The U.S. is currently facing an opioid epidemic that has resulted in billions of dollars in costs to the nation’s healthcare system. This report highlights examples of the critical role 340B hospitals are playing across the country to combat the opioid epidemic in the communities they serve.
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ABOUT 340B

The 340B drug pricing program was signed into law in 1992 to ensure healthcare providers that serve large numbers of low-income, Medicaid, uninsured and under-insured populations could continue their mission to provide care to all regardless of ability to pay. Rural hospitals serving patients in remote locations also qualify for the 340B program. In order to participate in the Medicaid and Medicare Part B markets, pharmaceutical companies must agree to provide outpatient pharmaceuticals to safety-net providers at a discounted rate. 340B program participants use their savings to provide critical services to their low-income and rural patients.

ABOUT 340B HEALTH

340B Health is an association of more than 1,300 hospitals that participate in the 340B drug pricing program. We are the leading advocate and resource for those providers who serve their communities through participation in the 340B program. For more information about us and the 340B program, visit www.340bhealth.org.
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- **Boston Medical Center** – David Twitchell, Vice President/Chief Pharmacy Officer
- **CHI St. Gabriel’s Health** – Howard Kenna, Director of Pharmacy
- **FirstLight Health** – Brent Thompson, Director of Pharmacy
- **MetroHealth System** – Joan Papp, Medical Director of Office of Opioid Safety
- **Riverside Health System** – Cynthia Williams, Vice President/Chief Pharmacy Officer
- **Wake Forest Baptist Health** – Bibi Wishart, Systems Manager for Community and Specialty Pharmacy
EXECUTIVE SUMMARY

The United States is currently facing an opioid epidemic that has resulted in more than 700,000 deaths between 1999 and 2017 and cost the economy an estimated $1 trillion since 2001. Federal and state policymakers have enacted legislation to address the issue, yet challenges and gaps in care remain as the epidemic continues to grow and affect many communities around the country. As safety-net providers, 340B hospitals have been on the front lines of this issue by establishing targeted programs and services to address the epidemic and prevent further cases of opioid use disorder in their community. This report seeks to better understand the specific role 340B hospitals are playing to address the crisis within their communities, the nature of the programs and services implemented, and how 340B program savings are helping them in their efforts.

340B Health conducted interviews in late 2018 of hospital leaders at six institutions participating in the 340B program. These hospitals, located in five states (Massachusetts, Minnesota, North Carolina, Ohio, and Virginia) representing different regions of the country, ranged in size from small critical access hospitals serving a largely rural population to large disproportionate share hospitals located in urban centers.

The hospitals reported a range of programs and services they initiated to address the opioid epidemic, including:

- Changing opioid prescribing patterns
- Community education programs
- Optimizing distribution of free naloxone and suboxone to first responders
- Innovative clinical care teams who manage, treat, and prevent cases of opioid use disorder
- Medication-assisted treatment (MAT) programs
- Drug take-back days in coordination with local law enforcement

The development and implementation of these programs has collectively had a positive impact on the communities served by these hospitals, with one hospital reporting that they have reduced opioid-related deaths in the community to zero as a result of their efforts.

The hospitals all noted that the 340B program has played an important role in supporting the implementation and continued operation of these programs and services. One hospital noted that 340B program savings were essential to defray the significant costs of providing free naloxone kits to the community and that without the program, such an effort would be

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unsustainable. Another hospital noted that 340B savings were key to hiring full-time staff to oversee a new MAT program designed to treat patients suffering from opioid use disorder. Several hospitals also noted that limiting or terminating the 340B program would force them to either find funding elsewhere or curtail some or all of their efforts. One rural critical access hospital noted that “savings from the 340B program allow us to keep our doors open. Without that support, [we] would still provide help, but things would be drastically cut back.”

These case examples lend further evidence that the safety-net hospitals participating in the 340B program are on the front lines of addressing this important issue. They are using 340B program savings to create and maintain programs and services critical for their communities to address the nation’s opioid epidemic.
INTRODUCTION AND REPORT PURPOSE

BACKGROUND

The United States is currently facing a growing epidemic of opioid use disorder that has garnered significant attention due to the staggering numbers of deaths and hospitalizations that have resulted from overdose and misuse of these drugs. According to the Centers for Disease Control and Prevention (CDC), there were more than 70,000 drug overdose deaths in 2017—the highest number of drug overdose deaths for any single year in U.S. history.\(^3\) The CDC also found that the increase in drug overdose deaths was the primary cause behind the drop in U.S. life expectancy in 2017, making that year the third in a row in which life expectancy fell or remained flat. The only other time in modern U.S. history that life expectancy has dropped three consecutive years was during the 1916 to 1918 influenza pandemic.\(^4\)

The current opioid epidemic is the latest in a series of opioid-related crises that began in the 1990’s, when new prescription painkillers became available in the market. As a result of robust and concerted marketing campaigns, physicians became more willing to prescribe these medications. A second wave hit the country in the 2000’s when initial efforts were made to stem the problem and many patients who had been using prescription painkillers instead turned to heroin as a more accessible and cheaper alternative.\(^5\) Finally, the country is now in the midst of a third wave in which even-stronger opioids in the form of synthetic opiates such as fentanyl can be obtained at an even cheaper price.\(^6\)

A recent study by the Altarum Institute found that the nation’s ongoing opioid crisis has cost the U.S. economy more than $1 trillion from 2001 to 2017 and is poised to cost the nation an additional $500 billion by 2020.\(^7\) These costs include increased law enforcement costs as well as lost earnings and productivity. The healthcare sector alone has incurred more than $215.7 billion in costs as a result of the opioid crisis, the majority attributable to overdose-related emergency department visits and indirect costs associated with the increased risk for medical complications.\(^8\)

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\(^8\) Id.
Federal and state policymakers have been responding in a variety of ways. On July 22, 2016, President Barack Obama signed into law the Comprehensive Addiction and Recovery Act (CARA), the most comprehensive effort undertaken to date to address the opioid epidemic. This legislation authorizes more than $181 million each year in new funding. In October 2017, President Donald Trump declared the opioid epidemic a public health emergency and most recently, Congress worked together in a bipartisan fashion to pass the “SUPPORT for Patients and Communities Act.” This legislation seeks to improve access to care for at-risk individuals suffering from opioid use disorder while providing funding and resources for state law enforcement to crack down on the sale of illegal opioids in the community.

340B HOSPITALS ON THE FRONT LINES OF THE OPIOID CRISIS

Despite the high-profile nature of the opioid crisis and recent enactment of federal legislation, there remain very real immediate challenges and gaps in access to care. Most experts agree that in order to address this multifaceted problem, significant investments still need to be made across the continuum of care from prevention to treatment and recovery support. Many of the programs and increased funding allocated under federal legislative efforts to date – implementing prevention strategies, identifying at-risk individuals, increasing the number of treatment facilities, and increased law enforcement efforts – will take time to implement. In addition, most experts agree that the funding dedicated to date, while desperately needed, is inadequate to address the full breadth of the problem. This has created a situation in which there are many existing gaps in access to treatment as well as in wrap-around and community support services. It is these gaps that 340B hospitals are helping to fill.

The 340B program allows providers that treat large numbers of low-income and rural patients to realize savings through discounts on brand-name and generic drugs they purchase. They are then able to use those savings to serve more patients, offer more comprehensive services, and address unmet needs in their communities. Prior research has shown that 340B hospitals are safety-net providers that treat significantly more low-income patients and provide a disproportionate share of the nation’s uncompensated and unreimbursed care compared with non-340B hospitals. 340B hospitals play a vital role in the healthcare safety net in the U.S., and this includes providing increased access to care and related services that may otherwise be unavailable in the communities that they serve. Research has also shown that 340B hospitals are more likely to provide critical services that are often under-reimbursed, such as HIV/AIDS treatment, psychiatric care services, and substance abuse and opioid treatment services. Collectively, these services allow 340B hospitals to address the opioid epidemic in a variety of

12 Id.
ways. These include increasing access to naloxone and other medication-assisted treatments to prescription drug “take-back” programs, provider and community education, and protocols to treat injectable opioid-related infections.

As demonstrated by this epidemic, there is still a critical need for the healthcare safety net in the U.S. Systemic changes in prescribing patterns, access to residential care, and medication-assisted treatment, as well as myriad other related aspects of the epidemic, take substantial periods of time to operationalize. The 340B program allows these safety-net hospitals to mobilize targeted services to meet the specific needs of the communities that they serve.

REPORT PURPOSE

This report illustrates the critical role that hospitals participating in the 340B drug pricing program have in addressing the opioid epidemic. This report highlights examples of 340B hospitals across the country and their efforts to combat the opioid epidemic in the communities they serve. These examples collectively illustrate that there is no “one size fits all” approach to addressing this issue, with each hospital and community mobilizing its own unique response to address the needs of its community in battling this epidemic. However, one common theme remains – that 340B hospitals, large or small, rural or urban, are on the front lines of addressing the opioid epidemic.
CASE EXAMPLES FROM THE FIELD

BOSTON MEDICAL CENTER – BOSTON, MA

Type of Hospital: Disproportionate Share Hospital
Number of Beds: 399

The Opioid Challenge

Although Massachusetts has experienced challenges with the opioid crisis that are in line with national trends, the effects of the epidemic are particularly concentrated in the communities served by Boston Medical Center (BMC). BMC is not only the largest safety-net hospital in New England, it is playing an important role in combatting the opioid crisis in Massachusetts and nationally.

The most recent data available from the Commonwealth show that Suffolk County, which makes up a large portion of the BMC service area, had one of the highest rates of unintentional opioid overdose deaths, with approximately 34.5 deaths per 100,000 people in 2017.13

In addition, patients served by BMC are disproportionately racial minority populations, low-income, and uninsured. Safety-net hospitals such as BMC shoulder much of the burden in caring for the relatively large percentage of patients in this population living with opioid use disorder and other chronic health conditions that are complex and costly to treat.

Addressing the Problem

Because the opioid crisis takes on many dimensions, BMC tackles the problem on multiple fronts. All the work that BMC does in caring for patients with opioid use disorder and those at risk is done under the umbrella of BMC’s Grayken Center for Addiction. The Grayken Center launched in 2017, aligning its numerous longstanding programs in addiction treatment, prevention, training, and research. The Grayken Center is led by Executive Director Michael Botticelli, whose own recovery from addiction shaped his career path and eventually led to his appointment as Director of the Office of National Drug Control Policy under President Obama. The Center’s groundbreaking addiction treatment programs, the result of years of experience combating the opioid crisis in Boston, form the model for successful programs not only throughout Massachusetts, but throughout the nation.

A prime example of this is BMC’s work on naloxone distribution. Naloxone is a potentially lifesaving medication for people who overdose on opioids, designed to rapidly reverse the overdose and restore normal respiration to a person whose breathing has slowed or stopped. According to the National

Institute on Drug Abuse (NIDA), naloxone is given to patients in one of three ways – injected by a trained professional, injected using a prefilled auto-injection device, or through a prefilled nasal spray.\textsuperscript{14} To be used effectively, naloxone needs to be put into the hands of the people who are in the best position to use it in situations where every second counts. That’s why BMC distributes naloxone kits and provides training to emergency medical technician crews, Boston University campus police and dormitory supervisors, and people with substance use disorders as well as their family and friends. The impact of BMC’s naloxone distribution has been so successful in improving health outcomes that it inspired the Massachusetts Department of Public Health to authorize “standing orders” to dispense naloxone on demand in all the state’s pharmacies. That means appropriate individuals will have access to the lifesaving medication with no prescription necessary.

As the busiest trauma and emergency services center in New England, BMC treats a high volume of patients directly impacted by the region’s opioid crisis. BMC emergency clinicians, in hopes of breaking the vicious cycle of overdoses they see play out daily, are leading the way in initiating patients on medication for addiction treatment (MAT) – a practice which beginning this year is now mandated in emergency departments statewide. Similarly, BMC’s innovative Office-Based Addiction Treatment (OBAT) Program, which integrates a nurse manager model into primary care, has facilitated access to MAT and improved treatment outcomes in patients with opioid use disorders. BMC’s OBAT Program, known as the “Massachusetts Model,” has been replicated statewide and nationally.

Healthcare providers also share in the responsibility to prevent opioid use disorder whenever possible, not just to treat the disorder after it already has arisen in a patient. That’s why BMC has taken concrete steps to reduce the amount of potentially unnecessary opioid orders that its healthcare professionals prescribe. A recent study concluded that at least 15 percent of opioid prescriptions following discharge were unnecessary, so BMC took the initiative to reduce the quantity and dose of tablets dispensed upon discharge. This resulted in a more than 25 percent reduction in prescriptions for opioids at BMC, resulting in more than 60,000 fewer opioid tablets out in the Greater Boston community and subject to possible misuse or dependency.

\textbf{The Role of 340B}

The widespread rollout of proven initiatives to prevent opioid use disorder and treat those suffering from the illness does not come without significant financial costs. For safety-net hospitals such as BMC, the 340B drug pricing program often provides invaluable support that is not available from any other sources.

At BMC, for example, some of the savings the hospital achieves through 340B help pay for the naloxone kits and training that are lifesavers for people with opioid use disorder in the community. Unfortunately, reimbursement levels from public health programs do not cover the full cost of the medication, which is a potential major barrier to BMC distributing it as widely as needed in the community. Even with 340B savings, BMC is losing money for each naloxone kit distributed. Without 340B to help subsidize the cost,

BMC would lose even more money. For a safety-net hospital such as BMC, the additional losses would be unsustainable for continuing a comprehensive effort that has proven to work.

Patients with opioid use disorder and the people who love and care for them might not be aware that 340B is playing such a large supporting role in the programs that are helping put them on the road to recovery. But the health professionals at BMC whose mission is to serve these patients with all the prevention and treatment tools at their disposal are very aware of just how integral the 340B program is to what they do.
CHI ST. GABRIEL’S HEALTH – LITTLE FALLS, MN

Type of Hospital: Critical Access Hospital
Number of Beds: 25

The Opioid Challenge

Located on the banks of the Mississippi River, Little Falls, Minnesota, is home to 8,500 people who are served by the 25-bed CHI St. Gabriel’s Health hospital, which is also one of the largest employers in the area. As the opioid epidemic began to appear in news headlines, many residents thought this wasn’t a problem in their town. Yet the number of prescriptions for addictive painkillers had skyrocketed.

“When we looked into it, we found patients who were taking opiates and didn’t know what for,” says Howard Kenna, the hospital’s pharmacy director. “There was an 85-year-old woman who had been taking opiates for years and had no idea why.” The research team at St. Gabriel’s also found evidence of people who seemed to be drug-seeking.

As they looked at the issue, the team identified several issues that needed addressing, including prescribing habits and limiting access to opioids, as well as issues around hospice care, nursing home care, treatment options, patient and community education, law enforcement, and the cost of treatment for opioid use disorder.

Addressing the Problem

St. Gabriel’s quickly assembled a Controlled Substance Care Team that included physicians, social workers, a pharmacist, and a nurse all dedicated to preventing and treating opioid misuse. “We realized right away that this had to be a community effort,” Kenna says, and that includes working with local law enforcement authorities. One of their goals is to keep people from ending up in prison due to actions taken to obtain and use opiates. An early initiative created what are known as “pain contracts” between patients and their doctors. The patient agrees to be weaned from opioid use and subject themselves to random urine and blood screens. “If they’re using, they’re out of the program,” Kenna explains. More than 600 patients have already participated.

The program has helped to dramatically reduce the number of opiate prescriptions written by the hospital’s physicians. More than 340 patients have been weaned from their reliance on narcotic medications, and the number of pills prescribed dropped from 38,000 in January 2015 to 21,500 in January 2018.

As the number of opiate prescriptions dropped, St. Gabriel’s began to share its model with others as part of an “ECHO” hub and spoke education program. Through a series of weekly teleconferences, the
St. Gabriel’s team shares what they have learned on a variety of opioid and controlled substance topics such as prescribing practices, community collaboration, pharmacological and physiological effects of prescribed and illicit substances, and buprenorphine clinics in the primary care setting.\(^\text{15}\)

Some of the other small cities and towns that participate in the ECHO program weren’t sure the topics were relevant to them. One example was the city of Hibbing, Minnesota, with a population of 16,000. Says Kenna: “We reached out to folks in Hibbing, and they first told us ‘we don’t have a problem.’ But our doctors said, ‘You do, but you don’t realize it yet.’”

Working with law enforcement partners, the hospital also holds a monthly luncheon to talk about issues related to the epidemic, including drug “take back” days that provide people with a convenient and safe way to dispose of prescription drugs. This also includes a “Coffee with a Cop” meeting that allows residents of Little Falls to talk about their concerns and questions.

**The Role of 340B**

Paying for all these programs is another challenge. Kenna reports St. Gabriel’s has received grant funding from the state. “That money goes way too fast,” he adds. Savings from 340B help the hospital provide medical services for the broader Morrison County community. “We are one of the poorer communities in the state,” Kenna says. “We provide about $3.3 million a year in uncompensated care. Savings from 340B allow us to keep our doors open.” Without that support, St. Gabriel’s would still provide help, “but things would be drastically cut back,” he says.

\(^{15}\) Project ECHO. University of New Mexico. [https://echo.unm.edu/](https://echo.unm.edu/)
Type of Hospital: Critical Access Hospital  
Number of Beds: 25

The Opioid Challenge

Located in East Central Minnesota, FirstLight Health System is a Critical Access Hospital serving an extensively rural farming community in about a four-county radius around the town of Mora, Minnesota.

Despite their small and relatively secluded community, over the past few years the opioid epidemic has reached their doorstep and affected some of their residents. Dr. Brent Thompson, the hospital’s pharmacy director, has been involved in several efforts to educate the community about the devastating impacts that opioids can have. He has worked with local law enforcement and community leaders to proactively prevent the epidemic from affecting more lives in their community.

Addressing the Problem

FirstLight Health noted that one of the biggest challenges in addressing the opioid epidemic was to educate the community about the epidemic and the deleterious effects of opioid use disorder. As the lead pharmacy representative of the hospital, Dr. Thompson traveled across his local communities to educate various groups about the issue. This included presenting at local church gatherings, Lions club meetings, other community groups, and schools. Dr. Thompson provided community residents with information on the ways in which opioid use disorder could lead to severe health complications and even death in addition to significant costs to the community.

FirstLight Health and Dr. Thompson also worked with local law enforcement to successfully set up multiple Drug Enforcement Agency (DEA) take-back days in the community so that residents could return any unused or extra opioids in the household. Dr. Thompson notes that these take-back programs result in less access to opioids in households and the community, thereby reducing the risk for opioid-related incidents.

Recently, FirstLight Health created the community’s first medication-assisted treatment (MAT) program to help address the opioid epidemic. Currently, the program has 15 active patients, none of whom have dropped out of the program and all of whom are successfully working towards improving their health.
The Role of 340B

With the help of savings from the 340B program, FirstLight Health was able to allocate full-time equivalents (FTEs) to manage cases of patients participating in the MAT program. The 340B program also allows easier access to the medication buprenorphine, which patients might otherwise not be able to afford, for treatment of opioid use disorder. In addition to these uses, program savings have allowed the hospital to directly help patients afford many of their medications. Dr. Thompson notes that many of the hospital’s patients are very poor and don’t have the money necessary to buy the medications they need to address their issues of opioid use disorder or other substance use disorders. 340B has allowed the hospital to defray the costs of these medications for their patients, ultimately improving their health and the likelihood that they adhere to the MAT program and their other treatment regimens.

While reduction of the 340B program would not stop FirstLight Health from providing these services to their community, Dr. Thompson notes that the hospital would have to scale back the program and potentially close other programs in order to stay financially solvent. FirstLight Health’s efforts to address the opioid epidemic is helping them continue to maintain no recorded deaths related to opioid overdose in their community, which Dr. Thompson notes has been a rare fortune.
The Opioid Challenge

Located in Cuyahoga County, Ohio, MetroHealth Medical Center serves patients in the northeast sector of one of the states hardest hit by the opioid crisis, with the second-highest opioid mortality rates in the country. According to the Cuyahoga County Opiate Task Force, there were 727 opioid overdose deaths in the county in 2017, up from 666 in 2016 and 370 in 2015.

“Our community has been impacted pretty significantly,” says Joan Papp, MD, FACEP, medical director of the Office of Opioid Safety, and assistant professor in the Department of Emergency Medicine at MetroHealth. “Every aspect of everything we do in the hospital is affected by it -- not only the way we treat pain but the way we respond to patients when we identify an overuse disorder.”

Addressing the Problem

MetroHealth has taken a multifaceted approach to addressing the opioid crisis in its service area, including prevention, treatment, and close collaboration with organizations throughout the county. In 2012, MetroHealth launched its Project DAWN (Deaths Avoided with Naloxone) pilot project. It provides walk-in services to help people with opioid use disorder, family, and friends identify risk factors for an opioid overdose and learn how to respond to such an emergency. People enrolled in the program receive free naloxone kits that contain two vials of the life-saving medication.

“We have built resources at every level of care for our patients,” Dr. Papp says. That includes the emergency department and numerous outpatient clinics. There is now a full-time case manager in the ED who can deliver medication-assisted treatment (MAT). A peer support program employs people who are in recovery to assist ED patients and get them connected to treatment.

MetroHealth’s work extends well beyond the walls of the hospital. A community-based “quick response team,” which also includes social workers and local police, goes to an overdose victim’s home within seven days of the incident to help connect them to treatment and provide a free naloxone kit. MetroHealth also provides care in the Cuyahoga County Correction Center, where the risk levels for opioid use disorder are extremely high. That involves revising some of the protocols used to treat inmates with opioid use disorders, implementing MAT with buprenorphine and naltrexone, when appropriate.

MetroHealth has increased staff and built infrastructure to direct these efforts, including by creating the Office of Opioid Safety, and 14 employees are solely dedicated to opioid treatment and prevention. The center has tools designed to educate both patients and providers about managing pain medication and identifying overdose risks.

Full-time educators work with providers on such issues as MAT, interpreting toxicology screens, and weaning patients off opioids. An opioid executive committee looks at systemwide data to identify areas for improvement. For instance, it has helped modify the electronic health record system to lower the number of opioids prescribed. An EHR registry identifies patients receiving high doses of opioids so the hospital can work with their physicians to alter prescribing habits.

MetroHealth also conducts several community educational events on the opioid crisis each month at libraries, health fairs, and other gathering points. Recently, it launched a podcast series called “Prescription for Hope” that features interviews with patients, providers, advocates, and others.

**The Role of 340B**

By the end of 2018, Project DAWN estimates it will have distributed 12,000 naloxone kits since its inception and reversed more than 1,800 overdoses with these kits. MetroHealth also estimates it has prescribed three million fewer opioid pills over an 18-month period, reducing the number of opioid pills prescribed for acute pain by 62 percent and for chronic pain by 25 percent.

Costs continue to pose a barrier to further progress, which underscores the importance of 340B savings to serve as a financial cushion for safety-net hospitals such as MetroHealth. Dr. Papp reports that the cost of a naloxone kit, for instance, has more than quadrupled since Project DAWN began. “We buy a lot of Narcan kits, and 340B makes them more affordable,” she says. But she worries about potential 340B cutbacks that would force MetroHealth to either scale back some of these efforts or seek alternative funding sources.
The Opioid Challenge

Riverside Regional Medical Center is a safety-net hospital located in Southeastern Virginia, part of the Riverside Health System. The center services the peninsula region of Virginia, which has been particularly affected by the opioid epidemic. According to the National Institute on Drug Abuse, the rate of opioid-related overdose deaths in 2016 in Virginia outpaced the national average.18

Because the center serves as the only facility in the region providing high-risk pregnancy services, including a neonatal intensive care unit, the area’s maternal and child health status also impacts the organization. Based on the most recent data available from the commonwealth, the region had higher percentages than the state average for mothers with late or no prenatal care, preterm births, low birth weights, and rate of HIV infections.19

As the only system in the area offering comprehensive infectious disease services, Riverside is grappling with an increase in HIV-related illness as well as serious injection-related infections. Many of these patients are uninsured and require lengthy inpatient stays to ensure resolution of their infections. Patients with serious injection-related infections who are not adequately treated have higher morbidity and mortality rates.

The challenges faced by these patients illustrate how difficult it is for the medical professionals who care for them to get a handle on the problem. In many of these cases, providers must focus on treating emergent, complex medical needs in addition to the underlying opioid use disorders.

Addressing the Problem

Riverside recognizes that pregnant and parenting women with opioid use disorders face significant challenges in caring for themselves as well as their children. That’s where the South-Eastern Family Project comes in.

By offering both comprehensive day and residential treatment to women, the project provides a stable and secure environment where women and their children can stay together throughout the course of the treatment that they need to get and stay healthy. While visiting or staying at the South-Eastern

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Family Project, pregnant and parenting women receive comprehensive care from a team of Riverside healthcare professionals who specialize in the complex care that is essential for this patient population.

Neonatal intensive care also is offered through Riverside, which is a significant resource for the community safety net. The NICU provides specialized services to the increasing number of infants born to area mothers with opioid use disorders.

Serious infections can be one of the life-threatening consequences of the use of injectable drugs. Riverside provides six to eight weeks of inpatient antibiotic therapy for patients whose use of injectable drugs has resulted in serious infections. Because a successful strategy for tackling opioid use disorder focuses on treating the whole patient, including those who require behavioral health assistance, those enrolled in this inpatient program also receive psychiatric care and counseling before and during their hospital stay.

Riverside recognizes that preventing unnecessary deaths from opioid use disorder requires the availability and timely application of naloxone in emergency situations. That’s why part of the Riverside opioid response strategy involves providing naloxone kits to local law enforcement agencies who might best be equipped to respond in such emergencies.

The Role of 340B

All the elements of the Riverside opioid response strategy are costly to provide, and these costs often are not fully covered by Medicaid and other public health programs. In addition, many of the patients helped by these programs are uninsured, putting a potentially burdensome strain on the safety-net system’s finances if alternative resources cannot be found.

This is where the 340B drug pricing program plays such an important role, by stretching limited resources further to enable Riverside to mount a robust, comprehensive response to the crisis. Some of the savings that the system realizes through 340B go to pay for support of the South-East Family Project, NICU services, the inpatient infection program, and the naloxone distribution effort.

Riverside incurs financial losses offering these services even after accounting for the assistance provided through 340B. Without 340B there to offer support, those financial losses would become unsustainable and would threaten the survival of opioid use disorder programs that the people of Southeastern Virginia need.
Type of Hospital: Disproportionate Share Hospital  
Number of Beds: 800

The Opioid Challenge

Signs of the coming opioid epidemic began to appear in the early 2000s in Winston Salem, North Carolina. Reports of opioid-related deaths concerned city leaders including the leaders of Wake Forest Baptist Health, an 800-bed academic medical center with hospitals, clinics, physician practices, diagnostic centers, and primary and specialty care facilities serving some 24 counties in northwest North Carolina and southwest Virginia. This includes many rural communities where the epidemic seemed to take hold early.

Opioid-related deaths in Forsyth County more than tripled from 13 in 2005 to 53 in 2015, according to a report by Governor Roy Cooper.\(^\text{20}\) The hospital system quickly realized it needed to address the problem in several ways. That included provider education to reduce the number of opioids being prescribed and patient and community education to stem the demand for the addictive drugs. “We had to start with the basics so that people could understand the bare bones of the epidemic. What’s causing it? How to treat it?” says Bibi Wishart, systems manager for community and specialty pharmacy at Wake Forest Baptist Health. On the treatment side, “our first line of defense was providing Narcan kits to people at risk of overdose,” she adds.

Addressing the Problem

To get a handle on prescribing practices, the state of North Carolina enacted the “Strengthen Opioid Misuse Prevention” or STOP Act, which set limits on prescribing opioids for acute pain.\(^\text{21}\) For example, the act limits first-time prescriptions to no more than five days, and prescriptions following surgery are limited to seven days. “There were a lot of challenges to comply with those limits,” Wishart says.

The health system revised its electronic health record (EHR) to use hard stops when physicians were at risk of exceeding the limits. Education programs focused on providers’ prescribing rates by sharing data and discussing alternatives. As in other communities, the use of naloxone is a key part of the response in Winston-Salem. “We have naloxone on standing order. We provide providers who conduct home visits


with kits to administer in case of overdose,” Wishart explains. These providers are a key part of patient and community education efforts.

Reducing the supply of opioids extended to the community. Wake Forest Baptist Health has placed drug “take back” programs at all of their pharmacies so that people in the community can safely discard unused prescriptions at any time, not just on special take-back days. The program also focuses on education to help residents understand the dangers of diversion due to storage of excess opioids and other drugs. “We have collected hundreds and hundreds of pounds of medications from people in the community and partnered with the local police departments to encourage patients to turn in their unused drugs,” Wishart explains.

Pharmacists also play an important role. “We started a program at our community retail pharmacies to identify patients with a certain risk score. We have our community pharmacists go and speak with the patients directly, including talking about their risk and the proper use of naloxone,” Wishart says.

**The Role of 340B**

Wake Forest Baptist Health uses savings from the 340B drug pricing program to fund some of these efforts in the homes of high-risk, low-income patients. This is especially true for the one-on-one interventions being done in homes and pharmacies across the county, Wishart says.

Despite the progress being made, the fight to control the opioid epidemic in North Carolina is far from over. Recently, the state’s health secretary estimated that North Carolina is averaging four deaths a day from opioid overdoses. While the hospital’s efforts have helped reduce the incidence of overdoses and deaths, new problems have arisen, including a shift from prescription pain medications to harder drugs such as heroin, methadone, and fentanyl, a synthetic opioid that is often available illegally.

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