# Bunker Shifts Relieve Long List Anxiety Syndrome -(LLAS)

Eric Brandser, MD Tushar Kothari, MD Radiology Associates of Northern Kentucky Crestview Hills, KY 41017

# Practice Demographics

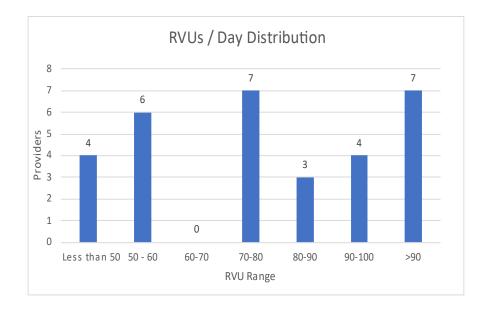
#### **Our Practice**

-"Equal is Fair" doctrine for decades

- -The schedule has never accounted for reader speed or shift variability
- -Range of radiologist reading speeds 2022 – mean daily wRVU prod. = 78 2022 – daily wRVU range is 35 to 110

### The Problem

#### Variation of productivity per day



50% of days considered frustrating and stressful up through 2017

### The Problem

#### The "Mix Factor" (fallacy)

For years we blamed long, tough days on slower readers.

We gave the supposed issue a name; the "Mix Factor".

This term was NOT based on analysis, just a group "feeling" of why the days were frustrating. We had endless discussions about how we could turn our slower readers into faster readers.

#### Long List Anxiety Syndrome - LLAS

Everyone is susceptible to LLAS, some more than others.

It is the demoralizing feeling that comes with long unread worklists, particularly at day end.

Some get it easily (unread list of 60) and others later (unread list of 140), but all eventually get LLAS.

Productivity goes <u>DOWN</u> as radiologists search the list for what is "best" to read next, rather than reading the next case in line.

### Mistakes we made – *Abandoned ideas* <u>We focused on making slower readers faster</u>

4

-Track wRVU data per radiologist and publish unredacted data to the group (shaming)

-Complaints about slower readers in virtually every corporate meeting for years

-Made slowest 4 readers pair up on weekends (weekends are lightly staffed, so impact of slow readers is greater)

-Required slow readers to stay later at end of day (punishment without solution to problem of getting cases read efficiently)

-Culture became increasingly divisive, IR vs. DR and faster versus slower readers

# Systematic analysis- *Why* we had frustrating days

CT daily variation in our system is HUGE.

-240 CT exam count variation from lowest to highest days

IR schedule is variable, and some days IR reads few DR cases to help with list.

Daily volume ramps at 10-11 AM.

Outpatient volume ramps at 4pm.

We had no way to separate day from evening work. Our phrase "the longer you stay, the longer you stay" at day end came from staying a little later and getting caught in the evening bolus.

- We scheduled by the day, not the hour, but inflow of cases varied by the hour in addition to the day.

- Workload *could* be calculated *after the fact*, but we had no way to *predict daily workload* to adjust our schedule in advance.

# The Solution – Birth of the "bunker" shift – Q1 2018

6

We created a new shift scheduled called "bunker".

Shift was to read 40 wRVU worth of studies.

-Remote/home reading encouraged
-How long it takes to get to 40 wRVU *irrelevant*-Cherry picking high wRVU cases *encouraged*-These cases are hardest at shift end when everyone is worn out

Anyone can sign up for the shift – slow or fast readers alike.

Paid roughly  $\frac{1}{2}$  of a day shift, in addition to biweekly.

Bunker shift starts at 11 am (when bolus of incoming exams accelerates).

Rule made that you cannot work a regular shift and then do a bunker, to keep everyone incentivized for group benefit.

#### Annual Bunker Shift Count by Year



#### Bunker growth

**2018**: Started as Mon-Fri only (fear of cost).

2019: Added Mon, Tues evening 2-hour timed shift.

2019: Added Sat, Sun timed shift.

**2020**: Modified weekend timed shifts to be hourly plus extra for more than 10 wRVU/hour (trouble filling at hourly rate). New weekend hybrid is 4 hours paid at hourly rate, plus 30.00/wRVU above 10 wRVU/hr.

2020: Creation of the "ad hoc bunker" shift

(next slide)

### 2020 Creation of the "ad hoc Bunker"

-Created and added to regular bunkers to fine tune coverage on a day-by-day basis

Anyone not working that day can sign up to jump on the list - if needed.

The "ad hoc bunkers" are in addition to regularly scheduled bunker - if needed.

We used an online sign-up for who is willing to work "ad hoc bunker" shifts on each day.

One of the day shift radiologists, called "the Maestro", watches the list and if case list/complexity are worrisome (LLAS), they then call for additional help.

"Ad hoc bunkers" are variable in size, from 10 to 40 aliquots of wRVU.

We found using midday bunkers much more effective than "cleaning up" the list at the end of the workday. Once LLAS takes over, group momentum fails and is hard to recover.

# The "Bunker" solution and group culture

#### **Our Fears**

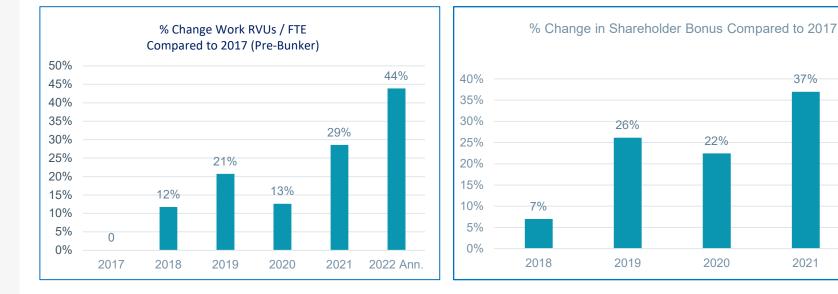
#### **Our Realities**

That some in the group would make more money than others	Salaries have never been equal (buying/selling vacation, doing extra shifts) – and this continued
That bunkers would suck up any money for bonuses	Bonuses went UP proportional to bunker use (next slide) including those who never do bunkers
That latent "lazy" radiologists would suddenly appear	We fortunately have very few lazy radiologists
That day shift radiologists would slack off and slow readers would become "slower"	Slow readers stayed slow, fast readers stayed fast
That people need to be "afraid" at the end of the day to really work hard	95% of our days are "comfortable" compared to 50% of days prior to "Bunkers"
That it wouldn't be fair/equal	Need to discuss fairness has diminished proportional to reduced LLAS
That working extra bunker shifts would lead to burnout	Burnout not yet a factor, presumably because the shift is of short duration and 100% voluntary

### Bunkers associated with positive group changes

wRVU/FTE increased proportional to number of bunker shifts (except 2020)

Bonus for everyone increased proportional to bunker use (except 2020-COVID effect)



-Bunkers mostly done by faster readers, hence more of the annual work is done by faster readers

-As group wRVU/rad increased, bonuses increased as well. -Benefits all, including slow readers who never "bunker"

37%

2021

### Conclusions

Since its creation in 2018, the "bunker" shift has been a success.

Faster readers enjoy the shift and the associated extra compensation.

Readers who never do "bunkers" get larger annual bonuses as "bunker" use increases.

Group-wide productivity increases correlate with increased number of "bunkers".

The need to fix slower readers diminished as LLAS prevalence diminished.

The number of "good days" dramatically increased compared to 2017. -95% of days now good, compared to 50% prior to Bunkers

Thank you for your time!