



# Improving Discharge Care for Children with Special Health Care Needs through a Nurse-led Learning Collaborative

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# Moderator

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Children's Hospital Los Angeles

Principal Investigator, CANDLE Collaborative

# Today's Speakers

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**Kevin Blaine, MAEd**  
Institute for Nursing and  
Interprofessional Research at  
Children's Hospital Los Angeles



**Angie Marin, MSN, RN-C**  
UC Davis Children's Hospital



**Melissa Gustafson**  
**MSN, RN, CPNP**  
Lucile Packard Children's  
Hospital at Stanford



**Sarah Wilkerson**  
**MSN, RN, CPNP**  
Monroe Carrell Jr. Children's  
Hospital at Vanderbilt University

# Ask Questions!

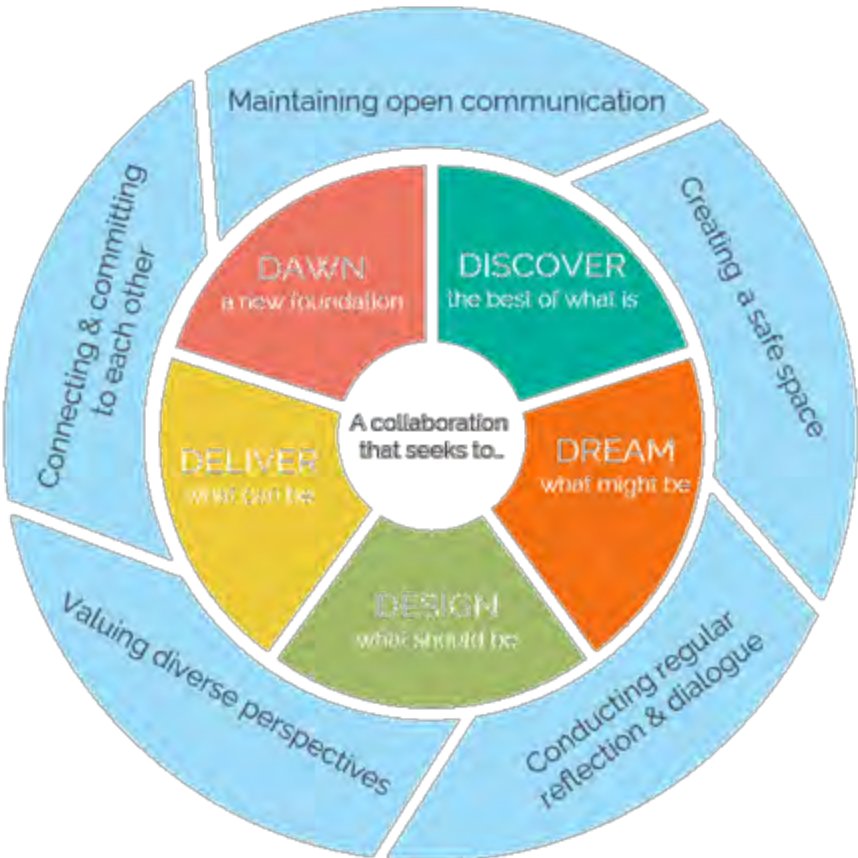
We look forward to a lively discussion with our audience.  
Enter questions in the GoToWebinar question box.



# CANDLE Collaborative Framework

## Guiding Principles

PAR  
Deeper Learning  
Interdisciplinary partnership  
Interinstitutional collaboration



## Outcomes

Meaningful change  
Long-term relationships  
Sustainable action  
Increased capacity



# What is PAR?

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- A social research approach
- Attempts to create knowledge that is informed by and responsive to the needs of affected individuals and groups
- Focused on translating ideas into action
- Disruption of the traditional research paradigm



# PAR In Action

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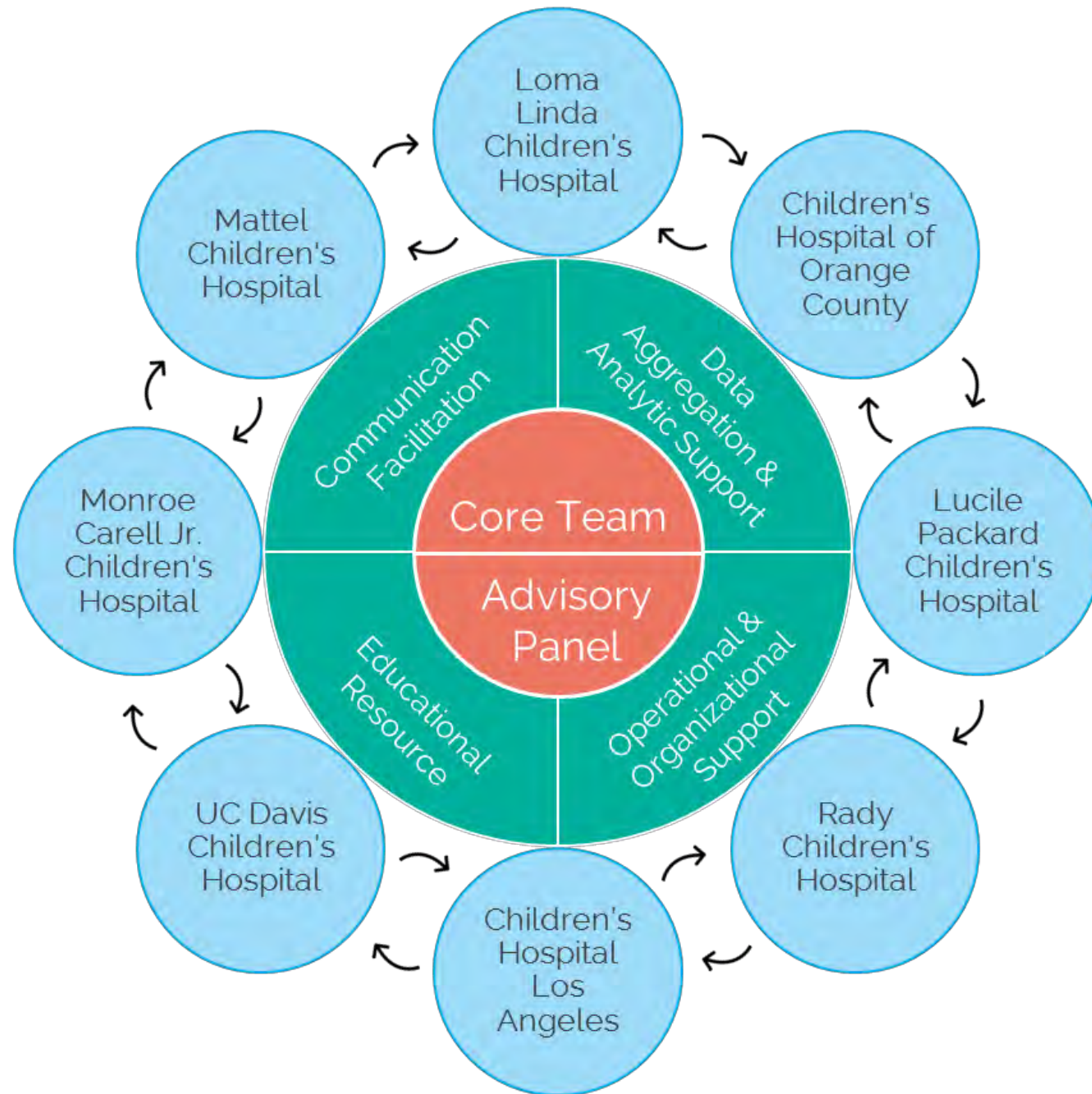
Everything is participant-driven – from the outset!

<b>Activity</b>	<b>PAR-based Response</b>
Defining the problem	Leverage local knowledge and current pressure points
Developing solutions	Participants help design tools & weigh in on intervention roll-out
Implementing and testing solutions	Participants assist with data collection where feasible
Analyzing the data	Emphasis on data that is local, actionable, and immediately relevant
Dissemination of findings	Often in non-traditional formats that cater to participant priorities



# Discharge Standards of Focus

- Make a Comprehensive & Responsive Discharge Plan
- Exchange & Confirm Discharge Plans with the Family and Post-Discharge Providers
- Ensure Family Readiness for Hospital Discharge



# Collaborative Structure



## 01 IN-PERSON MEETINGS

- Community and relationship building
- Group decision-making
- Review existing best-practice materials, resources, & toolkits
- Refine local project plans and implementation strategies



## 02 ONLINE WEBINARS

- Core Team presentation of common concerns, challenges, and potential areas of focus across all member hospitals
- Whole group learning session and discussion
- Keynote speakers with dedicated Q & A time

## 03 COACHING CALLS

- Report progress to date
- Celebrate successes
- Identify roadblocks and other challenges
- Problem solve with the Core Team



## 04 HOSPITAL VISITS

- Focused listening sessions
- Supportive observations
- Informational meetings with key project personnel
- One-on-one brainstorming solutions

# UC Davis Children's Hospital

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Daily Discharge Huddle

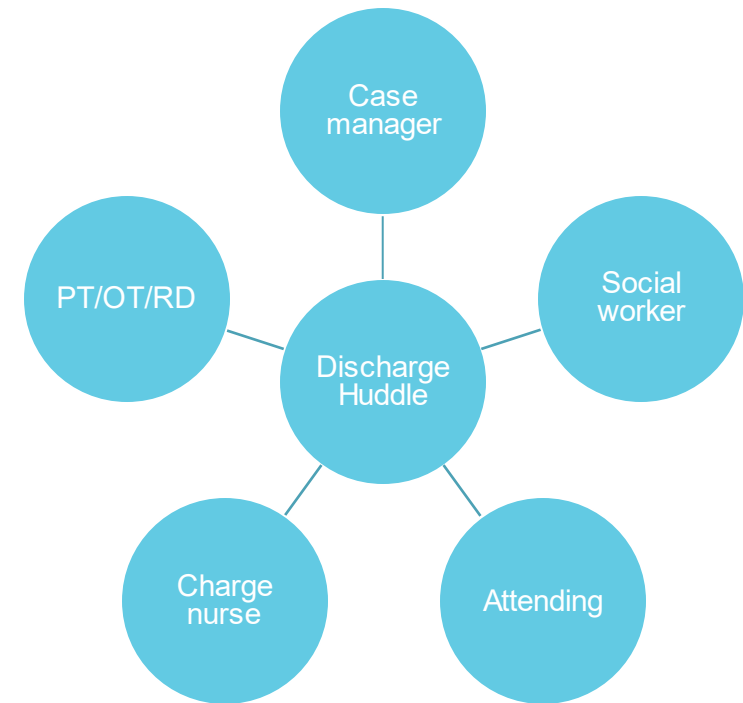


**Angie Marin, MSN, RN-C**  
Nursing Manager, Pediatrics

# Brief Description of Intervention

## Summary

- An interdisciplinary daily discharge huddle to identify discharge issues/barriers for patients expecting discharge within 48 hours
- Family and primary bedside RN notification of expected discharge



# Brief Description of Intervention

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## Key Components

- Pre-discharge huddle meeting with the Charge Nurse & Case Manager
- Charge Nurse communicates with OT/ PT before/after discharge huddle
- Case Manager leads discharge huddle
- After the discharge huddle, the charge nurse connects with the families of patients who have been identified as being ready to be discharged within 24hrs
- Charge Nurse shares the information from the discharge huddle with the bedside nurse re: anticipated discharge in 24 hours

# Tools, Resources, and Protocols

- Unit roster to track the children identified for discharge in 24hs
  - Intra-professional task columns added to the roster

24 hr DC	RM	NO NEEDS		Case Mgr	Social Work	PT/OT	<a href="#">Nutrition</a>	Pharm	other
	43-1								
	43-2								
	45-1								
	47-1								
	47-2								
	49-1								
	51-1								

- Email process change for Daily Discharge Rounds to relief charge nurses
- Hospitalist updated pediatricians with upcoming changes to the discharge rounds i.e. present potential(24hr) discharges first

# Example Scenario

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- The discharge huddle is an established meeting on the inpatient pediatric unit. 36 children are presented in approximately 30 minutes
- Attendees include: Charge Nurse, Case Manager, Dietician, Social Workers, Child Life, Attending, Resident
- Brief walkthrough for one patient



# Secrets to Success

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- **During Preparation for Implementation:**

- Involve case managers, social workers, assistant nurse manager and attending hospitalist in planning the intervention
- Quickly recognize needed adaptations for organization of information
  - i.e. numerical presentation vs identified discharges first

- **Once Discharge Huddles are Implemented:**

- At the beginning of the discharge huddle, reaffirm the goals and purpose of the meeting
- Invite the resident to join alongside the attending
- Review discharges not achieved within the previous 24 hours as anticipated

# Biggest Wins

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- Increased proactive assessments for each person's role, leading to earlier:
  - Identification of barriers to discharge
  - Ordering of prescriptions, DME, consults, etc
  - Research on available community resources (i.e. home infusion, home health, etc)
- More accurate collection of data, forms, referrals, etc.
- Improved time management during rounds, allowing MD to discuss patients on other units.
- Reduced weekend tasks for covering Social Workers or Case Managers

# Hindsight is 20/20

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- While the case manager is consistent and available daily, they don't have the authority to oversee bedside nurse's assignment
  - Accountability, authority, and responsibility for nursing care and discharge teaching falls to the bedside nurse
- Focus and emphasis should be placed on the early notification of the bedside nurse and family to impact readiness for discharge.
- Once attending started bringing Resident to the huddle, there was more efficient follow-through w/ orders and family communication.
- During the process, participants in the discharge huddle became proactive in asking for what they needed from the attending
  - i.e. forms available at meeting to be signed, specific wording for DME, home health resume orders, etc.

# Advice to Others

## Think small

- Changing practice of others: while it may seem simple it is not your workflow. It is very difficult to change the practice and culture of others.
- Allow individuation and use of organizational tools; adapt how you ask for the information you need.
- Recognize the most consistent contact with the patient and family is the bedside nurse.
- Reinforce the bedside nurse's role to facilitate family readiness for discharge.

# Lucile Packard Children's Hospital

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Implementation of a Pharmacist-led  
Proactive Medication Order Surveillance  
Program Among Hospitalized CMC



**Melissa Gustafson, MSN, RN, CPNP**  
Pediatric Nurse Practitioner

# Brief Description of Intervention

## Summary

- Pharmacist review discharge orders 24 hours prior to discharge to make any needed corrections to medications
- Creation of a Medication Action Plan (MAP) + review with families during teaching

# Brief Description of Intervention

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## Key Components

- Within 24 hours of discharge:
  - Dedicated Discharge Pharmacist (DDP) reviews medication discharge orders
  - DDP discusses needed corrections to discharge medication orders with NP
  - DDP completes a tailored medication education sheet for family/ patient
- Prior to Discharge:
  - DDP and/ or NP will review medication sheet with family
  - NP discusses discharge medications with bedside nursing
- Intervention tailored to all patients under CONNECT Team or CMC

# Tools, Resources, and Protocols

Sample Medication Schedule

Name of Medication	8 AM 	2 PM 	8 PM 	Comments
Baclofen ( <u>Lioresal</u> ) 10mg tablets	1 tablet (10mg) 	1 tablet (10mg) 	1 tablet (10mg) 	This medication can help with spasms. May cause drowsiness
Clonidine ( <u>Catapres</u> ) 0.1 mg tablets			2 tablets (0.2mg) 	Take at bedtime. This medication may cause drowsiness
Lacosamide ( <u>Vimpat</u> ) 10mg/mL solution	15 mL (150 mg) 		15 mL (150 mg) 	This medication is for seizure control.
Loratadine ( <u>Claritin</u> ) 1mg/mL syrup	10 ml (10mg) 			This medications is for Allergie symptoms
Magnesium Oxide 400 mg tablet	½ tablet (200mg) 		½ tablet (200 mg) 	This medication is a magnesium supplement
Melatonin 10 mg tablet			1 tablet (10mg) 	Take at Bedtime. This medication is a natural sleep aid.
Methylphenidate ( <u>Concerta</u> ) 27mg Extended release tablet	1 tablet (27mg) 			This medication helps with focus and mood. Recommended early in the morning as taking it too late can make it hard to sleep.
Omeprazole ( <u>Prilosec</u> ) 20mg capsules	1 Capsule 		1 Capsule 	May Open Capsules and sprinkle into yogurt or applesauce



# Tools, Resources, and Protocols

Sample Medication List: Spanish

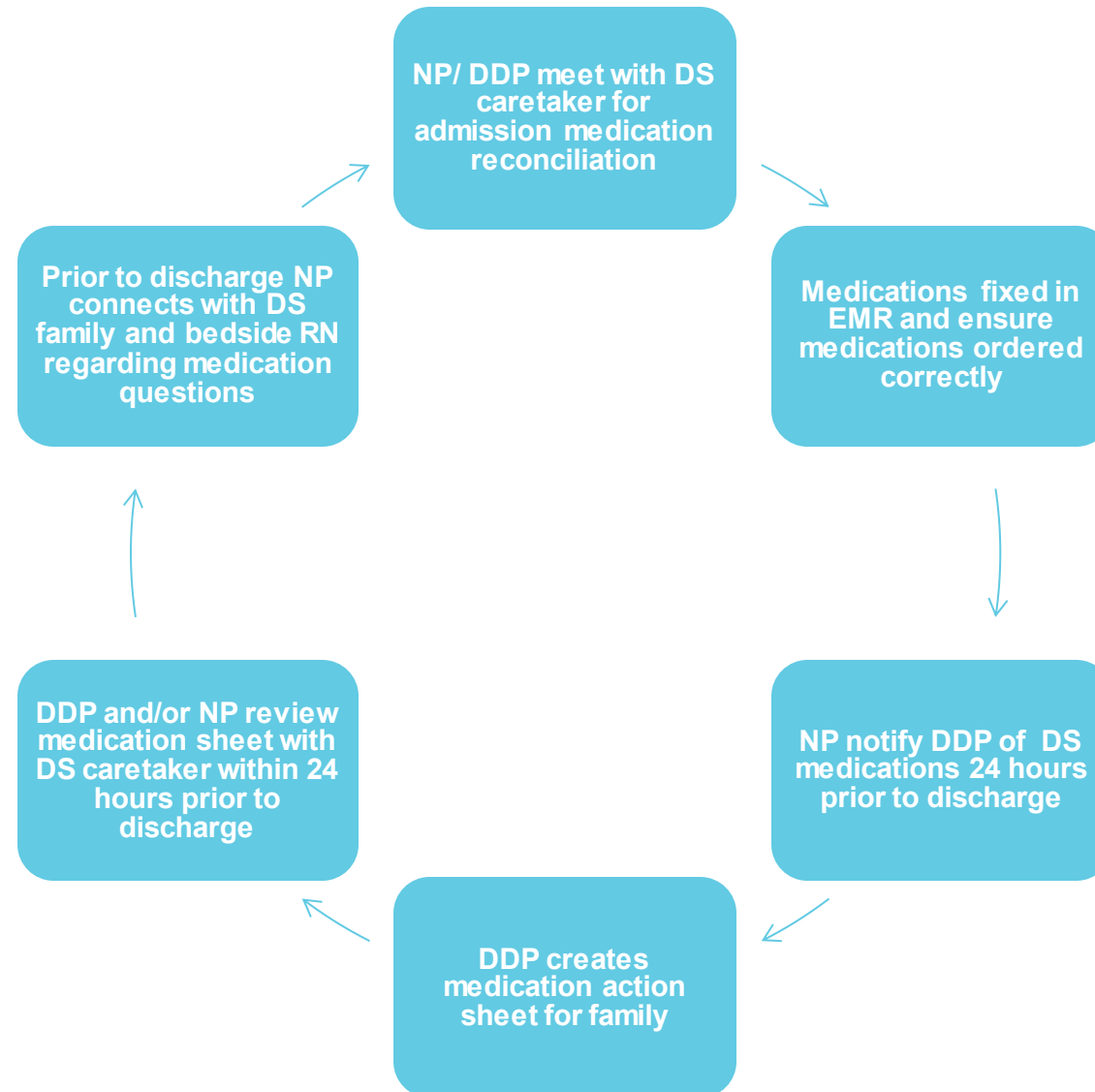
Nombre del Medicamento	7 AM 	3 PM 	11 PM 	Notas
<b>Albuterol 2.5mg / 3mL</b> 	<b>3 mL (2,5 mg)</b> 			Para ayudar a abrir los pulmones
<b>Glycopyrolate (Robinol)</b> <b>Tabletas de 2 mg</b>	<b>1½ tabletas (3mg)</b> 	<b>1½ tabletas (3mg)</b> 	<b>1½ tabletas (3mg)</b> 	Para las secreciones
<b>Nuevos Medicamentos</b>				
<b>Lansoprazole (Prevacid) 30mg</b> <b>tableta de disolución oral</b>	<b>1 tableta (30mg)</b> 			Este medicamento se utiliza para proteger el estómago y ayudar con el reflujo
<b>Polyethylene Glycol (Miralax)</b> <b>17 gramos de polvo</b>	<b>1 capful (17 gramos)</b> 			Tome mientras toma oxycodona. Sostenga si las heces líquidas
<b>Medicamentos que sólo se toman cuando es necesario:</b>				
<b>Para Los Pulmones</b>				
<b>Albuterol 2.5mg / 3mL</b> 	<b>Use 3 ml (2,5 mg) en la máquina nebulizadora 4 veces al día cuando esté enfermo</b> 			Este medicamento abre las vías respiratorias en los pulmones.

# Walkthrough with Example Patient

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- DS is a medically complex ex 27 week preemie 11 year old male with neonatal IVH ( grade IV), hydrocephalous s/p VP shunt, profound intellectual disability, Autism, ADHD-CT, epilepsy (recurrent episodes of status epilepticus), tethered cord, AKI/ CKD, and moderate persistent asthma. He is followed by our LPCH Neurosurgery, Neurology, Gastroenterology, Nephrology, Urology, and Psychiatry colleagues. DS is on 15 home medications and lives with mom (primary caretaker) and older sibling in 2nd story apartment building.
- Psychosocial: Mom receives IHSS and no other family members in area to help provide care

# Walkthrough with Example Patient



# Secrets to Success

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- Early communication of patient discharge plans to initiate intervention process in a timely matter
- Corrections to medication lists upon admission to avoid confusion at discharge
- Designated time for DDP and NP to work on Complex Care initiatives
  - Being shared with other departments presented delays and missed intervention opportunities.

# Biggest Wins (So Far)

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- Initiative provides a new platform for pharmacists at our institution that is not currently used
- Families provided positive feedback on the education they have received
- Better interdisciplinary team rapport and communication
- Other ancillary services have changed the level of importance they put on medication review and teaching based off of our processes.

# Hindsight is 20/20

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*Looking back, what are 2 things you wish your team had done differently?*

- Having a Clinical Pharmacist Resident dedicated to service every month
  - Coming soon as a result of this study: Transitions of Care Pharmacy Resident
- Advocating with administration for consistency in site lead's roles and responsibilities to avoid delays in care

# Advice to Others

- Make sure you have allotted time to dedicate to providing this intervention as coordination is key.
- Consider working with multiple pharmacists and/ or residents who can help with this initiative

# Monroe Carell Jr. Children's Hospital

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Cross-Collaborative Partnership to  
Standardize Two Medication Order  
Surveillance Programs



**Sarah Wilkerson, MSN, RN, CPNP**  
Pediatric Nurse Practitioner



# MCJCHV Overview

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- Inpatient Consulting Service
  - 2 attending physicians, 2 nurse practitioners, and a pharmacist
  - 2.5 nurses, dietitian, social worker, program coordinator
  
- Outpatient Continuity Clinic
  - Partner with community pediatricians
  - Each patient seen every 1-3 months
  
- About the Program
  - 375 patients on panel
  - Number of annual admissions: 800
  - Mean LOS: 9 days
  - Mean census: 6-10
  - Medical technology assistance: 90%

# LPCH Overview

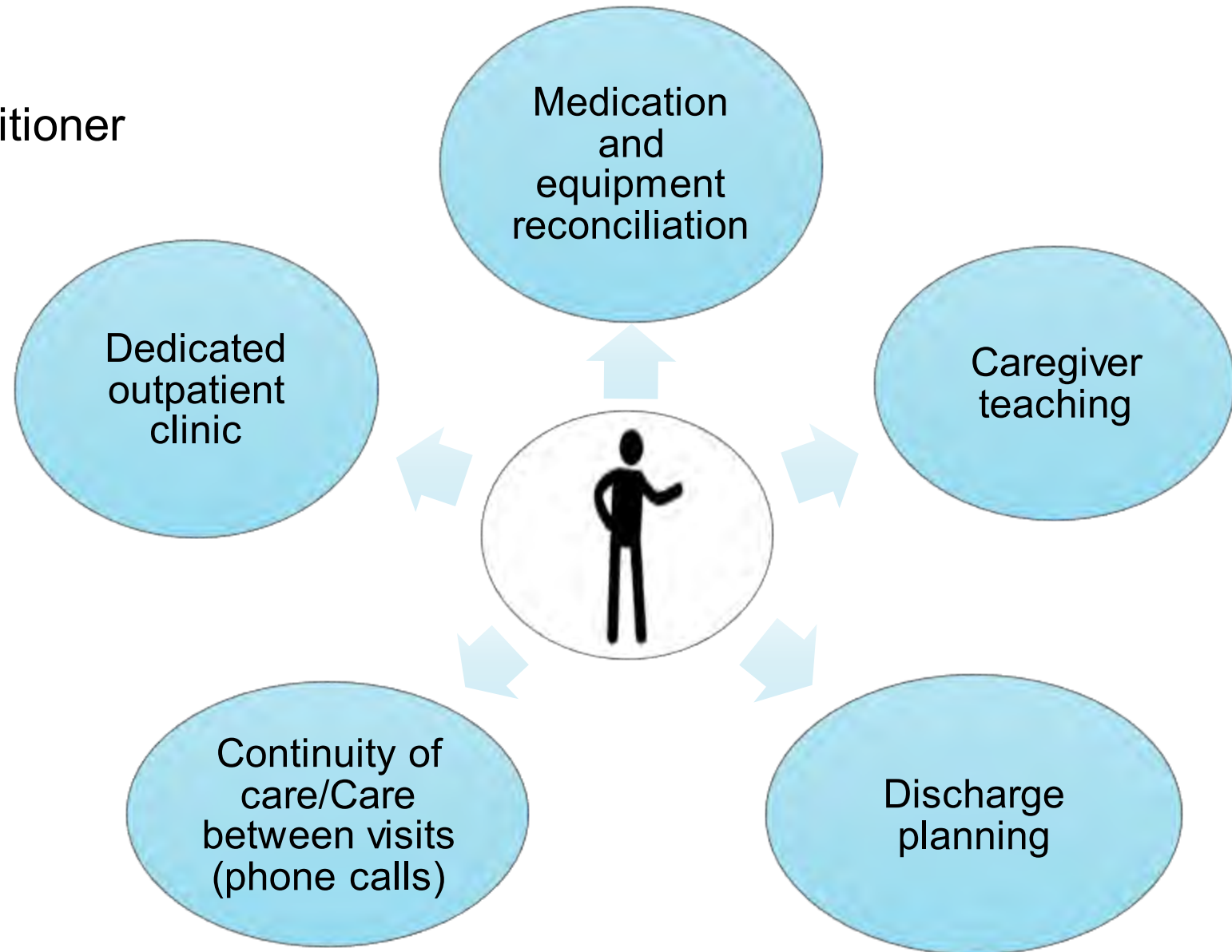
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- A medical consultative service that follows CMC admitted to specific surgical service
- On average, see about 3-4 patients weekly while admitted inpatient
- Inclusion Criteria:
  - Seeing 3 or more Sub-specialties
  - Prior hospitalizations
  - Neurosurgery or Orthopedic Medical Team

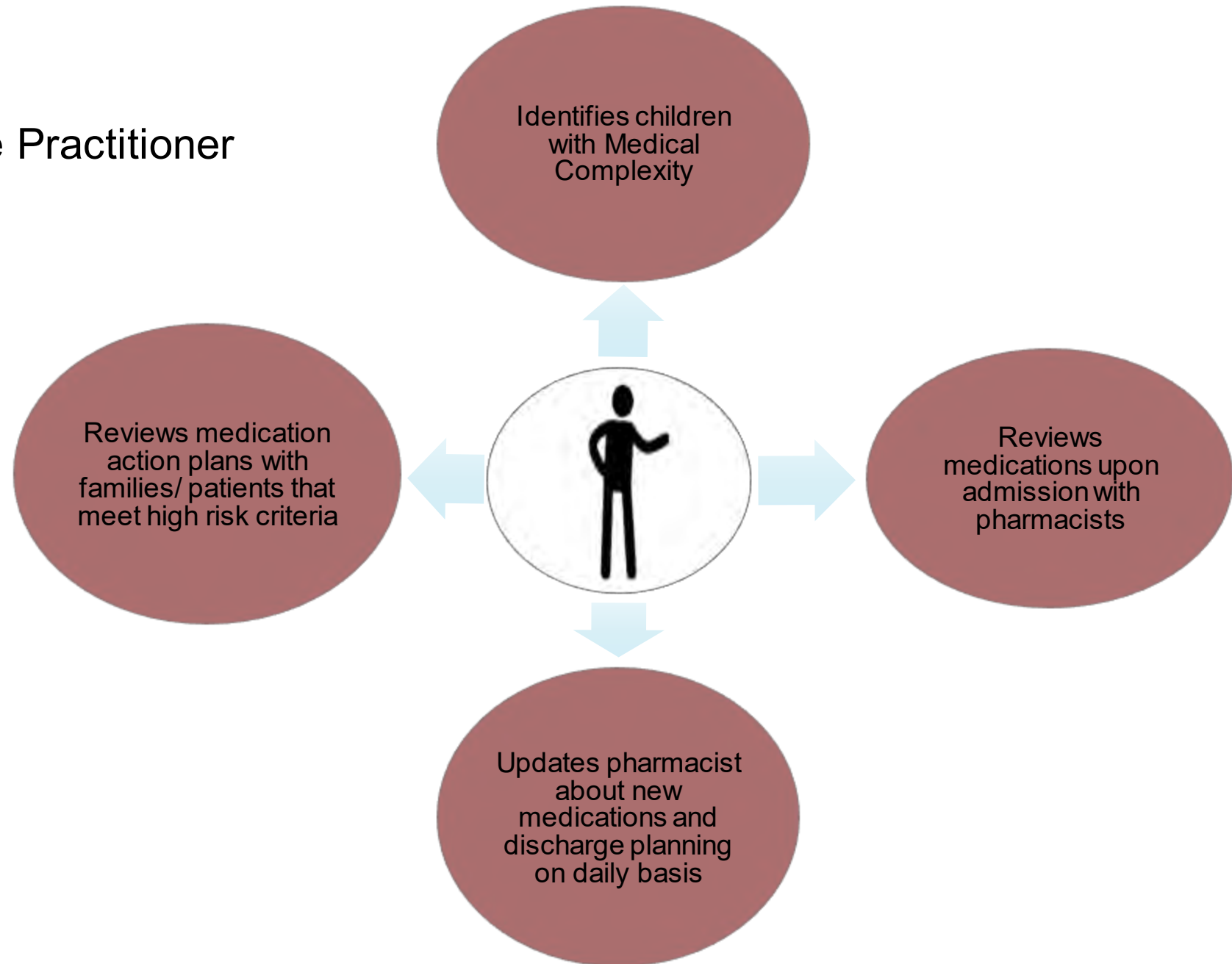
# MCJCHV

## Role of the Nurse Practitioner



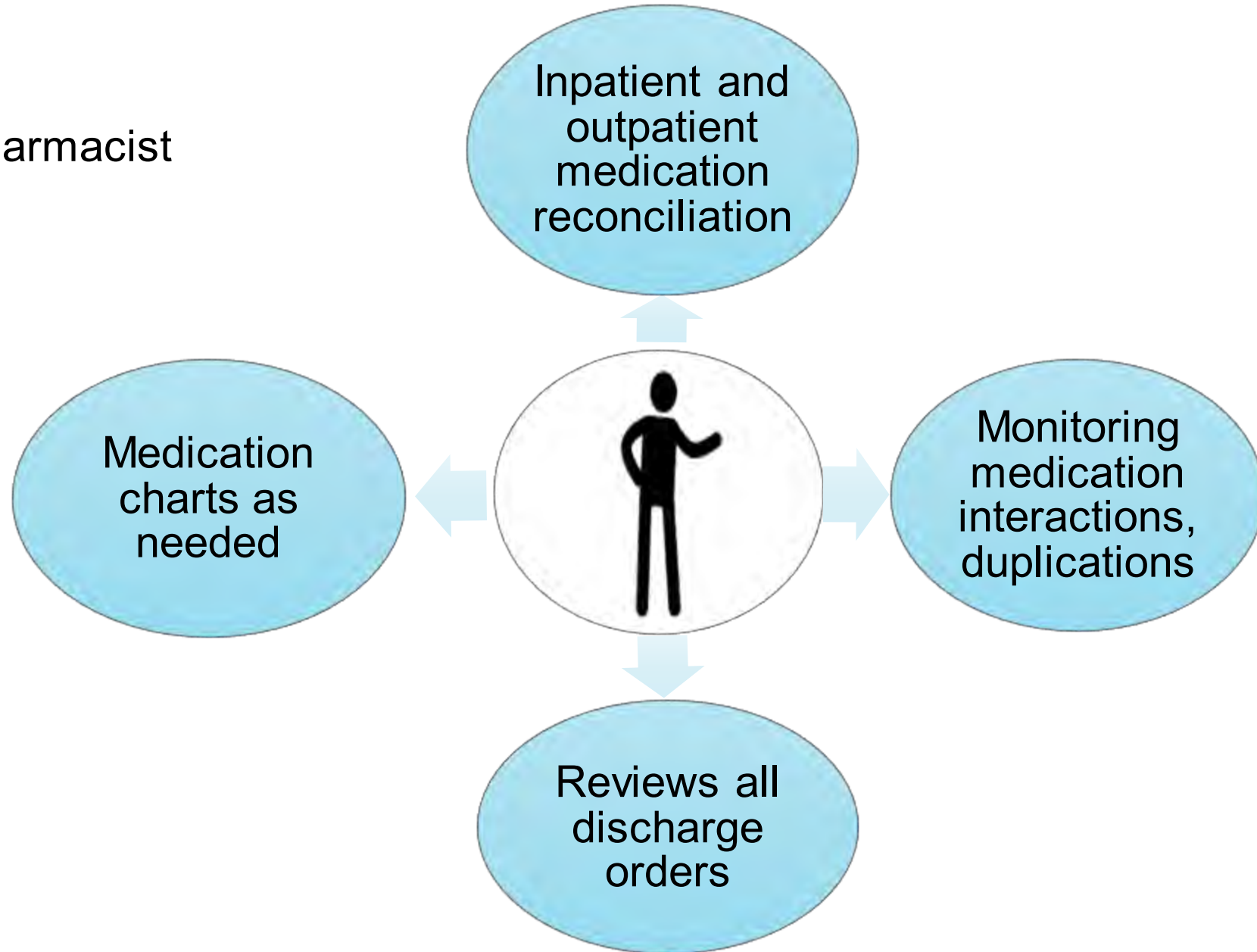
# LPCH

## Role of the Nurse Practitioner



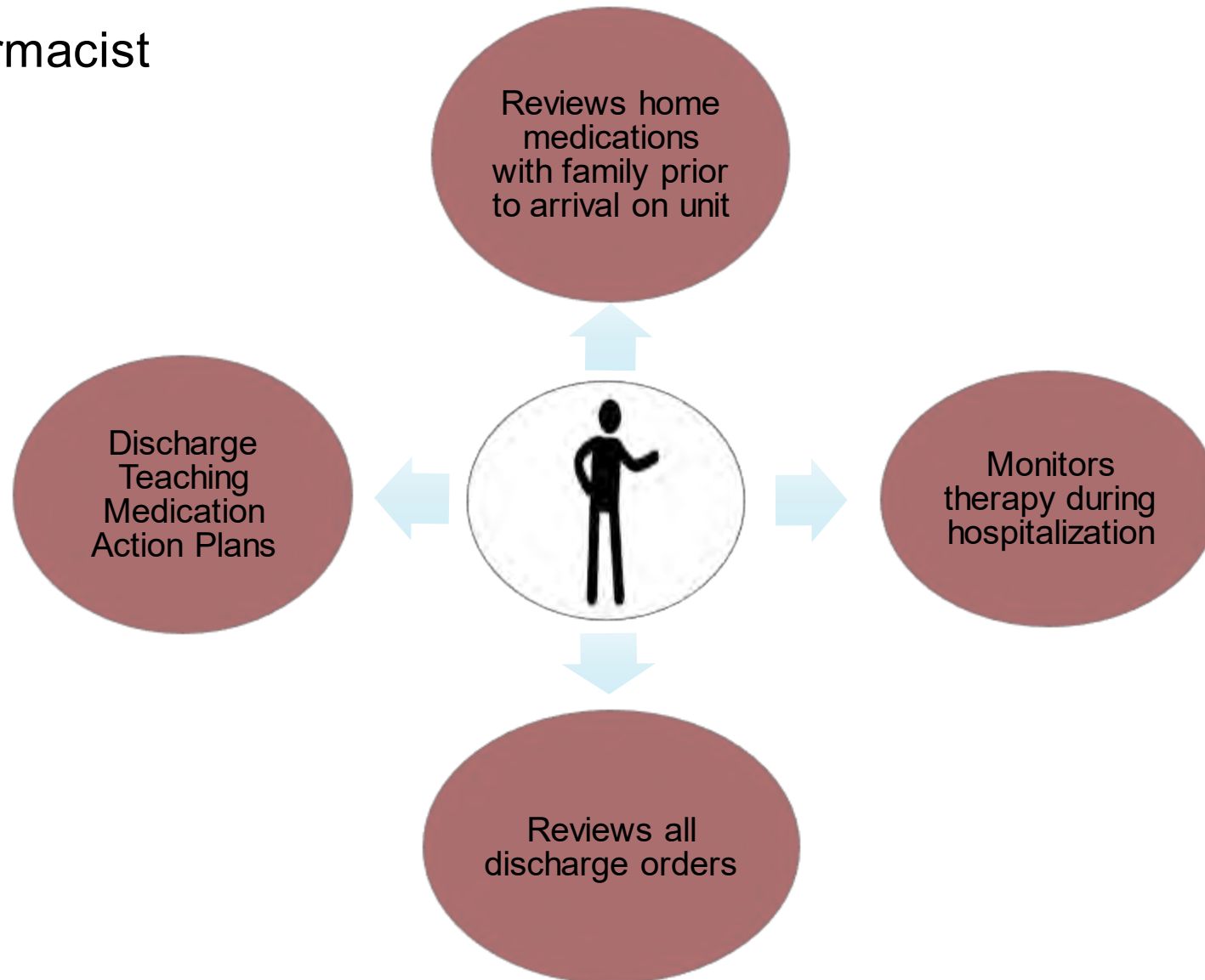
# MCJCHV

## Role of the Pharmacist

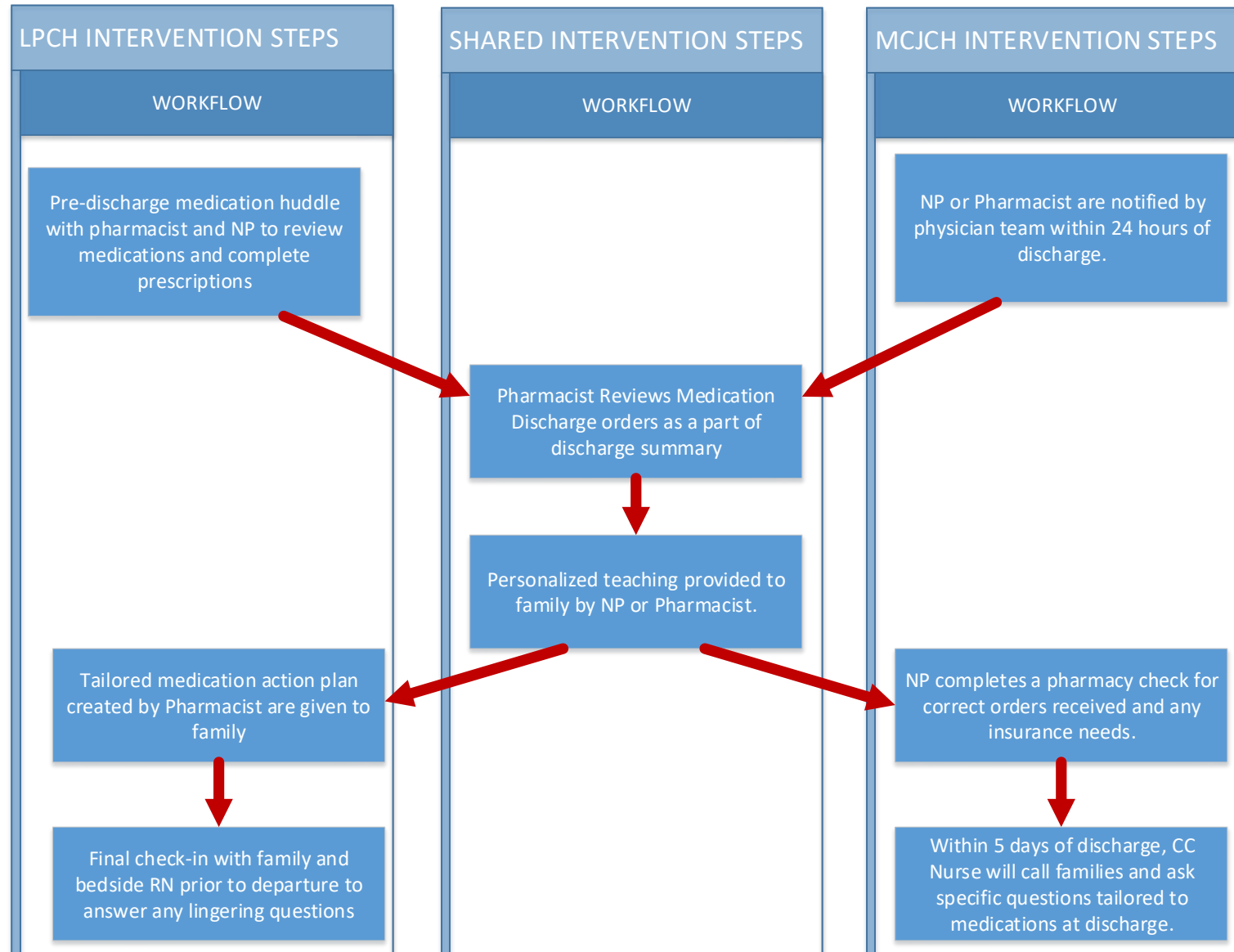


# LPCH

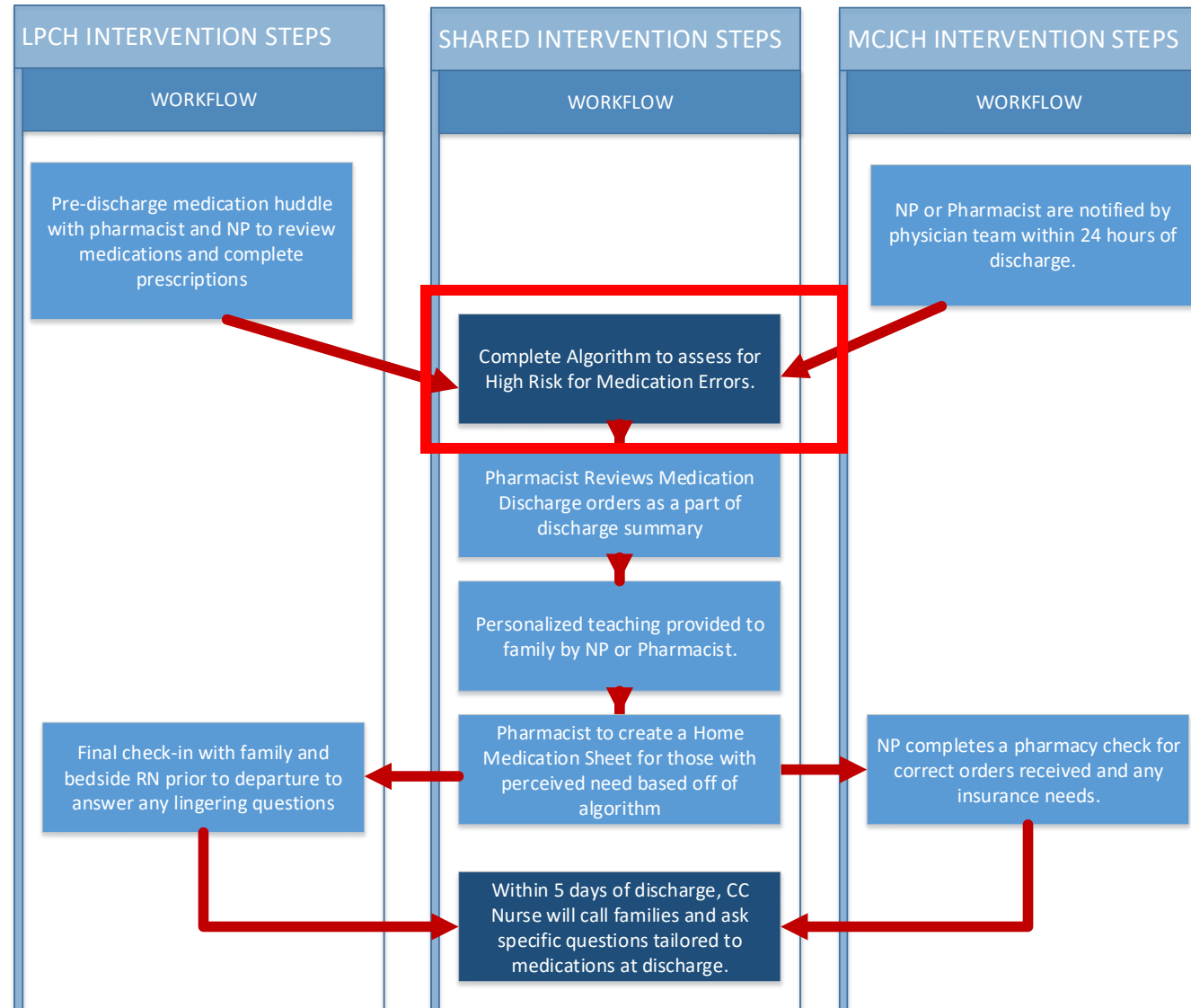
## Role of the Pharmacist



# Intervention Steps Prior to Collaboration



# Intervention Steps After Collaboration





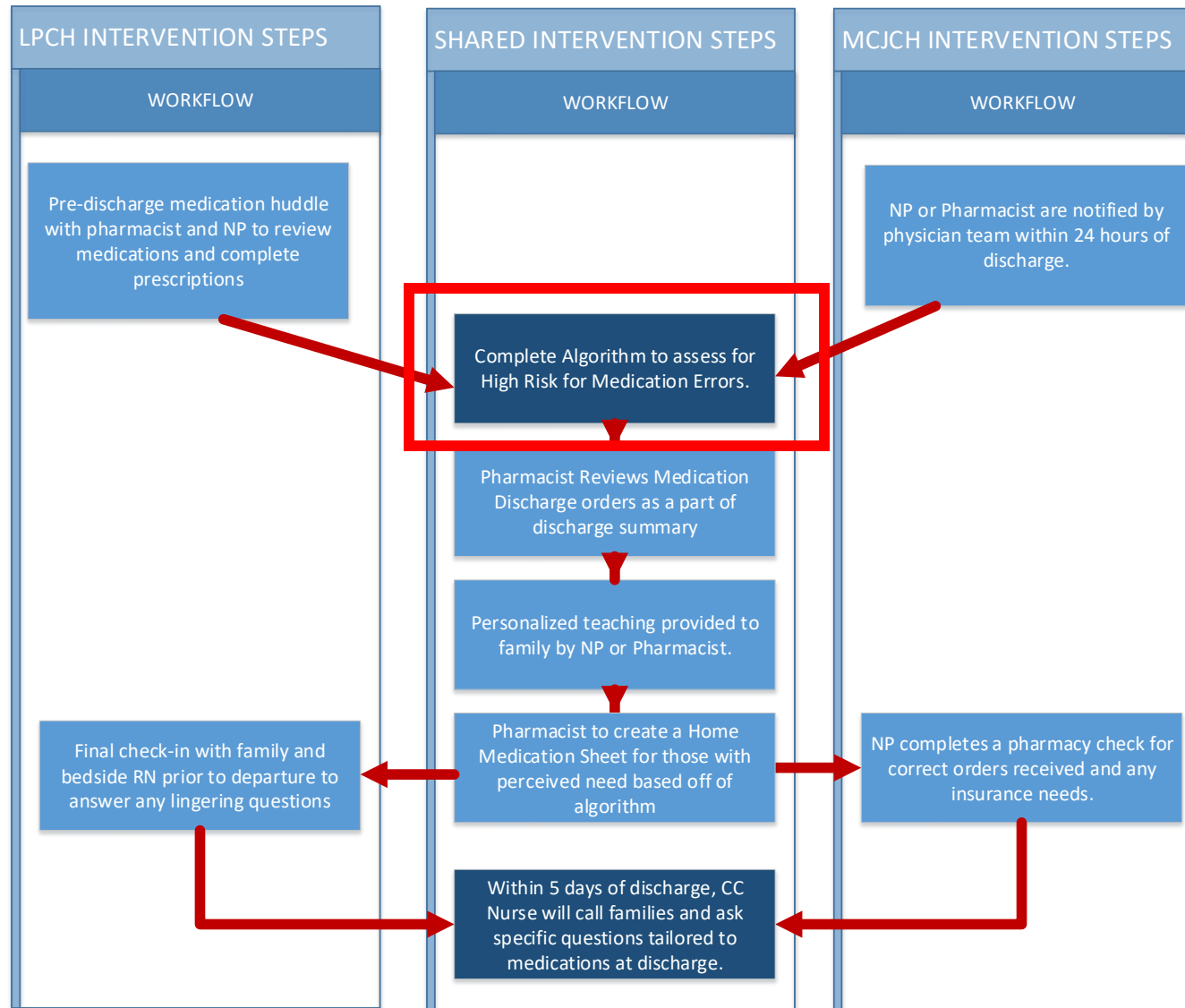
# Discharge Algorithm

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**If a patient gets a score of 15 or greater, they get an intervention**

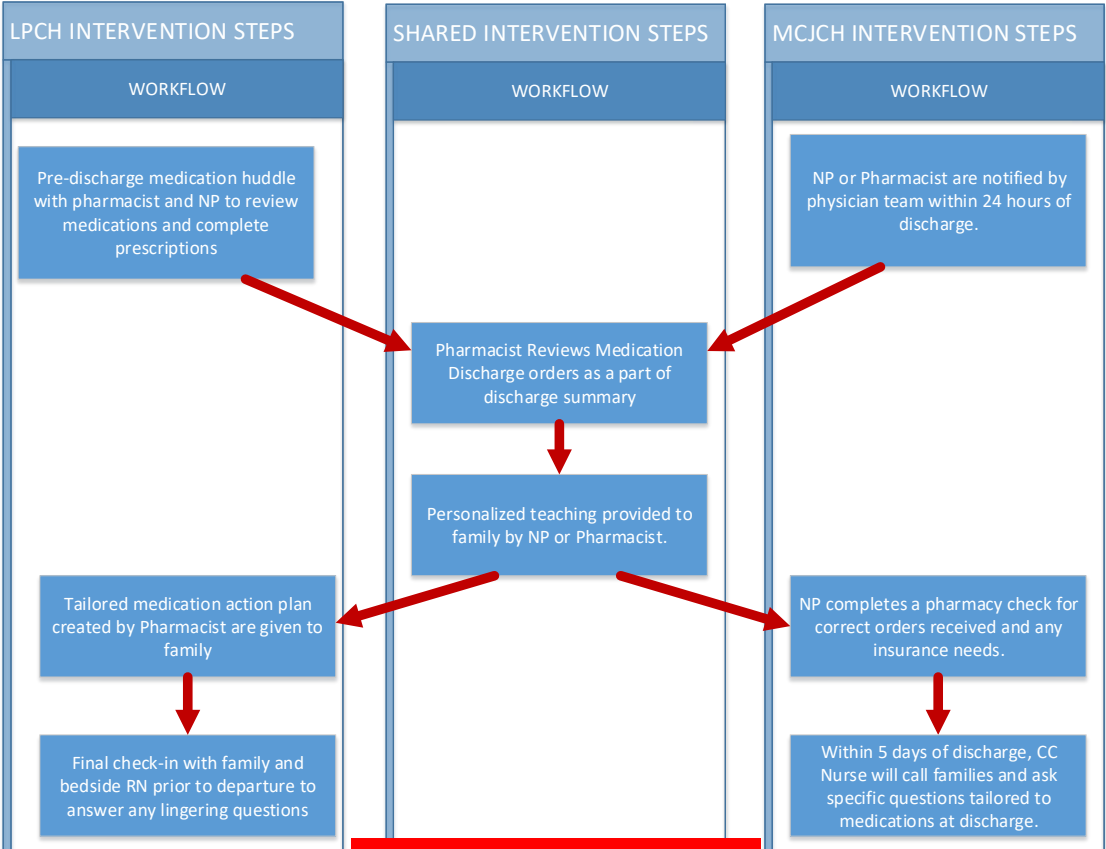
- New medications at time of discharge = 15 points
- Prescribed narcotics = 15 points
- Baclofen = 10 points
- Compounded medications = 5 points
- Number of home medications (including new meds at d/c)
  - $\leq 5$  = 0 points
  - $> 5$  = 5 points
  - $> 10$  = 10 points
  - $> 15$  = 15 points
- Patient uses  $\geq 2$  pharmacies = 5 points
- Date of last clinic visit  $> 6$  months = 10 points

# Intervention Steps After Collaboration



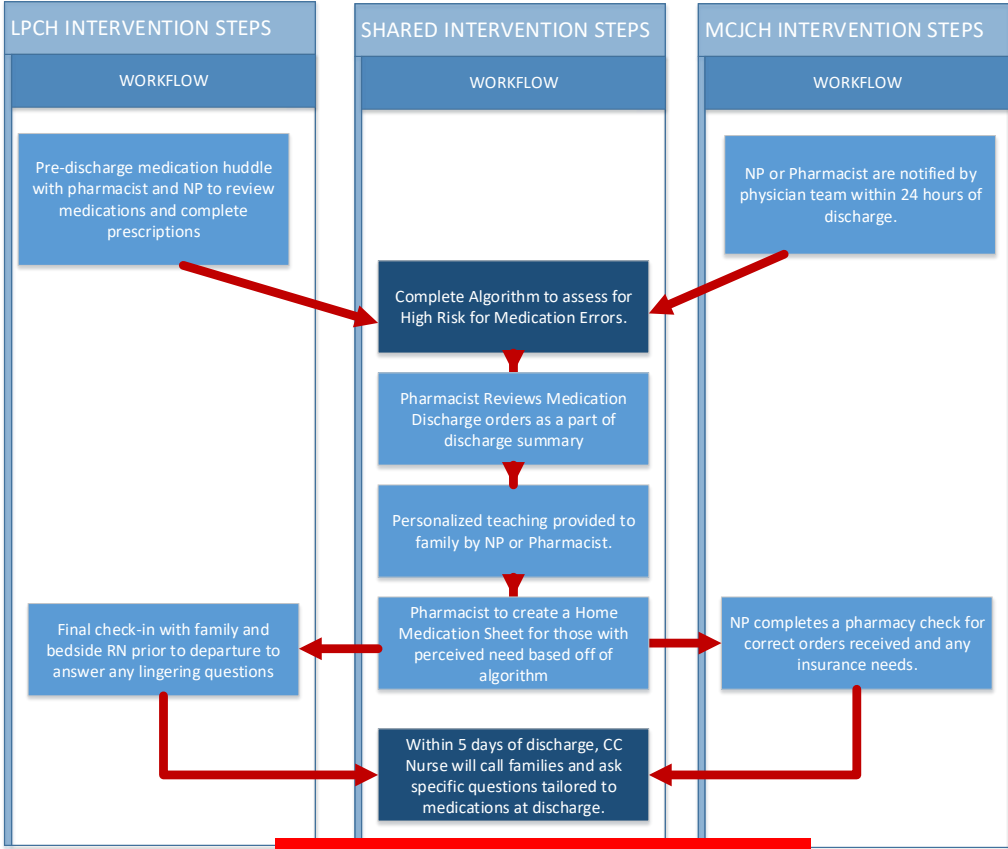
# Before Vs After Partnering via CANDLE Collaborative

Before



3 unique processes  
2 shared processes  
(Institutional Silo)

After



2 unique processes  
5 shared processes  
(Collaboration → Standardization)

# Evolution of Process Over Time

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- Difficulties with communication primarily due to being a consultative team
  - Periodic meetings with residents
  - Paging system
  - Educational opportunities for lessons learned and pitfalls
- Development of Algorithm
- Adaptation of process from collaboration of the two hospitals

# Lessons learned from MCJCHV

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- Improved discharge documentation
- Families had a dedicated time to discuss specific medication issues and felt more prepared for discharge
- Families were more satisfied when medications are correct on discharge paperwork and at pharmacy pick up (as evidenced from discharge follow up calls)
- Fewer medication errors at discharge, potentially leading to fewer readmissions

# Lessons learned from LPCH

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- Improved discharge documentation
- A Discharge Pharmacist can increase family and care team communication around medication orders/education
- Process may lead to improved medication safety, especially on transition to home
- Process may reduce healthcare overuse due to improved understanding and safe administration of medications

# Benefits of CANDLE Collaborative Membership

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- Created relationships with other institution to bounce ideas off or use as resource (including interprofessional relationships)
  - By having meaningful partnerships at other institutions, our organizations could see how best to improve current processes through the sharing of successes and challenges
- Allowed for joint dissemination opportunities (i.e. conferences, manuscripts)
- Built local capacity around quality improvement design and implementation, research administration (i.e. IRB submissions), and project management

# Audience Q&A

*Submit your questions through the GoToWebinar question box*

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**CANDLE**

Collaborative

[candlecollaborative.com](http://candlecollaborative.com)



We pursue a system that works for children with special health care needs.

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