

RESPECT: RADIOLOGY EMPLOYEES STRIVING FOR PRODUCTIVE AND EFFECTIVE COMMUNICATION

Presentation in Practice Policy and Quality Initiatives

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RESPECT: Radiology Employees Striving for Productive and Effective Communication

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*For the RESPECT team**

Abbreviation: RESPECT = Radiology Employees Striving for Productive and Effective Communication

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*Members of the RESPECT team are listed in the Acknowledgments.

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INTRODUCTION

Effective communication

- Essential for health care entities
- High-quality safe patient care
- Crucial, still a challenge
- Avoid serious safety events

Ineffective communication

- Lack of attention
- Lack of understanding
- Lack of respect

- Contributing factors in medical practices
 - Increasing workloads
 - Increasing reliance of technology
 - Less reliance on face-to-face communication
 - Increasing distance between sites of care delivery
 - Increasing stress

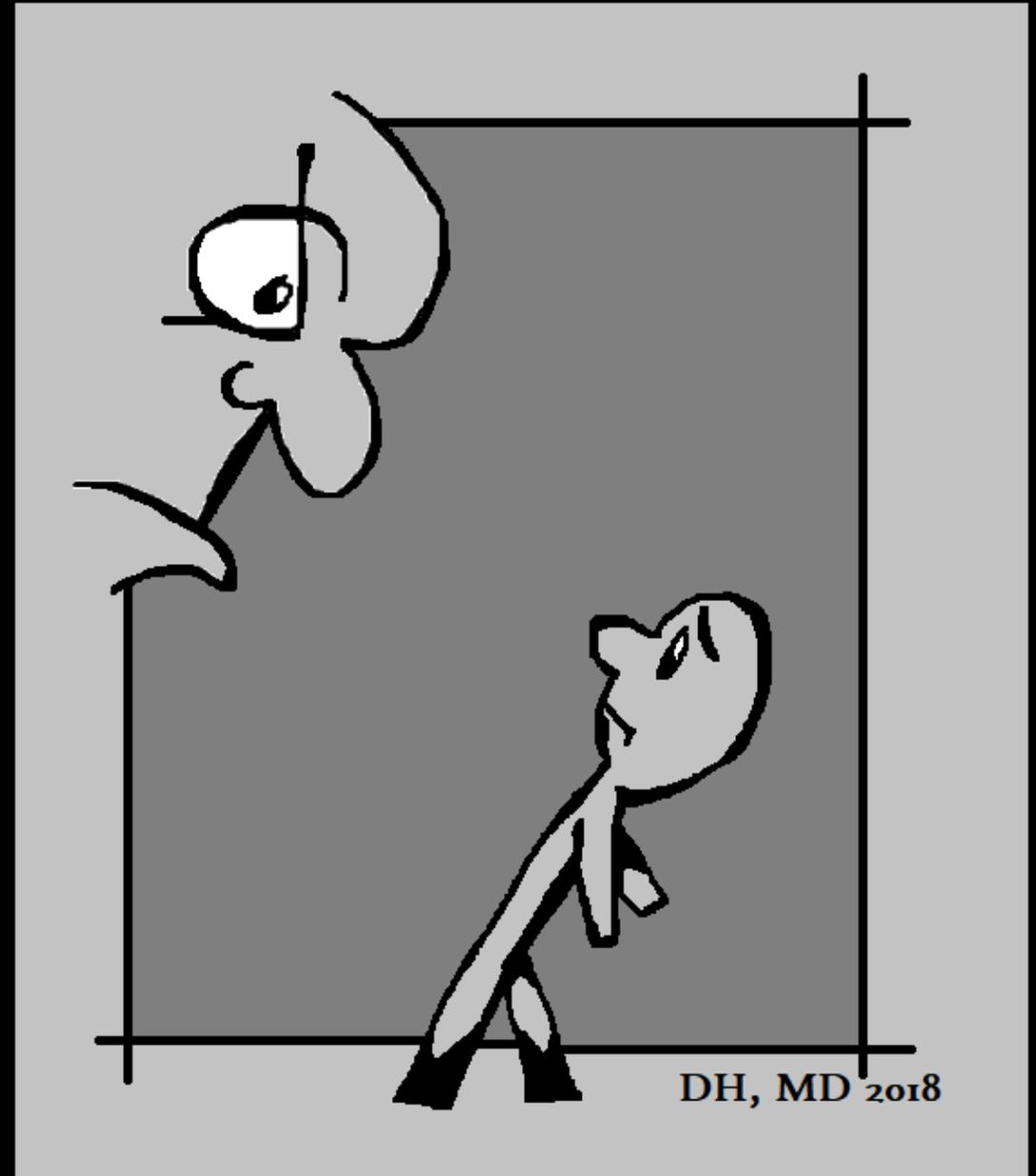


Lack of respect

Particularly troublesome

Components:

- Disrespectful words
- Tone of voice
- Body language
- Power gradient (higher title or role)

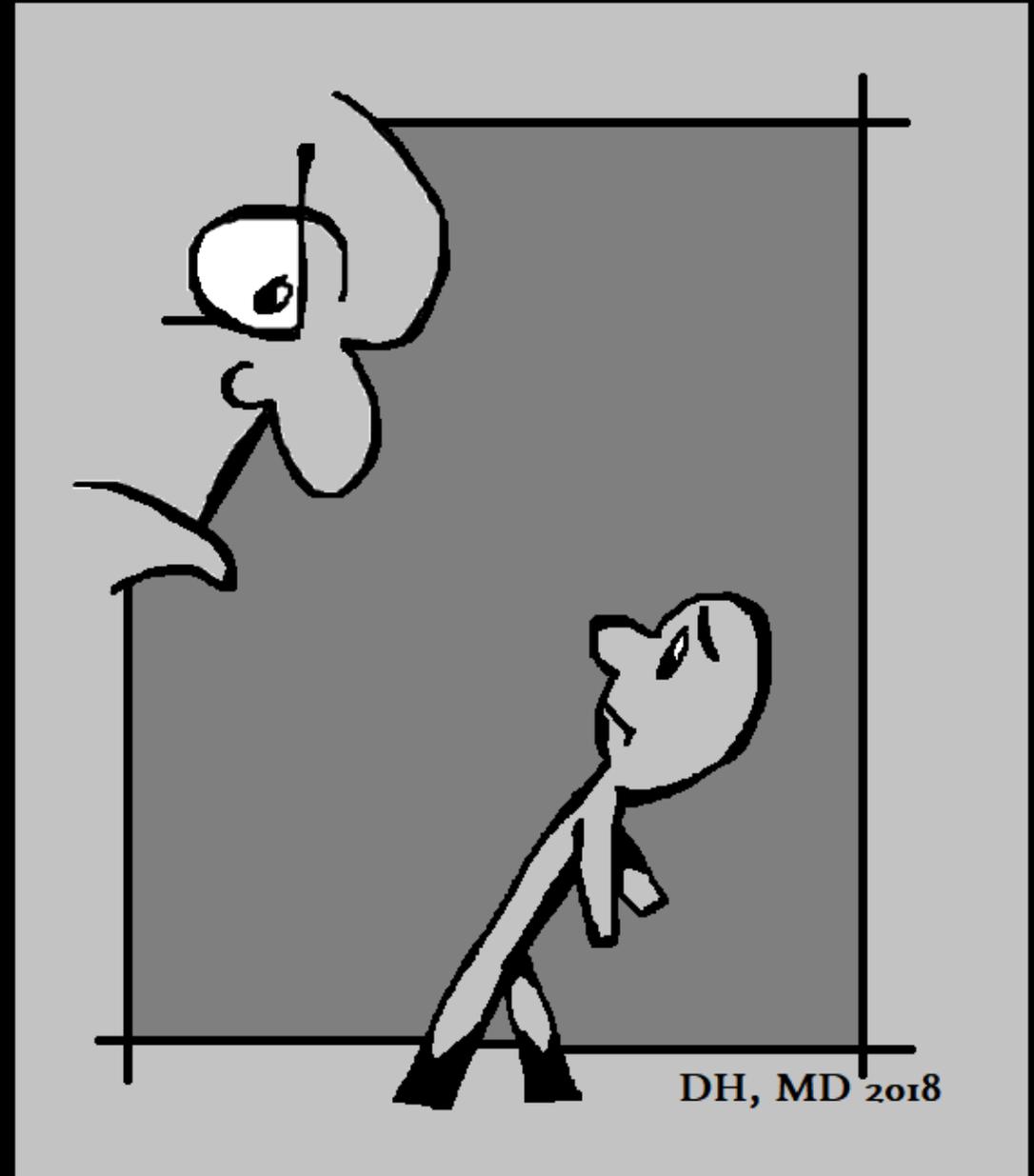


Lack of respect

Negative impact on health team

- Reliance on health care workers
- Less likelihood to report warning signs early

Frontline workers perceived disrespect by physicians



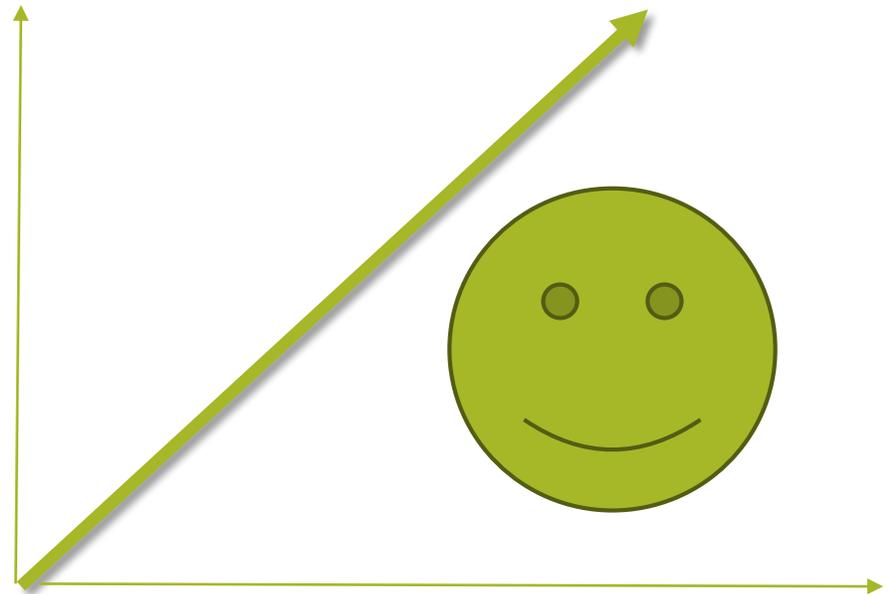
Quality improvement project

Focus: improving interactions

- Radiologists
- Technologists
- Child life specialists
- Reading room assistants

Goal: increase median percentage

- "Very good" and "Excellent" interactions
- From 48% → 90%



METHODS

Setting

- Large children's hospital
- Radiologists 35
- Pediatric radiology fellows 12
- Radiology technologists <200
- Reading room assistants 12
- Child life specialists 4



Setting

- Imaging at 11 sites across city
- Radiologists on site - 3 locations
- Reading room assistants - primary location
- Interactions in person and by telephone



Baseline Data Collection

- Problem identified
 - Multidisciplinary team designed
 - Identification of root causes
 - Solutions to correct specific behavior
-
- Chatham House Rule
 - Person vs scenario
 - Anecdote shared outside of room
 - People not identified outside

Baseline Data Collection

RESPECT - Radiology Employees Striving for Productive and Effective Communication team

- Perception of interactions
- Series of surveys

Table 1

TABLE 1

Table 1: Survey Questions Sent to Radiology Department Staff

Item Number	Survey 1	Surveys 2–9	Surveys 10–17
1	I am comfortable seeking guidance or support from radiologists.*	I am comfortable seeking guidance or support from radiologists.*	I am comfortable seeking guidance or support from radiologists.*
2	I am treated with respect when communicating with a radiologist.*	I am treated with respect when communicating with a radiologist.*	I am treated with respect when communicating with a radiologist.*
3	Overall, how would you describe your interactions with radiologists?*	Overall, how would you describe your interactions with radiologists in your last 2 workdays?*	Overall, how would you describe your interactions with radiologists in your last 2 workdays?*
4	Are there any examples of interactions that support your response to the first three questions?†	Are there any examples of interactions that support your response to the first three questions?†	Are there any examples of interactions that support your response to the first three questions?†
5	NA	NA	Name one radiologist that you have directly interacted with in the last 2 workdays.†
6	NA	NA	How would you rate the interaction with the radiologist you identified in the previous question?*
7	NA	NA	Why did you rate this interaction as less than excellent or very good? Choose all that apply.‡

Note.—NA = Not applicable.

*Five potential answer choices: excellent, very good, good, fair, or poor.

†Free-text answer.

‡Conditional question that only appeared if the response to question 6 was good, fair, or poor. Seven potential answer choices: rolled eyes at me, inappropriate tone when communicating with me, did not make eye contact, failed to acknowledge me, scowled at me, failed to identify himself or herself, or other (please specify).

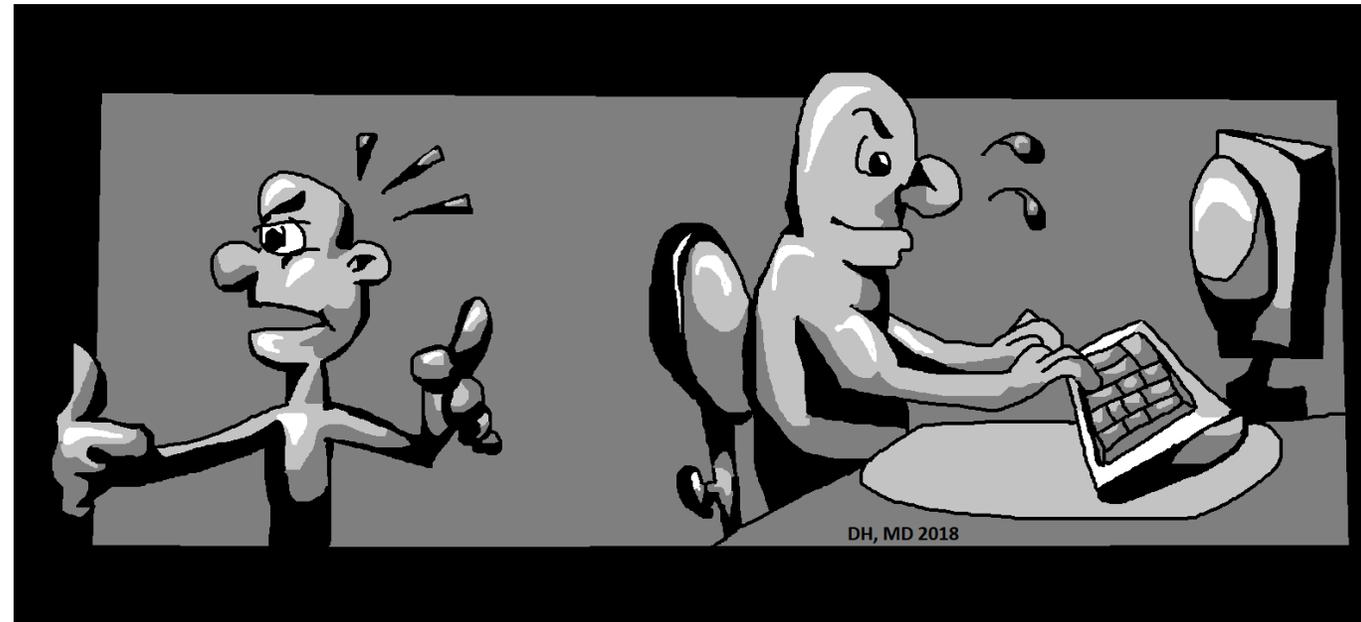
Baseline Data Collection

Perception of interactions

- Radiologists $\leftarrow \rightarrow$ frontline staff
- Both perspectives

Three major instances

- Disrespectful behavior
 - Radiologists $\leftarrow \rightarrow$ frontline staff
1. In-person interactions
 2. Telephone interactions
 3. Trainee interactions



Baseline Data Collection

- Three subgroups of team
- Root causes for negative interactions
- Potential interventions
- Interventions
- Tests conducted by each subgroup
- Methodology of "plan, do, study, act" (PDSA)

Table 2 - interventions and outcomes

TABLE 2

Table 2: Interventions and Their Outcomes

Category	Intervention	Result
Telephone interactions	Create script for answering phone	Modify: script felt forced
	Create recommendation for identifying self when answering phone	Adopt: successful intervention
	Implement automated call distribution system	Adopt: number of unneeded calls to reading room decreased, calls triaged to more appropriate location
In-person interactions	Tally in-person interactions as positive or negative in quality control area immediately after interaction	Modify: technologists did not tally interactions; move form to another location
	Tally in-person interactions as positive or negative in reading room immediately after interaction	Abandon: technologists did not tally interactions; move form to another location
	Implement secure messaging application to enable radiologists to answer pages or questions during conferences	Abandon: radiologists did not routinely answer pages with secure messaging application
	Change schedule so that a specific radiologist is assigned to cover the reading room during all conferences	Adopt: radiologists were now available in reading room when needed
	Individual survey responses shared with radiologists	Adopt: radiologists were routinely notified of how they were perceived by technologists
	Create opportunity for technologists to shadow radiologists in reading room	Abandon: technologists were not able to easily get away from clinical duties
	Trainee interactions	Trainee schedule time to shadow technologists
Schedule time for trainees to shadow technologists		Adopt: trainee and technologist feedback extremely positive; implemented for radiography, CT, and MRI
Create a meet and greet session for new trainees		Adopt and expand: meet and greet session deemed a positive experience and created a new social interaction for technologists and radiologists during the workday
Provide education during orientation on how to answer the telephone		Adopt: trainees understood different scenarios and accepted a standard way to answer the telephone

Baseline Data Collection

Test of change evaluated (PDSA ramp):

- Abandoned
 - Modified
 - Adopted
 - Expanded
-
- Improvement result of entire series of interventions
 - First intervention: awareness

Inverventions: In-Person Interactions

- Two locations: reading room and outside
- Disrespectful tone of voice
- Disrespectful body language
 - Lack of eye contact
 - Eye rolling
- Balanced interventions:
 - Psychological safety of frontline staff
 - Timely and private feedback to radiologists

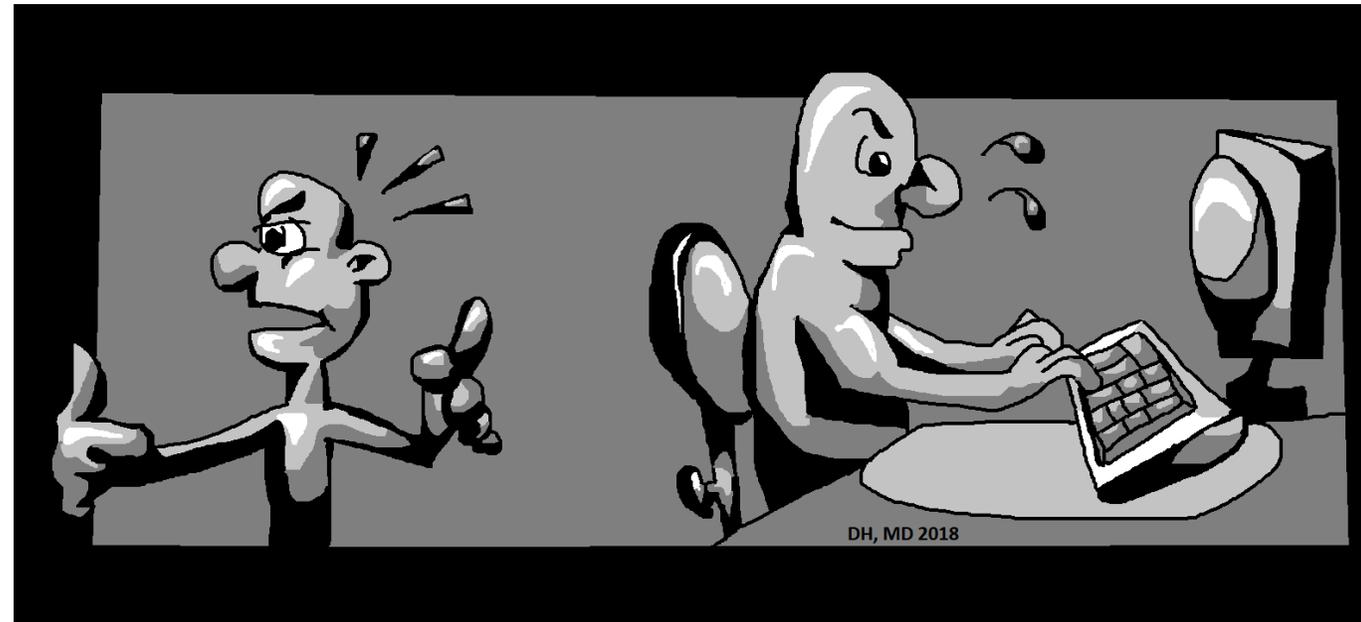


Table 2

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Interventions: Telephone Interactions

- Three major issues
 - Negative tone of voice
 - Incomplete information transmittal
 - Frequent radiologist interruptions

- Table 2

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Interventions: Trainee interactions

Several root causes

- Fellows didn't know technologists well
- Unaware of work effort with pediatric patients
- Not oriented appropriately
 - Desired departmental interactions

Interventions: Trainee interactions

- Shadowing
- Social events
- Orientations
 - Phone etiquette
 - Appropriate body language
 - Goals of improved interactions

Continued Data Collection

- Survey of frontline staff 4-6wk intervals
- Significant improvement if:
 - Eight consecutive measurements
 - All above the baseline or current median value
 - "Very good" or "Excellent" tracked

Fig 1

FIGURE 1

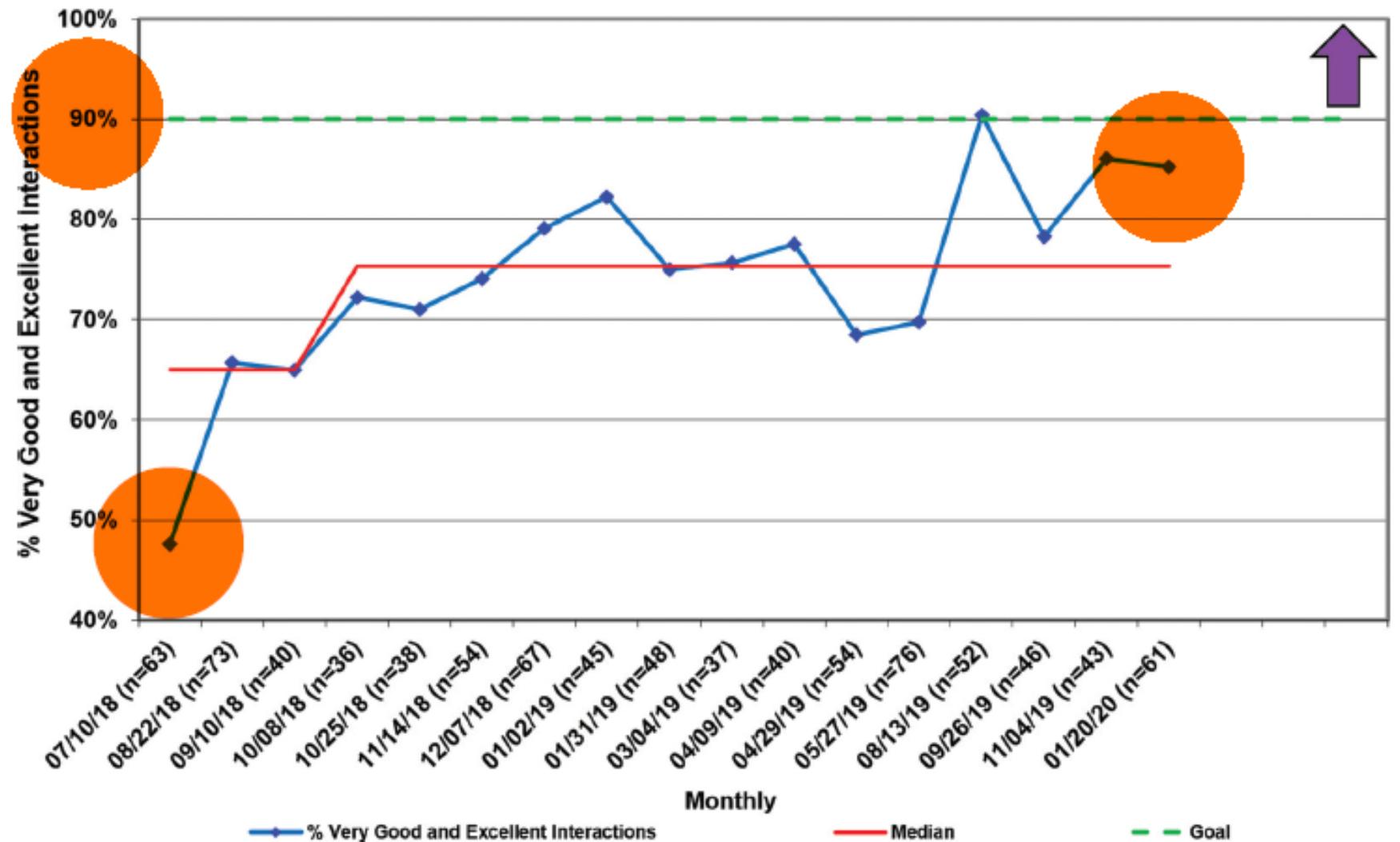


Figure 1. P-chart shows the percentage of very good and excellent interactions (blue line) between technologists and radiologists over time. The red line represents the median percentage of very good and excellent interactions. The median value significantly changed over time on the basis of standard process control rules. The dashed green line represents our a priori goal of 90% of interactions rated as very good or excellent. The purple arrow indicates the desired direction of change.

RESULTS

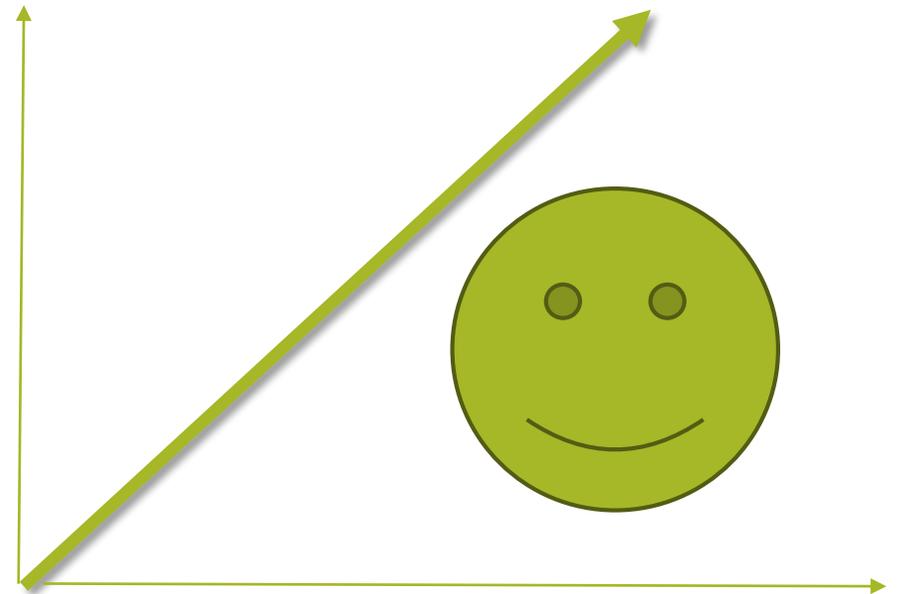
Results

Frontline staff responding survey n=63 (32%)

- "Very good" or "Excellent" interactions - 48%

Radiologists at baseline n=28 (85%)

- "Very good" or "Excellent" interactions - 96%
- No routine surveys in this group
- A year later, interactions 95%



Results

- July 10, 2018 - February 10, 2020: 17 surveys
- Range of "Very good" or "Excellent" 65%-90%
- Current (at publication) median 75%
- Initial median performance 65%

- Baseline 46 negative comments vs 12 positive
- Relationship of 2-3:1

Table 3

Fig 2-4

TABLE 3A

Table 3: Sample Comments from Frontline Staff

Comment Category	Positive or Negative Comment	Comment
General or baseline comments	Positive	Dr X is amazing! I love working with them.
	Negative	There's the A-team, the B-team, and the "we don't want them on our team."
	Negative	Radiologist X is by far the worst radiologist to work with because they are so condescending. They always have the attitude when I work with them that they are somehow better than I am. It makes it painful to work with them, and I am always dreading when they are on the schedule.
	Negative	Sometimes I'm not sure if the radiologist will be in a good mood or not (whether because of me calling or because of other distractions), and whether that bad attitude will be taken out on me. For some radiologists, I cross my fingers before calling, praying they are in a good mood. I don't call to be annoying. I call for the patient or because (heaven forbid) I need help.
Telephone interactions	Positive	Dr X is always a pleasure to talk with over the phone when you have a question.
	Positive	I feel very comfortable asking questions and calling radiologists for help.
	Mixed	I feel very comfortable asking questions and calling radiologists for help. Occasionally, when I call to ask for a study to be checked, it is because the protocol states "Please check images," or I see something that I am questioning. After asking for a check, I often get a response by Dr X similar to "Why am I checking this?"
	Negative	Sometimes radiologists seem irritated that they have to check studies over the phone. I know they are busy sometimes too, but this is protocol when things aren't normal. They will ask me questions multiple times, which means they are not listening to me when I am presenting the case.
	Negative	Dr X was very short and abrasive when on the phone. Today, they were checking scans in the reading room. They snapped at me twice for calling! I realize that they are busy, but it is disrespectful.

TABLE 3B

Table 3: Sample Comments from Frontline Staff

Comment Category	Positive or Negative Comment	Comment
In-person interactions	Positive	Working with Dr X and Dr Y in US on Tuesday was great. Both of them were happy to help with anything and everything.
	Positive	Dr X is so friendly with patients, families, and staff every time they are at our outpatient hospital. The other day they came back through at the end of their shift to thank us for helping them through the day and to say goodbye. Usually, the radiologists do not come through to say they are leaving for the day.
	Negative	Radiologists always seemed bothered when we let them know there are teleradiology studies to be read. Not all, but several get frustrated, and it feels like they are mad at us.
	Negative	I have had more than one technologist complain to me about the same radiologist rolling their eyes during conversations.
	Negative	I have walked into the reading room and asked if a radiologist could help in fluoroscopy. No one responded or even acknowledged that I had asked a question.
	Negative	We are trained to notify the radiologist as soon as possible in certain situations, but sometimes we are met with anxiety and frustration. It feels like the radiologist is upset that we are interrupting them in the reading room.
	Negative	Dr X is just rude and nasty. They talk over us technologists and it's unacceptable. If we acted in this manner, we wouldn't have a job.
Trainee interactions	Positive	Dr X was very helpful this weekend and always treated me respectfully, as I had a couple of situations in which I had to go to ask them questions.
	Positive	Dr X is always so nice and personable! A few weeks ago, I had a parent comment on how nice and understanding they were after a fluoroscopic procedure.
	Mixed	I am not always comfortable seeking help from the fellows. I am always comfortable asking for help or advice from the radiologists.
	Negative	Some of the fellows are less confident, and having support from the attending radiologist is helpful to minimize issues for technologists.
	Negative	Some fellows are still not stating who they are when answering the phone, or they will say their first name, but that doesn't help me when I work in the outpatient world and have no interaction with them face to face.

Note.—Comments have been edited for clarity and to ensure anonymity.

FIGURE 2

Survey number	Number of Positive Comments	Number of Negative Comments
1	12	46
2	30	22
3	23	12
4	16	8
5	15	6
6	13	13
7	28	9
8	8	3
9	18	10
10	41	15
11	61	12
12	53	20
13	85	24
14	53	7
15	42	7
16	39	4
17	61	13

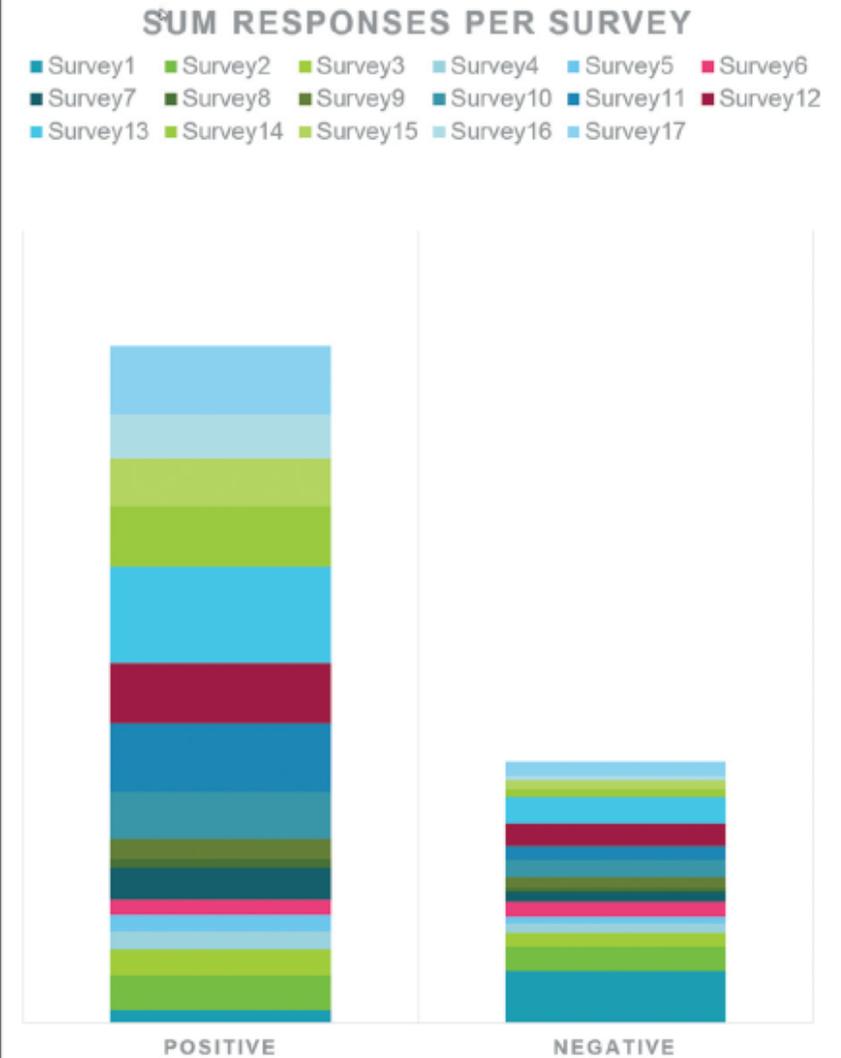


Figure 2. Stacked bar graph shows the aggregate frequency of positive and negative comments during the project. Each color of the bar represents response data from an individual survey. The chart highlights two observations. Initially, negative comments outnumbered positive comments by nearly 4:1 (46:12). At the time of publication, positive comments outnumber negative ones by 4.6:1. In addition, throughout this project, we have had twice as many positive comments as negative ones.

FIG 3



Figure 3. Stacked bar graph shows the frequency of positive interactions by radiologists. Each bar represents the number of times a specific radiologist (randomly assigned to a number at the bottom of the chart) was identified in a positive comment by a technologist. The different colors within each bar represent the survey in which the positive comment occurred.

FIG 4

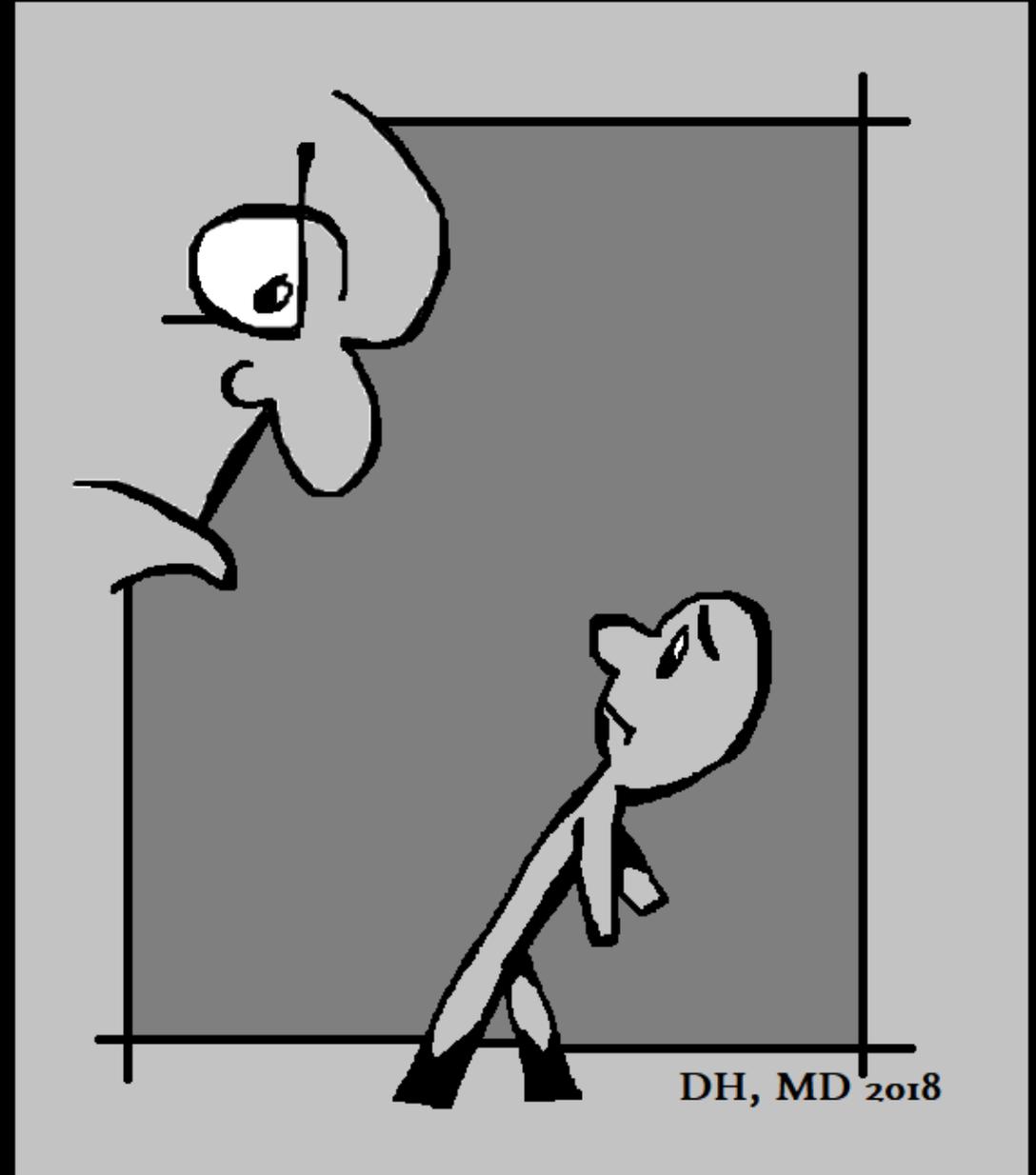


Figure 4. Stacked bar graph shows the frequency of negative interactions by radiologist. Each bar represents the number of times a specific radiologist (randomly assigned to a number at the bottom of the chart) was identified in a negative comment by a technologist. The different colors within each bar represent the survey where the negative comment occurred.

DISCUSSION

Discussion

- Ineffective communication
- Cause of failure in safety events
- Power gradient
 - Person with less power
 - Feels he or she cannot raise a concern
 - Job dissatisfaction
 - Poor patient experience
 - Minor and major patient safety events



Discussion

Improved communication:

- National Patient Safety Goal
- Every year since 2003
- Joint Commission
- Standardized tools:
 - Time-outs before procedures
 - Daily safety huddles
 - Creation of safety hotlines

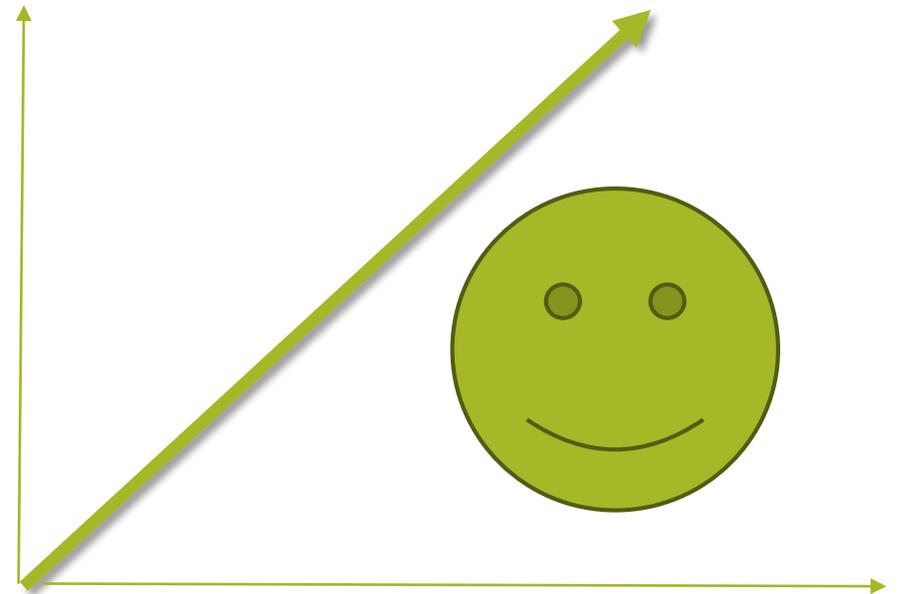
Discussion

Safety events still occur

- Never events: 4000/yr in the US
 - Wrong-site surgeries or procedures
 - Wrong-patient surgeries or procedures
 - Retained objects

Quality improvement routines and forums

- Problem acknowledged → change needed
- Negative interactions
- Radiologists ← → technologists



Discussion

- Change of departmental culture
- Multiple small tests of change
 - Improve interactions
- Two types of interventions:
 - Behavioral: require an individual → change
 - System-based

Discussion

- Assumption of research team about Radiologists:
 - Did not want to be perceived as disrespectful
 - Did not realize the effect of
 - Body language
 - Tone of voice
- Awareness targeted
- Sharing anonymous anecdotes
 - Perhaps most effective intervention
 - Eye contact
 - Greeting courtesy
 - Introducing oneself by phone

Discussion: Feedback and focused coaching

- One-on-one sessions
- Notable effort to improve interactions
- Some sought external help to improve:
 - Interpersonal relationships
 - Communication skills

Discussion: System-based issues

- Increased stress for radiologists and staff
- Decreasing number of phone calls to reading room
- Interruptions
 - Separate project
 - Simultaneous, continues
 - Interventions affecting radiologists



Discussion: Main, initial goal

- Interactions "Very good" or "Excellent"
- Increase from 48% → 90%
- Achieved at one survey
- Goal yet not achieved
- Sustained improvement
- Median percentage $\geq 90\%$
- Intrateam interactions (R-R, T-T)
- Creating culture of feedback

Discussion: Limitations

- Low response rate 18%-38%
- Impact of individual interventions not measured
 - Series of interventions → change
 - Unable to identify useful interventions
- Weber effect
 - People improve knowing they are observed
 - (+) Focus on awareness

CONCLUSION

Conclusion

- Quality improvement methodology
 - Improve interactions
 - Radiologists and frontline staff
- Modest improvement
- Significant work ahead

- Hope: framework → help other departments with similar problem