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### **SMART Rounding: development of a nurse-driven rounding checklist as a sustainable intervention for improved care communication**

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# SMART Rounding:

## Development of a nurse-driven rounding checklist as a sustainable intervention for improved care communication.

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# Introduction

Gaps in team communication can lead to:

- Adverse safety events
- Negative patient experience
- Delays in patient care coordination<sup>1</sup>

Checklists have been previously used as a highly reliable patient safety tool

When used across disciplines, checklists can standardize communication surrounding key safety and care items.

1. Bruton et al. *Br J Nurs.* 2016

# Introduction

Checklists aimed at streamlining care delivery during team rounds have led to:

- Decreased CR monitor use<sup>2</sup>
- Trend towards decreased time from discharge order to discharge<sup>3</sup>
- Increased newborn nursery discharges before 1100<sup>4</sup>

Checklist use on daily patient rounds have been studied most often in the intensive care setting and are associated with:

- Decreased Foley catheter, central line, and ventilator use<sup>5</sup>
- Reduced lab frequency, optimized antibiotics<sup>6</sup>
- Increased compliance with sedation holidays and prophylactic measures<sup>7</sup>

2. Clark et al. *Hosp Pediatr*. 2019 3. Gabriel et al. *MEDSURG Nurs*. 2017 4. Rochester et al. *Pediatrics*. 2018 5. Carlos et al. *Ann Am Thorac Soc*. 2014 6. Mckelvie et al. *Int J Qual Health Care*. 2016  
7. DuBose et al. *J Trama*. 2008

# Introduction

At CMKC, 5 Sutherland is a 21-bed unit which serves the following patients:

- Liver, kidney, rehabilitation medicine, and general pediatrics.
- High acuity with transplant and dialysis patients, as well as a tracheostomy-cohorting floor.

High hospital census prompted improvement efforts in patient flow through hospital High Reliability Unit work

- Average discharge time: 14:32, with only 12% of discharges occurring prior to 11am
- A checklist had previously been trialed on 5 Sutherland which addressed patient safety and discharge readiness
- This checklist was re-visited in Fall 2019 to address late hospital discharges

# 5 Sutherland SMART Baseline Data

Metric	Compliance
Does Patient need SA?	9%
Does patient still need monitors?	25%
Can any meds be converted to PO?	36%
Can IVF be discontinued?	83%
Does patient still require vascular access?	55%
Does patient have central or peripheral access?	47%

Metric	Compliance
Can line entries be consolidated?	10%
Can Foley be removed?	14%
Review labs/imaging schedule in next 24h	50%
Discharge criteria reviewed	70%
Med adjustment or need for refills discussed on rounds	35%
Other DC needs (education/follow-up) reviewed	39%

(Based on April- May 2019 Gold Team “secret shopper” audit)

# Aim Statement

- Develop and implement a daily rounding checklist for use on the 5-Sutherland medical-surgical unit with at least 80% daily checklist use, sustained over at least 6 months.

# Outcomes/Measures

- Primary outcome: Use of daily checklist on daily rounds.
- Secondary outcomes:
  - Discharge time/Time from order to discharge
  - Perceived efficacy of checklist and improved awareness of potential safety issues.
- Process metric: Percentage of patients with a complete rounding audit tool
- Balancing measure: Acceptability/time spent



# Outcomes/Measures

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# Methods

Multidisciplinary effort to create daily rounding checklist:

- Unit nursing director and assistant directors, unit nurse Quality Improvement PC (also bedside nurse), unit nurse educator, unit high reliable physician leader (also hospitalist), nephrology physician
- Additional input from: bedside nursing and subspecialty rounding teams.
- Badge buddy created for easier use

<b>S</b> <b>Situational Awareness</b>	<ul style="list-style-type: none"> <li>• Does patient need SA?</li> <li>• Does patient still need O2 and/or CR monitors?</li> <li>• Behavioral/restraint needs?</li> </ul>
<b>M</b> <b>Medications</b>	<ul style="list-style-type: none"> <li>• Meds converted from IV to PO?</li> <li>• Can IVF be DC'ed?</li> <li>• Today's med changes</li> </ul>
<b>A</b> <b>Access</b>	<ul style="list-style-type: none"> <li>• Vascular access needed? If so, central and/or peripheral?</li> <li>• Can central line entries be consolidated?</li> <li>• Other lines? (Foley, NG/GT)</li> </ul>
<b>R</b> <b>Routine</b>	<ul style="list-style-type: none"> <li>• Scheduled labs/imaging in the next 24h?</li> </ul>
<b>T</b> <b>Transition</b>	<ul style="list-style-type: none"> <li>• Anticipated Discharge Date?</li> <li>• Med rec / Rx / Prior auths</li> <li>• Meds to Beds?</li> <li>• Discharge Teaching?</li> <li>• Follow-up (PCP/subspecialty)?</li> <li>• Home care / DME orders?</li> <li>• Vaccines?</li> </ul>

# Methods

## Physician education

- Discussed checklist feasibility and checklist items/content with liver, kidney, rehab, and general pediatrics teams.

## Nursing education

- Renewed interest in greater multidisciplinary communication, care coordination, and more timely hospital discharges
- Nursing leadership and bedside nursing staff “buy-in” to be the ones to initiate checklist review
- QIPC engagement for checklist audits

# PDSA Cycle #1

Problem: Checklist not readily available on rounds

Root causes:

- No ownership of checklist
- Poor usability of previous checklist

Intervention:

- Introduce checklist with associated badge buddy
- Floor leadership educate staff on checklist use
- Streamlined checklist to include only 5 items

# PDSA Cycle #2

Problem: Poor compliance with checklist audit, unclear on prevalence of checklist use

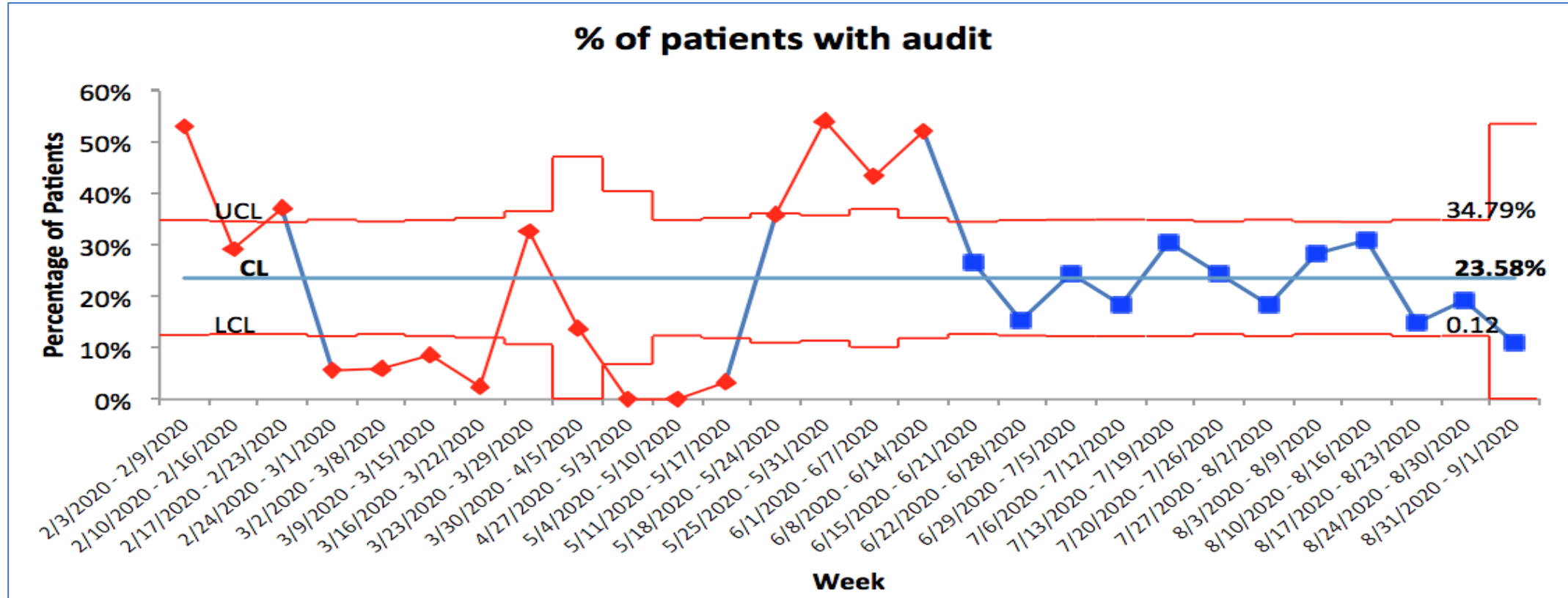
Root Cause:

- Ongoing COVID-19 pandemic & excessive nursing strain
- Overly complicated audit tool
- Inability to perform third party audits due to rounding limits and social distancing

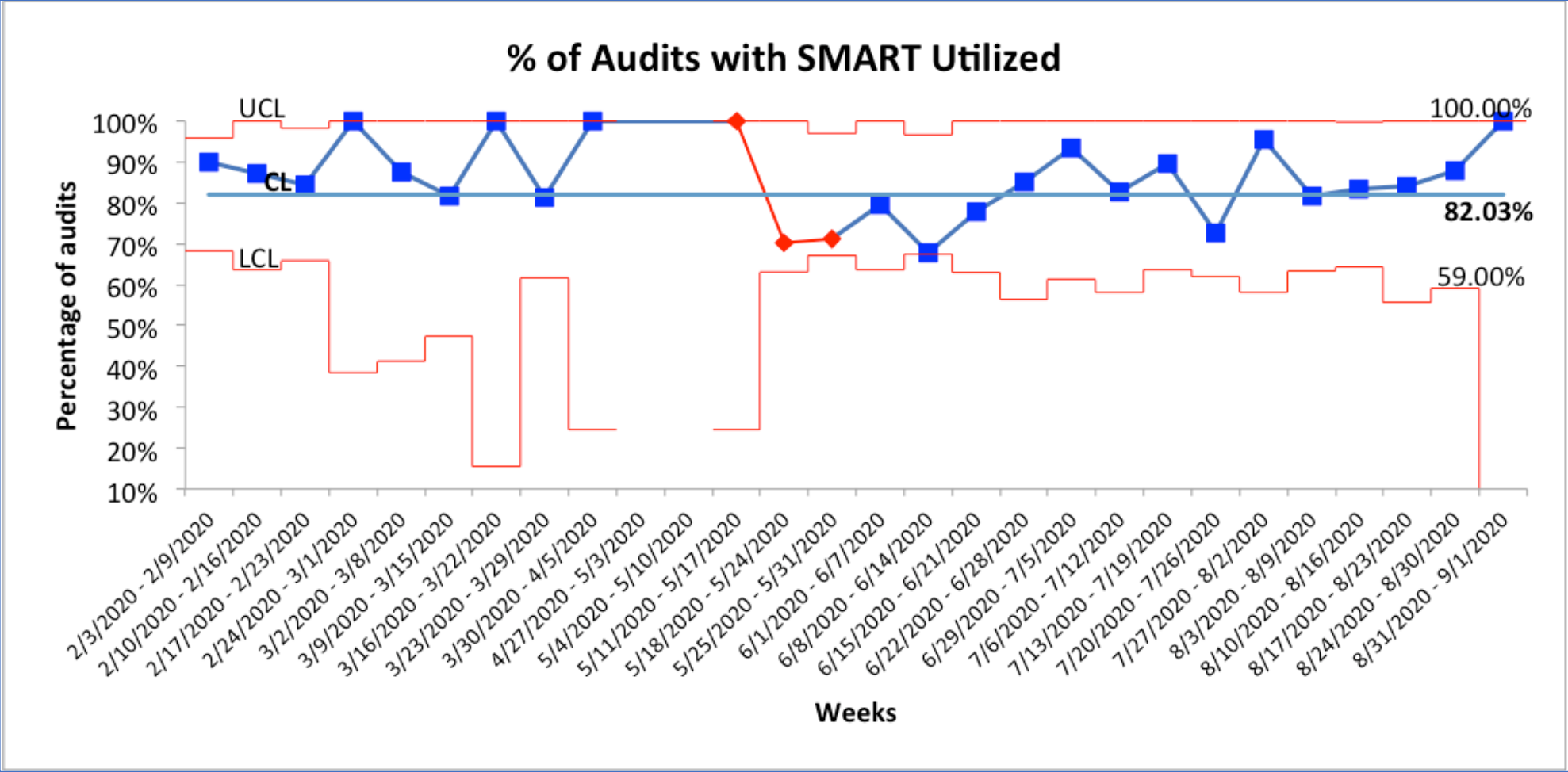
Intervention:

- Simplify audit tool

# Results



# Results



# Results

The SMART Checklist	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Improves multidisciplinary communication	11 (22%)	28 (55%)	10 (20%)	2 (3%)	0
Discusses otherwise unmentioned issues	9 (18%)	25 (49%)	14 (27%)	3 (6%)	0
Increases awareness of potential safety issues	5 (10%)	24 (47%)	16 (31%)	6 (12%)	0
Improves discharge planning	6 (12%)	16 (31%)	24 (47%)	4 (8%)	1 (2%)
Takes an acceptable amount of time	9 (18%)	31 (61%)	10 (20%)	1 (2%)	0
	Yes			No	
Leads to a delay in patient care		1 (2%)		50 (98%)	
Disrupts rounds		3 (7%)		47 (92%)	



# Limitations

## Selection bias present

- Those that complete audit are more likely to complete SMART checklist

## Patient outcomes tracked but were not used as measures for this pilot study

- Designed as feasibility project due to confounders with COVID-19

## No third-party auditing

- Limited by rounding limits during early pandemic.
- Third-party audits now part of routine.

# Conclusions

- Multidisciplinary stakeholders are essential to quality improvement projects related to daily rounds and team communication.
- The insertion of a structured rounding checklist into the workflow of a multidisciplinary care team is both feasible and acceptable to staff.
- Average time reported to complete checklist is additional 30-60 seconds.
- Simplified audit tools can lead to sustainment of new work processes into daily workflow of a medical/surgical rounding unit.

# Next Steps

- Checklist now used on all medical surgical floors with third party auditor.
- Current PDSA cycle focused on improving nursing presence on rounds
- Enhanced efforts and data collection on team members' shared understanding of plan and perception of team communication
- Ongoing evaluation of other outcome metrics (discharge patient time, time between discharge order and patient discharge, monitor use, patient/family engagement scores)

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