GEORGIA PERINATAL QUALITY COLLABORATIVE

Neonatal NAS Initiative Webinar

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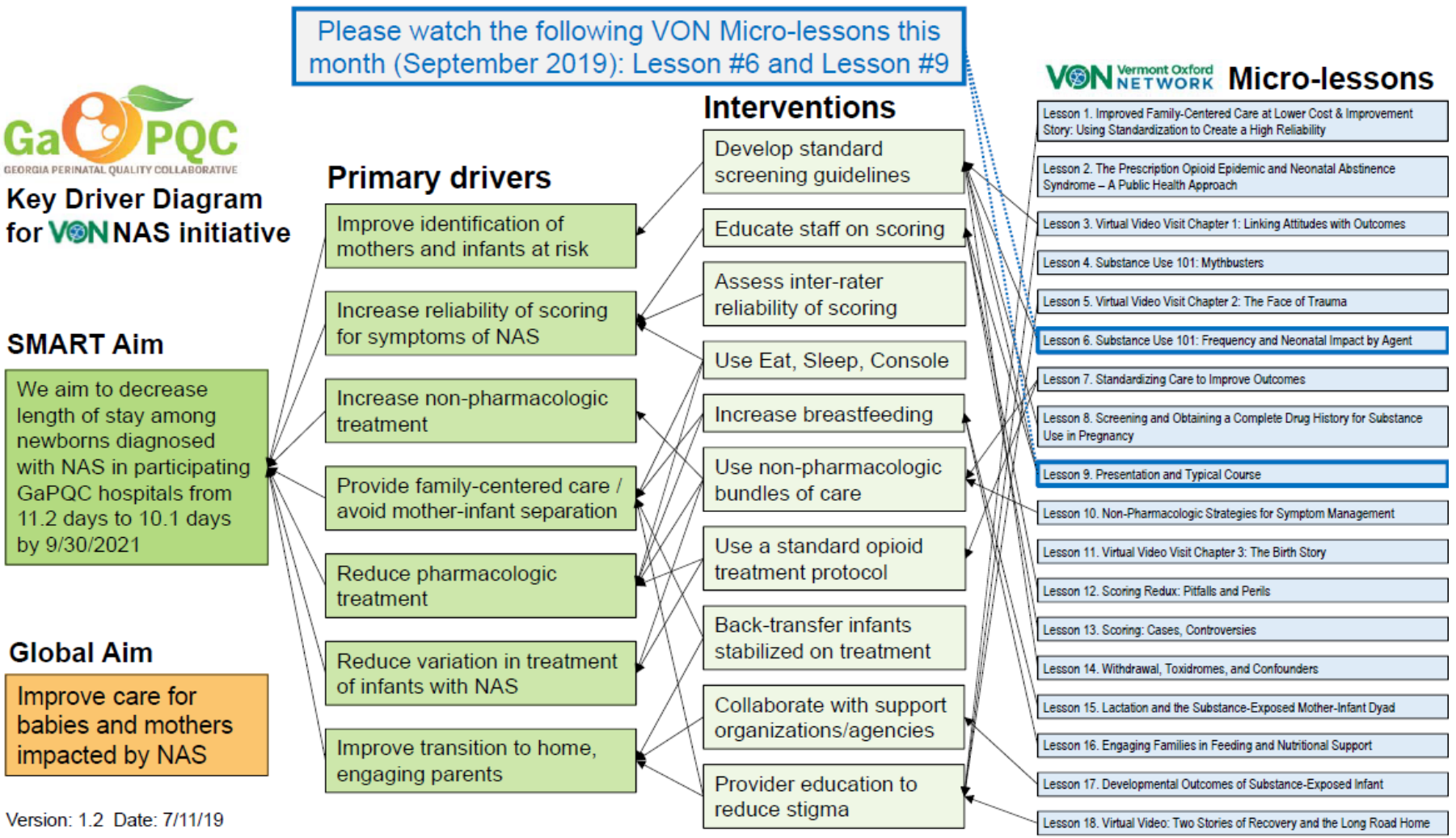
September 10, 2019
2:00-3:00pm

Key Driver Diagram



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GaPQC
GEORGIA PERINATAL QUALITY COLLABORATIVE

QI discussion
9/10/19

Key Driver Diagrams and Change Concepts

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Learning objectives

At the end of this, you will be able to:

1. Understand the construct of a key driver diagram
2. Apply change concepts to guide possible interventions to test in PDSA cycles

QI goal

Doing the right thing
(evidence based care)

For every patient
(equal care)

Every time
(consistent care)

Jain M. Road Map for QI

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

The Quality of Health Care Delivered to Adults in the United States

Elizabeth A. McGlynn, Ph.D., Steven M. Asch, M.D., M.P.H., John Adams, Ph.D., Joan Keesey, B.A., Jennifer Hicks, M.P.H., Ph.D., Alison DeCristofaro, M.P.H., and Eve A. Kerr, M.D., M.P.H.

Participants received recommended care 55% of the time.

McGlynn et al. *NEJM* 2003

Model for Improvement – 7 Steps

1. Form a team
2. Make an AIM statement
3. Establish measures
4. Identify and select changes to test using process improvement tools
5. Test changes using PDSA cycles
6. Implement changes that work
7. Spread changes to other locations

The Model for Improvement is recommended by the Institute for Healthcare Improvement and was originally developed by API (http://www.apiweb.org/)

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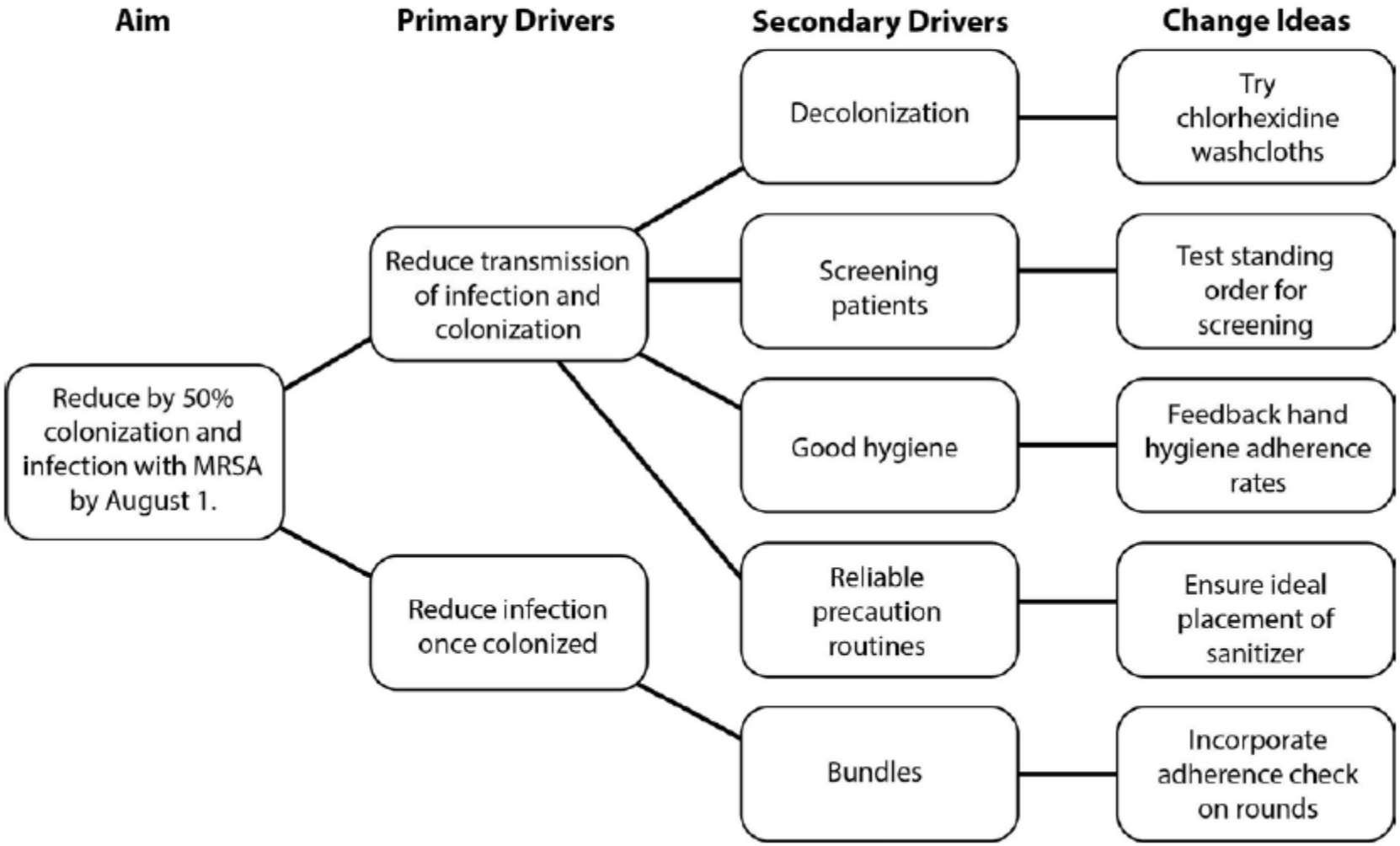
Institute for Healthcare Improvement

QI Essentials Toolkit

- Cause and Effect Diagram
- Driver Diagram
- Failure Modes and Effects Analysis (FMEA)
- Flowchart
- Histogram
- Pareto Chart
- PDSA Worksheet
- Project Planning Form
- Run Chart & Control Chart
- Scatter Diagram

IHI's QI Essentials Toolkit includes the tools and templates you need to launch and manage a successful improvement project. Each of the nine tools in the toolkit includes a short description, instructions, an example, and a blank template.

Example: Driver Diagram



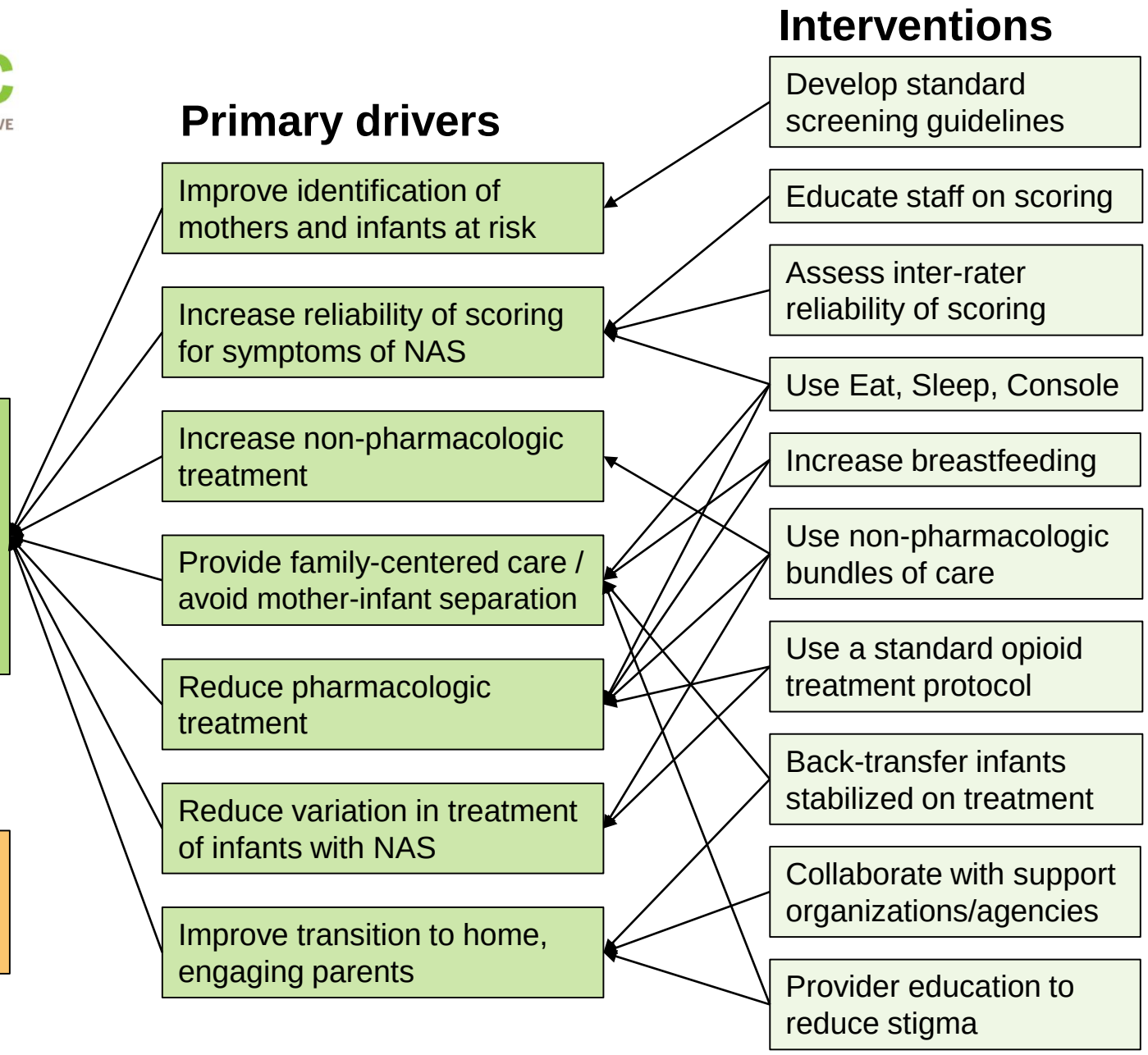
GaPQC
GEORGIA PERINATAL QUALITY COLLABORATIVE

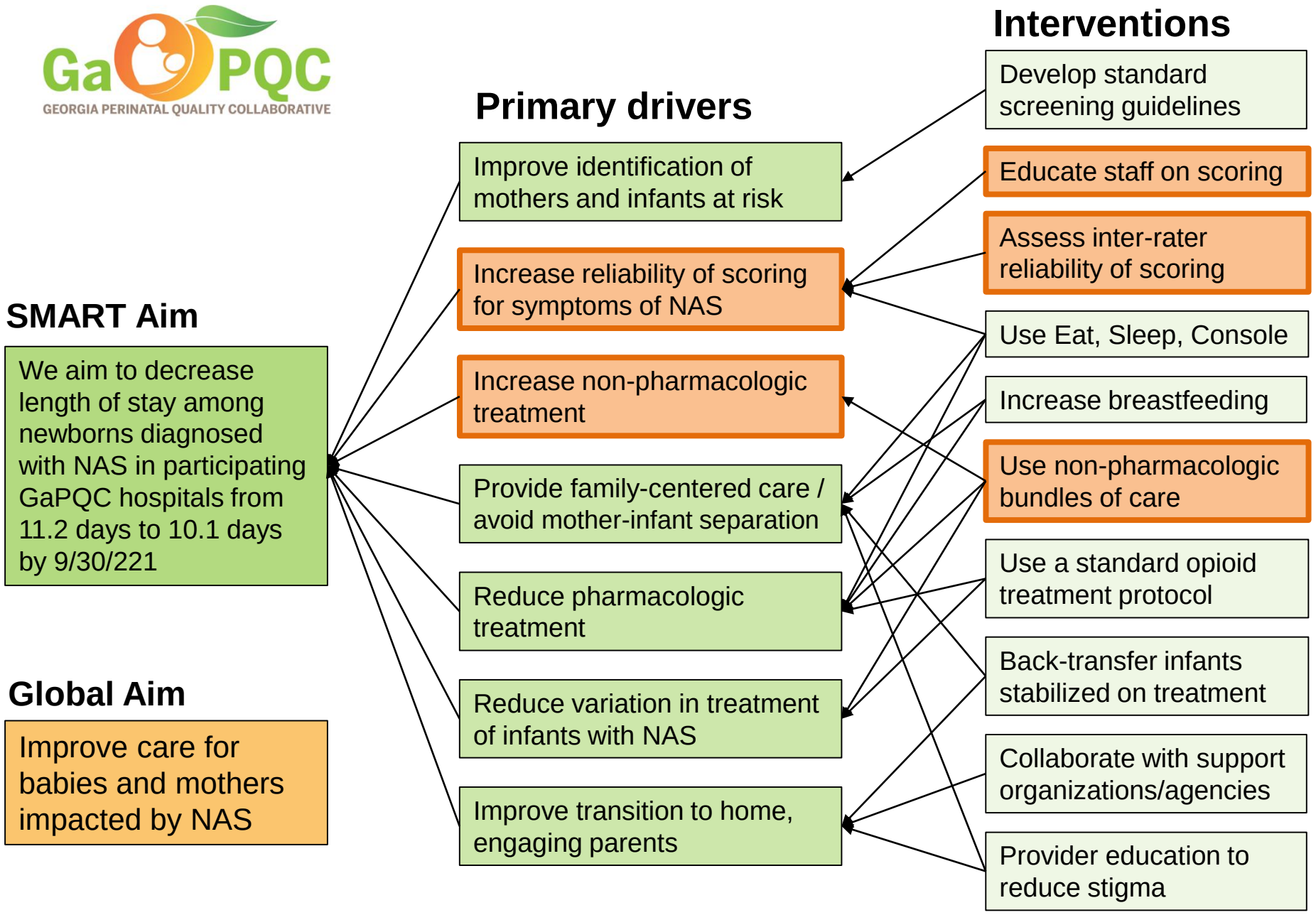
SMART Aim

We aim to decrease length of stay among newborns diagnosed with NAS in participating GaPQC hospitals from 11.2 days to 10.1 days by 9/30/221

Global Aim

Improve care for babies and mothers impacted by NAS




GaPQC
GEORGIA PERINATAL QUALITY COLLABORATIVE
SMART Aim
We aim to decrease length of stay among newborns diagnosed with NAS in participating GaPQC hospitals from 11.2 days to 10.1 days by 9/30/221
Global Aim
Improve care for babies and mothers impacted by NAS
Primary drivers
Improve identification of mothers and infants at risk
Increase reliability of scoring for symptoms of NAS
Increase non-pharmacologic treatment
Provide family-centered care / avoid mother-infant separation
Reduce pharmacologic treatment
Reduce variation in treatment of infants with NAS
Improve transition to home, engaging parents
Interventions
Develop standard screening guidelines
Educate staff on scoring
Assess inter-rater reliability of scoring
Use Eat, Sleep, Console
Increase breastfeeding
Use non-pharmacologic bundles of care
Use a standard opioid treatment protocol
Back-transfer infants stabilized on treatment
Collaborate with support organizations/agencies
Provider education to reduce stigma

Revision Date: 12/30/13

Key Driver Diagram

Project Name: OPQC Neonatal NAS

Project Leader: Walsh

GLOBAL AIM

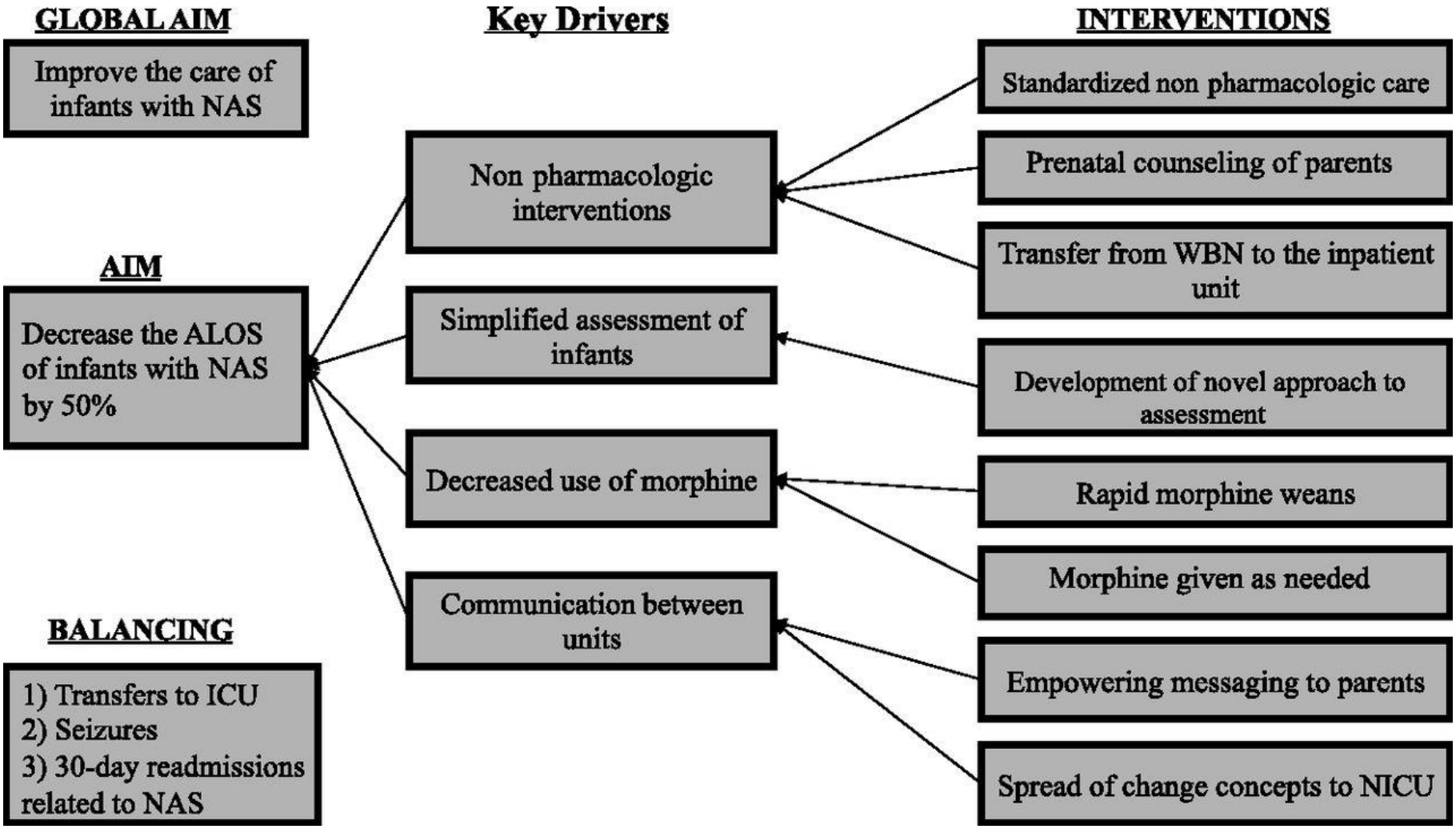
To reduce the number of moms and babies with narcotic exposure, and reduce the need for treatment of NAS.

SMART AIM

By increasing identification of and compassionate withdrawal treatment for full-term infants born with Neonatal Abstinence Syndrome (NAS), we will reduce length of stay by 20% across participating sites by June 30, 2015.

KEY DRIVERS	INTERVENTIONS
Prenatal Identification of Mom Implement Optimal Med Rx Program	•All MD and RN staff to view "Nurture the Mother- Nurture the Child" •Monthly education on addiction care
Improve recognition and non-judgmental support for Narcotic addicted women and infants	Fulltime RN staff at Level 2 and 3 to complete D'Apolito NAS scoring training video and achieve 90% reliability.
Attain high reliability in NAS scoring by nursing staff	
Optimize Non-Pharmacologic Rx Bundle	•Swaddling, low stimulation. •Encourage kangaroo care •Feed on demand- MBM if appropriate or lactose free 22 cal formula
Standardize NAS Treatment Protocol	• Initiate Rx If NAS score > 8 twice. •Stabilization/ Escalation Phase •Wean when stable for 48 hrs by 10% daily.
Connect with outpatient support and treatment program prior to discharge	• Establish agreement with outpatient program and/or Mental Health •Utilize Early Intervention Services
Partner with Families to Establish Safety Plan for Infant	Collaborate with DHS/ CPS to ensure infant safety.
Partner with other stakeholders to influence policy and primary prevention.	Engage families in Safety Planning.
	Provide primary prevention materials to sites.

OPQC Ohio Perinatal Quality Collaborative



Grossman et al. *Pediatrics.* 2017

KEY DRIVER DIAGRAM

Institute for Healthcare Improvement Open School

Name: _____ **University/Organization Name:** _____

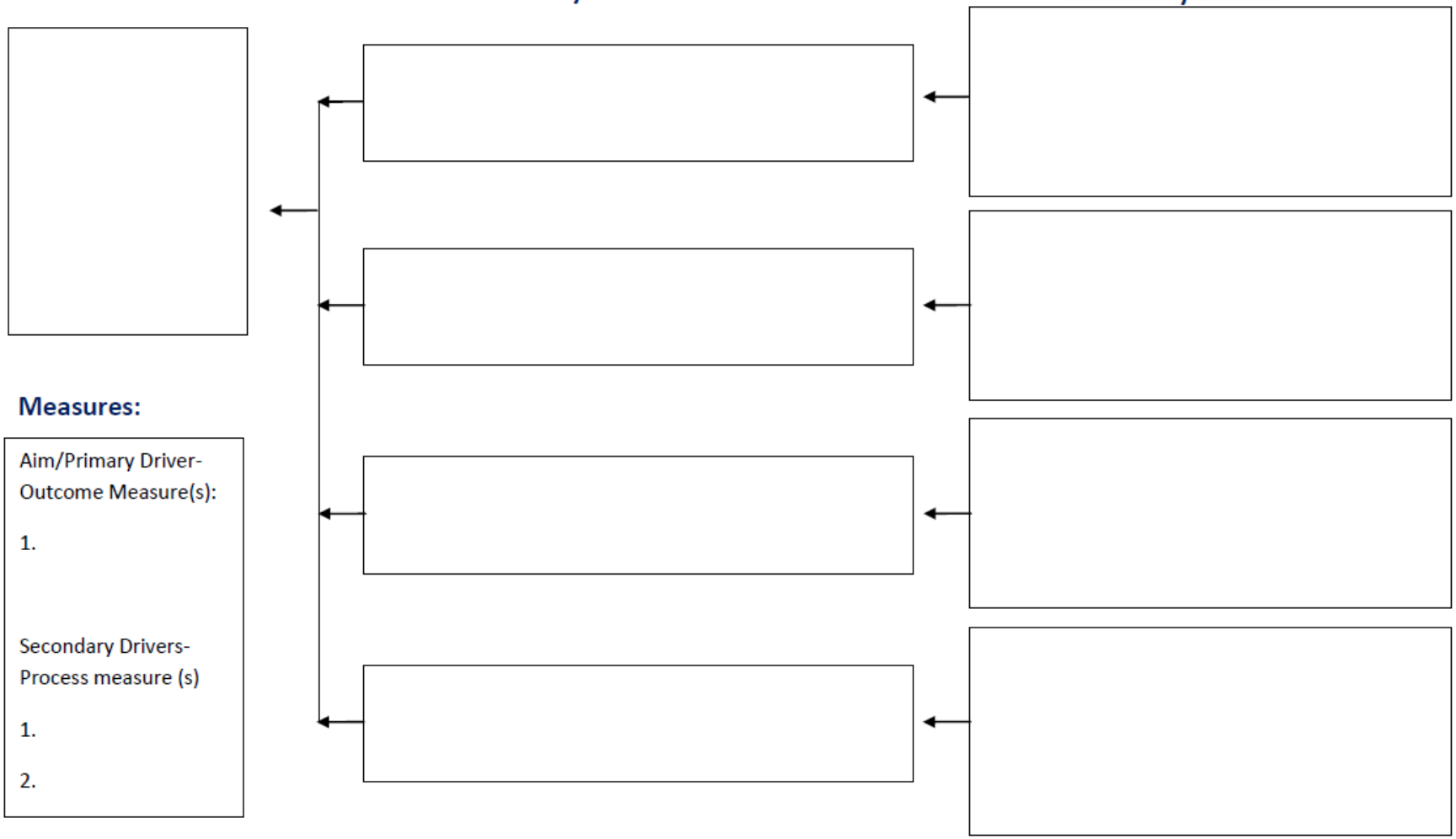
Project Title: _____ **Health System Sponsor Name:** _____

Team Members: _____

Aim:

Primary Drivers

Secondary Drivers



Measures:

Aim/Primary Driver-Outcome Measure(s):

1.

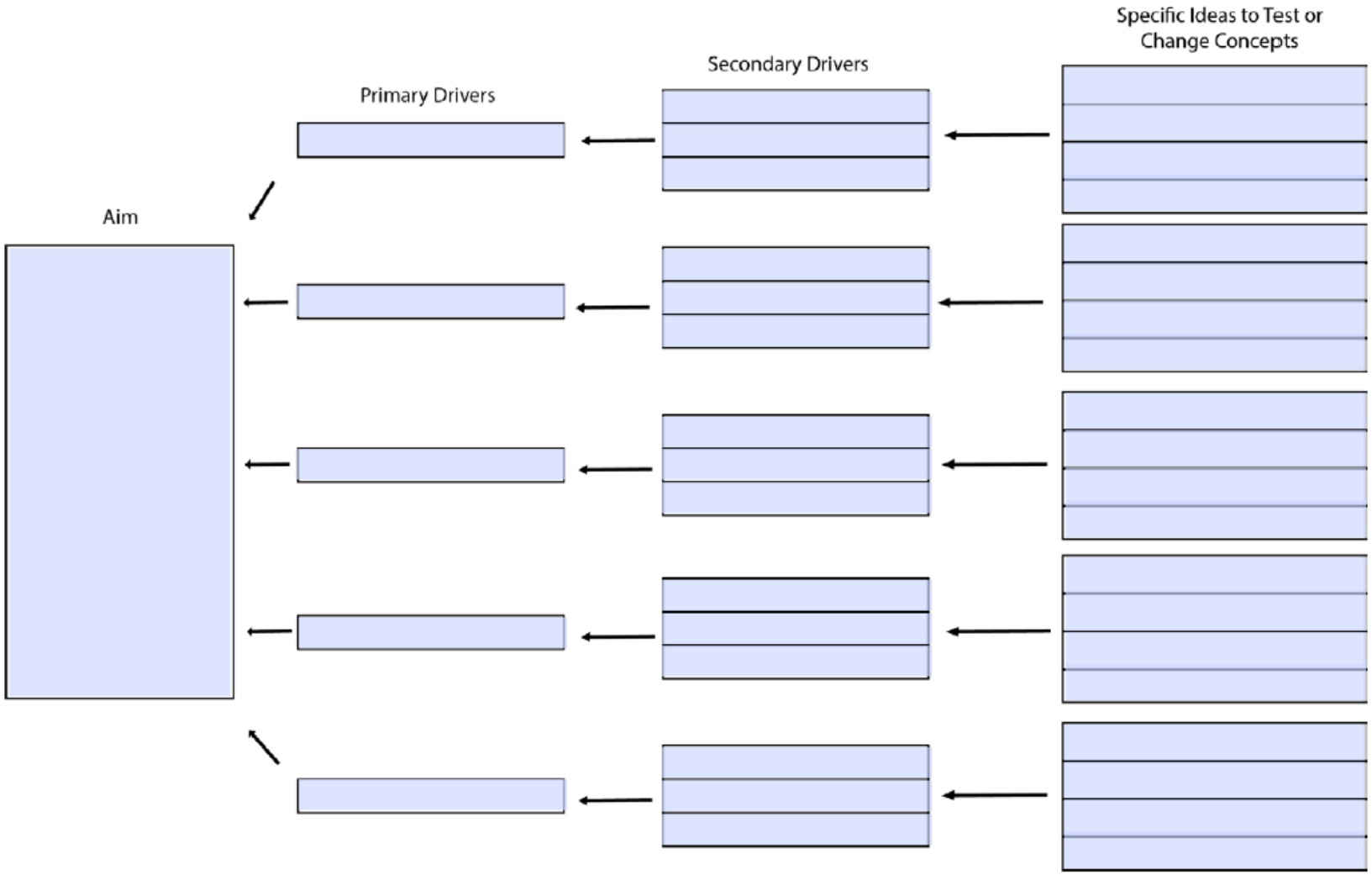
Secondary Drivers-Process measure (s)

1.

2.

Before filling out the template, first save the file on your computer. Then open and use that version of the tool. Otherwise, your changes will not be saved.

Template: Driver Diagram



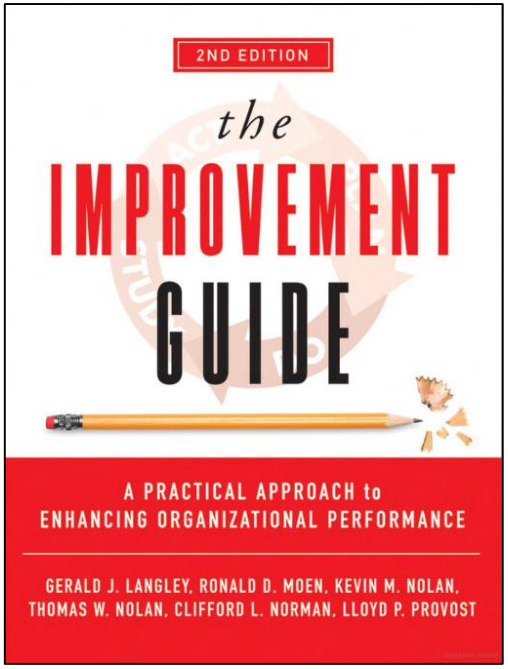
Using Change Concepts to Come Up with Ideas*

(To learn more, see *QI 102: How to Improve with the Model for Improvement.*)

Institute *for* Healthcare Improvement | Open School

- Eliminating waste, improving workflow, optimizing inventory (1-27, 40-45, 71)
- Enhancing producer-customer relationship and changing the work environment (28–40)
- Better managing time (46–50)
- Managing variation, designing systems to avoid mistakes (51–62)
- Design of products and services (63–70, 72)

1. Eliminate things that are not used
2. Eliminate multiple entries
3. Reduce or eliminate overkill
4. Reduce controls on the system
5. Recycle or reuse
6. Use substitution
7. Reduce classifications
8. Remove intermediaries
9. Match the amount to the need
10. Use sampling
11. Change targets or set points
12. Synchronize
13. Schedule into multiple processes
14. Minimize handoffs
15. Move steps in the process close together
16. Find and remove bottlenecks
17. Use automation
18. Smooth workflow
19. Do tasks in parallel
20. Consider people as in the same system
21. Use multiple processing units
22. Adjust to peak demand
23. Match inventory to predicted demand
24. Use pull systems
25. Reduce choice of features
26. Reduce multiple brands of the same item
27. Give people access to information
28. Use proper measurements
29. Take care of basics
30. Reduce demotivating aspects of the pay system
31. Conduct training
32. Implement cross-training
33. Invest more resources in improvement
34. Focus on core process and purpose
35. Share risks
36. Emphasize natural and logical consequences
37. Develop alliances and cooperative relationships
38. Listen to customers
39. Coach the customer to use a product/service
40. Focus on the outcome to a customer
41. Use a coordinator
42. Reach agreement on expectations
43. Outsource for "free"
44. Optimize level of inspection
45. Work with suppliers
46. Reduce setup or startup time
47. Set up timing to use discounts
48. Optimize maintenance
49. Extend specialist's time
50. Reduce wait time
51. Standardization (create a formal process)
52. Stop tampering
53. Develop operation definitions
54. Improve predictions
55. Develop contingency plans
56. Sort product into grades
57. Desensitize
58. Exploit variation
59. Use reminders
60. Use differentiation
61. Use constraints
62. Use affordances
63. Mass customize
64. Offer product/service anytime
65. Offer product/service anyplace
66. Emphasize intangibles
67. Influence or take advantage of fashion trends
68. Reduce the number of components
69. Disguise defects or problems
70. Differentiate product using quality dimensions
71. Change the order of process steps
72. Manage uncertainty — not tasks



More on Key Driver Diagrams

http://www.ihi.org/education/IHIOpenSchool/resources/Pages/Activities/GoldmannDriver.aspx

Improving Neonatal Abstinence Syndrome (NAS) Outcomes: Creating a Culture of Recovery

September 10, 2019

Brittany Smith, MSNEd., RNC-NIC, NICU Nurse Manager

Angie Reese, Team Lead Peer Recovery Coach, Georgia Council on Substance Abuse

Northeast Georgia Medical Center

Conflict of Interest

None

Objectives

- Discuss Evidence Based Practices for NAS
- Assess personal perceptions of substance use in patient families
- Discuss the impact of recovery language and culture
- Describe benefits of PEER Recovery Coaches in the NICU

Evolution of NGMC NAS Taskforce

- Team created:
  - Multidisciplinary
    - Neonatal Nurse Practitioner
    - Registered Nurses
    - Physical Therapists
    - Pastoral Care
    - Chief Neonatologist

- Grown to include:
  - - Multidisciplinary
    - DFACS representatives
    - Family Treatment Court representative
    - Partners for a Drug Free Hall representatives
    - Georgia Council on Substance Abuse representatives

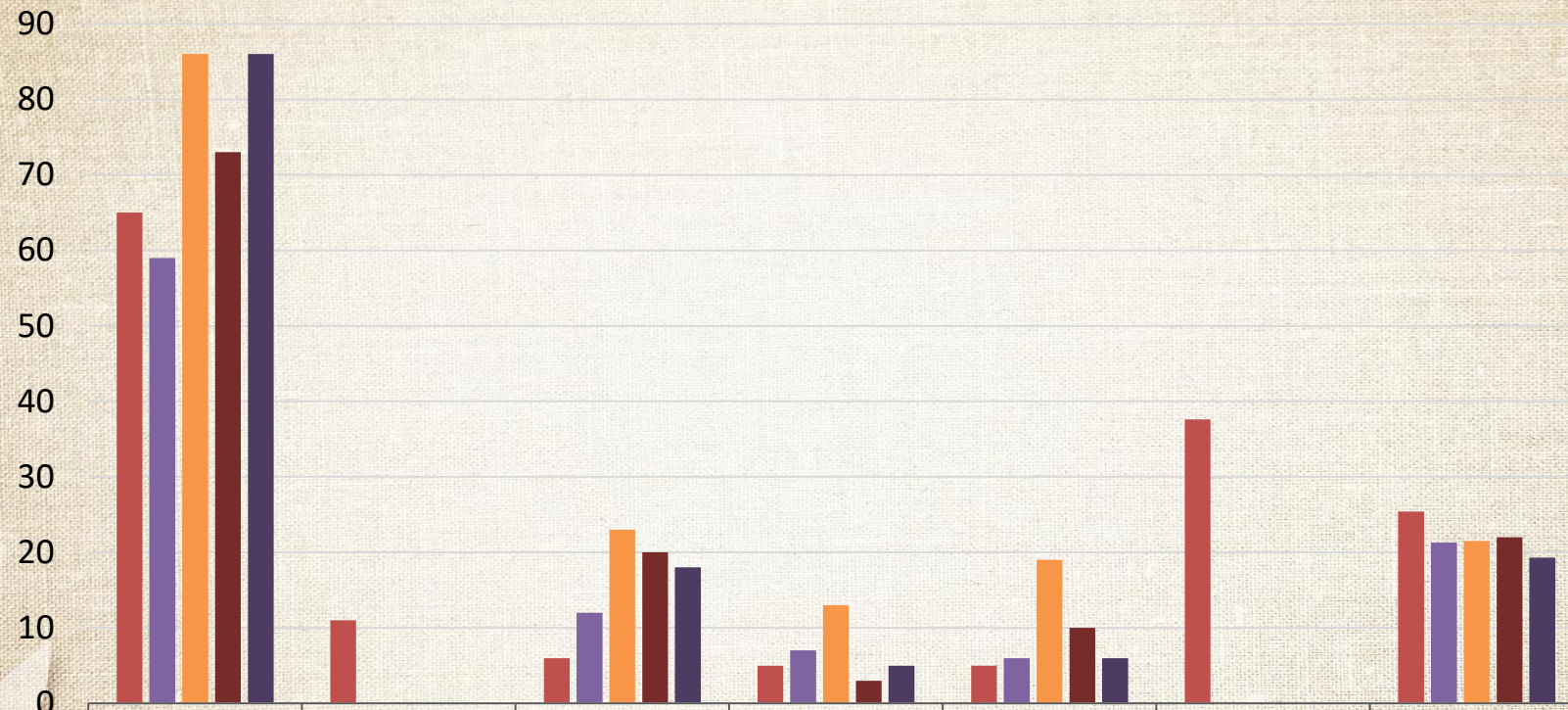
- Voluntary reporting to state: State Electronic Notifiable Disease Surveillance System (SendSS)
  - Results of mother's and infant's drug screens
  - Treatment required or not
  - Infant's clinical symptoms
  - Department of Family and Children Services (DFACS) referral
  - Head Start Program referral

- Hospital data collection
  - Length of stay
  - Length of treatment

Evolution of Taskforce

- Grown to include:
  - Avita Community Partners representative
  - DFACS representatives
  - Family Treatment Court representative
  - Partners for a Drug Free Hall representatives
  - Georgia Council on Substance Abuse representatives

Average Length of Stay (LOS)



	Total NAS Scored	Tx with Methadone	Tx with Morphine	Rebounded	Transfer In	Avg LOS Methadone	Avg LOS Morphine
2014	65	11	6	5	5	37.6	25.4
2015	59	0	12	7	6	0	21.3
2016	86	0	23	13	19	0	21.5
2017	73	0	20	3	10	0	22
2018	86	0	18	5	6	0	19.3

2014 2015 2016 2017 2018

Education and Standardization

- Education
  - Vermont Oxford Network: Universal NAS Training [26]
    - Requirement for all Neonatal Intensive Care Unit (NICU) staff
    - Mandatory for Labor and Delivery, Mother/Baby, and Pediatrics staff
  - Non-pharmacologic treatment techniques

- Standardization
  - Initiation of medication and treatment [12]
  - Medication weaning guidelines among all providers[9]
  - Policy created regarding which infant's to receive NAS scoring (Finnegan), drug screens, and screening method

Expanding Staff Education

Swaddle bathing [21]

- Improves temperature stability
- Maintains flexed, midline position
- Conserves energy
- Decreases physiological and motor stress

Neonatal Touch and Massage [8]

Primary Care Nursing [23]

- Care delivery system – hospital adopted

Speakers/Lunch and Learns

- Director of Emory Maternal Substance Abuse and Child Development Program
- PhD Candidate, Infant Mental Health Specialist
- Executive Director of Georgia Council on Substance Abuse

NICU Ethics Council

Prenatal Education

- Parents/Care Givers
  - Neonatologist consults
  - Guide for NAS Families [22]
    - From Ohio Collaborative
    - Vermont Oxford Network NAS Training [26]
  - WARM Line
  - Certified Addiction Recovery Empowerment Specialist (CARES) peer recovery coaches

Advancement of Standardization

- Change in staffing assignments
  - Higher Finnegan scores = lower patient to nurse ratio
- Created NAS order set in electronic health system
- Trialing Eat, Sleep, Console
- Parent/Infant rooming together [10,11,20]
  - In NICU, if meets certain criteria
  - Possible transfer to pediatric floor
    - Once infant is stable in weaning process
- Family Partnership Agreement [11]
- Hospital volunteer program: Cuddlers
- Development of Perinatal Work Group
- CARES NICU Peer Recovery Coaches

Recovery Language and Culture

- Staff
  - Mind set change [17,19,24]
    - Recovery language versus treatment language
      - Disease versus moral failure
  - Recovery Language Training
    - Speaking engagements from Executive Director of Georgia Council on Substance Abuse and CARES peer recovery coaches
    - Do's and Don'ts of recovery speak
      - Relapse is not a part of recovery

Expanding Recovery Culture

- Community
  - Obstetric offices
  - Pain clinics
  - Health departments
  - DFACS

Stories from the NICU

People support what they help to create…

Questions?

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Updates/Reminders

- VON Monthly Lesson Reports
  - There is an individual at your hospital with the ability to remove staff members. If you need to know who this is, email Bgeorge@vtoxford.org.
  - If you need to add members, or reassign core members, email me or Bgeorge@vtoxford.org.
  - We recommend having at least 5 core members.
    - 8 hospitals have fewer than 5
- Quarterly LOS Data

Press *6 to unmute yourself