Physician Agreements

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Updated 05/22/25

Physician Agreements – Anesthesia Institutional Support and Surgeon Block Time

Franklin Dexter, MD PhD FASA
Director, Division of Management Consulting
Professor, Department of Anesthesia
University of Iowa
Franklin-Dexter@UIowa.edu
www.FranklinDexter.net

Financial Disclosure

- I am employed by the University of Iowa, in part, to consult and analyze data for hospitals, anesthesia groups, and companies
- Department of Anesthesia bills for my time, and the income is used to fund our research
  - I receive no funds personally other than my salary and allowable expense reimbursements from the University of Iowa, and have tenure with no incentive program
  - I own no healthcare stocks (other than indirectly through mutual funds)

Physician Agreements – *Anesthesia Institutional Support* and Surgeon Block Time

Franklin Dexter, M.D., Ph.D.

Director, Division of Management Consulting

Departments of Anesthesia and Health Management & Policy

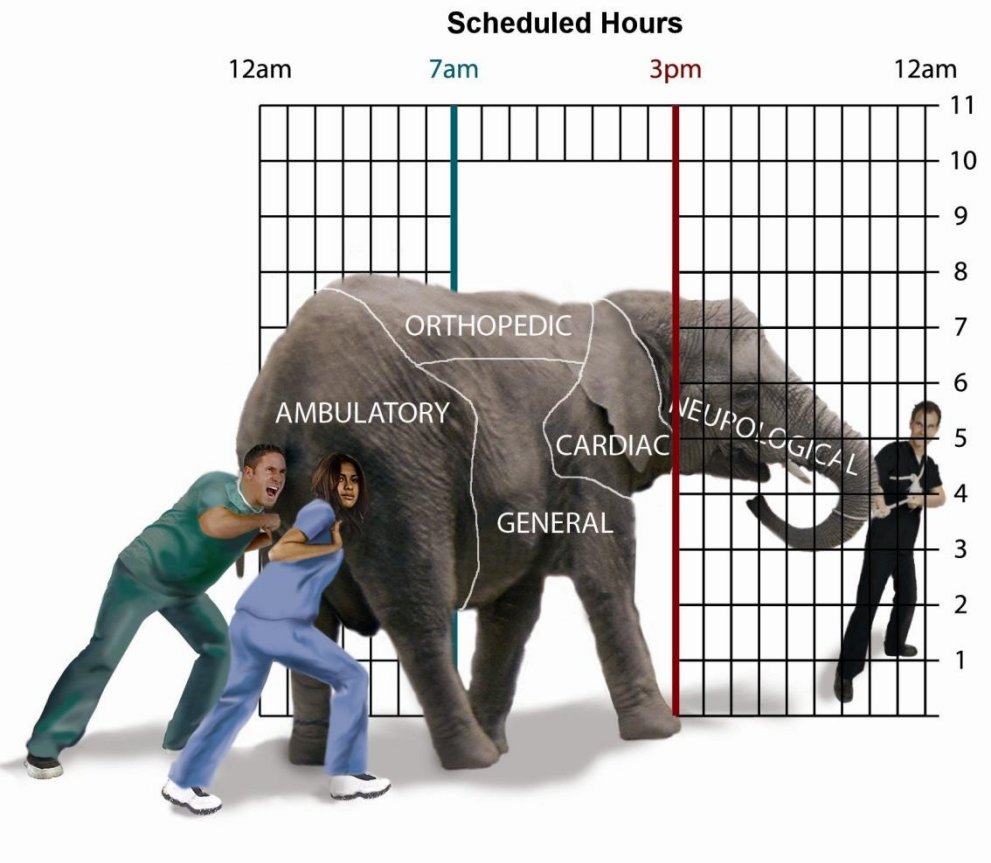
Professor, University of Iowa

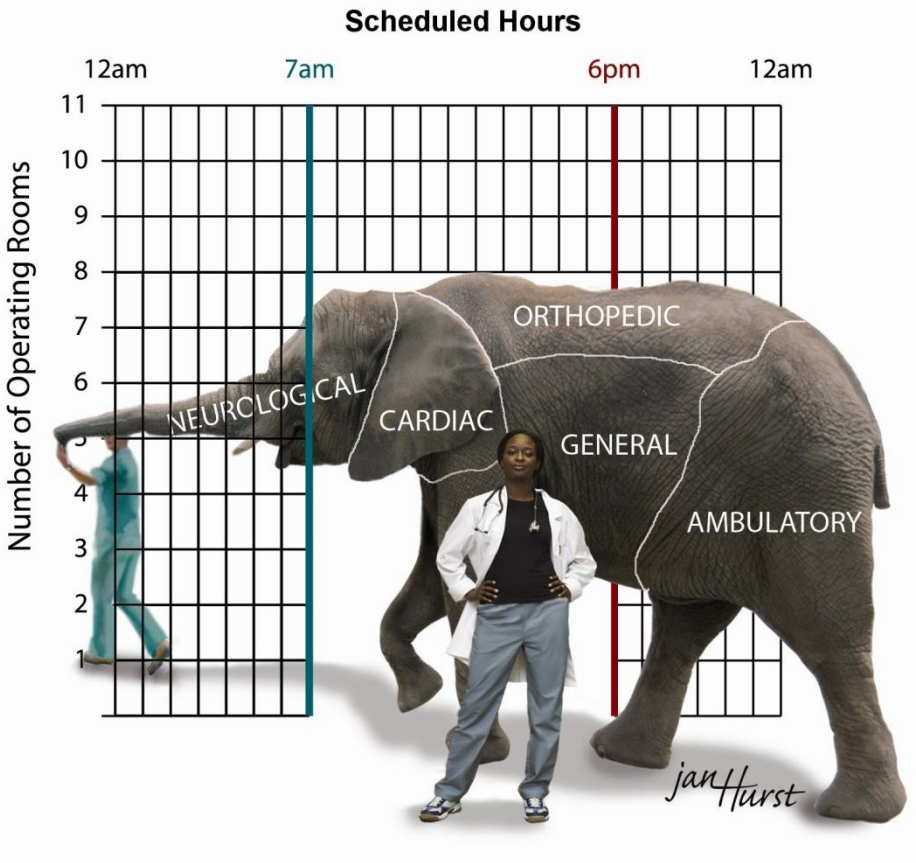
www.FranklinDexter.net

Normative Models → Understanding Implementation

- Good understanding of how to increase productivity of anesthesia providers
  - Nationwide, not an issue of working faster
  - Better match staff scheduling for each specialty to the times that anesthesia providers are actually working to do those cases
    - Increase allocative efficiency
      - Under vs. over-utilized OR time

McIntosh C et al. Anesth Analg 2006





"You are not going to get the elephant to shrink or change its size. You need to face the fact that the elephant is 8 OR tall and 11 hr wide." Steven Shafer, MD

Observational Data on *Durations of Workday*

- For 12 of 14 suites, staffing plan to maximize OR efficiency had costs at least 10% less than that being used by the managers
  - Managers did not have right number of staff, working the right number of hours, on the right days of the week, for specific surgical services

Dexter F et al. Anesth Analg 2001

Abouleish AE et al. Anesth Analg 2003

Freytag S et al. Der Chirurg 2005

McIntosh C et al. Anesth Analg 2006

Lehtonen JM et al. Int J Health Care Qual Assur 2013

Observational Data on *Durations of Workday*

- US national average for ambulatory surgery cases in 2010
  - 64% OR case time completed by 12 noon
    - 77% among pediatric cases (0 to 14 years)
  - 90% OR case time completed by 3:00 PM
    - 94% among pediatric cases

Dexter F et al. Periop Care OR Manag 2019

Observational Data on *Numbers of ORs*

- Average 5.5 hr of OR time per OR per day at 8 US community hospitals' ORs with knee and hip replacement surgery
- Average 6.0 hr of anesthesia time per OR per day at 11 US community anesthesia groups
- Most (≥ 59%) US facilities complete majority of their weekly anesthesia workload in the mornings of regular workdays

Dexter F et al. Health Care Manag Sci 2006
Abouleish AE et al. Anesthesiology 2002
Dexter F et al. Anesth Analg 2015

Normative Models → Understanding Implementation

- Good understanding of how to increase productivity of anesthesia providers
  - Nationwide, not an issue of working faster
  - Better match staff scheduling for each specialty to the times that anesthesia providers are actually working to do those cases

➢ Why did some hospitals and groups implement promptly while others did not?

Dexter F, Epstein RH. Anesth Analg 2015

Normative Models → Understanding Implementation

- Good understanding of how to increase productivity of anesthesia providers
  - Nationwide, not an issue of working faster
  - Better match staff scheduling for each specialty to the times that anesthesia providers are actually working to do those cases
- Why did some hospitals and groups implement promptly while others did not?
  - ➢ Why did many groups not send an engineer and an anesthesiologist to my course?

Quantifying Hospital Anesthesia Group Agreements

- Academic anesthesia departments in the US received an average of $159,000 per anesthesiologist in institutional support in 2008, using 2018 US dollars

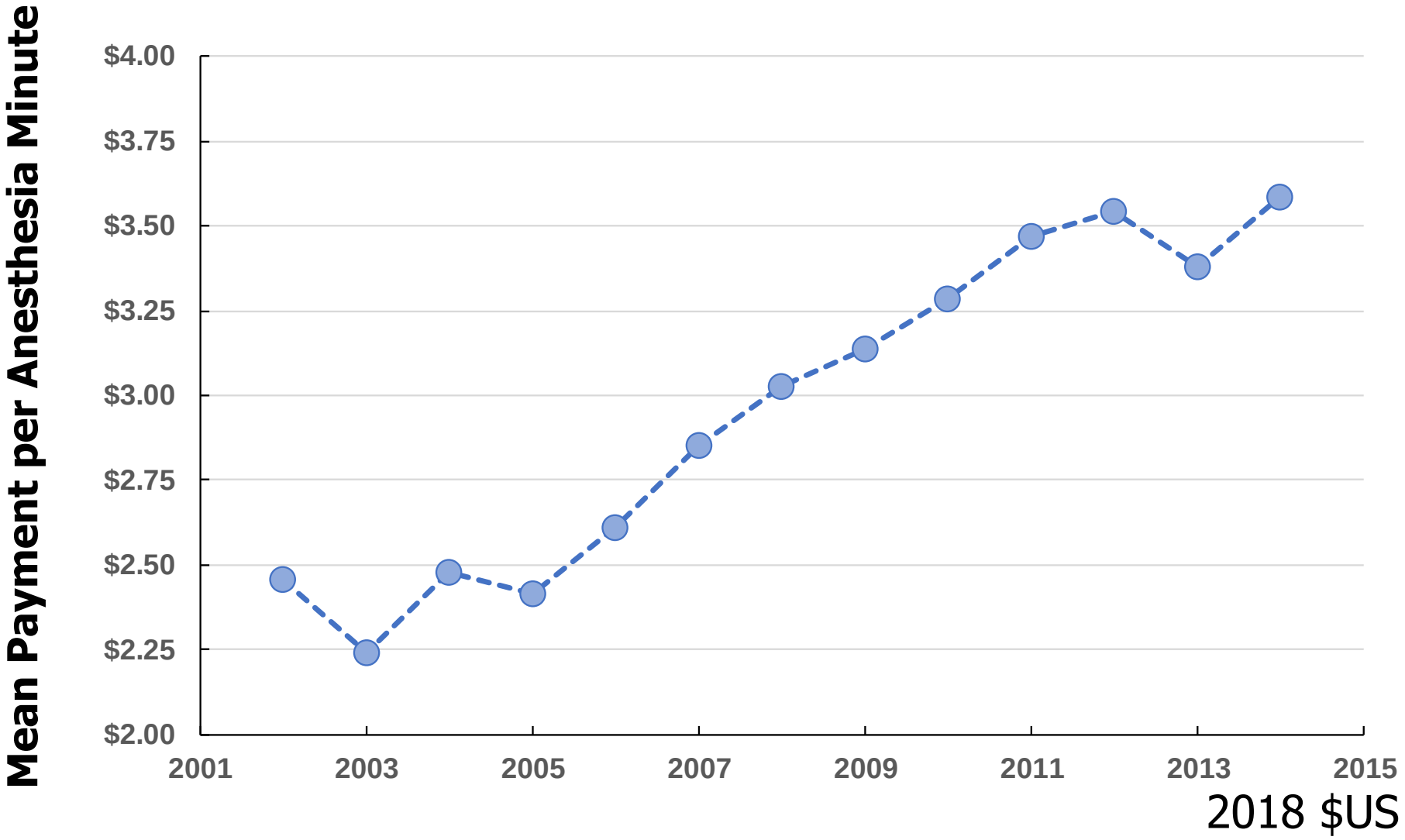
Kheterpal S et al. Anesth Analg 2009

Quantifying Hospital Anesthesia Group Agreements

- Academic anesthesia departments in the US received an average of $159,000 per anesthesiologist in institutional support in 2008, using 2018 US dollars
  - California hospitals paid mean $225 per anesthesia hour to groups in 2014, and this excluded value of employed CRNAs

Kheterpal S et al. Anesth Analg 2009
O'Connell C et al. Anesthesiology 2019

Quantifying Hospital Anesthesia Group Agreements



Hypothesis: Agreements with Hospitals Produce Disincentives

- Academic anesthesia departments in the US received an average of $159,000 per anesthesiologist in institutional support in 2008, using 2018 US dollars
- California hospitals paid mean $225 per anesthesia hour to groups in 2014, and this excluded value of employed CRNAs
  - Can we be more precise about what is being paid for other than "under-utilized OR time?"
  - How use incentives to increase productivity?

What Effectively is Being Paid For in Agreements?

"The anesthesia group will provide a minimum of six anesthesiologists covering weekdays from 7:00 AM to 5:00 PM. In addition, one anesthesiologist will provide coverage for emergency surgery between 5:00 PM and 7:00 AM and for twenty-four hours on weekends and holidays. In exchange, the group will be compensated at a monthly rate of **$75,000**. The group shall be entitled to bill and collect for anesthesia professional services rendered to patients."

What Effectively is Being Paid For in Agreements?

- Less common basis for payment is reasonable rate per hour for clinical services

- More common basis for payment is same reasonable rate per hour for non-clinical time

Dexter F, Epstein RH. Anesth Analg 2008

Organization of Anesthesia Portion of this Talk

- Less common basis for payment is reasonable rate per hour for clinical services
  - Precedent for hospital or multi-specialty group
  - Scenario showing why fixed monthly payment
- More common basis for payment is same reasonable rate per hour for non-clinical time
  - Incentives for managerial initiatives
  - Underpayment or overpayment of support
  - Advantage for anesthesia group

Less Common Basis for Payment in Agreement

- Hospital is providing sufficient payment to guarantee group makes a reasonable profit
  - Fair market rate is being paid for the availability of the anesthesia providers
  - Anesthesia group is effectively salaried
  - Since annual collections are predictable, profit is same (within 1%) if hospital pays more and keeps the collections

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➢ *Hospital has established precedent for other specialties and groups*

Scenario Showing the Precedent

- OR workload is sufficient for 5 ORs, not 6 ORs
- Negotiations for > 1 yr without an agreement
- An anesthesiologist leaves the group
- Group's profit increased by not replacing him
- Group informs OR block committee that it will often be able to staff only 5 ORs, not 6 ORs
- Surgeons complain to administrators
- Hospital signs lucrative agreement with group

Scenario Showing the Precedent

- Scuttlebutt among physicians is that the anesthesia group ("labor") successfully used a work slowdown to motivate the hospital (i.e., "the firm") to agree to a lucrative labor agreement based on the hospital assuring the group's profit
- Same principle applies if instead of hospital providing the support it is from multiple specialty group to one of its departments

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Scenario Showing Why Fixed Monthly Payment

- 20 academic anesthesiologists staff 36 ORs
- Overall 10 hr per day of time for lectures, administrative and educational meetings, etc.
  - Anesthesiologists doing them are assigned daily to the briefest ORs
- Initiatives with administrators and surgeons grow OR workload by 5% over 9 months
- Group recruits 1 additional anesthesiologist to cover the increased clinical workload

Scenario Showing Why Fixed Monthly Payment

- Collections increased by 5%
  - Hospital support reduced by 5%
- Costs increased by 5%
- Group's profit reduced by 5%

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➢ Agreement with variable monthly payment based on workload (collections) results in negative expected net present value for initiatives that would grow the practice

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- Group's profit reduced by 5%
- Agreement with variable monthly payment based on workload (collections) results in negative expected net present value for initiatives that would grow the practice

➢ "It is as if the anesthesiologists don't want to do more cases"

More Common Basis for Payment of Support

- Hospital compensates group for expected incremental hours of under-utilized OR time
  - Payment at reasonable (fair market) rate for component of the clinically idle time that is due to less than optimal scheduling practices
- Support fundamentally same as hospital compensating the group for anesthesiologist who serves as perioperative medical director
  - Time spent managing the OR rather than rendering paid patient care

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Consequence of Basis for Payment of Support

- Hospital can stipulate management provided
  - Assist colleagues to reduce turnover times
  - Facilitate decision-making on day of surgery
  - Manage case scheduling
  - Collaborate with analysts on marketing, etc.

OIG Advisory Opinion No. 08-08

Consequence of Basis for Payment of Support

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Anesthesiologists With Finished ORs Stay to Help In ≥ 3:2 Ratio

- Increased productivity from 5 versus 4 anesthesia & nursing teams assigned to 4 ORs
- Increased productivity from 4 versus 3 anesthesiologists assigned to 3 ORs
- Reduced productivity from 3 versus 2 anesthesia providers assigned to 2 ORs

Torkki PM et al. Anesthesiology 2005
Hansss R et al. Anesthesiology 2005
Williams BA et al. Am J Anesthesiol 1998

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  - Manage case scheduling
  - Collaborate with analysts on marketing, etc.
- Lack of such terms may explain lack of role of anesthesiologists in management
  - ➢ Payment without service may be a kickback

Semo JJ. Amer Soc of Anesthesiologists 2006

OIG Advisory Opinion No. 12-06 and 21-15

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  - Facilitate decision-making on day of surgery
  - Manage case scheduling
  - Collaborate with analysts on marketing, etc.
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  - Payment without service may be a kickback

➢ Contractually obligated non-clinical service without payment may be a reverse kickback

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Underpayment or Overpayment of Support

- Orthopedic center 30 ± 10 hr of workload daily
- 34 hr of staffing (3 ORs × 8 hr & 1 OR × 10 hr)

  34 hr = NORMINV(2/3, 30, 10)

- Average 6.3 hr under-utilized OR time daily
  - Staffing 34 hr reduces anesthesia group's costs by shrinking more expensive over-utilized OR time relative to staffing 30 hr or 32 hr
- 0.0 hr is incremental under-utilized OR time caused by OR allocation and case scheduling
  - No support should be provided

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➢ Average 2.3 hr **over**-utilized OR time daily

  – Yet, zero (0) inefficiency of use of anesthesia time caused by OR allocation & case scheduling
    - One reason why support based solely on over-utilized OR time is suboptimal
    - Other reason is that group has resulting negative expected net present value for initiatives that would reduce turnover times

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  - ➢Advantage for anesthesia group

Compare Anesthesia Group Profit Between Agreements

- Algebra shows agreements provide same support for the under-utilized OR time, but not for the billable anesthesia time
- Anesthesia group makes this comparison:
  a. Highest compensation per scheduled hour that it can reasonably expect to negotiate as support if it were to provide billing data
  b. Net collections per hour of billed time
- Since usually (b) > (a), usually larger profit with support just for the non-clinical time

Advantage From Hospital's Perspective Despite Support

- Less common basis for payment is reasonable rate per hour for clinical services
  - ➢Precedent for hospital or multi-specialty group
  - – Scenario showing why fixed monthly payment
- More common basis for payment is same reasonable rate per hour for non-clinical time
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  - – Underpayment or overpayment of support
  - – Advantage for anesthesia group

Worst Case Scenario is no Agreement on Staffing

- "Group will provide reasonable coverage"
- Since "safety criteria" of the 5 ordered priorities will be affected, the consequences are that it is impossible to:
  - Make systematic decisions on day of surgery
  - Implement decision support for day of surgery
  - Calculate appropriate OR allocations
    - Schedule cases to reduce over-utilized time
  - Make good tactical decisions
  - Apply targeted turnover time reductions

Worst Case Scenario is no Agreement on Staffing

- Exception would be facility where safety criteria hardly ever influences decisions, such as some ambulatory surgery centers

Worst Case Scenario is no Agreement on Staffing

- Consider special case of desired staffing = that maximizing efficiency of use of OR time
- Then, since staffing plan is (truly) optimal both for hospital and group, then why would there be a need for agreement to specify staffing?

Dexter F, Epstein RH. Anesth Analg 2015

Worst Case Scenario is no Agreement on Staffing

- Consider special case of desired staffing = that maximizing efficiency of use of OR time
- Then, since staffing plan is (truly) optimal both for hospital and group, then why would there be a need for agreement to specify staffing?
- ➢ Without agreement, cognitive biases and organizational pressures often cause economically suboptimal decisions

Dexter F et al. Anesth Analg 2007, 2009
Masursky D et al. Anesth Analg 2008
Stepaniak PS et al. Anesth Analg 2009

Worst Case Scenario is no Agreement on Staffing

- If no support is desired:
  - At 4 month intervals calculate staffing based on maximizing efficiency of use of OR time
    - By service and day of the week
  - Anesthesia group and hospital agree that staffing will be chosen months ahead and used whenever case(s) are waiting to start
    - Neither anesthesia group nor hospital expected to run more ORs and/or hours without mutual agreement

Dexter F, Epstein RH. Anesth Analg 2015

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Dexter F, Epstein RH. Anesth Analg 2015

Worst Case Scenario is no Agreement on Staffing

- Cannot persuade committees when cognitive biases and complex science
- Agreement supports the leader and sustains the processes when leader is promoted
  - Agreement inconsistent with science (e.g., OR allocations) prevents leader from making good decisions for lack of anesthesia providers

Prahl A et al. Anesth Analg 2013

Dexter F, Epstein RH. Anesth Analg 2015

Worst Case Scenario is no Agreement on Staffing

- Although presented as agreement between anesthesia group and hospital, equivalently:
  - Agreement between perioperative medical director, anesthesia group, and hospital when medical director is hired
  - Criteria for the annual performance evaluation of the perioperative medical director

Dexter F, Epstein RH. Anesth Analg 2015

Monitoring Performance of the Anesthesia Group

Monitoring Performance of the Anesthesia Group

- Complaints not following ordered priorities
  - Includes cases waiting when ORs in use less than the number allocated (e.g., weekends)

Dexter F et al. Anesth Analg 2007
Stepaniak PS et al. Anesth Analg 2009
Ledolter J et al. Anesth Analg 2010
Wang J et al. Anesth Analg 2013

Monitoring Performance of the Anesthesia Group

- Complaints not following ordered priorities
- ➢ Staff scheduling not matched to allocated time by service and day of the week

Dexter F et al. Anesth Analg 2010

Wachtel RE, Dexter F. Anesth Analg 2010

Monitoring Performance of the Anesthesia Group

- Complaints not following ordered priorities
- Staff scheduling not matched to allocated time by service and day of the week
- ➢ Quality of anesthesiologists' supervision of anesthesia residents and non-physicians

De Oliveira Jr. GS et al. Anesth Analg 2015

Dexter F et al. Can J Anesth 2017

Dexter F et al. J Clin Anesth 2020

Dexter F et al. Anesth Analg 2014, 2015, 2016, 2017, & 2024

Dexter F et al. Cureus 2023

Monitoring Performance of the Anesthesia Group

- Complaints not following ordered priorities
- Staff scheduling not matched to allocated time by service and day of the week
- Quality of anesthesiologists' supervision of anesthesia residents and non-physicians
- ➢ Hours of non-clinical services provided from time logs (calendars)

Stepaniak PS, Dexter F. Anesth Analg 2013

Monitoring Performance of the Anesthesia Group

- Complaints not following ordered priorities
- Staff scheduling not matched to allocated time by service and day of the week
- Quality of anesthesiologists' supervision of anesthesia residents and non-physicians
- Hours of non-clinical services provided from time logs (calendars)
  - List of those services at end of talk: "Anesthesiologist and Nurse Anesthetist Afternoon Staffing"

Review – Summarize the Facts of the Talk

Eventualities and Decisions to be Made 14 Months after Agreement

Eventualities and Decisions to be Made 14 Months after Agreement

1. Hospital precedent from salary guarantee
2. Why fixed monthly payment?
3. Services provided during under-utilized time
4. Calculation of supported under-utilized time
5. Why need agreement?
6. Appropriate agreement without support

Physician Agreements – *Anesthesia Institutional Support* and Surgeon Block Time

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Franklin-Dexter@UIowa.edu
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Surgeon Block Time

- Show example report to orient you to topic
- Explain why we are considering the topic
- Explain the science
  - Calculating blocks per 2 weeks
  - Surgeon chooses when to release block
  - Why not …
    - Case scheduling into blocks
    - Some flexibility to numbers of blocks?
    - Block based on utilization?
- Implementation if currently have block time

Example of Block Report

Service	Surgeon	Maximum 8-Hr Blocks per 2 Weeks
Orthopedics	Surgeon 1	5
	Surgeon 2	4
	Surgeon 3	3
	Surgeon 4	2
	Surgeon 5	1
Oral Surgery	Surgeon 6	3
	Surgeon 7	1
Wolf	Amy Wolf	3

Example of Block Report

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Example of Block Report

- Service
  - By knowing service's allocated time, can predict whether there is convenient (under-utilized) OR time available for a surgeon who wants to do a case on a date
  - Service is about the ORs (e.g., equipment), anesthesia providers, and nurses

Example of Block Report

- Surgeon block time
  - By knowing surgeon's block time, can predict whether a surgeon will be available and will have elective cases to be performed on a date
  - Block time is about the surgeons

Example of Block Report

- Surgeon block time
  - By knowing surgeon's block time, can predict whether a surgeon will be available and will have elective cases to be performed on a date
  - Block time is about the surgeons
- If want to see "real" report, go to:
  https://www.FranklinDexter.net/PDF_Files/ORStaffingExampleReport.pdf#page=21

Example of Block Report

- Surgeon block time
  - By knowing surgeon's block time, can predict whether a surgeon will be available and will have elective cases to be performed on a date
  - Block time is about the surgeons

➢ Other data can be used for the predictions, especially individual estimated probabilities of operating on days with, without block time

Eun J et al. Decis 2022

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Topic Covered is One of Two Elements of Surgeon Blocks

- One topic is the allocation of additional surgeon-specific block time, beyond that needed for current cases
  - Topic involves making decisions tactically (e.g., once a year) at a budget meeting
  - Different topic, different talk
- Second topic is the fine-tuning of the master surgical schedule every couple of months based on existing workload
  - Topic covered

Topic Covered is One of Two Elements of Surgeon Blocks

- If you want to focus on surgeon blocks to motivate a surgeon to do more cases at your hospital, then this is the wrong talk
  - Same if considering 2 ORs for 1 surgeon
  - These topics involve contribution margin and value added or lost by the growth and extra cost of 2nd OR or extra personnel
    - Go to third section of turnover time lecture
    - Perform financial analysis

Dexter F et al. Anesth Analg 2005

O'Neill L, Dexter F. Anesth Analg 2007

Topic Covered is One of Two Elements of Surgeon Blocks

- Most growth accrued by different surgeons, with *too few* cases to fill an OR for workday
- Average hospital in Iowa had majority of annual growth in inpatient and outpatient cases amongst surgeons who performed N ≤ 2 cases per *week* in baseline year (77.0% ± 2.5% [SE])
  - Growth in outpatient surgery Relative Value Units amongst those surgeons, 81.9% ± 2.2%

Dexter F et al. J Clin Anesth 2018

Epstein RH et al. J Clin Anesth 2022

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  - Growth in outpatient surgery Relative Value Units amongst those surgeons, 81.9% ± 2.2%
    - For these surgeons, open access to OR time on any future workday and then plan staffing based on maximizing efficiency of use of time

Block Time Increases Surgeons' Predictability of Start Times

- Surgeon blocks can be used to enhance the likelihood that available scheduled start times are convenient and predictable
  - Such coordination important because surgeons' productivity is principal bottleneck to patient flow

O'Neill L et al. Anesth Analg 2009

Block Time Increases Surgeons' Predictability of Start Times

- Surgeon blocks can be used to enhance the likelihood that available scheduled start times are convenient and predictable
  - Such coordination important because surgeons' productivity is principal bottleneck to patient flow
  - ➢ Disproportionately affects female surgeons, because operate fewer days per month and on operative days more often have only 1 case or 1 or 2 cases (all P <0.0001)

Dexter F et al. Cureus 2022

Dexter F et al. PLoS OnE 2023

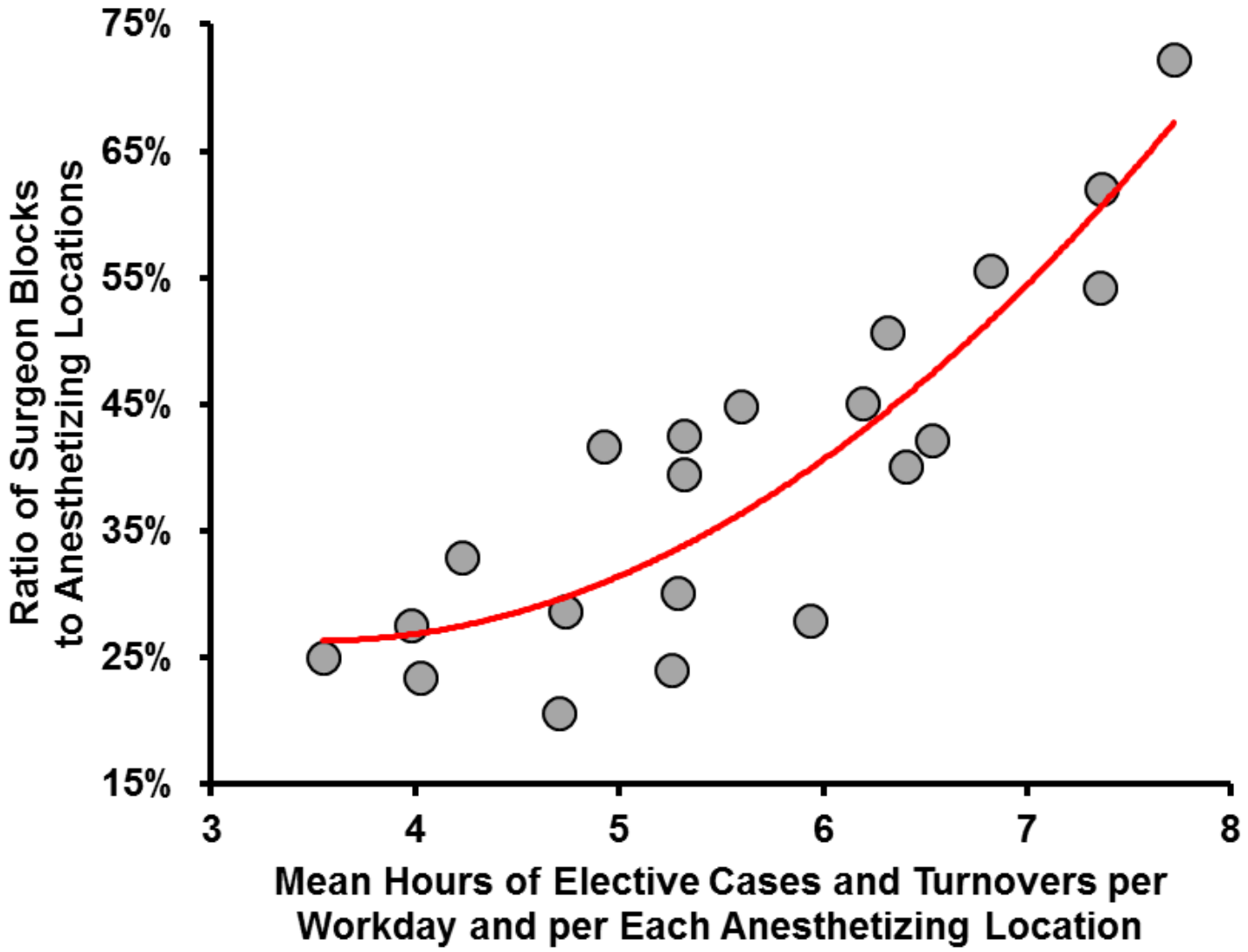
Block Time Increases Surgeons' Predictability of Start Times

- Surgeon block time especially important if many ORs have ≥ 7 hr cases and turnovers
  - Hospitals with high anesthesia productivity have many surgeons filling ORs for workday

Berry M et al. Health Care Manag Sci 2008

Sulecki L et al. Anesth Analg 2012

Block Time Increases Surgeons' Predictability of Start Times



Block Time Can Both Reduce and Increase OR Efficiency

- Reduce by poorly filling service's OR time
  - Surgeon uses block time to keep competing surgeons from scheduling at the hospital
- Increase by preventing cancellations from double use of same equipment or ICU beds
  - Calculations do need to be by surgeon since surgeons differ in mix of procedures

Vanberkel PT et al. Anesth Analg 2011

Chow VS et al. Prod Oper Manag 2011

Surgeon Block Time

- Show example report to orient you to topic
- Explain why we are considering the topic
- ➢ Explain the science

Dexter F et al. Anesth Analg 1999
Dexter F et al. J Clin Anesth 2017
Dexter F et al. J Clin Anesth 2020
Epstein RH et al. Cureus 2022

Surgeon Block Time

- Show example report to orient you to topic
- Explain why we are considering the topic
- Explain the science
  - Calculating blocks per 2 weeks
  - Surgeon chooses when to release block
  - Why not …
    - Case scheduling into blocks
    - Some flexibility to numbers of blocks?
    - Block based on utilization?
- Implementation if currently have block time

Calculating Blocks per 2 Weeks

Service	Surgeon	Maximum 8-Hr Blocks per 2 Weeks
Orthopedics	Surgeon 1	5
	Surgeon 2	4
	Surgeon 3	3
	Surgeon 4	2
	Surgeon 5	1
Oral Surgery	Surgeon 6	3
	Surgeon 7	1
Wolf	Amy Wolf	3

Calculating Blocks per 2 Weeks

- Calculate the number of blocks that surgeon can fill consistently each 2-week period
  - Most easily done literally by seeing how many blocks surgeon fills consistently
    - No target utilization to be maintained

Surgeon Chooses When to Release Block

- Once surgeon has filled or released a block within the 4-week cycle, then can schedule elective case outside of block time

  Four weeks = 2 × "per 2 Weeks"

Dexter F et al. Anesth Analg 1999

Case Scheduling into Blocks

- Unimportant how cases are scheduled into block time, provided elective cases are not scheduled into the service's non-blocked time until the surgeon has filled his or her blocks

Dexter F, Traub RD. Anesth Analg 2002

Van Houdenhoven M et al. Anesth Analg 2007

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Shi P et al. Anesth Analg 2016

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Case Scheduling into Blocks

- Schedule each case into its service's time that day either to start as early or late in the day as possible, but not into over-utilized OR time
- At hospital and outpatient facility, latest start time has only 2.6 min and 0.4 min extra over-utilized OR time per OR per day, respectively

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- Schedule each case into its service's time
  - As early in the day as possible
  - Using bin packing (see "Day of Surgery" lecture)
  - Method that incorporates uncertainty in case duration
- Difference among the three was just 0.5 min of under-utilized OR time per OR per day

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Van Houdenhoven M et al. Anesth Analg 2007

Why Not Have Flexibility of One Block a Bit Empty?

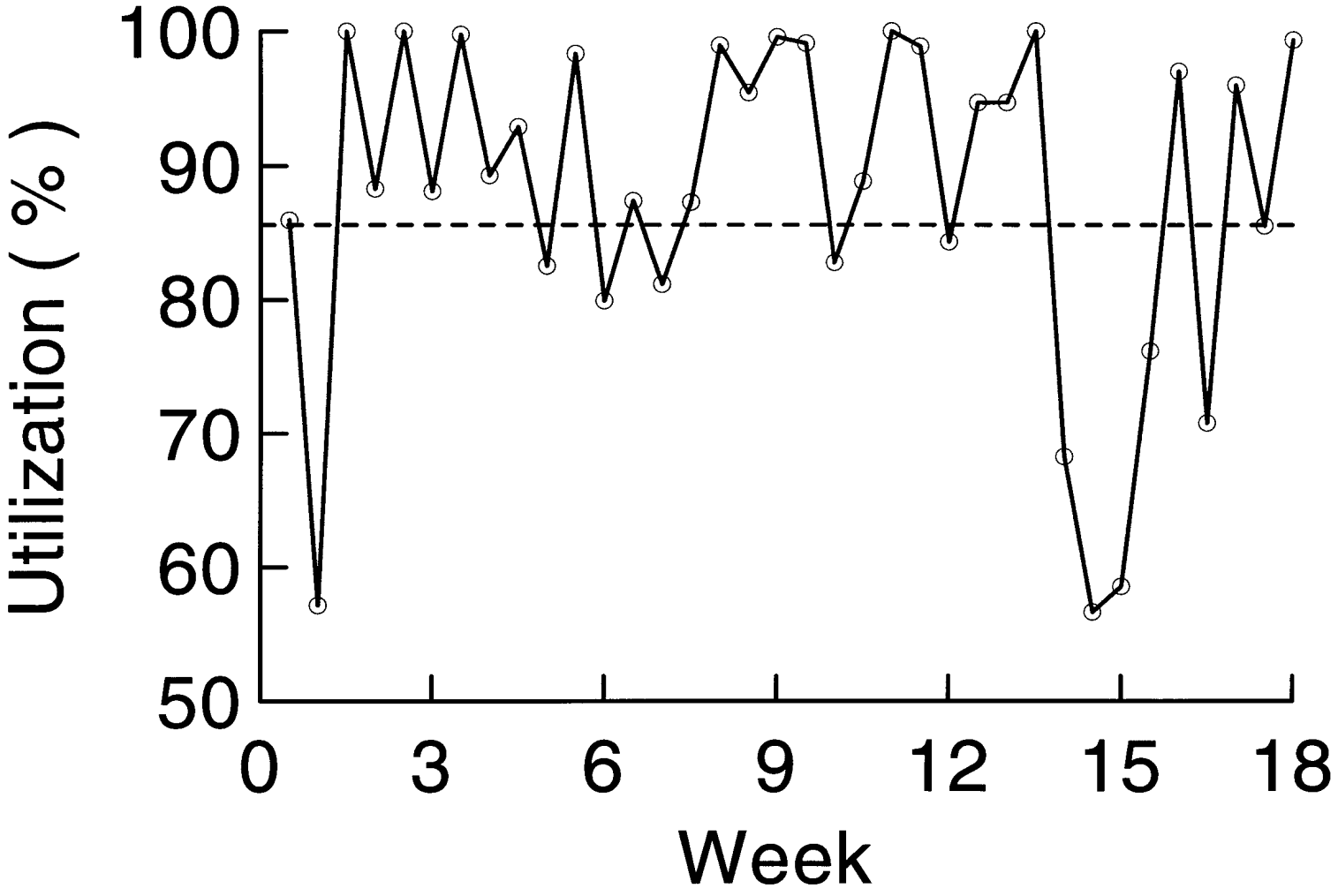
Why Not Have Flexibility of One Block a Bit Empty?

- Large reduction in average adjusted utilization
- Treats surgeons unequally, with those fully filling their blocks having longer patient waits than a surgeon with one nearly empty block each week
- Will run out of OR time, with the sum of the blocks for surgeons within a service exceeding the allocated OR time for the service

Dexter F et al. Anesth Analg 1999
Dexter F et al. Anesth Analg 2000

Why Not Block Time Based on Adjusted Utilization?

Where Put Confidence Interval Bars Around Mean Utilization?



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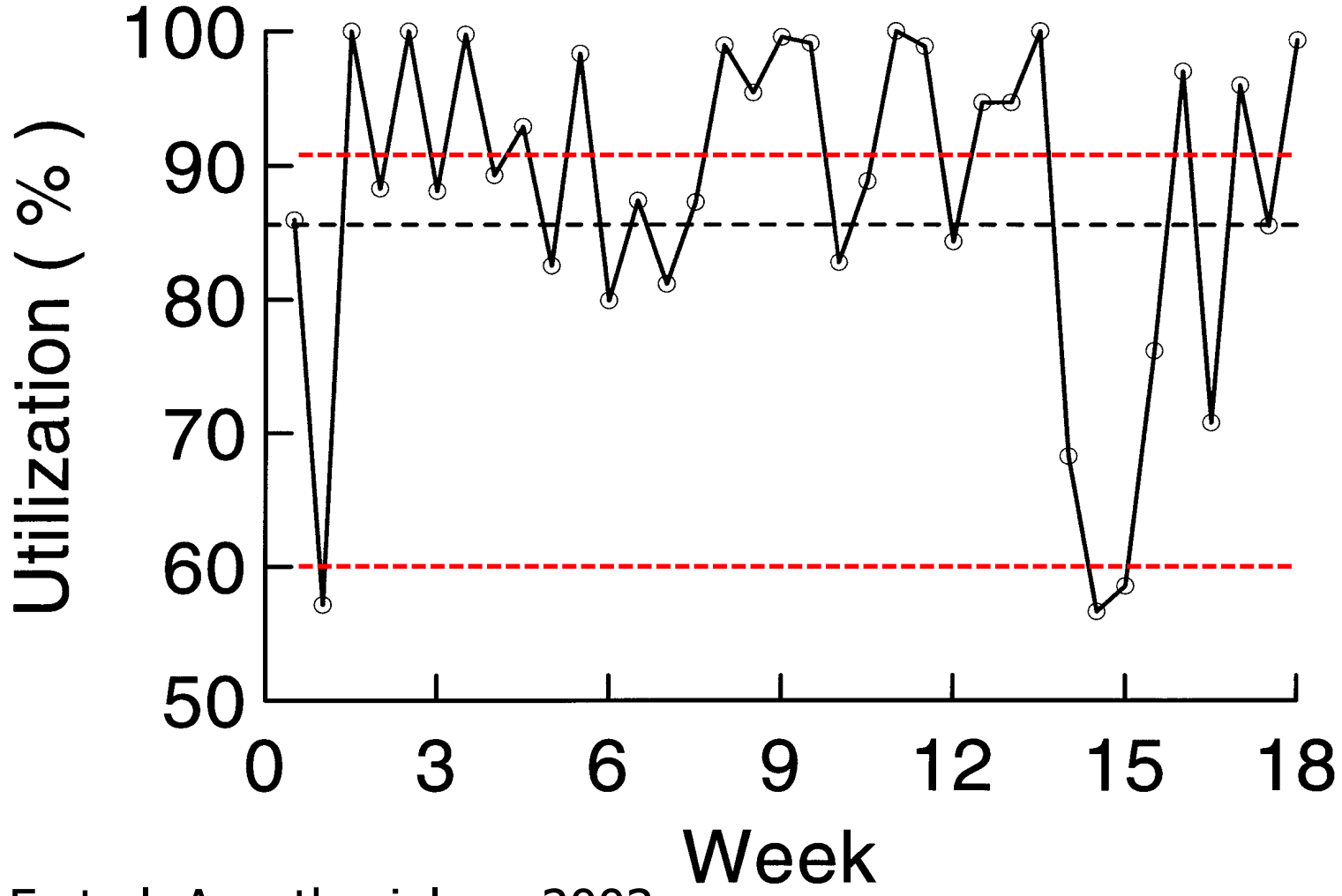


Dexter F et al. Anesthesiology 2003

Why Not Block Time Based on Adjusted Utilization?

- Surgeon has an average adjusted utilization of 81%
- How many months of data are needed for measured utilization to be a sufficiently accurate estimate of adjusted utilization for practical use?

Dexter F et al. Anesth Analg 1999

Dexter F et al. Anesthesiology 2003

Why Not Block Time Based on Adjusted Utilization?

- Surgeon has an average adjusted utilization of 81%
- How many months of data are needed for measured utilization to be a sufficiently accurate estimate of adjusted utilization for practical use?
  - ➢ The answer can be > 10 years

Why Not Block Time Based on Adjusted Utilization?

- During previous quarter, Surgeon 1 has measured adjusted utilization = 65%
- During previous quarter, Surgeon 2 has measured adjusted utilization = 80%
- Reduce OR time planned for Surgeon 1 and give it to Surgeon 2?

Why Not Block Time Based on Adjusted Utilization?

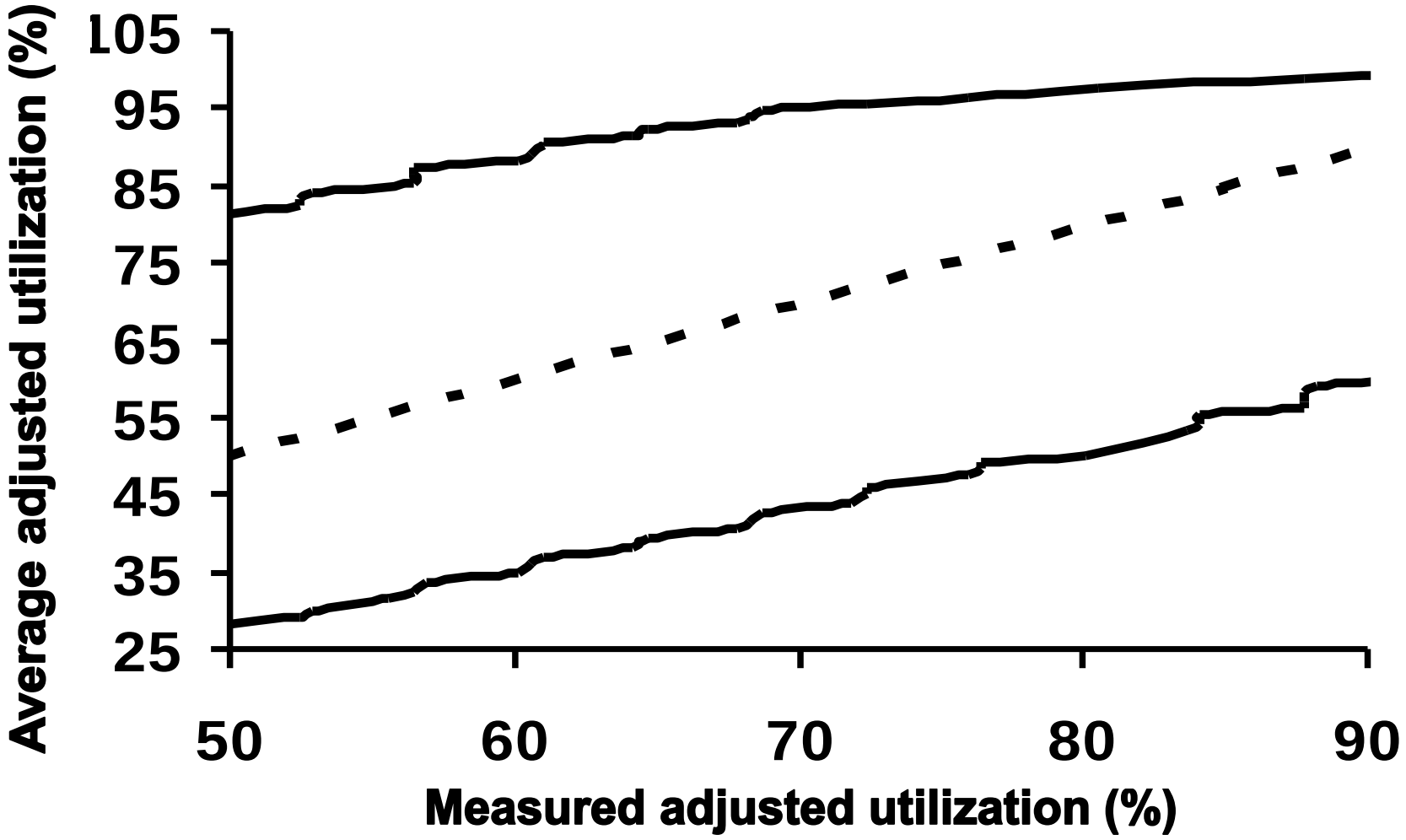
- 65% surgeon to an 80% surgeon?
- Probability that surgeons have the same average OR utilization is ≥ 16%!
  - Measured difference may be random chance

Why Not Block Time Based on Adjusted Utilization?

- Predominant cause of wide confidence intervals is …?

Dexter F et al. Anesthesiology 2003

Scheduling Cases Taking Precisely 3.75 Hours Into 8 Hours



Why Not Block Time Based on Adjusted Utilization?

- Predominant cause of wide confidence intervals is random variation in the numbers of patients each week requesting to be scheduled for surgery
  - 2, 3, or 4 patients to be scheduled into each block represents large % difference

Why Not Block Time Based on Adjusted Utilization?

- Because average out of 117 hospitals has 77% of surgeon-day combinations with 1 or 2 cases

and

- Because objective of calculating block time is to facilitate the coordination of surgeons' schedules

Then

- Statistical methods used for calculating block time for surgeons needs to be appropriate for surgeons performing few cases

Dexter F et al. J Clin Anesth 2017

Why Not Block Time Based on Adjusted Utilization?

- Because average out of 602 facilities has 64% of surgeon-day combinations with 1 or 2 cases

and

- Because objective of calculating block time is to facilitate the coordination of surgeons' schedules

Then

- Statistical methods used for calculating block time for surgeons needs to be appropriate for surgeons performing few cases

Epstein RH et al. J Clin Anesth 2021

Why Not Block Time Based on Adjusted Utilization?

- Need for large sample size is a consequence of measuring utilization ***by surgeon***
  - Issues do not arise when measuring utilization for a group or department
- By surgeon (i.e., subspecialty) is precisely what is needed for block time decisions

Why Not Maximum Waiting Time of 2 Weeks?

Why Not Maximum Waiting Time of 2 Weeks?

- Can calculate number of blocks that surgeon can always fill each 1-week period
- Most surgeons will have substantially less block time than if plan block per 2 weeks
- Much greater percentage of the hours of cases scheduled into service's time

Dexter F et al. Anesth Analg 1999
Dexter F et al. Can J Anesth 2012

Surgeon Block Time

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➢ Implementation if currently have block time

Implementation If Have Poorly Calculated Block Time

- If block time currently distributed based on other criteria, cannot reduce a surgeon's block time based on low utilization, since cannot accurately measure the percentage utilization

Dexter F et al. Anesth Analg 2003

Implementation If Have Poorly Calculated Block Time

- Change #1
  - More block time to surgeons wanting more block time and for whom current block time is less than that calculated always to be filled

Implementation If Have Poorly Calculated Block Time

- Change #1
  - More block time to surgeons wanting more block time and for whom current block time is less than that calculated always to be filled
    - Future block time follows above processes

Implementation If Have Poorly Calculated Block Time

- Change #2
  - For surgeons currently with more block time than calculated to be filled, release the block time 1 week ahead

Dexter F et al. Anesth Analg 2003

Dexter F, Macario A. Anesth Analg 2004

Implementation If Have Poorly Calculated Block Time

- Change #2
  - For surgeons currently with more block time than calculated to be filled, release the block time 1 week ahead

➢ What about surgeon who fully fills his/her OR each day when scheduling into block time
  – How assure that surgeon has enough hours?

Implementation If Have Poorly Calculated Block Time

- Change #2
  - For surgeons currently with more block time than calculated to be filled, release the block time 1 week ahead
- What about surgeon who fully fills his/her OR each day when scheduling into block time
  - How assure that surgeon has enough hours?
    - That is different problem of allocating OR time by service, which takes into account predictive errors in case durations, add-on cases, case cancellation, staff scheduling, etc.

Review – Summarize the Facts of the Talk

Put What Block Responsibility on Perioperative Medical Director?

Put What Block Responsibility on Perioperative Medical Director?

1. Why blocks per 2 weeks and how calculate?
2. Describe surgeon release and scheduling of cases into his or her block time
3. Why not flexibility to numbers of blocks?
4. List reasons for not based on block utilization
5. What do if already have inaccurate blocks?

What Include in Written Block Time "Policy"?

What Include in Written Block Time "Policy"?

- Calculate the number of blocks that surgeon can fill consistently each 2-week period
- Once surgeon has filled or released a block within the 4-week cycle, then can schedule elective case outside of block time
- More block time to surgeons wanting more block time and for whom current block time is less than that calculated always to be filled
- For surgeons currently with more block time than calculated to be filled, release the block time 1-week ahead

Additional Information on Operating Room Management

- www.FranklinDexter.net/education.htm
  - Example reports with calculations
  - Lectures on service-specific OR staffing, day of surgery decision making, anesthesia staffing, turnover times, drug and supply costs, comparing procedures among hospitals, strategic decision making, and PACU staffing
- www.FranklinDexter.net
  - Comprehensive bibliography of peer reviewed articles in operating room and anesthesia group management