The Costs of Disruptive Physician Behavior

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In 2004, Robert Sutton, professor of management science and engineering at Stanford University’s School of Engineering, published a Harvard Business Review (HBR) article titled, “More Trouble than They’re Worth.” As the title suggests, Sutton argued that “star” performers may actually cost organizations more money than they generate for the firm. The popularity of this topic and article made it a Best of HBR for 2004 and eventually led to Sutton’s book, “The No Asshole Rule,” which he published in 2007. He sites several examples of firms who instituted a “no jerk rule,” and demonstrates that indeed these “star” jerks actually cost an organization more than they generate in revenues. While this knowledge empowers executives in the sectors which Sutton analyzed, he did not test his thesis in a healthcare delivery setting.

The purpose of this paper, therefore, is to attempt to quantify the costs of disruptive physician behavior to hospitals. Drawing from some of Sutton’s frameworks, combined with the literature available on this topic, I hope to construct a framework which empowers hospital executives as they encounter all-star physician “jerks.”

What Is Disruptive Physician Behavior?
Disruptive physician behavior is any action which interferes with the ability of other healthcare providers to effectively deliver patient care. A recent story in CBS news illustrates such behavior:

(Associated Press) A neurosurgeon was wrestled to the floor by sheriff’s deputies outside the operating room after he threw a fit because he had to wait for instruments to be sterilized, authorities say. Dr. Federico Castro-Moure, 45, was arrested Monday at Highland Hospital and will be charged with interfering with deputies, said sheriff’s Capt. William Eskridge.

Castro-Moure, the hospital’s chief of neurosurgery since 2002, allegedly became belligerent when nurses told him that instruments brought in from another medical facility had to be sterilized. It took three deputies to subdue the doctor.

"He was aggressive. He was angry, agitated, yelling and out of control. That’s when the deputies had to take him down," Eskridge said.

Castro-Moure was jailed and released several hours later on $4,000 bail. The doctor was placed on leave while the hospital investigates.

Recently, stories such as these are increasingly common in the headlines or through portrayals on popular television shows. Notably, this physician was the head of neurosurgery, thus, a “star”
performer for this hospital. While actions like this are at the extreme, there is a spectrum of disruptive behavior. The following are other examples of behaviors which fill this continuum:

- Profane or disrespectful language
- Demeaning behavior, such as name-calling
- Sexual comments or innuendo
- Inappropriate touching, sexual or otherwise
- Racial or ethnic jokes
- Outbursts of anger
- Throwing instruments, charts, or other objects
- Criticizing other caregivers in front of patients or other staff
- Comments that undermine a patient’s trust in other caregivers or the hospital
- Comments that undermine a caregiver’s self-confidence in caring for patients
- Failure to adequately address safety concerns or patient care needs expressed by another caregiver
- Intimidating behavior that has the effect of suppressing input by other members of the healthcare team
- Deliberate failure to adhere to organizational policies without adequate evidence to support the alternative chosen
- Retaliation against any member of the healthcare team who has reported an instance of violation of the code of conduct or who has participated in the investigation of such an incident, regardless of the perceived veracity of the report

Of the behaviors listed above, overt physical threats are the least common in healthcare. Bullying physicians rely on more subtle tactics of intimidation. According to a recent survey, the following are the most common forms of disruptive behavior: condescending language or intonation (88%), impatience with questions (87%), and reluctance or refusal to answer questions or phone calls (79%). Forms of blatant intimidation most frequently experienced were: strong verbal abuse (48%), threatening body language (43%), and physical abuse (4%).

Causes of Disruptive Behavior

Aside from the military, healthcare is the sector where hierarchy is perhaps most pronounced and influential on the culture. For example, physicians are the only members of the hospital staff who must be addressed by a title rather than their first name. Similarly, the white coat is a visible symbol of authority that distinguishes physicians from other providers. Even the length of the white coat further segregates physicians according to their perceived importance in the hospital. Medical students wear short white coats; in some institutions, first year residents are made to wear short coats as well; upper level residents and attending physicians wear longer coats; surgeons often wear the longest coats, thought this phenomenon varies according to physician preference. This hierarchy creates a mindset of perceived superiority to other healthcare providers. In fact, physicians rarely engage in disruptive behavior towards each other, while nurses, pharmacists, and other providers are far more commonly

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targets of their intimidation. 1 Additionally, physicians are the most common offenders, whereas other providers engage in such behavior much less frequently. 4

A second factor which contributes to disruptive physician behavior is the dependence hospitals have on physicians to generate referrals and subsequently revenues. Thus, doctors are often seen as "customers" rather than employees. The prevailing attitude which follows is that the "customer is always right," and consequently, hospital administrators have learned to tolerate behaviors from physicians which would not by tolerated from other employees. In fact, even hospital executives are not immune from this behavior. 95% of physician executives surveyed reported encountering disruptive or potentially dangerous physician behaviors on a regular basis. 5

Not all physicians indulge in this disruptive conduct. Approximately 4-6% of physicians actually exhibit intimidating behavior. 6,7 However, these figures seem understated when compared to actual reports from nurses. According to a recent study, 64% of nurses report some form of verbal abuse from a physician at least once every 2 to 3 months, with 23% reporting at least one instance of physical threat from a physician, with the most common being having an object thrown at them. 8 Either intimidating behavior is under-reported, or the impact of those 4-6% of bullying physicians is far more reaching than one would predict.

Costs of Disruptive Behavior

Employee Turnover

Nurses consider disruptive physician behavior as the most significant factor affecting job satisfaction. Job dissatisfaction is a predictor of nurses' intent to leave their jobs, which is the greatest predictor of nurse turnover. 9

31% of nurses report knowing at least one nurse who left their job because of intimidating physician behavior. 10 More specifically, verbal abuse accounts for 18% of nurse turnover. 11 Witnessing bullying attacks is even more pervasive. In a study performed by the Veterans Hospital Association (VHA), 96% of nurses witnessed or experienced disruptive physician behavior.

Merely witnessing an abusive attack has a far-reaching influence. According to a recent study, twenty percent of bullying witnesses leave their jobs. For every incident, two coworkers witness the event. Of those who were the target of the attack, twenty-five percent leave. 12

Nurse Turnover: What Are the Costs of Disruptive Physician Behavior?

Nurse turnover costs can amount to two times a nurse's salary. The national average salary of a medical-surgical nurse is $46,832. 13 Therefore, the cost of replacing just one nurse is $92,442. A

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10 Robert Sutton, “No Asshole Rule.”
specialty area nurse can cost up to $145,000 to replace. (Replacement costs include human resources expenses for advertising and interviewing, increased use of traveling nurses, overtime, temporary replacement costs for per diem nurses, lost productivity, and terminal payouts.)

According to these figures, the costs of disruptive physician behavior on nurse turnover for an academic medical center (AMC) like Massachusetts General Hospital (MGH) can amount to more than $11 million per year for medical-surgical nurses alone (see Figure 1).

**Figure 1.** Total Annual Costs in Nurse Turnover to an Academic Medical Center due to Disruptive Physician Behavior. (number of nurses for Mass General Hospital. Source: American Hospital Association).

### Assumptions
- Nurse turnover rate (nat'l average): 21.3%
- Nurse turnover rate due to bullying: 18.0%

<table>
<thead>
<tr>
<th>Licensed Nurses</th>
<th>Annual Number of Nurse Turnover</th>
<th>Turnover due to Physician Abuse</th>
<th>Nat'l Average Salary (Med-Surg)</th>
<th>Turnover Costs</th>
<th>Total Annual Cost due to Disruptive MD Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>2249</td>
<td>479</td>
<td>86</td>
<td>$46,832</td>
<td>2x Annual Salary</td>
</tr>
<tr>
<td>Part-time</td>
<td>1639</td>
<td>349</td>
<td>63</td>
<td>$23,416</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3888</td>
<td>828</td>
<td>149</td>
<td></td>
<td>$11,019,222</td>
</tr>
</tbody>
</table>

**Patient Safety: What are the Costs of Disruptive Physician Behavior?**

Disruptive physician behavior can impact patient safety through two different channels depending on the intervention the patient requires. If the patient’s condition can be treated medically, then adverse drug events (ADE) can occur. According to a study, 49% of non-physician providers have felt pressured to dispense or administer a drug despite serious patient safety concerns. 40% have kept quiet rather than question the physician intimidator.14 Another study reported that 17% of adverse events occurred as a result of disruptive behavior.15

How much does this cost a hospital? According to a study by Duke, the average academic medical center has 4.4 ADEs per 100 admissions.16 Using MGH again as an example, the number of annual inpatient admissions for 2009 was 47,250. This volume would have approximately 2080 ADEs per year, given the above ratio. Assuming 17% of these are caused by disruptive physician behavior (per the Rosenstein study), then 353 ADEs occur annually from such behaviors. According to an AHRQ study at MGH, ADEs increase the length of stay by an average of 4.6 days, resulting in $4,685 of additional costs.17 Thus, multiplying this by the number of ADEs caused by disruptive physician behavior, the total annual cost for an academic medical center like MGH is $1,653,805.

Surgical complication is another area where disruptive physician behavior can affect patient safety. A recent study by the WHO showed that use of a surgical checklist can decrease complication rates by 30%. Adoption of such a checklist, however, often encounters resistance from many surgeons. What are the costs associated with such resistance? According to the WHO study, an academic medical

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15 Rosenstein & O'Daniel, 2005
center has an average surgical complication rate of 3%. Again, using MGH as an example for an AMC, given an average of 19,233 inpatient surgeries per year, this amounts to 577 patients with surgical complications. A 30% reduction in complications would prevent about 173 complications. Given that the average cost of a surgical complication, according to the WHO report, is $13,372, compliance with the WHO checklist results in $2,313,356 per year in savings.

Physicians who engaged in intimidating behavior toward co-workers are also likely to treat patients in a similar manner. This, too, has cost implications for a hospital. According to several studies, physicians at high risk for a malpractice lawsuit are less effective at providing meaningful communication and maintaining rapport with patients and their families, especially when a complication occurs. Though limited data exists to show how many times per year a physician “jerk” is likely to be sued than one who has more positive communication with patients, the cost of malpractice suits also add to the overall costs of a disruptive physician.

More important than the financial implications is the impact that ADEs and surgical complications have on a patient’s life. The indirect costs of poor patient satisfaction, as well as the impact on the reputation of the hospital as a result of sub-standard care, are also costs which must be considered when considering the impact of “jerk” physicians on patient safety.

The level of safety and quality of a hospital is suspect for yet another reason when intimidating physician behavior is tolerated. Amy Edmondson’s research on error reporting within nursing units revealed that unforgiving work environments where “heads will roll” or where one is “put on trial” for a mistake are more likely to conceal medical errors. Conversely, “psychologically safe” environments were more likely to report medical errors, and thus were more likely to address the cause of those problems, making it a safer place to work and to be cared for. Thus, there are likely hidden costs in the form of undisclosed medical errors where intimidating behaviors are tolerated. Quantifying the savings of creating a psychologically safe environment in healthcare is another area of analysis which would further strengthen the argument for instituting a “no jerk” policy in a hospital.

What is the impact of disruptive physician behavior on hospital revenues?

Psychologically safe work environments could potentially lead to higher revenues for a hospital as well. A study by Edmondson, Bohmer, and Pisano illustrates how providers that work in psychologically safe work environments are able to learn new medical procedures much faster than teams that do not operate in such an environment. Specifically, surgeons who lead their team in a more collaborative style that values input from all team members, as opposed to a surgeon who leads with a dictator-like approach, showed a much steeper learning-curve. Assuming that newer medical technologies and procedures can lead to higher revenues (either by decreasing operating time and thereby increasing volume, or by increasing reimbursement via new coding for improved technology), hospitals which foster psychologically safe work environments could potentially see higher revenues. This opportunity cost could also be included in the total cost to a hospital for tolerating disruptive physician attitudes and behavior.

What are the indirect costs of disruptive physician behavior?

Perhaps the greatest indirect cost to having a “jerk” physician on staff is the time required by the management team to deal with issues surrounding the offending physician. No research has been done to quantify the time invested by administrators in dealing with just one physician “bully.” This is another opportunity for research, as the only evidence that exists relates to star performers outside of healthcare settings. Nevertheless, this non-healthcare case study from Robert Sutton’s work serves as a baseline against which future research on physician disruptors can be compared. One example from a firm in Silicon Valley follows:

**Figure 2.** Time spent by administration in managing one disruptive star performer.

<table>
<thead>
<tr>
<th>Administrator</th>
<th>Time Spent (hrs)</th>
<th>Costs ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Manager</td>
<td>250</td>
<td>25,000</td>
</tr>
<tr>
<td>HR professional</td>
<td>50</td>
<td>5,000</td>
</tr>
<tr>
<td>Counseling</td>
<td>50</td>
<td>5,000</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>15</td>
<td>10,000</td>
</tr>
<tr>
<td>Employment counsel</td>
<td>10</td>
<td>5,000</td>
</tr>
<tr>
<td>Recruiting and Training a Department</td>
<td></td>
<td>n.a.</td>
</tr>
<tr>
<td>Secretary</td>
<td></td>
<td>94,000</td>
</tr>
<tr>
<td>Overtime Costs associated with Disruptor’s</td>
<td></td>
<td>n.a.</td>
</tr>
<tr>
<td>Demands</td>
<td></td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>375</strong></td>
<td><strong>$169,000</strong></td>
</tr>
</tbody>
</table>

**Are Star Performers Replaceable?**

The work by Huckman and Pisano provides some evidence to suggest that star performers are replaceable. Using patient mortality as an outcome measure, they found that the quality of a surgeon’s performance at a given hospital improves significantly with increases in his or her recent procedure volume at that hospital, but does not significantly improve with increases in his or her volume at other hospitals in which he or she operates. Their findings suggest that surgeon performance is not fully portable across hospitals (i.e., some portion of performance is firm specific). Further, they provide preliminary evidence suggesting that this result may be driven by the familiarity that a surgeon develops with the assets of a given organization. In other words, the team around the surgeon may be just as important, if not more so, than the surgeon him/herself.

**Next Steps**

When a physician has caused sufficient damage within an organization, that hospital administrators consider the option of terminating the physician, often the argument is made, “We can’t afford to lose Dr. So-and-So. She brings our hospital so much in revenues. We couldn’t afford losing her to a competitor.”

Huckman and Pisano’s work suggests that even if the star physician were to join another institution, his/her performance may not return to previous levels. More importantly, their work suggests that it is the team around the physician that the hospital cannot afford to lose.

This attempt at a cost analysis (summarized in Figure 3) shows that star physician disruptors cost an AMC like the Mass General Hospital approximately $35.7 million a year in revenues (not taking into consideration opportunity costs, such as lost revenues from slower organizational learning). Considering...
the net income for MGH in 2008 was $138 million,\textsuperscript{21} this sum is 26% of their annual net income. Given the small, 1-3% margins most AMCs make per year, this sum cannot be ignored.

**Figure 3.** Total costs of permitting disruptive physician behavior in a typical Academic Medical Center.

<table>
<thead>
<tr>
<th>Cost Consideration</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Turnover</td>
<td>11,019,222</td>
</tr>
<tr>
<td>Adverse Medical Events</td>
<td>1,653,805</td>
</tr>
<tr>
<td>Surgical Complications</td>
<td>2,313,356</td>
</tr>
<tr>
<td>AdministrativeTime*</td>
<td>20,727,850</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$35,714,233</strong></td>
</tr>
</tbody>
</table>

\* Assumes cost per jerk of $169,000 per year (Figure 2).

\*Assuming 5\% of physicians engage in disruptive behavior, with 2,453 MDs at MGH (Source: AHA).

The cost of retaining disruptive physicians is high, both in terms of lost employees, patient safety, as well as direct and indirect costs. Rather than catering to these high-profile, high-need personalities, hospital administrators can focus that same time and effort toward creating a sustainable, high-performance organization. These efforts would consist of creating a psychologically safe work environment, with emphasis on teamwork rather than individual performers. With patients, rather than physicians, at the center of the strategy, hospital executives will find better consistency and alignment with their patient-centered missions. Collectively, bold leaders can change the current culture of the medicine and prepare the way for meaningful reform in our healthcare system.