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## Screening Pediatric Patients for Readmission Risk

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# Screening Pediatric Patients for Readmission Risk

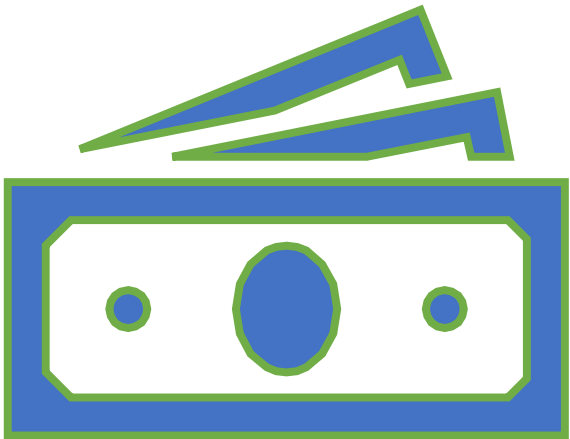
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-

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Manager of Care management and Utilization Review



# 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

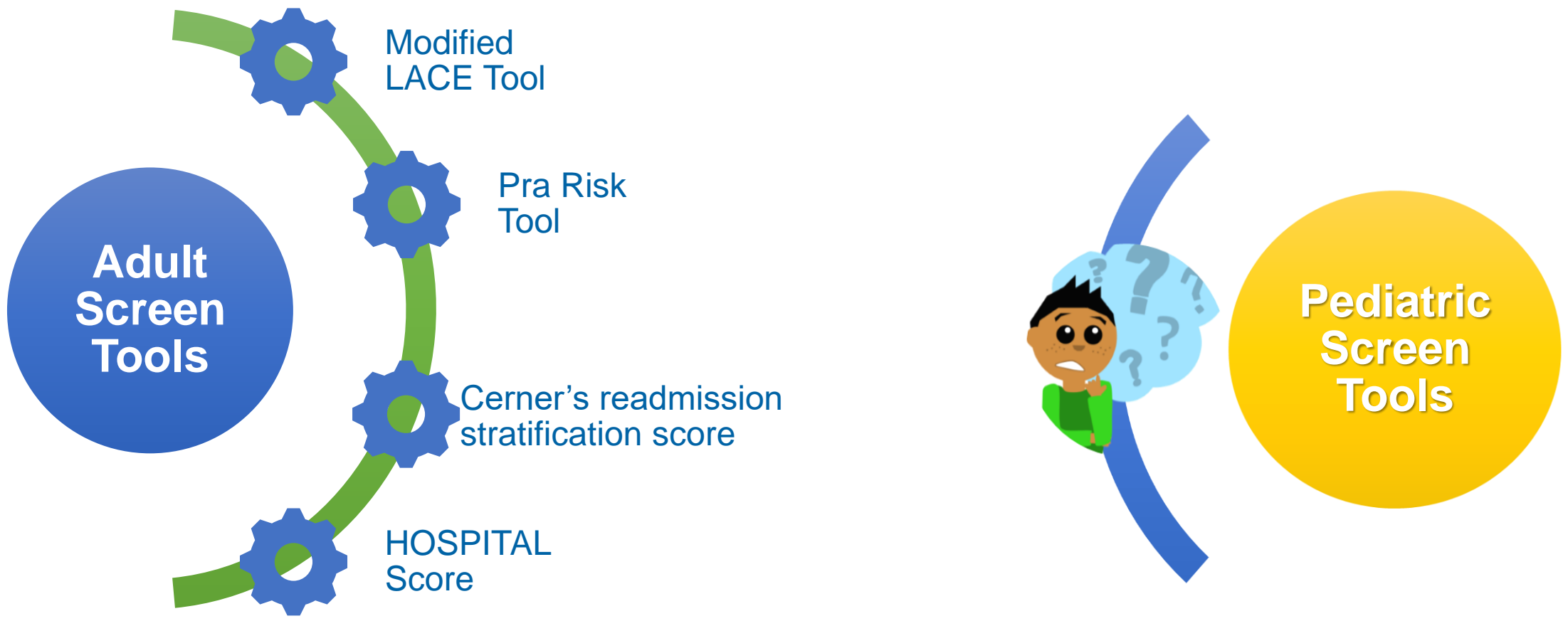
Through use of identification criteria, stratify patients at risk



## 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  
ED Visits



## Increase

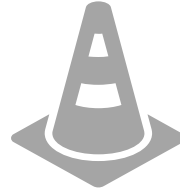
Patient & Caregiver Satisfaction  
Compliance with national standards of  
practice & CMS regulations

# 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

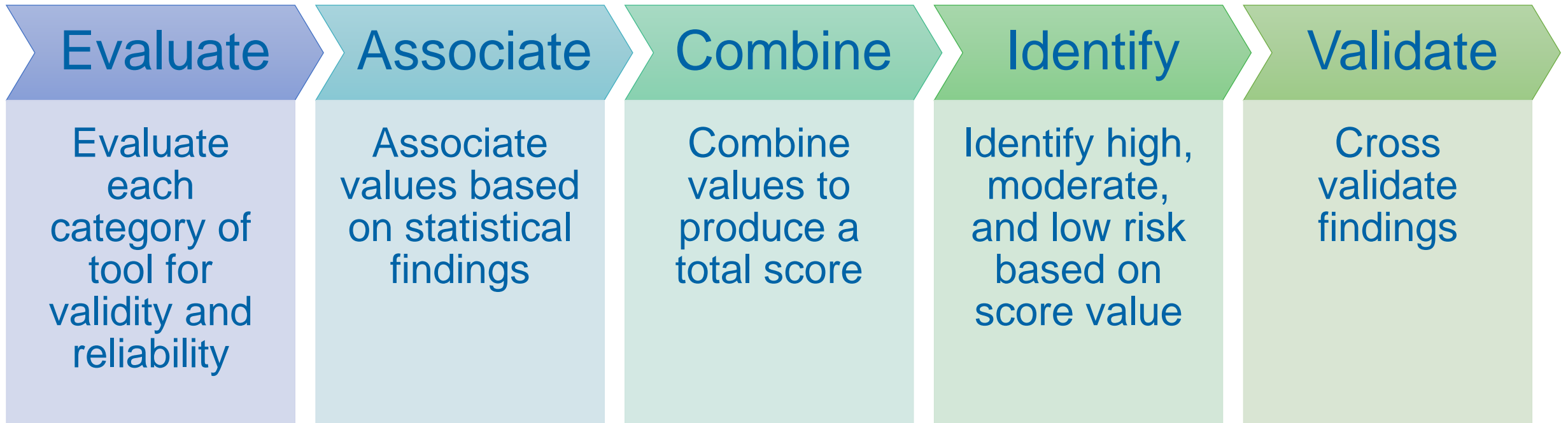


## Balancing

Nurse Care Manager satisfaction

30-day readmission rate

# Research Overview





# Study Demographics



**SAMPLE SIZE:**  
5371 PATIENTS



**DURATION:**  
12 MONTHS



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



**TEST GROUP:**  
30 DAY  
READMISSIONS

# Evaluate Risk Factors



**Admitting  
Diagnosis**



**Chronic  
Condition  
Indicator**



**Readmission  
History**



**Admission  
Acuity**



**Insurance**



**DME**



**Home Nursing**

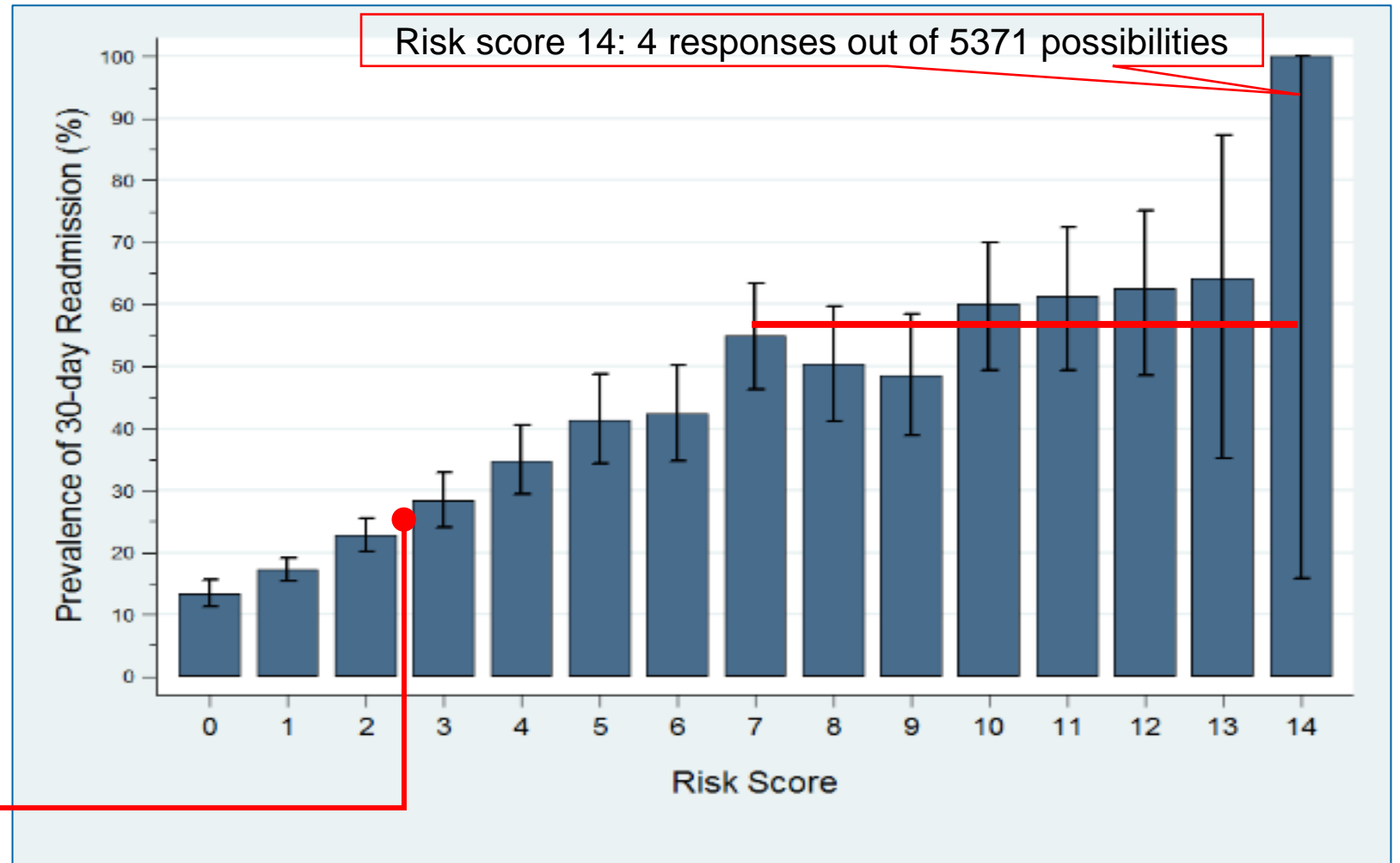
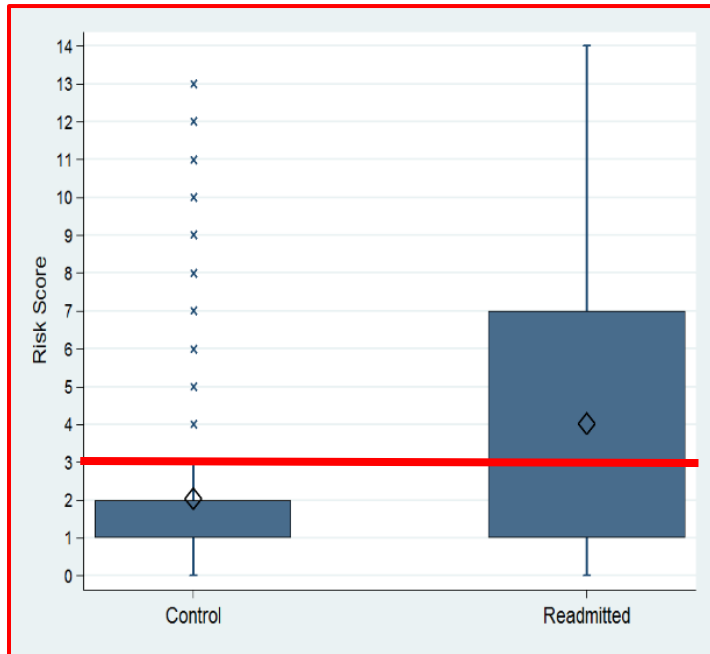


**Home Therapy**

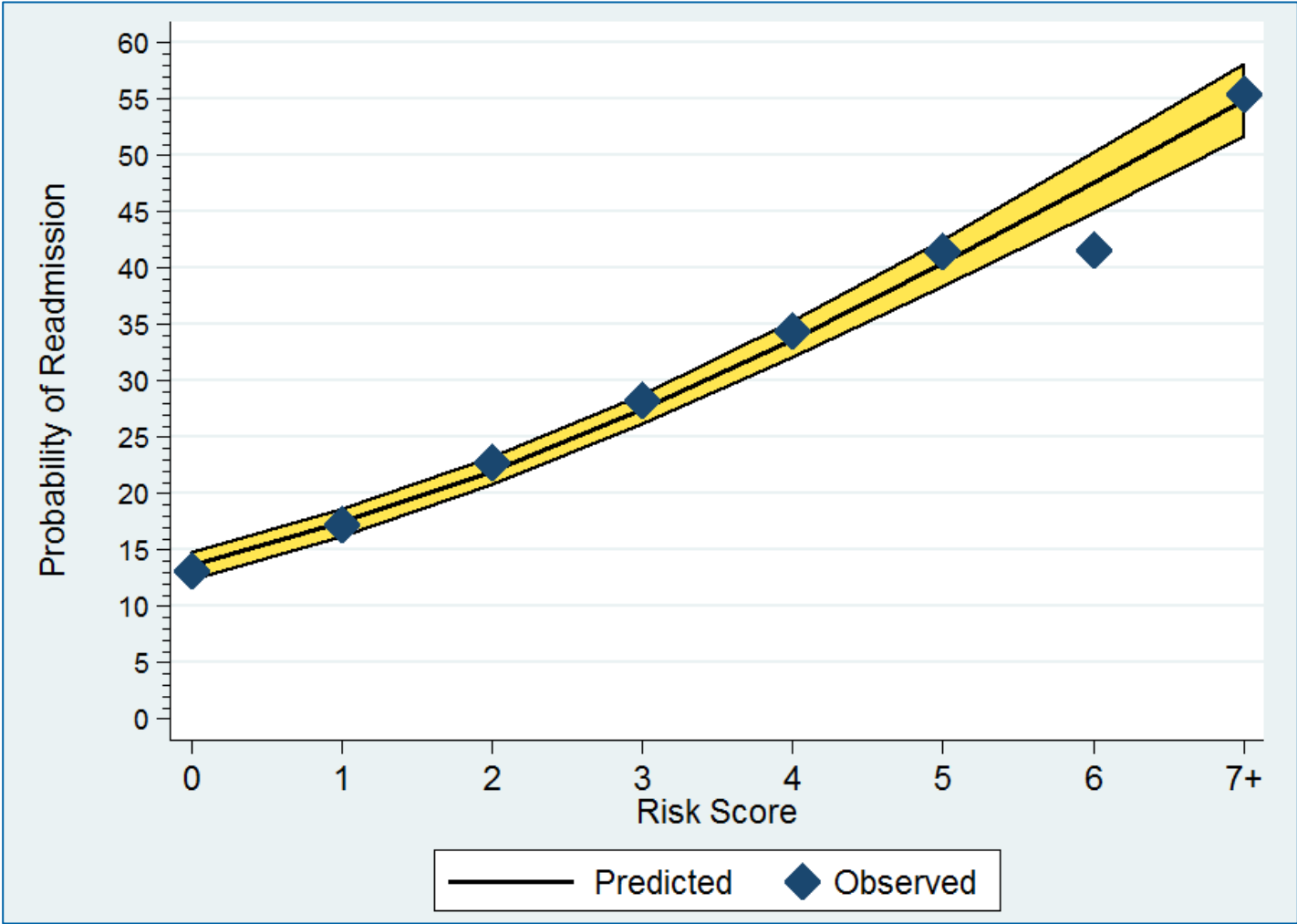


**Language**

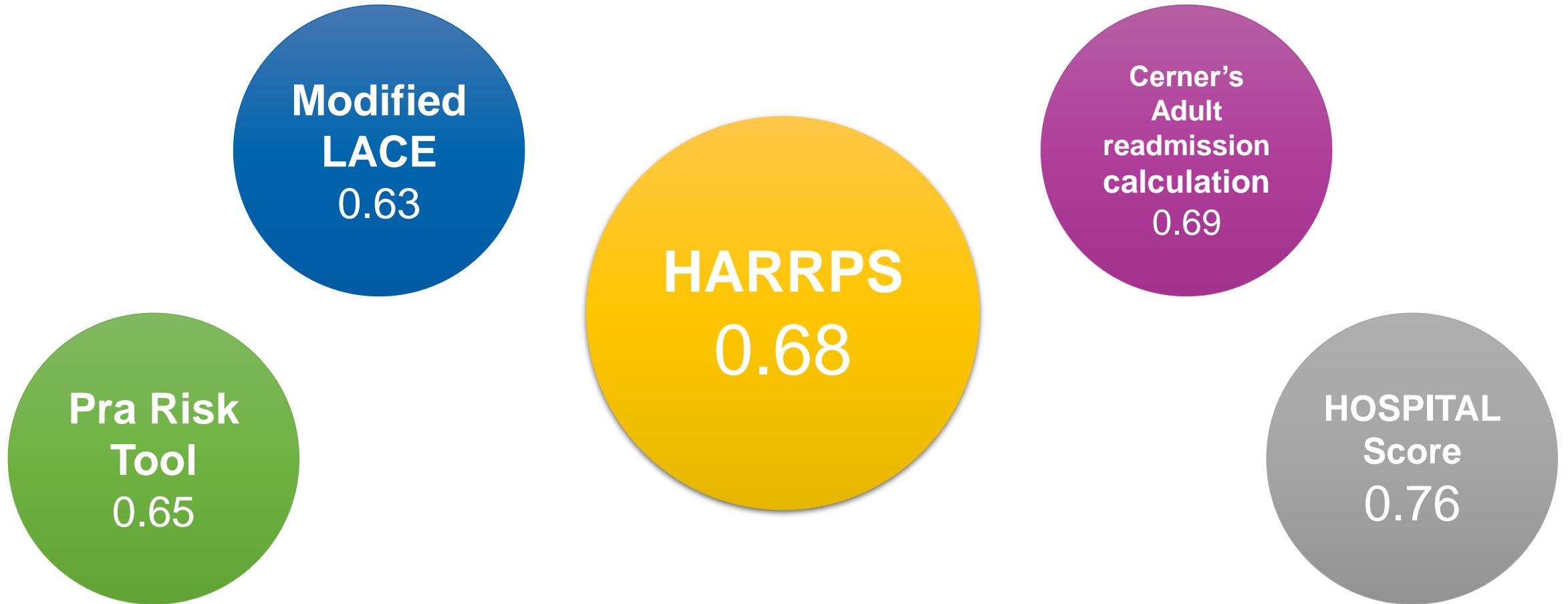
# Identify Risk Categories



# Cross Validate



# C-Statistic Score compared to Adult Risk Tools



# HARRPS Development Timeline



# Next Steps



**Share tool with  
other pediatric  
organizations**

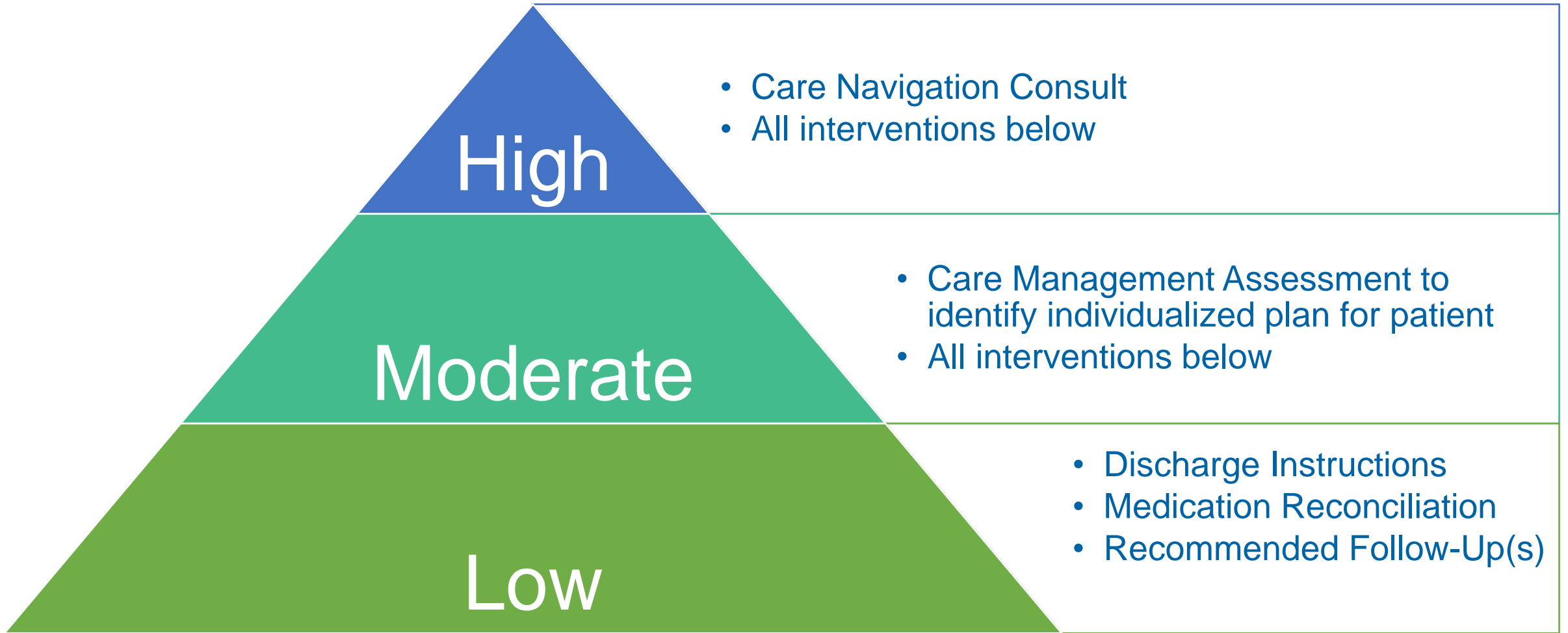


**Collaborate with  
other  
organizations to  
determine best  
practice  
interventions for  
high risk patients**



**Future research  
opportunities**

# Interventions Based on Risk Category





# HARRPS Tool

[www.childrensmercy.org/harrps](http://www.childrensmercy.org/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:**

Anemia/Neutropenia     Bronchiolitis     Seizure     Ventricular Shunt  
 Appendectomy     Gastroenteritis     Sickle cell crisis     None of the above  
 Asthma     Pneumonia     Upper respiratory infection

**Number of chronic conditions:**  
 Right clicking on box below, select Reference Text to access chronic condition indicator 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 03:28:00)

**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"/> None	<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"/> Bilevel 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

