Normalization of Deviance:
When Unacceptable Practices/Standards Replace the Acceptable

ANDREW WOODWARD, M.A. RT(R)(CT)(QM)
THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
DIVISION OF RADIOLOGIC SCIENCE
What is this “normalization of deviance” phenomenon?
What began as an occasional non-compliance with an established standard.....

- Standard is easily recognized
- Professionals consistently disregard it
- Intentional deviation from the standard becomes
  - Widespread
  - Practiced
  - Condoned by the group
- The deviation becomes “normalized” practice
Recipe for disaster.....

- Mistakes, errors or lapses go
  - unattended
  - unappreciated
  - or unresolved for an extended period of time
Major accidents and incidences

Resulted in serious harm/disaster

- Not linked to an individual but....
  - Involved multiple people
  - Involved multiple mistakes
  - Involved breach of
    - Fail safe systems
    - Safety nets
Normalization of Deviance in Industry

NASA (1986)
- The Challenger

NASA knew—for at least 5 years prior—about the rocket booster O-ring failures that led to the Challenger disaster.

http://www.onlineethics.org/cms/12707.aspx

- In the 20 years prior to the Columbia space shuttle tragedy, the debris shedding that ultimately doomed the shuttle had occurred without incident on each and every previous shuttle flight (Predmore, 2006).
- As that occurrence became increasingly familiar to design engineers, its risk severity was steadily down-graded according to the illogical idea that “if no accident has happened by now, it never will.”

http://forward.com/articles/170105/sp ace-shuttle-columbia-disaster-claimed- israeli-as/?p=all
The non-compliance becomes

Routine

Rational

Acceptable
Why is this phenomenon a serious problem in healthcare?
Hospital Acquired Infections (HAI’s)

- About 1 in 25 hospital patients has at least one healthcare-associated infection.
- There were an estimated 722,000 HAIs in U.S acute care hospitals in 2011.
- About 75,000 hospital patients with HAIs died during their hospitalizations.

Despite well-known and accepted standards.....

Example #1 – Study completed by VitalSmarts found that there is common rule-breaking in American Hospitals

- no hand washing and sanitizing; skipping infection control practices; failing to check armbands, etc...
- 30% compliance without reminders
- “healthcare-acquired infections, those that are the result of medical, surgical, or nursing care, not pre-existing conditions that provoke healthcare encounters (hospitals and other professionals prefer the term healthcare-associated infections for obvious reasons), lead to 100,000 deaths at a cost to hospitals of $30 billion annually.”


Example #2 – Surgeon breaking sterile field, not once but twice – nothing said

http://emap-projects.usask.ca/vsac205/Lab5/lab5_maintaining_sterility.php
Why does this happen?

**Institutionalization** – staff exposed to deviant behaviors routinely performed by authority figures. Our “norm”.

**Socialization** – the newcomer joins or does not join the group practicing deviant behavior. Mediated by rewards and punishment.

**Rationalization** – convinced behaviors are legitimate and acceptable.
Mechanisms for normalization

- Rules are irrational.
- Lack of knowledge or understanding of the rule or standard.

Lessons Learned

- When teaching policies and procedures, the reason for the rule and possible negative outcomes should be discussed.
- Orientation should be comprehensive.
- Staff development and training should be ongoing.
Mechanisms for normalization

- Rules decrease productivity.
- Trust me/rules don’t apply to me.
- Dynamic work environments – unstable and unpredictable situations.

  ◦ Example – Policy to discourage drug diversion in neonatal care unit

Lesson learned:

- When faced with new technology, unstable or busy work environments, employees devise “accommodations” to the new work challenge.
Mechanisms for normalization

Breaking the rule means better patient care

- Example – Phlebotomist who breaks protocol to decrease likelihood of poor outcome
Mechanisms for normalization

- Leadership lacking in reporting problems.
  - Example – don’t want to “look bad”; politics trumping safety; too time consuming; productivity loss.

- Lesson Learned:
  - Rather than evaluating the situation from the perspective of the emotional and physical work of correcting the deviance consider the consequences of an actual adverse event occurring.
Recommendations

Remediation requires a **Renewed Commitment** to Patient Safety!

- Department managers must involve everyone in clinical practice.

- We must start talking about the deviations that have become normalized in a safe “just culture” manner.
  - discussions, incident surveys and reports, and the use of focus groups.
The reality is:

- Deviations are common
- Deviations are usually thought to achieve efficiency and not meant to harm
- Deviations – must be
  - Identified
  - Examined
  - Stopped
Clinical Practice & Patient Safety

http://www.who.int/entity/patientsafety/research/strengthening_capacity/research_classics_main.gif
“On the other hand, no amount of training, education, pleading, or probation seems to ever fully triumph over human nature....”

Karen Titus
### Table 4. Reports Submitted through PA-PSRS in 2014 by Event Type and Submission Type, Acute-Level Facilities

<table>
<thead>
<tr>
<th>EVENT TYPE</th>
<th>SERIOUS EVENTS</th>
<th>INCIDENTS</th>
<th>TOTAL NO. OF REPORTS</th>
<th>% OF TOTAL REPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Medication error</td>
<td>189</td>
<td>&lt;1</td>
<td>43,988</td>
<td>&gt;99</td>
</tr>
<tr>
<td>Adverse drug reaction</td>
<td>220</td>
<td>4</td>
<td>4,828</td>
<td>96</td>
</tr>
<tr>
<td>Equipment/supplies/devices</td>
<td>43</td>
<td>1</td>
<td>5,739</td>
<td>99</td>
</tr>
<tr>
<td>Fall</td>
<td>928</td>
<td>3</td>
<td>32,325</td>
<td>97</td>
</tr>
<tr>
<td>Error related to procedure/treatment/test</td>
<td>623</td>
<td>1</td>
<td>54,700</td>
<td>99</td>
</tr>
<tr>
<td>Complication of procedure/treatment/test</td>
<td>3,732</td>
<td>10</td>
<td>33,484</td>
<td>90</td>
</tr>
<tr>
<td>Transfusion</td>
<td>21</td>
<td>1</td>
<td>3,497</td>
<td>99</td>
</tr>
<tr>
<td>Skin integrity</td>
<td>587</td>
<td>2</td>
<td>32,364</td>
<td>98</td>
</tr>
<tr>
<td>Other/miscellaneous*</td>
<td>737</td>
<td>3</td>
<td>22,773</td>
<td>97</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,080</strong></td>
<td><strong>3</strong></td>
<td><strong>233,698</strong></td>
<td><strong>97</strong></td>
</tr>
</tbody>
</table>

*This is not a single category of completely unclassified reports but rather a category that includes specific subcategories that did not logically fit under other existing top-level headings. Examples of subcategories under other/miscellaneous are inappropriate discharge, other unexpected death, and electric shock to the patient.*

### Table 6. Reports Submitted through PA-PSRS in 2014 by Event Type and Level of Patient Harm, Acute-Level Facilities

<table>
<thead>
<tr>
<th>EVENT TYPE</th>
<th>UNSAFE CONDITIONS</th>
<th>EVENT, NO HARM</th>
<th>HARMFUL EVENT</th>
<th>DEATH EVENT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Medication error</td>
<td>2,097</td>
<td>7</td>
<td>41,891</td>
<td>21</td>
<td>185</td>
</tr>
<tr>
<td>Adverse drug reaction</td>
<td>102</td>
<td>&lt;1</td>
<td>4,726</td>
<td>2</td>
<td>217</td>
</tr>
<tr>
<td>Equipment/supplies/devices</td>
<td>874</td>
<td>3</td>
<td>4,865</td>
<td>2</td>
<td>43</td>
</tr>
<tr>
<td>Fall</td>
<td>297</td>
<td>1</td>
<td>32,028</td>
<td>16</td>
<td>914</td>
</tr>
<tr>
<td>Error related to procedure/treatment/test</td>
<td>6,484</td>
<td>22</td>
<td>48,216</td>
<td>24</td>
<td>605</td>
</tr>
<tr>
<td>Complication of procedure/treatment/test</td>
<td>3,079</td>
<td>10</td>
<td>30,405</td>
<td>15</td>
<td>3,621</td>
</tr>
<tr>
<td>Transfusion</td>
<td>522</td>
<td>2</td>
<td>2,975</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Skin integrity</td>
<td>9,393</td>
<td>31</td>
<td>22,971</td>
<td>11</td>
<td>587</td>
</tr>
<tr>
<td>Other/miscellaneous</td>
<td>7,054</td>
<td>24</td>
<td>15,719</td>
<td>8</td>
<td>680</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>29,902</td>
<td>12</td>
<td>203,796</td>
<td>85</td>
<td>6,872</td>
</tr>
</tbody>
</table>

Possibilities for normalization of deviance in clinical practice
Clinically we should:

1. Contribute to a culture of patient safety
2. Work in teams for patient safety
3. Communicate effectively for patient safety
4. Manage safety risk
5. Optimize human and environmental factors
6. Recognize, respond to and disclose adverse events
References

http://www.isssp.com/?page=product_profile&show=4717

Contact Information

Andrew_woodward@med.unc.edu