

eRVUs: How to Assign Value (and compensation) to Non-Clinical Activities

Gary E. Lemack, MD
Professor of Urology and Neurology
Vice Chair of Education
University of Texas Southwestern Medical Center



1

DISCLOSURES

- Clinical Adjudication Committee: Blue Wind Medical



2

THE DIFFERENT ROLES OF CLINICAL FACULTY



3

ACADEMIC COMPENSATION MODELS¹

- Fee for Service
 - Lowest quality care²
- Fixed rank-based salary + incentive
 - Based on clinical productivity
- Fixed rank-based salary + incentive
 - Based on “value”

4

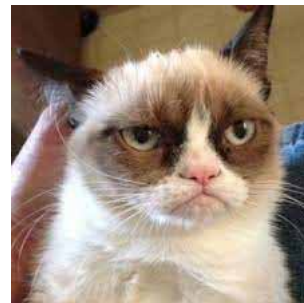
WEIGHTED RANK-BASED COMPENSATION MODELS

- Academic compensation historically models based on rank
- Rank is variable between institutions, but advancement based on:
 - Research/academic contributions
 - Leadership positions
 - National/international reputation
 - For clinical “tracts” – based on clinical volume/teaching

5

DISCONTENT

- Junior faculty sense they are unfairly compensated and working harder to support midlevel/senior
- Distrust of finances and departmental leadership
- May not encourage academic pursuits



6

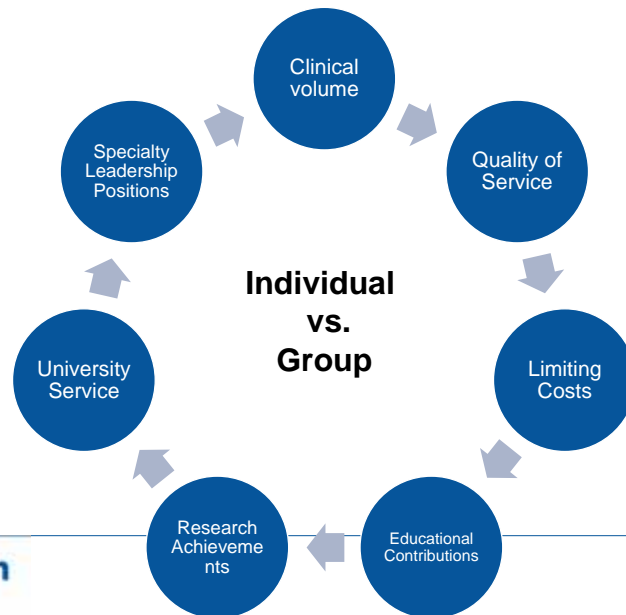
INCENTIVIZING FACULTY – CLINICAL PRODUCTIVITY

- Incentive/bonus often based exclusively on wRVU
- Issues exist with exclusively wRVU compensation
 - Rewards clinical volume – risk of OVER use and OVER treatment
 - Does NOT reward clinical outcomes
 - NOT achievable equally in all specialties
 - Only rewards one of our academic missions

VOLUME \neq VALUE

7

VALUE-BASED COMPENSATION MODELS



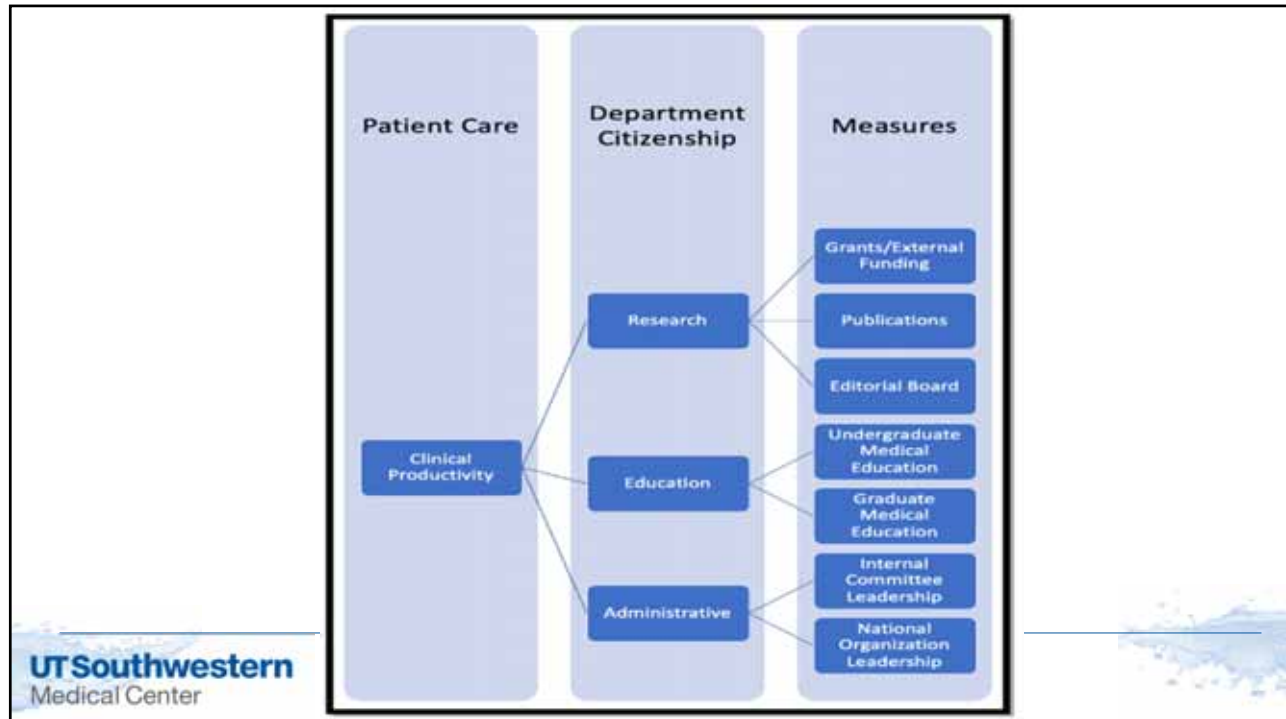
8

ASSIGNING VALUE TO NON-DIRECT REVENUE GENERATING ACTIVITIES

- Not a new concept
- 90+ % employees do not directly generate revenue
- Necessary for the function of the department
- Bring value to the clinical enterprise

ACADEMIC RVU - MODELS

- **Support only income-generating academic activities**
 - Funded Grants, Hospital supported positions, mandated positions (GME)
- **Support only internal activities/positions**
 - Research, External Leadership positions NOT supported
- **Support all aspects of educational mission bringing value**
 - Research (regardless of funding)
 - Educational contributions/teaching
 - Leadership positions



11

EVU – Educational Value Unit

- **Clinical eRVU** – meant to compensate for decrease in faculty clinical efficiency in presence of learners
- **Core eRVU** – time spent in trainee education, NOT during billable activity
- Designed to assign portion of university funding to supplement wRVU

Core Educational Value Unit (EVU) Allotment of Administrative Positions in Medical Education Programs, University of Kansas School of Medicine, Kansas City, 2003

Position	Core EVU allotment*
Residency program director	0.30
Residency associate program director	0.30
Residency program key faculty	0.10
Fellowship director	0.10
Student sub-internship director	0.10
Student critical care rotation director	0.05
Student physical diagnosis course director	0.20
Student ambulatory course director	0.20
Student clerkship director	0.20

Clinical Educational Value Unit (EVU) Allotment of Faculty's Specific Patient-Care Activities with Learners, University of Kansas School of Medicine, Kansas City, 2003

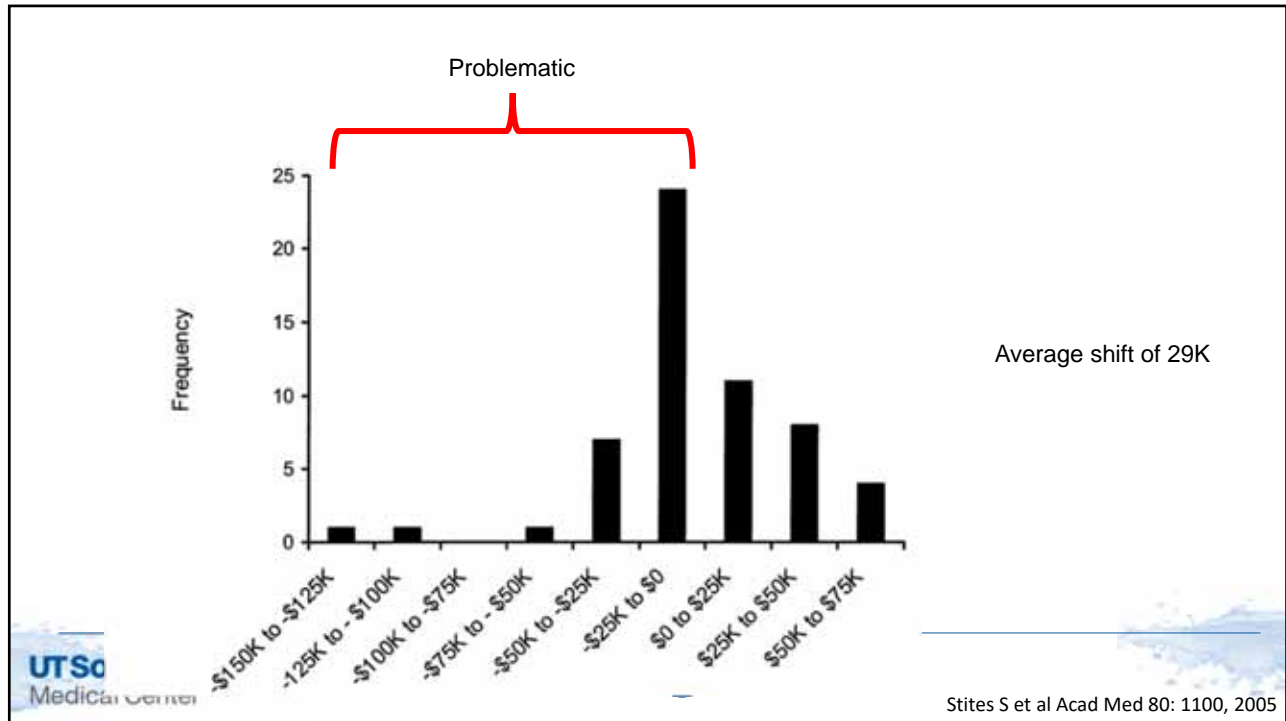
Activity	Clinical EVU allotment*
Inpatient medicine	0.02/month
Consults	0.015/month
Staff clinic with learners	0.001/half-day
Resident continuity clinic	0.002/half-day

UT Southwestern Medical Center

12

Stites S et al Acad Med 80: 1100, 2005

12



13

The Academic RVU

SUM TOTAL OF:

- Publication aRVU = % effort x academic value x author rank score x impact value
- Administrative and community service aRVU = % effort x academic value x role
- Teaching aRVU = % effort x academic value x score
- Research aRVU = % effort x academic value x funding modifier x PI status

14

Type of Publication	Percentage of Effort per Year	Academic Value
Peer-reviewed article	4%	1.0
Nonpeer-reviewed article	2%	0.3
Abstract	2%	0.5
Book	20%	0.5
Book chapter	4%	0.5
Book review	2%	0.5
Invited speech	0.8%	0.3
Exhibit	2%	0.3

Type of Service	Percentage of Effort per Year	Academic Value
National committee	1%	0.4
State committee	1%	0.3
Institutional committee	1%	0.2

Average Student Rating	Multiplier per Year
1	0.5
2	0.75
3	1.0
4	1.5
5	2.0

Funding Source	Modifier
Federal	1.0
Industry	0.4
Institutional	0.2

Funding	Academic Value
X < \$25,000	5
\$25,000 < X < \$50,000	10
\$50,000 < X < \$100,000	20
\$100,000 < X < \$250,000	40
\$250,000 < X < \$500,000	80
\$500,000 < X < \$1,000,000	150
\$1,000,000 < X	200

UTSouthwestern
Medical Center

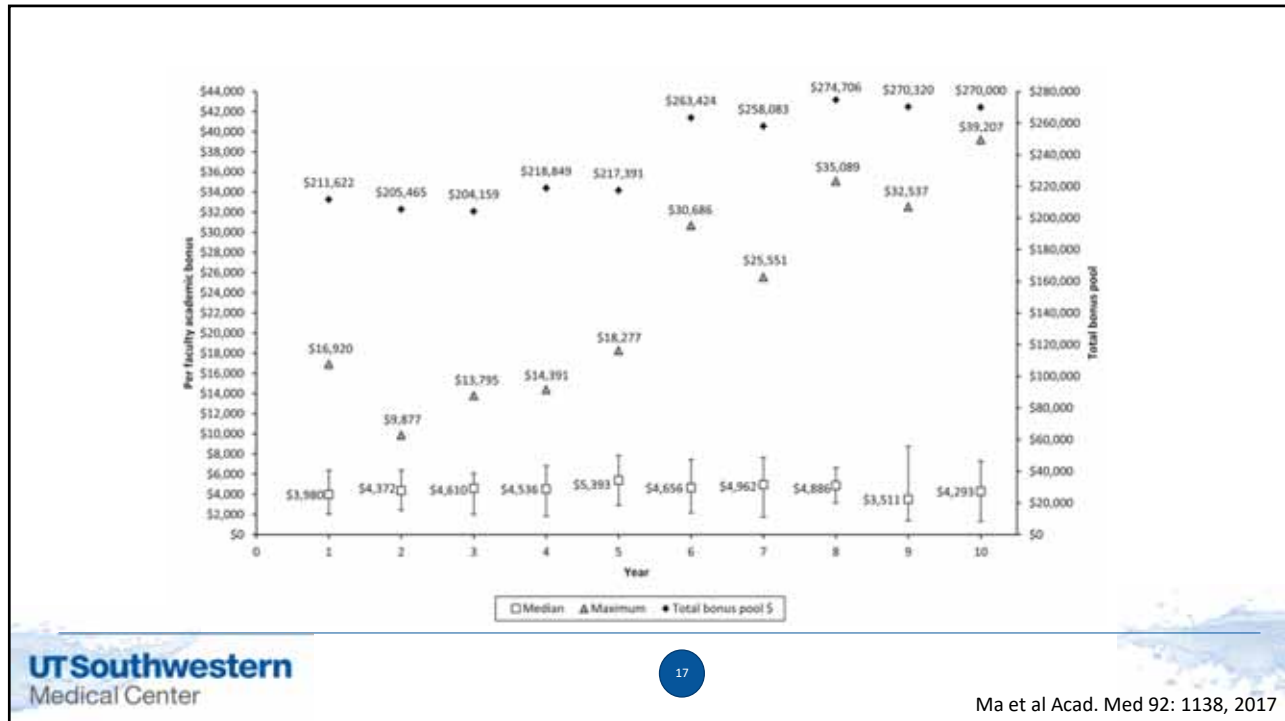
15

ACADEMIC RVU AS AN INCENTIVE

- *Subjective* point system awarded and reviewed by Chair
 - Abstracts, Papers, Grant submissions, Lectures, External leadership
- 5-8% of total compensation pooled in Incentive plan
- Proportion of Bonus based on points accumulated by faculty

$$\frac{\text{Your accumulated points}}{\text{Total faculty points}} \times \text{Total allotted funds} = \text{Your incentive}$$

16

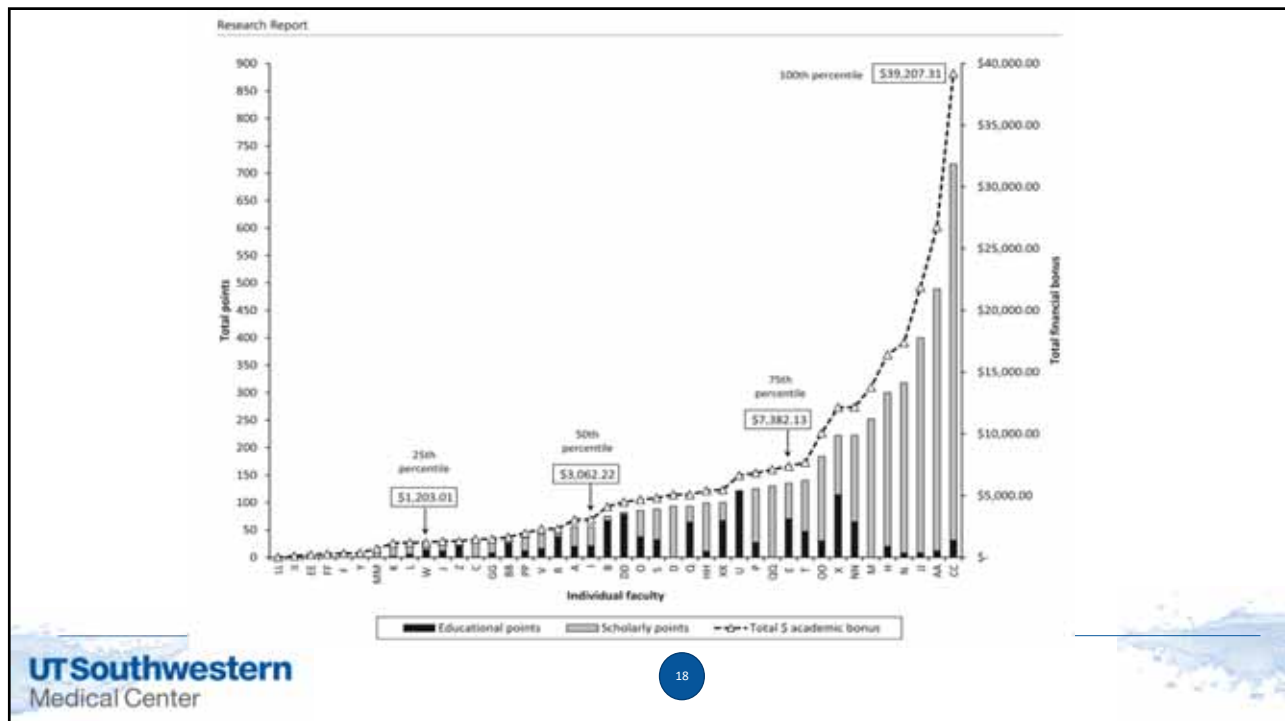


UT Southwestern
Medical Center

17

Ma et al Acad. Med 92: 1138, 2017

17

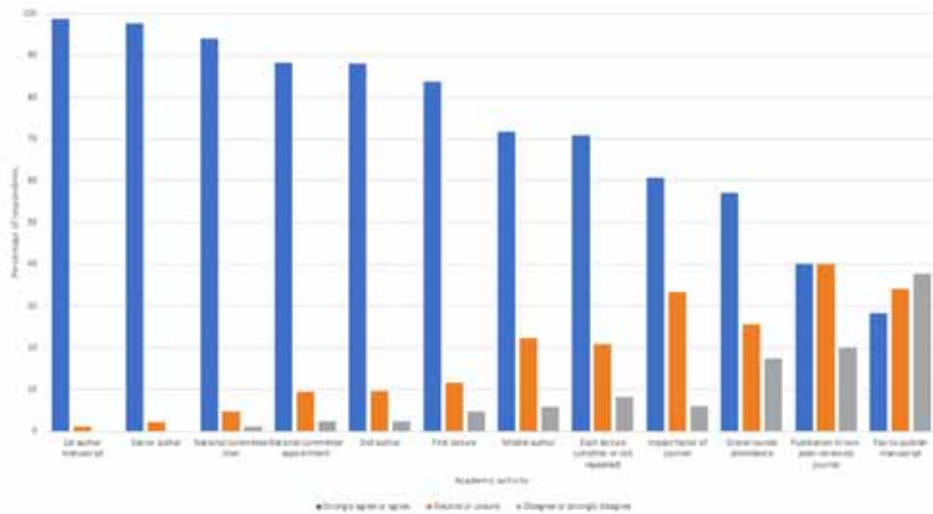


UT Southwestern
Medical Center

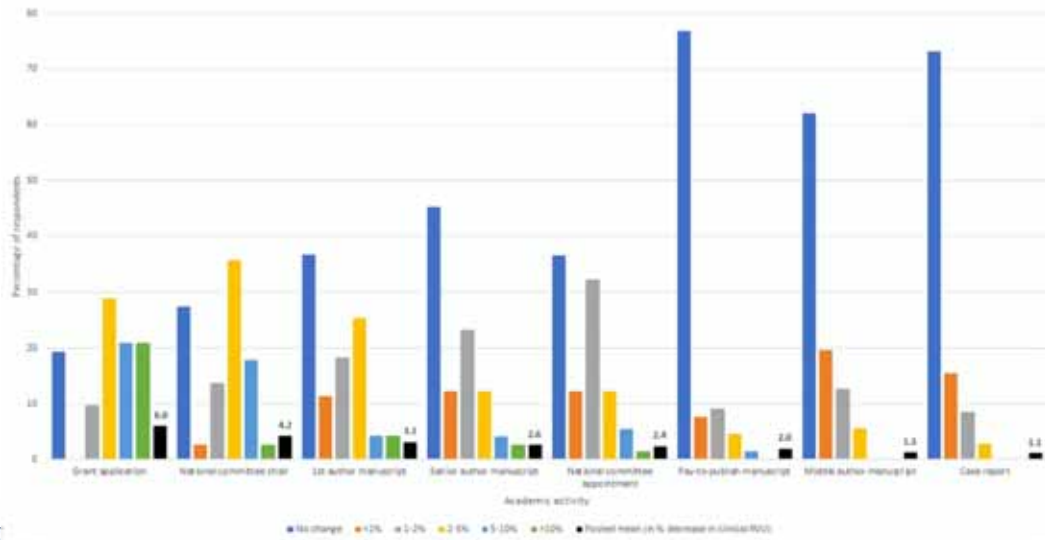
18

18

WHAT IS VALUED IN ACADEMIC SURGERY – A NATIONAL SURVEY



ASSIGNING RELATIVE VALUE TO SURGICAL ACADEMIC ACTIVITIES



AN ACADEMIC RVU MODEL IN SURGERY

- Self-reported
- 5 categories: Research, Education, Innovation, Academic Svc, Peer review
- Rank aggregated annually
- Incentives distributed:
 - Top 10%
 - Top Third
 - Top Half
- Scores adjusted for faculty rank
 - 2x Score for Associate, 3x score for Assistant
- aRVU bonus pool was up to 50% of the entire incentive pool
- Overall 2-5% of salary

21

TABLE 1. Summary of Scheme for Awarding Academic Relative Value Units (aRVUs)

Research Achievement	Points Awarded
Presentations—scaled according to presentation forum	25–150
Publications—scaled according to publication type and journal impact factor	125–750
Submitted grants that were not funded—scaled according to annual direct costs	100–625
Active or newly funded grants—scaled according to annual direct costs	200–1250
Active industry-sponsored clinical trials—scaled according to annual direct departmental revenue	75–275
Leadership	
Committee and leadership positions in medical center institutions and professional organizations—scaled according to position and organization type	75–1000
Scientific Peer Review	
Manuscript and abstract review	25–150
Extramural study section service	125
Editorial leadership—scaled according to position and journal impact factor	250–750
Departmental Participation	
Grand Rounds attendance—scaled according to attendance rate	100–200
Education Contributions and Achievements	
Teaching and mentorship activities—scaled according to level of activity and achievement	175–375
Education awards—scaled according to award type	375–500
Writing group membership for national curricula or certification	350
Examiner for national board exams	375
Innovation	
Patents—for filing and award	500

22

IMPACT OF ACADEMIC RVU INCENTIVE SYSTEM

Metric	Total Performance (No. or USD) 2015-2017	Annual Performance (No. or USD)		Increase 2017 Vs 2015	P Value 2017 Vs 2015
		2015	2017		
Presentations	2106	579	862	49%	<.001
Publications	1183	390	446	14%	.02
Grants submitted	184	63	69	10%	.6
Active grants	195	58	73	26%	.1
Total research funding	\$19.0M	\$4.6M	\$8.4M	83%	<.001
Total NIH funding	\$6.5M	\$0.6M	\$3.4M	467%	<.001
Total income from active grants	\$16.0M	\$4.3M	\$7.2M	67%	<.001
Median [IQR] income per active grant	\$79.3K [\$38.6K-\$189.4K]	\$52.5K [\$29.0K-\$178.4K]	\$131.1K [\$42.0K-\$259.4K]	\$78.6K	0.6
Active clinical trials	43	8	23	188%	.002
Total income from industry-sponsored clinical trials	\$1,644K	\$385.4K	\$647.3K	68%	<.001
Median [IQR] income per industry-sponsored clinical trial	\$9.3K [\$2.7K-\$20.7K]	\$8.7K [\$2.2K-\$20.0K]	\$10.0K [\$2.2K-\$25.2K]	\$1.3K	0.8
Patents submitted	83	20	31	55%	.09
Participants in minimally invasive surgery or student skills lab	87	25	33	32%	.3
Participants in national curriculum or certification writing groups	34	7	14	100%	.1
Committee positions in academic organizations	791	226	298	32%	<.001
National/International	617	180	232	29%	.002
Regional	174	46	66	43%	.03
Editorial board, associate editor, or editor	191	50	74	48%	.01

23

ACADEMIC RVU INCENTIVE IN PEDIATRIC SURGERY

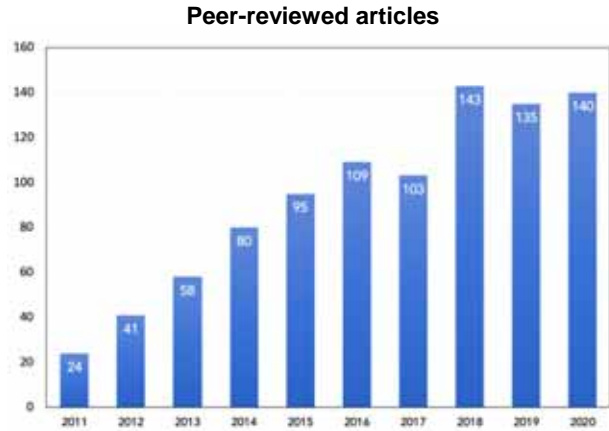
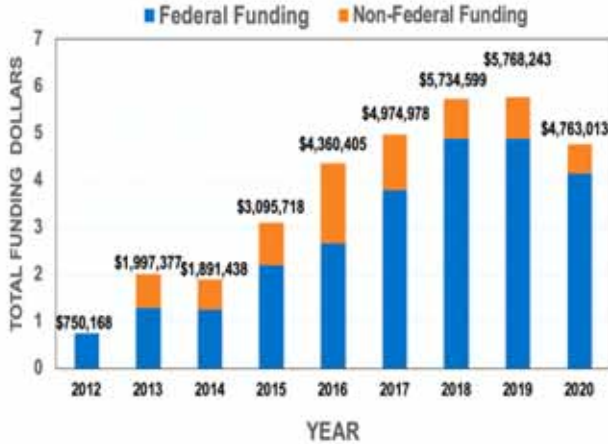
Physician Incentive Program: _____ MD				
Goals/Measures	Weight (% total incentive)	Threshold Performance (75% threshold)	Target Performance (85% threshold)	Max Performance (100% threshold)
Achieve operative clinical wROGs.	40%	wROGs	wROGs	wROGs
Group Goal 1 (Group increase annual number of wROGs by:)	3%	1%	2%	3%
Additional Group Goals 1) All faculty members complete Trauma simulation in new Simulation Center 2) 75% of faculty members accept at least 1 open ACG block 3) All group members participate in clinical rotations, including rotations to other hospitals (ACOM, Beaumont, Sun Belt)	12%	Achieve 1 of 3	Achieve 2 of 3	Achieve 3 of 3
Personal Goals 1) Publish 5 papers related to (area of interest) 2) Initiate new multi-center clinical research study 3) Complete a multi-institutional study on (area of interest) 4) Mentor new faculty member in (area of interest) 5) Complete assigned National Committee surgical review expectations	10%	Achieve 3 of 5	Achieve 4 of 5	Achieve 5 of 5
Teaching / Attendance Goals 1) 80% attendance at monthly Clinical Research Conference 2) 75% attendance at M&M conference 3) 70% attendance at Surgery Grand Rounds 4) 50% attendance at Pediatric Surgical National Conference	5%	Achieve 2 of 4	Achieve 3 of 4	Achieve 4 of 4
Academic Goals 1) Peer review articles (first/last author) = 1 point 2) Peer review articles (middle author) = 0.5 point 3) Book chapter (first/last author) = 1 point 4) Book chapter (middle author) = 0.5 point 5) Journal/book editor = 2 points 6) New external grant submitted as PI (=75K) = 1 point 7) New external grant funded as PI (=75K) = 2 points 8) New external grant funded as PI (=75K) = 2 points 9) New external grant funded as PI (=75K) = 3 points 10) New external grant submitted as PI = 0.5 point 11) New external grant funded as PI = 1 point 12) National platform presentation (first/last author) = 1 point 13) National platform presentation (middle author) = 0.5 point 14) National poster presentation (first/last author) = 0.5 point 15) National poster presentation (middle author) = 0.25 point 16) National invited Lecture/Course Instructor/Fac = 2 points 17) New national/international symposium = 2 points 18) Department Teaching Award = 1 point 19) College of Medicine Teaching Award = 2 points 20) Patent filed = 1 point 21) Patent granted = 2 points 22) NIH Full-Time Study Section Member = 3 points 23) NIH Study Section participation = 1 point 24) New national committee member = 1 point 25) National committee chair = 2 points 26) New IRB protocol approved as primary PI = 0.5 point 27) PI across subjects in new IRB approved clinical research study = 0.5 points 28) PI across subjects in new educational research study (non-IRB approved) = 0.5 points 29) Award at National Meeting = 2 points 30) Award at Local Meeting = 1 point	30%	... points	... points	... points

1. Sample physician incentive plan. Areas highlighted in yellow are individualized and dependent upon the clinical FTE of the faculty member, including the weight.

24

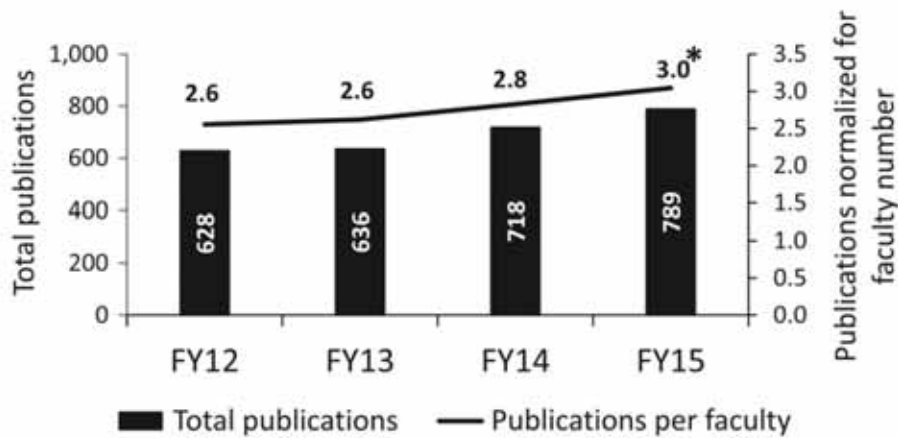
IMPACT ON ACADEMIC PRODUCTIVITY

NO CHANGE IN NUMBER OF FACULTY



25

CAN A-RVU SYSTEMS IMPROVE PRODUCTIVITY?



26

WHERE DO WE GO FROM HERE?



UT Southwestern
Medical Center

27

27



Thank you

28