Improving the Safety of Insulin and TB Syringes

The Problem

BIDMC monitors all of its non-safety and safety needle use in order to comply with a Massachusetts Department of Public Health requirement. We are committed to decreasing the number of needle-sticks occurring from these types of products. BIDMC's Safer Sharps Committee evaluated EOHS data to identify which needles were causing injuries to employees. Although existing insulin and TB syringes were safety needles, the investigation revealed that the safety device for these syringes was contributing to needle sticks.

Aim/Goal

With a commitment to improve employee safety, the goal of the Safer Sharps Committee was to evaluate and subsequently implement alternative safer products in order to reduce the number of needle sticks at BIDMC.

The Team

Safer Sharps Committee:

- Linda Baldini, RN
- Jeff Berry
- Kerry Carnevale, RN
- Michael Howell, MD
- Chris Kristeller, RN
- Jason Laviolette
- Janet Lewis, RN
- John McDonald
- Kelly Orlando, MBA
- Bill Pyne
- Matt Rabesa, MBA
- Jill Rougan, RN
- Joe Sheil
- Rich Stroshane
- Kim Sulmonte, RN

The Interventions

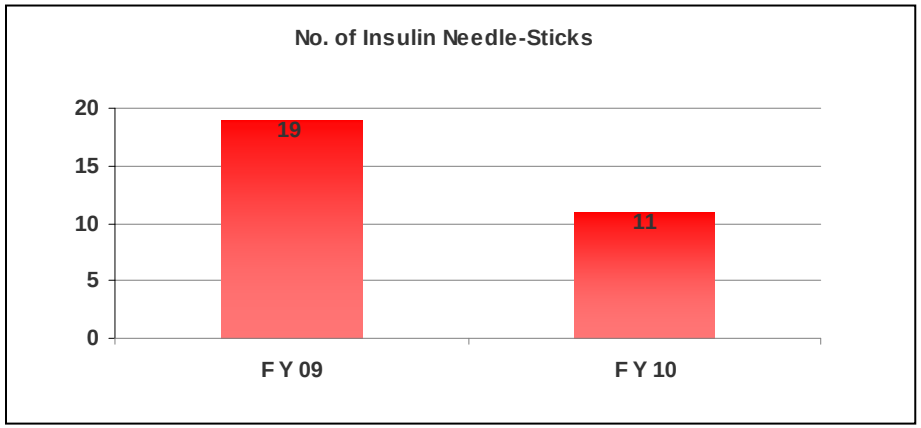
- Under the guidance of BIDMC's Safer Sharps Committee, research was conducted on replacement products at other Boston-area hospitals.
- Pilot study of retractable insulin and TB syringe technology from two vendors occurred on two surgical units in November and December 2009
- Staff from pilot study units provided feedback on preferable vendor design
- When preferable product became unavailable post pilot study, staff feedback solicited to determine key features wanted in needle safety technology
- Hospital and clinic-wide training of new insulin and TB needle safety technology occurred in March 2010.

The Interventions (continued)

- Insulin and TB syringe product line converted to new technology in March 2010
- Training by the vendor occurred in September 2010 to reinforce correct use of the safety technology

The Results/Progress to Date

There was a definitive reduction in the number of needle-sticks caused by insulin products:



Lessons Learned

- Staff participation in product selection was essential to identifying issues with trial products and with gaining compliance with safety technology use
- Ongoing monitoring and rapid review of post-conversion employee injury reports identified additional areas for employee education
- Communication of new product implementation must be improved to make the transition to safer products as successful as possible.

Next Steps/What Should Happen Next

- Continue to monitor for trends in needle stick injuries through ongoing review of employee injury reports
- Evaluate existing needle safety product line
- Compile inventory/documentation of non-safety needles currently found in departments throughout BIDMC

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