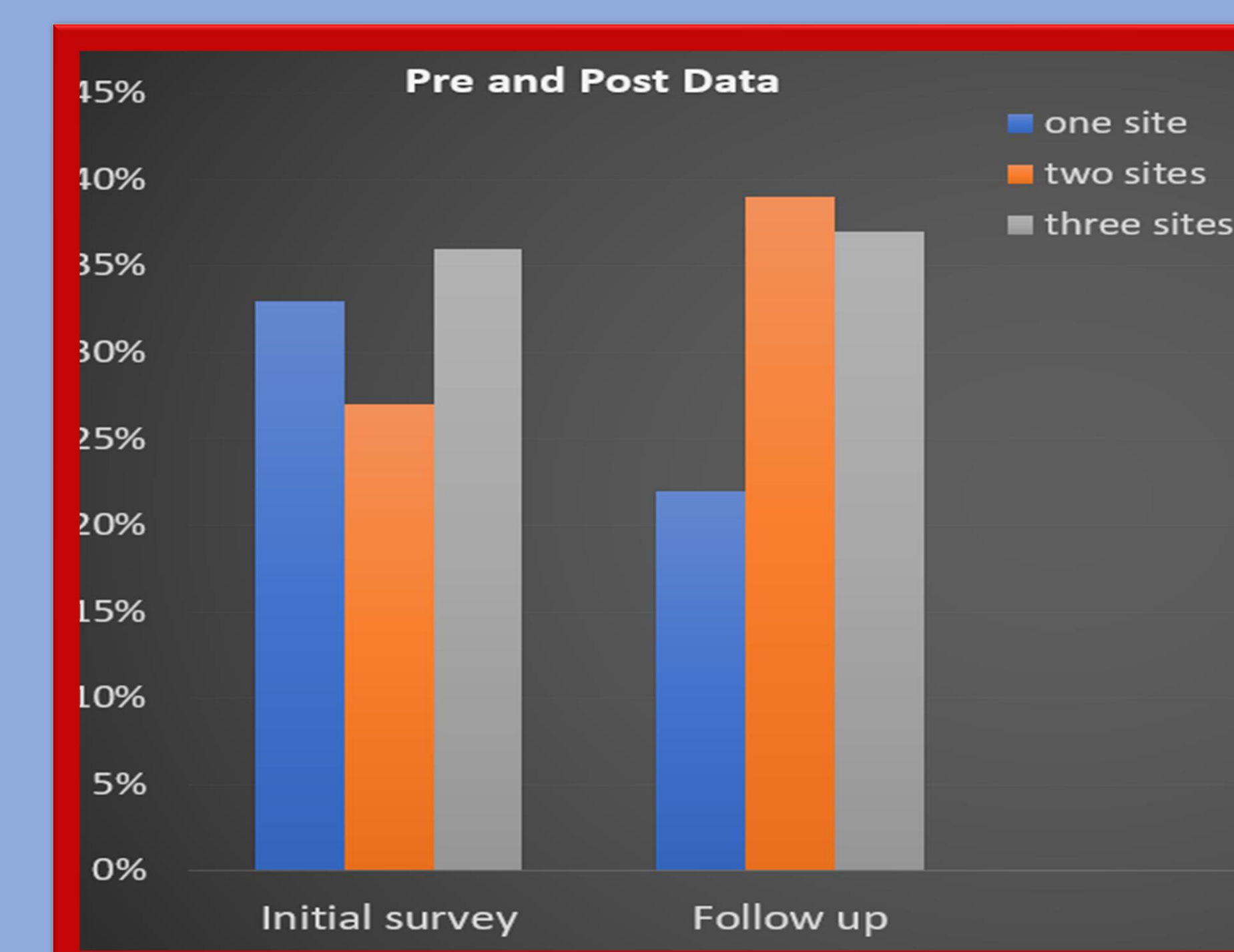
45 LVNs and RNs were surveyed

- 33% of staff taught Veterans one injection site only
- 27% of staff taught two injection sites
- 36% of staff taught all three injection sites
- 4% did not complete survey

RESULTS

54 LVNs and RNs were surveyed

- 22% of staff taught one injection site only (11% decrease)
- 39% of staff taught two injection site options (12% increase)
- 37% of staff assessed taught all three injection site options (1% increase)
- 2% did not complete survey
- Overall, 13% of nurses surveyed improved their practice on insulin site rotation.



LIMITATIONS

- Roughly 25% of PACT nurses participated in the survey
- High onboarding rate of nurses
- Training was not mandatory
- Unable to determine if those that participated in the survey attended the education offerings

SUSTAINABILITY

- Propose that education on best-practices for insulin injection administration be provided to all newly-hired nursing staff during orientation.
- Propose that education on best-practices for insulin injection administration be a mandatory annual competency.
- 6-month evaluation to assess sustainability

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REFERENCES

Available Upon Request

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