It's not Okay - Taking a Stand Against Sharps Injuries

April 2018

PSHSA.ca

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Taking a stand against Sharps Injuries.

Outline

- Ontario Needle Safety Regulation
- Ontario WSIB data and survey statistics
- Prevention of injury:
  - using SEMS
  - Solutions from Ontario hospitals
  - Components of a comprehensive sharps safety program

Safety Engineered Medical Sharps

Safety-engineered needle means,

(a) a hollow-bore needle that,

(i) is designed to eliminate or minimize the risk of a skin puncture injury to the worker, and

(ii) is licensed as a medical device by Health Canada, or

(b) a needleless device that,

(i) replaces a hollow-bore needle, and

(ii) is licensed as a medical device by Health Canada.

(Ontario Regulation 474/07 – Needle Safety)

Ontario's Needle Safety Regulation

- Applies to HC work environments where workers use hollow-bore needles on persons for therapeutic, preventive, palliative, diagnostic or cosmetic purposes
  - Hospitals
  - Doctors' and dentists' offices, community health centres, family health teams
  - Home care, ambulance, public health, schools, occupational health services

**sharps other than Hollow bore needles can still be dealt with under the general provisions of the Occupational Health and Safety Act and regulations*

Ontario's Needle Safety Regulations

Summary:

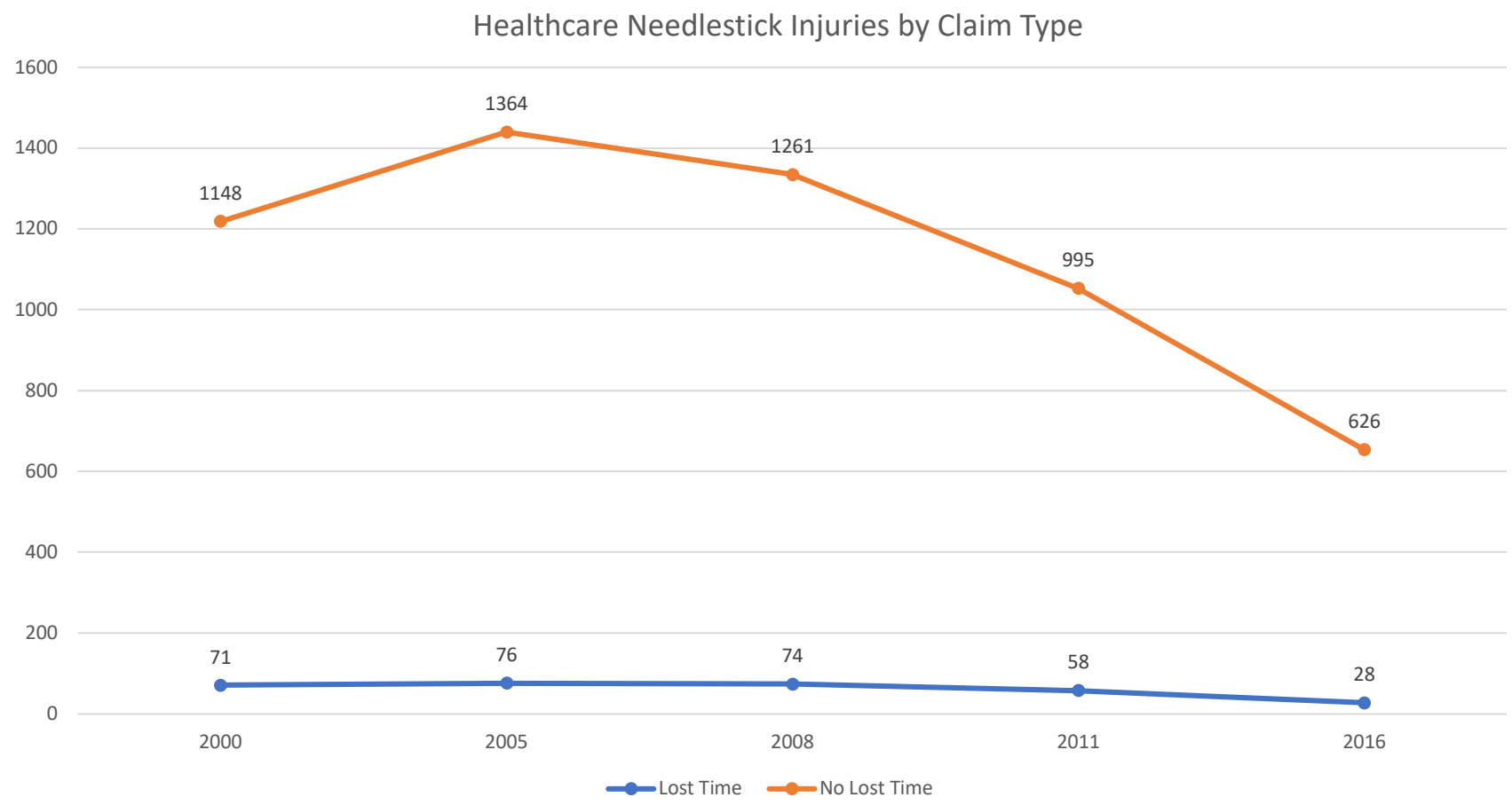
- All hollow bore needles must be safety engineered
- Three exceptions will be allowed based on:
  - Cannot locate a safety engineered version commercially
  - The worker has reasonable grounds to believe there will be risk of harm
  - There is an emergency or crisis, the supply of safety engineered needles have been exhausted and waiting for new supplies would present a risk of harm to person or public interest

Engineered Control-Do safety features work to reduce injuries?

- The CDC has reported on studies that showed that the use of SEMS among phlebotomists resulted in a reduction of up to 76%. (CDC, 1997)
- NIOSH reports on studies that have reduction of rates ranging from 62% to 88% reduction in injuries (NIOSH, 1999)
- Analysis of EPINet data collected in the USA shows a clear decline (51%) in the number of sharps injuries after implementation and use of safety engineered devices. (Perry, 2005).
- Some hospitals in Ontario have reported large reduction in injuries within one year after use of safety engineered medical sharps were introduced.

WSIB Data

Health Care Sector Needle Stick Injuries by Claim Type



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Data Source: EIW Claim Cost Analysis Schema, August 2006, December 2012 and Feb 2018 snap shot.

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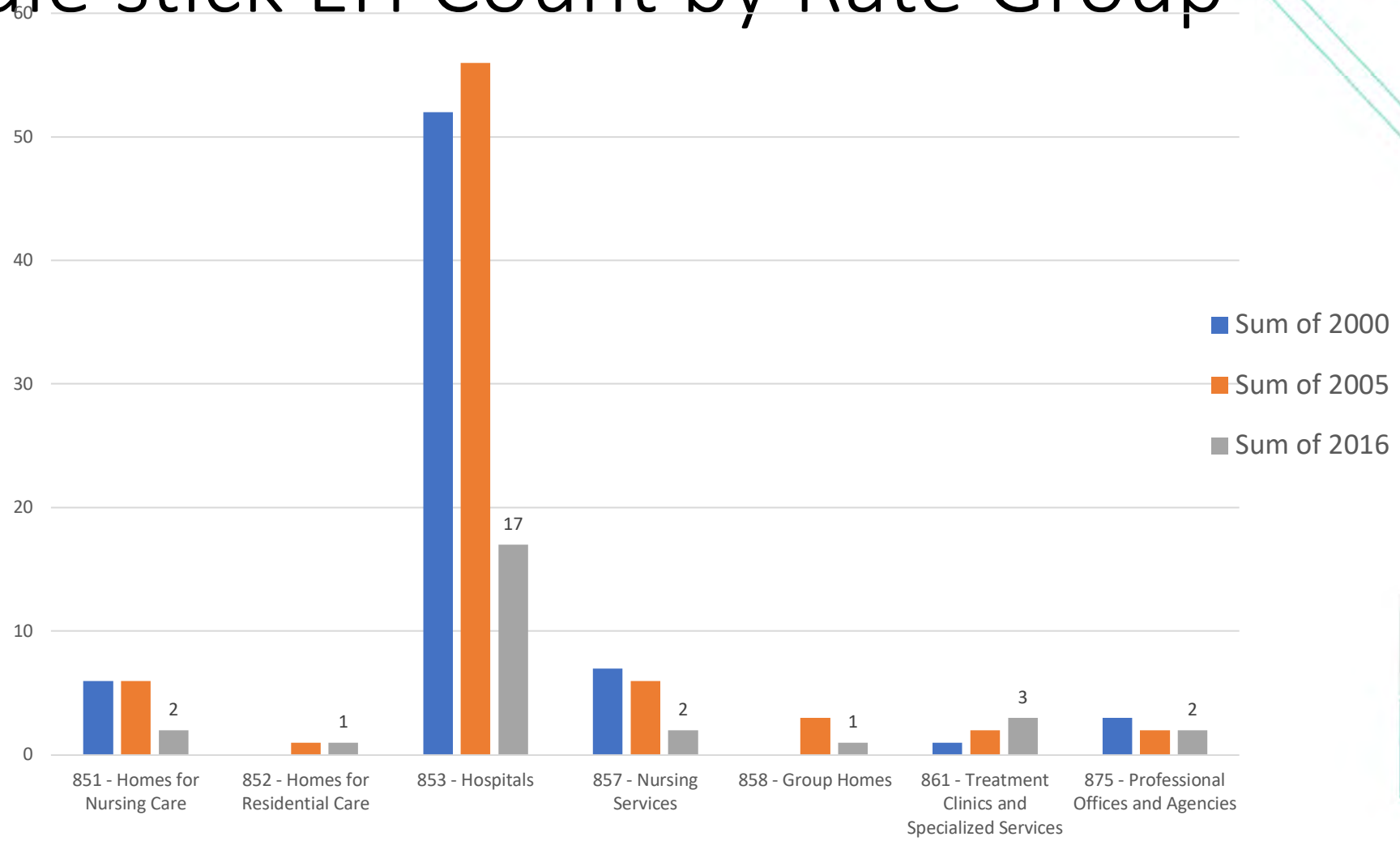
Needle stick LTI Count by Rate Group



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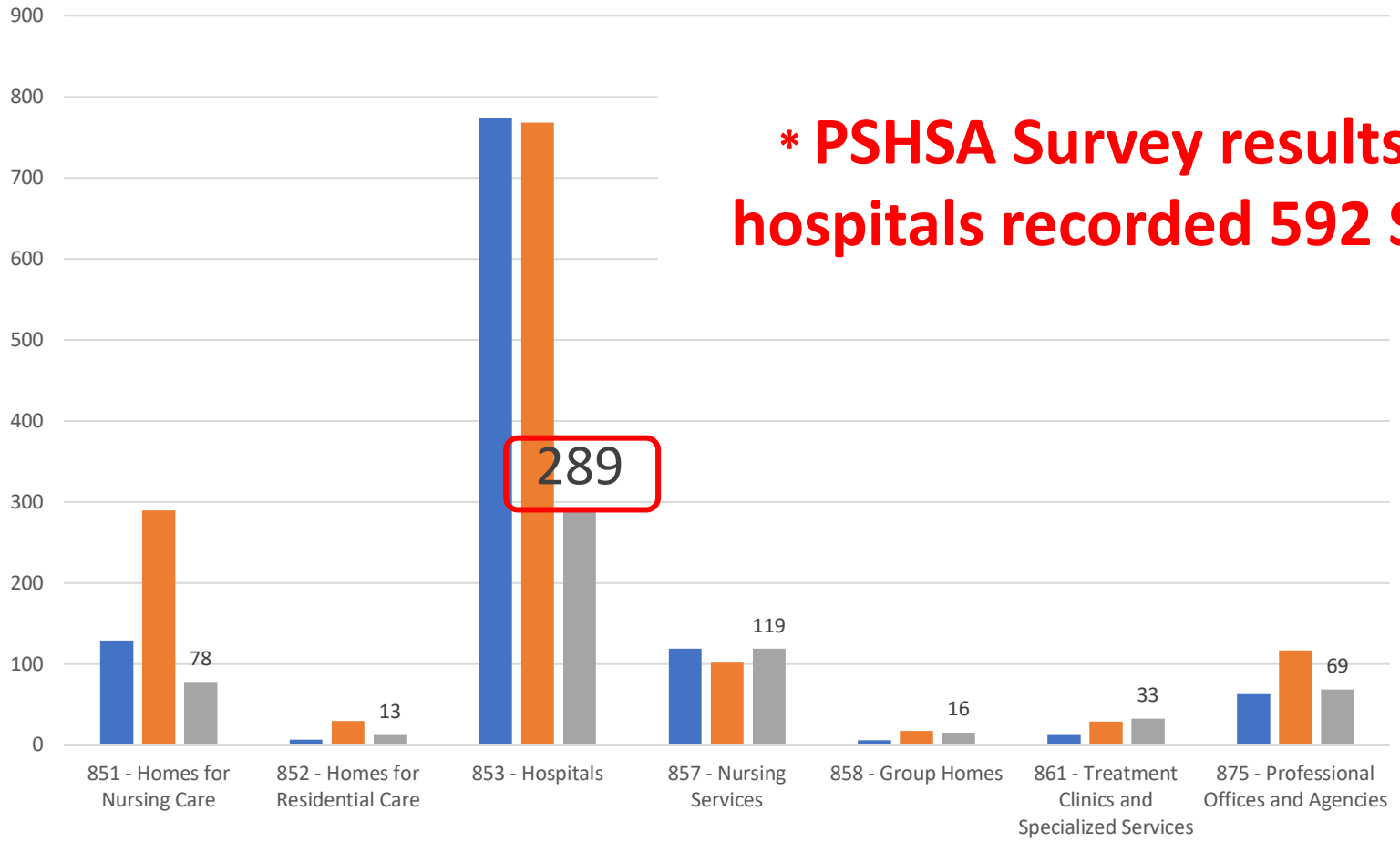
Needle stick NLTI Count by Rate Group



*** PSHSA Survey results: In 2016- 13 hospitals recorded 592 Sharps injuries**

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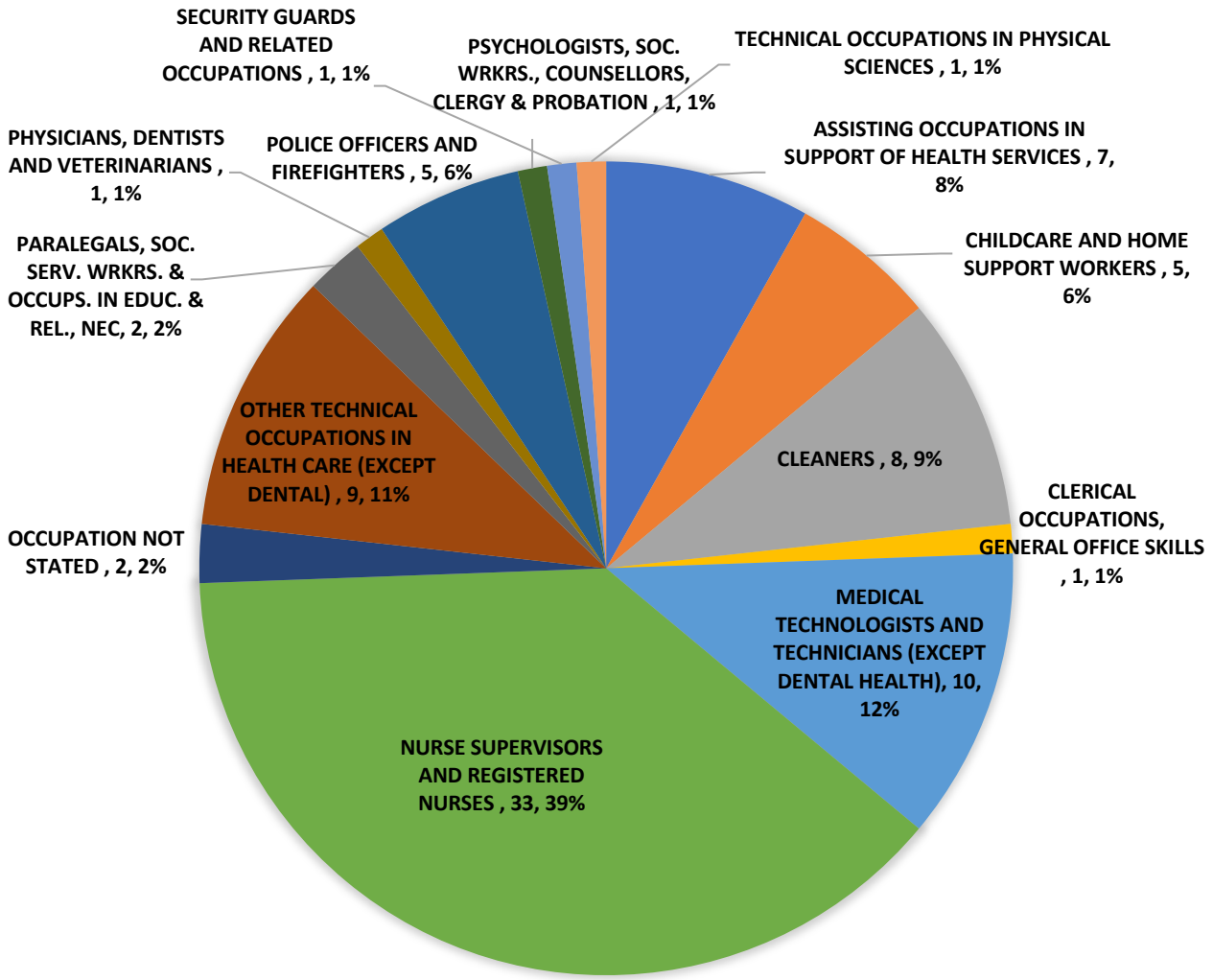
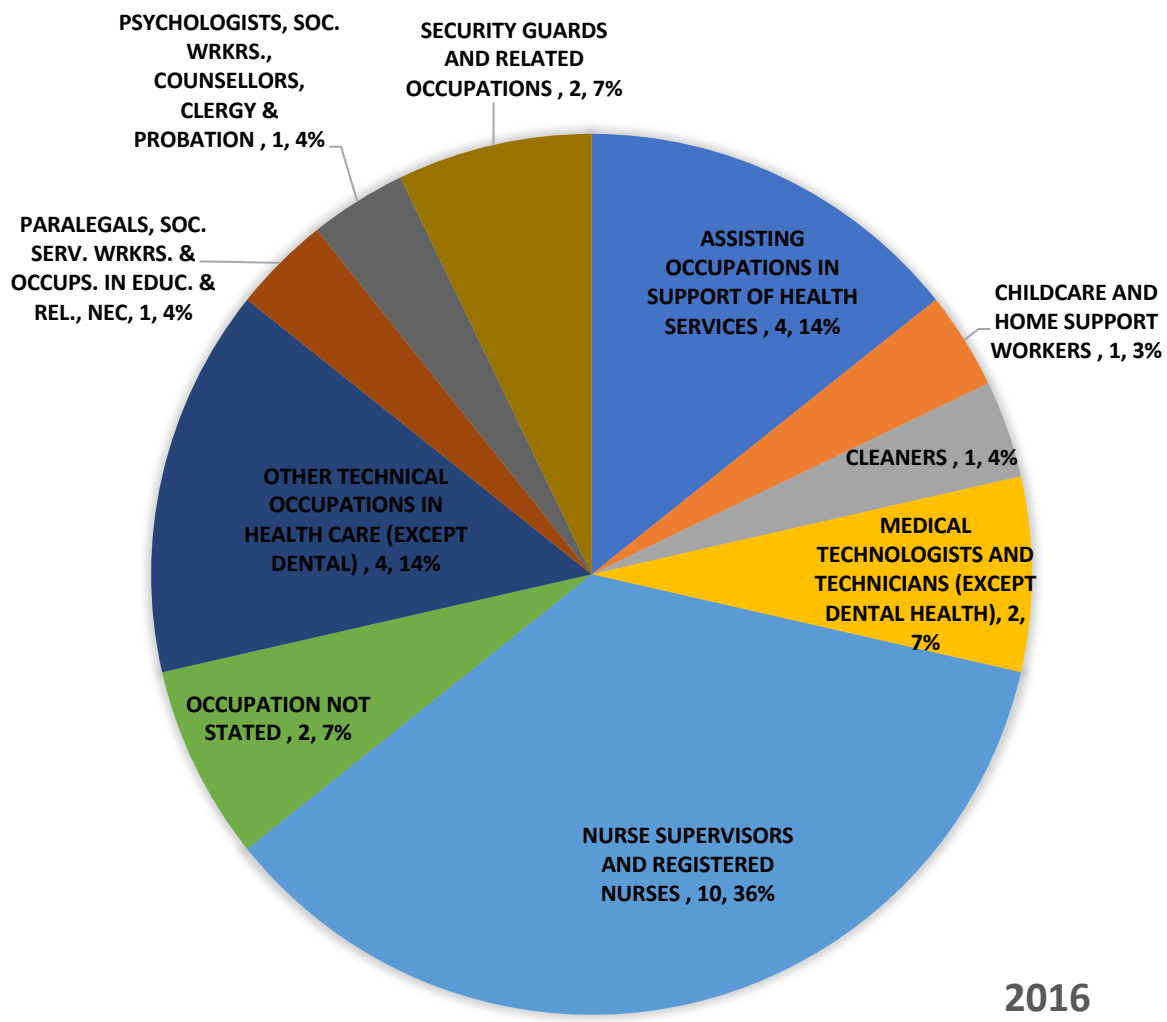
Data Source: EIW Claim Cost Analysis Schema, August 2006, December 2012 and Feb 2018 snap shot.

Needle stick LTI Count by HC Occupation



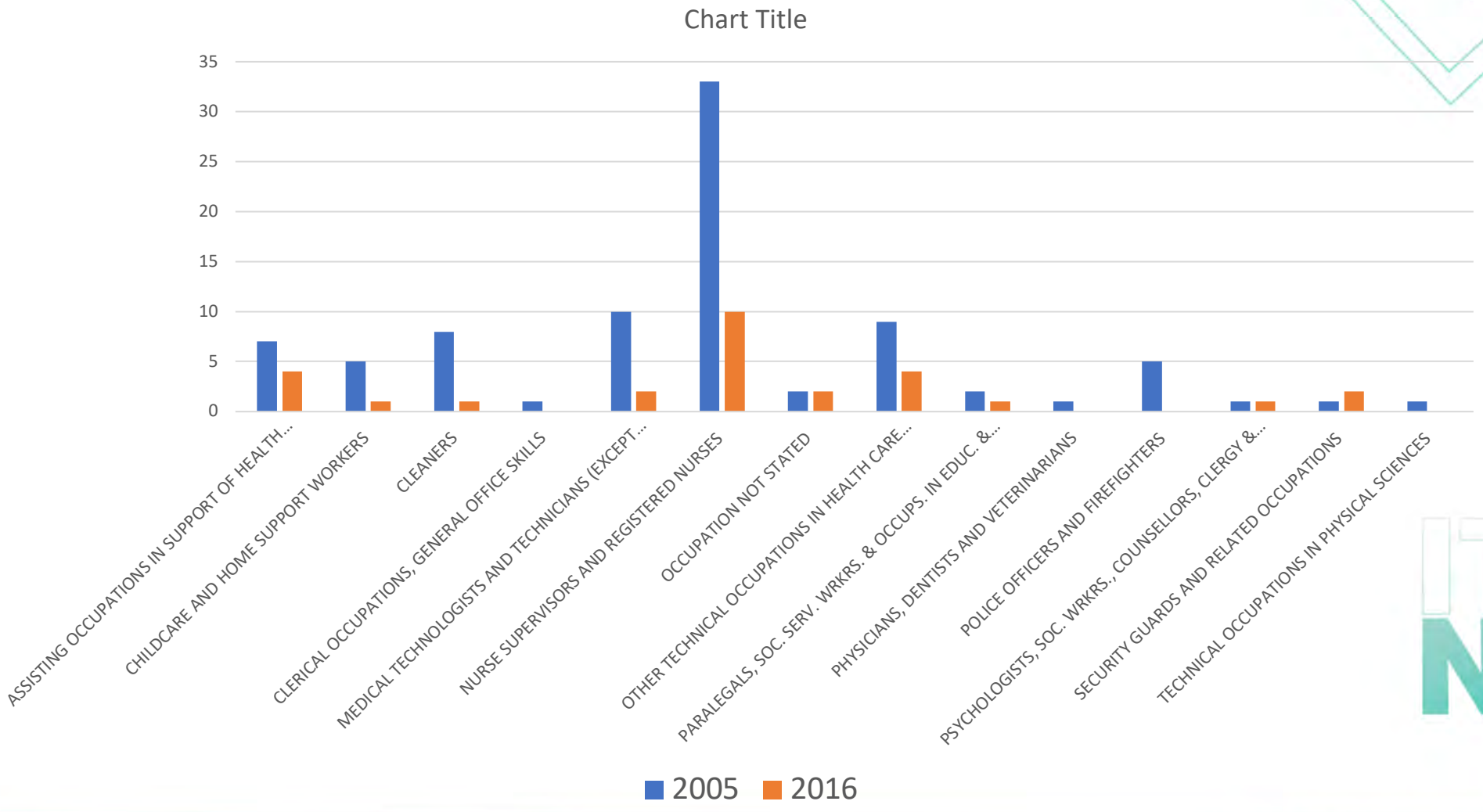
2005



2016

Data Source: EIW Claim Cost Analysis Schema, August 2006, December 2012 and Feb 2018 snap shot.

Needle stick LTI Count by HC Occupation



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PSHSA Survey results- April 2018

13 Ontario Hospitals provided data to 15 questions on Sharps injuries

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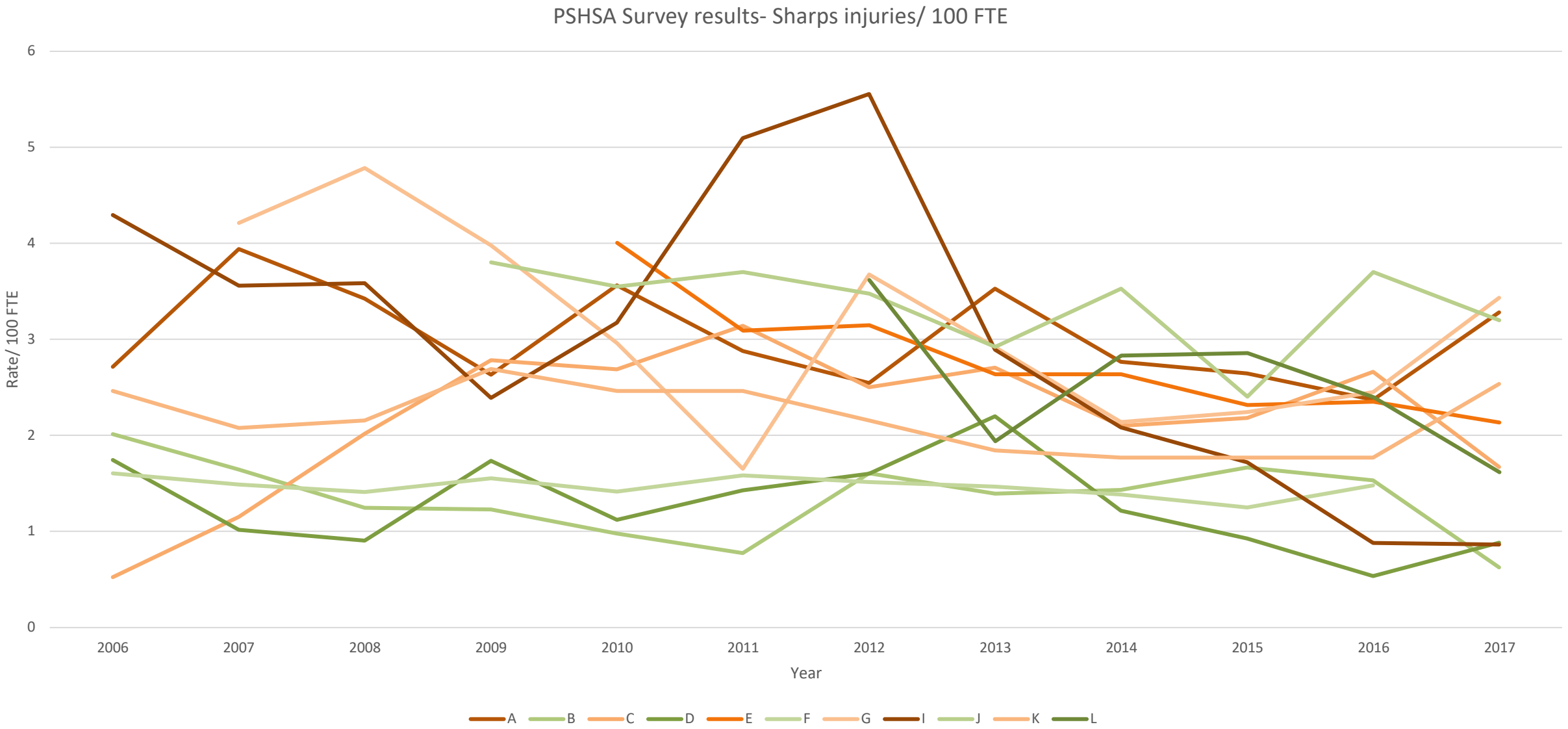
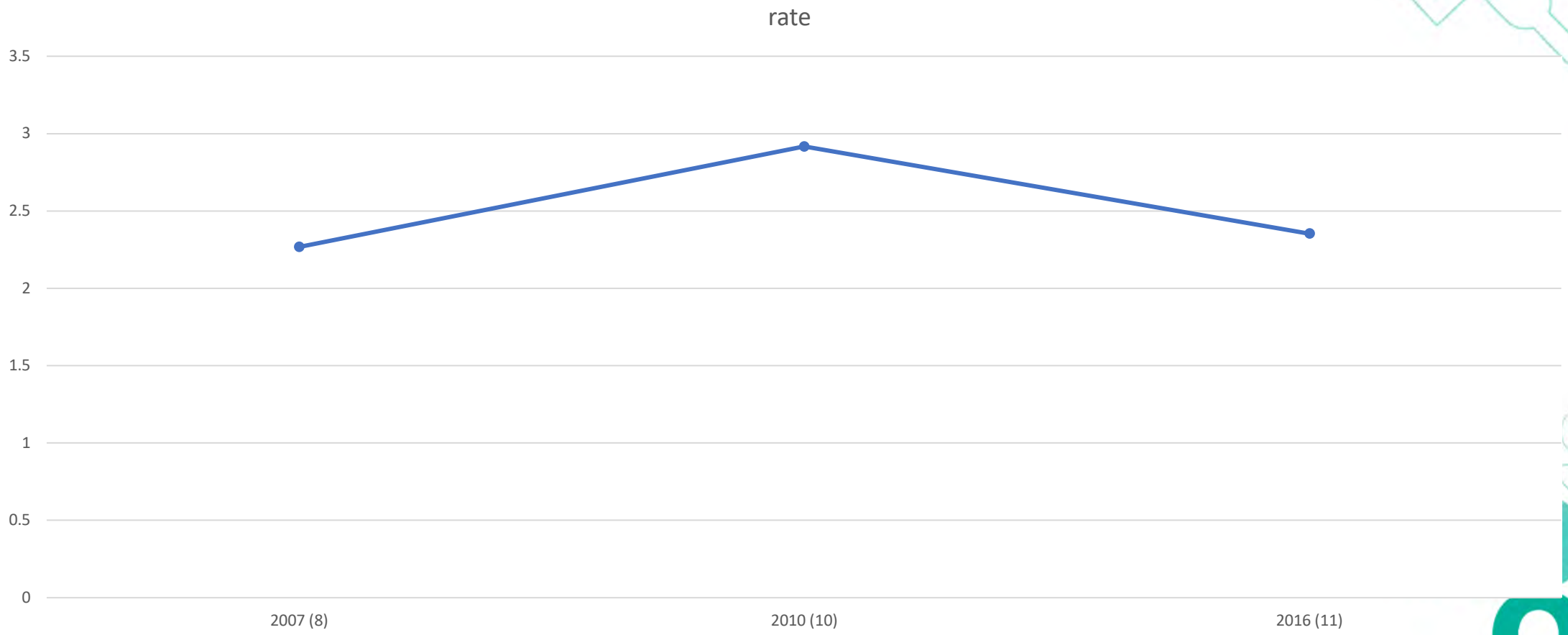
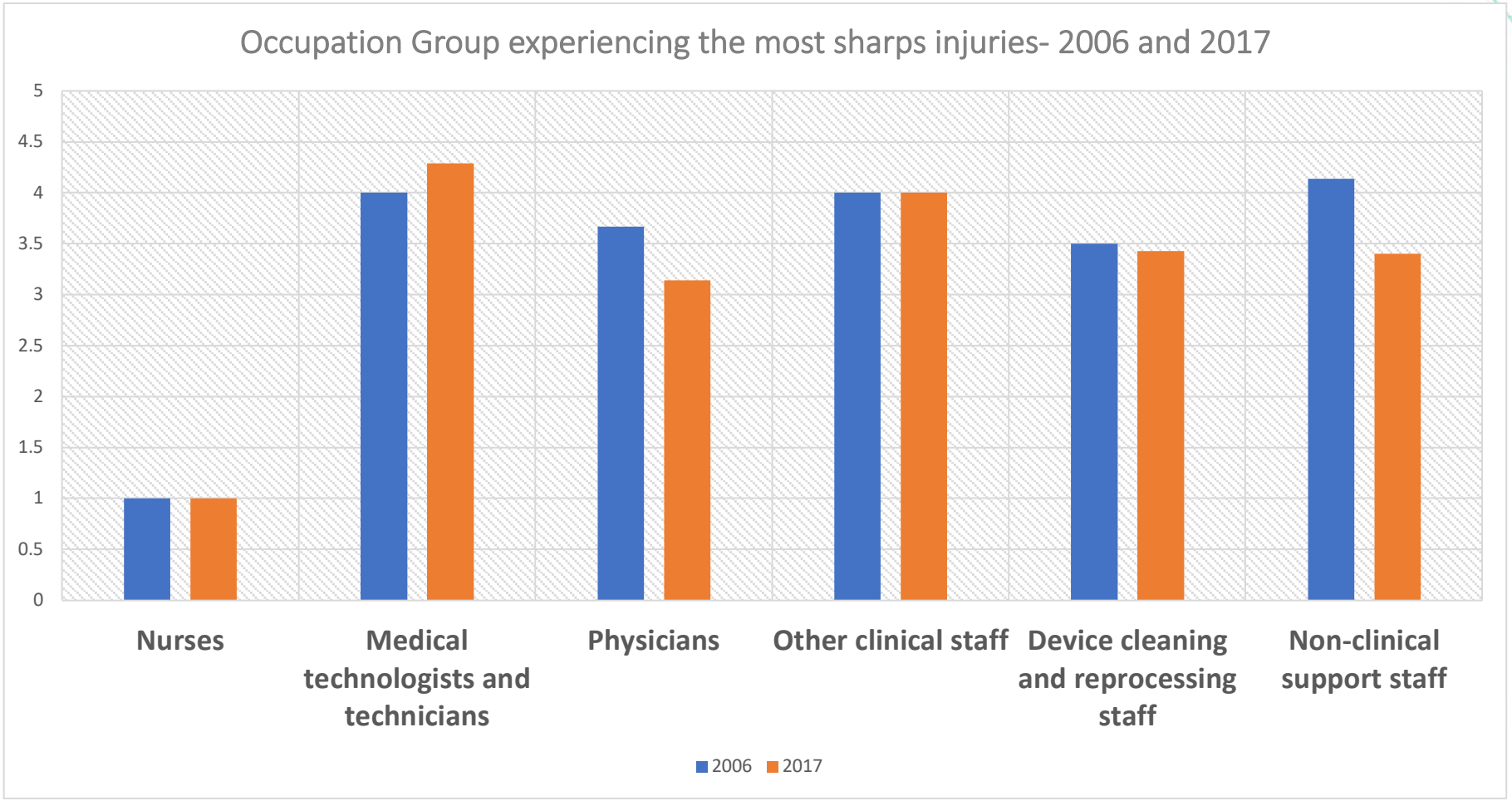
Rates of Sharps injuries/ 100 FTE



PSHSA Survey results- Rates of Sharps injuries/ 100 FTE



PSHSA Survey results



(Weighted average of occupation ranking from Highest to lowest)

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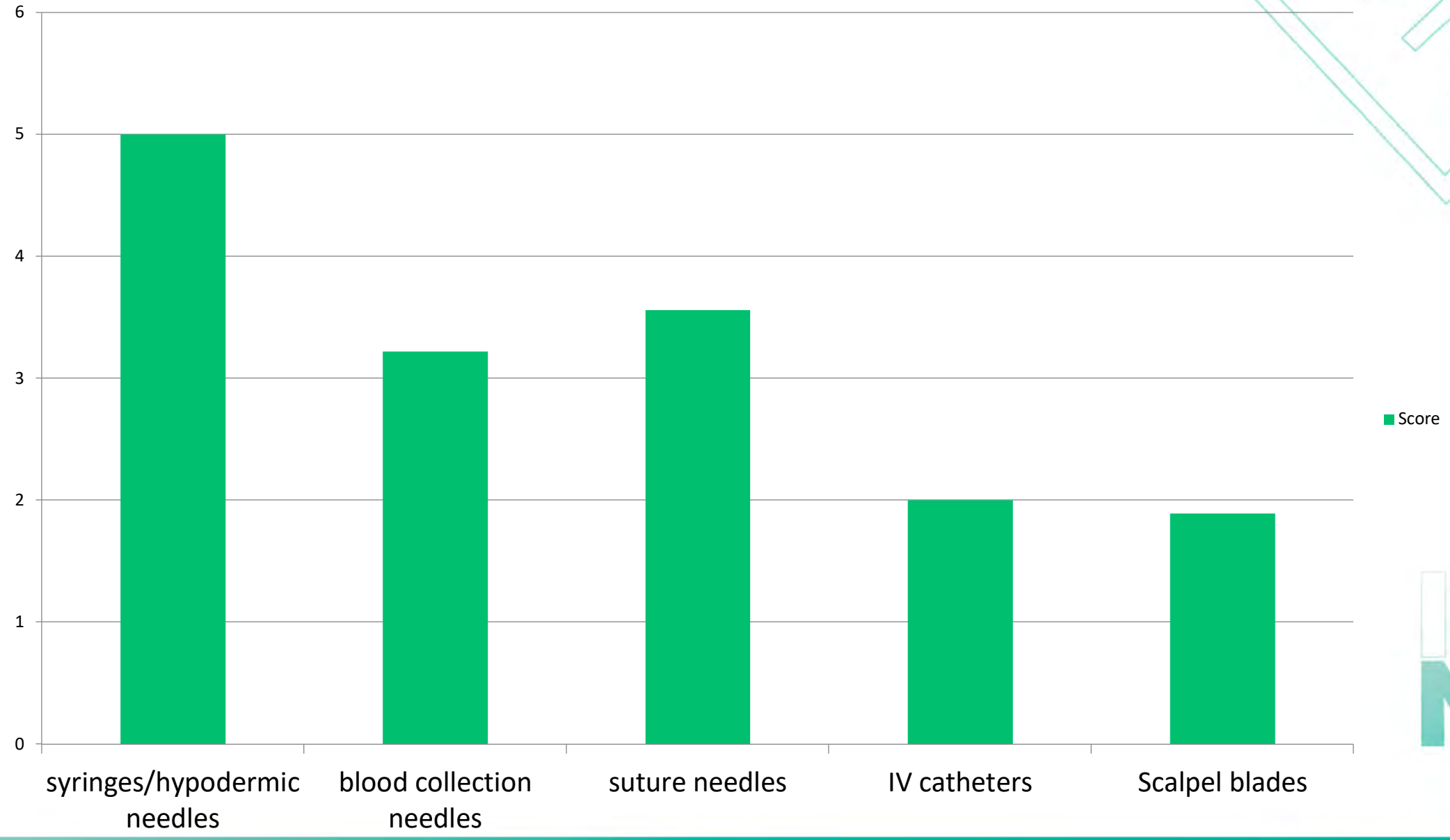
In 2017 what medical devices contributed to the highest number of injuries (rank from 1-5 with 1 being the most frequent)



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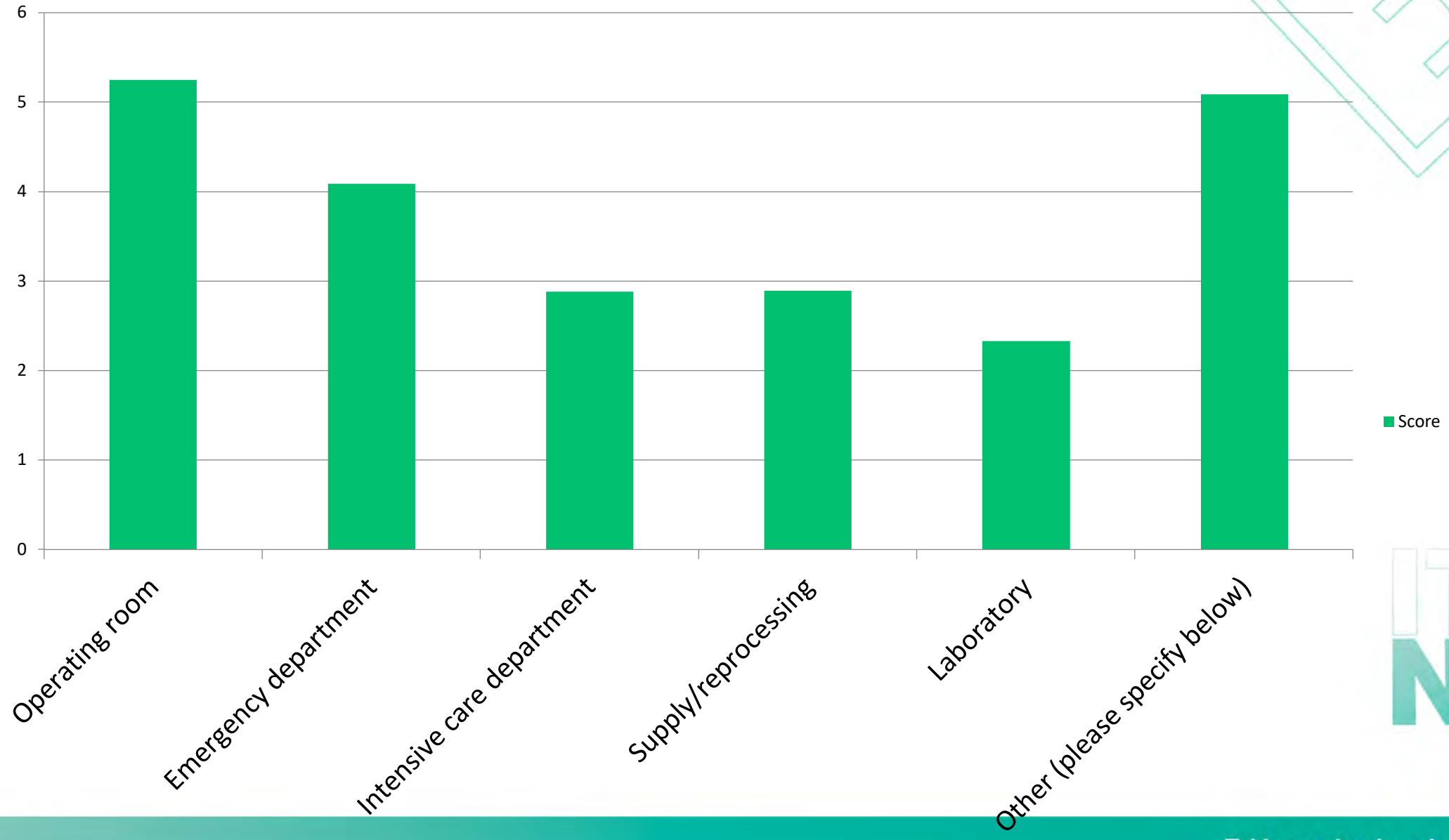
In 2017, what department experienced the most injuries (rank from 1-5 with 1 being the most frequent)



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PSHSA Survey results- April 2018

Question	Response
All medical sharps have been replaced with SEMS where a replacement is available	30.77%
All hollow bore sharps have been replaced with SEMS where a replacement is available	61.54%
SEMS are available but occasional use of conventional devices occurs as per exemptions in the Needle Safety Regulation	69.23%
SEMS are available, but some staff are still regularly using conventional devices as per exemptions in the Needle Safety Regulation	23.08%
SEMS are available, but several staff are still regularly using conventional devices as per exemptions in the Needle Safety Regulation	0.00%
SEMS are available, but some staff are still regularly using conventional devices even though their use does not meet the exemptions in the Needle Safety Regulation	0.00%
SEMS are available, but several staff are still regularly using conventional devices even though their use does not meet the exemptions in the Needle Safety Regulation	0.00%

Under reporting is listed as a recurring issue for sharps injuries. Do you feel this is still a concern?

Responses Yes 25.00% (3) **No 75.00%(9)**

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Sharps Injury Prevention

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Applying Hierarchy of Controls to Biological Hazards

- Medication administration methods that do not require a sharp (nasal spray, transdermal patch etc.)
- One time use equipment
- Replace injectables with oral meds
- Substituting suturing with adhesives
- Safety engineered needles and sharps
- CSA approved puncture resistant sharps containers
- Immunization programs
- Post exposure protocols
- Environmental cleaning and decontamination
- Gloves/gowns/protective clothing
- Eye/face protection

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Hierarchy of Control

Blood and body fluid exposure can be controlled following the Occupational Hygiene Hierarchy of Controls:

- Control at Source (e.g. elimination or engineered control)
- Control along Path (e.g. work practice controls)
- Control at Worker (e.g. personal protective equipment, immunization)

Hierarchy of Control

Examples of Control at Source:

- Devices with no actual “sharp”; substituting a “hazardous” item for a less hazardous one. (Not available for all sharps.)
- Safety engineered devices. Devices with safety features designed into the product to make the device “safer”. These features may be:
  - Active safety feature - requires a voluntary action by the user to engage the safety device.
  - Passive safety feature - safety feature is automatic, or requires no additional action on the part of the user.

Desired Features of SEMS

- The device is needle-less or sharp-free
- If the sharp cannot be eliminated, there are built-in safety features
- The safety features are passive
- If active, the safety feature is easily activated with a single hand while the user's hand remains behind the exposed sharp
- The user can tell if the safety feature has been activated, e.g., from an audible click
- The safety feature cannot be deactivated through disposal
- The device is easy to use and practical It comes in a variety of sizes/gauges
- It is safe and effective for patients

Additional methods of reducing sharps injuries

PSHSA Survey: What other strategies have you used to reduce sharps injuries at your organization?

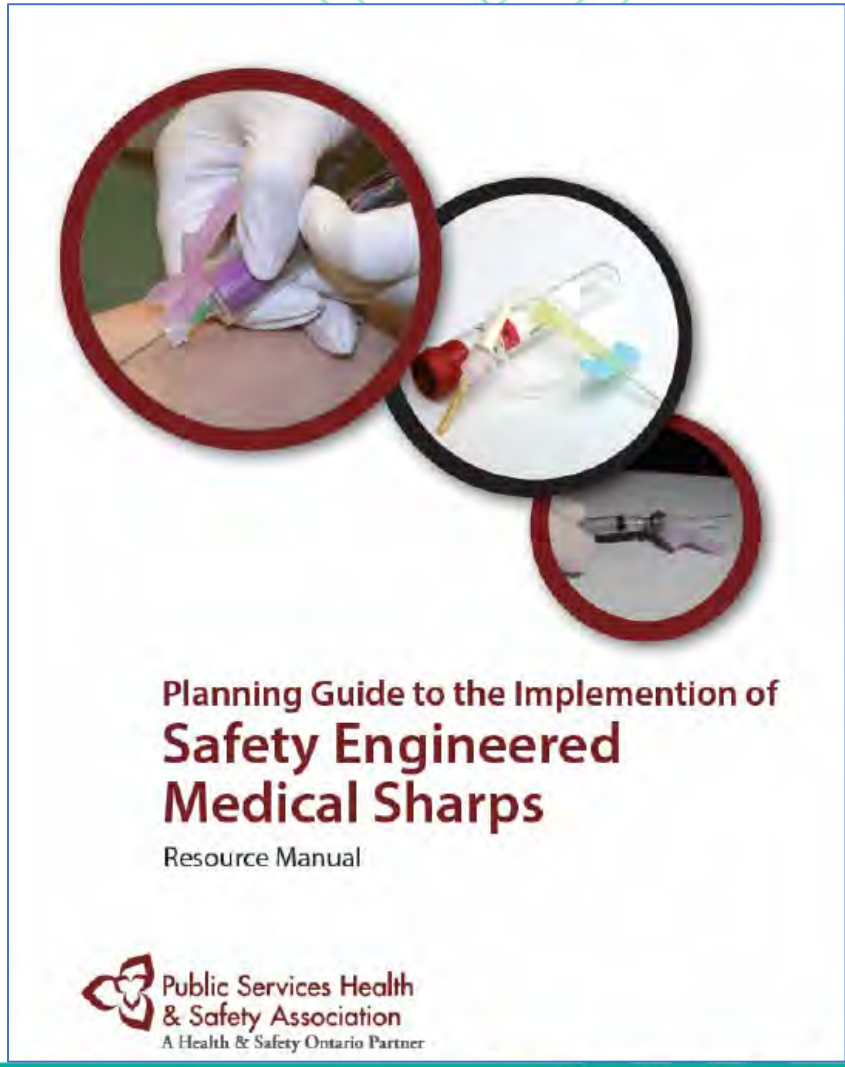
- Consultant system review.
- Injury reviews using software.
- Launches at product evaluation committee.
- High level support and motivation from CEO/Senior Management ; development of program specific protocol; reporting on incidence to staff through newsletter and communication board; Safety topic as standing item on team meetings; 2 person check when removing/disposing sharps; Audits: Annual audits -Non-SEN audit- Accommodated nurses doing audits.
- Sharps containers
- On-line reporting -implementation of an electronic workplace occurrence reporting system.
- follow up investigation by leaders

Additional methods of reducing sharps injuries

- Development of a sharps working group to review incidents and identify opportunities to improve incident reporting, safe work practices and awareness of sharps safety
- Review of products that are frequently involved in sharps exposure and suggested replacements sought.
- Engagement of the Professional Practice group
- Process changes in the OR
- Training:- by medical device vendor; Annual training at Nursing fares -Refresher training- Increased our education to new staff and students- Training- combination of e-learning and in-class training
- Outsourced our laundry
- Walk-about education campaign, in-service from product providers
- Mandatory assessment of the hazard and implementation of controls
- Provision of puncture-resistant gloves for housekeeping staff.

Implementing a Sharps Safety Program

1. Management support and leadership
2. Assess program needs
3. Develop program components
4. Implement the program
5. Evaluate the program



PSHSA Survey: 69.3% of the responding hospitals have used PSHSA's Planning Guide to the Implementation of Safety Engineered Medical Sharps

Evaluation

- Program Indicators
  - Number of new devices implemented
  - Number of training sessions
  - Audit of staff acceptance/adherence to SEMS
- Program Outcomes
  - Injuries
  - Incidents
  - Number of reports vs. previous reporting
  - Use of rates?

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Thank you!

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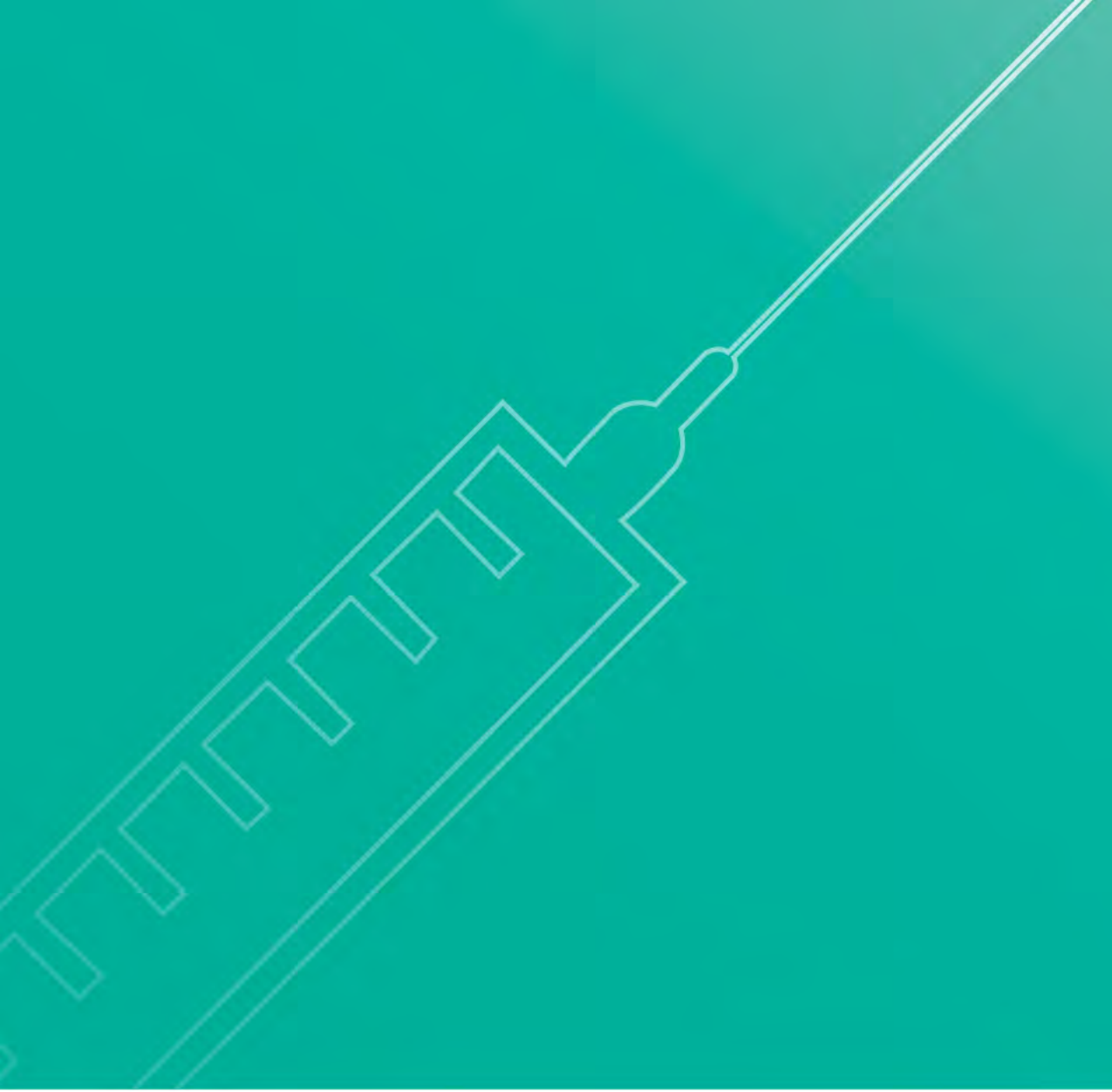

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