



Maternal Health: The Cornerstone of Public Health

INTRODUCTION

Public health is founded on the goals of preventing adverse health events and promoting healthy behaviors to ensure the areas where people work, live and play are safe. Maternal health is a critical factor in shaping population health.

The World Health Organization's definition notes, "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."¹ At the population level, public health strives to protect and promote the well-being of those individuals and their communities to foster resilient, sustainable environments for current and future generations to prosper².

Maternal health is a significant public health topic on a national and global scale. While there are cultural differences that influence family planning, childbirth and parenting practices, mothers around the world share a steadfast influence on their children, family and community that is crucial to the survival and wellbeing of future generations. *Maternal health directly influences the child, family, community and their contribution to society.*

As New York State strives to "**become the healthiest state for people of all ages**", it's proposed 2019 – 2024 Prevention Agenda has cross-cutting principles that are supported by this position paper³.

The Association of Perinatal Networks (APN)–leaders in community driven maternal and child health- recognizes the need to craft solutions to our maternal and infant mortality and morbidity health crisis in order to achieve the nation's Healthy People 2020 goals and New York State's vision to be the healthiest State for people of all ages. The APN has identified solutions that impact public health across the life course and at the interpersonal, group, organizational, community, and policy levels to address social determinants which lead to adverse maternal and infant health outcomes.

A Call to Action

This paper provides a blueprint for successful strategies to improve maternal health. The positions/recommendations complement comprehensive New York State and federal initiatives.

The APN is committed to collaborating with all stakeholders to implement this blueprint including community residents, CBO's, providers, policy makers, insurers, programs and systems throughout the State of New York.

We call upon all stakeholders to engage in critical discussions, self-reflection, and take personal responsibility to actively address the issues.

BACKGROUND

As New York State strives to “**become the healthiest state for people of all ages**”, it’s proposed 2019 – 2024 Prevention Agenda has cross-cutting principles that are supported by this position paper⁴. This includes an emphasis on the social determinants of health, a life course approach to prevention, the promotion of equity, and impacting health from the individual to policy levels.

In addition, the Prevention Agenda Feedback Summary lists Promoting Healthy Women, Infants and Children as a goal to reduce maternal mortality and morbidity under the Maternal & Women’s Health focus area⁵.

The World Health Organization’s definition notes, “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”⁶ At the population level, public health strives to protect and promote the well-being of those individuals and their communities to foster resilient, sustainable environments for current and future generations to prosper⁷. Maternal health is a significant public health topic on a national and global scale. While there are cultural differences that influence family planning, childbirth and parenting practices, mothers around the world share a steadfast influence on their children, family and community that is crucial to the survival and wellbeing of future generations. *Maternal health directly influences the child, family, community and their contribution to society.*

Maternal mortality and severe maternal morbidity are on the rise in the U.S.

According to a CDC 2016⁸ report,

- Each year, 700 women die of pregnancy-related causes, and more than 50,000 have severe pregnancy complications.
- African-American women are 3 to 4 times more likely to die of pregnancy complications than white women.
- Women aged 35 to 39 are almost twice as likely to die of pregnancy complications as women aged 20 to 24. The risk becomes even higher for women aged 40 or older.

New York State Maternal Health Data for 2014⁹ shows that:

- Over 50% of females with live births were insured by Medicaid.
- Nearly 45% of females with a live birth were overweight or obese at the time of delivery.
- Preterm births ranged from a low of 9.3% among whites to a high of 14.8% among blacks.
- Since 2005, all infant, neonatal, post-neonatal, and perinatal deaths and rates declined.
- Increases in mortality rates were observed in complications of pregnancy, childbirth and puerperium.
- Low birthweight births in 2014 ranged from a low of 6.6% of for white females to a high of 12.0% for blacks.

- Pregnancy rates increased over time for females aged 35 years and over,
- Teenage pregnancies, live births, spontaneous fetal deaths and induced abortions all decreased substantially since 2008.
- From 2008-2014, Hispanic females observed the largest birth rates (15.2 per 1,000).
- From 2009 to 2014, the number of females delivering vaginally after having a previous cesarean delivery increased 57.9% while the number of primary cesarean deliveries decreased by 15% over the same time period.

A child's health and well-being are significantly influenced by the physical, mental and social well-being of his or her mother. If society can get maternal health right it raises the bar for the likelihood that the aforementioned statistics will improve. In order to do this a comprehensive approach is necessary.

Receiving prenatal care is very important for mom and baby as it provides an opportunity to screen the mother for medical, emotional and behavioral risk factors that can have adverse effects on the development of the fetus and an educational opportunity to address how the mother can reduce the risk of pregnancy complications. Additionally, the pre- and inter- conception (before and between pregnancy) periods are of equal importance to maternal, infant and child health. The health of a woman before she becomes pregnant plays a significant role during pregnancy and birth outcomes

STATEMENT OF PROBLEM

According to Governor Andrew M. Cuomo, "Maternal mortality should not be a fear anyone in New York should have to face in the 21st century."

New York State ranks 30th in the nation for its maternal mortality rate. While the rate improved from 46 in 2010, the numbers don't support the state's quest to be the healthiest state for people of all ages, especially if you are an African-American woman. An African-American woman in New York is 4x more likely to die in childbirth than her White counterparts. Research shows that in New York City highly educated black women still fare significantly worse than white women with less than a high school degree.

These racial disparities are poised to be addressed at a state level via a comprehensive initiative to target maternal mortality while reducing racial disparities in health outcomes through the **Taskforce on Maternal Mortality and Disparate Racial Outcomes.**

The APN is optimistic that the priority areas of the Taskforce will complement, and in some instances, overlap with the APN's recommendations.

Taskforce Priority Areas:

- Establish the Maternal Mortality Review Board
- Launch the Best Practice Summit with Hospitals and OB-GYNs
- Pilot the Expansion of Medicaid Coverage for Doulas

- Support Centering Pregnancy Demonstrations
- Require Continuing Medical Education and Curriculum Development
- Expand the New York State Perinatal Quality Collaborative
- Launch Commissioner Listening Sessions

As previously stated, preconception health care, reproductive justice, health equity, and the social determinants of health are key drivers to addressing racial and disparate outcomes in maternal health.

Preconception health care is a strategic objective of *Healthy People 2020*¹⁰. A 2006 Report by the CDC “*Recommendations to Improve Preconception Health and Health Care - United States: A Report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care*” was published in an effort to improve reproductive health outcomes¹¹. Unfortunately, barriers continue to exist that prevent preconception counseling from being adequately integrated into routine primary care. Due to the high frequency of unplanned pregnancies, Preconception Health Care has the potential to be a great public health strategy.

Reproductive Justice is crucial to reproductive health care. It does not only relate to contraceptives, abortion rights, or labor and delivery options, but advocates for ending health inequalities throughout the life cycle.

Sister Song is a national women of color reproductive justice collective, and it defines the reproductive justice framework as:

“...the right to have children, not have children, and to parent the children we have in safe and healthy environments — is based on the human right to make personal decisions about one’s life, and the obligation of government and society to ensure that the conditions are suitable for implementing one’s decisions. Reproductive justice addresses the social reality of inequality, specifically, the inequality of opportunities that we have to control our reproductive destiny. Our options for making choices have to be safe, affordable and accessible, three minimal cornerstones of government support for all individual life decisions.”¹²

According to Braveman¹³, “**health equity** means social justice in health. No one is denied the possibility to be healthy for belonging to a group that is historically economically and socially disadvantaged.”

Healthy People 2020 defined a health disparity as: “. . . a particular type of health difference that is closely linked with economic, social, or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, age, or mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or

other characteristics historically linked to discrimination or exclusion.”¹⁴

Considerable public health efforts have been galvanized to reduce health disparities and ensure health equity for patients through the use of culturally and linguistically appropriate services, however, policies and standards are slowly being implemented.

A 2015 systematic review by Hall and colleagues revealed that implicit bias is significantly related to patient-provider interactions, treatment decisions, treatment adherence, and patient health outcomes. Implicit bias, also known as unconscious bias, is “the bias in judgment and/or behavior that results from subtle cognitive processes (e.g., implicit attitudes and implicit stereotypes) that often operate at a level below conscious awareness and without intentional control.”¹⁵

It is important for health care organizations to lessen the effect of implicit bias at all points of contact with patients. This is important because implicit bias not only affects outcomes of care, but can also affect whether patients will return for services.

Social determinants of health are closely associated with health disparities. According to the Kaiser Family Foundation, “the social determinants of health, for example, include where a person lives, learns, works, plays, and ages. These factors influence one’s ability to access quality education, stable housing, a safe neighborhood, reliable transportation, healthy food, and more. Increasingly, evidence suggests that social determinants

have the greatest impact on health outcomes, even more so than the medical care one receives.”¹⁶

Social determinants of health (SDH) greatly impact vulnerable populations and affect maternal and infant health outcomes. For example, low socioeconomic status is associated with increased chances of having a low birth weight infant or preterm birth.¹⁷ In addition, pregnant women with limited social support are more likely to have a low birth weight infant.¹⁸

Doulas as a Solution

Studies show that doula care is associated with lower cesarean delivery rates, shorter labors, higher rates of spontaneous vaginal birth, and higher levels of satisfaction.^{19,20} Another study concluded that “access to doula services for pregnant women who are at risk of poor birth outcomes may help disrupt the pervasive influence of social determinants as predisposing factors for health during pregnancy and childbirth.”²¹

Collective Impact

A Collective Impact strategy has the potential to engage a wide number of stakeholders in addressing social determinants of health. Collective Impact is defined as, “A framework to tackle deeply entrenched and complex social problems. It is an innovative and structured approach to making collaboration work across government, business, philanthropy, non-profit organizations and citizens to achieve significant and lasting social change.”²² Collective Impact (CI) is a collaborative approach to address complex social problems. The CI framework includes 5 key

elements: 1) Common Agenda; 2) Shared Measurement; 3) Mutually Reinforcing Activities; 4) Continuous Communication, and 5) Backbone Support.

In 2014 Healthy Start adopted CI as a framework for reducing infant mortality and many grantees participated in a Peer Learning Network (PLN) to support CI implementation.

Key findings from the 2017 Evaluation of the Healthy Start project showed that “participants reported increased knowledge and confidence in the application of CI. Several participants reported that the CI-PLN created a space for engaging in peer sharing challenges, successes, and best practices. Participants also reported a desire to continue implementing CI and furthering their learning.”²³

APN recommends the following positions and recommendations to improve maternal health and reduce racial and ethnic health inequities. These positions relate to the areas of the APN mission.

POSITIONS/RECOMMENDATIONS

The following positions/recommendations are the APN’s Community Call to Action. The position statements represent the bridge between maternal health and public health. Each recommendation is preceded by the area of intervention that it impacts (individual, interpersonal, organizational, community, or policy). Some recommendations cross multiple areas of intervention. The recommendations are

designed to be executable and measurable for both progress and impact.

Position Statement 1: Preconception health care is part of the continuum of routine health care capturing every woman that may become pregnant or her partner.

Because the first few weeks of pregnancy are crucial to the healthy development of babies, mothers need to be healthy and avoid all harmful activities and substances near the time of conception. Preconception health is the health of women and men before pregnancy during their reproductive years. It involves knowing how health conditions and risks factors could affect a woman or baby before she becomes pregnant. Preconception health care allows women and men to take immediate steps to protect the health of a baby they might have sometime in the future. According to the CDC, “Preconception health care is the medical care a woman or man receives from the doctor or other health professionals that focuses on the parts of health that have been shown to increase the chance of having a healthy baby.” Research shows that although more fathers are participating in childbirth preparation classes, childbirth, and infant care, health care providers still fail to effectively engage them through programs.²⁴

Recommendations

Areas of Impact: Individual and Organizational

1. Primary and specialty care providers can implement an all-embracing life course approach to

preconception care and pregnancy planning to include women with chronic diseases and those differently abled by asking them one key question (Would you like to become pregnant in the next year?).

Areas of Impact: Interpersonal

2. Strengthen father involvement by expanding preconception health content to include male focused preconception health care.

Position Statement 2: Reproductive justice is recognized as a human right that promotes positive maternal and women’s health (regardless of age, gender, ethnicity, skin color, economic or immigration status, physical ability, educational attainment, or a person’s involvement in the criminal justice system).

The current status of infant mortality, increasing maternal death rates, and growing health inequities presents opportunities for multi-sector initiatives focused on creating women’s reproductive justice agendas.

Strategies should be comprehensive by addressing women as whole humans instead of separate reproductive body parts. Similarly, holistic vision and collaboration across all ages, races, genders, socio-economic class, and all other differences are important in reducing oppression and exploitation.

Recommendations

Areas of Impact: Individual and Interpersonal

1. Create awareness centered on birthing rights for women in vulnerable communities by incorporating the topic in ESL programs for immigrant, non-English speaking women.
2. Provide junior and senior high school girls with culturally sensitive tools that help them to develop a full understanding of the reproductive system, menstruation, conception, physiologic birth, and body autonomy through a life-course lens.

Areas of Impact: Organizational

3. Provide training on implicit and economic bias and the connection between contraception suggestions (e.g., Long-acting reversible contraceptives-LARC) for health professionals.

Areas of Impact: Community and Policy

4. Provide comprehensive training to under-sourced sectors such as law enforcement/correction professionals on the importance of maternal/women’s health for all women including women who are incarcerated.

Position Statement 3: Providers recognize, understand, and work to uproot the constructs created in the health care system based on prejudice, discrimination, racism, and implicit bias as part of an

overall strategy to provide equitable accessible health care throughout the life course.

As stated by Braveman in a 2014 Public Health Report, “Health Disparities are the metrics we use to measure progress toward achieving health equity.”²⁵

Maternal and infant health inequities are serious public health problems that have many social and economic consequences. Maternal and infant health disparities vary and can exist among different groups including insured and uninsured populations, urban and rural communities, privately and publicly insured individuals, and racial or ethnic minorities.

Recommendations

Areas of Impact: Organizational, Community and Policy

1. Mandate intentional racial bias trainings to be held annually for all health care providers and staff as a means of reinforcing the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (The National CLAS Standards) that promotes health equity through policy, practices and allocated resources.
2. Deploy participatory approaches to research to capture target populations in familiar places and spaces to obtain input that will properly inform Community Health Needs Assessments and Community Health Improvement Plans.

Areas of Impact: Organizational and Community

3. Design maternity bundles through a health equity lens and train all staff involved in the maternity care episode to implement services and care through this lens.

Position Statement 4: Utilize a social determinants of health approach to reducing maternal mortality and morbidity and its known risk factors.

Much interest exists in reducing socioeconomic and racial/ethnic disparities in health status. The primary policy focus around reducing health differences has included improving access, coverage, and quality of health care. However, health can also be improved by reducing poverty, eliminating social isolation, improving environmental conditions, integrating technology, cross-sector collaborations, and more.

The first three years of life are critical for healthy child development. New York State’s First 1,000 Days on Medicaid Initiative supports a home visiting model for high perinatal risk communities to improve maternal and child health outcomes. Comprehensive services would include medical care, behavioral care, social services and health education.^{26,27}

Recommendations

Areas of Impact: Community and Policy

1. **SDH Economic Stability:** Engage and support prospective health professionals of color from vulnerable and marginalized

communities early in formal education and throughout the obtaining of professional degrees (physician, nursing, midwifery) to reduce poverty and increase economic stability and the provision of culturally-centered clinical care in their communities (by us, for us).

Areas of Impact: Organizational, Community and Policy

2. **SDH Social and Community Context:** Introduce legislation that allows reimbursement for certified independent community-based doulas and community-based doula programs serving women from zip codes with hotspots or overall high rates of poverty, maternal mortality and morbidity, preterm birth, and/or infant mortality.

Areas of Impact: Organizational and Policy

1. **SDH Health and Health Care:** Increase access to preconception care for African-American women and women with prior adverse maternal and birth outcomes by standardizing the provision of prenatal home visits or extended hours.
2. **SDH Health and Health Care:** Bolster follow-up care during the postpartum period through innovative methods (e.g., texting, scheduled robo-calls, home visits, etc.) to reduce isolation of new mothers and keep them engaged in the health care system and a medical home.

3. **SDH Health and Health Care:** Incentivize the provision of Group Prenatal Care through partnerships between Hospitals, Clinics, Federally Qualified Health Centers and Community Based Organizations.

A CALL TO ACTION

This paper provides a blueprint for successful strategies to improve maternal health. The positions/recommendations complement comprehensive New York State and federal initiatives.

The APN will continue to lead by example, listen to the community, assess and build capacity, and make recommendations towards implementing programs to address the diverse communities of the state.

The APN is committed to collaborating with all stakeholders to implement this blueprint including community residents, CBO's, providers, policy makers, insurers, programs and systems throughout the State of New York.

We call upon all these stakeholders to engage in critical discussions, self-reflection, and take personal responsibility to actively address the issues identified in this paper.

The APN acknowledges Ashely Breth, MPH Student Intern, Buffalo Prenatal- Perinatal Network and *Just Us Women Productions*: Tamara Wrenn, MA, CCCE, Project Manager
Deborah Duewson, MPH Senior Consultant, Eilish Neely, MPH Research Consultant, for their work on this document in conjunction with APN Board members LuAnn Brown and Sharon Chesna.

The Association of Perinatal Networks of New York (APN)

is a 501c3 incorporated organization of the perinatal networks and other entities focused on maternal and infant health and well-being located and providing services throughout New York State. The APN was established as an informal association in 1997 and incorporated in 2002 for the purpose of advancing at the state level, the benefits many NYS communities have experienced as a result of the individual perinatal networks. APN's purpose is to broaden awareness of the continuing need to address and improve maternal, infant and child health services and outcomes in New York State, and to broaden the awareness of the improvements in perinatal health that have been evidenced in the regions of the state covered by perinatal networks. The APN attributes much of the improvements in maternal infant health over the past 30 years to the increased coordination of services and collaboration among providers that is promoted through the perinatal network concept.

The Mission of the Association is: *"To improve perinatal, maternal and child health throughout New York State, and to support the work of the individual Perinatal Networks."*

The APN accomplishments include:

- Convening the first statewide symposium on perinatal health (in partnership with the NYS Dept. of Health, Bureau of Women's Health);
- Published the *Charting A Course for Perinatal Health in New York State - A Framework for Strategic Planning*;

- Hosted the first state-wide coordinated training of medical and community health care professionals on postpartum depression;
- Host educational programs for NYS legislators on maternal and child health issues and the importance of various legislation and programs;
- Led a Folic Acid Awareness Campaign for NYS (March of Dimes);
- Annual sponsor of the NYS Perinatal Association's annual perinatal partnership conference;
- *Text for Babies* lead entity in NYS;
- Convener of statewide symposiums and summits on current and emerging perinatal health issues;
- Published the *Comprehensive Prenatal-Perinatal Services Networks, 20 year Report*;
- Convener of the *Premature Infant Health Network of NYS*;
- Developed and facilitated a Consumer Education Toolkit for the March of Dimes Healthy *"Babies are Worth the Wait"* initiative to reduce early elective deliveries.

For more information about the Association of Perinatal Networks, or the information contained in this document, contact the APN office:

Association of Perinatal Networks
457 State Street Binghamton, NY 13901
(p) 607-772-0517 (f) 607-772-0468
www.associationofperinatalnetworks.org
contact: apn@mothersandbabies.org

REFERENCES

- ¹ <http://www.who.int/about/mission/en/>. Accessed May 25, 2018.
- ² <https://www.apha.org/what-is-public-health>. Accessed May 25, 2018.
- ³ https://www.health.ny.gov/facilities/public_health_and_health_planning_council/meetings/2018-05-16/docs/cross_cutting_principles.pdf. Accessed May 30, 2018.
- ⁴ https://www.health.ny.gov/facilities/public_health_and_health_planning_council/meetings/2018-05-16/docs/cross_cutting_principles.pdf. Accessed May 30, 2018.
- ⁵ https://www.health.ny.gov/facilities/public_health_and_health_planning_council/meetings/2018-05-16/docs/feedback_summary.pdf. Accessed May 30, 2018.
- ⁶ <http://www.who.int/about/mission/en/>. Accessed May 25, 2018.
- ⁷ <https://www.apha.org/what-is-public-health>. Accessed May 25, 2018.
- ⁸ <https://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2016/aag-maternal-health.pdf>. Accessed May 26, 2018.
- ⁹ https://www.health.ny.gov/statistics/vital_statistics/docs/vital_statistics_annual_report_2014.pdf. Accessed May 28, 2018.
- ¹⁰ <https://www.hhs.gov/opa/sites/default/files/reproductive-health-and-healthy-people-2020.pdf>. Accessed May 26, 2016.
- ¹¹ Johnson, K., et al., Recommendations to improve preconception health and health care--United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR Recomm Rep*, 2006. 55(Rr-6): 1-23.
- ¹² <https://www.sistersong.net/reproductive-justice/>
- ¹³ Paula Braveman 2014 Volume: 129 issue: 1_suppl2, page(s): 5-8
- ¹⁴ <https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities>. Accessed May 25, 2018.
- ¹⁵ Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. *Achieving Health Equity: A Guide for Health Care Organizations*. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016.
- ¹⁶ Kaiser Family Foundation. Beyond health care: the role of social determinants in promoting health and health equity, 2015. Retrieved from www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/
- ¹⁷ Zhong-Cheng L, Wilkins R, Kramer MS. Effect of neighbourhood income and maternal education on birth outcomes: a population-based study. *Canadian Medical Association Journal*. 2006; 174(10):1415–20.
- ¹⁸ Feldman PJ, Dunkel-Schetter C, Sandman CA, Wadhwa PD. Maternal social support predicts birth weight and fetal growth in human pregnancy. *Psychosomatic Medicine*. 2000;62(5):715–25.
- ¹⁹ Hodnett E, Gates S, Hofmeyr G, Sakala C. Continuous Support for Women During Childbirth (Review) *Cochrane Database of Systematic Reviews*. 2013
- ²⁰ Kozhimannil KB, Attanasio LB, Jou J, Joarnt LK, Johnson PJ, Gjerdingen DK. Potential benefits of increased access to doula support during childbirth. *Am J Manag Care*. 2014;20 (8):e340–52.
- ²¹ Kozhimannil KB, Vogelsang CA, Hardeman RR, Prasad S. Disrupting the pathways of social

determinants of health: doula support during pregnancy and childbirth. *Journal of the American Board of Family Medicine : JABFM*. 2016;29(3):308-317.

22

<http://www.collaborationforimpact.com/collective-impact/> Accessed May 27, 2018.

²³ Bradley K, Chibber KS, Cozier N, Meulen PV, Ayres-Griffin C. Building Healthy Start Grantees' Capacity to Achieve Collective Impact: Lessons from the Field. *Maternal and Child Health Journal*. 2017;21(Suppl 1):32-39. doi:10.1007/s10995-017-2373-1.

²⁴ Bond, M. J. (2010). The missing link in MCH: paternal involvement in pregnancy outcomes Frey,

K. A., Engle, R., & Noble, B. (2012). Preconception healthcare: What do men know and believe? *Journal of Men's Health*, 9(1), 25-35. DOI: 10.1016/j.jomh.2011.11.001

²⁵ Braveman Public Health Reports / 2014 Supplement 2 / Volume 129.

26

https://www.health.ny.gov/health_care/medicaid/redesign/1000_days/2017-12-01_proposal_desc.htm#x. Accessed May 31,2018.

²⁷ <https://www.governor.ny.gov/news/governor-cuomo-announces-comprehensive-initiative-target-maternal-mortality-and-reduce-racial>