



ST VINCENT'S  
HOSPITAL  
MELBOURNE

# Hospital-wide Roll-out of Safety Pen Needles for Insulin Delivery Devices

A Diabetes Nurse Educator's Experience

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# Introduction

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## Background

Needle stick injuries to Healthcare Workers resulting from patients' own pen delivery devices have six times the incidence rate compared with disposable syringes. This places significant human and financial burdens for the nurses involved and health services as a whole <sup>(1)</sup>.

The US and European Union governments have mandated the use of Safety Engineered Devices through guidelines, regulations and policy. This is yet to occur in Australia <sup>(2)</sup>.

# Aim and Objectives

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**To successfully implement a change management initiative and hospital wide roll-out of an insulin safety pen needle.**

- Identify and meet with stakeholders
- Identify best practice insulin safety pen needle
- Develop and implement hospital-wide education in the use of the safety pen needle
- Change practice ensuring hospital-wide use of safety pen needle.

# Method

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- A planning workshop was organised involving the stakeholders: The diabetes education manager, infection control manager and medication safety pharmacist
- Current practice issues and barriers to introducing the safety engineered device were identified
- Collation of studies detailing risks, benefits and cost were reviewed
- Two month pilot was developed, implemented and evaluated
- A hospital-wide education schedule was planned and implemented following the pilot
  - Including Port Phillip Prison.

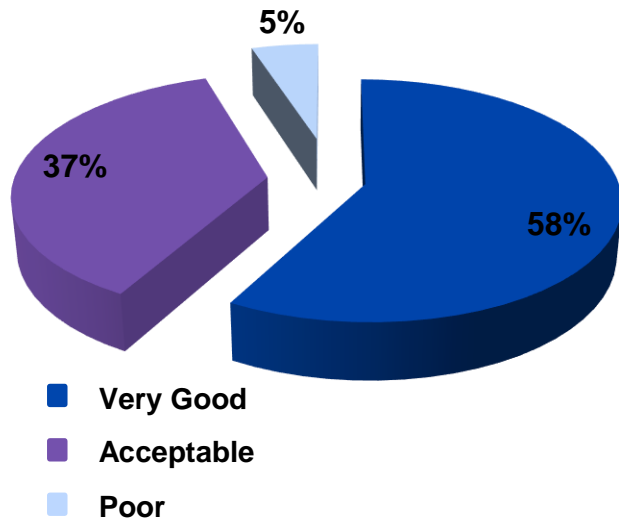
# Method

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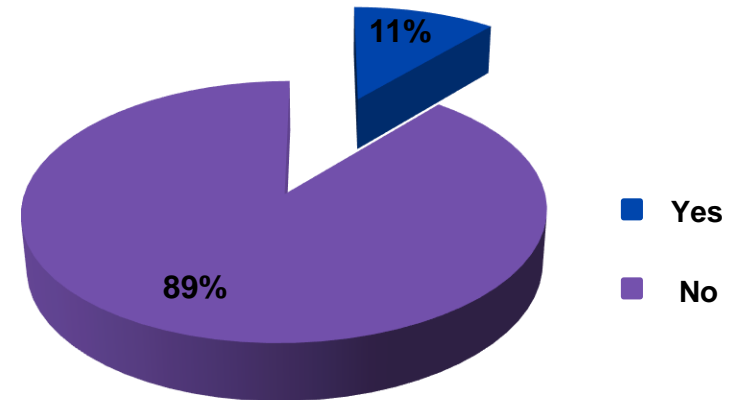
- Presentations were developed and given at:
  - Nurses Forums
  - Diabetes Update Days
  - Clinical nurse educator and pharmacy meetings
  - The Senior Nurses Advisory Council
  - Each ward and clinical department.

# Pilot Trial Results

## Overall ease of use and handling



## Did the product require a significant change in your technique?



# Pilot Trial Results

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- Ability to penetrate the skin using the safety needle – 90% positive
- Ease of activating the safety mechanism – 100% positive
- Overall satisfaction with 'sharps' containment – 100% positive
- Overall satisfaction with pen needle and connection with pen – 100% positive
- 42% of respondents had attended an in-service, the remaining 58% were shown by colleagues or used the displayed poster with instructions for use.

# Conclusion

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The hospital-wide education and roll-out of a safety needle for insulin pen devices was successfully implemented. The collaborative and supportive approach used ensured the initial resistance to change was overcome, as supported by anecdotal evidence.

Evaluation of safety needle use is ongoing via monitoring of risk reporting.





# References

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- (1) Pellissier, G., Miguere, B., Tarantola, A., Abiteboul, D., Lolom, I., Bouvet, E., the GERES Group. (2006) Risk of needlestick injuries by injection pens. Journal of Hospital Infection 63, 60-64.
- (2) Murphy, C.L. The serious and ongoing issue of needlestick in Australian healthcare settings. Collegian (2013), <http://dx.doi.org/10.1016/j.colegin.2013.06.003>

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