Skilled Nursing Facility Payment Models: Nursing Component *Technical Expert Panel*

Acumen, LLC

November 19th 2015

Outline

Sessions	
1	Introductions and Project Overview
2	Options for Revising Nursing Index
3	Considering Non-Therapy Ancillary Services as a Separate Payment Component
4	Explore Introducing NTA Payment Component
5	Options for Revising the Case-Mix Classification System
6	Open Discussion

Outline

Sessions	
1	**Introductions and Project Overview**
2	Options for Revising Nursing Index
3	Considering Non-Therapy Ancillary Services as a Separate Payment Component
4	Explore Introducing NTA Payment Component
5	Options for Revising the Case-Mix Classification System
6	Open Discussion

Session 1 Outline

Session Objective

- Introduce TEP participants and today's goals

Session Topics

- Introduce panelists and project team
- Explain project's overarching goals
- Describe scope of today's TEP

Session Time

- 15 minutes

Welcome

- CMS has contracted with Acumen, LLC to identify potential refinements and alternatives to the existing Prospective Payment System (PPS) for Medicare Part A SNF stays
- This TEP is an important venue for acquiring vital stakeholder and expert input during the process
- Introduction
  - Panelists
  - Project team representatives

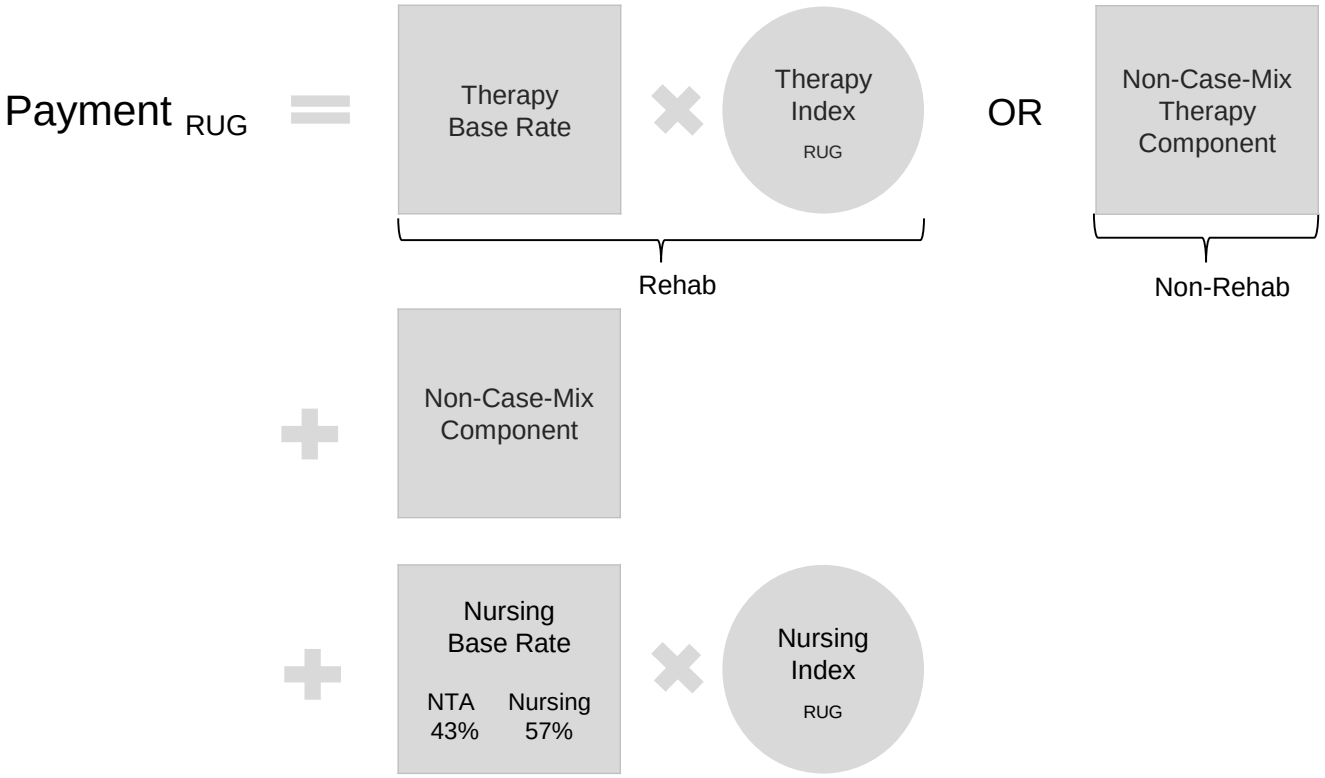
Overview of Project

- Three main project goals
  - Develop alternative approaches that improve adequacy and appropriateness of payment
  - Evaluate performance of each approach
  - Select and support implementation of revised payment approach
- To ensure readily implementable alternatives, the project will make recommendations under two constraints:
  - Statutory requirements (e.g. per diem payments)
  - Currently available data
- Project recommendations can address all components of the SNF PPS

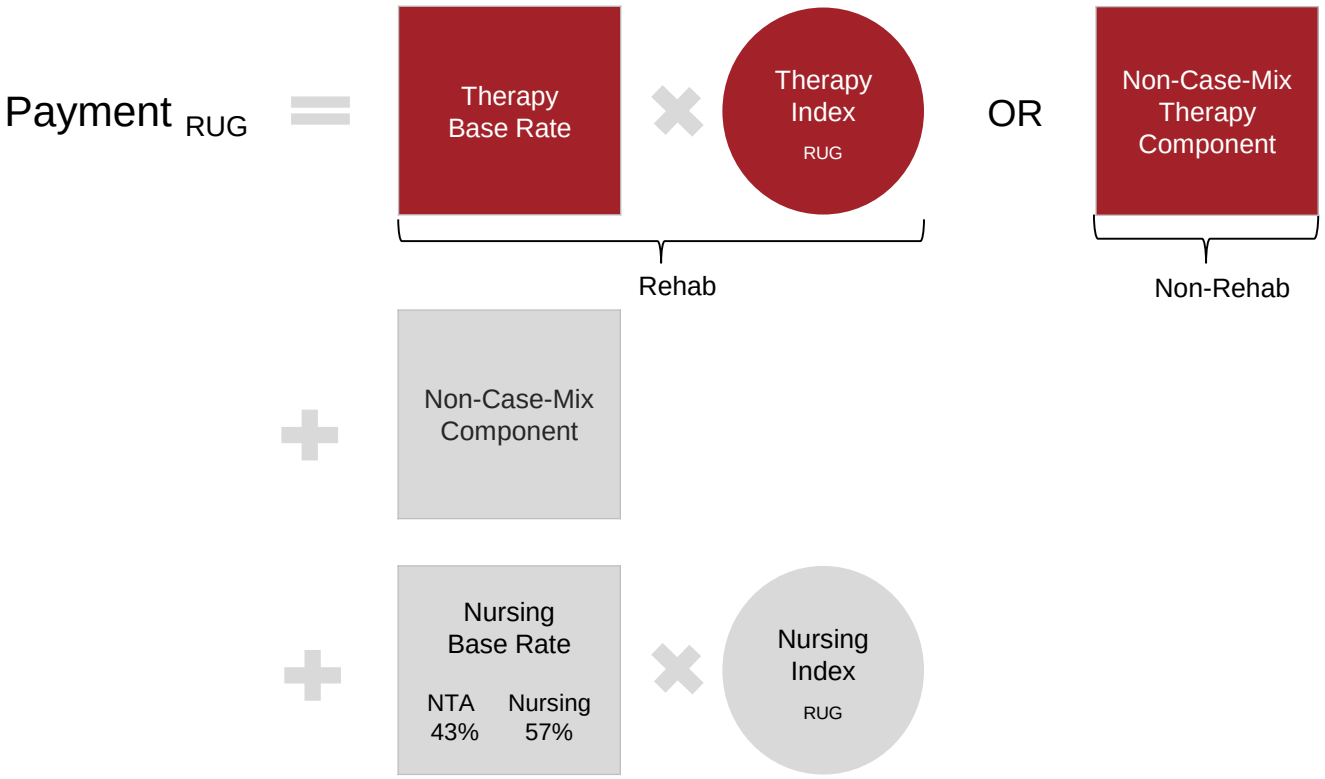
SNF PPS Payments Consists of Three Components

Therapy	Nursing	Non-Case-Mix
• Physical therapy • Occupational therapy • Speech therapy • Evaluation for therapy	• Nursing services • Social services • NTA services	• Room and board • Administrative costs • Capital-related costs

Therapy and Nursing Components Vary by Case-Mix Group (RUG)



TEP Focused on the Therapy Component was Held in February 2015



Therapy TEP Has Been a Valuable Resource

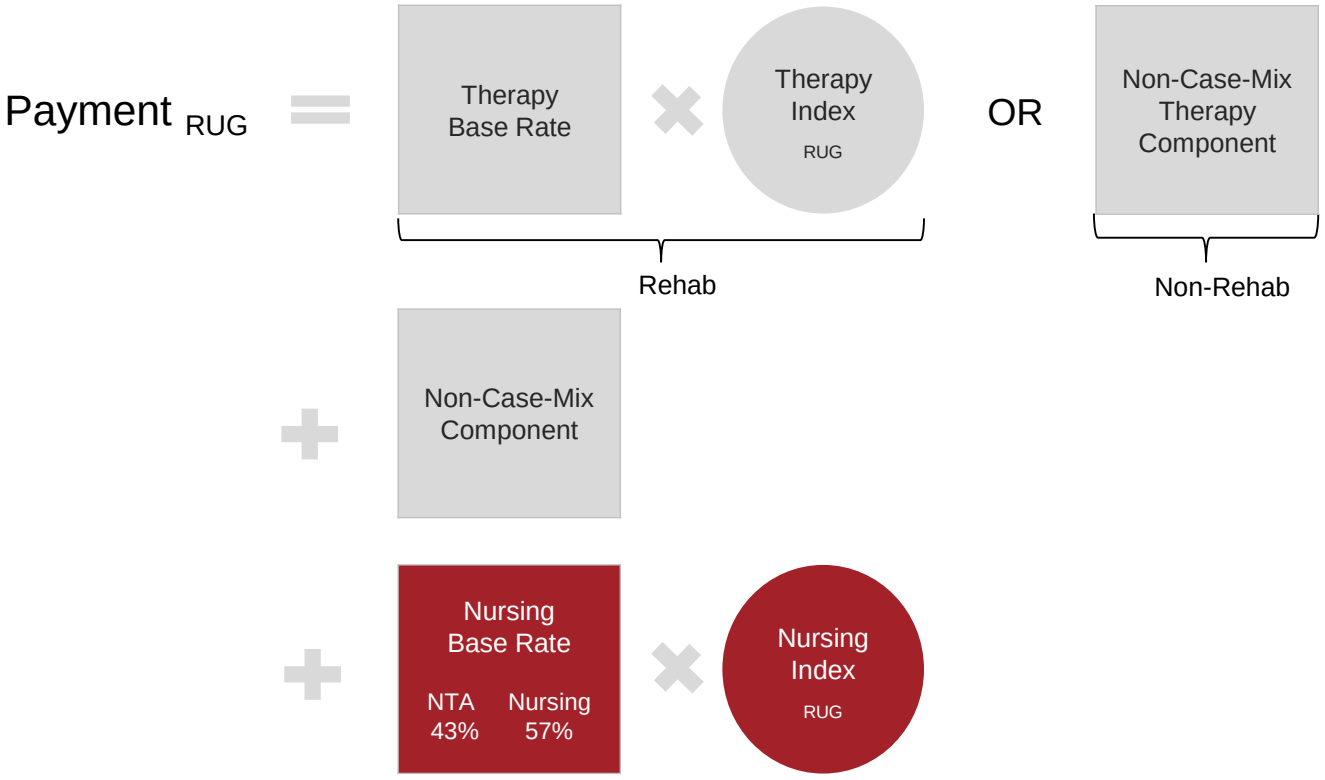
- Recommendations from the therapy TEP have been implemented in ongoing analyses and will inform planned analyses
- The summary of the therapy TEP discussion can be found here:

  https://www.cms.gov/Medicare/Medicare-Fee-For-Service-Payment/SNFPPS/therapyresearch.html

- Additional comments about the therapy TEP or overall project research can be sent to:

  SNFTherapyPayment@cms.hhs.gov

Today's TEP Focuses on the Nursing Component



Specific Topics of Today's TEP

- Setting nursing payments that adequately and accurately compensate providers, for any given case mix system
  - [Session 2] Assessing differences in nursing costs across residents to revise the nursing index
  - [Session 3] Assessing differences in NTA costs across residents and over time
  - [Session 4] Assessing the introduction of a NTA index into the current RUG system
- Selecting an improved case-mix classification system
  - [Session 5] Options for using clinical information to create new case mix groups

TEP Agenda

Session		Time	Topic
Morning	Session 1	9:30 to 9:45 AM	Introductions and Project Overview
	Session 2	9:45 to 11:00 AM	Options for Revising Nursing Index
	Break	11:00 to 11:15 AM	-
	Session 3	11:15 to 12:15 PM	Considering Non-Therapy Ancillary Services as a Separate Payment Component
Lunch		12:15 PM to 1:15 PM	-
Afternoon	Session 4	1:15 – 2:15 PM	Effects of Introducing NTA Payment Component
	Break	2:15 to 2:30 PM	-
	Session 5	2:30 to 4:00 PM	Options for Revising the Case-Mix Classification System
	Session 6	4:00 to 5:00 PM	Open Discussion

Outline

Sessions	
1	Introductions and Project Overview
2	**Options for Revising Nursing Index**
3	Considering Non-Therapy Ancillary Services as a Separate Payment Component
4	Explore Introducing NTA Payment Component
5	Options for Revising the Case-Mix Classification System
6	Open Discussion

Session 2 Outline

Session Objective

Examine administrative data on nursing costs and explore options for updating nursing indexes

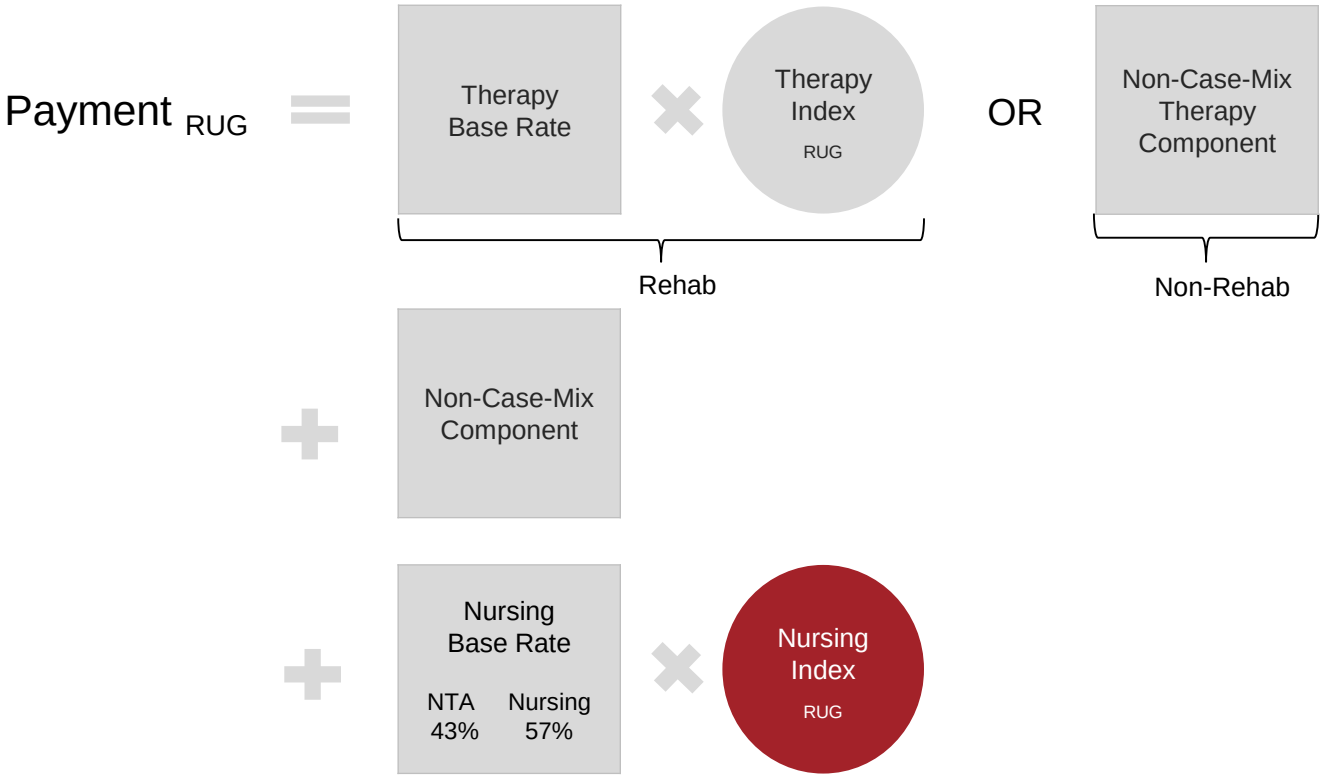
Session Topics

- Motivation to evaluate nursing costs
- Measurement of resident-specific nursing costs
- Options for revising nursing index

Session Time

1 hour and 15 minutes

Session 2: Options for Revising Nursing Index



Current Nursing Indexes Based on STRIVE Nursing Time Study

- 2007 STRIVE study collected data on resident-specific nursing minutes for all residents in the study
- Using wage data, minutes were weighted by relative wage of the staff member who administered service to produce "wage weighted staff time" (WWST)
- Nursing index for each RUG is the average WWST per day for the RUG divided by overall average

Reform of Case-Mix Classification May Require Revision of Nursing Indexes

- This project is exploring alternative case-mix classification systems to reform the current RUG system. Some areas of research include:
  - Reform of therapy component (discussed in Therapy TEP)
  - Separation of non-therapy ancillary (NTA) services from nursing component (discussed in Sessions 3 and 4)
- Modifications to case-mix classification would require recalculation of nursing case-mix indexes
  - In the case of changes to the therapy categories, the nursing index must change because it relies on the interaction between current therapy categories and nursing predictors (ADL, ext. services)
  - In the case of the creation of new case-mix groups to account for variation in NTA services, the nursing component would need to be re-calculated

Calculating Nursing Indexes Requires Data on Nursing Costs

- Nursing indexes are intended to reflect average nursing costs of case-mix groups relative to overall average
- Nursing costs cannot be derived from MDS assessments
  - Assessments do not report nursing time
  - In contrast, reported therapy minutes can be used to infer therapy costs
- Claims contain charges, which could be converted to costs using the cost-to-charge ratios (CCR) on cost reports

Limitations of Using Claims Data to Measure Resident-Specific Nursing Charges

- Charges on claims can be recorded in various revenue centers indicating the type of service associated with the charge
- Nursing charges are normally reported within general revenue centers that also include "non-case-mix" services such as room and board, rather than revenue centers specific to nursing
- Nursing+non-case-mix charges reported in claims often do not vary across different points in the stay or across different residents within each facility, even when comparing dissimilar RUGs

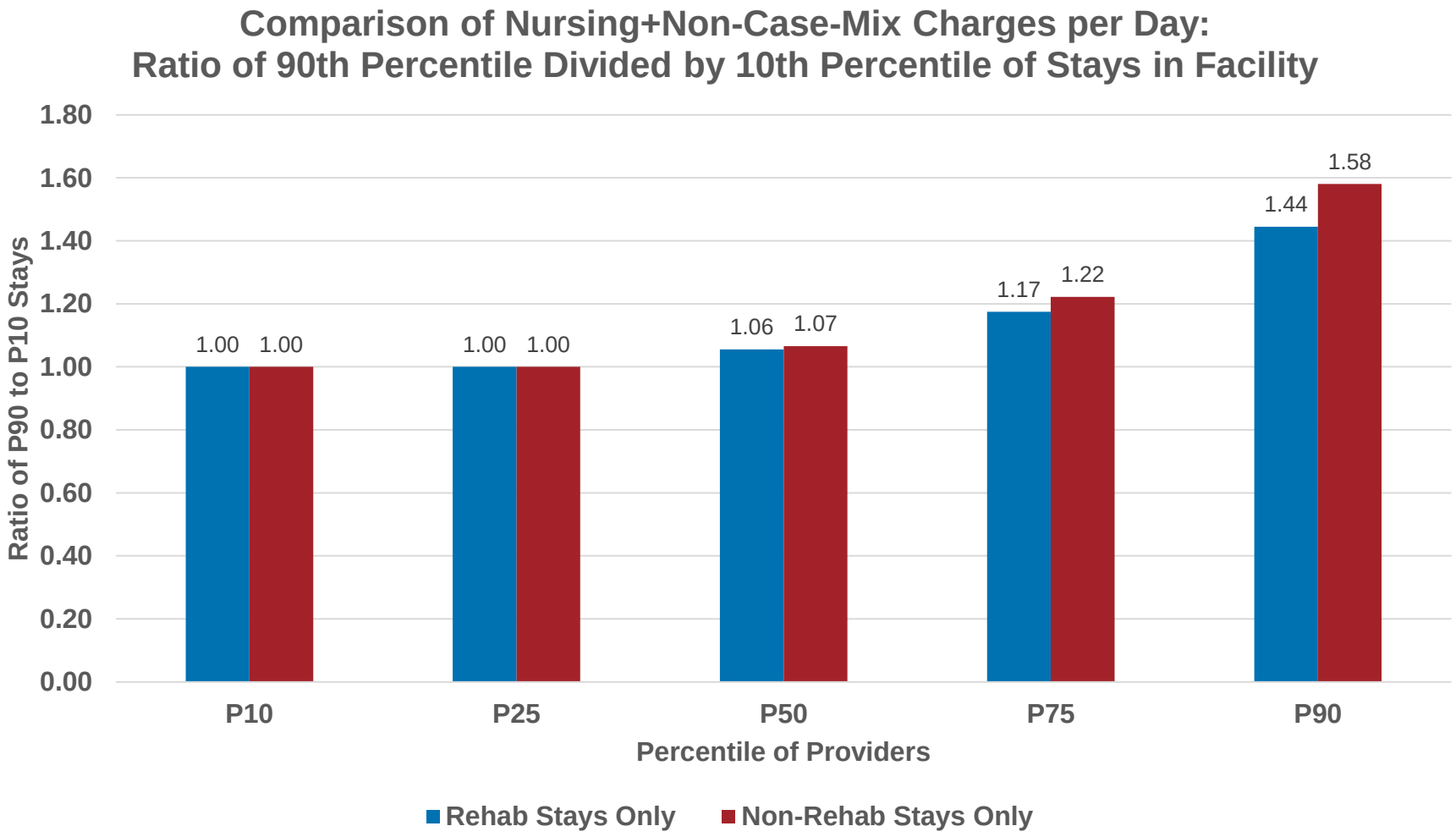
Nursing+Non-Case-Mix Charges Remain Constant at all Points during a Stay

Difference in Nursing+Non-Case-Mix Charges per Day Last Claim Minus First Claim ($)						
Claim Count	**Mean**	**P10**	**P25**	**P50**	**P75**	**P90**
1	-	-	-	-	-	-
2	$1	$0	$0	$0	$0	$1
3	$0	$0	$0	$0	$0	$9
4	$2	-$1	$0	$0	$0	$11
5	$6	-$5	$0	$0	$0	$14

Providers Report Similar Nursing+Non-Case-Mix Charges for Different Residents

Within-Provider Ratio of Charges: 90th Percentile Divided by 10th Percentile					
Measure	**P10**	**P25**	**P50**	**P75**	**P90**
Nursing+Non-Case-Mix Charges per Day	1.00	1.00	1.06	1.19	1.56
Total Therapy Charges per Day	1.62	1.90	2.46	3.74	6.26

Nursing+Non-Case-Mix Charges Show Limited Within-Facility Variation for both Rehabilitation and Non-Rehabilitation Stays



Three Options to Adjust Nursing Index

1. Nursing indexes could be set by assigning all residents to non-rehabilitation RUGs for nursing payment
2. New nursing indexes could be calculated by linking variation in facility-level nursing costs to the composition of the resident population
3. Resident-level nursing time data from the 2007 STRIVE study could be used to derive new nursing indexes, after reweighting to reflect changes in resident population

Option 1: Nursing Indexes Set by Assigning All Residents to Non-Rehabilitation RUGs

- Methodology
  - Assign resident to highest-paying Non-Rehabilitation RUG for which they qualify
  - Assign nursing weight from the Non-Rehabilitation RUG (based on 2007 STRIVE data)
- Advantages
  - Use of more resident characteristics than Rehabilitation RUGs, which allows for finer distinctions in nursing staff time
  - Non-Rehabilitation RUGs contained the majority of the STRIVE population, so Non-Rehabilitation nursing indexes more precisely reflect average nursing needs
- Disadvantages
  - Residents receiving therapy may have different nursing service use than residents who have the same clinical characteristics but do not receive therapy

Distribution of SNF Population Under Non-Rehabilitation RUGs

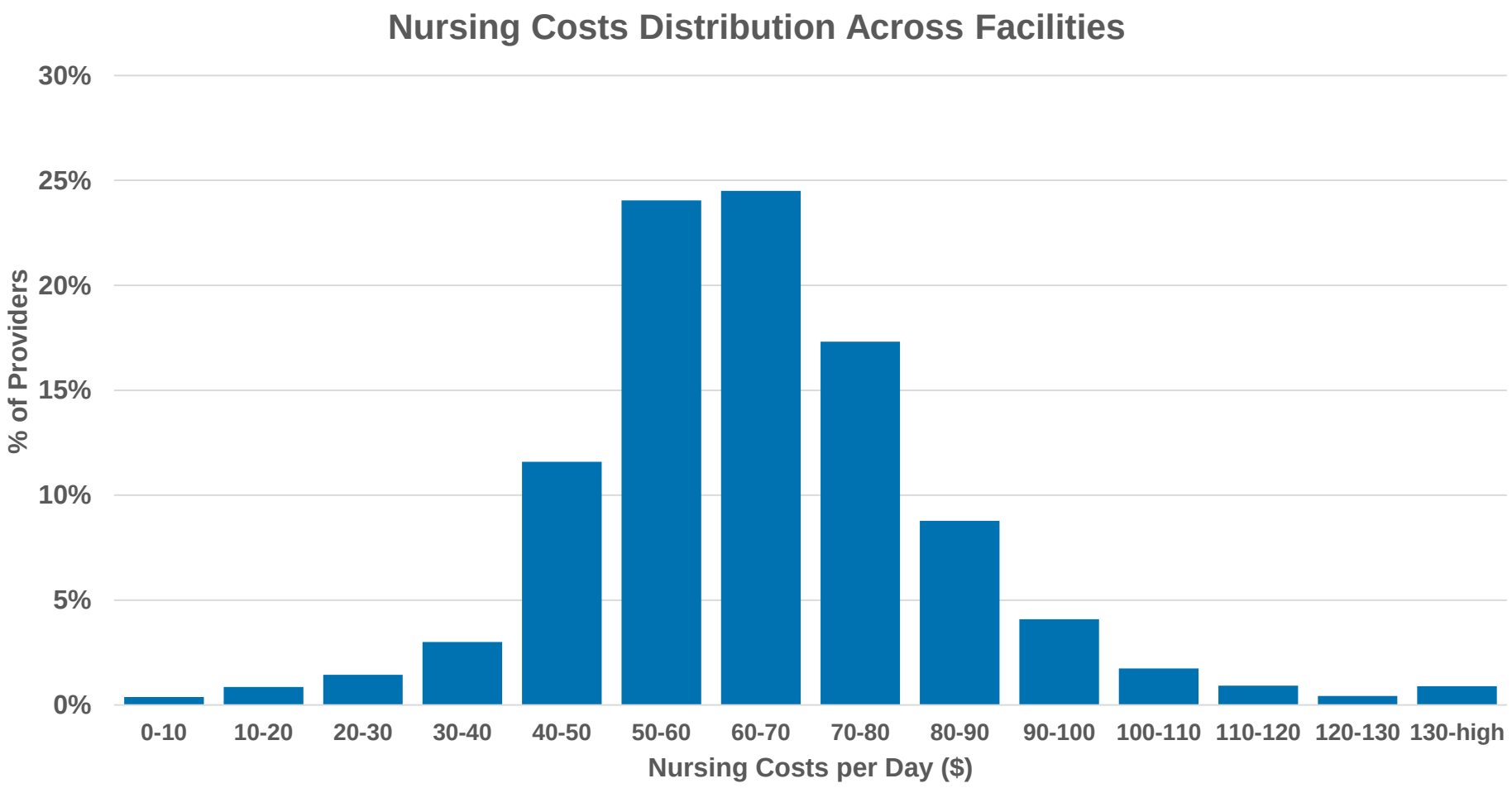
Current System: Most-Frequent Non-Rehab RUGs	**% Non-Rehab RUG Days**
LD1	9.3%
LE1	7.6%
LC1	6.7%
CA1	6.0%
CC1	5.9%
CD1	4.9%
HD1	4.8%
PC1	4.8%
HE1	4.5%
HB1	4.1%

Full Population: Most-Frequent Non-Rehab RUGs	**% Non-Rehab RUG Days**
PC1	15.1%
CC1	12.7%
CD1	8.2%
PD1	7.6%
PB1	6.0%
LC1	5.9%
CB1	5.6%
LD1	5.5%
HC1	4.2%
HD1	3.3%

Option 2: Differences in Costs across Facilities Used to Set Nursing Indexes for Case-Mix Groups

- Methodology
  - Calculate facility-level nursing costs from cost reports
  - Calculate the relative frequency of each case-mix group at facility level
  - Estimate nursing indexes for each case-mix group by linking variation in costs to variation in resident composition
- Advantages
  - Use of current nursing costs that reflect current practices
  - Readily replicable method to reweight indexes at a later point
- Disadvantages
  - Variation in costs between facilities may be driven by factors unrelated to the mix of residents in each facility

Nursing Costs Vary Across Facilities



Option 3: STRIVE Data Used to Set Nursing Indexes for New Case-Mix Groups

- Methodology
  - Reassign the STRIVE population to new case-mix groups
  - Calculate nursing indexes for new groups using nursing staff time measurement, after reweighting to reflect changes in resident population
- Advantages
  - STRIVE is the most recent source of nationally-representative resident-level data on nursing staff time
  - Detailed resident-level data in STRIVE allows for credible reweighting to reflect changes in resident population
- Disadvantages
  - Data was collected in 2007 and may not be representative of current clinical practices
  - STRIVE assessment data corresponds to an earlier version of the MDS (version 2.0)

Discussion Questions

1. Are nursing costs homogeneous across residents, or is the limited variation in charges a result of billing patterns?
   - If there is variation in nursing costs, what resident characteristics drive this variation?
2. Are Non-Rehabilitation RUGs an appropriate classification system to reflect differences in nursing service use for the overall SNF population?
3. Is the composition of the resident population the main driver of variation in nursing costs across facilities?
4. How have clinical practices changed since the 2007 STRIVE study?

Outline

Sessions	
1	Introductions and Project Overview
2	Options for Revising Nursing Index
3	**Considering Non-Therapy Ancillary Services as a Separate Payment Component**
4	Explore Introducing NTA Payment Component
5	Options for Revising the Case-Mix Classification System
6	Open Discussion

Session 3 Outline

Session Objective

Discuss creation of a separate NTA component in SNF PPS payment, with a focus on drug costs

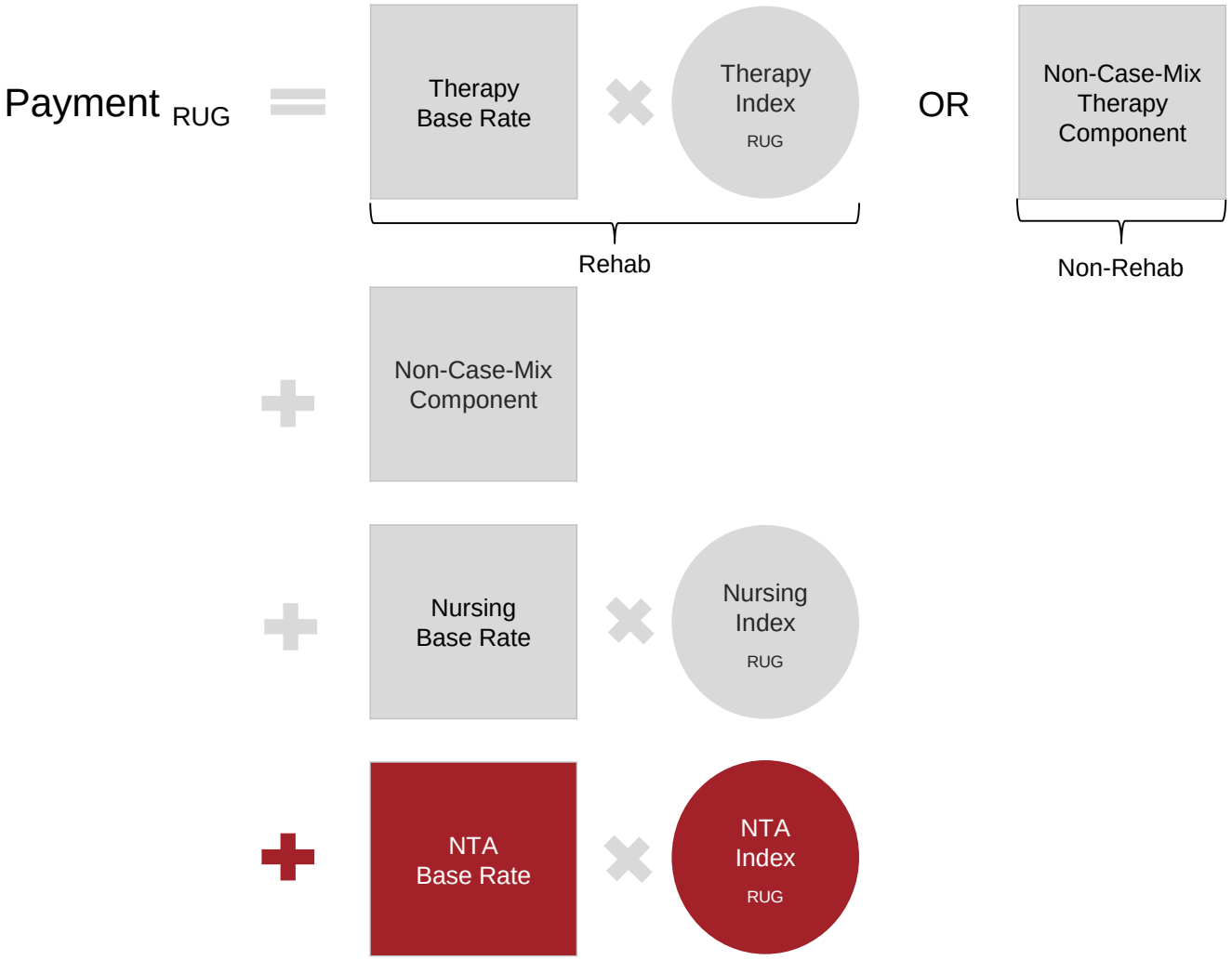
Session Topics

- Motivation for creating a separate NTA component
- Measuring NTA costs in administrative data
- Examining source of NTA costs and timing over course of a stay

Session Time

1 hour

Session 3: Considering Non-Therapy Ancillary Services as a Separate Payment Component



Current Nursing Payments Do Not Fully Capture Variation in NTA Costs Across Residents

- Nursing base rate reflects average NTA costs for all residents
  - 43% of nursing base rate consists of NTA costs
- However, nursing indexes are originally based on variation across RUGs in nursing staff time alone
- To examine how well nursing indexes reflect NTA costs, need to construct measure of resident-specific NTA costs

NTA Costs Can be Estimated from Charges in Claims and Facility Cost Reports

- NTA claim charges vary markedly across different claims within a facility, in contrast to nursing charges

Provider Ratio (90th Percentile Divided by 10th Percentile)					
Measure	**P10**	**P25**	**P50**	**P75**	**P90**
NTA Charges	5.13	7.88	11.64	18.77	32.96
Nursing+Non-Case-Mix Charges	1.00	1.00	1.06	1.19	1.56

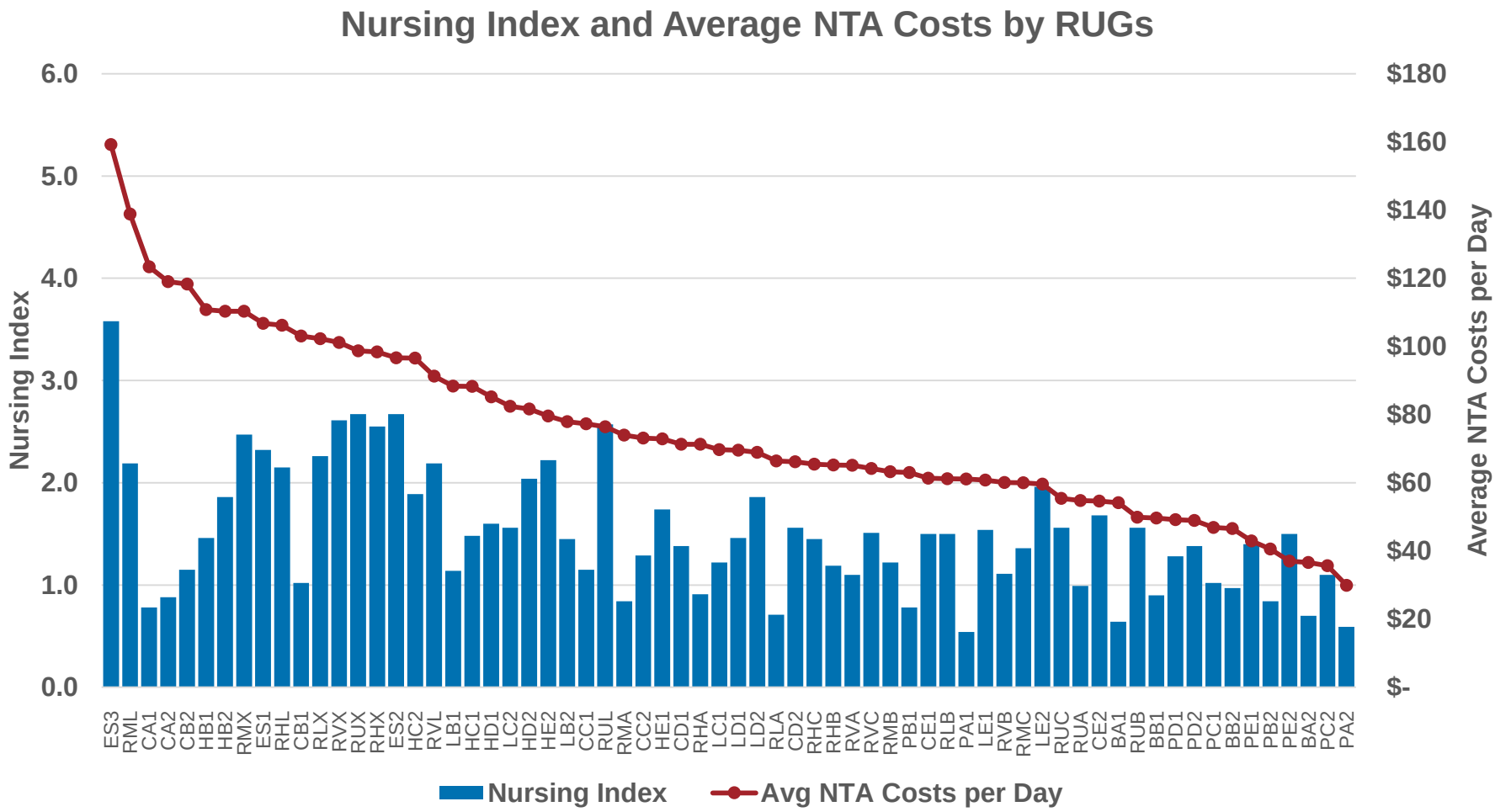
- Resident-specific charges can be multiplied by cost-to-charge ratios from facility-level cost reports to estimate resident-specific costs

Procedure Can Be Implemented Separately for Three NTA Categories

Drug	Respiratory	Other
• Pharmacy • IV Therapy • IV Solutions	• Respiratory services • Inhalation services • Other respiratory services	• Laboratory services • Radiology services • Medical/surgical supplies

- 131 NTA revenue centers on claims can be categorized into three categories
- Separate CCRs can be applied to charges in each category to get estimates of NTA costs for each category
- Total NTA costs are the sum of costs across the three categories

Nursing Index and Average NTA Costs are not Closely Related

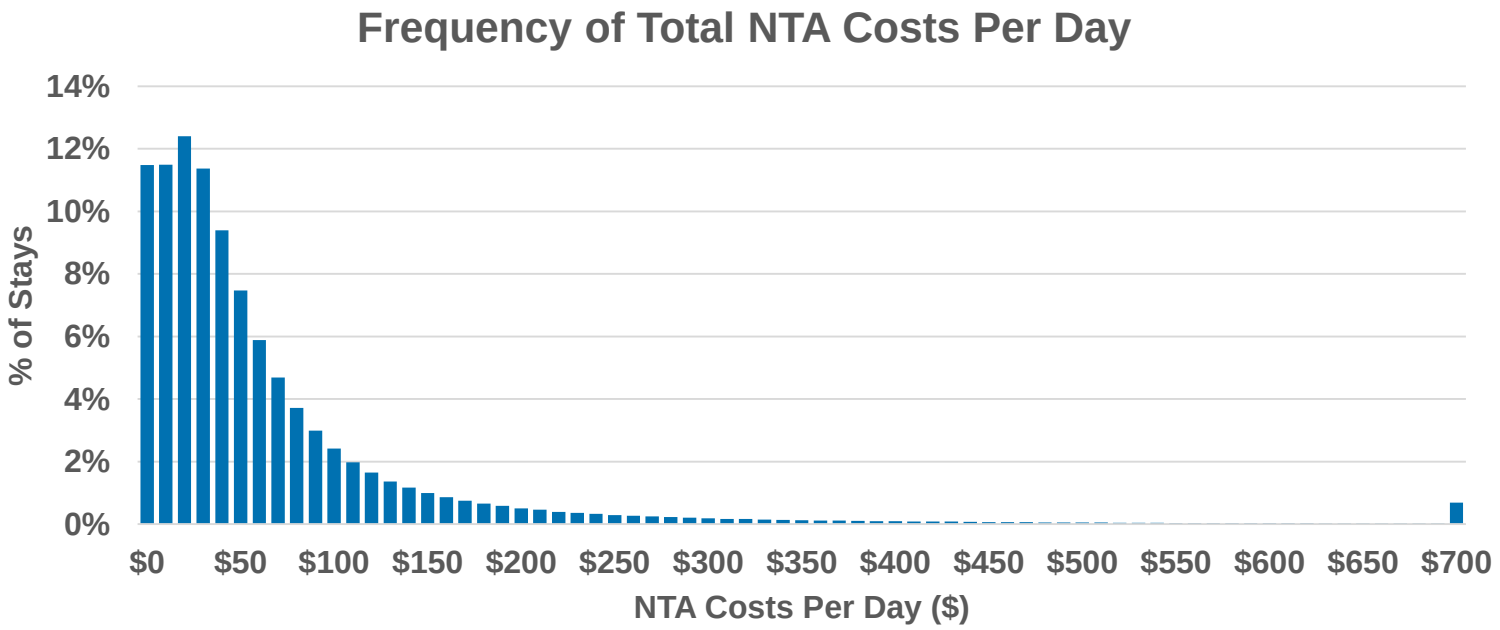


A Separate NTA Component Could Better Account for Variation in Costs

- NTA component would have two parts
  - *NTA Base Rate* reflecting average NTA costs for population and updated for price changes over time
  - *NTA Index* accounting for variation in NTA costs across different types of residents
- Proper design of separate NTA component requires understanding the specific sources of NTA costs and the timing of NTA costs during the course of a stay

Small Portion of the SNF Population Has Very High NTA Costs

- The study population excludes the 0.5% of stays with highest NTA charges, and providers with top-1% and bottom-1% NTA CCRs
- After restrictions, 2% of stays have NTA costs per day higher than $400



NTA Costs are Principally Comprised of Drug Costs

Revenue Center Category	% Stays with Costs in Category	% of NTA Costs	Average Costs per Day	
			Full Population	Stays with Positive Costs in Category
Drug	93%	81%	$63	$67
Other NTA	75%	18%	$12	$15
Respiratory	6%	1%	$1	$16

Medication Categories on the MDS Assist in Identifying High NTA Drug Costs

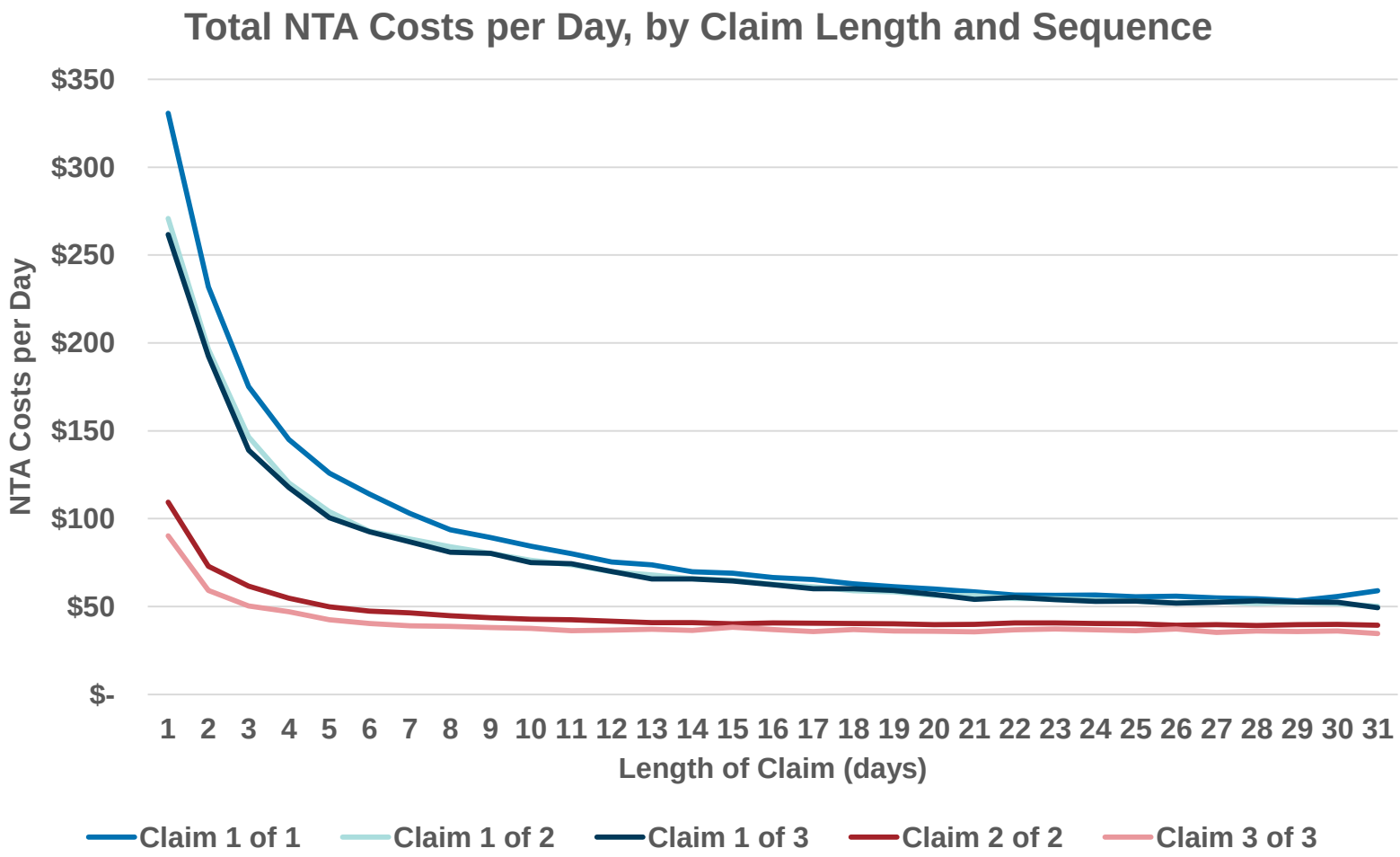
Medications		Average Drug Costs per Day (First Claim of Stay, 1-3 Utilization Days)		
		Used	Not Used	Difference (*Used* minus *Not Used*)
N0350A	**Insulin Injection**	$295	$183	$111
N0300A	**Injection**	$231	$179	$51
N0410F	**Antibiotic**	$232	$192	$40
N0410C	**Antidepressant**	$231	$194	$37
N0410G	**Diuretic**	$225	$198	$27
N0410B	**Antianxiety**	$227	$203	$24
N0410D	**Hypnotic**	$230	$206	$24
N0410E	**Anticoagulant**	$222	$202	$20
N0410A	**Antipsychotic**	$223	$206	$17

But Substantial Variation in Drug Costs Exists Within Medication Combinations

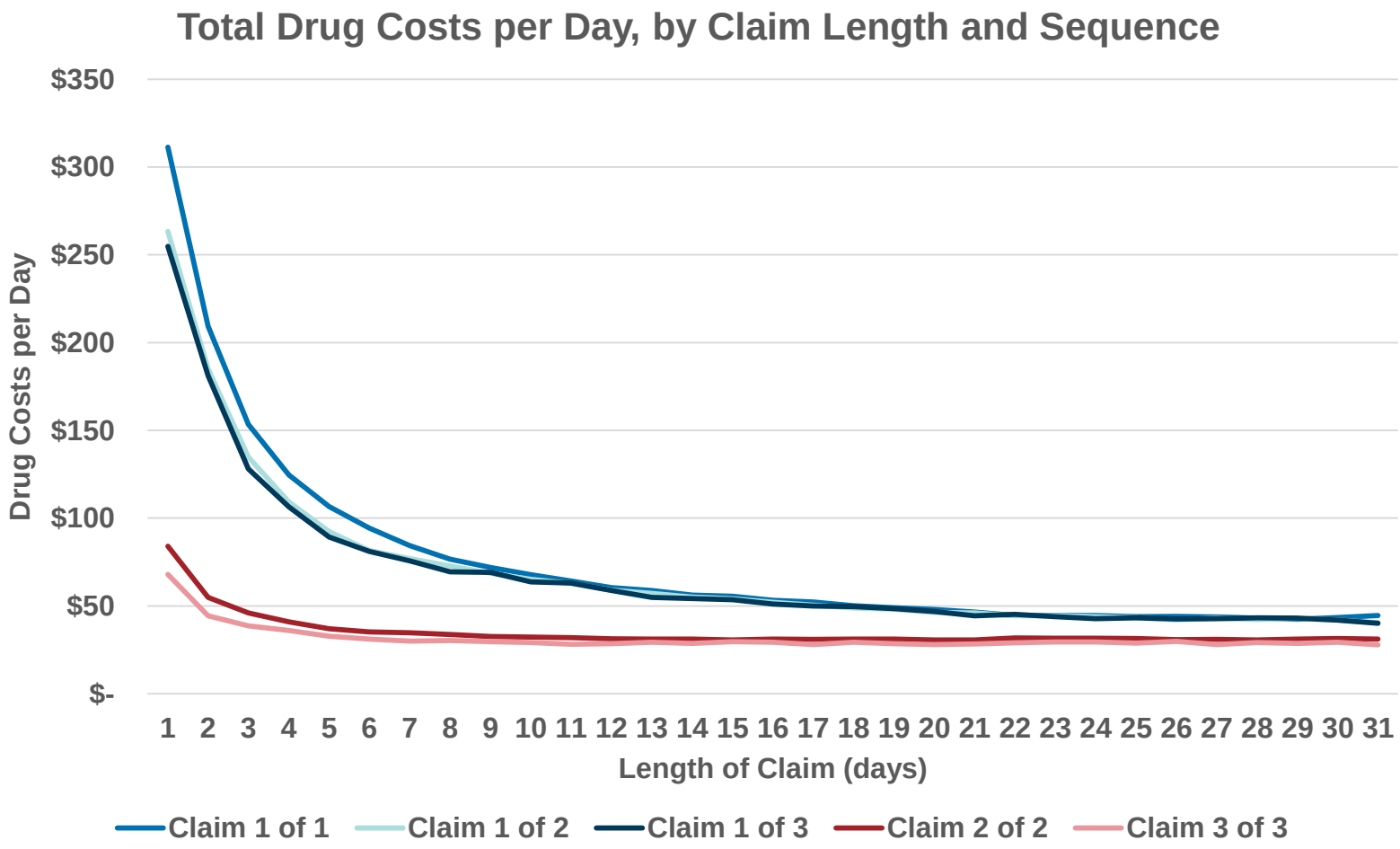
Section N Medication Combination	# Meds	Drug Costs per Day (First Claim of Stay, 1-3 Utilization Days)					
		Mean	P10	P25	P50	P75	P90
None	0	$159	$0	$0	$39	$173	$446
Injection, Insulin Injection	2	$266	$0	$0	$117	$357	$707
Antibiotic	1	$178	$0	$0	$58	$210	$463
Injection, Anticoagulant	2	$158	$0	$6	$75	$207	$397
Injection, Insulin Injection, Antibiotic	3	$296	$0	$0	$139	$390	$745
Injection	1	$141	$0	$1	$44	$159	$375

- There are large differences in drug costs, even for residents with the same medication combinations
- Some residents have very high drug costs despite not listing any medications on the MDS

Total NTA Costs per Day Decline with Length of Stay



Drug Costs are the Source of This Decline

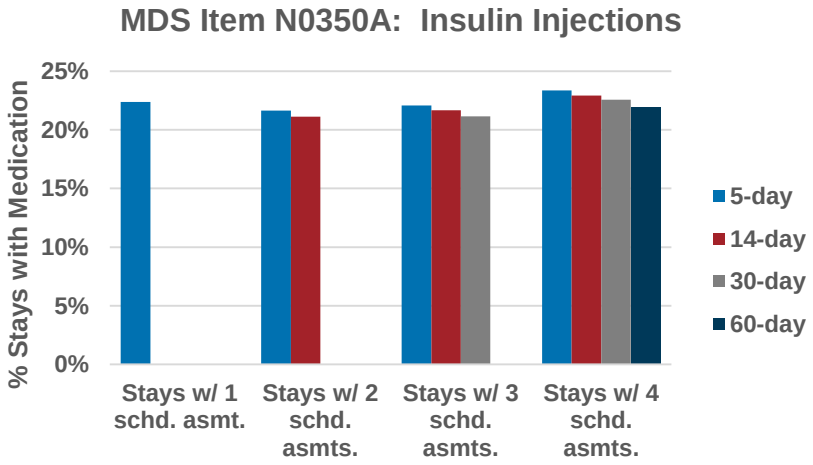


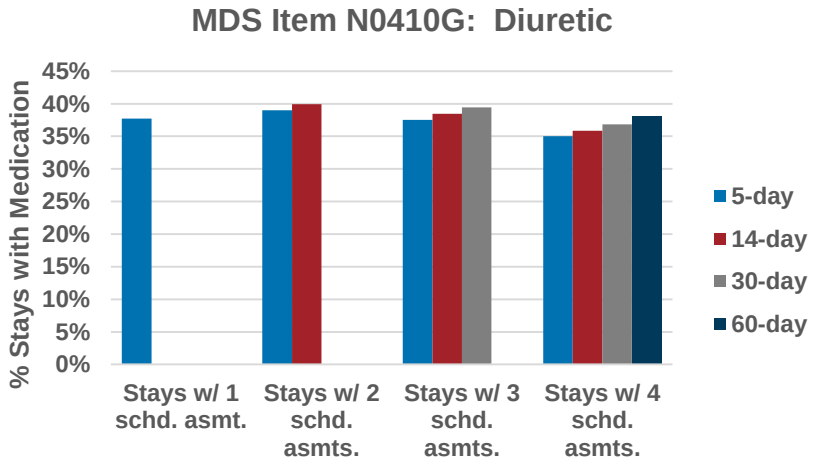
Drug Costs are Higher at Beginning of the Stay Regardless of Length of Stay

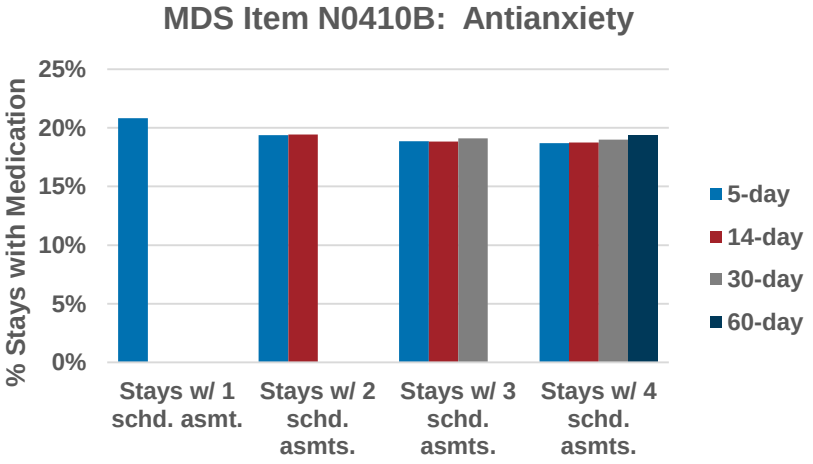
Drug Costs per Day on the First Claim						
Utilization Days on First Claim of Stay	Eventual Length of Stay					
	1-3 days	4-8 days	9-15 days	16-31 days	32-60 days	61-100 days
1-3 days	$227	$198	$199	$198	$192	$183
4-8 days	-	$96	$89	$86	$85	$85
9-15 days	-	-	$63	$60	$60	$60
16-31 days	-	-	-	$48	$45	$45

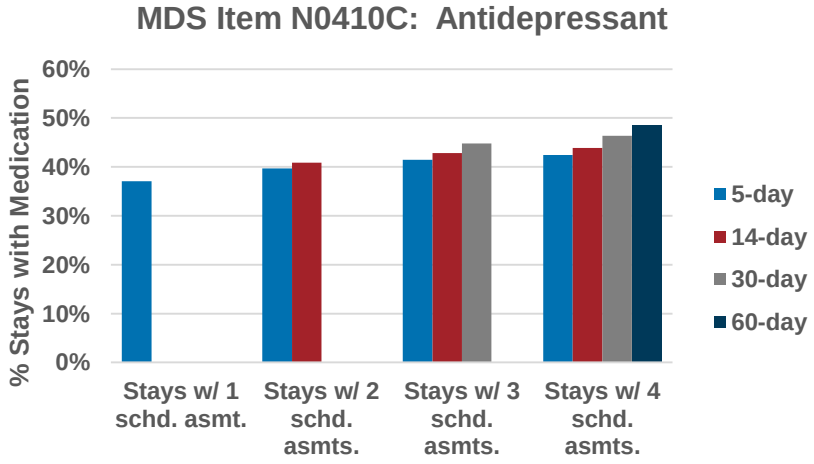
- Patterns could reflect frontloading of drug billing or higher drug use at the beginning of the stay

Most Medications Show Consistent Use over the Stay

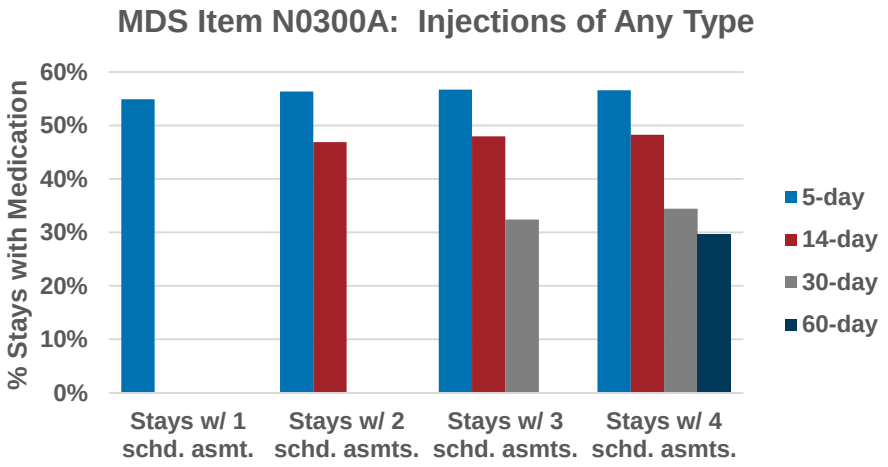


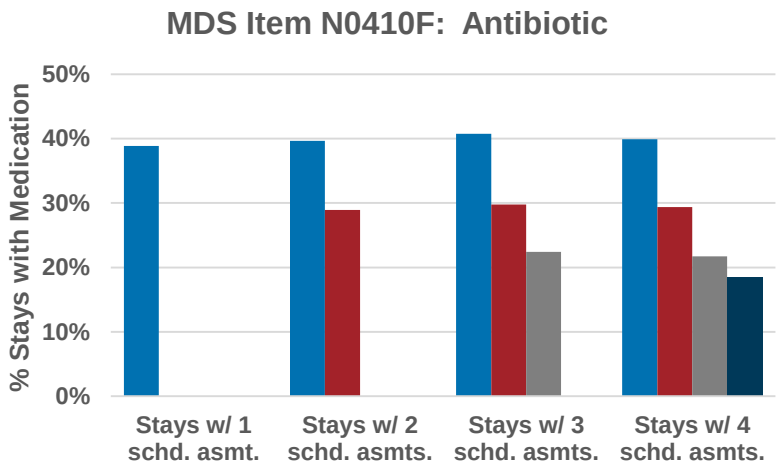






Only Some Medications Show Declining Use over the Stay





- Antibiotics and injections show a decline in use through the stay, suggesting that usage patterns for some drugs may correspond to billing patterns

Discussion Questions

1. In introducing a separate NTA component into payment, is it appropriate to focus on drug costs?
2. What types of drugs drive variation in drug costs?
   - Are there important categories of drugs not included in Section N of the MDS?
   - What is the source of large variation in drug costs within Section N categories?
3. Why are NTA costs concentrated at the beginning of the stay?
   - Does the frontloading of drug costs reflect billing practices or actual service use patterns?
   - Can any unused prescription drugs be returned to the pharmacy?
   - Do residents bring long-term prescription drugs to the SNF, or do facilities always fill a new prescription?
   - Should stay length be considered as a determinant of NTA payment in an alternative system? (e.g. block pricing)

Outline

Sessions	
1	Introductions and Project Overview
2	Options for Revising Nursing Index
3	Considering Non-Therapy Ancillary Services as a Separate Payment Component
4	**Explore Introducing NTA Payment Component**
5	Options for Revising the Case-Mix Classification System
6	Open Discussion

Session 4 Outline

Session Objective

Examine approaches for constructing a separate NTA payment component

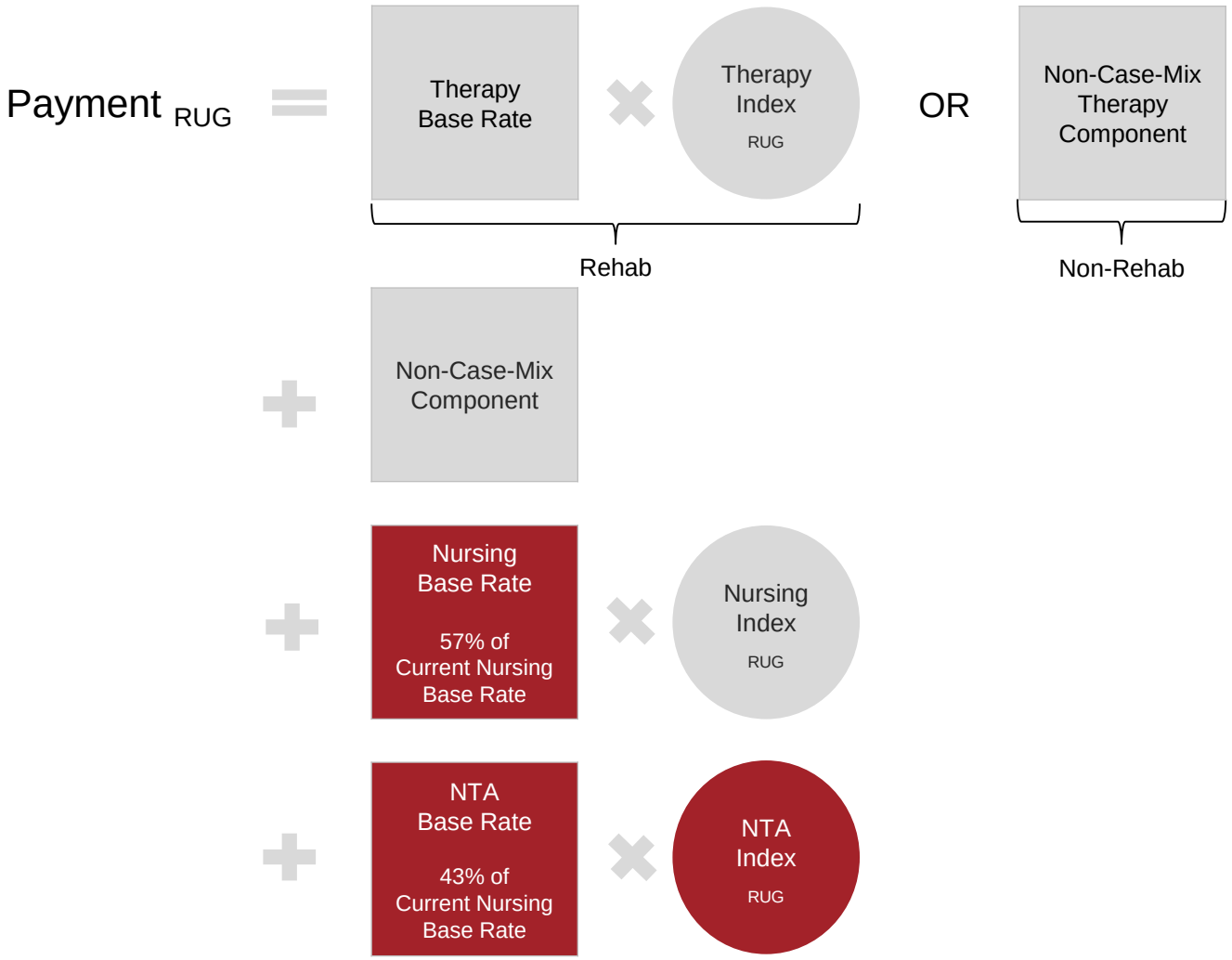
Session Topics

- Methodology for calculating a separate NTA payment component under current RUG system
- Assessing impact of new NTA component on payment accuracy

Session Time

1 hour

Session 4: Explore Introducing NTA Payment Component



Addition of NTA Component While Maintaining Current RUG System

- While the goals of this project also include exploring alternatives for case-mix classification (Session 5), adding an NTA component to the current RUG system allows direct comparison between current and adjusted payment rates in terms of payment accuracy
  - Payment accuracy is defined as consistency in the relation between payment and costs across payment groups
- Similar methodology could be used to model a separate NTA component in an alternative case-mix system

Nursing Base Rates Must be Adjusted to Compensate for NTA Component

- Original nursing component calculation was based on FY 1995 cost reports as required by the statute
- Nursing component included nursing, NTA, and social services costs
- Estimates for NTA base rate and adjusted nursing rate derived by disaggregating the original fraction of nursing component that accounted for NTA costs

Component	Nursing Base Rate (FY 2014)	% of Nursing Base Rate accounting for NTA costs*	Estimated Base Rates	
			Nursing	NTA
Urban	$165.81	43.4%	$93.85	$71.96
Rural	$158.41	42.7%	$90.77	$67.64

*Source: Federal Register, Nov 27 1998; Reopening of Comment Period, FY1999 Interim Final Rule

NTA Component Could be Calculated Based on Average NTA Costs by RUG

- *NTA Base Rate* set to $71.96 (urban) / $67.64 (rural)
- *NTA Index* computed by dividing the RUG average NTA costs over the population average

Most Frequent Rehab RUGs	Case-Mix Indexes		
	Therapy	Nursing	Proposed NTA
RUB	2.11	1.74	0.85
RUC	2.11	1.74	0.95
RUA	2.11	1.11	0.94
RVB	1.45	1.24	1.03
RVC	1.45	1.68	1.10

Most Frequent Non-Rehab RUGs	Case-Mix Indexes		
	Therapy	Nursing	Proposed NTA
LD1	-	1.21	1.19
CA1	-	0.65	2.11
LE1	-	1.26	1.04
LC1	-	1.02	1.19
HD1	-	1.33	1.46

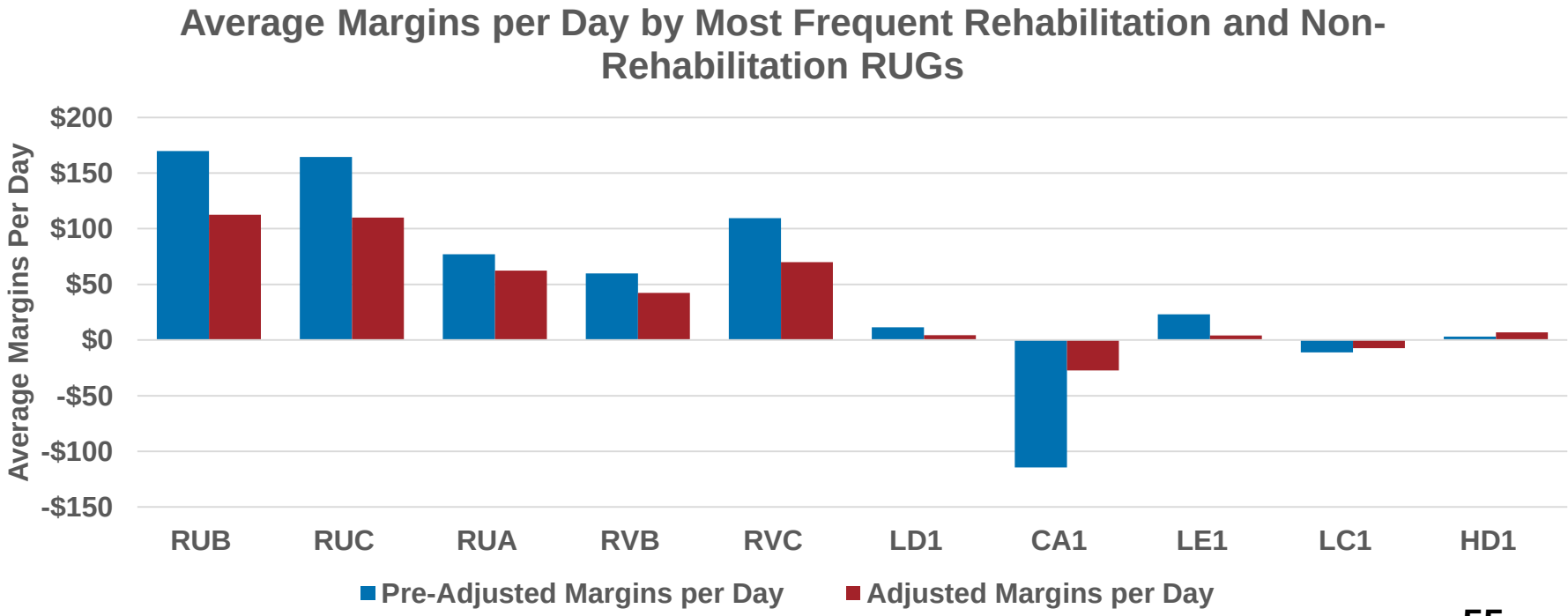
Two Metrics Available for Evaluating Introduction of NTA Component on Payment Accuracy

1. Variation across RUGs in margins
   - Margins defined as the difference between payment and costs per day
   - Standardized for geographic adjustments

2. Variation across RUGs in fraction of stays with negative profits (total payment less than total estimated costs)

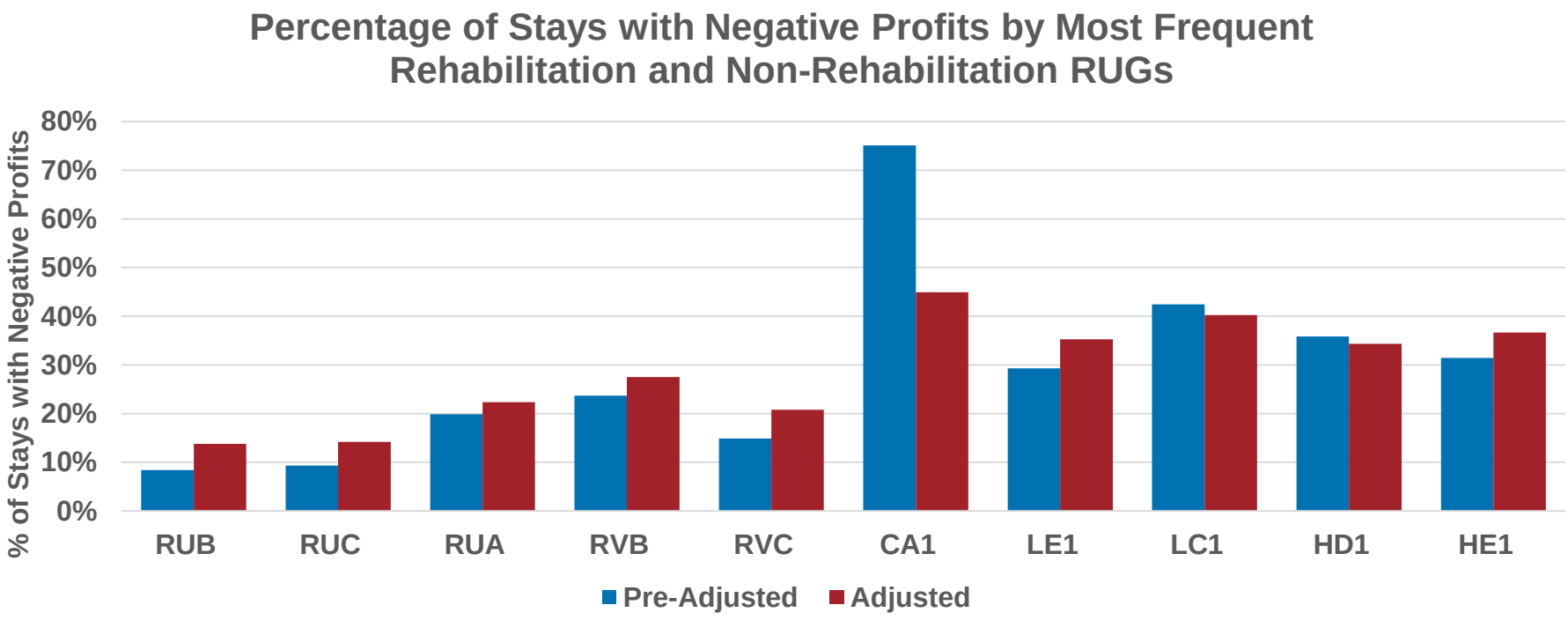
Proposed NTA System Reduces Variation in Margins Across RUGs

- Under current system, some RUGs have very high average margins per day, while other RUGs have costs that exceed payments
- Proposed system leads to more homogenous margins, increasing payment accuracy



Proposed System Reduces Differences across RUGs in Fraction of Stays with Negative Profits

- Some RUGs have higher percentages of stays with negative profits than others, but the percentage of such stays becomes more homogeneous across RUGs after introducing NTA component



Discussion Questions

1. Is the methodology used to calculate NTA indexes appropriate?
2. What refinements could be introduced?
3. What metrics should be used to evaluate effects of introducing an NTA component?

Outline

Sessions	
1	Introductions and Project Overview
2	Options for Revising Nursing Index
3	Considering Non-Therapy Ancillary Services as a Separate Payment Component
4	Explore Introducing NTA Payment Component
5	**Options for Revising the Case-Mix Classification System**
6	Open Discussion

Session 5 Outline

Session Objective

- Discuss options for revising the RUG case-mix classification system, with focus on incorporating resident clinical characteristics in the first stage of case-mix classification

Session Topics

- Motivate revision of existing case-mix classification system
- Describe clinical complexity of SNF population and implications for segmentation of case-mix classification system
- Four options for using clinical information in a first-stage segmentation of a revised case-mix classification system

Session Time

1 hour

Existing RUG Classification System Emphasizes Provision of Specific Services

- Current first stage of existing RUG system is determination of whether beneficiary receives rehabilitation services
- Rehabilitation RUGs defined by further case-mix classification along three dimensions
  - Whether any extensive services are received
  - Therapy minutes
  - ADL score
- Non-rehabilitation RUGs defined by further case-mix classification along more dimensions
  - Whether extensive services are received and type of extensive services
  - Limited set of medical conditions, including mental health
  - Use of restorative nursing services
  - ADL score

RUGs Defined by Clinical Conditions Account Currently for Small Share of Stays

- 91% of utilization days are in those rehabilitation RUGs that depend on therapy minutes and functional status alone
- Only 6% of utilization days are in RUGs that require specific clinical conditions to qualify
- Extensive nursing services may indirectly indicate presence of specific conditions, but only 2% of utilization days are in extensive services RUGs

Introducing Clinical Conditions in First Stage of Case-Mix Classification May Better Capture Heterogeneous Costs of Care

Most Frequent RUGs	MS-DRG in Qualifying Inpatient Stay		Number of Diagnoses in MDS Section I					
	Surgical	Medical	Mean	P10	P25	P50	P75	P90
RUB	33.7%	66.3%	4.1	2	3	4	5	7
RUC	30.7%	69.3%	4.7	2	3	5	6	8
RUA	35.1%	64.9%	3.8	1	2	4	5	7
RVB	29.7%	70.3%	4.3	2	3	4	6	7
RVC	28.0%	72.0%	4.9	2	3	5	6	8

- In any given RUG, there is wide variability in clinical circumstances, categorized either by the qualifying inpatient stay or Section I of the MDS

But, Clinical Characteristics of Residents are Complex and Classification Would be Challenging

Top HCCs (90 days prior to SNF admission)	% of Stays for which All HCCs are Included in Set
Top 5	12.3%
Top 10	24.7%
Top 15	32.8%
Top 20	41.6%

- Detailed classification of residents based on combinations of health conditions is not possible because thousands of combinations are present
- MDS assessment includes only a selective subset of health conditions in Section I

Tradeoffs in Selecting Level of Clinical Detail in First Stage Case-Mix Classification

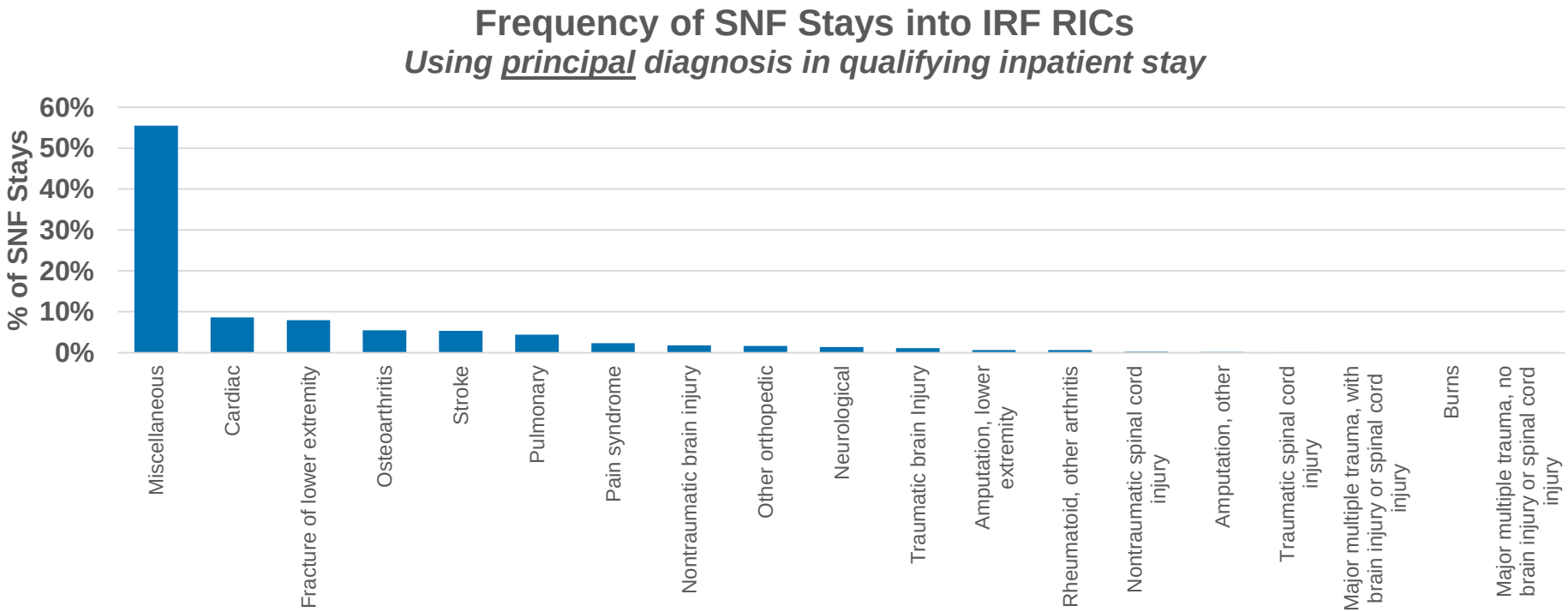
- Advantage of assigning residents into detailed clinical categories includes creation of clinically homogeneous groups
- Advantage of broad clinical groupings includes large number of SNF stays in each clinical category, which allows for:
  - Increased precision of average cost estimates
  - Increased ability to adjust flexibly for factors that may be as important or more important for predicting cost of care (co-morbidities, extensive nursing services, functional status, cognitive status, and mental health)

Four Options Using Clinical Characteristics as Criteria for First Stage Case-Mix Classification

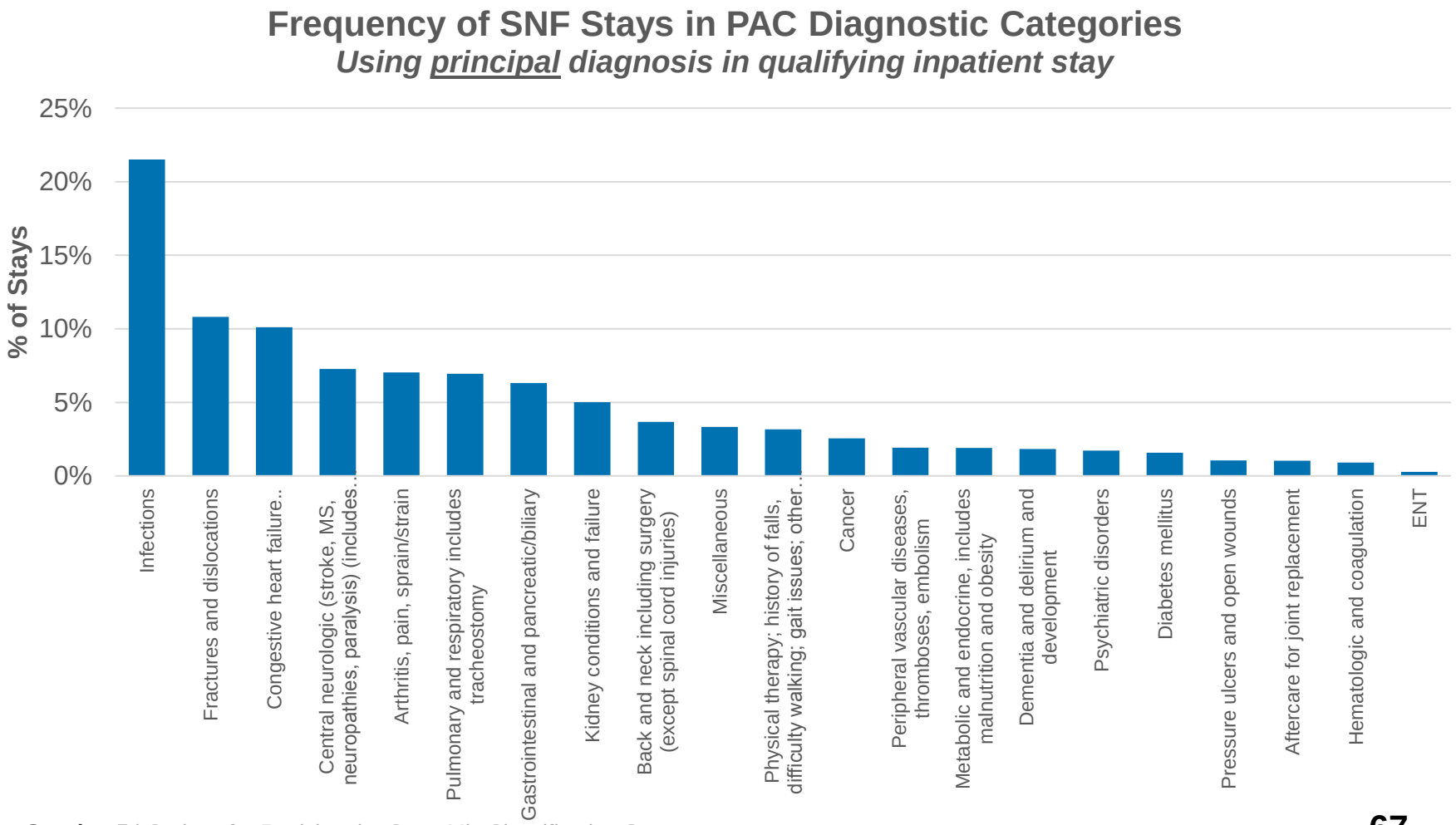
1. Rehabilitation Impairment Categories (RICs) from the IRF payment system
2. PAC Diagnostic Categories classifying conditions commonly treated in PAC settings
3. Major Diagnostic Categories (MDC) that group DRGs linked to qualifying inpatient stay
4. Inpatient Clinical Categories classifying type of inpatient stay preceding SNF entry

Option 1: RICs from IRF Payment Do Not Depict Much of SNF Population

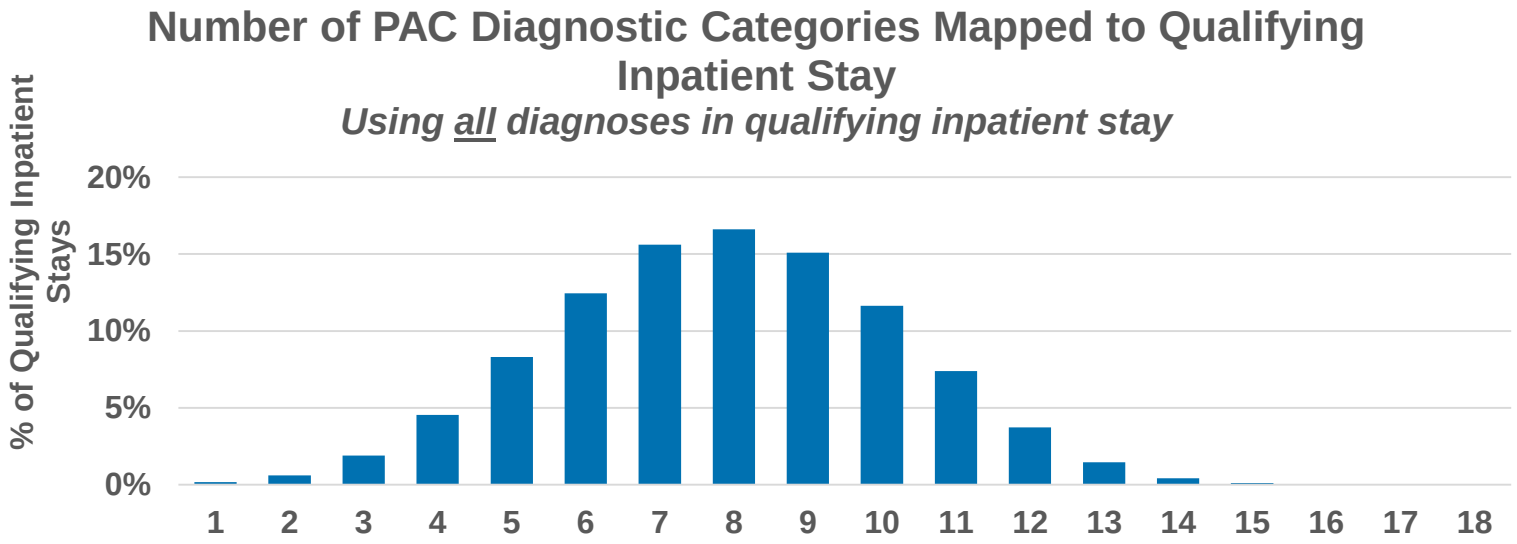
- Large share of SNF stays classified into "Miscellaneous" category
- Most of 20 remaining RICs are infrequent



Option 2: PAC Diagnostic Categories Can be Constructed to Group Most SNF Stays



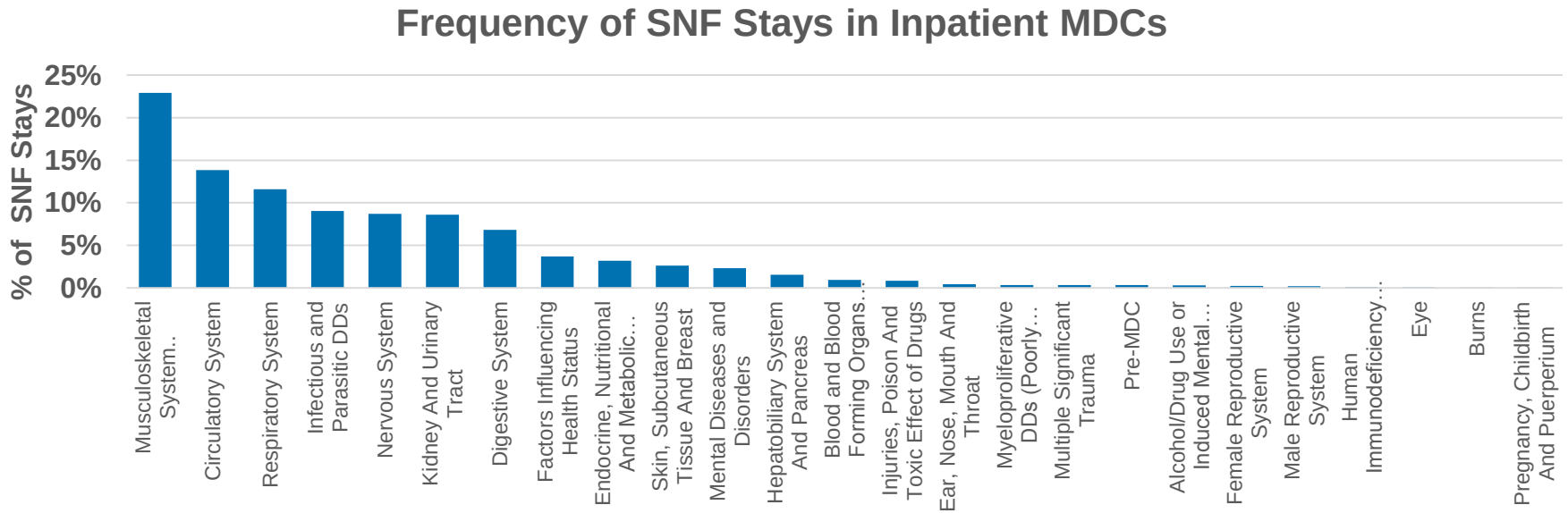
But, PAC Diagnostic Categories Also Encounter Problem of Clinical Complexity



- PAC Diagnostic Categories better define conditions treated in SNFs than RICs and MDCs, but a single inpatient stay often links to multiple PAC Diagnostic Categories when secondary diagnoses are used

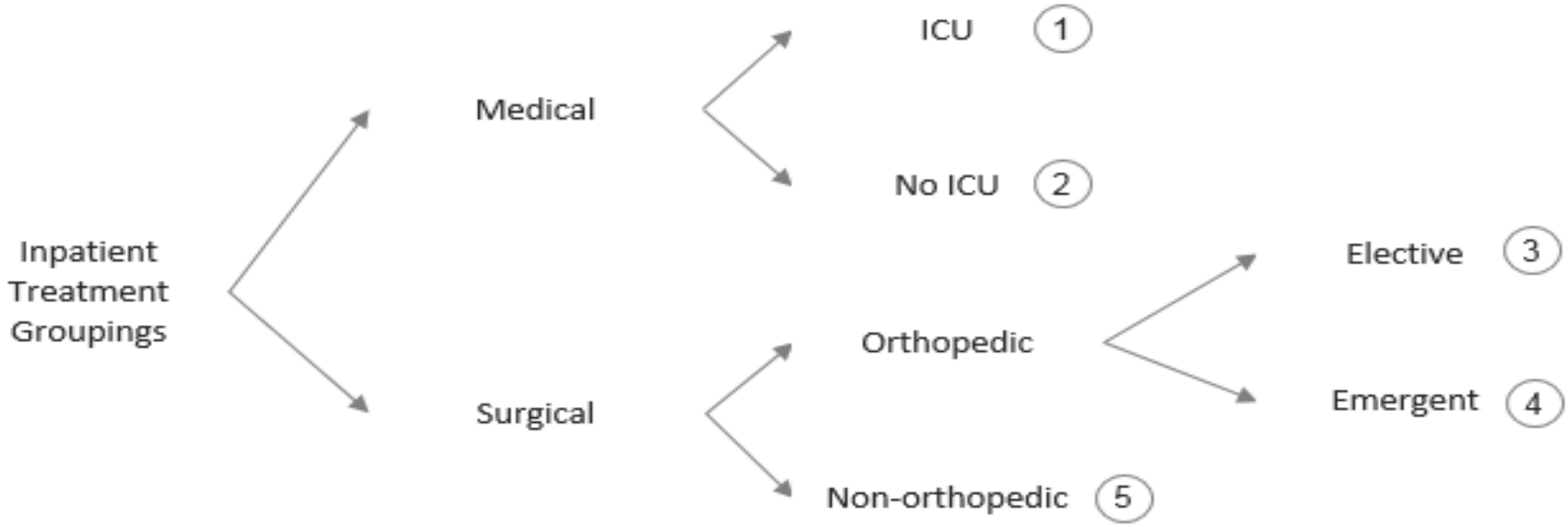
Option 3: Qualifying Inpatient Stays Are Concentrated in Small Number of MDCs

- Many MDCs have very small number of SNF stays, making it difficult to derive reliable case-mix indexes and conduct further classification splits
- MDC groupings not designed to capture homogeneity in cost or type of PAC care

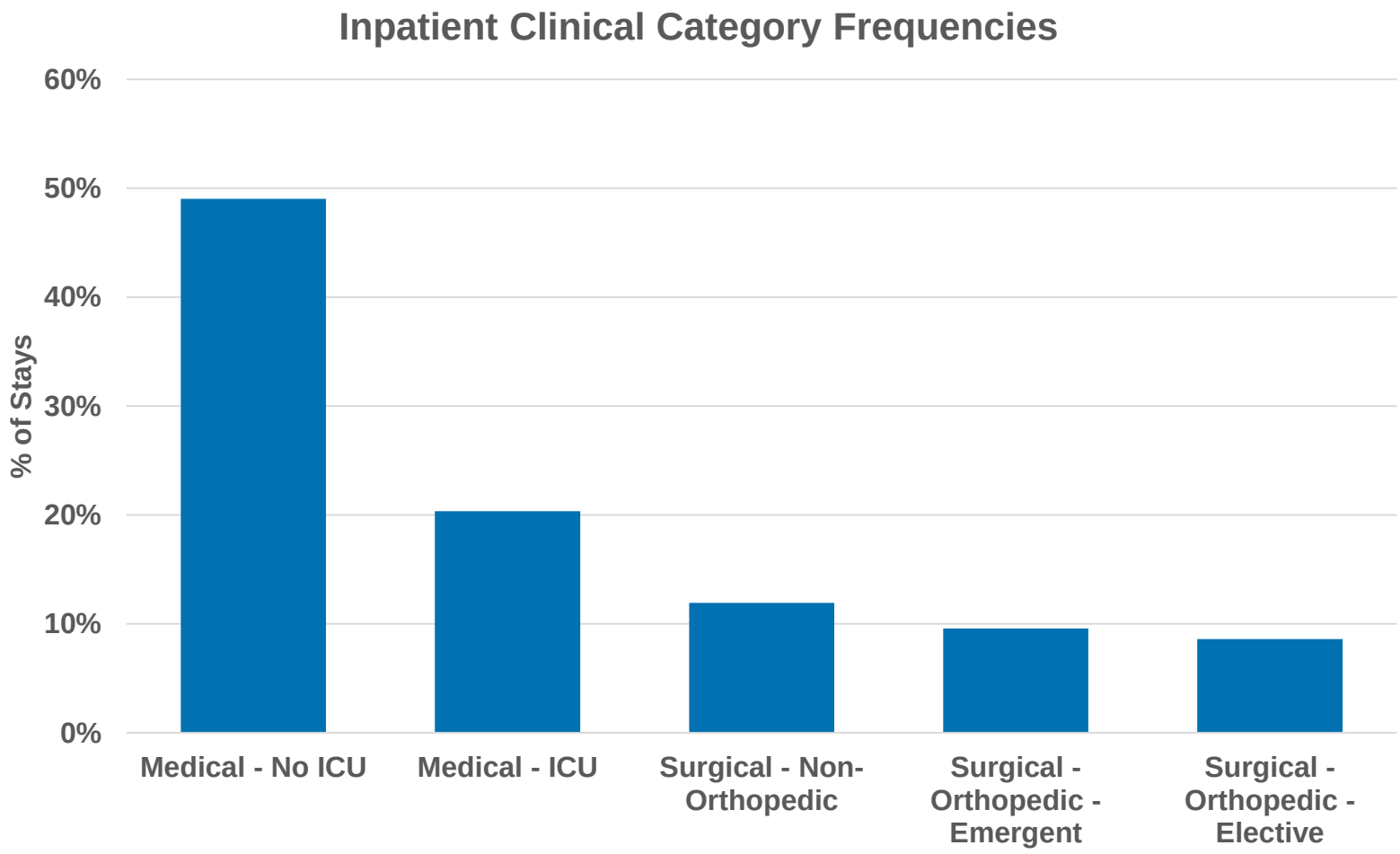


Option 4: Qualifying Inpatient Clinical Categories Designed to Address This Clinical Complexity

- Acumen clinicians created a broader first stage classification capturing important clinical information
  - Preserves ability to account for such factors as functional status and mental health
  - Provides a tractable way to predict costs of SNF care



Inpatient Clinical Categories Cover All Stays and Allow for Further Distinctions



Average Daily Cost and Length of Stay Differ in Familiar Ways Across Inpatient Clinical Categories

Broad Clinical Categories	Average Costs Per Day		Length of SNF Stay	
	Therapy	NTA	0-14 Days	15-100 Days
Medical - No ICU	$133	$72	31%	69%
Medical - ICU	$134	$83	36%	64%
Surgical - Non-Orthopedic	$135	$87	38%	62%
Surgical - Orthopedic - Emergent	$144	$67	24%	76%
Surgical - Orthopedic - Elective	$153	$68	45%	55%

- Residents coming from elective orthopedic surgeries have the highest therapy costs, low NTA costs, and the highest fraction of short stays

Discussion Questions

1. What criteria are applicable for determining which case-mix classification option is pertinent for the SNF setting?
2. What are the advantages and disadvantages of adapting a classification system from another care setting versus creating a new classification system specifically to SNFs?
   - How well does the SNF population align with other PAC or inpatient settings?
3. What are the benefits and limitations of using information from the qualifying inpatient stay SNF to classify residents?
4. How could Inpatient Clinical Categories be adapted to better predict treatment costs, while keeping number of categories small?

Outline

Sessions	
1	Introductions and Project Overview
2	Options for Revising Nursing Index
3	Considering Non-Therapy Ancillary Services as a Separate Payment Component
4	Explore Introducing NTA Payment Component
5	Options for Revising the Case-Mix Classification System
6	**Open Discussion**

Session 6 Outline

Session Objective

- Provide opportunity for all TEP participants to offer feedback and thoughts

Session Topics

- Open Discussion

Session Time

1 hour*

*May be adjusted to accommodate for overtime in earlier sessions

Open Discussion

- All attendees, including observers, are encouraged to comment on day's discussion
- Speakers may offer comments or direct technical questions to project team representatives
- Please limit remarks to allow time for others to participate

Thank You