

# Demonstrating Organizational Benefit of Pediatric APRN Practice in an Academic Medical Center

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# Objectives

- Discuss creative ideas for demonstrating organizational benefit of APRN utilization.
- Describe outcome measures for APRN role activities.

Presenter has no COI to disclose

# Vanderbilt Team Recognition

- Jill Kinch, MSN, APRN, CPNP- PC/AC  
APN Manager, Peri-operative Services
- Michelle Terrell, MSN, APRN, CPNP- PC/AC  
APN Manager, Pediatric Critical Care & Cardiology
- Claire Slone, MSN, APRN, NNP-BC  
APN Manager, Neonatal Services

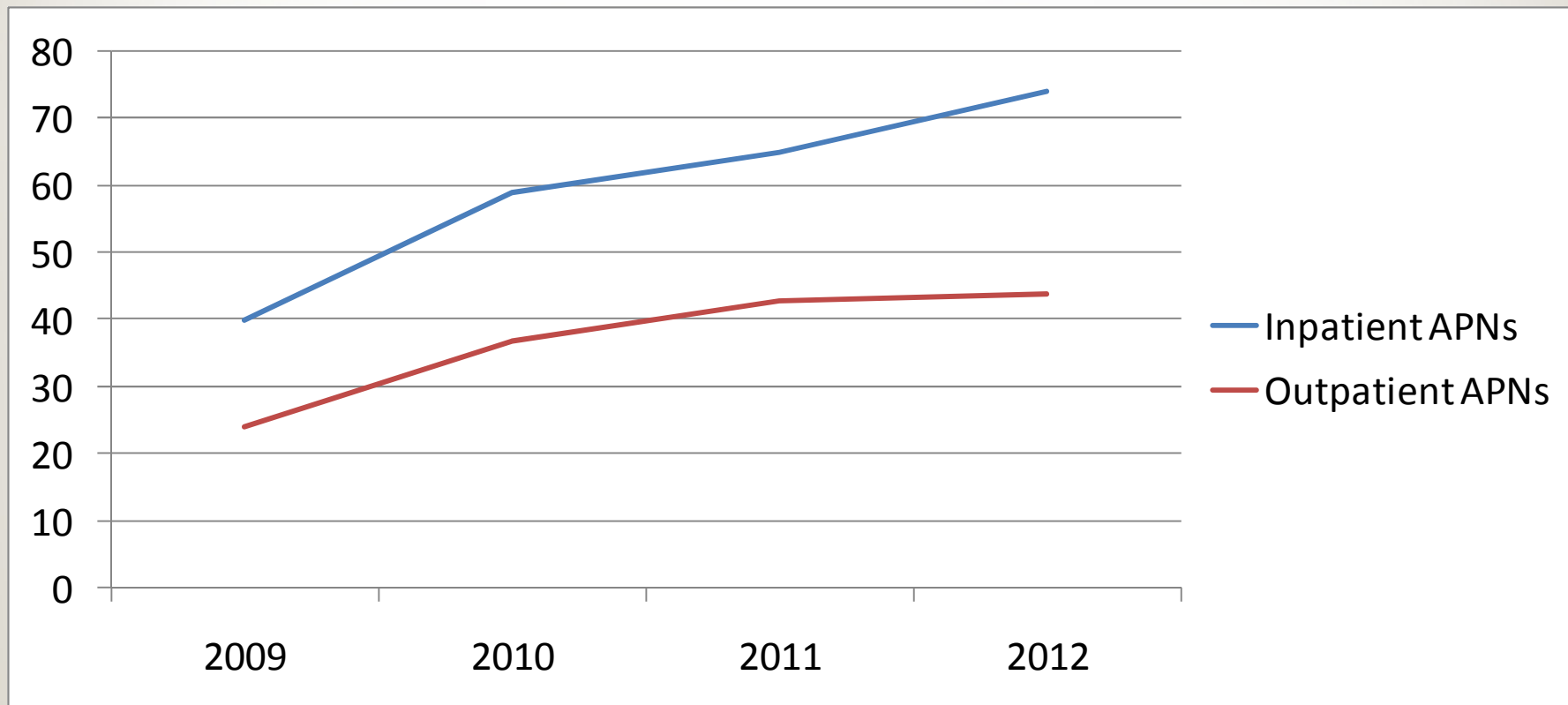
# Purpose

- Innovative approach to demonstrating organizational benefit of non-revenue generating pediatric APRN practice in an academic medical center
  - Determine APRN “provider-specific” quality and productivity metrics and develop a means for tracking these metrics systematically.

# Significance

- Academic medical centers have become more dependent on APRN services to assure patient outcomes and close gaps left by ACGME resident work hour reductions.
  - But with this dependence, cost has risen without a means of documenting benefit and outcomes (return on investment).

# APN Utilization at MCJCHV

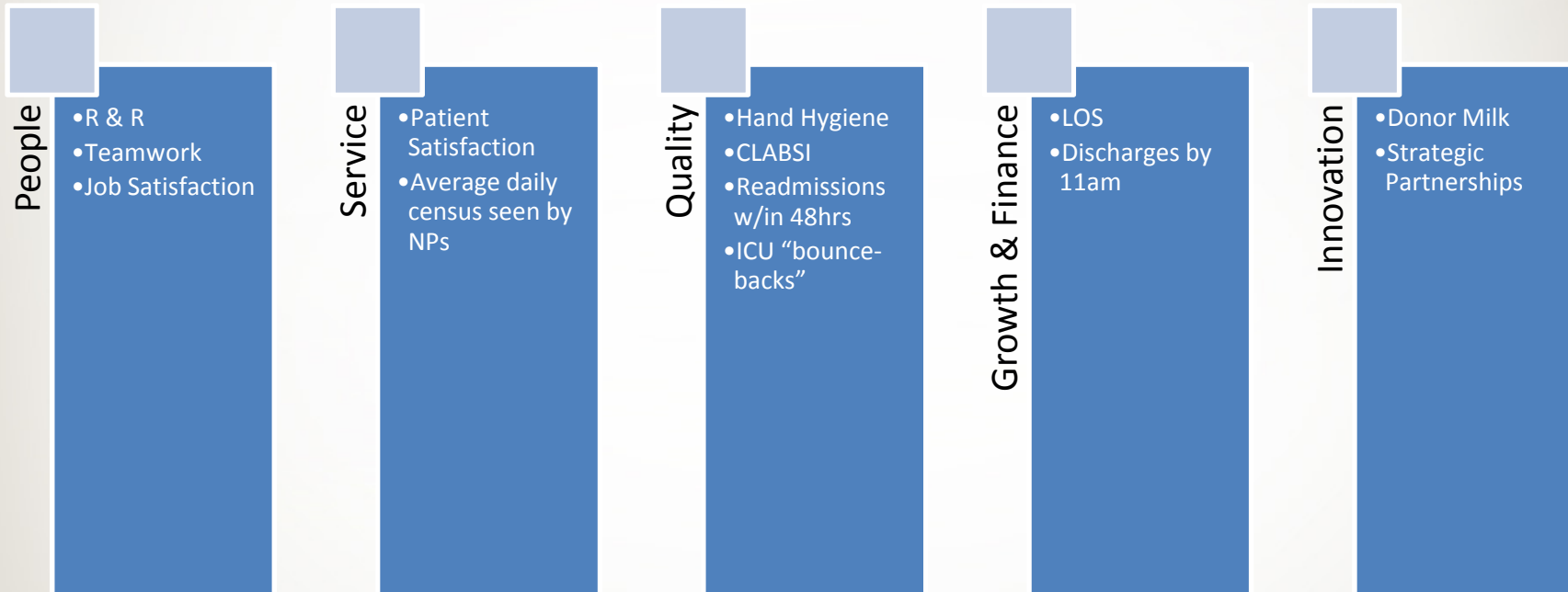


# Strategy and Implementation

- Based on previous work by Griffin, et al, the Children's leadership team began to distinguish aspects of APRN practice that are driven by APRN “providers” within the hospital

Griffin, E, Staebler, SL, Murey, K, McCorstin, P and Harrington, L. (2007). Dashboards: A tool to demonstrate the impact of the advanced practice nurse in the hospital setting. *Oncology Nursing Forum*, 34(2), 572-73.

# Strategy and Implementation





# Strategy and Implementation

PEDIATRIC CARDIOLOGY ACUTE CARE APN PILLAR SCORECARD				FY 2012 YTD				FY 2012 QTR 1			PENDING DATA		REACH		TARGET		THRESHOLD		
PILLAR	GOAL	MEASURES	FREQ	JUL			AUG			SEPT			TARGET/COMPARATIVE	TRENDING	SOURCE				
PEOPLE	Retention & Turnover	NEW HIRE RETENTION AFTER 24 MONTHS	QTRLY														HR		
		OVERALL TURNOVER	QTRLY															HR	
	Other	% APRNs w/NATIONAL SUBSPECIALTY CERTIFICATION	QTRLY															NDNQI	
		JOB SATISFACTION	ANNUAL															COMM.SURVEY	
		ENOUGH STAFFING FOR THE WORKLOAD	ANNUAL															COMM.SURVEY	
		ADMIN/ MANAGEMENT SUPPORT	Q 2 YRS															SAFETY CLIMATE	
		TEAMWORK ACROSS UNITS	Q 2 YRS															SAFETY CLIMATE	
		TEAMWORK WITHIN UNITS	Q 2 YRS															SAFETY CLIMATE	
PRACTICE ENVIRONMENT SCALE (PES SCORE)	Q 2 YRS															NDNQI 2008			
SERVICE	Patient Satisfaction	OVERALL QUALITY OF MEDICAL CARE	QTRLY														PRC		
		OVERALL TEAMWORK BET. DRs, NURSES&STAFF	QTRLY															PRC (key driver #1)	
		PATIENT ENGAGEMENT (PROVIDER'S INVOLVING PT IN CARE DECISIONS)	QTRLY															PRC	
		QUALITY OF CARE PROVIDED BY NPs	QTRLY															PRC	
		APNs COMMUNICATION W/CHILD	QTRLY															PRC	
		APNs COMMUNICATION W/FAMILY	QTRLY															PRC	
		MANAGEMENT OF PATIENT PAIN	QTRLY															PRC	
		CLABSI Rate-SIR (PCCU)	MONTHLY															Sci Health (NDNQI)	
		HAND HYGIENE COMPLIANCE RATE	MONTHLY															Sci Health (NDNQI)	
		SSI CARDIAC- SIR	MONTHLY															Sci Health	
VAP-SIR (PCCU)	MONTHLY															Sci Health (NDNQI)			
CAUTI-SIR (PCCU)	MONTHLY															Sci Health (NDNQI)			
QUALITY	Adverse Events	MEDICATION ERRORS (RELATED TO ORDER ENTRY)	MONTHLY														VERITAS		
			QTRLY																
	APRN Sensitive Indicators			QTRLY															
		READMISSION TO HOSPITAL WITHIN 48H	QTRLY															Medipac	
		RRT CALLS TO PCCU	QTRLY															RESUSCITATION	
		CODES ON 6C	QTRLY															RESUSCITATION	
		FIRST CALLS	QTRLY															RESUSCITATION	
		LENGTH OF STAY	QTRLY															Medipac ADT tables	
		COST PER UNIT OF SERVICE (VARIANCE)	QTRLY															TSI	
		OVERTIME (HOURS)	MONTHLY															FINANCE	
VOLUME (PT. DAYS)	MONTHLY															FINANCE			
GROWTH/FINANCE	Results of Operation & Cost per Discharge	AVERAGE DAILY CENSUS SEEN BY NP GROUP	MONTHLY														NP DATA COLLECTION?		
		NP HRS PER PATIENT DAY	MONTHLY															FINANCE	
		% of NP PATIENT ADMITS PER TOTAL PCCU ADMITS	MONTHLY															EDW FROM STARFORMS	
		NUMBER OF PATIENT DISCHARGES	MONTHLY															EDW FROM Medipac	
		DISCHARGES BY 11am (discharge orders written by...)	MONTHLY															Medipac/Wiz	
		Discharge Summary within 48 hours	QTRLY															Medical Records	
		AVERAGE NP TIME SPENT ON DISCHARGE/TRANSFER	MONTHLY															?	
			QTRLY															DEPT TRACK USAGE	
			QTRLY															DEPT TRACK USAGE	
			QTRLY															DEPT TRACK USAGE	

# Strategy and Implementation

PILLAR	GOAL	MEASURES
PEOPLE	Retention & Turnover	NEW HIRE RETENTION AFTER 24 MONTHS
		OVERALL TURNOVER
	Other	% APRNs w/NATIONAL SUBSPECIALITY CERTIFICATION
		JOB SATISFACTION
		ENOUGH STAFFING FOR THE WORKLOAD
		ADMIN/ MANAGEMENT SUPPORT
		TEAMWORK ACROSS UNITS
		TEAMWORK WITHIN UNITS
		PRACTICE ENVIRONMENT SCALE (PES SCORE)

SERVICE	Patient Satisfaction	OVERALL QUALITY OF MEDICAL CARE
		OVERALL TEAMWORK BET. DRs, NURSES&STAFF
		PATIENT ENGAGEMENT (PROVIDER'S INVOLVING PT IN CARE DECISIONS)
		QUALITY OF CARE PROVIDED BY NPs
		APNs COMMUNICATION W/CHILD
		APNs COMMUNICATION W/FAMILY
		MANAGEMENT OF PATIENT PAIN

# On-going Performance Evaluation

Each metric has established threshold, target and reach goals. Those metrics which have retrospective data will be compared to performance going forward via the scorecard. Strategies are developed for performance improvement for metrics below performance standards (quarterly basis)

# Strategy and Implementation

Pillar	Goal	Measure	Threshold	Target	Reach
People	Retention and Turnover	New Hire Retention after 24 months			
People	Retention and Turnover	Overall Turnover			
People	Other	% APRNs w/National Subspecialty Certification			
People	Other	Job Satisfaction			
People	Other	Enough Staffing for the Workload			
People	Other	Admin/Management Support			
People	Other	Teamwork Across Units			
People	Other	Teamwork Within Units			
People	Other	Practice Environment Scale (PES Score)	2.97	3.02	3.08
Service	Patient Satisfaction	Overall Quality of Medical Care			
Service	Patient Satisfaction	Overall Teamwork Between Doctors/Nurses/ & Staff			
Service	Patient Satisfaction	Patient Engagement (Provider's Involving Pt in Care Decision)			
Service	Patient Satisfaction	Quality of Care Provided by NP's	3%	4%	5%
Service	Patient Satisfaction	APNs Communication with Child			
Service	Patient Satisfaction	APNs Communication with Family			
Service	Patient Satisfaction	Management of Patient's Pain			
Quality	Healthcare Associated Infections	CLABSI Rate- SIR (6C)	0.99	0.87	0.75
Quality	Healthcare Associated Infections	Hand Hygiene Compliance Rate (NPs 6C)	88%	92%	95%
Quality	Healthcare Associated Infections	SSI Peds Cardiac-SIR	0.89	0.84	0.74

MEDICAL CENTER

Pillar	Goal	Measure	FY_11 Results	FY 2012						
				Q1			Q2			Q3
				July	August	September	October	November	December	January
Growth/ Finance	Results of Operations & Cost per Discharge	Cost per Unit of Service (Variance)	Null							
		Length of Stay (Avg.)	Null							
		NP Hours Per Patient Day	Null							
		Overtime (Hours)	Null	0	0	0	0	0	0	
	Volumes	% of NP Patient Admits per Total PCCU Admits	Null							
		Average Daily Census Seen by NP Group	Null				5.4	5	3.6	
		Discharge Summary within 48 Hours	Null							
		Discharges by 11am (orders entered/written)	Null							
		Number of Patient Discharges	Null							
		Volume (Patient Days)	Null							
Quality	APRN Sensitive Indicators	Codes on 6C	Null	0	0	0				
		FIRST Calls on 6C	Null	0	0	0				
		Readmission to Hospital Within 48 Hours	Null							
		RRT Calls TO 6C	Null	13	3	2				
	Healthcare Associated Infections	CLABSI Rate- SIR (6C)	Null	0	0	4.09	0	0	0	
		Hand Hygiene Compliance Rate (NPs 6C)	Null	100	100	100	100	100		
		SSI Peds Cardiac-SIR	Null	0	3.2	0	0	0		
Service	Patient Satisfaction	Management of Patient's Pain	71.1	62.5	40	77.8	62.5	88.9		
		Overall Quality of Medical Care	80	87.5	80	77.8	87.5	90		
		Overall Teamwork Between Doctors/Nurses/ & Staff	76.2	87.5	60	88.9	87.5	80		
		Patient Engagement (Provider's Involving Pt in Care Decision)	80	75	80	75	62.5	80		
		Quality of Care Provided by NP's	68.5	87.5	66.7	88.9	75	100		

1) Pick A Pillar

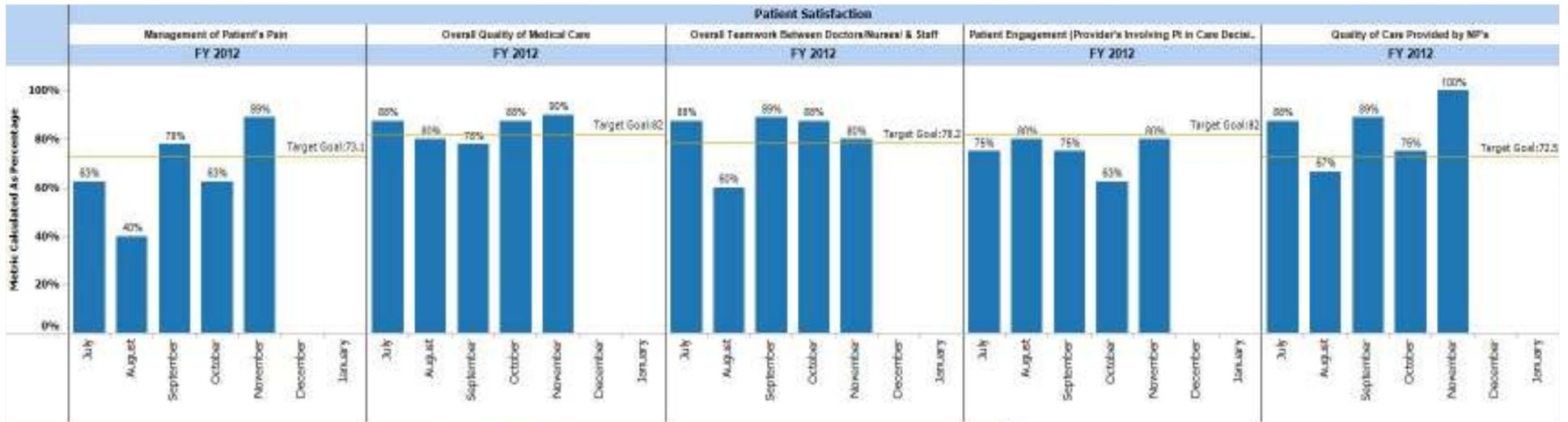
Service

Pick a Goal

All

Pick A Measure

All



Score Card				FY 2012						
Pillar	Goal	Measure	FY_11 Results	Q1			Q2			Q3
				July	August	September	October	November	December	January
Service	Patient Satisfaction	Management of Patient's Pain	71.1	62.5	40	77.8	62.5	88.9		
		Overall Quality of Medical Care	80	87.5	80	77.8	87.5	90		
		Overall Teamwork Between Doctors/Nurses/ & Staff	76.2	87.5	80	88.9	87.5	80		
		Patient Engagement (Provider's Involving Pt in Care Decision)	80	75	80	75	82.5	80		
		Quality of Care Provided by NPs	68.5	87.5	66.7	88.9	75	100		

Target_Colour			
RED	GREEN	BLUE(Cannot Compare)	
Targets			
	Threshold	Target	Reach
Management of Patient's Pain	72.1	73.1	74.1
Overall Quality of Medical Care	81	82	83
Overall Teamwork Between Doctors/Nurses/ & Staff	77.2	78.2	79.2
Patient Engagement (Provider's Involving Pt in Care Decision)	81	82	83
Quality of Care Provided by NPs	71.5	72.5	73.5

# Implications

As APRN specific metrics are monitored, each team has the data to determine aspects of practice requiring review, evaluation and process improvement – allowing objective administrative decision-making for resource and manpower deployment for maximal impact on patient outcomes and process indicators.