Partnering to Improve Health Care Quality
for Mothers and Babies

NAS PHARMACOLOGIC MANAGEMENT

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Welcome!

- **Please enter your Audio PIN on your phone so we can un-mute you for discussion**
- If you have a question, please enter it in the Question box or Raise your hand to be unmuted
- This webinar is being recorded
- Please provide feedback on our post-webinar survey

Our speakers

William Driscoll, DO

Lance Wyble, MD, MPH

Doug Hardy, MD

Thank you!

Learning objectives

1. Discuss pros & cons of the most commonly used medications in NAS
   - 1st line: Morphine, Methadone
   - 2nd line: Phenobarbital, Clonidine

2. Discuss benefits of complying with a standardized guideline

3. Describe individual hospital pharmacologic guidelines

4. Understand how to develop a process map to communicate pharmacologic management

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PHARMACOLOGIC MANAGEMENT

1st line: Morphine, Methadone

NAS Therapies in US NICUs

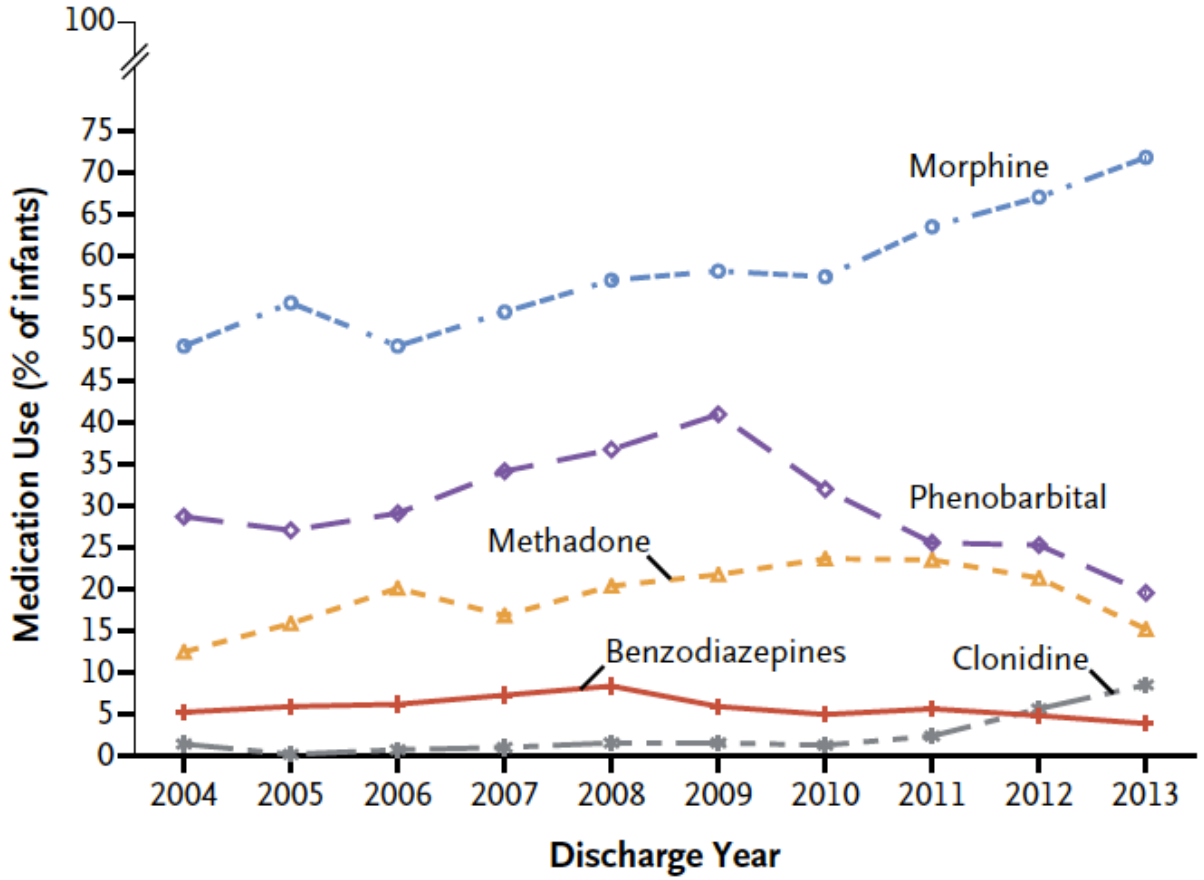

Figure 3. Medication Use in Infants with the Neonatal Abstinence Syndrome.

- Morphine & methadone are most commonly used therapies
- Buprenorphine may become more common over time
- New studies support role of clonidine alone in treatment of NAS

Journal of Perinatology, 34, 867-872

Morphine

ADVANTAGES	DISADVANTAGES

• Can be weaned more quickly in general due to its short half life
  • Shorter course of treatment
  • Shorter hospitalization
• Can be more easily given after discharge if necessary
	• Short half life means diligent treatment and scoring during capture and weaning

Methadone

- 0.05-0.2 mg/kg every 12-24 hours

ADVANTAGES	DISADVANTAGES

• Longer half life means fewer daily doses	• Long half-life may delay weaning
	  • Longer course of treatment
	  • Longer hospital stay
	• Can lead to *torsades de pointe* in patients with congenital prolonged QT syndrome

Morphine vs. methadone

- No good comparisons between morphine & methadone as primary therapy for NAS
- Multiple reviews comparing NAS treatment with morphine or methadone have found conflicting results regarding length of stay
- Retrospective review of 36 infants treated with morphine or methadone for NAS found higher Cognitive and Gross Motor domains on Bayley-III for those treated with morphine

Takeaways

- Maternal methadone dose DOES NOT foretell likelihood of NAS in infant
- Non-pharmacologic measures are critical to successful treatment
- Centers have been successful with morphine or methadone – get a protocol and STICK TO IT

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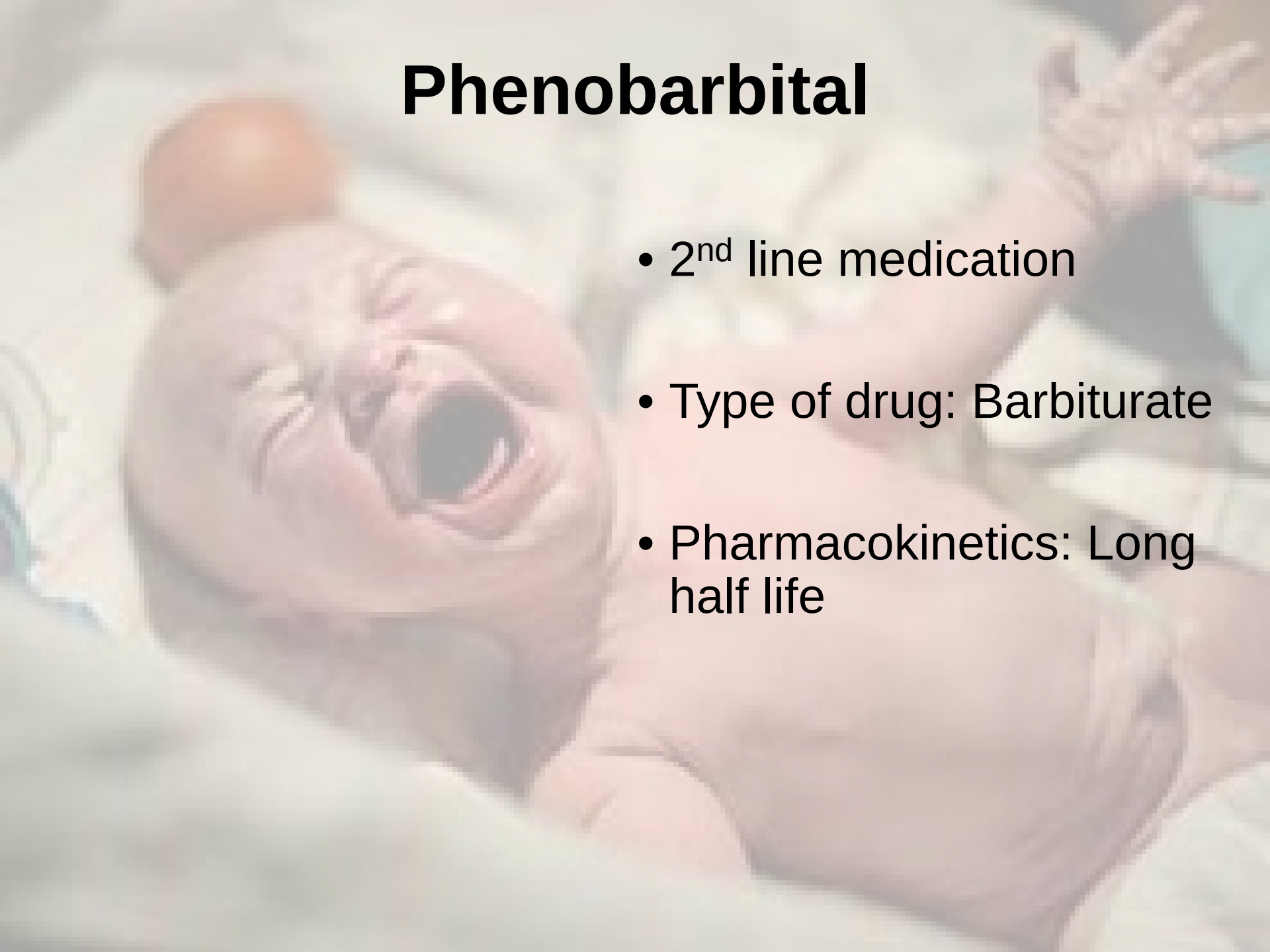
PHARMACOLOGIC MANAGEMENT

2nd Line: Phenobarbital, Clonidine

Phenobarbital



- 2nd line medication
- Type of drug: Barbiturate
- Pharmacokinetics: Long half life

Phenobarbital

ADVANTAGES	DISADVANTAGES
• Decreased length of hospital stay (i.e., discharge home on phenobarbital)	• Enteral formulation contains 10% alcohol • Potential prolonged medication exposure

- Data on morphine/clonidine combination vs. morphine/phenobarbital combination
  - Phenobarbital combination had shorter hospital length of stay, but overall longer medication treatment time

Surran et. al. Journal of Perinatology 2013

Phenobarbital: Use in NAS

- Polysubstance exposed neonate

- Commonly used dosing:
  - Loading dose of 20 mg/kg (given in 1 or 2 doses)
  - Maintenance dose of 5 mg/kg/day

Clonidine

- 2nd line medication
- Type of drug: CNS alpha$_2$ receptor agonist

- Pharmacokinetics
  - Inhibits sympathetic outflow
  - Reduces catecholamine release

Clonidine

ADVANTAGES	DISADVANTAGES
Reduced LOS when combined with other NAS medications	• Reduced blood pressure & heart rate (reduced catecholamine release) • Weaned too quickly → rebound hypertension & tachycardia

Clonidine: Use in NAS

- Used to treat withdrawal in neonates, children, & adults
- Conflicting data on morphine alone vs. morphine/clonidine combination
- Commonly used dosing: unknown
  - Reports of every 3, 4, or 6 hours
  - Reports of continuous drug delivery

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BENEFITS OF COMPLIANCE WITH A STANDARDIZED GUIDELINE

Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome

Walsh MC, Crowley M, Wexelblatt S, et al. *Pediatrics*. 2018;141(4): e20170900

Ohio Statewide Collaborative Quality Improvement Project

Multi-modal quality improvement initiative

GOAL 1	Standardize identification, nonpharmacologic & pharmacologic treatment in Level 2 & 3 NICUs
GOAL 2	Reduce the use of & length of treatment in same Level 2 & 3 NICUs
GOAL 3	Reduce hospital length of stay in pharmacologically treated newborns with NAS

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

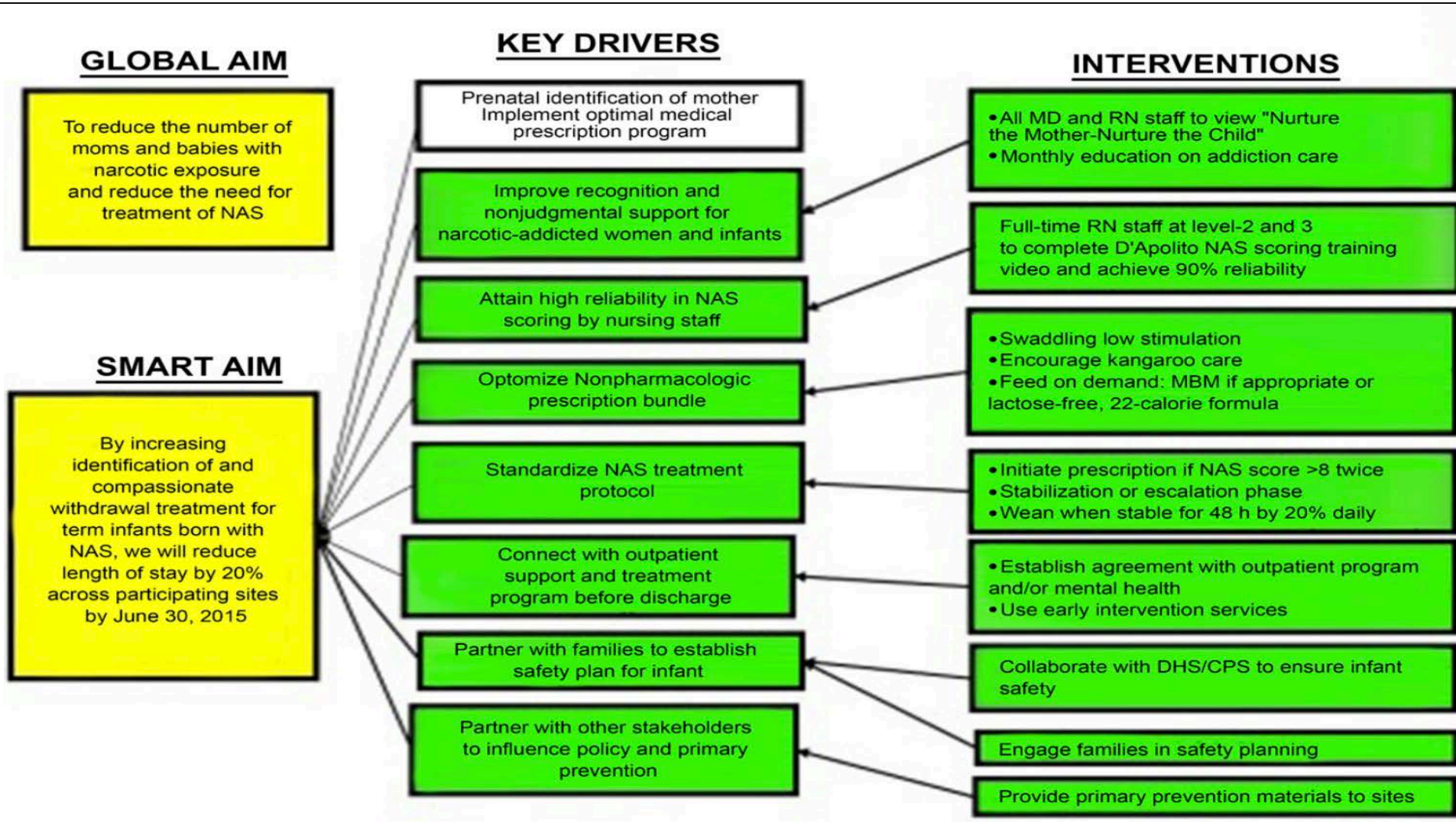

FIGURE 1

Key driver diagram for OPQC to Improve the Care of Newborns with In-Utero Narcotic Exposure. CPS, Child Protective Services; DHS, Department of Hu Services; MBM, maternal breast milk; MD, medical doctor; RN, registered nurse.

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

Ohio Statewide Collaborative Quality Improvement Project

Compliance	PRE-intervention	POST-intervention
Nonpharmacologic bundle	37%	59%
Pharmacologic bundle	59%	68%

- Ninety-six percent of Ohio NICU's participated
- Nearly half of babies received pharmacologic treatment

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

Ohio Statewide Collaborative Quality Improvement Project

Nonpharmacologic ALL OR NONE

1: Swaddling

2: Low Stimulation or Rooming In

3: Breast milk and/or Low Lactose

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Ohio Statewide Collaborative Quality Improvement Project

Pharmacologic ***ALL OR NONE***

1: Treatment initiated appropriately

2: Unit primary opiate given

3: Weaning begun 48hr after stabilization

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Ohio Statewide Collaborative Quality Improvement Project

Pharmacologic Intermediate process

1: Frequency of dose escalation

2: Failed weaning

3: Percent of infants with either or both

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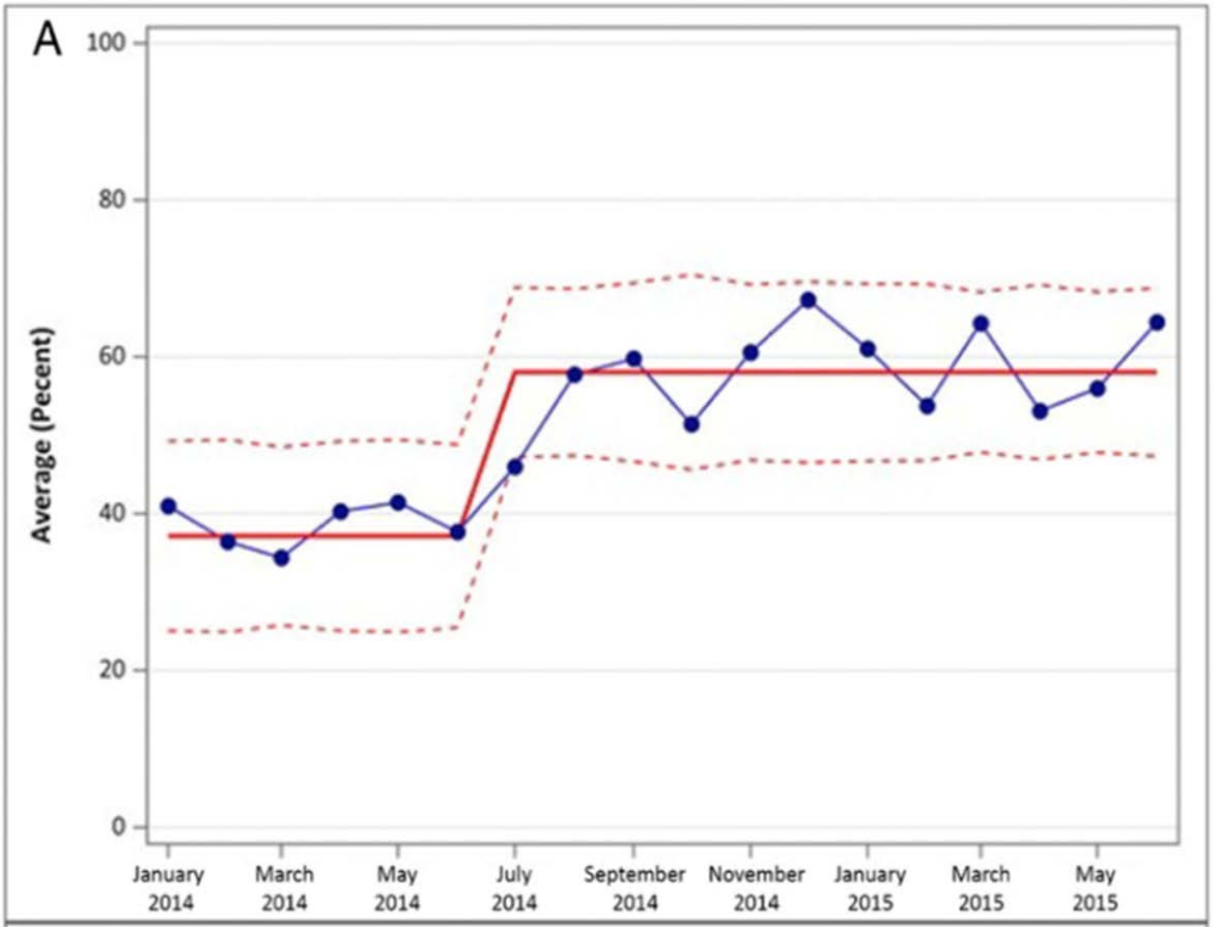
Ohio Statewide Collaborative Quality Improvement Project

Nonpharmacologic bundle compliance



- Significant improvements in this bundle
- Centerline shift: increase by 21% from 37% to 59%

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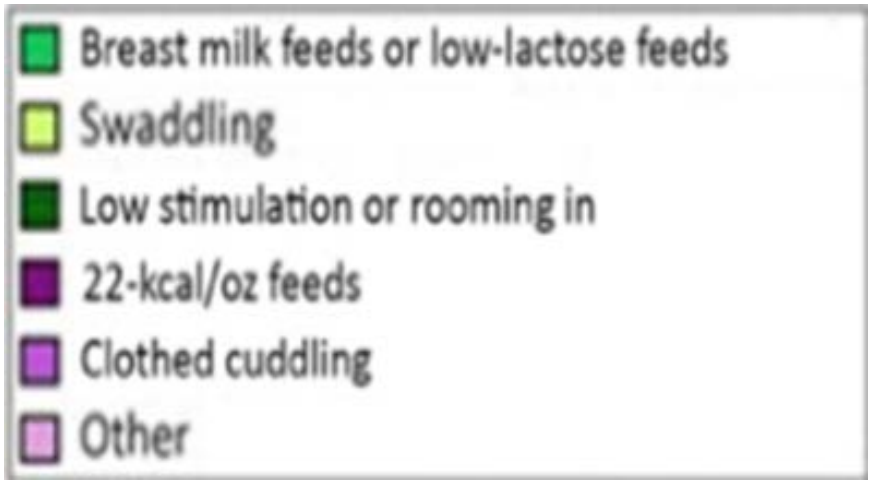
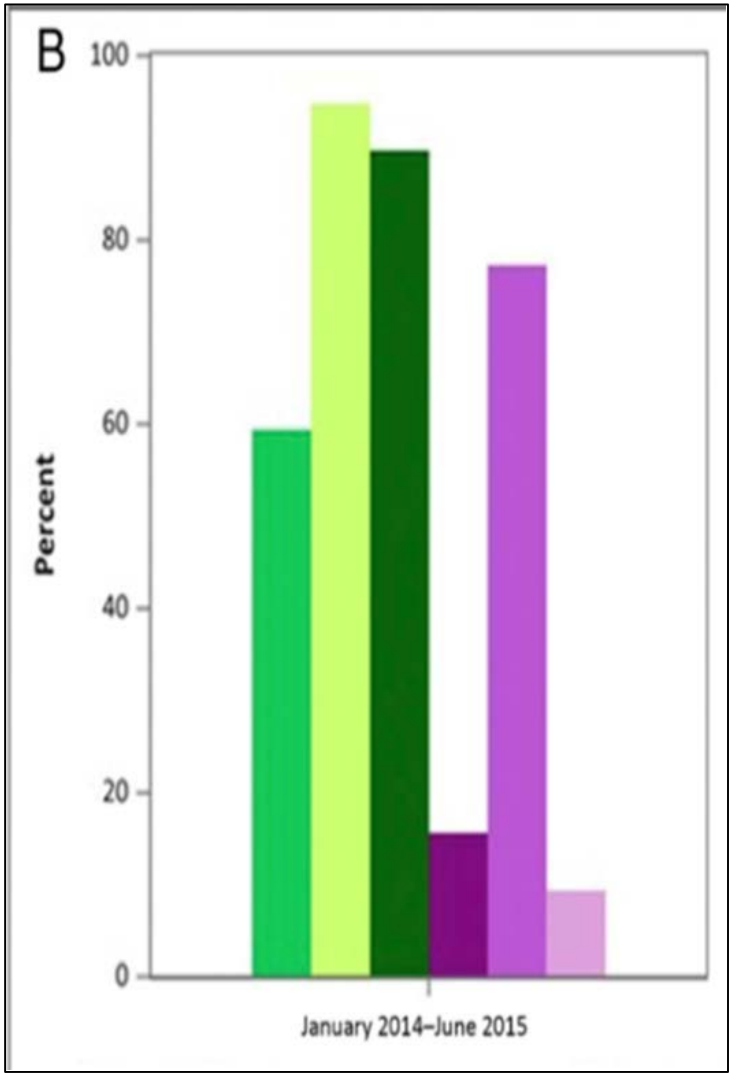
Nonpharmacologic bundle compliance

- Criteria met in individual elements





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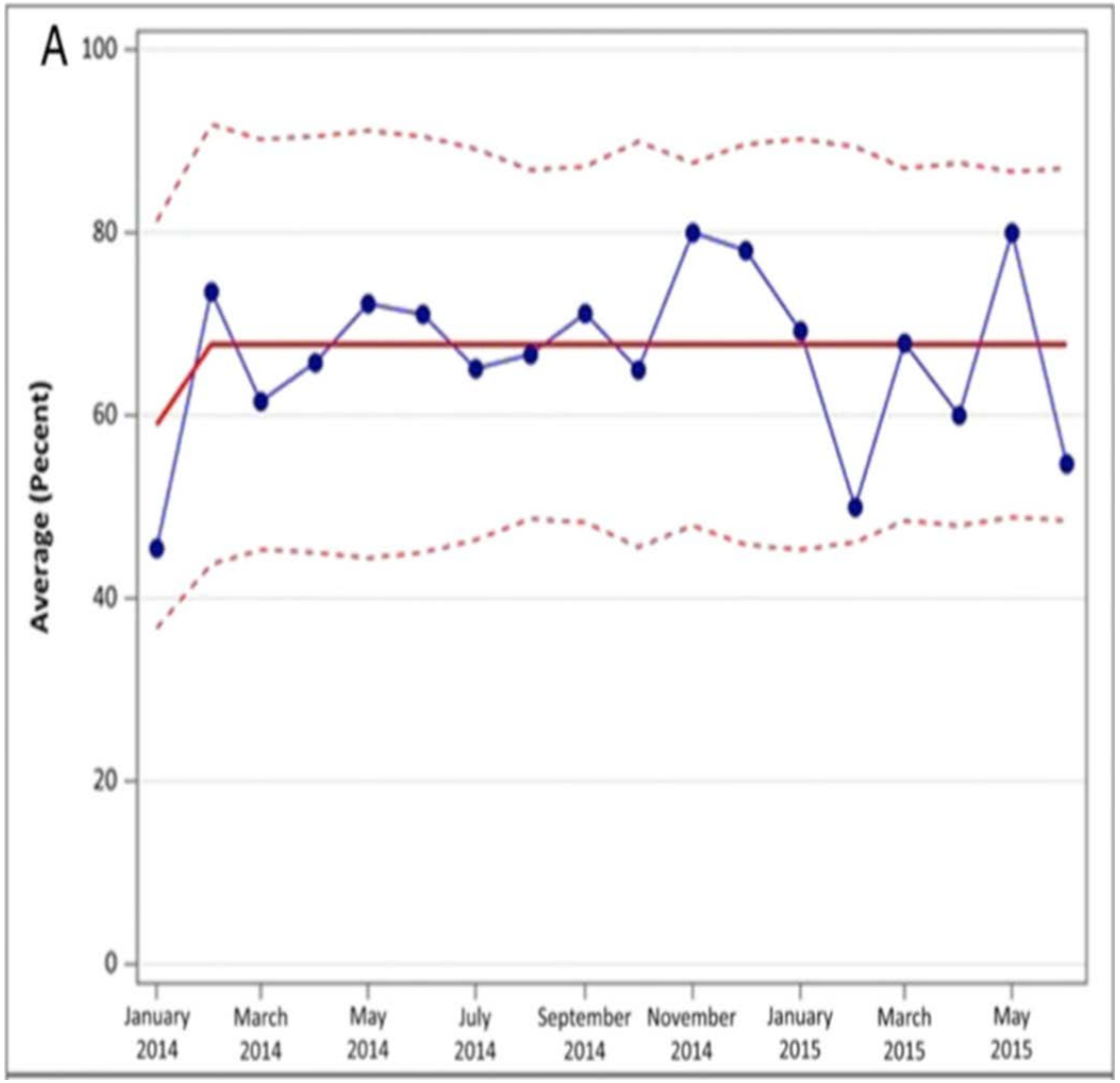
Pharmacologic bundle compliance

- Outcome only reported for Morphine in this bundle
- Centerline shift: Increase from 59% to 68%

*Missing Methadone cohort (i.e. Underreporting true compliance)



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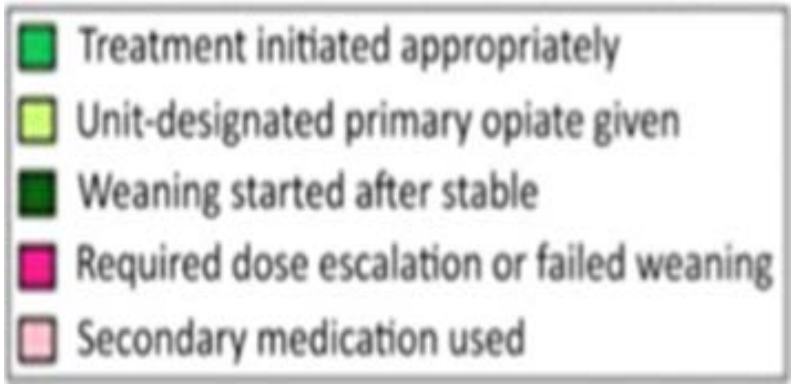
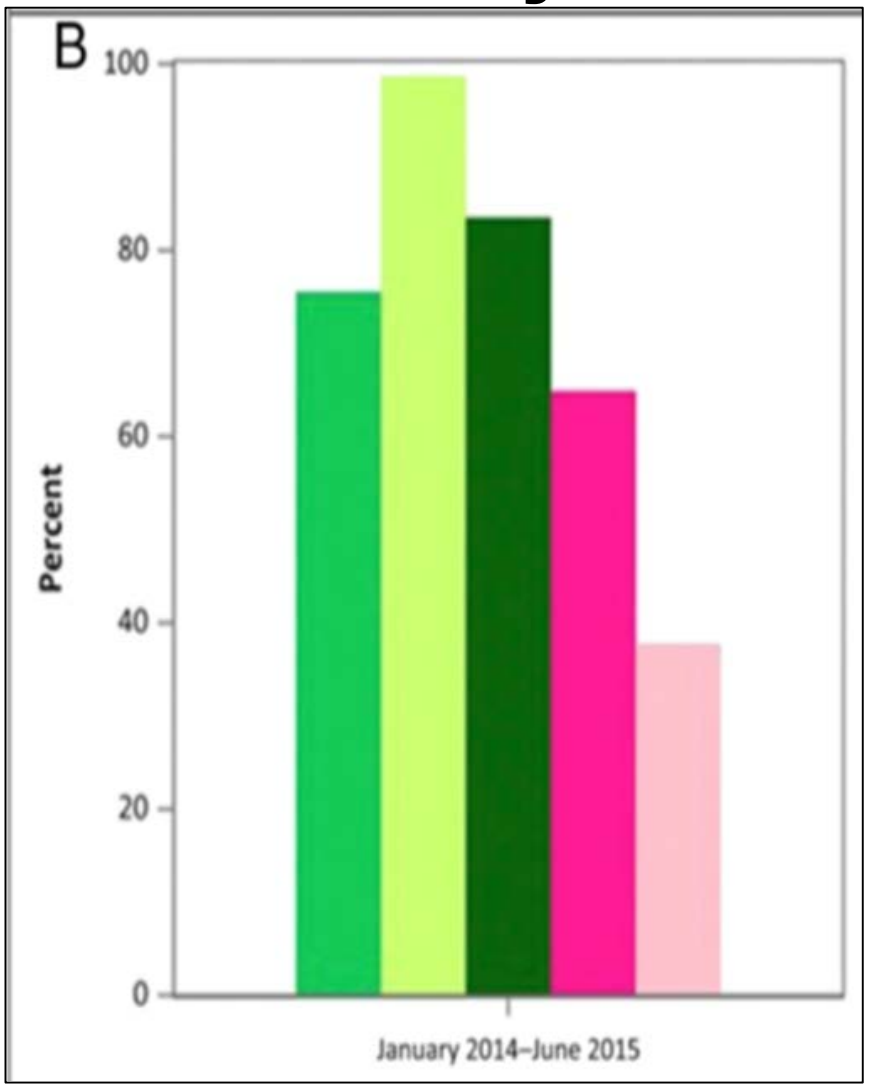
Pharmacologic bundle compliance

- Criteria met in individual elements





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Ohio Statewide Collaborative Quality Improvement Project

Pharmacologic Intermediate process

- Significant decrease in failed weaning/dose escalation
- Centerline shift: Decrease from 67% to 59%

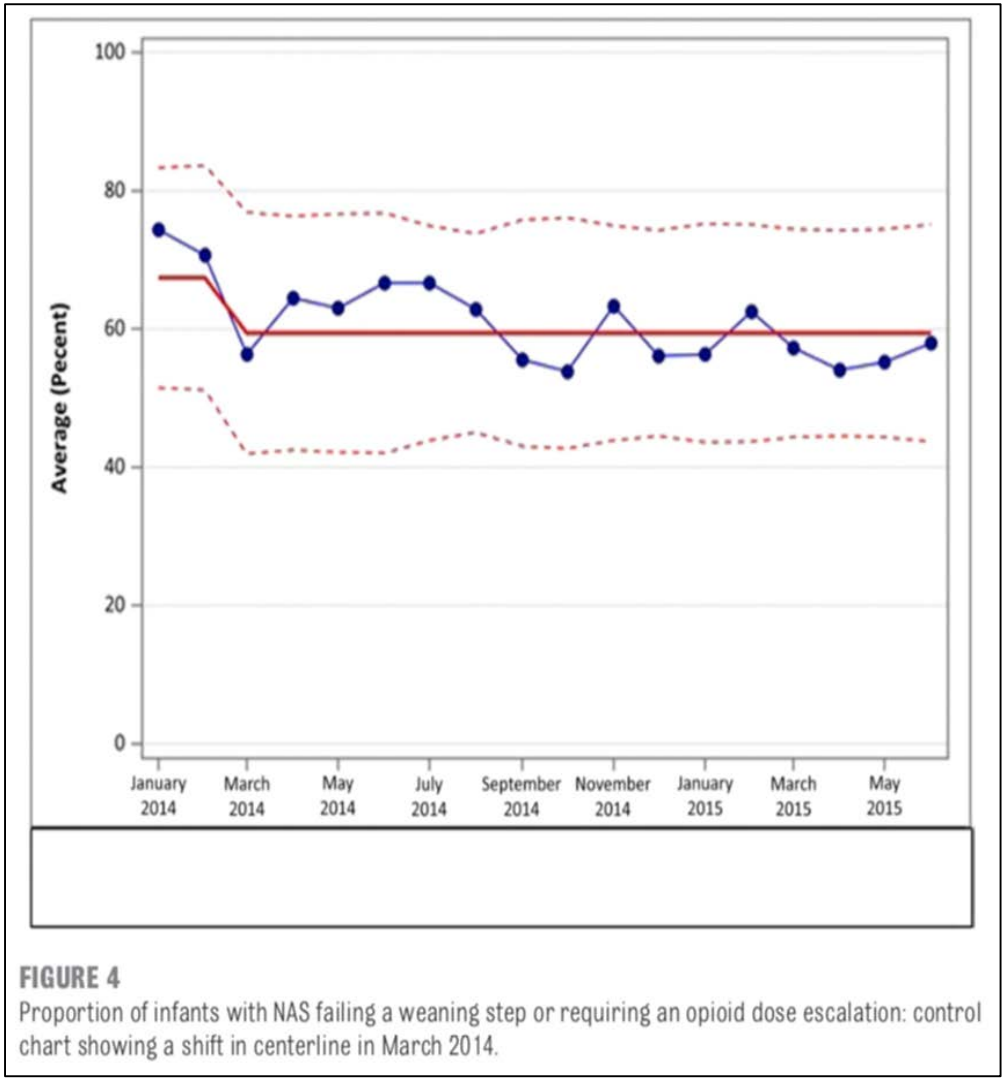

FIGURE 4
Proportion of infants with NAS failing a weaning step or requiring an opioid dose escalation: control chart showing a shift in centerline in March 2014.

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

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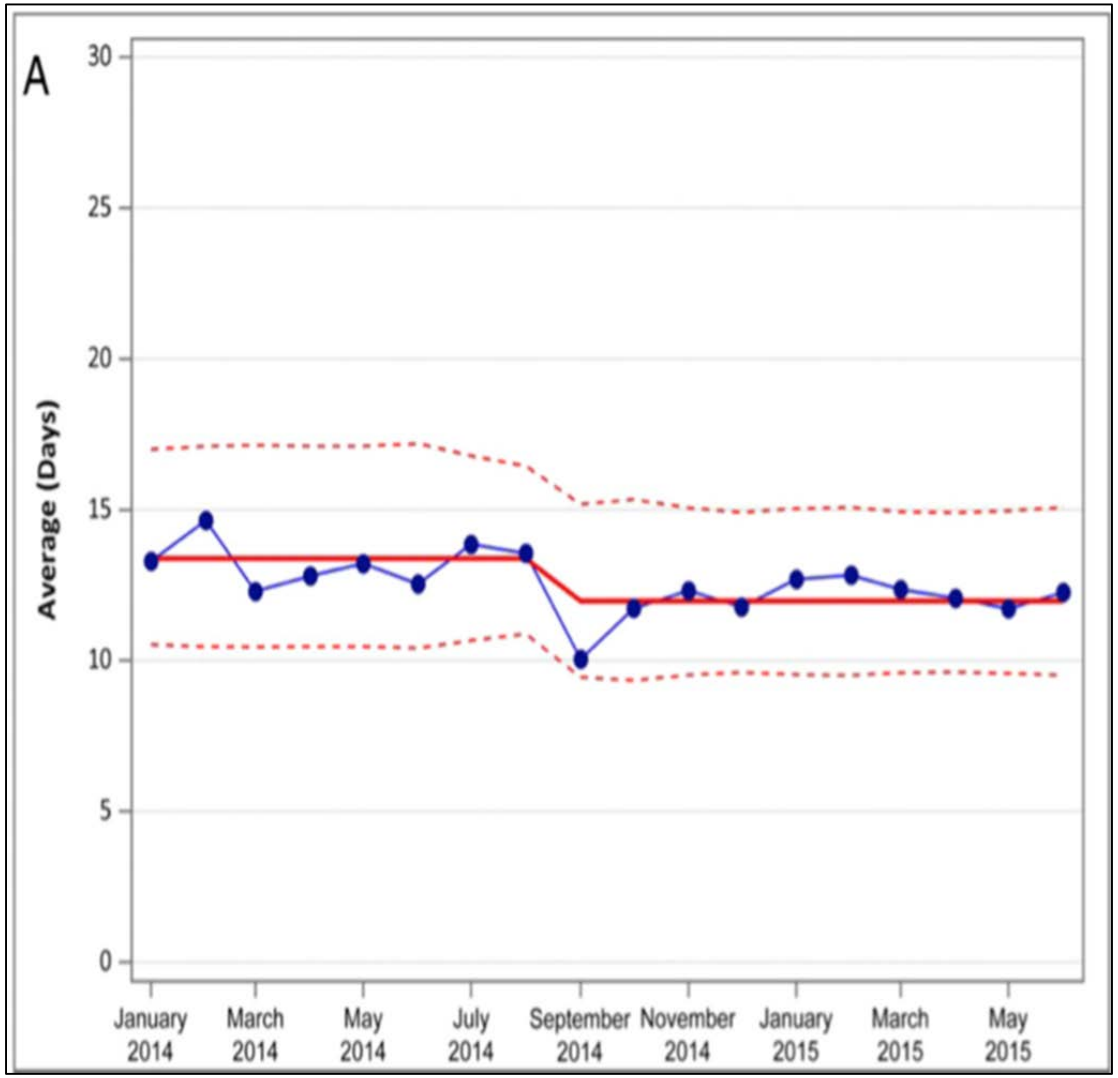

Average length of treatment decreased from 33.8 to 21.3 days

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

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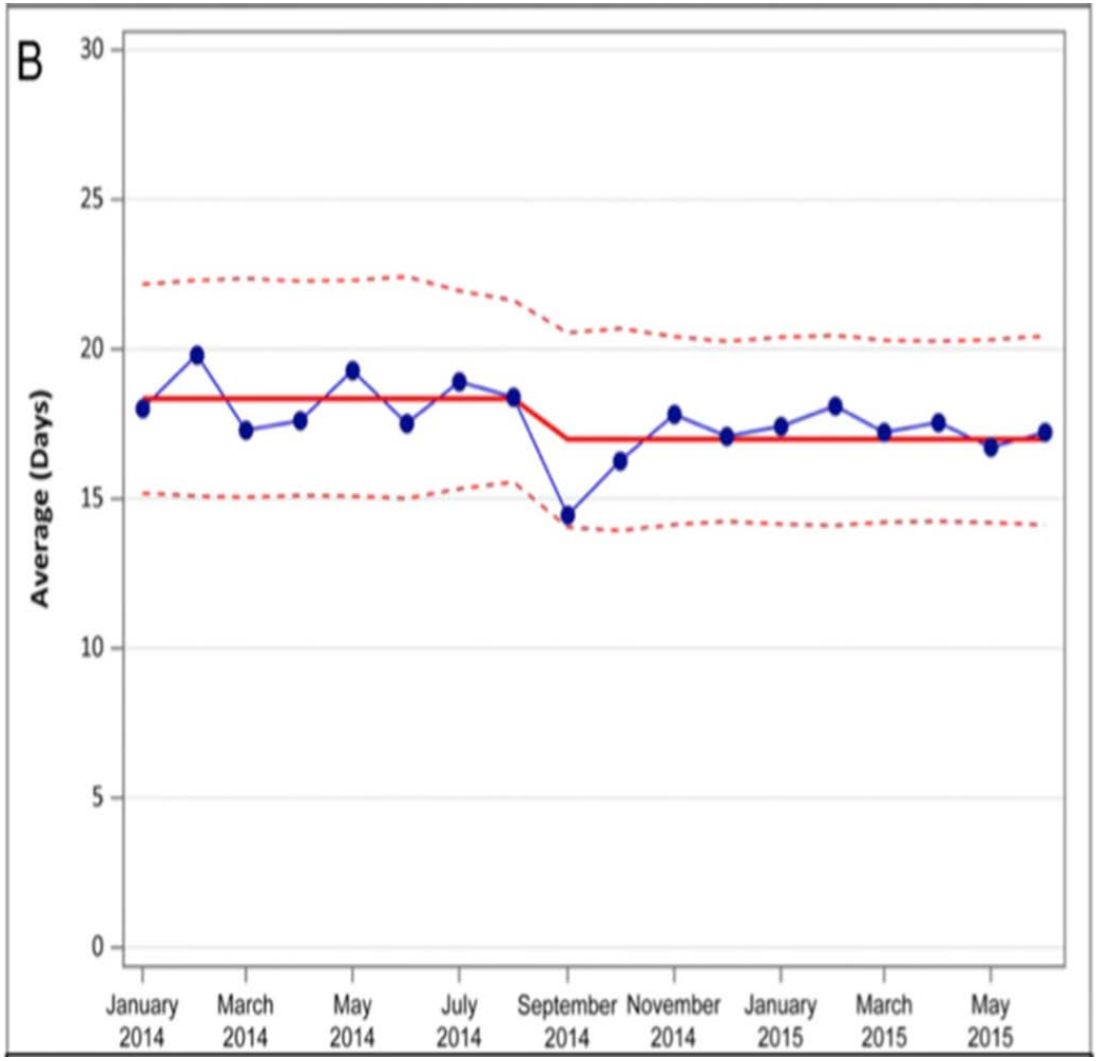


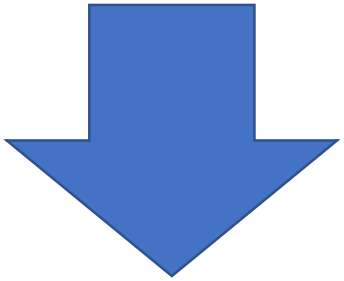
Average length of stay decreased from 18.3 to 17 days

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

Takeaways

- High reliability achieved with **unit-specific opioid** (99%)
- High reliability achieved with **weaning protocol** (87%)
- Total compliance measure was reduced b the component of treatment initiation (68%), influenced by Finnegan scoring

Therefore, high confidence that



Promoting a uniform, standardized approach to pharmacologic treatment ***is effective in reducing variability & outcomes***

Walsh MC, Crowley M, Wexelblatt S, et al. Ohio Perinatal Quality Collaborative Improves Care of Neonatal Narcotic Abstinence Syndrome. *Pediatrics.* 2018;141(4):e20170900

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INDIVIDUAL HOSPITAL GUIDELINES

- University of Florida/Jacksonville
- Winnie Palmer
- Baycare

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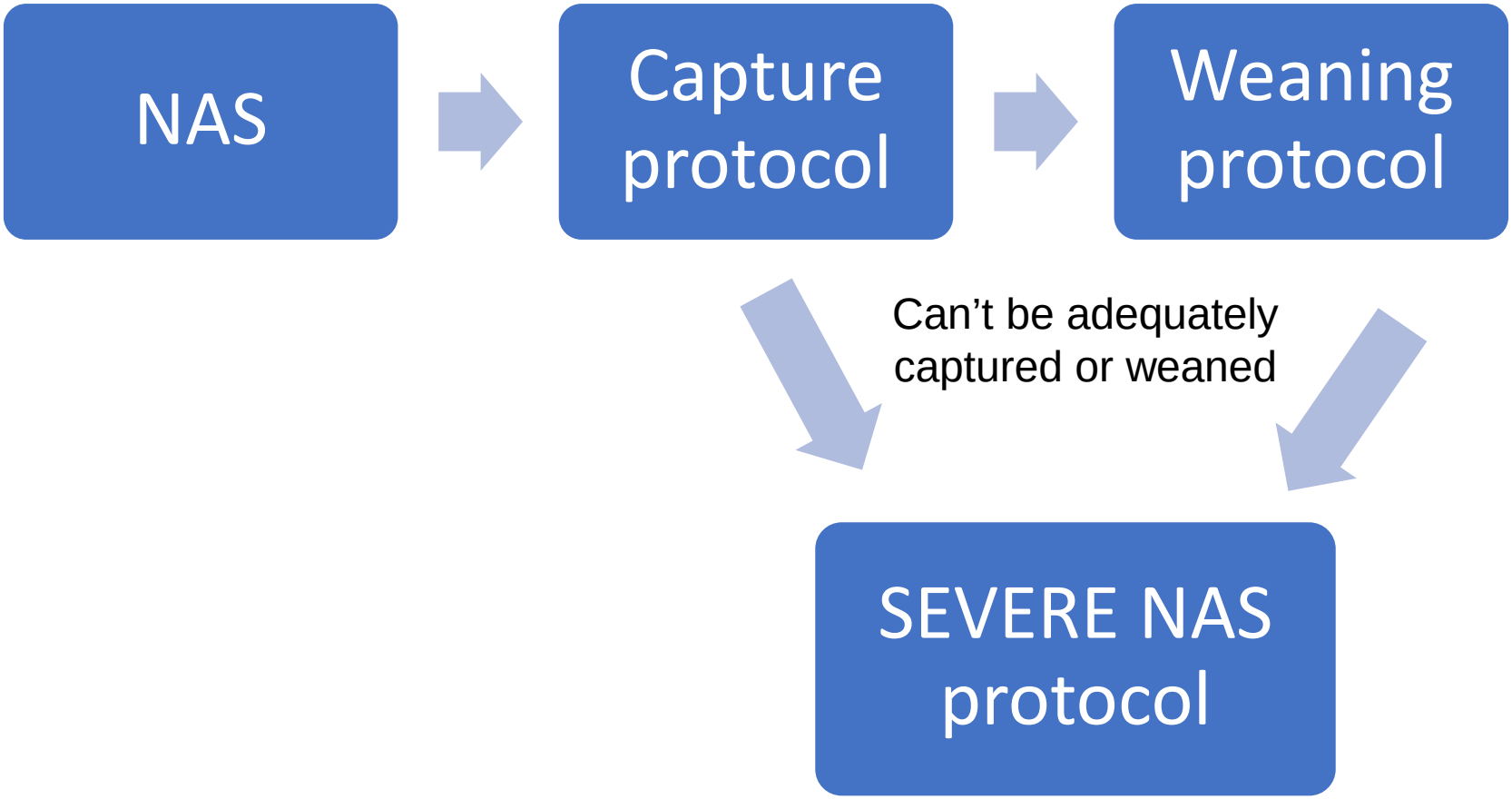
for Mothers and Babies

NAS PROTOCOL/GUIDELINES

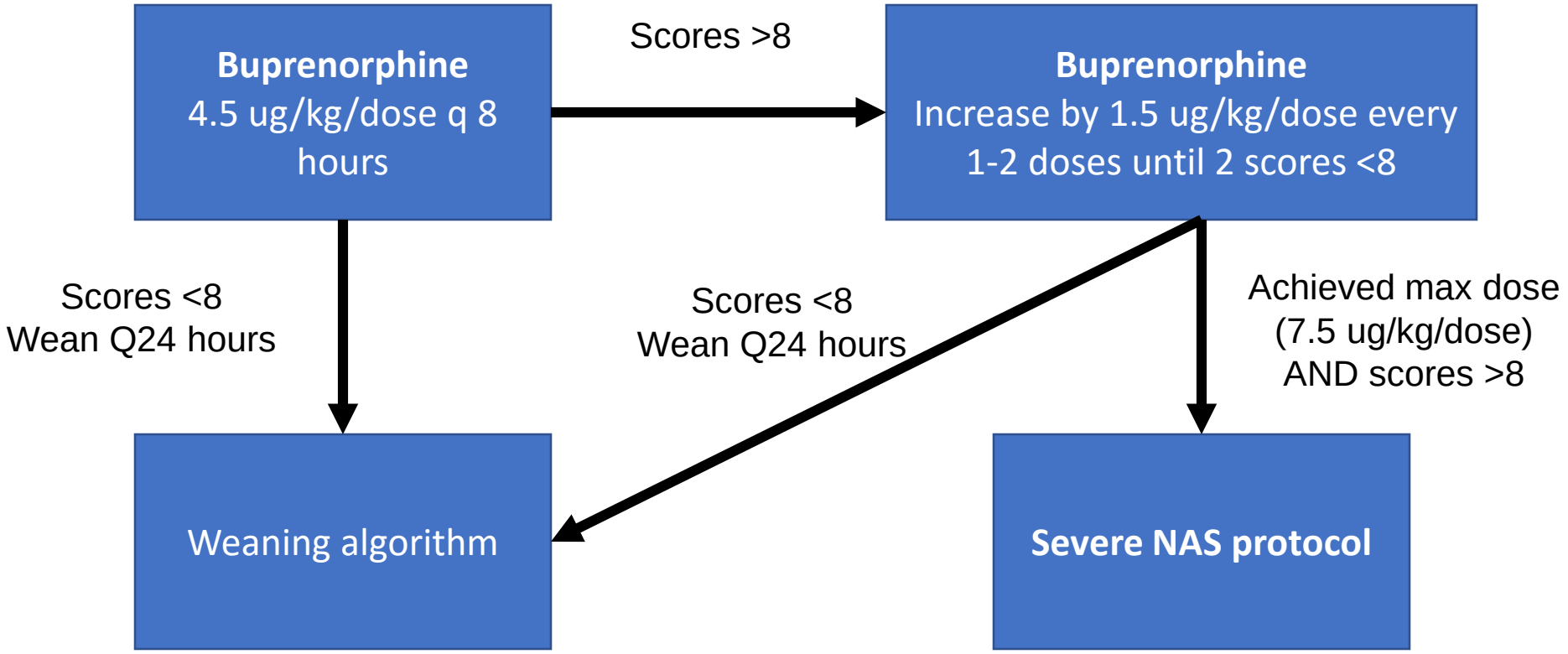
UF Health/Jacksonville

UF/Jacksonville



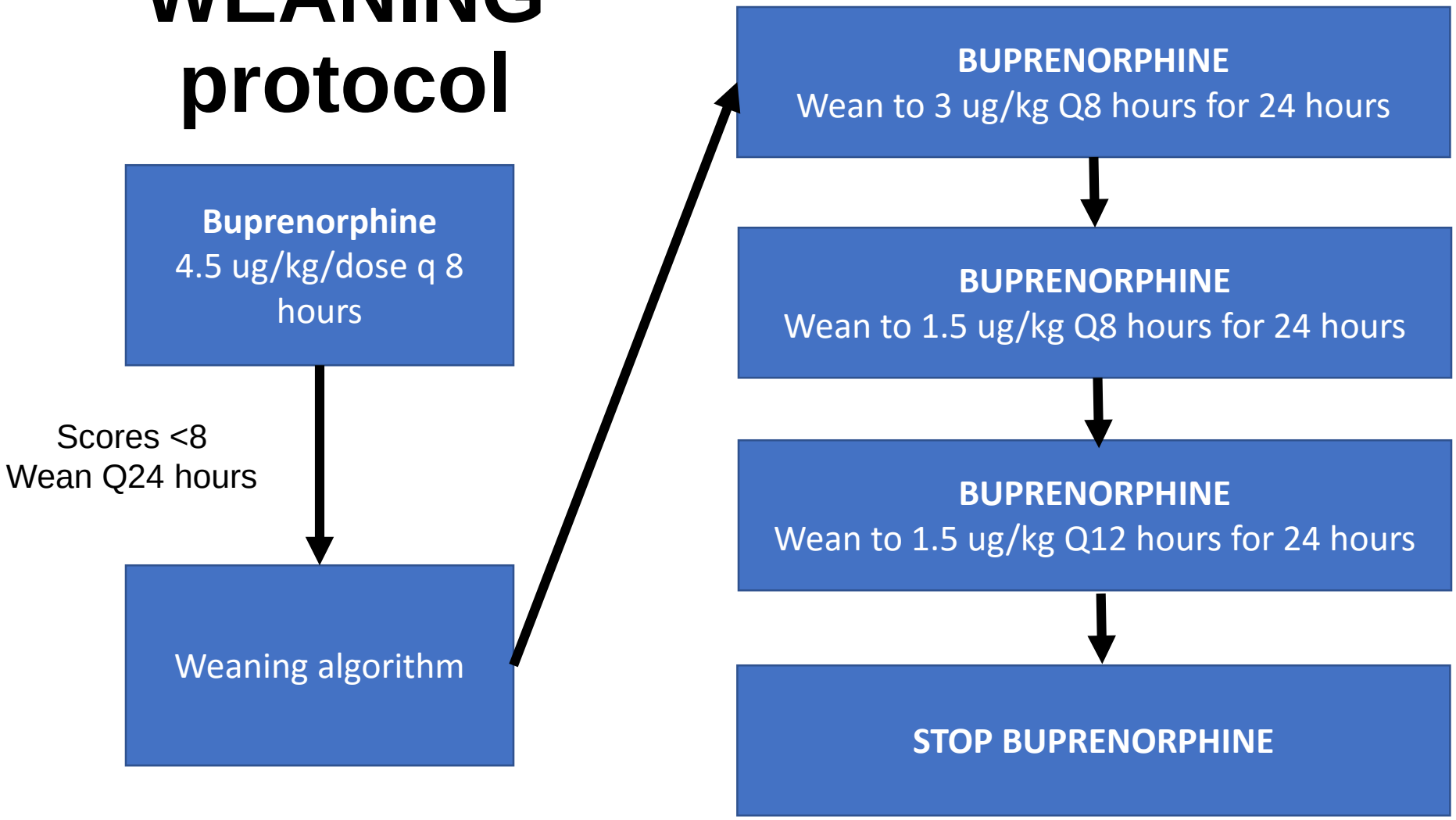
CAPTURE protocol

Initiate buprenorphine when 2 consecutive scores >8 or 1 score >12 despite maximization of non-pharmacologic measures.



- Buprenorphine concentration: 75 ug/ml: compounded with 30% ethanol and simple syrup. If volume greater than 0.5 ml give in 2 separate aliquots with pacifier (2 minutes apart) to help absorption.
- Once captured, consider PT/OT consultation

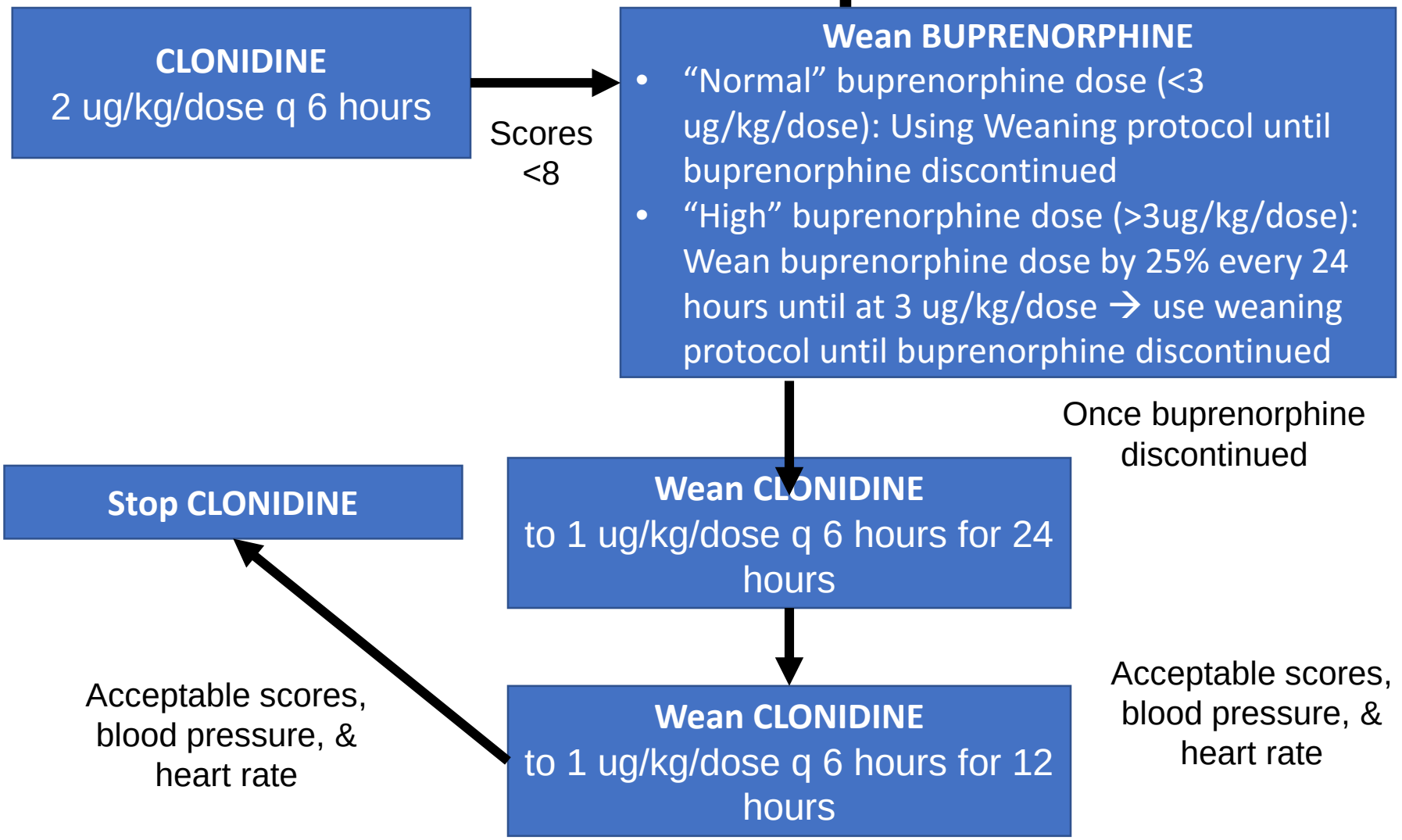
WEANING protocol



NOTES:

- Caregiver rooming (if appropriate and room available) has been shown to facilitate timely weaning.
- If scores average >8 DO NOT wean.
- If scores average <6 consider weaning the dose as early as 16 hours
- Go to Severe NAS protocol if patient can't be weaned every 2-3 days
- Once medication is discontinued observed patient for 1-2 days.

SEVERE NAS protocol



- Use for patients who can't be adequately captured or weaned efficiently.
- Ensure all non-pharmacologic measures are maximized (parent/cuddler holding, rooming in)
- Notify NAS experts of severe NAS case

Notes with Severe NAS protocol

- Clonidine
  - Measure blood pressure Q6 hours while on clonidine & for 1-2 days after clonidine is discontinued.
  - Hold clonidine dose if mean blood pressure < 40 mmHg and/or heart rate <100 bpm.

- If patient doesn't respond to buprenorphine & clonidine use Phenobarbital
  - Load with Phenobarbital (10 mg/kg) x2 doses 12 hours apart
  - Start maintenance dose of 2.5 mg/kg twice a day
  - Once average scores are <8 wean buprenorphine 1st, clonidine 2nd , & phenobarbital 3rd

- Once off all medications, the severe NAS patient should be monitored for 2 days for rebound NAS signs.

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NAS PROTOCOL/GUIDELINES

Winnie Palmer

Winnie Palmer Hospital
NICU Protocol for NAS therapy

Neonatal Abstinence Syndrome Management

NAS Scoring

Begin scoring every 3 hours once NAS is suspected
If maternal narcotic use is known, begin scoring on admission

Non-pharmacologic therapy

Non-pharmacologic therapy is critical to treatment of NAS and with appropriate and timely intervention, it may reduce or eliminate the infant's need fo
pharmacologic therapy. Initiate non-pharmacologic therapy below as soon as scoring is started:

- ☐ Dark and quiet Room Assignment
  - Notify appropriate charge nurse for room assignment to one of the preferred rooms for NAS babies
- ☐ Swaddling, pacifier, holding, gentle up and down rocking
  - Parents and family are the ideal caretakers when able and available, rooming-in is preferred
  - Volunteers should be called when the family is unavailable, particularly in the early stages
- ☐ Attend to any infant needs quickly (wet or soiled diaper, dropping pacifier, etc.)
- ☐ Frequent feeds if able to feed ad lib
- ☐ Encourage breast feeding if no contraindications noted and no other drug abuse documented
- ☐ **NO CD PLAYERS and NO MECHANICAL ROCKERS (mamaRoo is approved)**

Winnie Palmer Hospital
NICU Protocol for NAS therapy

Initiation of Pharmacologic Therapy:

Single score > 8: Attend to any infant needs (feeding, diaper change, etc.), wait 1 hour and repeat scoring (FOR FIRST ELEVATED SCORE ONLY)

- If repeat score ≤ 8, continue with non-pharmacologic intervention
- If repeat score is > 8, initiate Morphine at dose that corresponds to the higher score; MD/NNP to be notified of score q 3 hours.

Subsequent scores > 8: Use the "**Escalation**" column to increase Morphine until scores ≤ 8 (see chart); MD/NNP need to be called with score q 3 hours so morphine dose is increase accordingly until infant is controlled. Once infant is receiving morphine, escalate dose with single scores > 8. DO NOT REPEAT scoring after 1 hour as per protocol for the initial elevated score.

- Maximum morphine dose = 0.1 mg/kg/dose
- If morphine is at 0.1 mg/kg/dose and scores continue to be > 8, Clonidine is added at 1 mcg/kg/dose every 6 hours.
- If scores continue to be > 8, increase Clonidine to 2 mcg/kg/dose every 6 hours. Clonidine may be escalated to 3 mcg/kg/dose q 6 hours for persistently elevated scores.
- If scores remain elevated with increasing pharmacologic therapy, consider that there may be additional non-opioid drug exposure contributing to the infant's clinical picture.

NAS Score	Initial morphine Dosing	Escalation	Re-escalation (post wean initiation)
0-8	**Not Indicated**	**Continue same dose**	**Continue same dose**
9-12	0.04 mg q 3 hours	Increase morphine by 0.02 mg	Increase morphine by 0.01 mg
13-16	**0.08 mg q 3 hours**	**Increase morphine by 0.04 mg**	**Increase morphine by 0.02 mg**
17-20	0.12 mg q 3 hours	Increase morphine by 0.06 mg	Increase morphine by 0.03 mg
21-24	**0.16 mg q 3 hours**	**Increase morphine by 0.08 mg**	**Increase morphine by 0.04 mg**
25 or higher	0.20 mg q 3 hours	Increase morphine by 0.1 mg	Increase morphine by 0.05 mg
Morphine is the Agent of Choice for NICU NAS			

Weaning of Pharmacologic Therapy

Initiate tapering with NAS scores ≤ 8 for 48 hours

- Decrease morphine by 0.02 mg every 24 hours (May decrease more rapidly with scores < 5)
- Once off morphine for 24 hours with scores ≤ 8, reduce Clonidine dose by 50% for 24 hours, then discontinue.

Re-escalation of Pharmacologic Therapy

If scores increase to > 8 once weaning has begun, re-escalate morphine dose with each score > 8 using the "Re-escalation" column above

Winnie Palmer Hospital
NICU Protocol for NAS therapy

Morphine – initiation

Begin morphine with 2 scores > 8, 1 hour apart

- 9-12 = 0.04 mg every 3-4 hours
- 13-16 = 0.08 mg every 3-4 hours
- 17-20 = 0.12 mg every 3-4 hours
- 21-24 = 0.16 mg every 3-4 hours
- ≥ 25 = 0.20 mg every 3-4 hours

Winnie Palmer Hospital NICU Protocol for NAS therapy

Morphine – continuation therapy

- For each subsequent score > 8, ***increase*** dose by:
  - 9-12 = 0.02 mg every 3-4 hours
  - 13-16 = 0.04 mg every 3-4 hours
  - 17-20 = 0.06 mg every 3-4 hours
  - 21-24 = 0.08 mg every 3-4 hours
  - ≥ 25 = 0.1 mg every 3-4 hours
- Subsequent dosing every 3-4 hours
- If morphine reaches 0.1 mg/kg every 3-4 hours and scores are still > 8, add Clonidine at 1 mcg/kg every 6 hours. May increase to 2-3 mcg/kg q 6 hr

Winnie Palmer Hospital NICU Protocol for NAS therapy

Morphine – weaning

- Once scores are ≤8 for 48 hours, may begin to wean morphine by 0.02 mg every 24
  - May decrease more rapidly with scores <5
- Once off morphine for 24 hours with scores ≤8, reduce Clonidine dose b 50% for 24 hours, then discontinue Clonidine

Winnie Palmer Hospital NICU Protocol for NAS therapy

Morphine – re-escalation

- If scores increase to > 8 on 2 occasions after weaning was started, increase dose with each score >8 by:
  - 9-12 = 0.01 mg every 3-4 hours
  - 13-16 = 0.02 mg every 3-4 hours
  - 17-20 = 0.03 mg every 3-4 hours
  - 21-24 = 0.04 mg every 3-4 hours
  - ≥ 25 = 0.05 mg every 3-4 hours

Winnie Palmer Hospital NICU Protocol for NAS therapy

Clonidine – weaning

- If clonidine was given, continue at the maximum dose until morphine has been stopped for 24 hours.
- Wean by 50% and watch for tachycardia or hypertension or increased NAS scores
- If stable for 24 hours, discontinue clonidine and observe for another 24-48 hours.

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NAS PROTOCOL/GUIDELINES

Baycare

St Joseph's Women's Hospital

Early medication protocol: Morphine

- Scores DURING FIRST 1-2 days of withdrawal

- **≥8 intermittently or 1 scores ≥12**

→ start Morphine dose 0.04 mg/kg/dose q3 hours

- **Consistent scores >12**

→ start Morphine at 0.06 mg/kg/dose q3 hours

Medication escalation: Morphine

- Scores DURING FIRST 1-2 days of treatment for withdrawal

- Continues with high NAS scores (2 scores of 9-12 or 1 score >12)

→increase Morphine dose by 0.01-0.02 mg/kg/dose q 3h

MAX Morphine dose used 0.08mg/kg/dose q3h

- Must assess the effect for 12 hours before another increase

Medication escalation: Adding Clonidine

- Add Clonidine when
  - Morphine at 0.08 mg/kg/dose
  - IF 2 scores 9-12 or 1 score >12
- Start Clonidine at 1 mcg/kg/dose q3h
- Must assess the effect for 12 hours before another increase.
- Clonidine monitoring: blood pressure & heart rate before dose administered
  - Hold Clonidine dose if heart rate <100 bpm or systolic blood pressure <60 mmHg

Medication escalation: Clonidine

- Increase Clonidine dose IF 2 scores 9-12 or 1 score >12
- Can increase Clonidine
  - 1st increase to 2 mcg/kg/dose q3 hours
  - 2nd increase to 2.5 mcg/kg/dose q3 hours
  - 3rd increase to 3 mcg/kg/dose q3 hours
- Must assess the effect for 12 hours before another increase
- Clonidine monitoring: blood pressure & heart rate before dose administered
  - Hold Clonidine dose if heart rate <100 bpm or systolic blood pressure <60 mmHg

Medication escalation:
High doses of Morphine & Clonidine

When Morphine at 0.08 mg/kg/dose

& Clonidine at 3 mcg/kg/dose

IF Morphine preferred

- Increase Morphine to 0.09 mg/kg/dose q3 hours, then to 0.1 mg/kg/dose, then to 0.11 mg/kg, then to 0.12 mg/kg/dose

THIS DOSE MAY LEAD TO IATROGENIC CONCERNS

- Must assess the effect for 12 hours before EACH increase

IF Clonidine preferred

- Increase Clonidine doses 3.5mcg/kg/dose, then 4mcg/kg/dose

Medication weaning: Morphine

ALWAYS wean morphine BEFORE Clonidine
(regardless of Morphine dose)

- Decrease Morphine by ~10% for every 18-30 hours that scores AVERAGE ≤8

- When Morphine is at 0.09 mg/kg/dose q3 hours, go to 0.08 mg/kg/dose q3 hours, then to 0.07 mg/kg/dose, 0.06 mg/kg/dose, 0.05 mg/kg/dose...

- If scores are higher after weaning, assess the effect for 12 hours before returning to the previous dose

Medication weaning: Morphine

ALWAYS wean morphine BEFORE Clonidine
(regardless of Morphine dose)

- Once Morphine is at 0.04-0.05 mg/kg/dose Q3 hours, frequency can be spaced *(still before Clonidine weaning)*

- Decrease Morphine frequency to q6 hours for 18-30 hours
  - IF scores AVERAGE ≤8 can continue weaning frequency (e.g., if at 0.05 mg/kg/dose q3 hours wean to q6 hours, then q12 hours, then discontinue)

- If scores are higher after weaning, assess the effect for 12 hours before returning to the previous interval

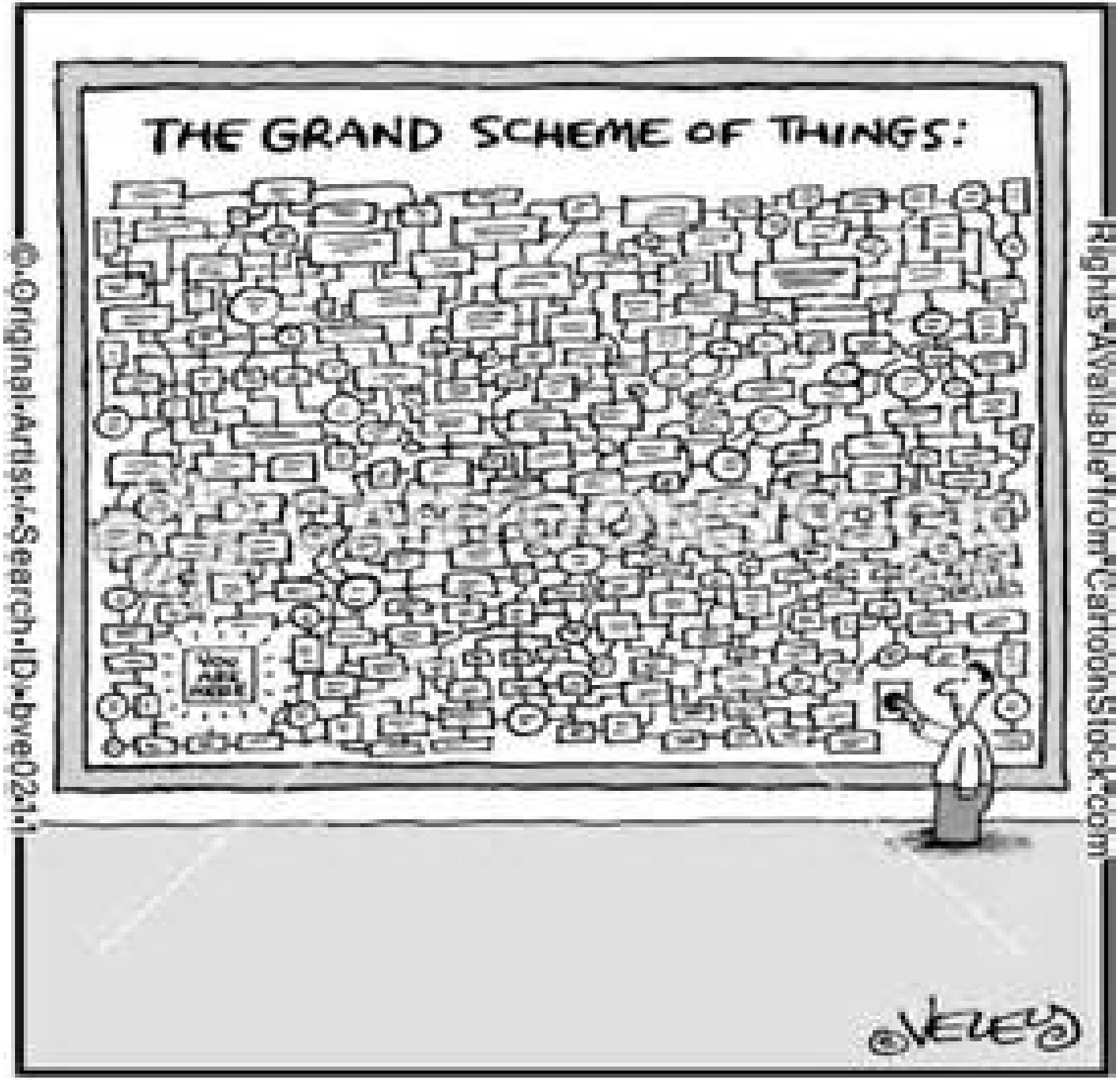
Medication weaning: Clonidine

- Once Morphine has been discontinued for 18-30 hours, consider Clonidine weaning
- Decrease Clonidine dose by 1 mcg/kg/dose changes
- Decrease Clonidine frequency once at 1 mcg/kg/dose
  - Start at q6 hour frequency for 18-30 hours
  - IF scores AVERAGE ≤8 can continue weaning frequency (e.g., if at q6 hours wean to q12 hours, then discontinue)
- If scores are higher after weaning, assess the effect for 12 hours before returning to the previous interval

Partnering to Improve Health Care Quality
for Mothers and Babies

USING PROCESS MAPPING IN NAS

Maya Balakrishnan & Karen Fugate


THE GRAND SCHEME OF THINGS:
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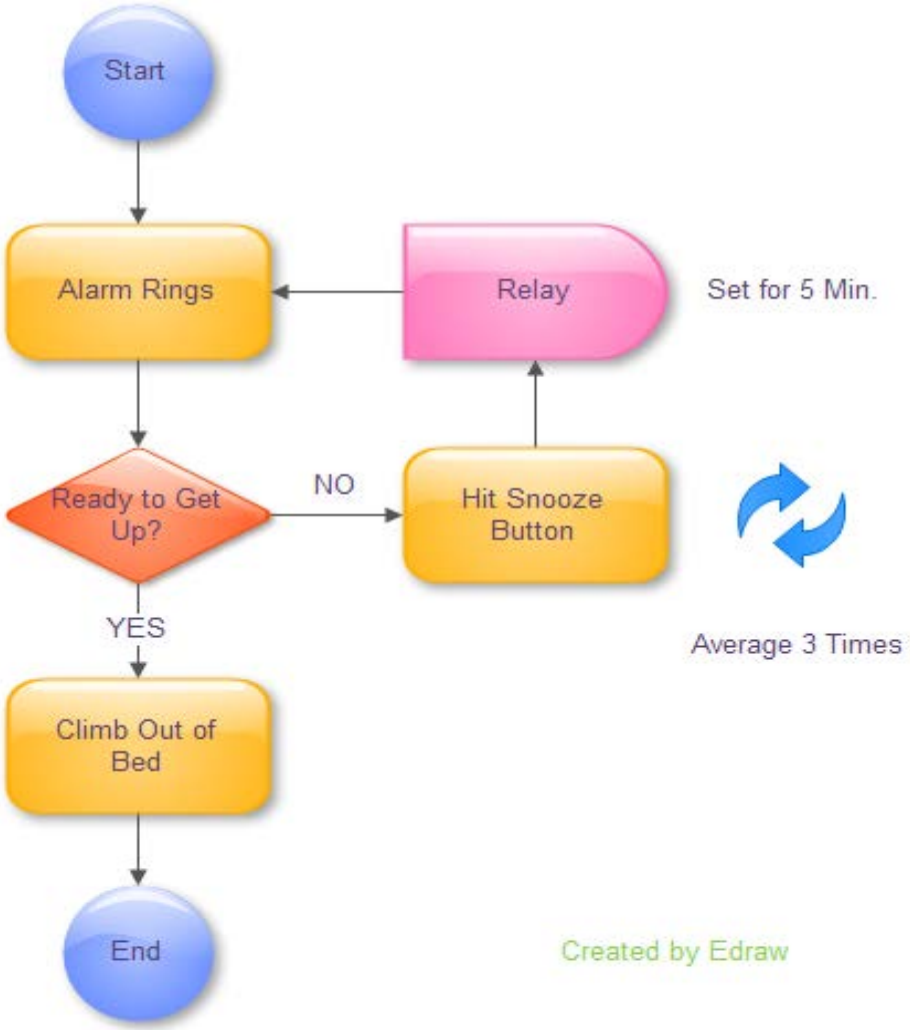
What is a process flow map?

AKA, Flowcharts, Flow maps, Flow diagrams, Algorithms

- Tool in your toolbox
- Easy-to-understand visual model of a process
- Standardizes a process
- Can improve efficiency
- Sequence of steps to get from “A” → “B”

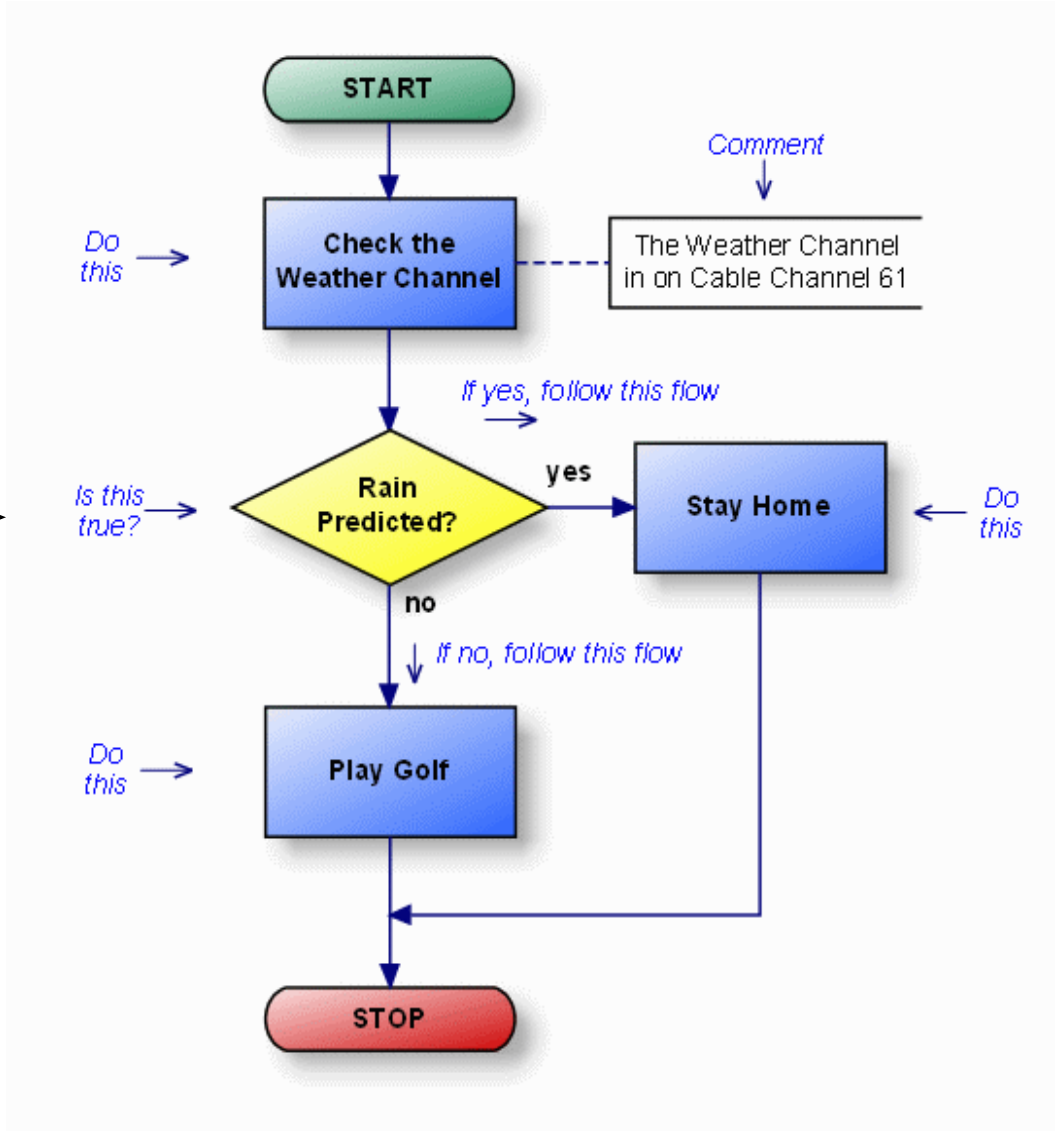


Why use a process flow map for NAS management?

- **Clarify current state**
  - Basis for discussion
  - Standardize a process
- **Communicate a process**
  - Clarify process for team & others
- **Analyze a process**
  - Opportunities, inefficiencies, bottlenecks

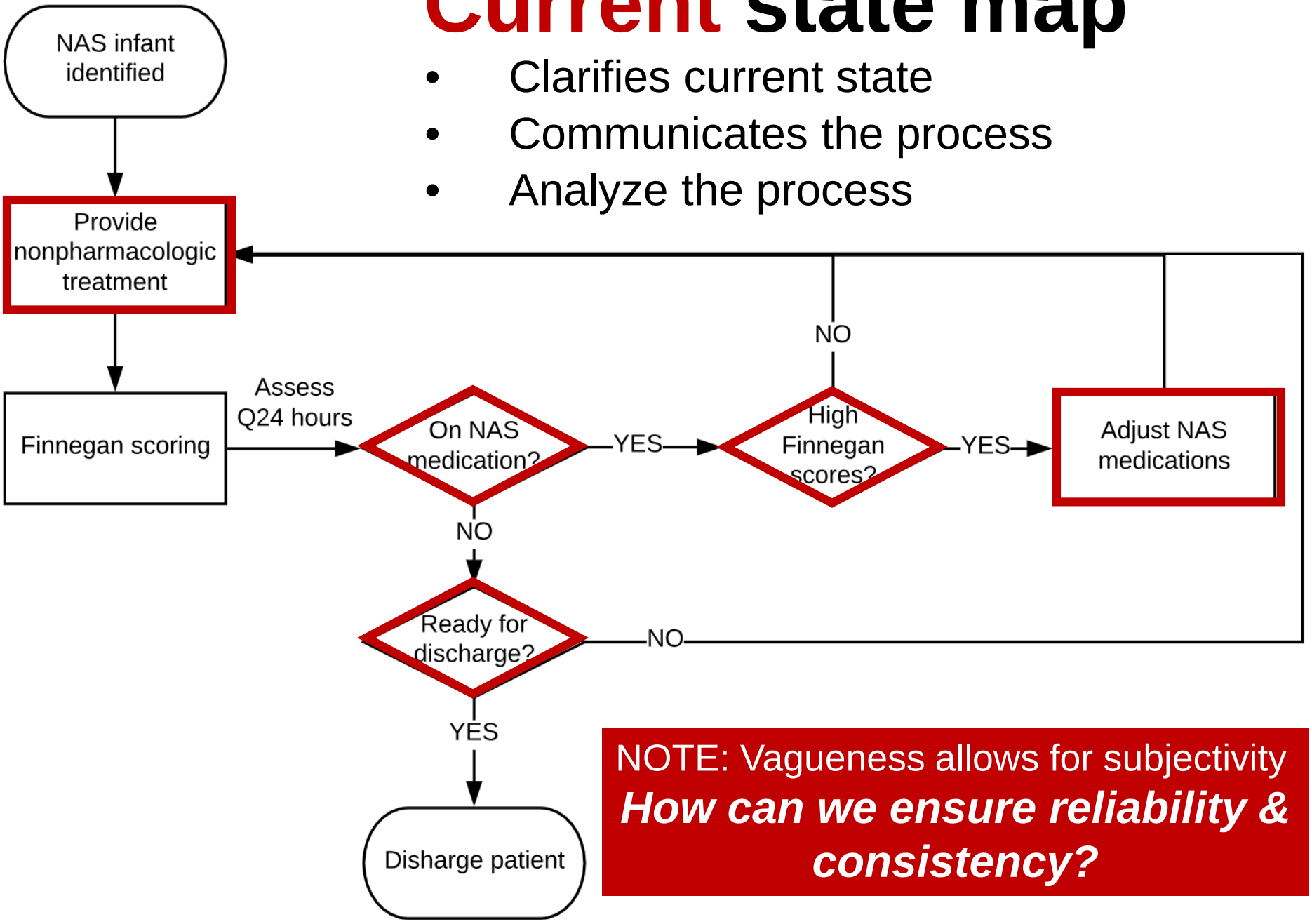
Process map symbols

- Start/End
- Step
- Decision
- Delay
- Direction



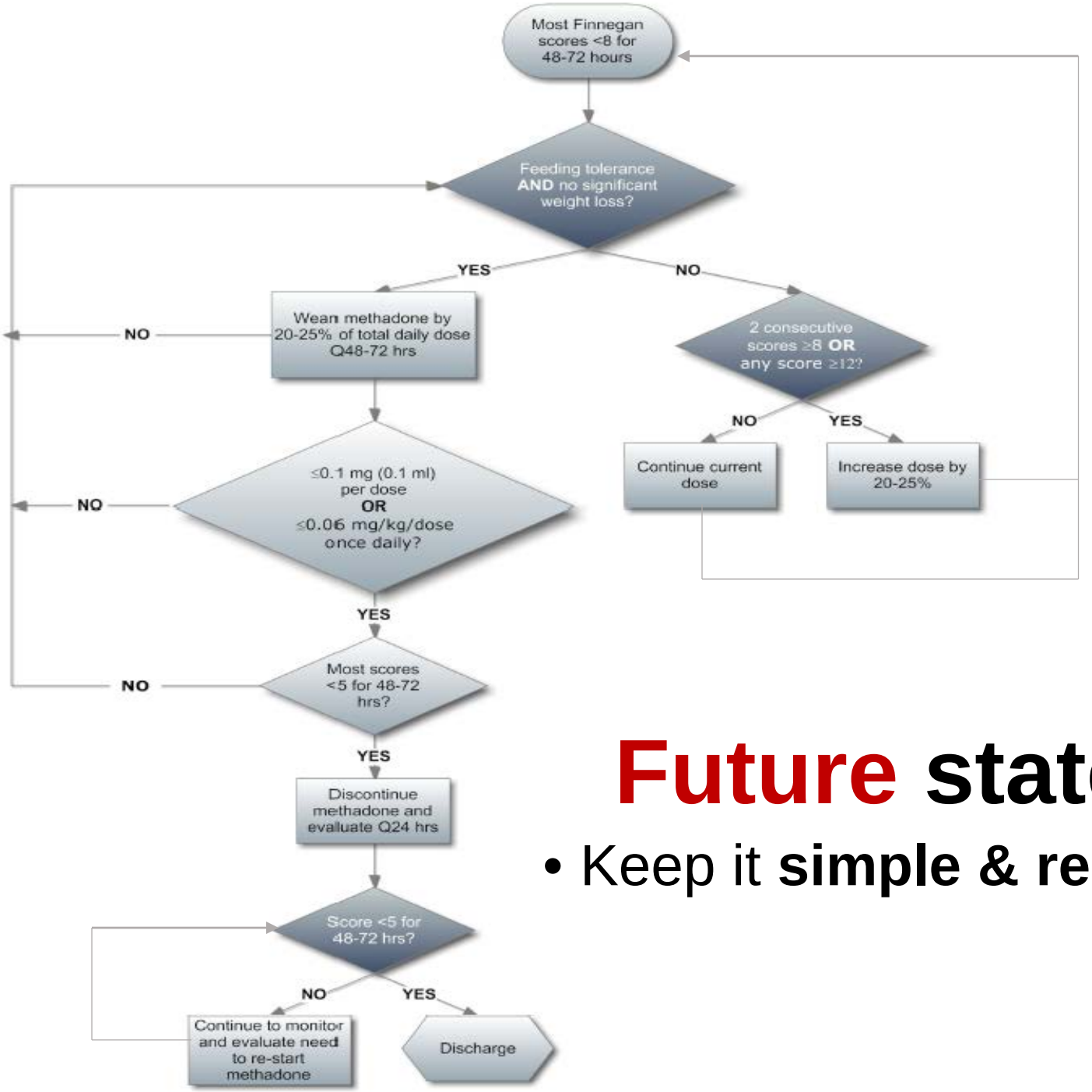
Current state map

- Clarifies current state
- Communicates the process
- Analyze the process



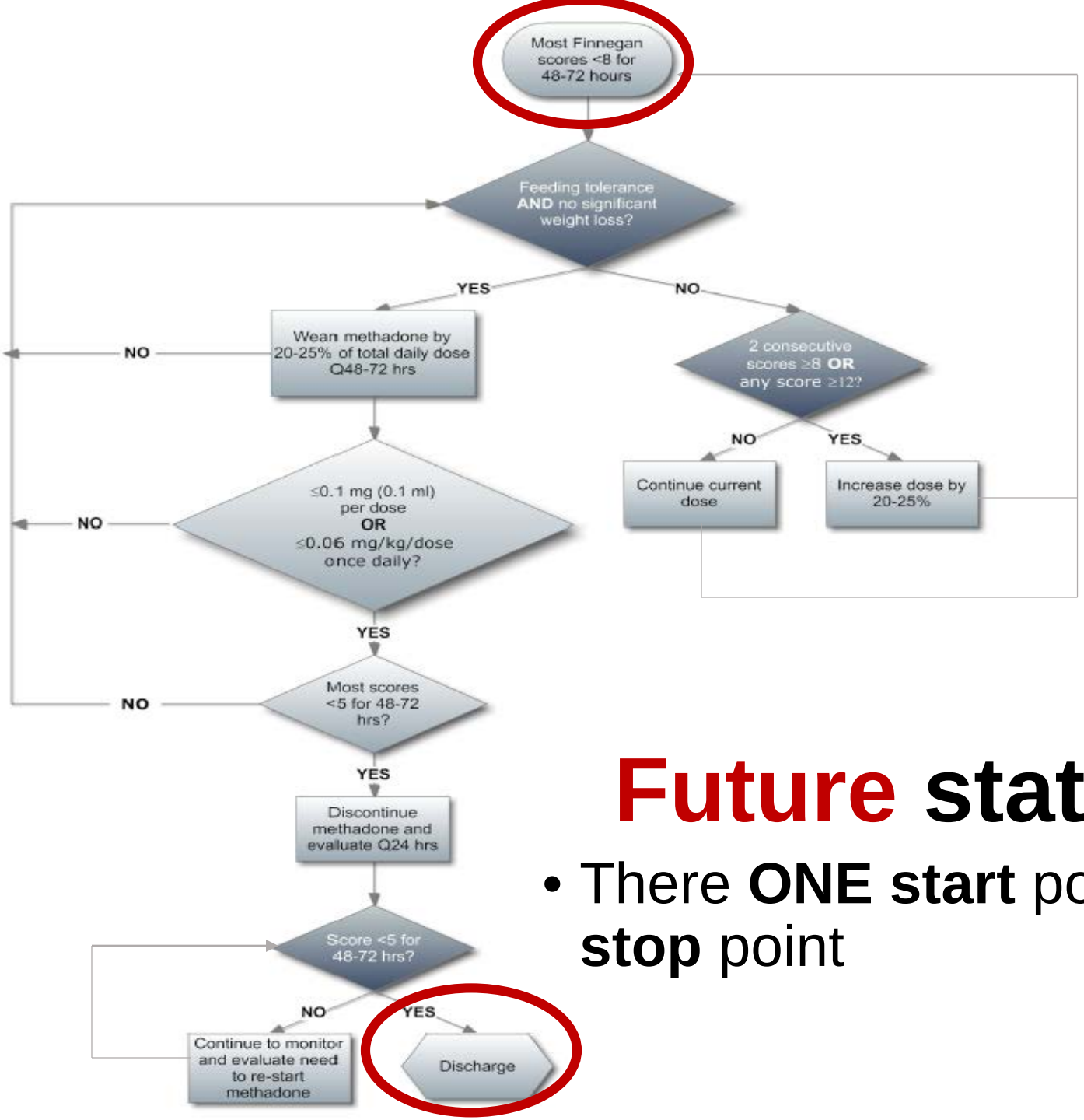
NOTE: Vagueness allows for subjectivity

How can we ensure reliability & consistency?



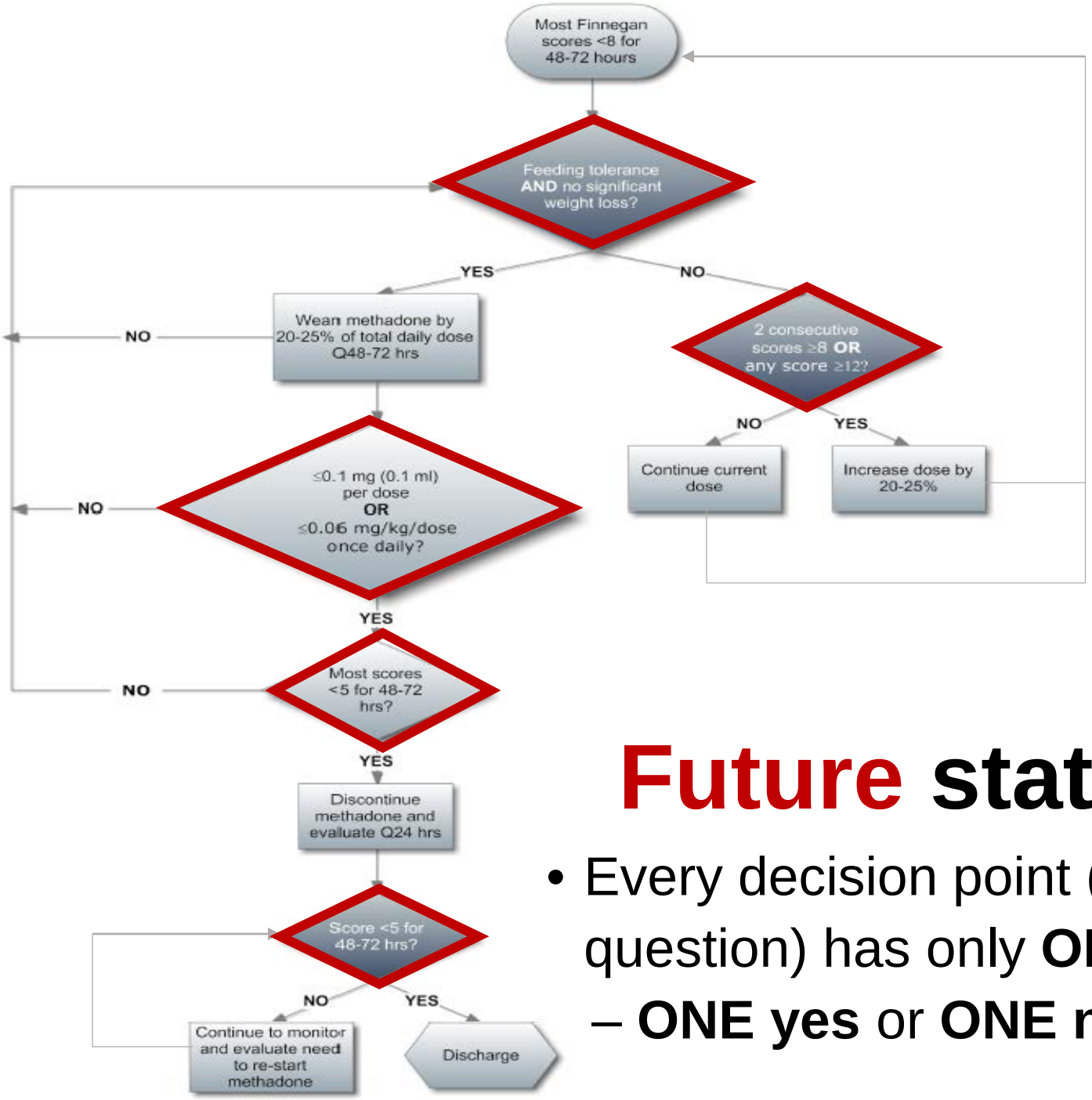
Future state map

- Keep it **simple & readable**



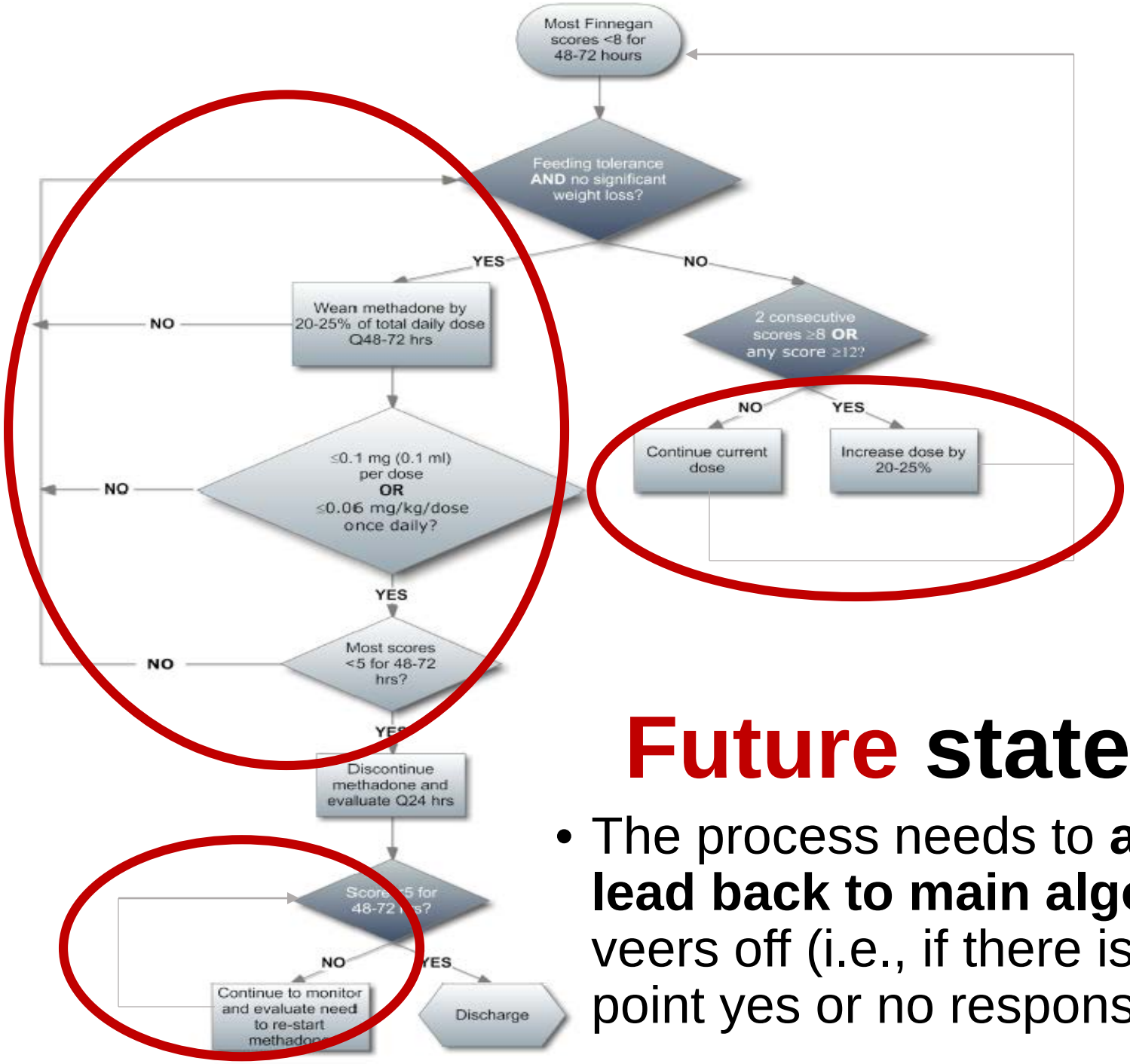
Future state map

- There **ONE start** point & **ONE stop** point



Future state map

- Every decision point (i.e., question) has only **ONE response** – **ONE yes** or **ONE no**



Future state map

- The process needs to **always lead back to main algorithm** if veers off (i.e., if there is a decision point yes or no response)

Tips on mapping

- “Walk” or observe the outlined process
- Sketch your map (sticky notes, butcher paper)

→ use an online application to create a Process map

Microsoft Word™, Excel™

- https://www.wikihow.com/Create-a-Process-Flowchart

Lucidchart.com (Free trial software)

- https://www.lucidchart.com/

Our challenge to your team

Develop a pharmacologic treatment algorithm for NAS & share it with our FPQC teams

- Housestaff Handbook
- Stipend & Benefits
- Resident Assistance Program
- Resident Advisory Committee
- Education Funds
- Taxi Services
- Training Requirements
- FL Medical Licenses
- Graduating/Exit Requirements
- New Innovations Login
- Near Miss Reporting
- Frequently Asked Questions
- Anonymous Reporting
- Research Resources
- Quality Improvement

Quality Improvement for Residents & Fellows

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What is Quality Improvement?

A formal approach to the analysis of performance and systematic efforts to improve it. Learn more through this talk given by Dr. Mike Evans called "An Illustrated Look at Quality Improvement in Health Care."

USF Quality Improvement Mission

Guided by a focus on quality, patient safety, and co-production of care, our physicians will strive to continuously improve healthcare delivery in our communities. We are invested in co-producing doctors who continuously improve healthcare.

QI vs Research

What are some differences between QI and Research? Read more at Quality Improvement Versus Research.

Q & A

If you have a question, please enter it in the Question box or Raise your hand to be un-muted.

We can only unmute you if you have dialed your Audio PIN (shown on the GoToWebinar side bar).

Save the Date: April 4-5, Tampa
FPQC 2019 Conference

- Racial/ethnic disparities in maternal mortality & morbidity – Elizabeth Howell, MD, MPP

  Professor of Population Health Sciences & Policy, Obstetrics, Gynecology, and Reproductive Science, & Psychiatry, Mount Sinai Health System

- Parent topic – Lelis Vernon

  NICU Mom, National Network of Perinatal Quality Collaboratives, Patient and Family Centered Care advocate

- Racial/ethnic disparities in NICU care quality – Jochen Profit, MD

  Associate Professor of Pediatrics (Neonatology), Stanford University

- Change Management– Bethany Robertson, DNP, CNM

  Assistant Professor Clinical, Emory University

For More Information, go to www.fpqc.org

Next NAS Webinar

Tuesday, February 19 at 1:00 pm ET

Topic: Eat Sleep Console Scoring

THANK YOU!

Technical Assistance:

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