Maryland Patient Safety Center
Perinatal/Neonatal Quality Collaborative

NAS: Improving Care to Improve Outcomes

A Maryland Statewide Collaborative

MARYLAND
Patient Safety
CENTER

This Collaborative is

Funded by the

Maryland Department of Health

Maternal and Child Health Bureau

Who we engaged to get started- Our Steering Committee

- René Y. Adams, MSN RNC-NIC, Nurse Manager, NICU, Howard County General Hospital
- Victoria Beltran, RN, NNP, NICU, University of Maryland Medical Center
- Megan Brasauskas, LGSW, MedStar Franklin Square Medical Center, NICU, Pediatric Social Worker
- Sara Cherico-Hsii, Health Policy Analyst-Advanced, Office of the Sec., MD Dept. of Hlth & Mental Hygiene
- Bonnie DiPietro, RN, MS, Director of Operations, Maryland Patient Safety Center
- Webra Price Douglas, PhD, CRNP, IBCLC, Maryland Regional Neonatal Transport Program
- Michelle Drapeau-Clem, BSN, RNC- NIC, NICU Staff Nurse, Frederick Memorial Hospital
- Hollie M. Eid MSW, LGSW, Social Worker/ Case Manager, U of MD Upper Chesapeake Medical System
- E.W. Emanuel, MD, MBA, Assoc. Med. Dir.: Health Education, Health Promotion, Marketing Liaison, Maternal Child Services, Transgender Health Services, Employee Health, Kaiser Permanente
- Maria (Chona) Hamrock, MPH, BSN, RNC-NIC, NICU Nurse, Anne Arundel Medical Center
- Mark L. Hudak, M.D., Prof. Dept. of Ped., Div. of Neonatology, U of FL, College of Medicine-Jacksonville
- Robert Imhoff, III, President and CEO, Maryland Patient Safety Center
- Lauren M. Jansson, MD, Associate Professor of Pediatrics, Johns Hopkins University, School of Medicine
- Ann Johnson, RNC, MSN, Clinical Educator NICU & Pediatrics, Mercy Medical Center
- David Kanter, MD, Division of Newborn Medicine, Sinai Hospital of Baltimore
- Anisha Khandelwal, Data Analyst, Maryland Patient Safety Center
- Fernando V. Mena, MD, Chief, Section of Neonatology, Dept. of Ped., MedStar Franklin Square Med. Cntr
- Megan Roesler, RN, BSN, CPN, Staff Nurse, Mt. Washington Pediatric Hospital
- Veronica Rosemary, RN Staff Nurse, LDRP, University of Maryland, Shore Medical Center
- James Rost, MD, Med. Dir. of Patient Safety, Med. Dir. NICU, Adventist Healthcare Shady Grove Med. Center
- Elizabeth Santa Maria, LGSW, Social Worker/Case Manager, Frederick Memorial Hospital
- Diane Vanes BSN, RN, Clinical Manager, LDRP and SCN, Meritus Medical Center
- S. Lee Woods, M.D., Ph.D., Medical Director, Maternal and Child Health Bureau, Prevention and Health Promotion Administration**,** Maryland Department of Health and Mental Hygiene

Collaborative Timeline

❖ **Fall 2015 to early 2016**   Steering Committee formed to determine direction and actions

❖ **Contracted with SME**   Fall 2015, contracted with Dr. Mark Hudak

❖ **Spring 2016**   VON reached out to us through Dr. Hudak

❖ **June 2016**   Confirmed partnership with VON to use NAS Statewide Implementation Package

❖ **July, Aug., Sept. 2016**   Recruitment of collaborative participants- 31 of 32 Maryland birthing hospitals, plus one specialty pediatric hospital agreed to participate

❖ **October 7, 2016**   **NAS Collaborative Kick-off meeting**

❖ **October 17-21, 2016**   VON Day Audit

❖ **Nov., 2016 to Aug. 2018**   Collaborative calls, webinars, facility consultations, attitude survey, process measures, Annual Face to Face meetings

❖ **November 17, 2017**   **Second Annual Face to Face**

❖ **September, October 2018**   Second VON Day Audit

❖ **November , 2018**   **Final Face to Face**

MARYLAND
Patient Safety
CENTER

Goals of the MPSC NAS Collaborative

1. Reduce LOS in infants with NAS

2. Reduce 30-day readmissions of infants with NAS

3. Decrease transfers from birthing hospital to higher or extended levels of care for infants with NAS

MARYLAND
Patient Safety
CENTER

Why we partnered with VON

- VON offers data-driven, action-oriented learning for improving outcomes and increasing the quality, safety, and value of newborn care.

- Our partnership with VON allows our participants access to interactive reporting tools, established curricula and educational modules for quality improvement.

- The partnership with VON accelerated the work of our NAS collaborative.

MARYLAND
Patient Safety
CENTER

Highlights of the MD Collaborative

- Have a baseline LOS from VON day audit and baseline LOS from discharge data from the Health Department
- Learned that our VON Day audit LOS was 19 days, whereas our state data showed 12 days. This revealed that the state data does not include the days from transfers to higher or extended level of care, whereas the VON day audit does
- VON shared an attitude survey which we conducted at the onset and will repeat at end of collaborative
- Developed our own MPSC NAS bundle
- Developed quarterly process measures survey based on the MD NAS Bundle
- All but one birthing hospital participating
- Excellent engagement of participating facilities
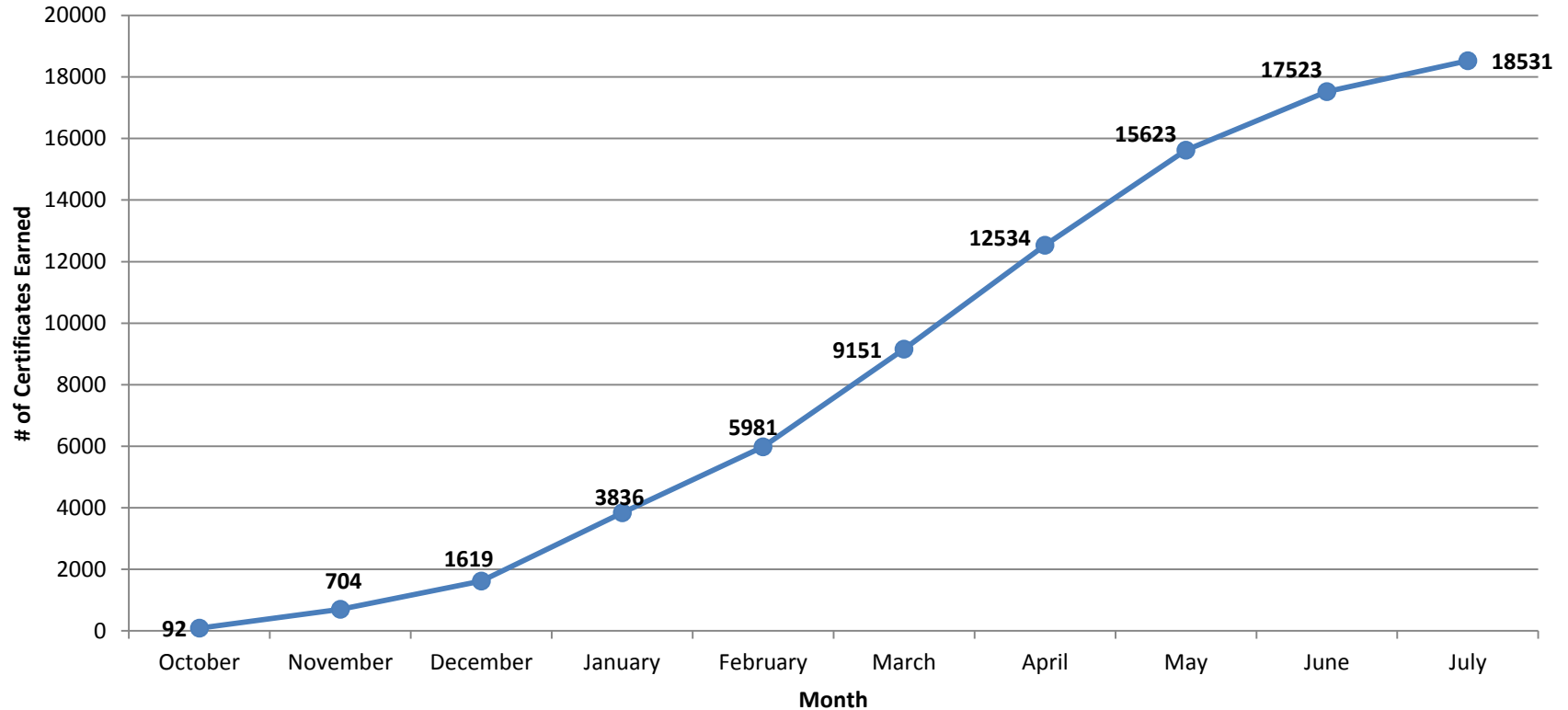
Challenges we have faced

- Will not have another VON day audit for 2 years
- Determining readmission rates
- Obtaining transfer rate data – only four hospitals in Maryland transfer for medical management of NAS
- Tracking monthly the number of completed modules per hospital- some glitches, but being corrected
- IT policies of one hospital blocking outside e-mails has been challenging
- Dependence on VON to reset passwords, generate reports- our participants are used to contacting us for such things.

MARYLAND
Patient Safety
CENTER

How is Maryland Doing?
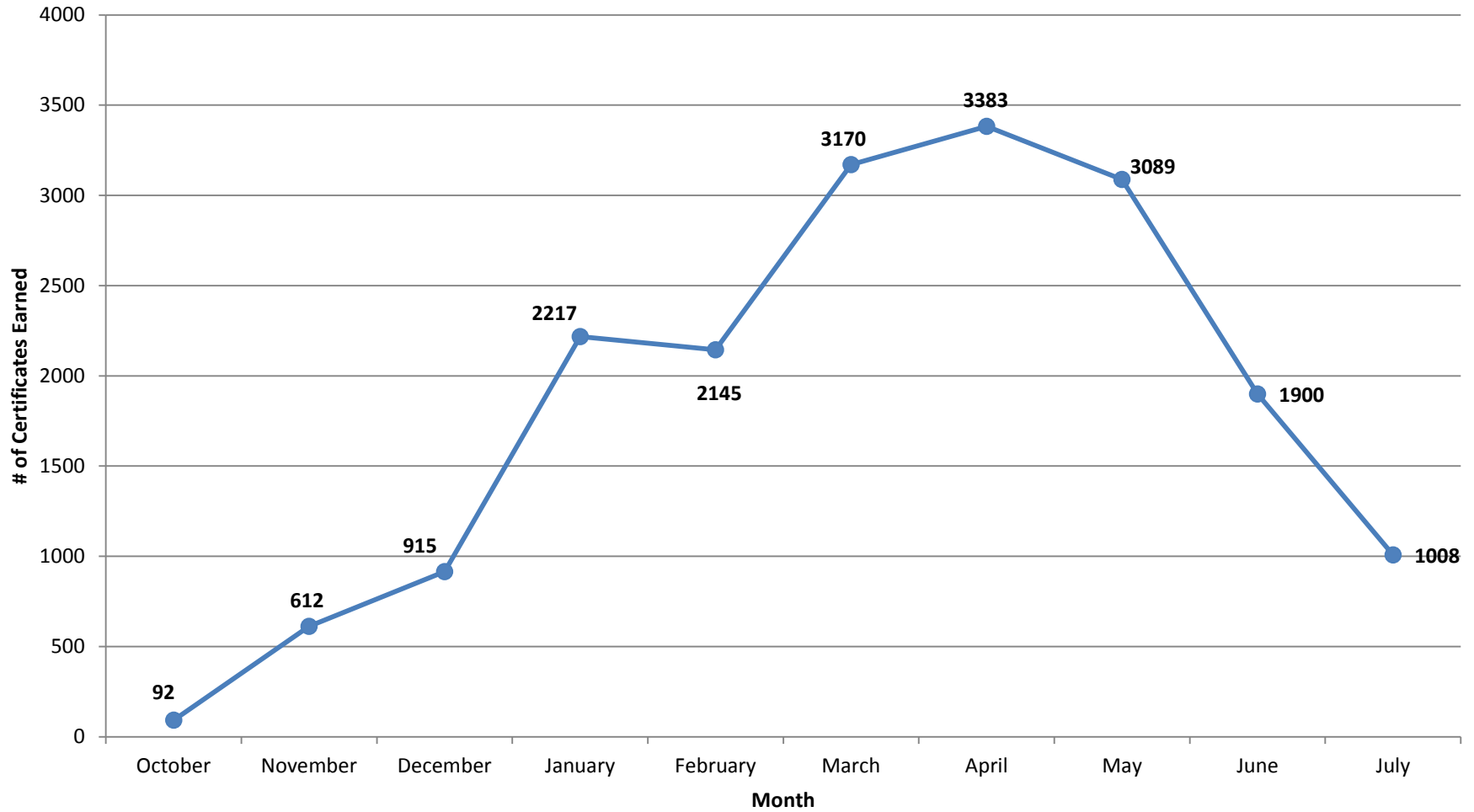
VON Modules in Maryland

- 32 Hospitals with access

- 3788 registered users as of July 31

- Registered users per hospital range from 15 to 487

- Potential for completion of 68,184 modules (3788 X 18 modules)

- Total modules completed as of July 2017: 18,531 (27.2% of possible)

- Four hospitals with no participation at all- interesting to note that 3 of those four do not treat medically, and the other reports very few cases. Not a priority?

MARYLAND
Patient Safety
CENTER

Total Maryland NAS Certificates Earned
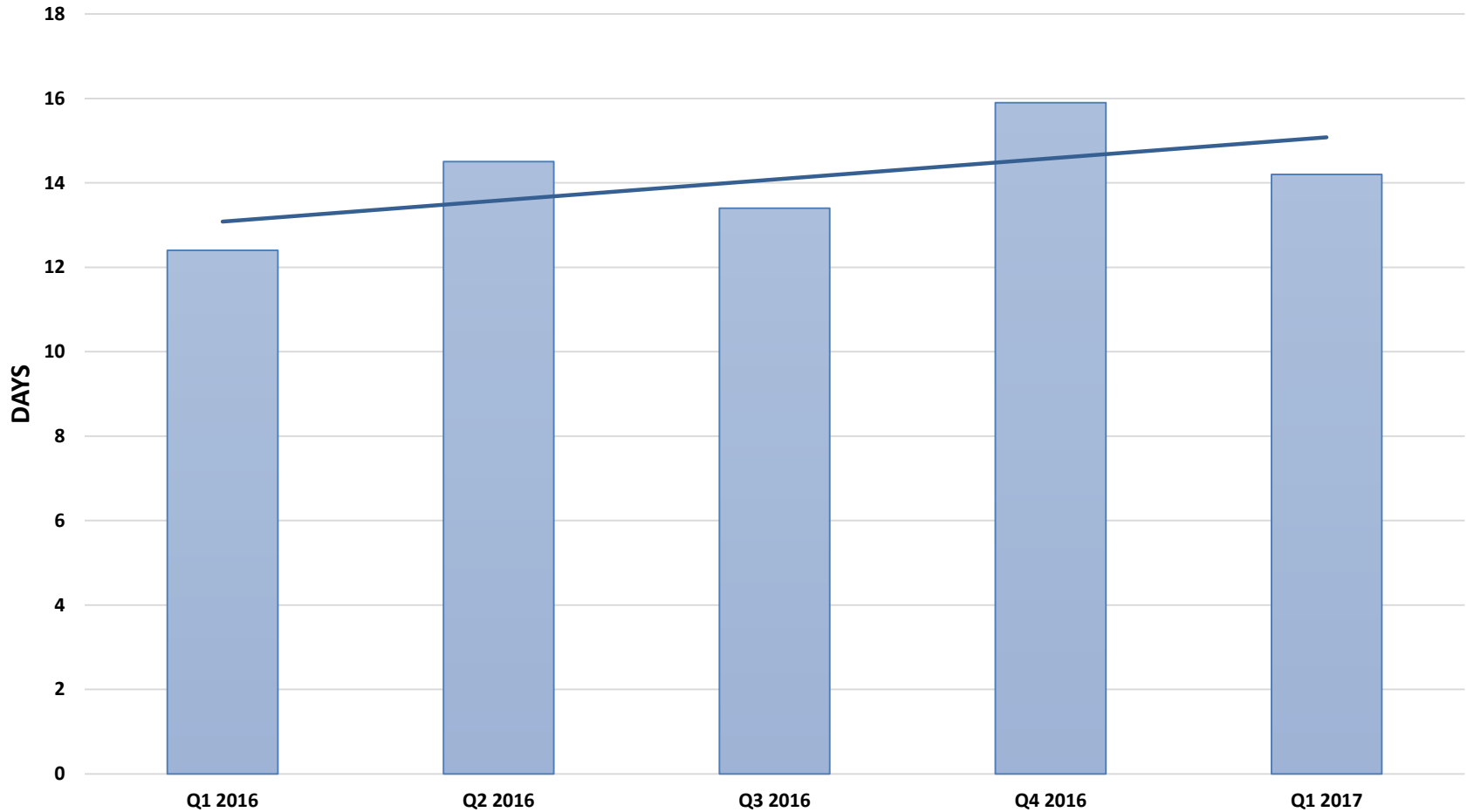## October 2016 - July 2017

Source: Maryland Department of Health

Maryland NAS Certificates Earned by Month
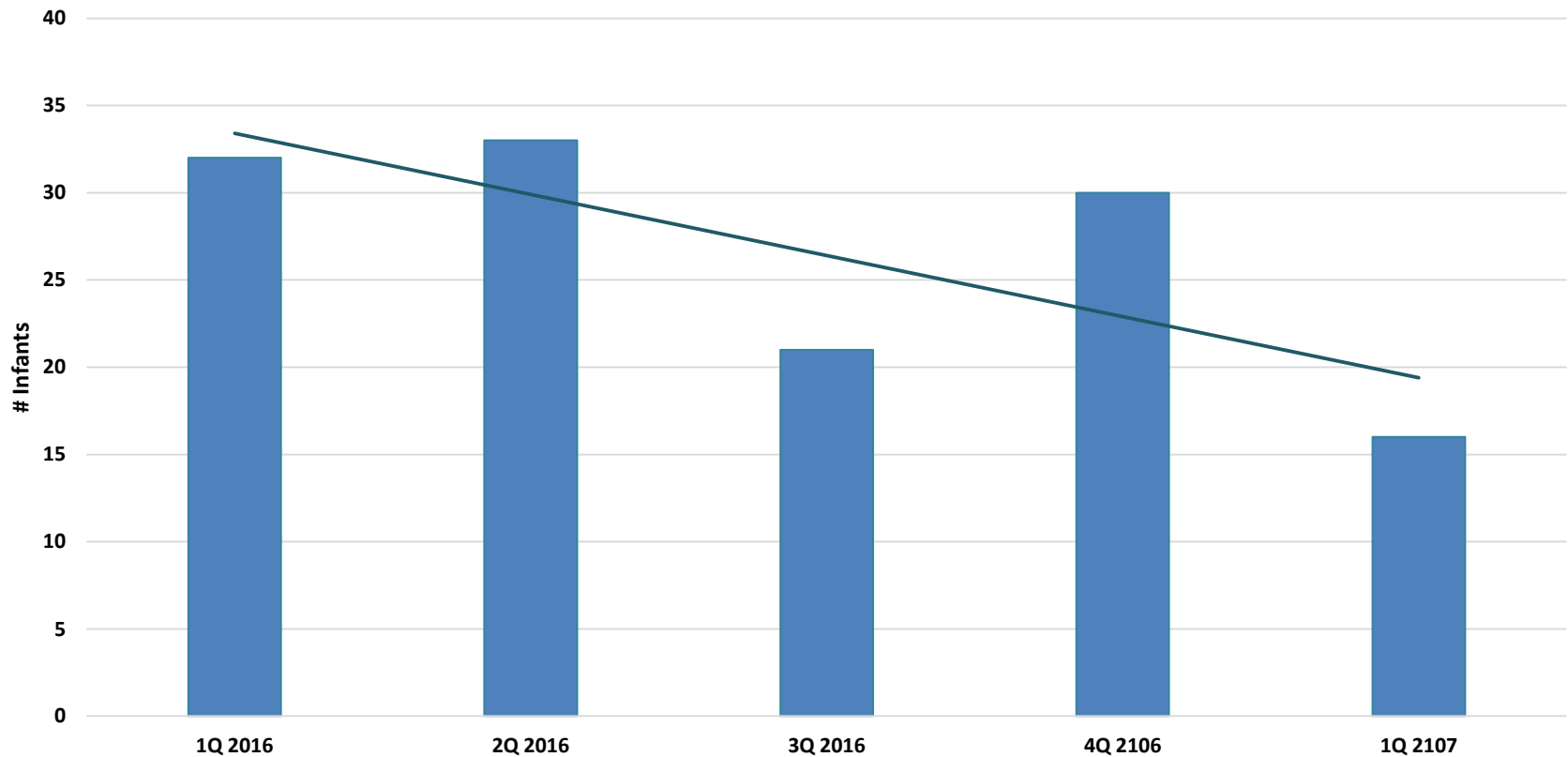October 2016 - July 2017

Source: Vermont Oxford Network

Maryland Birth Hospital Average LOS , Infants with Diagnosis of Neonatal Abstinence Syndrome
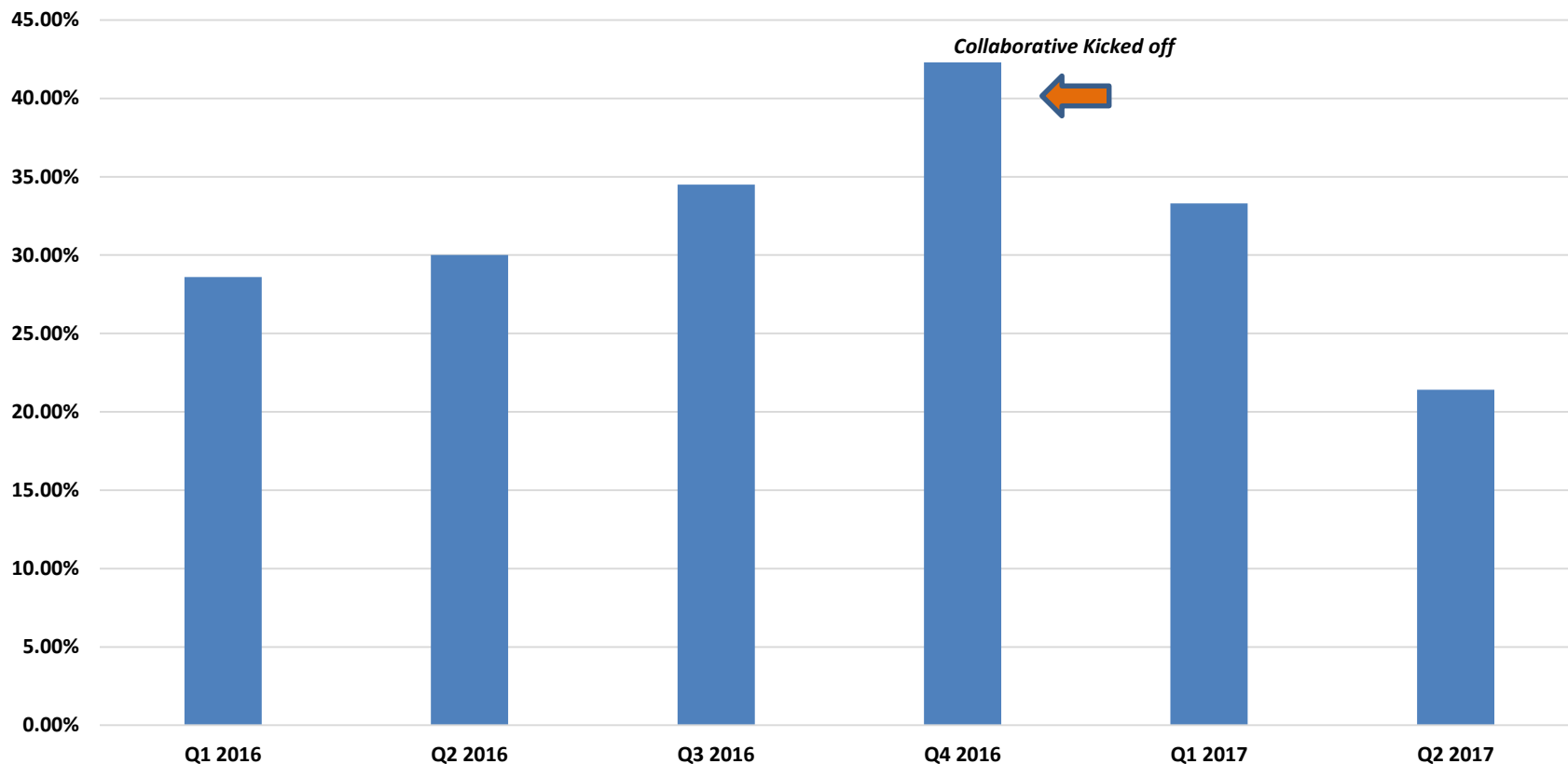

Source: Maryland Department of Health

MARYLAND
Patient Safety
CENTER

**Maryland Birth Hospital Transfers to MWPH for
Infants with NAS**

Source: Maryland Department of Health

Preliminary: Percent of Maryland Infants with NAS transferred to another higher level nursery from hospitals that do no treat medically

Collaborative Kicked off

****Four hospitals of 32 Maryland birthing hospitals do not treat pharmacologically. Two reported.

(Prelminary) Thirty Day Readmissions- (Question- what were the ICD-10 codes?)

❖ <11 readmissions of infants discharged with diagnosis of NAS statewide Q1 2016 to Q1 2017 (one year)

❖ <11 readmissions of newborn infants discharged without a diagnosis of the NAS statewide Q1 2016 to Q1 2017 (one year)

Source: Maryland Department of Health

Questions?

Contact Information:
Bonnie DiPietro
bdipietro@marylandpatientsafety.org