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### Presentations

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4-2019

## Screening Pediatric Patients for Readmission Risk

Sarah Bradshaw

Blair Buenning

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# Screening Pediatric Patients for Readmission Risk

Sarah Bradshaw, MSN, RN, CPN, ACM-RN

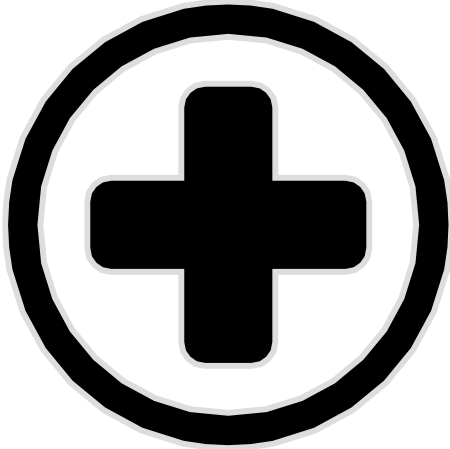
Blair Buenning, MSN, RN, CPN, ACM-RN



# Objectives

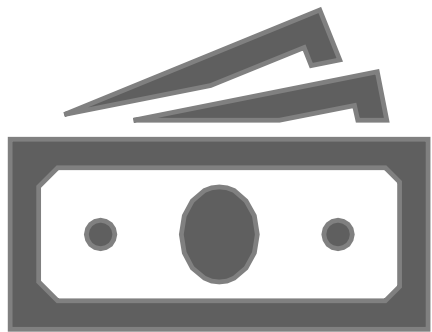
- Identify how quality improvement and research projects can be used together to produce statistically significant high-quality outcomes
- Describe an evidence-based pediatric readmission tool
- Develop an action plan to apply the HARRPS tool within your organization

# Hospital Acquired Conditions



- Preventable Readmissions
- Central Line-Associated Blood Stream Infections (CLABSI)
- Catheter-Associated Urinary Tract Infections (CAUTI)
- Serious Falls
- Pressure Injury
- Surgical Site Infections
- Venous Thromboembolism
- Adverse Drug Events (ADE)

# Pediatric Readmission Costs



- Cost per event<sub>1</sub> = \$9,540
- Average yearly Medicaid claim for single complex patient = \$69,906
- Nationwide annual cost (2015) = \$1.5 Billion
- Increased risk for developing HAC

# Case Management Standard of Care

“Case management is expected to have a defined method for screening/identification and assessment of patients in need of case management services”



## Screening/ Identification

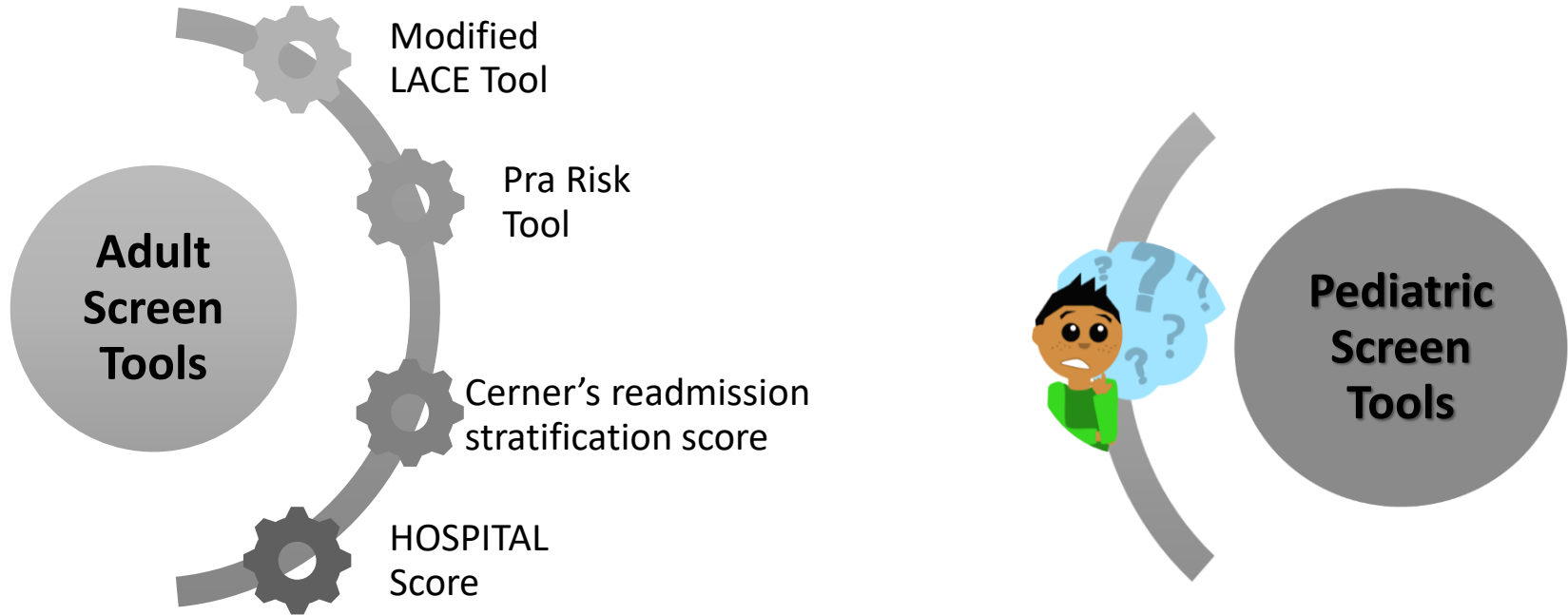
Through use of identification criteria, stratify patients at risk



## Assessment

Expand on knowledge gained by screen and complementary to other disciplines' assessments

# Screening for Readmission Risk



# Why Develop a Screen tool?



## **Decrease**

Readmissions  
Length of Stay  
Emergency Department visits



## **Increase**

Patient/family satisfaction with care  
Compliance with national standards of practice & CMS regulations



# Gaps Addressed in QI Cycles



Validity



RELIABILITY of data



Evidence based practice



Lack of documentation/data points available

# QI Project Measures



## Outcome

100% of admitted patients will have a screen complete within 24 hours of admission



## Process

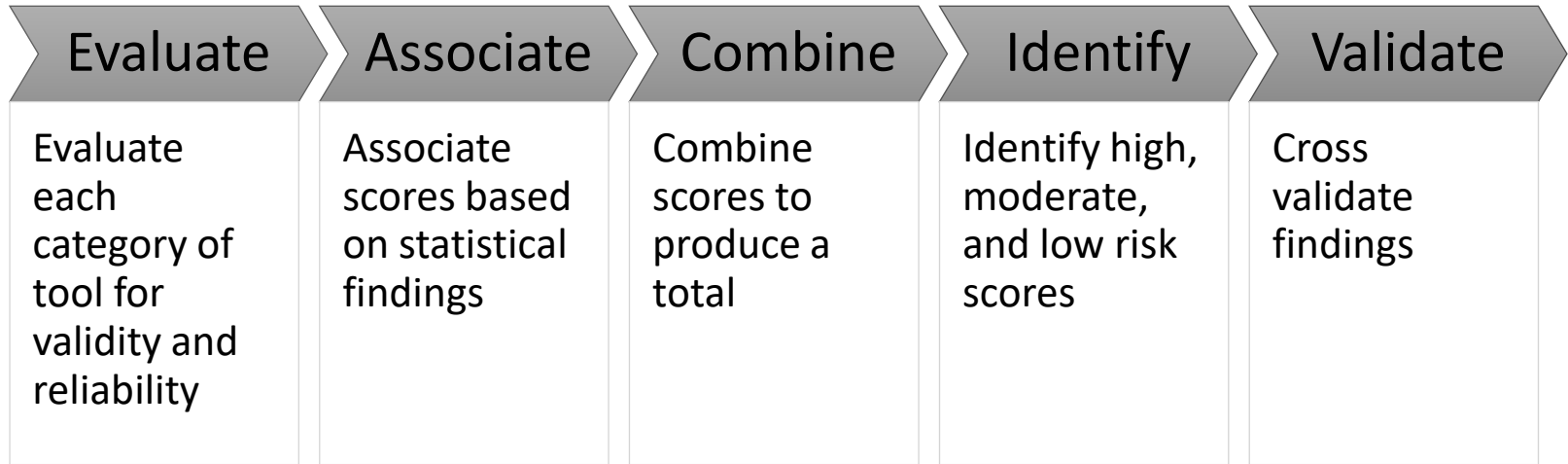
>85% reliability between Care Managers  
Decrease average completion time  
100% of fields completed within each entry



## Balancing

Nurse Care Manager satisfaction  
30-day readmission rate

# Research Overview



# Identified Risk Factors



**Admitting  
Diagnosis**



**Chronic  
Condition  
Indicator**



**Readmission  
History**



**Admission  
Acuity**



**Insurance**



**DME**



**Home Nursing**



**Home Therapy**



**Language**

# Study Demographics

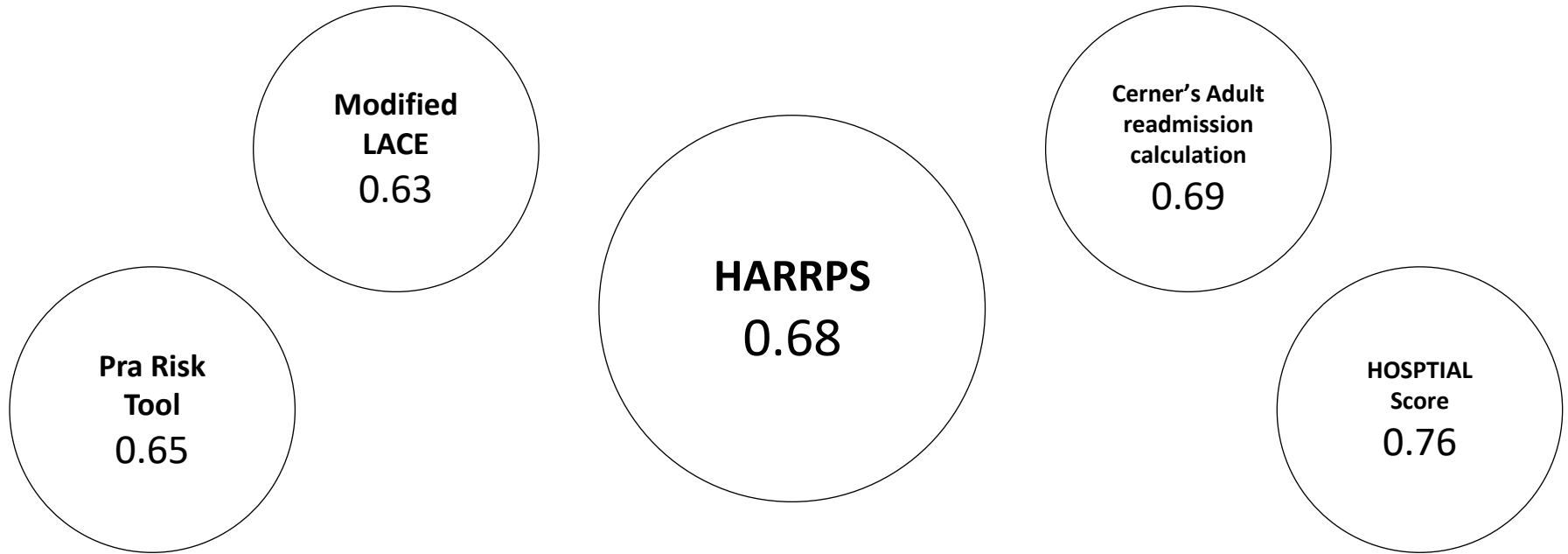
**SAMPLE SIZE:**  
5371 PATIENTS

**DURATION:**  
12 MONTHS

**CONTROL GROUP:**  
RANDOMIZED PATIENTS  
NOT READMITTED  
WITHIN 30DAYS

**TEST GROUP:**  
30 DAY  
READMISSIONS

# C-Statistic Score compared to Adult Risk Tools



# Key Points

- HARRPS Tool is a valid and reliable pediatric risk stratification tool
- Highlights need for targeted interventions based upon low, moderate, and high readmission risk

# HARRPS Tool

Website:

[www.childrensmercy.edu/HARRPS](http://www.childrensmercy.edu/HARRPS)

Email:

[HARRPS@cmh.edu](mailto:HARRPS@cmh.edu)

Care Management Admission Screen - HARRPS Tool

\*Performed on: 01/28/2019 0842 CST By:

### Care Management Admission Screen - HARRPS Tool

**Admitting diagnosis at risk for readmission:**

<input type="radio"/> Anemia/Neutropenia	<input type="radio"/> Bronchiolitis	<input type="radio"/> Seizure	<input type="radio"/> Ventricular Shunt
<input type="radio"/> Appendectomy	<input type="radio"/> Gastroenteritis	<input type="radio"/> Sickle cell crisis	<input type="radio"/> None of the above
<input type="radio"/> Asthma	<input type="radio"/> Pneumonia	<input type="radio"/> Upper respiratory infection	

**Number of chronic conditions:**  
Right clicking on box below, select Reference Text to access chronic condition list.

0  1  2  3  4+

**Acuity of admission:**  
Social Work Consult required if psycho-social concerns is checked.

ICN/PICU admit  Medical transport from outside facility  Significant psycho-social concerns  None of the above

**Readmission history:**  
Complete Readmission Assessment for patients readmitted within 30 days.

Patient readmitted within last 30 days  Inpatient Admission with in last 6 months  No readmission history within last 6 months

**Primary Insurance**  
Insurance Company: Commercial Insurance  
Primary Health Plan: Commercial Ins 1 Other Policy#: 41382464329  
Group #: 1200200

**Type of insurance:**

Self Pay  
 Medicaid  
 Commercial/Private

**Caregiver language for healthcare needs**  
Caregiver Language for Healthcare Needs: English (01/28/19 08:28:00)  
Patient Language for Healthcare Needs: English (01/28/19 08:28:00)

**Caregiver language for healthcare needs:**

English  
 Spanish  
 Other

**Current medical supplies/services in home:**  
Care Management Assessment required if any selections are made in Current medical supplies/services in home.

<input checked="" type="checkbox"/> A/C	<input type="checkbox"/> Feeding pump	<input type="checkbox"/> Pulse oximeter	<input type="checkbox"/> Other:
<input type="checkbox"/> Apnea monitor	<input type="checkbox"/> Feeding tube/supplies	<input type="checkbox"/> Suction machine/supplies	
<input type="checkbox"/> Bi-level positive airway pressure	<input type="checkbox"/> Hospital bed	<input type="checkbox"/> Tracheostomy tube/supplies	
<input type="checkbox"/> Central line/infusion	<input type="checkbox"/> Nebulizer	<input type="checkbox"/> Urinary catheter supplies	
<input type="checkbox"/> Continuous positive airway pressure	<input type="checkbox"/> Orthopedic equipment	<input type="checkbox"/> Ventilator with circuits/supplies	
<input type="checkbox"/> Cough Assist	<input type="checkbox"/> Ostomy supplies	<input type="checkbox"/> Wound vac	
<input type="checkbox"/> Dialysis machine/supplies	<input type="checkbox"/> Oxygen/supplies	<input type="checkbox"/> Wound/continence supplies	

Calculated DME Count:  DME count:  0  1  2  3  4+

**Does patient have in-home therapy? (P.T., OT, and/or SLP)**  Yes  No

**Does patient have in-home nursing? (Skilled Nursing and/or Private Duty)**  Yes  No

**HARRPS Score**

**HARRPS Risk:**

Low risk (0 - 2) - No needs identified at this time  
 Moderate risk (3 - 6) - Further assessment recommended  
 High risk (7-14) - Further assessment recommended

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In Progress