Health Care

"Well.. Just Stop Doing That...."
A road to value or ruin in the Inpatient Setting?

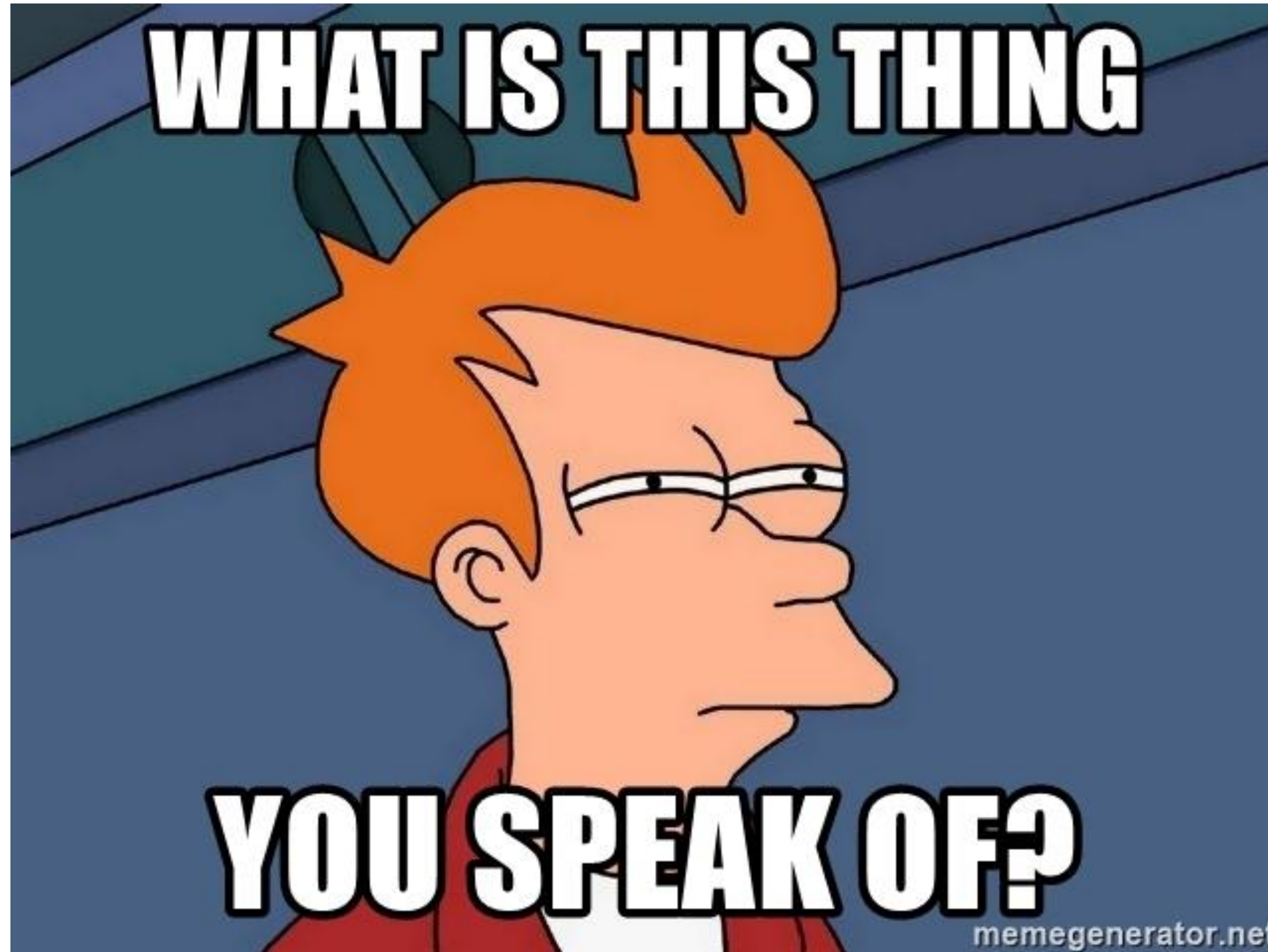
Kevin Clary, MD

Associate Chief Medical Officer: Value Based Initiatives

Objectives

- Understand the basics of Value Based Care in relation to "High Value Care" and how it related to inpatient costs
- Review current approaches to "High Value Care" in the inpatient setting
- Look at current campaigns and approaches to identifying areas for addressing high value care
- Understand effectiveness of various techniques of implementation to reduce unwarranted utilization
- Understanding the difference between creating "Rules" and "Choice Shaping"
- Learn to "Make Right Easy"

Value Based Care……What is it?



Value Based Care vs High Value Care

Health University of Missouri

- Value = (Quality + Experience*)/Cost

- **Value Based Care** = Care that is delivered to maximize quality for patients by reimbursing providers and networks for improved outcomes – **(Think Payment Model!!!)**
- **High Value Care** (as defined National Academy of Medicine)
  - Safe
  - Timely
  - Efficient
  - Equitable
  - Patient Centered

Waste and Value at a Glance

Health University of Missouri

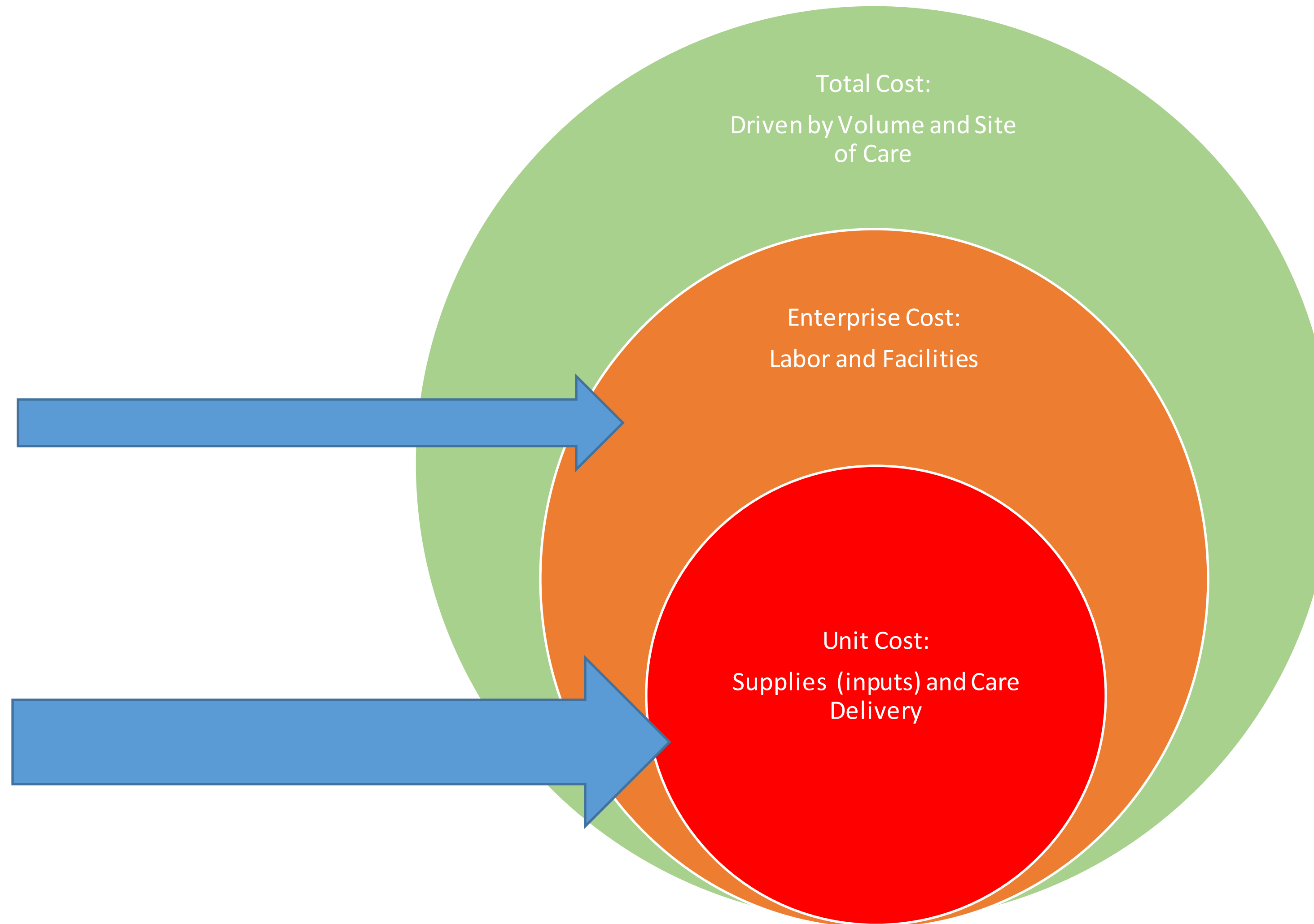
- In the US total cost of waste per year are estimated at. $760 billion to $935 billion - (25% of total spending)

- However…… "savings from interventions that address waste were $191 billion to $286 billion."
  - Specifically…. Overtreatment or Low Value Care accounted for $12.8-28.6billion

- Importantly …. "**No studies** were identified that focused on interventions targeting administrative complexity" – Actually the LARGEST category of waste
  - However the estimated annual cost of waste in this category was $265.6 Billion

(Shrank et al JAMA 2019)

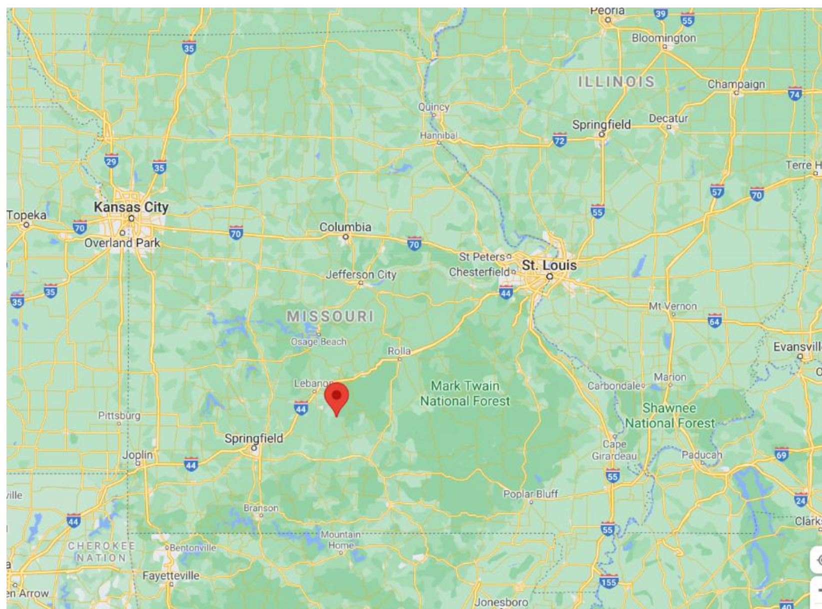
The Issue with Inpatient Care and Cost



Hospitalist Impact is **limited** mostly to care delivery and to a lesser extent how this affects labor

- ie… more respiratory treatments = more RT's, more telemetry means = more tele-boxes
- More tests and treatment means more cost.

So why even bother!!!!????



A little Place called Competition, Missouri.

Why I Bother…….

Why I bother…..Continued….

I bother because ………..

Health
University of Missouri

DRS. CRAWFORD, TILLMAN, WISE, HOLLIS and STAFF
PRACTICE LIMITED TO ANESTHESIOLOGY
215 PROFESSIONAL BUILDING
SPRINGFIELD, MISSOURI
UNiversity 9-4377

Mrs. Nadine Massey
Plato Star Route
Lebanon, Missouri

PLEASE RETURN THIS STATEMENT WITH REMITTANCE. RECEIPT SENT ON REQUEST.

DATE	PROFESSIONAL SERVICE	CHARGES	CREDITS	BALANCE
1-29-66	Anesthetic	72.00		72.00

Please Pay Last Amount in This Column

ANESTHETIC FEE SEPARATE FROM HOSPITAL AND SURGERY.
PLEASE MAKE CHECKS PAYABLE TO DRS. CRAWFORD, TILLMAN, WISE AND HOLLIS
CS — CASH
INS — PAID BY INSURANCE COMPANY
BS — PAID BY BLUE SHIELD

In 1966, my grandmother developed breast cancer for the second time, at age 45.

CHAS. E. LOCKHART, M. D.
SURGEON
609 Cherry; UN 9-9139

No.

SPRINGFIELD, MISSOURI, 3-9 1966

RECEIVED OF Nadine Massey
Seventy five + no/100 DOLLARS

AMOUNT PAID $ 75.00
BALANCE DUE $ 125.00

CASH ☐
CHECK ☑
M. O. ☐

Chas. E. Lockhart MD
BY MR

How far we have come!!!

Health
University of Missouri

STATEMENT

ST. JOHN'S HOSPITAL - 1235 E. CHEROKEE - SPRINGFIELD, MISSOURI 65802

NAME MASSEY MRS NADINE — AGE 45 — SEX F
STREET or ROUTE PLATO STAR RT — PHONE 462 5331
CITY & STATE LEBANON, MO — PHYSICIAN CHAS. LOCKHART

DATE	ROOM NO.	DATE	ROOM NO.
1-28	202		

Date	Description	Sundry	X-Ray X-Ray Therapy	Drugs	Med. & Surg. Supplies	LABORATORY Code	LABORATORY Amount	Room, Food & Nursing Serv.	Credits - Cash Unless Otherwise Indicated	BALANCE
JAN28				1.50				17.00		18.50
JAN29				.40	4.50	12	5.00			
						62	3.00			
						101	2.50			
						204	10.00	17.00		60.90
JAN30	REC	7.00								
JAN30	OPR	57.50								
JAN30	ANESP	23.00		6.00	2.85					
					18.75			17.00		193.00
JAN31						313	10.00			
						312	10.00			
						12	5.00	17.00		235.00
FEB 1				9.20				17.00		261.20
FEB 2								17.00		278.20
FEB 3					3.60			17.00		298.80
FEB 4				1.50	.75			17.00		318.05
FEB 5				4.50	2.00			17.00		341.55
FEB 6								17.00		358.55
FEB 7					2.00			17.00		377.55
								17.00		[illegible]
FEB 8				1.50						
				1.10◇						
				3.00◇	2.95					394.90

KEY TO CODE
ANE .....Anesthetic
ANESP ...Anesthetic Supplies
DEL ......Delivery Room
EST SP ..Electric Shock Supplies
EEG .....Electroencephalogram
EKG .....Electrocardiogram
IV ....Intravenous
NU ......Nursery
OPR .....Operating Room
OXY .....Oxygen
PHY TH ..Physical Therapy
REC .....Recovery Room
SE ....Special Equipment
TE ....Telephone & Telegraph
TRA .....Transfusion Service

Last Balance Is Amount Due

- Anesthesia: $72.00
- Surgeon: $200.00
- Hospital (13 Days) $394.00
- Total **$666.90**

- **In 2021 dollars $5,354**
- **Avg surgery today $17,000 (w/o recon)**

Current Movements in "High Value Care" in Hospital Medicine

MU Health University of Missouri

- Things We Do For No Reason ™
  - Society of Hospital Medicine
  - Hospital Medicine Specific
  - Good case based examples for teaching
  - Need Membership for full access
- Choosing Wisely ©
  - ABIM
  - Not Hospital Medicine Specific
  - Limited Updates…. Relying on subspecialties to create recs.
- ACP – High Value Care Initiative
  - Run by ACP
  - Has separate Hospital Medicine Module
  - Mix of free/paid content (free for members)
  - Has good educator modules/particular regarding payer and cost arrangements.

Common themes

1. Every Tells you what NOT to do.
2. Nobody tells you how NOT to do it!

Resources and Teaching Files

Health
University of Missouri

Advertisement

Journal of Hospital Medicine

HOME | ABOUT | FOR AUTHORS | BROWSE | EDITORIAL FELLOWSHIPS

CHOOSING WISELY®: THINGS WE DO FOR NO REASON™ Teaching Files

This category contains articles that, using a case-based approach, describe practices (tests, procedures, management strategies) that may be poorly supported by evidence or which have become part of standard practice based despite the availability of less expensive or higher value alternatives.

Article	Supporting Information
Journal of Hospital Medicine Journal of Hospital Medicine Choosing Wisely®: Things we do for no Reason™ Full Access Things We Do for No Reason™: Routine Correction of Elevated INR and Thrombocytopenia Prior to Paracentesis in Patients with Cirrhosis	Teaching File PPT
Things We Do for No Reason™: Routine Coverage of Anaerobes in Aspiration Pneumonia	Teaching File PPT
Things We Do For No Reason™: Treatment of Infection-Related Fever in Hospitalized Patients	Teaching File PPT

ABOUT ACP | Log In | Search ACP

MEMBERSHIP | CME & MOC | MEETINGS & COURSES | CLINICAL INFORMATION | PRACTICE RESOURCES | ADVOCACY | STORE

Clinical Information

- Clinical Guidelines & Recommendations
- Performance Measures
- Journals & Publications
- Clinical Resources & Products
- High Value Care
  - Resources for Clinicians
  - Curriculum for Educators and Residents
- Ethics & Professionalism

HOME > CLINICAL INFORMATION > HIGH VALUE CARE

High Value Care

ACP's High Value Care initiative aims to improve health, avoid harms, and eliminate wasteful practices.

The initiative addresses High Value Care broadly, offering learning resources for clinicians and medical educators, clinical guidelines, best practice advice, case studies, and patient resources on a wide variety of related topics. Some learning opportunities even offer free CME and MOC.

ACP High Value Care Initiative

An overview of the College's High Value Care initiative. More High Value Care Videos

High Value Care Resources

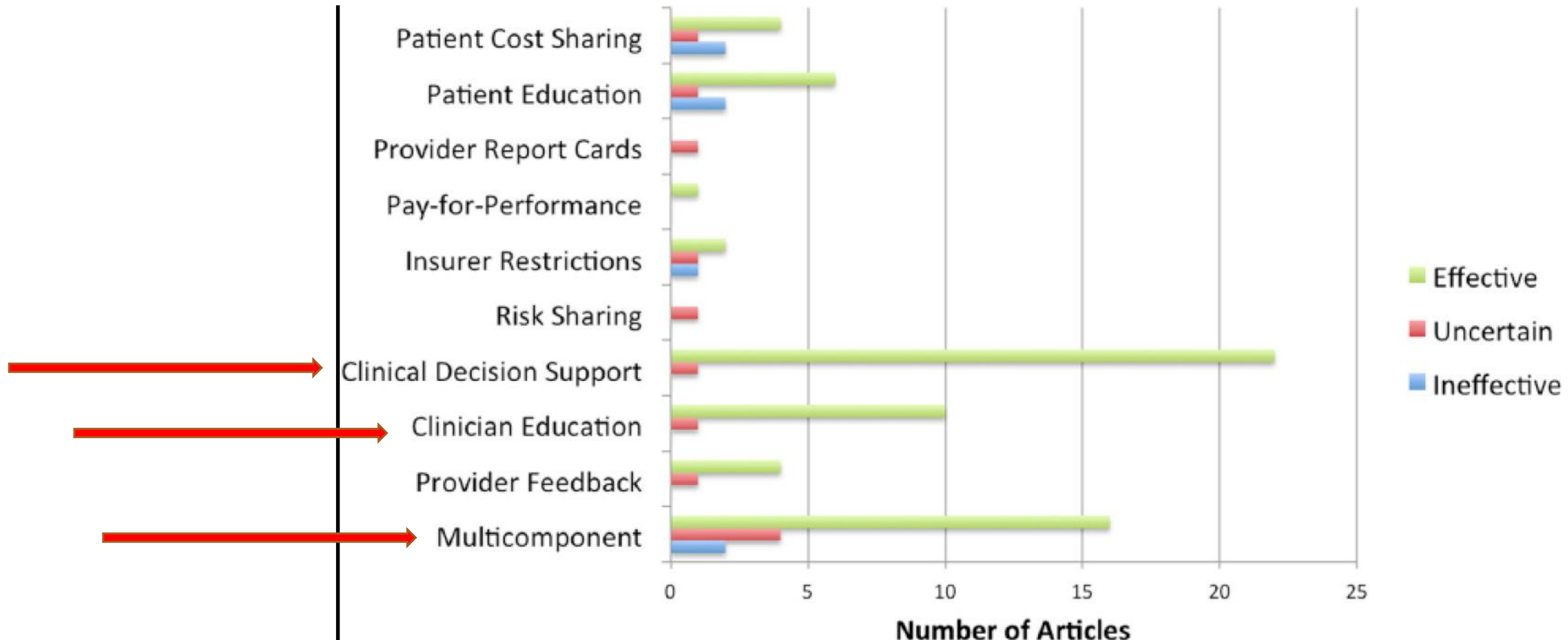
Implement High Value Care principles into your practice or train residents to make cost-conscious decisions with ACP's free High Value Care resources. Interactive cases, off-the shelf presentations, conversation guides, and toolkits allow you to practice making high-value decisions with your patients to improve outcomes while eliminating waste.

- High Value Care Cases CME/MOC
- UPDATED High Value Care Curriculum for Educators and Residents
- Cost of Care Conversations

Is Education Alone Effective????

Health
University of Missouri

- Cola et al. Reviewed 108 articles on effectiveness of Interventions to reduce "Low value Care"



Main take away….

MU Health
University of Missouri

- Incentives are great for increasing doing SOMETHING but not for NOT doing something
- Make it easy to do the RIGHT thing first and place barriers where the potential for overuse exist…. (ie… Clinical Decision Support)
- Physician Education is necessary for buy in…….
- Teamwork Makes the Dream work.

Don’t Blame us, blame our brains…

Health
University of Missouri

- Applied Behavior Analysis (Ingvarsson et al 2023)
  - Rule Based
    - Better for rare and unforeseen events
    - Necessary when trial and error are not an option
  - “Three Term Contingency”
    - Need (Antecedent, Behavior, Consequences)
    - Better for COMPLEX Dynamic Systems
    - I’m Calling it “Choice Shaping”

Table 1

Key principles and concepts within applied behavior analysis.

Key principle	Concepts	Description
Three-term contingency	Antecedent	An event that precedes and signals an expected behavior and the consequences that will follow.
	Consequences	An event that comes after the behavior that maintain, change, or extinguish behaviors.
Rule-governing	Rule	An instruction that states the expected behavior and the expected consequences for performing the behavior.

Rule Based vs "Three Term Contingency"

Health
University of Missouri

Rule Based Examples

- Great where critic
  needed
  - "Hard Stops" in E
    products and alle
  - Restrictive Order
    high cost medicat
    biologic chemo)
  - Limits on weight based dosing in Pediatrics
- **Weakness**
  - Annoying
  - Hackable → lead to frustration

Take home

1. Both Approaches have their place
2. They are NOT necessarily mutually exclusive

"Three Term Contingency" Examples

so be seeing as "Choice Shaping"
where common problems
ection with multiple decision

nical Pathways with facilitative
rdering
- Education Campaigns
- Clinical Team Performance Feedback
- **Weakness**
  - At most effective require LOTS of infrastructure to maintain

OK, I have an idea for a project, now what.

Health
University of Missouri

- Start Small and pick something
- Focus on a headache as much as cost
- Don't strive for perfection

An Example for MU

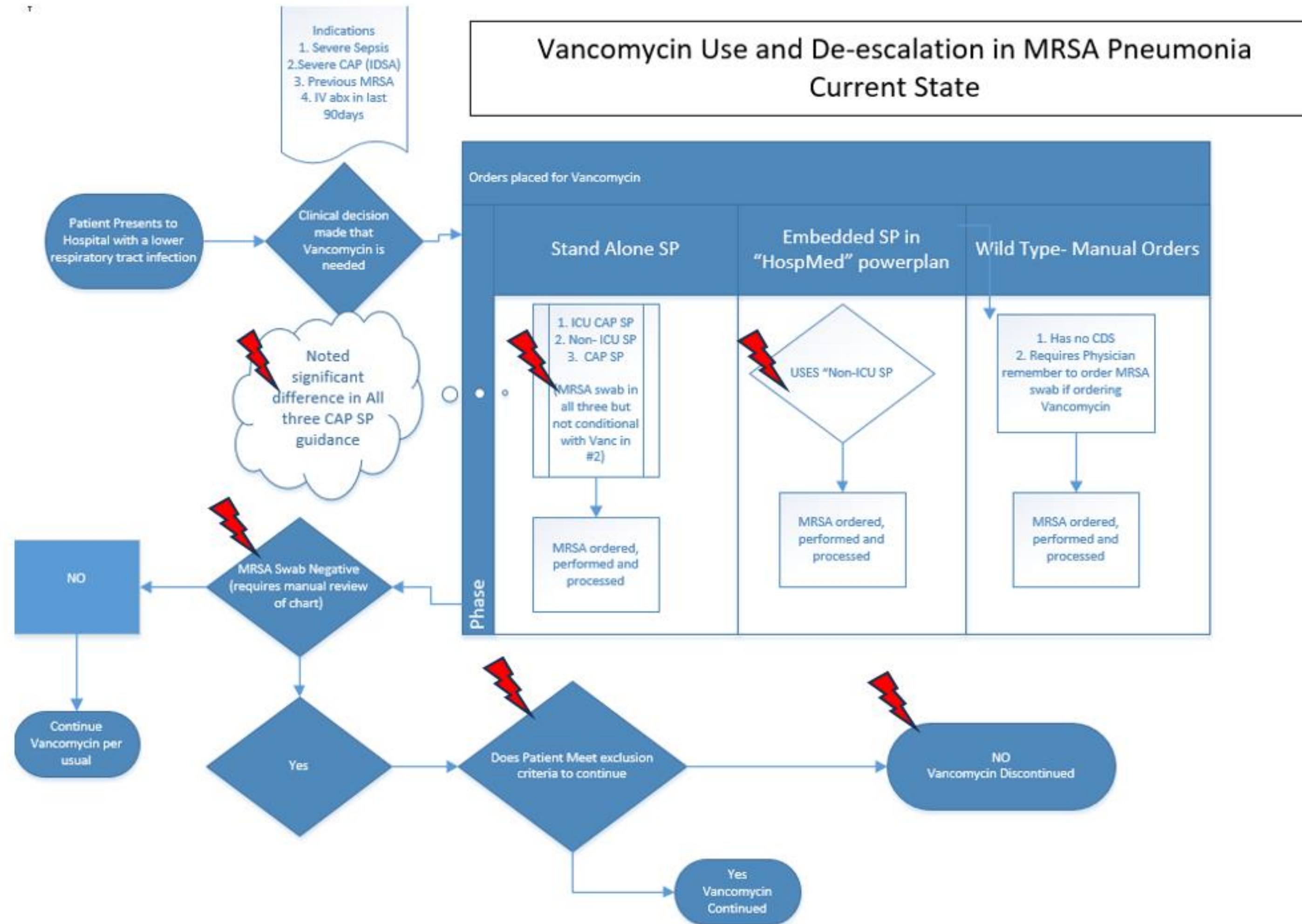
Health University of Missouri

- Project "Vanc-quish"
  - Myself and Dr. Taylor Nelson, DO (Infectious Disease)
- *Global aim*:
  - *Reduce unnecessary vancomycin overprescribing and/or prolonged use in patients hospitalized with infections where MRSA is not the causative pathogen.*

Medical Service Comparison

Values	Service: Family Medical Care Pre-MRSA Swab Implementation	Family Medical Care Post-MRSA Swab Implementation	Internal Medicine Pre-MRSA Swab Implementation	Internal Medicine Post-MRSA Swab Implementation	Pulmonary Disease Pre-MRSA Swab Implementation	Pulmonary Disease Post-MRSA Swab Implementation
Discharges	156	183	388	348	142	150
Average LOS	8.6	8.9	10.5	12.6	16.4	15.0
% Discharges with ICU Stay	42.9%	37.2%	45.4%	48.9%	97.2%	99.3%
MRSA PCR Swab Orders		34		94		51
% Visits with Vancomycin	45.5%	35.5%	54.1%	48.0%	88.0%	84.0%
Average Number of Days Vanc Administered	2.0	1.4	3.1	2.3	6.2	5.4
Average Vanc Direct Cost/Visit	$66.46	$36.12	$93.54	$58.19	$192.55	$151.63
Average Total Direct Cost/Visit	$13,816.90	$14,232.84	$18,557.72	$19,505.77	$46,547.67	$45,766.66

Project "Vanc-Quish"

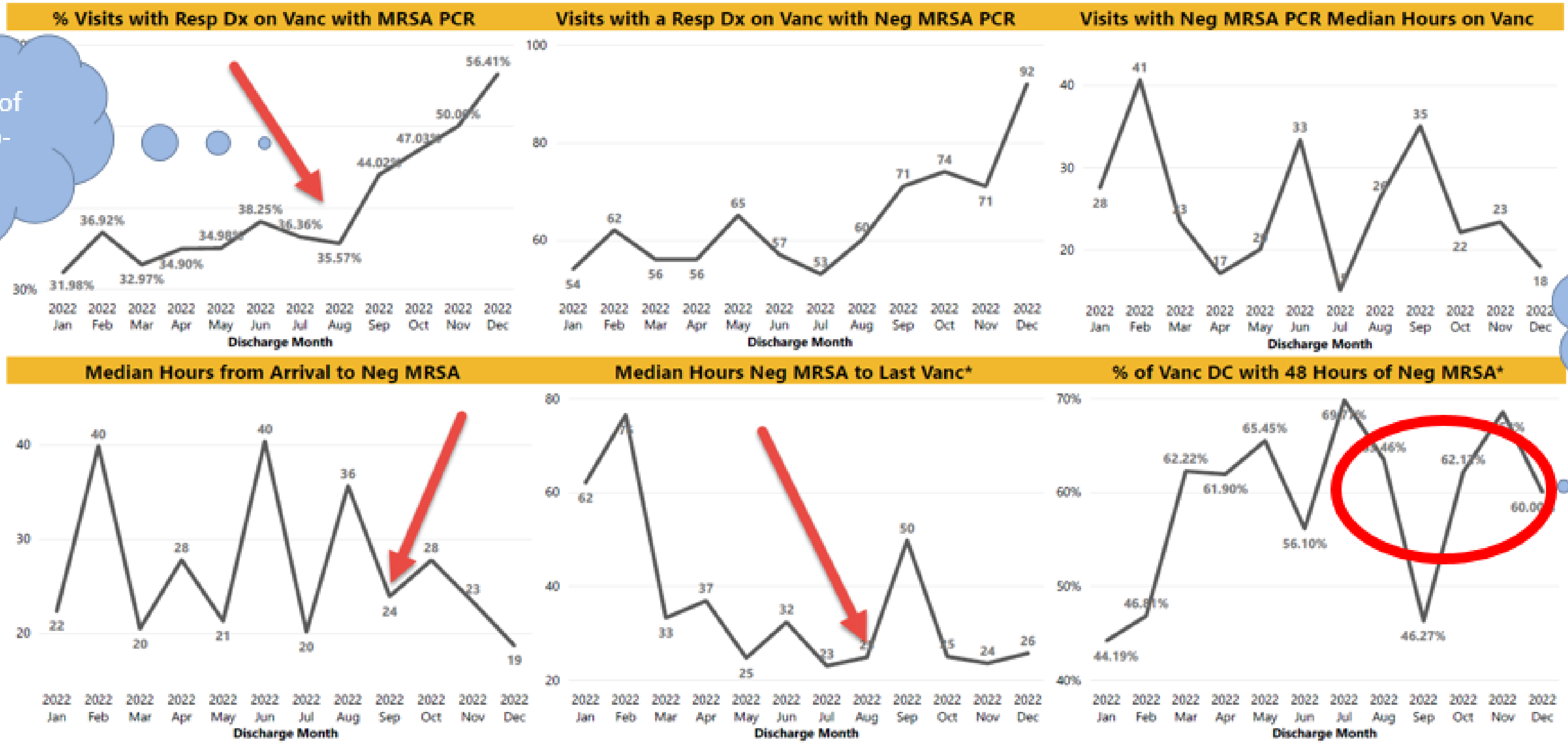


There were 256 ways to order Vancomycin at MUHC!!!

Project Vanc-quish - Continued

Health
University of Missouri

Addition of PNA Sub-phase



High ICU volume?

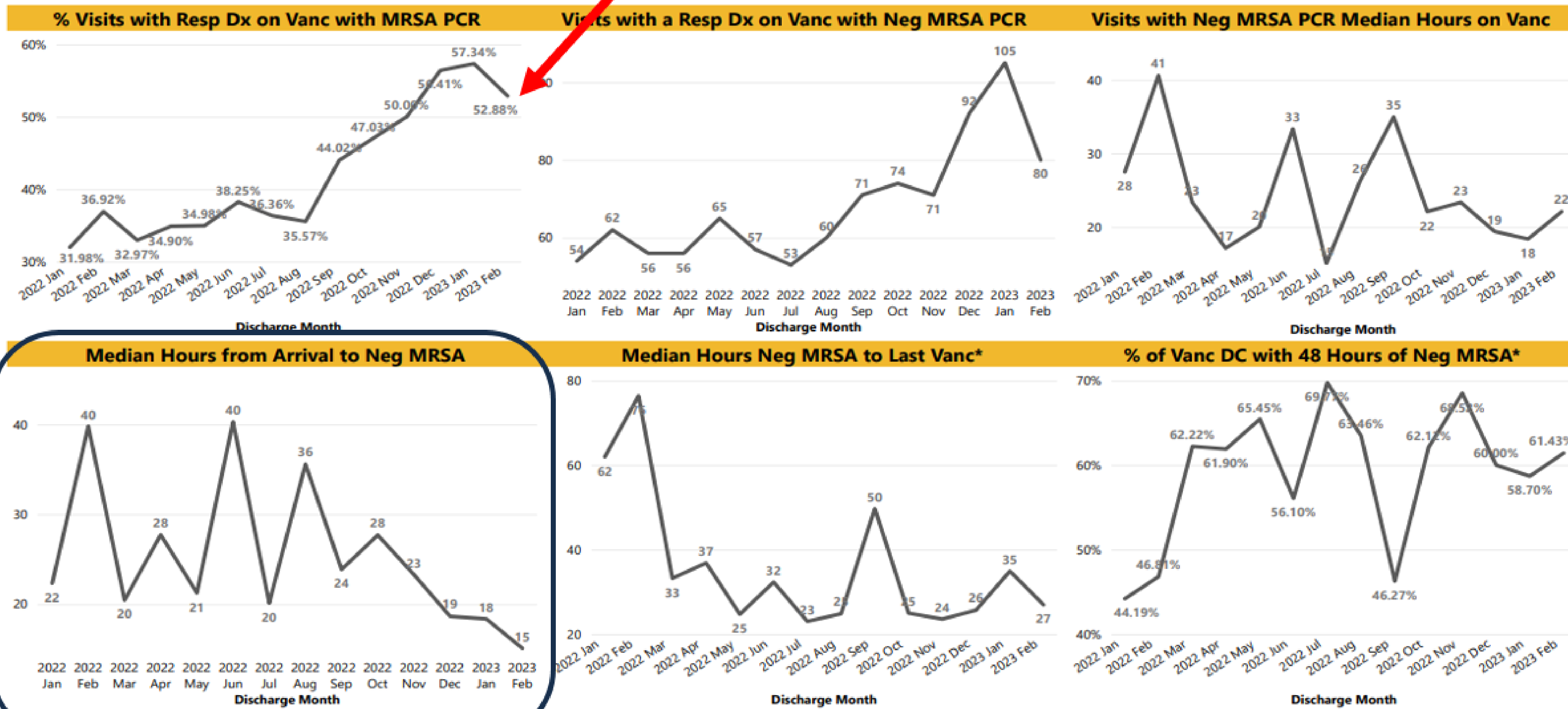
Project Vanc-Quish -

"Rule Based" –
Intervention gone awry

Health
University of Missouri

Health Care

Respiratory Patients on



*Excludes Pts who did not have vancomycin administered post MRSA negative result

Parting Shots

1. In order to succeed in future payment models, Hospitalist will need to take a lead in delivery of High Value Care.
2. Cost of healthcare as impacted by Hospitalist are more than simply an addition of the tests and treatments ordered.
3. Successful reduction of “low-value” care is most likely to be impacted by facilitative Clinical Decision Support (CDS and ongoing feedback)
4. A combination of “Rule Based” and “Three Term Contingency” (ie..Choice Shaping)
5. “Make RIGHT easy” is always the best answer

References

- Shrank WH, Rogstad TL, Parekh N. Waste in the US Health Care System: Estimated Costs and Potential for Savings. *JAMA.* 2019;322(15):1501–1509. doi:10.1001/jama.2019.13978
- Colla CH, Mainor AJ, Hargreaves C, Sequist T, Morden N. Interventions Aimed at Reducing Use of Low-Value Health Services: A Systematic Review. Med Care Res Rev. 2017 Oct;74(5):507-550. doi: 10.1177/1077558716656970. Epub 2016 Jul 8. PMID: 27402662.
- Ingvarsson S, Sandaker I, Nilsen P, Hasson H, Augustsson H, von Thiele Schwarz U. Strategies to reduce low-value care - An applied behavior analysis using a single-case design. Front Health Serv. 2023 Feb 28;3:1099538. doi: 10.3389/frhs.2023.1099538. PMID: 36926508; PMCID: PMC10012739.
- https://www.choosingwisely.org/
- https://www.acponline.org/clinical-information/high-value-care