**SPOT Update**

SPOT is the root cause analysis (RCA) software that will replace the Microsoft Word RCA Template. RCA is a key patient safety process to help VHA healthcare facilities answer these questions about adverse events and close calls: what happened?, why did it happen?, and what can we do about it?

SPOT is actually a combination of Microsoft (MS) Access database software and SQL Server software. Much of the RCA data and MS Access software is stored on a facility's fileserver, which is a network computer usually located in the main computer area of a hospital. Other parts of the software are located on the PCs of the risk or patient safety manager and PCs of other people in their office who lead RCA processes. With password protection, all these PCs communicate (are networked) with the fileserver in a secure fashion. In addition, an individual RCA case can be temporarily downloaded onto a “stand-alone” laptop computer and used by the RCA team, who use temporary passwords for that case.

Finally, when an RCA case is completed, it can be sent in a secure fashion to the SQL Server database at NCPS.

**What are the major capabilities of SPOT?**

- Guide and support the Risk/Patient Safety Manager and RCA Team through the process
- Capture data on safety events and all the items in the RCA Form presently in use (i.e., 22 questions)
- Run as shared (network) and stand-alone (laptop) computer set-up
- Search upon RCAs in your facility
- Search for deidentified RCAs from all of the VA (this is called “Search-All”)
- Develop flow charts in an automated fashion (VA NCPS invention)
- Secure electronic submission of RCAs from facilities to NCPS
- Tools to follow-up, track, and document corrective actions and outcome measurement
  - For VISNs, various capabilities to assist VISN patient safety (this is called “VISN SPOT”)

**When will you see SPOT run?**

January 2001:
- Phase I roll-out (five sites)
- Tested software at five facilities in one VISN

April-June 2001:
- Phase II roll-out (30+ sites)
- Tested implementation and software issues at one volunteer facility from the other 21 VISNs

Fall 2001:
- Phase III roll-out (130+ sites)
- VISN by VISN accelerated implementation at remaining facilities

Fall-Winter 2001:
- “VISN SPOT” final development and testing at 22 VISN offices
- Further enhancements and troubleshooting of SPOTs as necessary (e.g. “Search-All”)

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**Psychiatric Ward Screens**

Some older facilities still have windows in locked psychiatric wards that were fitted with security screens. Over the years the screens warp and develop different size gaps between the screen and the window frame. There are three bolts on each side of the window that hold the screen in place. There was a recent incident at an inpatient psychiatric ward in which a psychiatric patient was able to thread a bed sheet around the middle bolt that holds the screen to the window and create a noose. The middle bolt is at a height that would allow a person to be hanged. It is recommended that if you have older buildings housing inpatient psychiatric patients and the windows are protected by security screens that you check them for excessive gaps.
VA Salt Lake City Develops Community Collaborative Partnership

The VA Salt Lake City Health Care System (SLCHCS) is working cooperatively with community agencies to promote patient safety initiatives throughout the state. The SLCHCS Director, James Floyd, is a member of the Utah Hospital Association (UHA) Patient Safety Task Force. Members of the UHA, and representatives from the Utah State Department of Health, were recent guests at the medical center for a presentation on the VHA Patient Safety Program and the activities being undertaken at SLCHCS. This exchange of knowledge and information regarding program development is anticipated to assist in a statewide rollout of a patient safety program.

Oral Medication Syringes

We have recently been informed by VISN 16 about a close call involving a nurse drawing up an oral liquid medication. The nurse was using an oral medication syringe called a "pipette" by the manufacturer.

The graduated markings on the "pipette" were unlike the markings on the syringes we commonly use in the USA. Therefore, when using a "pipette" you need to measure the dose you are administering in a way other than what you are used to doing. The graduated markings are on the plunger of the 3 ml "pipette" and start at 3 ml on the tip end with intervals of negative (-) 0.05 ml per division. On the standard USA syringe the markings are on the barrel and start with 0 cc/ml on the tip end with intervals of positive (+) 0.1 ml per divisions (see accompanying photos).

What Happened

In this close call the nurse was drawing up a dose of 0.25 mg of an oral medication liquid (1mg/ml) using a "pipette," but instead of drawing up 0.25 ml of the liquid 2.5 ml (2.5 mg) was drawn and nearly administered to the patient.

Suggestions

☑ Consider using oral tablets.
☑ For those inpatients that cannot tolerate tablets, have pharmacy prepackage unit dose liquid.
☑ Caregivers should replace the "pipette" with a USA standard-type oral syringe (that cannot be attached to a needle or IV tubing to avoid unintentional administration by wrong route).

☑ Alert all staff that pass medication about the "pipettes" and that these should not be thought of as typical syringes. The markings are unlike those of the syringes we are used to, and they are on the plunger of the "pipettes." If possible, DO NOT USE THEM.

We are now working with the Institute for Safe Medication Practices (ISMP) and the "pipette" manufacturer to provide a new pipette that meets USA standards. Thanks go out to the VISN 16 staff for alerting us of this potential problem.
(On a regular basis we will feature teaching examples pulled from medical literature and similar RCAs that we feel are applicable and of interest to the entire VHA healthcare system. These cases are intended to be used for learning purposes only.)

Surgical towels

(We have seen a number of incidents of retained objects in post op, here is an example of one.)

Description

A patient underwent emergency exploratory surgery for a perforated ulcer. During the surgery, a non-radiopaque towel (that’s right - a towel - not a surgical sponge) was placed in the abdomen to retract the liver. This was not clearly communicated to the assisting resident or the nurses. Upon closing, the towel was missed and was left inside the abdomen. Several days post-op, the patient developed discomfort and ileus. Abdominal x-rays were done but the towel was not visible since it had no radiopaque markers. A CT scan was done which revealed free air and possible retained foreign body. Patient was taken back to the operating room where an abscess was found around a surgical towel. The towel was removed, abscess cavity drained, and the patient fully recovered.

Lessons Learned

The following lessons were learned from this event:

- Clear communication between physician and operating room team when placing materials inside the body cavity is critical.
- Familiarity with the facility’s operating room policies, specifically those pertaining to non-radiopaque materials being placed inside the body cavity, contributed to this event.
- Operating room policies did not clearly address use of towels in body cavities, only making reference to radiopaque sponges, needles and instruments. Prohibited or high risk categories of objects were not addressed.

Actions Taken

The following actions were recommended:

- Any materials that are placed inside the body cavity will be clearly communicated from the surgeon to the scrub nurse with verbal confirmation from the appropriate OR staff including tracking.
- Establish new formal physician orientation to assure physician knowledge of current policies and procedures.
- Revise operating room policies based on current standards of practice and prohibit the use of any material that is not radiopaque inside the body cavity unless by specific approval.

Conference Calendar

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<td>VA/QuIC Summit on Effective Practices to Improve Patient Safety</td>
<td>9/5-7/01</td>
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<td>NCPS Patient Safety Improvement Training</td>
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<td>Human Factors &amp; Ergonomics Society Annual Meeting</td>
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<td>NPSF Partnership Symposium 2001</td>
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<td>IHI 13th Annual National Forum on Quality Improvement in Health Care</td>
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<td>Orlando, FL</td>
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RCA Team Tips

The following is a list of helpful hints for those of you involved in the RCA process.

ADVISORS:

- Attend team meetings and provide clear guidance at critical decision points (i.e., Initial Flow Chart, Tables 15 & 19).
- Do a final check with the group recorder to ensure that identifiers (i.e., personal names, facility names) do not appear in flow charts or narrative text. (This step is critical in initial de-identification of the patient safety information database.)
- Don’t let the team waste time trying to make picture perfect flowcharts (these can always be done by hand, if necessary). If anyone experiences difficulty with the software, please contact NCPS right away at (734) 930-5890 and ask to have a software expert work on the problem right away (this will save time and minimize frustration).

TEAM LEADERS:

- It is useful for the leader and team members to bring their calendars to the first meeting and set the schedule for future full-team meetings right away. Likewise, it’s great to have a briefing/sign-off meeting date with the Director established as soon as the team is chartered.
- Establish clear boundaries with others interested in the RCA process and actions. Only the Director has the authority to non-concur with an RCA team action and request a revision to any action. (Do not put department heads, service chiefs or administrative gatekeepers in the position of editing, revising or censoring the RCA action plan.)

TEAM MEMBERS:

- Avoid blindsiding your colleagues! Interview department heads or service chiefs who are likely to be involved in carrying out actions early in the RCA process (seek their opinions and experiences ... learn about what has been tried successfully or unsuccessfully before, and avoid known obstacles.)
- If the team selects an expensive fix (e.g., staffing, equipment, etc.) do some homework before submitting the plan to the Director (i.e., consult with a local fiscal expert in deriving approximate short and long term costs for the fix).

TOP MANAGEMENT TEAM:

- Schedule a RCA briefing and sign-off date as soon as the RCA team is chartered. Let the team present the report to management, let them cover “what we found,” the “recommendations” and “what is needed from management.” This will provide an avenue for the team to be recognized for their work and ensure clearer communication about any additional work that needs to be done.
- Tell your own stories, and make it safe for others to tell theirs.

These are just a few RCA team tips. For a more thorough listing of RCA hints visit the “Mining Gold” section on the NCPS intranet site (http://vaww.ncps.med.va.gov/gold.html).

NCPS TIPS is published bi-monthly by the VA National Center for Patient Safety (NCPS). As the official patient safety newsletter of the Department of Veterans Affairs (VA), it is meant to be a source of patient safety information for all VA employees. All pictures are VA photos unless otherwise identified. Opinions of contributors are not necessarily those of the VA. Suggestions and articles are always welcomed and readers can contact us at:

VA National Center for Patient Safety
P.O. Box 486
Ann Arbor, MI 48106-0486
Phone: (734) 930-5890
Fax: (734) 930-5899
E-mail: ncpstips@med.va.gov
Websites:
Internet: www.va.gov/ncps
Intranet: vaww.ncps.med.va.gov

NCPS Director … James Bagian, M.D., P.E.
TIPS Editor … Don Jarosz
TIPS Editorial Board ……… James Bagian, M.D., P.E.
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