



# Use of Flowcharts to Improve Understanding, Reporting, and Coding of Patient Safety Indicators

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## Background

- Patient Safety Indicators (PSI) are a set of eighteen quality measures established by the Agency for Healthcare Research & Quality (AHRQ) to evaluate hospital performance in various patient safety domains.
- This information is available to the public through the Inpatient Quality Reporting Program (IQRP) and CMS Hospital Compare program.
- It also has a significant impact on CMS payment to hospitals in two separate Pay-for-Performance (P4P) programs including the Hospital Value Based Purchasing Program (HVBP) and the Hospital Acquired Condition Reduction Program (HACRP).
- PSI 15 evaluates unrecognized abdominopelvic accidental puncture or laceration rate.
- In 2018, there were 10 cases of PSI 15 at our academic affiliated community based hospital.
- Creating a culture of safety at an institution requires providers to understand how and why events are reported, the importance of accurate documentation and to have a willingness to learn from errors if they do occur.

## Case Example

- A 76 y/o female presented with one day of diffuse abdominal pain, nausea, vomiting, and diarrhea. Vital signs revealed a temp 36.4 °C , HR 102 bpm, BP 127/77, and RR 27. PE was significant for abdominal distention with diffuse tenderness. Abnormal lab values included a lactate of 7.35 and white blood cell count of 23.7.
- CT scan of her abdomen and pelvis revealed intraperitoneal free fluid, distended cecum concerning for volvulus or bascule, and dilated ascending, transverse, and descending colon. The patient was taken for emergent exploratory laparotomy.
- Upon visualization, there were patchy areas of necrosis and ischemia throughout the colon and the decision was made to proceed with a total colectomy.
  - During take down of the splenic flexure, it was noted that there was a tear in the splenic capsule with bleeding. The operative note reads "...We worked our way up towards the splenic flexure and there was a tear in the splenic capsule with gentle traction on the colon which was bleeding...". This was packed and later during the surgery it was determined that due to the high risk for bleeding with repair, a splenectomy would be performed
- A second laparotomy was performed the next day

## Objective

- The goal of this project was to create a flow chart of Patient Safety Indicator 15 to improve provider understanding of it's application to intraoperative events.

## Methods

- For this project I created a flow chart of PSI 15 to improve understanding of the PSI and help facilitate discussion to continually improve our patient care.

## Future Direction

- Inquire the perceived usefulness of the flow chart by staff including surgeons and coders
- Create a flowcharts for remaining PSI
- Find appropriate means of dissemination: print, electronic, meeting, etc
- Determine if there are any improvements in these areas

## Discussion

- Accurate reporting of PSI has important financial and review implications for hospitals and providers.
- PSI 15 applies to this case because there was a splenic laceration in the first operation followed by a second operation within the same admission. If more detailed documentation about the incident had been used, would the reporting be any different? (Would PSI 15 still apply)
- For PSI 15 in particular, wording and documentation is very important to establish appropriate coding.
- It is targeted at unrecognized lacerations and punctures that are avoidable. In this case the laceration was recognized and handled, however it could not be determined whether this was avoidable.
- A second operation or procedure within the same admission qualifies for PSI 15 regardless of whether it was for the laceration.
- The correct coding is ultimately the responsibility of the provider and the documentation should contain "*clear, detailed, and specific terminology to communicate the circumstances...*"
- Increased education and understanding may lead to more detailed documentation and improved recording of PSI quality measures which will then lead to interventions aimed at actually reducing PS events.

## References

Newell, S. (2015) PSI 90: the Impact of Clinical Documentation Improvement and Coding on Organizational Financial Performance. [1-78] American College of Surgeons. (2016) *Statement on documentation and reporting of accidental punctures and lacerations during surgery*. Chicago, IL. American College of Surgeons.

## Intervention

### PSI 15: Unrecognized Abdominopelvic Accidental Puncture or Laceration Rate

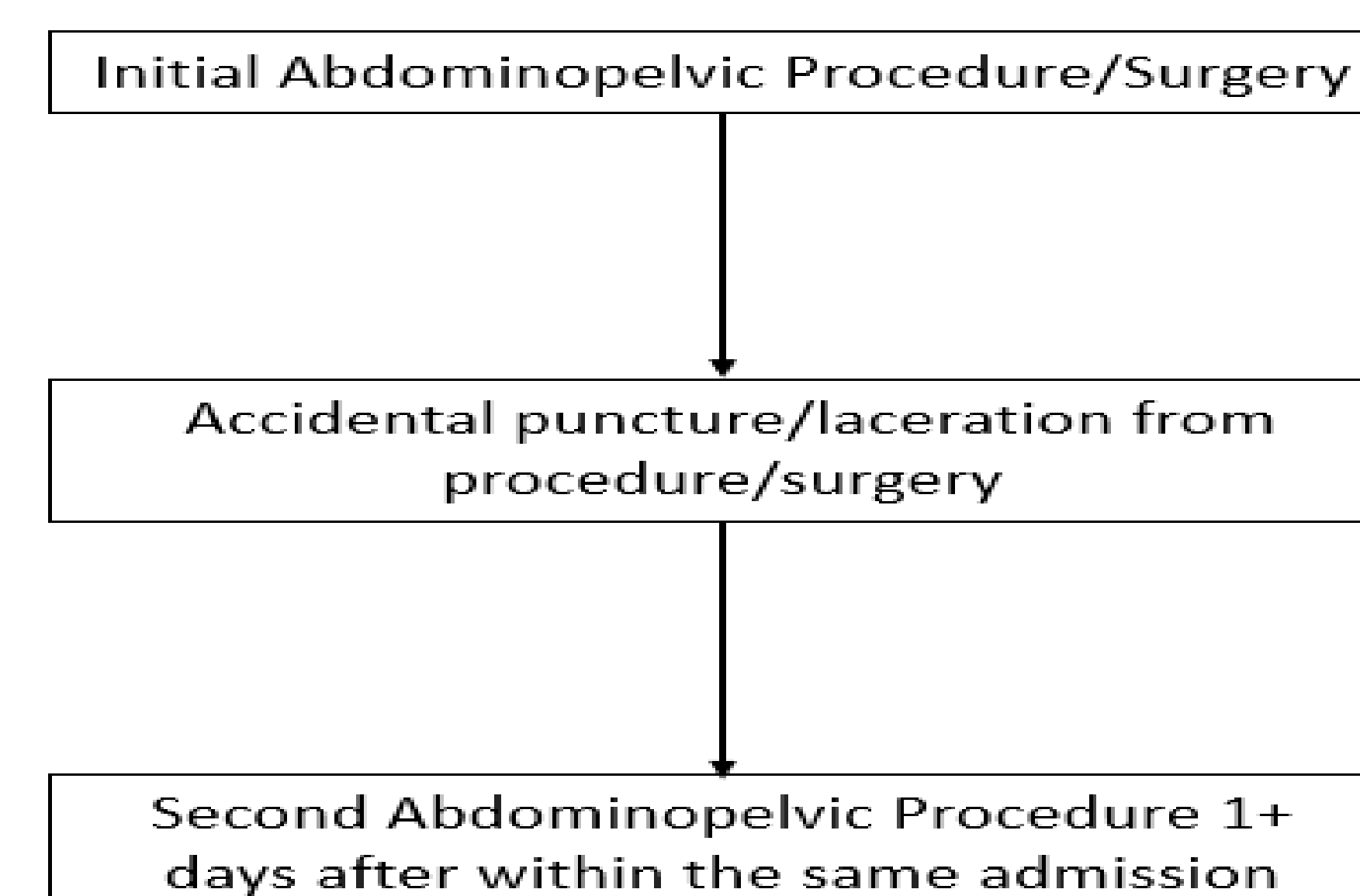
Reported as a rate:  $\frac{\# \text{ discharges after an accidental puncture/laceration during an abdominopelvic procedure/surgery}}{1000 \text{ discharges following an abdominopelvic procedure/surgery}}$

**Includes:**  
Any abdominopelvic procedure that could result in a puncture/laceration

*If not accidental or unavoidable it must be documented in such a way to make this clear*

#### Notes

- The title describes "unrecognized" punctures and lacerations with the assumption of recognized punctures being repaired, and consequently not requiring a second procedure. If a recognized puncture/laceration is followed by a second procedure, regardless of whether or not the second procedure is related to the prior, it meets the criteria.



**Excludes:**  
A) *Accidental puncture/lac listed as primary diagnosis*  
B) *Accidental puncture/lac listed as secondary diagnosis present at admission*  
C) *Obstetrics cases*

For PSI15 full document [CLICK HERE](#)

For ACS statement on documentation [CLICK HERE](#)