



SHARING OUR SUCCESS

.....

The Progress of TexasAIM
Obstetric Hemorrhage Learning
Collaborative 2018-2020



Texas Department of State
Health Services



Thank you, TexasAIM Hospitals!

As of November 2020, 219 of hospitals with obstetric service lines have voluntarily enrolled in TexasAIM and made a commitment to improve maternal health and safety. The TexasAIM Team is inspired by the hard work and dedication of improvement teams working to transform patient care in birthing hospitals across Texas.

TexasAIM hospitals and their staff dedicate resources, time, and energy to participate in TexasAIM and, through innovation, team work, and unwavering determination, work to make health care safer for every mother through implementation of the Alliance for Innovation on Maternal Health (AIM) Obstetric Hemorrhage (OBH) Patient Safety Bundle in care settings across Texas. We continue to hear from teams about the progress and improvements being made to processes and patient care, as well as an appreciation for the shared experiences and lessons learned from the learning collaborative.

Without fail, TexasAIM hospitals have banded together during the COVID-19 pandemic and shared resources on online platforms, engaged in discussion boards with one another, presented on webinars and shared experiences and lessons learned as hospital teams adapt to new circumstances. We are proud of and motivated by the work Texas birthing hospitals have done and continue to do.

We appreciate the level of engagement and participation in the TexasAIM Plus Obstetric Hemorrhage Learning Collaborative and we look forward to continuing to work together and learning from the work you do to combat severe hypertension in pregnancy and improve the health and safety for mothers and babies in Texas!

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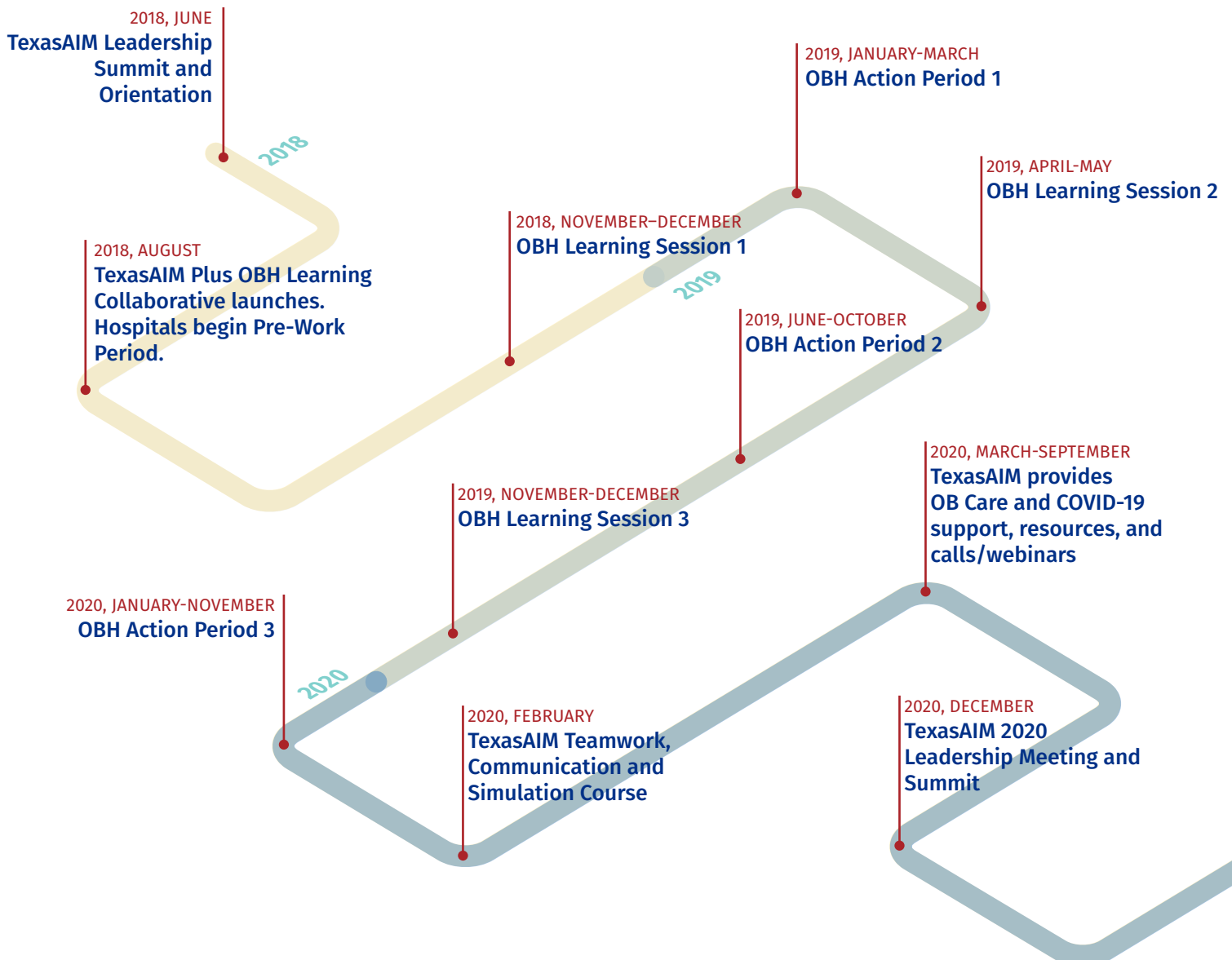
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Overview of the TexasAIM Initiative

TexasAIM is a large-scale, statewide hospital-based maternal safety quality improvement initiative of the Texas Department of State Health Services, with **219 (98 percent)** of Texas' birthing hospitals voluntarily enrolled. Of those hospitals participating in TexasAIM, **181 (83 percent)** are enrolled to participate in the TexasAIM Plus Obstetric Hemorrhage Learning Collaborative. TexasAIM uses the Institute for Healthcare Improvement's Breakthrough Series™ (BTS) Collaborative Model for Breakthrough Improvement as the foundation for the program. A BTS Collaborative is a vehicle for identifying, testing, and spreading changes that are effective for improving care and outcomes for defined populations.

Components of the model include formation of local improvement teams; completion of pre-work; participation in interactive collaborative Learning Sessions; engagement throughout Action Periods, which include continued shared learning through action period calls and implementation of small, rapid-cycle, Plan-Do-Study-Act tests of change to implement bundle components to address key drivers of the maternal safety issues; and participation in regular reporting and use of data within the measurement strategy to drive improvement. This collaborative learning model supports accelerated improvement as hospital teams share successful implementation strategies across settings for rapid adoption of new practices. Texas hospitals have engaged in many activities since the TexasAIM Initiative was first launched in June 2018.

TexasAIM Obstetric Hemorrhage Timeline



TexasAIM Enrollment by the Numbers

Hospitals participating in TexasAIM serve:



>378,600
WOMEN EVERY YEAR

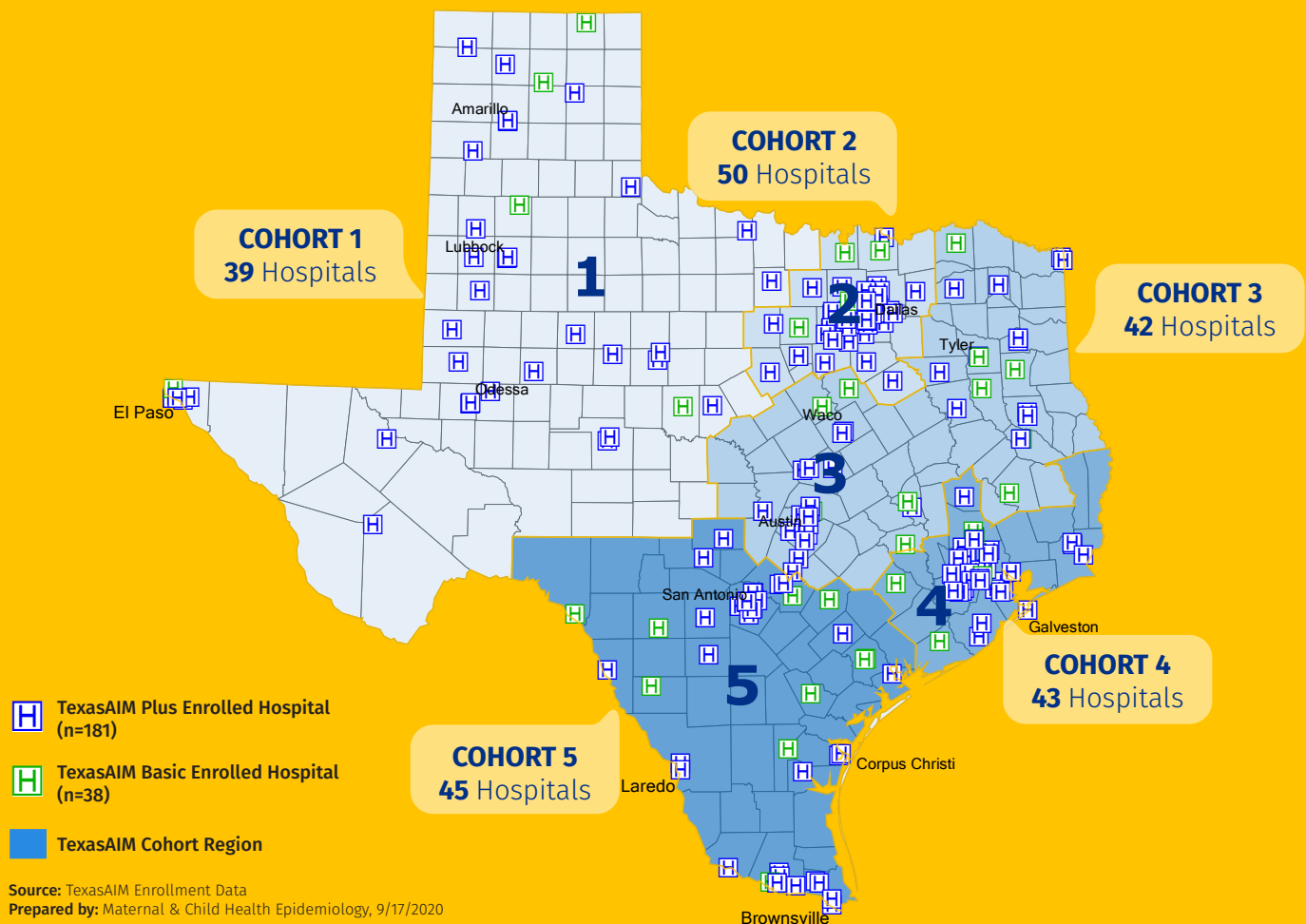


>99%
OF TEXAS BIRTHS



10%
OF NATION'S BIRTHS

Hospital Enrollment:



Source: TexasAIM Enrollment Data
Prepared by: Maternal & Child Health Epidemiology, 9/17/2020

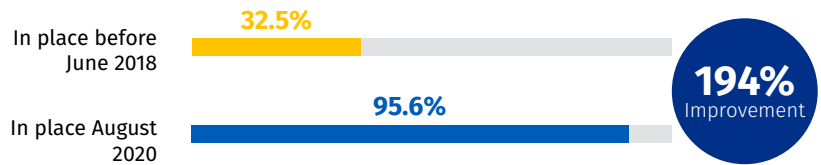
The data shown above is from 11/03/2020.

Obstetric Hemorrhage Structure and Process Measures

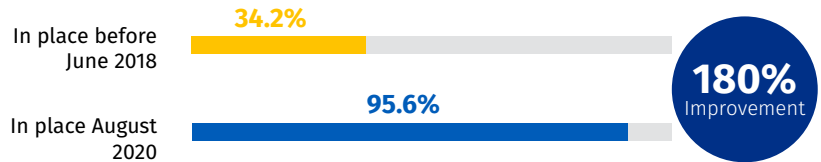
Since the launch of the TexasAIM Initiative in June 2018, participating hospitals have submitted regular reports on their progress toward achieving a series of structure and process goals. Some of these goals include instituting regular reviews of severe maternal morbidity cases, making sure obstetric hemorrhage supplies are readily available (typically in a cart or mobile box), tracking blood loss measurement from labor through recovery, and educating providers on the elements and implementation of the obstetric hemorrhage bundle, and more. The graphs below indicate substantial progress toward the initiative's goals over the past two years. An update on additional measures is available in the the DSHS Maternal Health & Safety Initiatives Report, available at <https://www.dshs.texas.gov/mch/TexasAIM.aspx>.

Percentage of Hospitals with Obstetric Hemorrhage Structures and Processes in Place

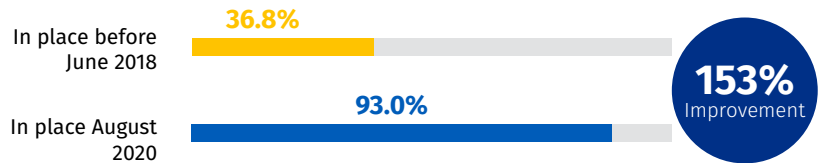
Structure: Regular, formal debrief after cases with major complications



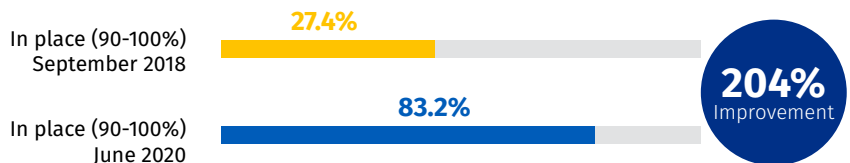
Structure: Multidisciplinary systems-level review of severe maternal morbidity cases



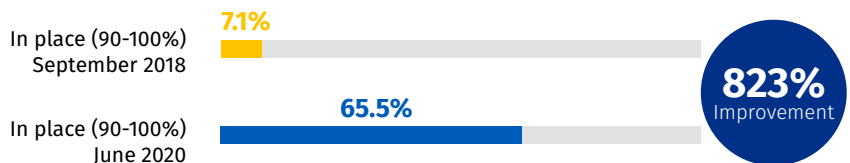
Structure: OBH policy and procedure in place including stage-based management plan with checklists



Process: OBH risk assessment with risk level assigned



Process: Quantitative and cumulative blood loss measurement through recovery



Learning Sessions

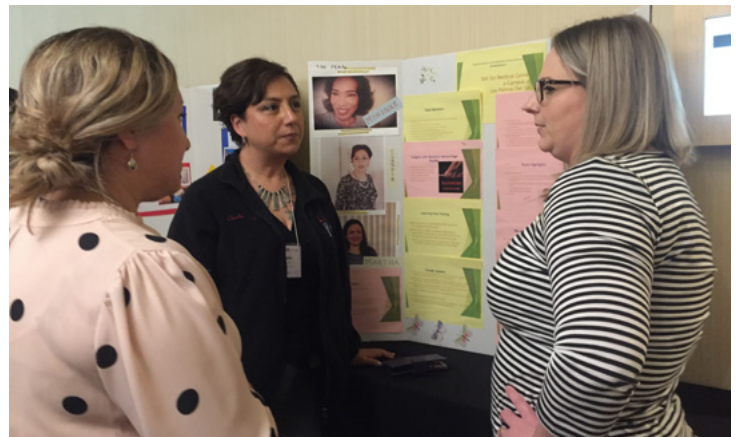
From November 2018 through December 2019, multidisciplinary hospital improvement teams and expert faculty shared learning and exchanged practical ideas in three Learning Sessions across five cohorts for implementing bundle components to hardwire a systematic, comprehensive, standardized framework for care delivery to reduce severe maternal morbidity associated with obstetric hemorrhage.

“Great conference, great communication, awesome speakers, learned a ton.”

“Large and small hospitals have the same problems regardless of size.”

“We met a team that had already solved our problems, and we had already solved theirs.”

An average of **540 attendees** representing **160 TexasAIM Plus hospitals** attended each Learning Session across the five cohorts.



Participants engaged in TeamSTEPSS exercise, Simulation Wars, and Story Board Rounding at Learning Sessions.

Action Periods

Action Periods took place following each Learning Session. Monthly calls were held with Plus Teams and included content-driven topics and tailored discussions to coach teams in overcoming obstacles and accelerating improvement efforts. The calls focused on components of the obstetric hemorrhage bundle, simulation and drills, maternal early warning system, and sustainability. **Over the course of 12 calls, there was a cumulative total of 2,278 attendees, with an average of 190 participants attending each call.**

I am bringing the CMQCC Blood Product refusal checklist to our OB section meeting next week. I think it is a great conversation tool for our providers to use in the office and/or on admission for those refusing blood products.

At my hospital, we have been working on initiating debriefs for our severe events. All of the great information today will be really helpful for rolling that out.



During Action Periods, hospital teams tested new strategies and spread changes throughout their unit to standardize care. Teams continued to share with and learn from each other during Action Period calls.



TexasAIM Saving Lives all over Texas

A Texas hospital shares their experience with postpartum hemorrhage

We experienced our first very big hemorrhage last week. The mother, a gravida 5, had had a C-section and within an hour started bleeding heavily. Her uterus would not get firm no matter what we did on the nursing side. The physician came quickly and determined it was uterine atony. Our staff acted super quickly, utilizing our hemorrhage cart and flow sheets we have in place. All the things that [TexasAIM] has taught us, and that we have taught our staff came into play. [The Team Lead] and I got to be present and help as well, but mostly our staff were the ones running the hemorrhage code.

The mother ended up losing around 4 Liters of blood, but due to the quick acting and thinking on the part of our staff, her vital signs never crashed, and she did very well after a Bakri balloon was placed. She ended up going home two days later. She cried and thanked the staff for saving her life, even coming back up to the hospital with her family so they could thank us for saving her.

Seeing how everything we have learned from [TexasAIM] truly came together and we had no major hiccups was so amazing to watch. Staff came up to us after and thanked us over and over for all we have taught them through TexasAIM and how grateful they were to have that knowledge.

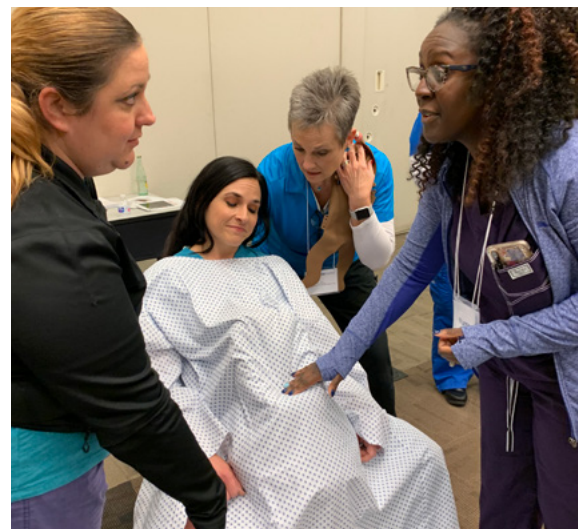
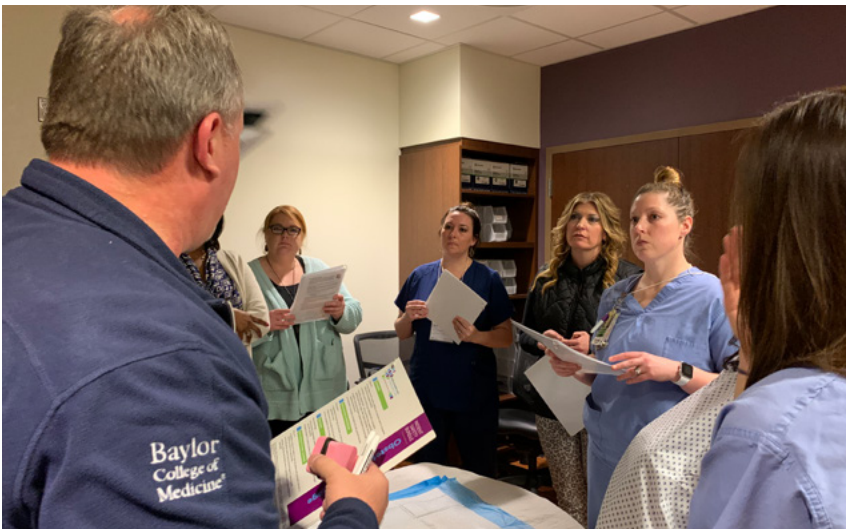
[The Team Lead] and I just wanted to say how thankful we are for your team and this bundle. It not only helped us save a mother's life the other day... it really has brought so much knowledge and skill to this facility.

TexasAIM Teamwork, Communication and Simulation Course

DSHS and partners hosted the first statewide Simulation train-the-trainer Course in February 2020. The Simulation Training focused on how to implement and utilize low fidelity simulation as a tool to improve readiness and quality of care. The training was a one-day event that took place in all five cohorts. **There was representation from 120 hospitals and 297 attendees who were able to take what they learned back to their teams and hospitals.**

Reinforced timely actions, improved medication knowledge and overall increased the team's confidence in their abilities.

Due to it being a simulation instead of a drill I have been able to truly engage staff in the simulations. In this way they are better prepared because we repeat each simulation to improve. I have also taught other units that we collaborate with how simulation works. We recently simulated an OB trauma in the ED and discovered lots of opportunities for improvement.



TexasAIM Simulation Training included in-situ postpartum hemorrhage drills to practice technical skills, teamwork and communication for standardized responses.

TexasAIM Obstetric Care and COVID-19

In mid-March 2020, TexasAIM responded to the global COVID-19 pandemic by holding regular calls focused on obstetric care and COVID-19. During this time, teams were not only sharing resources and lessons learned but also connecting through online platforms. Between March and September 2020, there were 12 calls focusing on topics such as anemia protocols, transport, rural hospitals, neonatal care, anesthesia and critical care, Q&A panels, strategies for reopening, health disparities, and more. **Over the course of the 12 calls there were 2,430 attendees and 3,071 views total.**

“Sharing the information from all of the resources you have - it helps to remember we are not the only ones writing this book.”

“I have greatly appreciated the COVID Webinars and collaboration. It has greatly helped me in advocating for things like universal testing knowing that other hospitals in the area were implementing them.”



Throughout 2020, TexasAIM hospitals showed unwavering commitment to maternal health and safety during the COVID-19 pandemic.

Key Lessons Learned and Shared from TexasAIM Hospitals

Over the past two years hospitals have been *sharing seamlessly and stealing shamelessly* with one another throughout the collaborative. There have been lessons learned and shared along the way. Here is a snapshot of a few themes that continue to inform the collaborative as we move forward to the next bundle.

- Getting buy-in is easier if you **focus first on WHY you want to make changes**. Help people understand the benefits of the bundle for patient care before you start talking about HOW to implement it.
- **The heart of the hemorrhage bundle is assessing risks, identifying stages, and intervening early and appropriately**. The hemorrhage cart and QBL are tools to achieve these goals, not ends in themselves.
- **Change can be good**. Evidence-based practice as the gold standard disrupts the status quo, but you do what works for the safety of mothers. The results speak for themselves: knowing how to manage a hemorrhage like a well-oiled team is a comfort to both patients and clinicians.
- Being able to **track real-time data throughout the collaborative**, has impacted physicians and **led to their increased participation and involvement**.
- The more champions you can **engage at different levels**, the smoother the road.
- **Communication with and involvement of multidisciplinary levels of hospital staff** on bundle implementation, and involving them in the process, **promotes team ownership and innovation**.
- **Partnerships outside of the labor and delivery and postpartum units are key**: lab, anesthesia, OR, ER, pharmacy, materials management, IT. Bring staff in these units in early so they understand the WHY and feel like part of the team.
- When making major changes, start early, but also allow time for adjustments. **Staggering implementation of bundle components can keep it manageable**. There is no single best starting point.
- **Creating a learning environment** where trial and error is the norm, and Plan-Do-Study-Act cycles are routine, goes a long way toward engaging physicians and nurses and minimizing pushback.
- **Educating and re-educating is key for initial implementation and for sustaining the changes**. Approach challenges and setbacks with curiosity instead of judgement and find solutions together.
- Simulation is very important. **“Just like any team, if you don’t practice it you can’t play it when it comes to the emergency.”**
- Hospital teams **valued the technical guidance, algorithms, and procedures shared**, but also **appreciated being supported to find their own way to implement the best practices**.
- **Transfer of learning** among hospitals, through case studies and sharing how they responded, has helped bring nurses and doctors on board and enable everyone to see the benefits of changes.
- **Hospitals greatly valued the chance to network, share and learn from each other**. **Hospitals of all sizes** including small rural hospitals, have had the opportunity to **identify and share their unique strengths**.
- **Including staff outside the core AIM team in meetings and other TexasAIM learning opportunities** can increase enthusiasm and buy-in.
- **Engaging and educating** providers outside of the labor and delivery unit, for example, in ambulatory care settings, emergency services, and emergency departments **can enable prompt recognition of urgent maternal early warning signs**.

Thank You to Our Partners

The Texas Department of State Health Services TexasAIM Team would like to extend our gratitude to the many partners who help make TexasAIM a success. Partners include members of the Texas Maternal Mortality and Morbidity Review Committee, Perinatal Advisory Council, American College of Obstetricians and Gynecologists/Alliance for Innovation on Maternal Health, the Consortium of Texas Certified Nurse Midwives, Texas Collaborative for Healthy Mothers and Babies, the Texas Hospital Association, the Texas Medical Association, the Texas Nursing Association, University of Texas – Tyler, Texas Regional Advisory Councils, Texas Health and Human Services Commission, and many others. Thank you to Dr. David Lakey, Dr. Patrick Ramsey, Dr. Christina Davidson, Amanda Wagner, Sheena Abraham, Sarah Presti, Nagla Elerian, and all of our colleagues at The University of Texas System and Texas Collaborative for Healthy Mothers and Babies.

We would like to give a big thank you to our partners at MoMMA's Voices and Black Mamma's Community Collective. A special thank you to the mothers who shared their stories to move hearts and minds toward improving maternal health and safety.

We are also thankful to our faculty members:

TexasAIM Plus Obstetric Hemorrhage Learning Collaborative Faculty Members

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- Carroll Deighton, MSN, RNC-OB, C-EFM
- Rakhi Dimino, MD, MMM, FACOG
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- Karin Fox, MD, M.Ed
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- Jamie Morgan, MD

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- Sarah Page-Ramsey, MD
- Amber Pocrnich, BSN, RNC-MNN
- Brook Thomson, MD, FACOG

We would also like to recognize Amanda Wagner, UT Tyler/TCHMB Perinatal Quality Improvement Nurse, for her support with the simulation events.

TexasAIM PfP-OBH Simulation Program Host Sites

- Children's Memorial Hermann Hospital
- CHRISTUS The Children's Hospital of San Antonio
- Parkland Hospital
- University of Texas Southwestern

Looking Forward to 2021

The TexasAIM Team and our partners look forward to holding the gains we have made over the past two years and continuing to work together to improve the health and safety of mothers across Texas.

To learn more about TexasAIM, please visit <https://www.dshs.texas.gov/mch/texasaim/> or you can email us at TexasAIM@dshs.texas.gov.