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Tackling Youth Substance Abuse on Staten Island: A Collective Impact Project

In October 2016, Adrienne Abbate, Project Director of the Tackling Youth Substance Abuse (TYSA) program since its inception in 2012, sighed as she sat down after TYSA's monthly steering committee meeting. The two-hour meeting had been attended by representatives from a wide cross-section of Staten Island's health and social service providers, as well as law enforcement, education, and local government.

Adrienne had served on the community-based working group that had helped to develop TYSA, a cross-sector collaborative response to the alarming rates of substance abuse—particularly of prescription drugs and alcohol—on Staten Island. TYSA's goal was to reduce substance use among the youth on the island using a collective impact approach. In the four years since its founding, TYSA had accomplished a great deal. But now, many of the original members of TYSA's steering committee—most of whom had been high-level decision-makers in their organizations—were delegating their spots to mid-level staff who were not empowered to make organizational decisions. During this period workgroup participation also began to wane with more of the strategy implementation falling to TYSA's staff. In addition, TYSA's early successes against prescription drug abuse were increasingly overshadowed by a growing opioid problem on the Island and by a continuing culture of alcohol abuse by underage teens.

While the meeting was, as usual, lively and well-attended, Adrienne's mind was occupied with the future of TYSA. They had successfully launched a collective impact initiative and now faced the challenge of sustaining it after the initial buzz faded. Major concerns were keeping the steering committee engaged and effective by managing its composition and role, while also keeping up with an opioid epidemic evolving from the misuse of pharmaceuticals to the misuse of heroin and other street drugs. A more subtle challenge was that, in the Staten Island community, TYSA was over-identified with Adrienne herself; how could TYSA shift the community's perception to demonstrate its value beyond its leader? It was time to pull TYSA's executive leadership and staff together to discuss strategies to reinvigorate the program and to sustain the momentum they had fought so hard to create.

Background on Staten Island

Reflecting its name, Staten Island (SI) is a tight-knit, insular community. Situated southwest of the rest of New York City, it is connected to Brooklyn by the Verrazano-Narrows Bridge and to Manhattan by a free commuter ferry. (See **Exhibit 1** for a map of the City's boroughs.) Of NYC's

five boroughs, SI is the least densely populated with the most homogenous and the smallest population—about 500 thousand people, or 6% of New York City's population. Much of the population is white and middle class, with a median household income of approximately $71,000 and a high school graduation rate of almost 70%, compared with a citywide median of $55,000 and 59% graduation rate. Politically, too, SI distinguished itself from the other boroughs: of the City's five Borough Presidents, SI's James Oddo (elected 2013) is the only Republican, and Staten Island is the only borough Donald Trump carried in the 2016 presidential election.[1] The south shore section of Staten Island is the more affluent area while the population on the Island's Manhattan-facing north shore is more economically disadvantaged and more diverse, with more people of color.

As described by Steve Rabinowitz, Director of Downstate Field Operations in New York State's Office of Alcoholism and Substance Abuse (OASAS), Staten Island is "unique in New York City. The line where certain communities begin and end can be amorphous, but not on SI. There's a clear boundary, plus a strong cultural identity." OASAS prevention services coordinator Anette Guando-Guster agreed, describing SI as "a suburb in the city" with "a great deal of connectedness." (See **Exhibit 2** for a list of people quoted in this case, and their positions and organizations.)

Addressing Staten Island's Health Issues

Despite its relative affluence, Staten Island had the highest all-cause mortality rate in New York City, driven by high rates of heart disease and cancer, as well as significantly higher rates of accidents, respiratory diseases, and substance abuse than the rest of the City. (See **Exhibits 3 and 4** for more on morbidity and mortality.)

Staten Island is also one of two boroughs in NYC without an office of the City's public health department (the Department of Health and Mental Hygiene) and the only borough without a public hospital run by NYC Health & Hospitals. It has two private, non-profit hospitals—Staten Island University Hospital/Northwell Health (formerly St. Vincent's Hospital), and Richmond University Medical Center—and a history of collaboration among providers on the island.

All of this added up to a culture of interconnectedness, but also a "frontier mentality," as described by Betsy Dubovsky, Executive Director of The Staten Island Foundation (TSIF), which was established in 1997 as an independent private foundation by a local bank that funded local non-profits from its $70m endowment. Staten Island, Dubovsky said, was a "limited universe, and we know all the players… but many have long felt that nobody's coming to rescue us."

Prior to jumpstarting an initiative to improve Staten Islanders' health,[2] the Foundation had funded an extensive "visioning" project led by the City University of New York, College of Staten Island, a few years earlier, the goal of which was to identify and eventually address pressing

[1] http://www.politico.com/2016-election/results/map/president/new-york/
[2] Take Care Staten Island was a borough-specific offshoot of the city Health Department's Take Care New York initiative, which listed 10 priorities to be addressed in order to improve New Yorkers' health. For more information, see http://www1.nyc.gov/site/doh/health/neighborhood-health/take-care-new-york-2020.page.

community needs in the borough. But while the multi-year project had generated thousands of ideas from hundreds of people, the economic downturn and a new college president with other priorities had brought it to an end before any measurable outcomes were achieved.

This left the Executive Director of TSIF interested in a more targeted approach to improving complex issues including health and health care access on the Island. "The board chairman made the case for SI in terms of health: SI has significant health issues, not enough support, no local public health office. We don't have a city hospital here. We don't need more beds but our private hospitals need to be better reimbursed. We have the highest all-cause mortality despite the highest median income in the City," explained Betsy.

The Staten Island Partnership for Community Wellness (SIPCW)

The Staten Island Partnership for Community Wellness, commonly known as SIPCW, was founded in the mid-1990s by representatives of the two hospitals on Staten Island to identify emerging health needs and mobilize a community-led response. They had invited other community-based providers to collaborate with them to identify the health needs of Staten Islanders, gaps in service, and ways to improve residents' access to care.

Originally a membership organization, SIPCW had no formal staff, low fees ($25 per year, enough to cover refreshments at an annual open meeting), and a loose structure. The group met about six times a year, when members reported what they were doing, but with "no agenda to address or solve the problems they identified," explained Carol Ann Pisapia, Administrative Director of ambulatory services at Staten Island University Hospital. "Despite that, the members participated meaningfully and established important relationships with each other."

By 2003, SIPCW applied for and was granted status as a 501c3 non-profit organization, which opened doors to fund-raising activities and to expanding capacity. The organization grew to include representatives of a wide array of community-based organizations and agencies, and with an infusion of funds from TSIF for a borough-wide program to improve community health, SIPCW was eager to take the lead in addressing pressing public health needs on the island.

Two key members of SIPCW—Fern Zagor, President/CEO of Staten Island Mental Health Society, Inc., and Diane Arneth, President/CEO of Community Health Action of Staten Island—discussed the breadth of health issues Staten Islanders faced. Fern said, "We wanted to bring sustainable change to the three most challenging issues here: tobacco, nutrition/healthy lifestyle, and teenage alcoholism. SI had worse percentages than anywhere else in the state. These were priority needs on SI." Diane agreed, citing in particular the "horrifying numbers concerning alcohol and substance abuse," which her organization had worked to improve for decades. But how could SIPCW most effectively bring about lasting change in Staten Islanders' health—and which health issue could it most productively tackle?

What is Collective Impact?

Looking for a more direct way to support SIPCW's efforts to improve public health outcomes in the community, Betsy Dubovsky was intrigued by the Collective Impact (CI) model she read

about in the *Stanford Social Innovation Review*. CI was an approach to making public sector coalitions more effective in achieving sustainable outcomes at scale.

The Collective Impact framework was developed by FSG[3] consultants John Kania and Mark Kramer as a structured approach to solving complex social problems by bringing together multiple organizations from different sectors of society. In contrast to typical collaborative efforts, participants in a collective impact project agree to work on a specific problem using a common agenda, aligning their efforts, and sharing data and measures of success.

The CI model includes five key conditions for success to bring the participating organizations into alignment so that all are working collaboratively toward a common goal, as well as for achieving more dramatic and sustainable results than any individual organization could achieve on its own. The five conditions include:

- a common agenda and shared goals;
- shared measurement systems, common success metrics, and data sharing;
- mutually reinforcing activities—building on and using the strengths and interests of partner organizations;
- continuous communication; and
- a "backbone" support organization with resources dedicated to the collaboration.

These five conditions, John Kania noted, are baseline specifications. "It's not a recipe but a set of minimum conditions. It's hard to make progress at scale without them. A big reason for failure is underfunding of backbone resources."

The backbone element was unique within collaboration frameworks. A backbone organization was to be staffed separately from the other collaborating organizations, with dedicated personnel "who can plan, manage, and support the initiative through ongoing facilitation, technology and communications support, data collection and reporting, and handling the myriad logistical and administrative details needed for the initiative to function smoothly."[4] (See **Exhibit 5** for more on the backbone organization.)

The problem targeted through CI, Kania pointed out, must be an issue the community cares about. "The collaboration needs to work from and through the community. It's not top down or bottom up; it's all of the above."

Identifying the Target Problem

Betsy Dubovsky explained, "I wanted to bring the CI approach to an issue that SIPCW chose. I'm a social worker by profession and I knew that for this to work, it had to be the community's project, not one the Foundation or I imposed." In mid-2010, she hired FSG to talk to SIPCW about the Collective Impact method with the goal of pinpointing and tackling one of Staten Island's most pressing health problems.

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[3] FSG (Foundation Strategy Group) was a nonprofit consulting firm specializing in strategy, evaluation, and research in the area of social impact.

[4] John Kania and Mark Kramer, "Collective Impact," *Stanford Social Innovation Review*, Winter 2011.

Betsy enlisted three other members of SIPCW's board to work with her as an executive committee: Diane Arneth, Carol Ann Pisapia, Fern Zagor, and Sara Gardner, Executive Director of the Fund for Public Health NYC. These women, along with a working group made up of Partnership members plus other community stakeholders, including Adrienne Abbate, undertook nine months of intense work to pinpoint a problem to focus on and determine a strategy to tackle it.

The guiding CI framework dictated a data-driven, evidence-based approach to defining (and tackling) a target problem. Statistics clearly highlighted the extent of the drug and alcohol problems on SI. Still, Diane said, "it took a year to choose one particular issue [youth substance abuse] to focus on. It was a huge time and energy commitment—a thoughtful, lengthy process, exciting and engaging," including weekly phone calls, with consulting support from FSG and major financial and operational support from the SI Foundation.

Staten Island's Substance Abuse Problem

Using data collected by the state and city, the working group found that compared to New York City's other four boroughs, Staten Island's rates of substance abuse stood out starkly. Death rates from overdoses of prescription opioids were significantly higher on the Island and had been increasing dramatically since the mid-2000s. A 2009 survey found that Staten Island youth reported higher rates of alcohol and prescription pain reliever use than in the rest of NYC. (See **Exhibits 6 and 7** for data on substance use on Staten Island.)

Some attributed the Island's pressing substance abuse problem, in part, to what Sara Gardner described as SI's "deeply entrenched culture of drinking" which rendered its young people uniquely vulnerable to substance abuse. Fern Zagor described "beer keg parties at home" as "a rite of passage."

Prescribing patterns also drove the substance abuse problem. When New York State implemented a real-time prescription-monitoring program for providers[5] in 2013, it showed that SI had the highest rate of opioid prescriptions. SI residents—many of whom were employees of the City's fire and police departments—were largely covered by health insurance. As had happened in many areas of the country, adults suffering chronic pain or coping with on-the-job injuries from strenuous physical work were quickly prescribed opioids, often in large quantities, by their doctors, which led to a huge amount of opioids being available in the community.

Steve Rabinowitz said,

> Some physicians, either because they genuinely believed that they were doing good pain management or in some cases for monetary gain, clearly over-prescribed opioid medications. This and the aggressive marketing of opioids by the pharmaceutical industry led to the dramatic increase in prescription opioid use and abuse of the last

[5] I-STOP (Internet System for Tracking Over-Prescribing)

> several years. In this regard Staten Island mirrors what has happened in other parts of NY and the United States.

Over-prescribing also led to youth abuse of opioids; unused pills were kept in medicine cabinets where kids could find them.

Use of prescription opioids—on Staten Island, as in other areas affected by the opioid crisis—sometimes led, unwittingly, to addiction; when prescription refills were no longer available, people turned to alternatives such as illicit street drugs. Some found themselves abusing opioids not to get high, but rather to avoid the agonizing symptoms of withdrawal.

Steve continued,

> Opioid use, until the recent epidemic, was historically an inner city phenomenon. The outbreak of the last few years has been more suburban and rural, and in that regard Staten Island is more like a suburban area such as northern Westchester and the south shore of Long Island than other parts of NYC.

Carol Ann Pisapia explained, "The opioid crisis was mainly happening on the south shore," the wealthier side of the borough where there was some degree of denial about the drug problem. Such denial was not uncommon in communities coping with the opioid epidemic; for example, residents of some towns in New Hampshire, a state dealing with the most ODs per capita than anywhere in the country except West Virginia, denied having a drug crisis despite data clearly showing otherwise.[6]

Kate Chimenti, Senior Analyst at Staten Island Performing Provider System, said,

> The SI community didn't want to hear that there was a problem. People blamed it on the north shore, but OD deaths were happening on the south shore to white, middle class people. After more deaths in the community they were more open-minded, less hush-hush. People were angry that SI was getting a bad name, and they wanted an immediate solution.

Developing a Common Agenda and Blueprint for Action

Adrienne Abbate, who at that time was Borough Manager for the Staten Island Smoke-Free Partnership and was also part of the working group, explained,

> Many existing efforts were addressing substance misuse on Staten Island, but they were siloed. The CI concept suggests that if we can align our efforts, we can have greater impact. While a regular coalition might work for discrete issues, CI is better for more complex problems, like poverty, education or substance use disorders that are influenced by many factors.

"We didn't want to recreate existing programs, most of which focused primarily on adults," said Carol Ann Pisapia. "Based on the data, we decided to focus on youth first with the understanding that impact would ripple and affect adults and community members," Adrienne added. Fern

[6] Benjamin Rachlin, "A Small-Town Police Officer's War on Drugs," *New York Times Magazine*, July 12, 2017. Online: https://www.nytimes.com/2017/07/12/magazine/a-small-town-police-officers-war-on-drugs.html

Zagor agreed: "We felt that we could get to the parents because of their concern for their kids. They might reevaluate their own behavior."

Having identified youth substance abuse as their focus, from June through October 2011 the group focused on developing a common agenda for the project (see **Exhibit 8**), with The Staten Island Foundation providing support. They worked with FSG to design a collective impact project with the goals of decreasing the use of alcohol and prescription drugs and supporting young people in making "healthy choices" overall. "From the beginning," Adrienne explained, "FSG took a very analytic approach to the process, and mapped out all the layers of influence that can impact behavior—starting with the individual and expanding to the family, community, and systems." (See **Exhibit 9** for more on levels of influence.)

The project working group interviewed over one hundred individuals in Staten Island, New York City, and the state in order to define all aspects of the youth substance abuse problem, set goals, and identify measures of success. Adrienne explained,

> We looked at the local level to determine the risk and protective factors—availability of substances, community attitudes, enforcement of laws, youth engagement—and identified strategies to reduce risks and build community assets. We also kept in mind what we had the capacity to influence. This informed how we would organize, align efforts, and develop a framework for change.

(See **Exhibit 10** for more on risks and protective factors.)

The group also identified sectors and individuals who should be involved in the CI effort, including entities that would not normally be part of a public health initiative—such as the police department, the District Attorney, the press, the Department of Education, and elected officials—as well as the Department of Health, hospitals, and treatment providers across the Island. Carol Ann Pisapia noted, "Having multiple sectors represented gives us a broader view."

The overall vision that came out of this process was described by FSG as follows:

> This project seeks to drive major improvements in youth substance abuse prevention and treatment in Staten Island. It builds from the belief that collective effort is necessary to make large scale change and, therefore, strives to create a community-wide framework that establishes a common goal and shared vision for change in order to facilitate coordinated action. This coalition emphasizes the use of data to inform decision-making and improvement, monitor progress, and hold stakeholders accountable for results. It also aims to mobilize community stakeholders, recognizing that regional efforts will be more successful if we can garner significant community support to push for common outcomes than if the various actors work independently.[7]

By late fall 2011, the group had adopted a "blueprint for action" and defined the key elements necessary for success, including identifying a backbone organization, setting up a steering committee and workgroups, developing an initial communications plan, and determining metrics to measure progress and success. Thus, the TYSA project was born.

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[7] Staten Island Tackling Youth Substance Abuse Initiative: Common Agenda and Blueprint for Implementation, Fall 2011, p.3.

TYSA's Organizational Structure

TYSA's organizational structure (see **Exhibit 11** for a diagram) relied on collaboration at many levels:

Backbone staff: The group decided that SIPCW was the logical entity to serve as the backbone organization for the project since it had existing relationships with many of the organizations and agencies that would be involved in TYSA and was also a 501c3. The TYSA program would be a specific project within SIPCW. At a minimum, TYSA would need a project manager and a data analyst; as backbone staff they would be responsible for coordinating and managing the activities of the initiative.

TSIF funded a search service to find a director—who, it turned out, was already involved in the planning process. In May 2012, Adrienne Abbate, a member of the policy and advocacy working group, became TYSA's Project Director, as well as SIPCW's Executive Director (and first paid staff member). Fern Zagor explained, "We saw Adrienne's real potential for growth. Hiring her was the best choice we ever made." TYSA's public launch was held in autumn 2012. Adrienne remained TYSA's only project staff member until late 2013, when TYSA received a highly competitive federal grant that funded a coordinator position.

Executive Committee: A group of five, including the Steering Committee chair, which led the steering committee.

Steering Committee: The steering committee, comprised of a broad, cross-sector range of community stakeholders, was tasked with providing strategic direction and guidance to the project. The steering committee was to provide oversight of the backbone staff and workgroups and monitor progress of the project overall. Composed of high-level individuals from participating organizations, it was to act as the primary decision-making body, meeting monthly. "These are people who can make decisions on the spot during meetings and then go back to their organizations and implement changes," explained Adrienne. The steering committee originally had about twenty members, but grew over time to almost twice that number.

Workgroups: Based on their analysis of the factors that influence youth substance abuse, TYSA designated four cross-sectoral workgroups, each of which was composed of 8-10 people from participating organizations. The workgroups were where the work of the initiative was intended to take place. With strategic guidance from the steering committee, they would select evidence-based strategies, develop implementation plans, and put those strategies and activities into action in coordination with the other workgroups. The goals of the four groups were:

- *Social Norms*: Parents, schools, and the community adopt attitudes and behaviors that support healthy youth attitudes towards substance abuse.
- *Retail and Marketplace Availability*: Substances are only available in settings that support appropriate use.
- *Continuum of care*: Prevention and treatment organizations provide a high quality, integrated continuum of care for youth.

- *Policy and advocacy*: Creating systems level change to impact norms, supply and continuum of care.

A year or two later, the Retail and Marketplace Availability Workgroup was re-formed as two workgroups, one of which focused on opioids and the other on alcohol availability. A youth council was set up later as a way to connect directly with young people in the community, meeting on a weekly basis. (See **Exhibit 12** for more information on the workgroups, and **Exhibit 13** for agreement forms with guidelines for service on various committees.)

Forming the Steering Committee: Enlisting cross-sector collaborators and partners

After the public launch, TYSA focused on formalizing the relationships with cross-sector collaborators and partner organizations, many of whom had participated in or been interviewed during the analytic phase of the project. Now they were asked to make a long-term commitment and sign an agreement outlining roles and responsibilities of steering committee and/or workgroup membership.

"For a cross-sector collaboration, everyone who touches the issue needs to be involved," said Diane Arneth. "We invited these groups in and explained what we were trying to do and what their role would be." According to Fern Zagor, "There was already a culture in this community that working together is a good thing. Collective Impact allowed for a collaboration of collaborations."

Engaging all the stakeholders was TYSA's first big accomplishment, according to Diane: "It didn't make an impact on the target problem of youth substance abuse, but it set the stage for us to have an impact. People who were never in rooms together before were now talking directly." See **Exhibit 14** for TYSA partner organizations.

Examples of cross-sector activities and accomplishments

Increasing access to prevention and treatment options: Members of the continuum of care workgroup were mostly mental health and substance abuse providers who created a resource and referral guide for drug and alcohol treatment on Staten Island. TYSA then leveraged its relationship with the health department, already involved with the TYSA initiative, which distributed the pamphlet to 900 physician office practices. "Without their participation in TYSA, we couldn't have done this," explained Adrienne.

Through their collaborative work, drug treatment providers also began to coordinate their services. Diane Arneth explained that providers could coordinate hours, for example. "One organization will do early mornings, another will do evenings—it's a forum to work together. These are simple logistics, but we can be more effective than if we're working in silos."

Building awareness through connections with schools and parents: The social norms workgroup reached out to schools and other community groups to bring visibility to the substance abuse problems on the island. Carol Ann Pisapia said,

> We've held a lot of very successful workshops, such as Parents You Matter, and we've reached parents through PTA meetings. Public schools are now very open to us coming in. Previously, schools had their own programs which were cut by the city—but we were part of getting the programs re-instated.

Diane explained that school-based workshops "raised awareness and gave people skills to address the issue in their own families. When you partner with a group, like the PTA, it's better than trying to get in with no connection."

Anette Guando-Guster added,

> When TYSA got started, the community itself didn't recognize the extent of the problem. There were great taboos around talking about drug and alcohol use, so people were suffering alone. TYSA did a great job of helping reduce stigma and allowing people to start talking about the problems, and created resources that people could access.

Advancing policy changes: In 2013, New York State implemented the I-STOP system, a real-time prescription monitoring program system for tracking opioid prescriptions that, Adrienne explained, "cut down dramatically on doctor shopping—drug-seeking behavior where people go to multiple doctors for prescription pain medications. The bill was co-authored by Staten Island legislators and was shaped by input from TYSA's policy and advocacy workgroup."

In addition, an effort originally spearheaded by Community Health Action of Staten Island (CHASI), led by Diane Arneth and her colleagues, resulted in statewide policy changes in the availability of naloxone—an opioid antidote commonly known by its brand name Narcan—which can block the effects of opioids and prevent overdoses.

CHASI offered free naloxone kits and training to anyone, teaching people how to recognize an OD and deliver naloxone. Diane explained,

> We've been working with active drug users since the '80s and have offered this training for a long time. Active heroin users were trained and had naloxone. But, per regulations, certain EMS personnel were not allowed to carry naloxone and had to wait till they got to the ER for naloxone to be delivered—which was just dumb. Once it came to people's attention the EMS regulation got reversed, but it highlights some strange gaps that can be addressed fairly easily and rapidly, with a real outcome.

Because of a conversation at a steering committee meeting, Staten Island piloted naloxone training for police officers. Diane said, "I happened to be sitting next to a special projects person from the NYPD who asked, 'Could you train my officers to use naloxone?' That conversation may have eventually started, but it happened because we were getting people in the same room." That single unplanned conversation during a steering committee meeting catalyzed the NYPD to offer officers naloxone training in a pilot overdose protection program on Staten Island. The training was later rolled out to the entire NYPD force. Not only has this prevented ODs across the City, Diane explained, "it shifted the police's relationship to drug users: how can we

intervene to link people to services, instead of arresting the same people over and over? We're eager and interested in new ways that law enforcement can get people resources instead of into the criminal justice system."

Maximizing Resources Through Collaboration

Backbone Growth

After the initial and continued investment from TSIF, TYSA received a number of federal and state grants to support its infrastructure and implementation activities, including the SAMHSA Drug Free Community Grant in 2013 and the NYS OASAS Partnership For Success grant in 2015, the only award funded in the NYC area. "The grant is very prescriptive," explained Jazmin Rivera, TYSA's Program Manager. "The focus is on prescription drugs and heroin prevention, and there's a large evaluation component." TYSA was required to report outcome data and tracking data and provide a community needs assessment, plus a coalition capacity checklist to assess the strengths and weaknesses in the community, done by survey.

As a result, "TYSA has helped to create a well-connected system of OASAS-funded providers. Community-based organizations are coordinated—OASAS helps to connect them through data—but TYSA is the central system organization," said Anette Guando-Guster.

In addition to managing its integral role in fighting youth substance abuse on SI, TYSA's influence had grown at the state and even national levels, and demands for help had increased. Betsy Dubovsky noted, "TYSA's work is recognized as people and groups like OASAS turn to SIPCW for help."

Leveraging early successes of TYSA, SIPCW was awarded a number of grants to support other projects that complemented TYSA—such as the Behavioral Health Infrastructure Project[8] and SIPCW for a Healthier Staten Island[9]—and the organization's growth. By 2016, SIPCW had grown to employ 12 staff members (including a full-time TYSA coordinator) and increased its original $150k budget to $1.3m. With the addition of other grant funds, SIPCW was no longer solely dependent on support from TSIF.

Securing funding for the backbone itself, however, could be challenging. Adrienne explained, "Funders and foundations understand direct service providers. The backbone sounds like jargon, or administrative overload. So it's crucial that we continue to show the backbone's value and impact."

[8] The Behavioral Health Infrastructure Project is part of the New York State Delivery System Reform Incentive Payment (DSRIP) Program, which focuses on restructuring the health care delivery system by reinvesting in the Medicaid program.
[9] SIPCW for a Healthier Staten Island aimed to improve the health of Staten Islanders and reduce the prevalence of chronic disease. SIPCW organized and led this borough-wide coalition of community partners to implement evidence-based and innovative health promotion strategies.

Resources for Partner Organizations

Participation in TYSA also brought increased funding for members of the coalition. Funders appreciated the coordination of efforts and resources and the ability to speak in a common voice when describing community need.

In Fern Zagor's words, "You get more dollars and more bang for your buck with collaborative efforts, because collaboration can do more than any individual organization." But a common challenge in CI was moving partner organizations away from competition and towards collaboration. Diane Arneth explained, "This approach isn't easy, but a bunch of single-focused organizations going in their own individual directions won't get the impact you need." She elaborated:

> One big success for TYSA: there was a big OASAS grant for expanding prevention services. There was competition between SIPCW as an organization and two TYSA providers on Staten Island that both wanted to apply, so we said, "Let's discuss. Is there a way we can work together?" It was not an easy conversation—it's one thing to work together when there are no dollars on the line. The two organizations had to give up some of the dollars they were asking for—but they saw it would strengthen their application to funders by demonstrating participation in a county-wide coordinated coalition. They wrote TYSA into their own grant applications to scale prevention strategies and have a greater reach. It was a tremendous success and a really meaningful way to come together.

Measuring Impact

As the TYSA program was being developed, the workgroups and FSG decided on long-term goals and measures of success (see **Exhibit 15**). "Getting to population-level change is the holy grail," explained Betsy Dubovsky, but such change can come slowly. "You have to have successes along the way to keep people engaged."

TYSA pointed to a number of clear successes on Staten Island. Between 2008 and 2014, prescription painkiller use decreased by 83% among 7th–12th graders. Between 2011 and 2013, opioid overdose deaths in Staten Island decreased 32% among Staten Island residents overall, even as overdose deaths increased in NYC. The 2013 Youth Development survey looked at prescription drug abuse[10] among 12–17 year olds; in 2013 the rate was 8%, which dropped to 4% by 2016.

Unfortunately, as the abuse of prescription drugs decreased, the use of heroin on the Island began to surge, serving as a reminder of the complexity of substance abuse problems. (See **Exhibits 16 and 17** for data on NYC deaths involving heroin.)

By October 2016, TYSA had achieved many short- and medium-term successes that the organizers hoped would lead to long-term changes, including

- Productive stakeholder relationships

[10] Defined as past 30-day use of opioids without doctor's permission

- Connections with schools and parents
- Policy changes
- Funding and resources
- Increasing recognition of the CI method and of TYSA's influence

Jazmin Rivera explained that TYSA was invested in long-term outcomes and evidence-based approaches—which aren't quick. "Our job is to prove the value of what we're doing. We need to communicate a broader view, rather than a client-by-client perspective. Within sub-populations, perspectives are different, as are cultural and social norms—and we don't always have the right translators."

Keys to Success

A number of powerful elements bolstered TYSA's success: support from funders, a dedicated backbone, evidence-based approaches, and growing influence and relationships in the SI community.

Support from funders. "TYSA is unique because of its benefactor, TSIF. It couldn't have happened without TSIF's commitment to multi-year funding and understanding that change doesn't happen overnight," said Sara Gardner. TSIF Executive Director Betsy Dubovsky added, "Our commitment to TYSA was significant—as it is in every effort we get involved in. We're deeply involved in getting things started and getting past obstacles. We're the pressure and the glue."

A dedicated backbone organization. Having a backbone organization was critical to success, TYSA affiliates said. While the backbone enabled organizations to collaborate better, it also helped individual organizations to continue their own work while the collaborative project moved forward. "It was great to have TYSA driving the bus, because most members had full time jobs as CEOs of their organizations," explained Diane Arneth. Adrienne concurred, "With this model, community-based organizations can focus on their specific work while TYSA takes a broader view."

Fern Zagor explained, "We had collaborative efforts before but no infrastructure to help facilitate and move the project along. You need the backbone to stabilize and grow, bring in more money, and support stakeholders." Diane elaborated: "The backbone isn't a provider and isn't vested in any specific organization so it can be an objective third party—a mediator and convener—and help us work together."

Evidence-based approaches. Diane explained, "In the substance use disorder arena, focusing on evidence based, data-driven approaches is mind-blowing—you don't have to waste time convincing people out of their incorrect beliefs." Dr. Ginny Mantello, Director of Health and Wellness in the Office of the SI Borough President, agreed: "Alignment and engagement is easier if there is data and evidence giving our partners direction."

Influence and relationships. TYSA benefitted from existing relationships between member organizations. As Diane said, "TYSA's member organizations have long-standing good relationships with each other; we bring cooperation to the table. And when people see us working with the departments of Health and Education, the PTA, civic groups, the DA and law enforcement, they know we're not 'big bad treatment providers trying to bring addicts into the neighborhood.'"

Sara Gardner elaborated: "In SI, everyone knows each other. The relationships between community providers and social service agencies go deep and are built on trust. There's some competition, but they work it out through compromise. It's a close-knit group of people who care passionately about this problem—a grassroots effort from tremendously committed people."

Personal relationships were key to TYSA's success and standing in the community. Jazmin Rivera noted, "Success is based on building a community, and Adrienne has built important personal relationships." Adrienne herself said, "I am from Staten Island and that provides me with a level of credibility. It's all about relationships."

Challenges

Despite its successes, by the fall of 2016, TYSA faced a number of challenges. The changing nature of the substance abuse problem, competing demands at SIPCW to divert its attention to other community needs, and—perhaps most important—a loss of focus and commitment of the Steering Group itself, all threatened the continued effectiveness of TYSA.

TYSA was founded to help reduce the use of prescription opioids, but as their use had decreased, the use of heroin, fentanyl, and other non-prescription drugs had exploded in the borough. While I-STOP legislation had had a real impact on prescribing patterns, it also may have inadvertently led to an increase in the use of heroin as the scrutiny on prescription drug use increased, which Sara Gardner called "an unintended consequence in public health."

SIPCW had taken on other projects in addition to TYSA, and its leadership needed to figure out how to support these different initiatives. The demands on Adrienne, who was employed by SIPCW but specifically in charge of TYSA, had grown. She explained, "One of my challenges is to keep the focus on TYSA and its members, not on SIPCW as the backbone. Stakeholders associate me with TYSA, but it is the shared leadership of the initiative that has led to its successes."

However, the most critical challenge facing TYSA was one of member commitment and focus. The workgroups' momentum had slowed and the steering committee was no longer as effective at guiding the work. Jazmin Rivera said, "The steering committee sets strategy and makes decisions, but the workgroups do the work." But over the years, the structure faltered, leading to what a number of members described as "a steering committee that doesn't steer" and what one member described as "a huge disconnect between making decisions and implementing—and sometimes there's some tension between TYSA and the agencies working 'in the trenches.'"

Sustaining Collective Impact: Where to go from here

TYSA's steering committee started with about 20 members but eventually reached about 35. "When you have new people constantly involved, you can't steer," one member said. "It's a dilemma—everyone wants to be on the steering committee, not in a work group. But people need to be actively involved, otherwise it's not CI," said Fern. Adrienne agreed: "Some members have stopped coming. They felt their voices weren't heard and they started to lose sight of how they contributed to the overall goals of the initiative."

Carol Ann Pisapia, co-chair of the steering committee, spoke of needing to amend by-laws. "We're struggling with keeping our focus and making the group feel empowered. We need to be selective. How do we recruit? Are we over-represented in one area? Are there decision-makers at the meetings?" Sara Gardner had similar concerns: "How can we bring new members on effectively, to be on the same page with shared goals? That's part of the process we are still working on."

New members were joining who are not as well-trained in public health or the evidence-based CI model. Carol Ann commented, "We have to continually reset, focus on being data-driven, ask if a strategy is evidence-based. Is this in line with our strategy and goals?" Diane said,

> At the beginning, we had the luxury of time to explain the different components of CI when we brought people on, but with new members comes a new challenge: they need to understand the framework and agree to abide by it. When you bring in broader sectors, you begin to bump up against attitudes and beliefs inconsistent with the data and must challenge those ideas in a respectful way. So you're both managing the meeting and educating the group, which leads to meetings when you discuss the basics of CI again and again. You need very skilled staff and partners—and the partners can't alienate other partners. It's a more contingent collaboration. People have strong beliefs about substance abuse, but you don't want to drive people away.

How could TYSA maintain its momentum, incorporate new challenges, keep its stakeholders engaged, stay relevant over time, and gain recognition in the community? What could Adrienne and TYSA do to help the steering committee—and the TYSA effort as a whole—move forward and meet its ambitious goals? As they evolved and added new stakeholders and roles, how could they stay focused and avoid mission drift? Adrienne reflected on key factors that had played a role in getting TYSA up and running, and whether new directions and strategies were needed to keep the collective impact project going and growing.

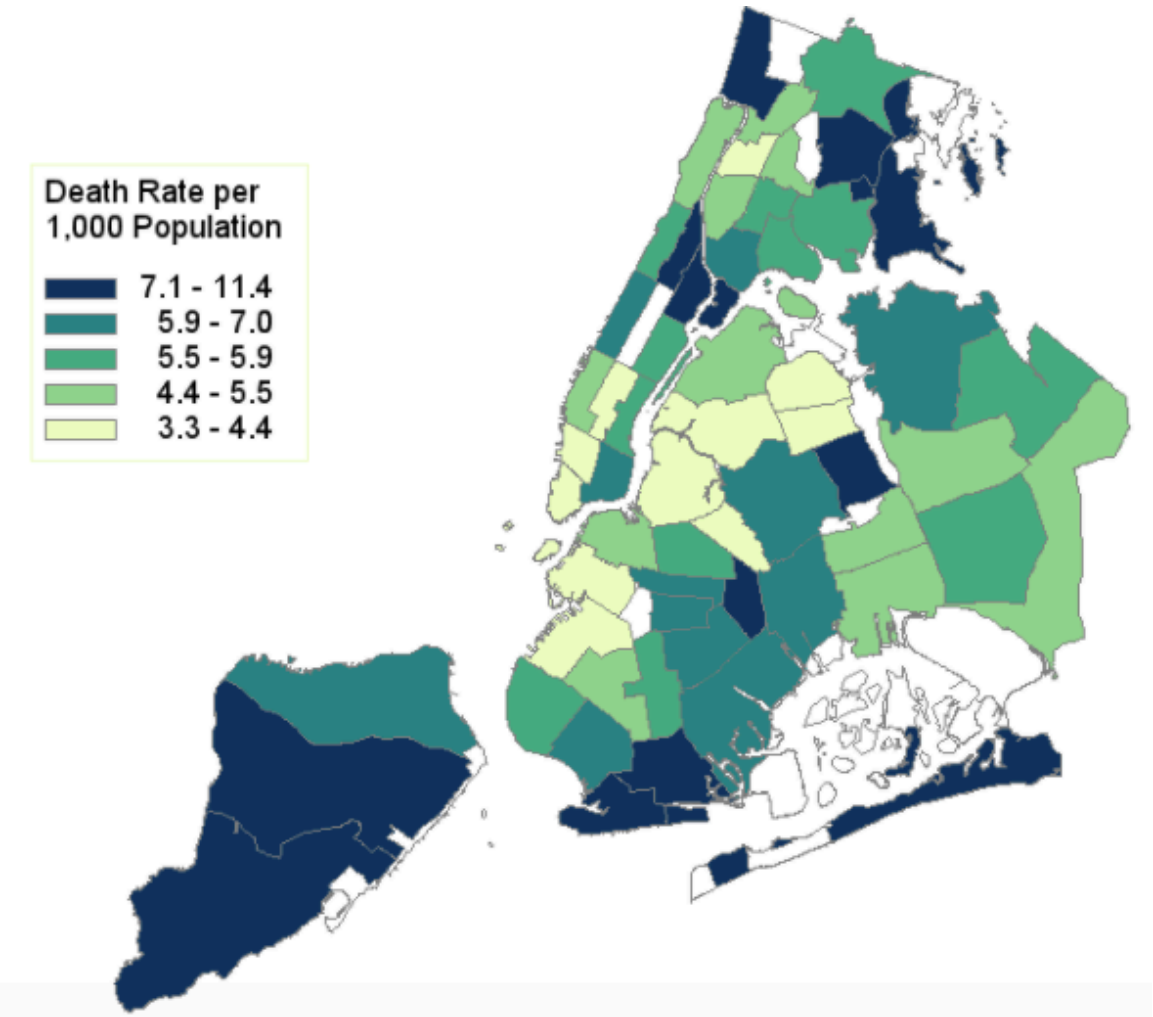
Exhibit 1: Map of New York City Boroughs

(source: https://nycmap360.com)

Exhibit 2: People Quoted in this Case (alphabetical by last name)

Name	Position and Organization
Adrienne Abbate	Project Director, TYSA; Executive Director, Staten Island Partnership for Community Wellness ("The Partnership")
Diane Arneth	President/CEO, Community Health Action of Staten Island (CHASI)
Kate Chimenti	Senior Analyst, Staten Island Performing Provider System
Betsy Dubovsky	Executive Director, Staten Island Foundation (TSIF)
Sara Gardner	Executive Director, Fund for Public Health NYC
Anette Guando-Guster	Prevention Services Coordinator, New York Office of Alcoholism and Substance Abuse (OASAS)
John Kania	Consultant, FSG
Ginny Mantello, MD	Director of Health and Wellness, Office of the Staten Island Borough President
Carol Ann Pisapia	Administrative Director of Ambulatory Services, Staten Island University Hospital
Steve Rabinowitz	Director of Downstate Field Operations, New York Office of Alcoholism and Substance Abuse (OASAS)
Jazmin Rivera	Program Manager, TYSA
Fern Zagor	President/CEO, Staten Island Mental Health Society, Inc.,

Exhibit 3: Mortality by Community District of Residence, New York City, 2015



(source: NY Department of Health)

Exhibit 4: Morbidity in Staten Island vs. New York City, 2015

New York City (all boroughs)				Staten Island only			
Leading Cause	**Deaths**	**Death Rate**	**Age Adjusted Death Rate**	**Leading Cause**	**Deaths**	**Death Rate**	**Age Adjusted Death Rate**
Diseases of Heart	17124	200.3	181.4	Diseases of Heart	1333	280.9	231.6
Malignant Neoplasms (Cancer)	13309	155.7	145.1	Malignant Neoplasms (Cancer)	842	177.4	147.3
Influenza (Flu) and Pneumonia	2094	24.5	22.2	Influenza (Flu) and Pneumonia	141	29.7	24.6
Diabetes Mellitus	1852	21.7	20.1	Chronic Lower Respiratory Diseases	134	28.2	23.5
Cerebrovascular Disease (Stroke)	1847	21.6	19.7	Diabetes Mellitus	123	25.9	21.7
Chronic Lower Respiratory Diseases	1761	20.6	19	Cerebrovascular Disease (Stroke)	94	19.8	16.4
Essential Hypertension and Renal Diseases	1104	12.9	11.7	Accidents Except Drug Poisoning	84	17.7	15.9
Alzheimer's Disease	1079	12.6	11.1	Mental and Behavioral Disorders due to Accidental Poisoning and Other Psychoactive Substance Use	72	15.2	15.2
Accidents Except Drug Poisoning	1055	12.3	11.6	Essential Hypertension and Renal Diseases	57	12	10
Mental and Behavioral Disorders due to Accidental Poisoning and Other Psychoactive Substance Use	1051	12.3	11.5	Intentional Self-Harm (Suicide)	31	6.5	5.9
All Other Causes	11844	138.5	128.8	All Other Causes	629	132.5	113.7

Source: New York State Bureau of Vital Statistics

Exhibit 5: Desired Attributes of a Backbone Organization

The Backbone

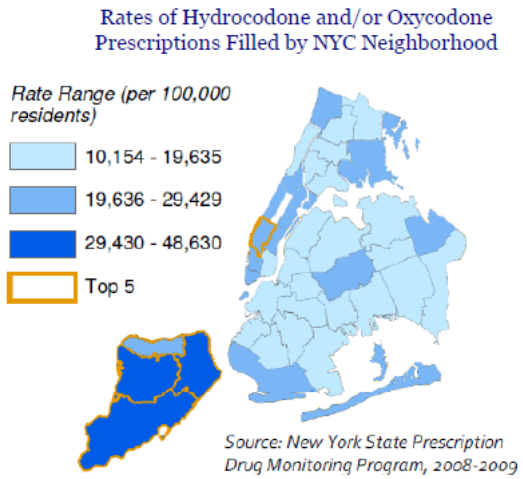
Optimal Staffing
- Director
- Coordinator
- Data/Evaluator

Qualities
- Infrastructure to support
- Flexibility to adapt
- Ability to influence
- Ability to see systems level

Experience
- Understanding of population health

Exhibit 6

Staten Island Had the Highest Rates of Opioid Prescriptions Filled and Highest Rates of Poisoning and Unintentional Death in NYC



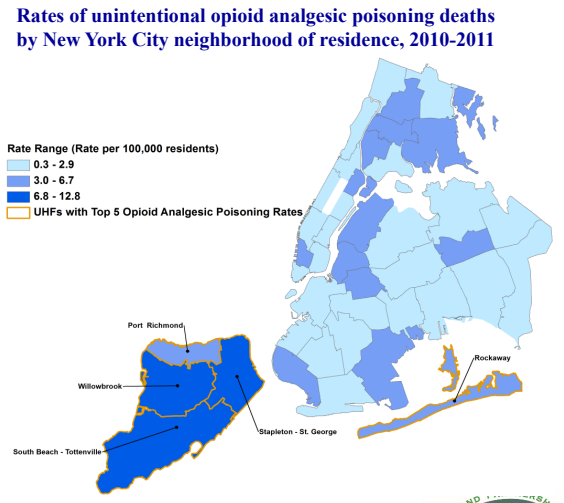


Exhibit 7: All hospital discharges involving drug overdose, rate per 100,000 population aged 18–44 years, 2012–2014

	Discharges				Average Population (aged 18-44)	Crude
County	**2012**	**2013**	**2014**	**Total**	**2012-2014**	**Rate**
Bronx	945	945	817	2,707	562,758	160.3
Kings (Brooklyn)	962	950	840	2,752	1,071,059	85.6
New York (Manhattan)	681	711	614	2,006	767,113	87.2
Queens	653	776	630	2,059	914,945	75.0
Richmond (Staten Island)	337	285	238	860	167,326	171.3
New York City Total	3,578	3,667	3,139	10,384	3,483,202	99.4

Source: 2012-2014 SPARCS Data as of September 2016 available through NY State Department of Health: https://www.health.ny.gov/statistics/opioid/data/h5.htm

Exhibit 8: Defining the Common Agenda

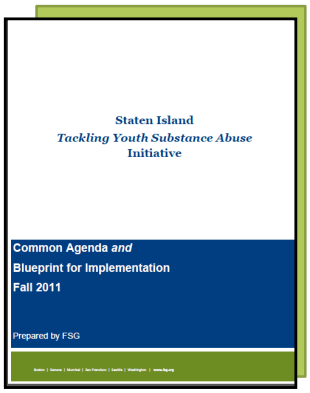
Common Agenda

1. How you are going to work together? — PRINCIPLES
2. How to focus and define issue? — PROBLEM DEFINTION
3. How will we know we've succeeded? — GOAL
4. How you divide work and organize? — FRAMEWORK FOR CHANGE
5. How you will track progress and learn? — PLAN FOR LEARNING

Establishing a Common Agenda

SHARED UNDERSTANDING OF ISSUE

- Prioritization of substances
- Identification of Root Causes and Local Conditions
- Exhaustive research of landscape



SHARED VISION OF APPROACH

- Use of evidence based strategies
- Use of data to refine strategies
- Buy-in from critical stakeholders who can make organizational changes

Exhibit 9: Multi-sectoral Levels of Influence

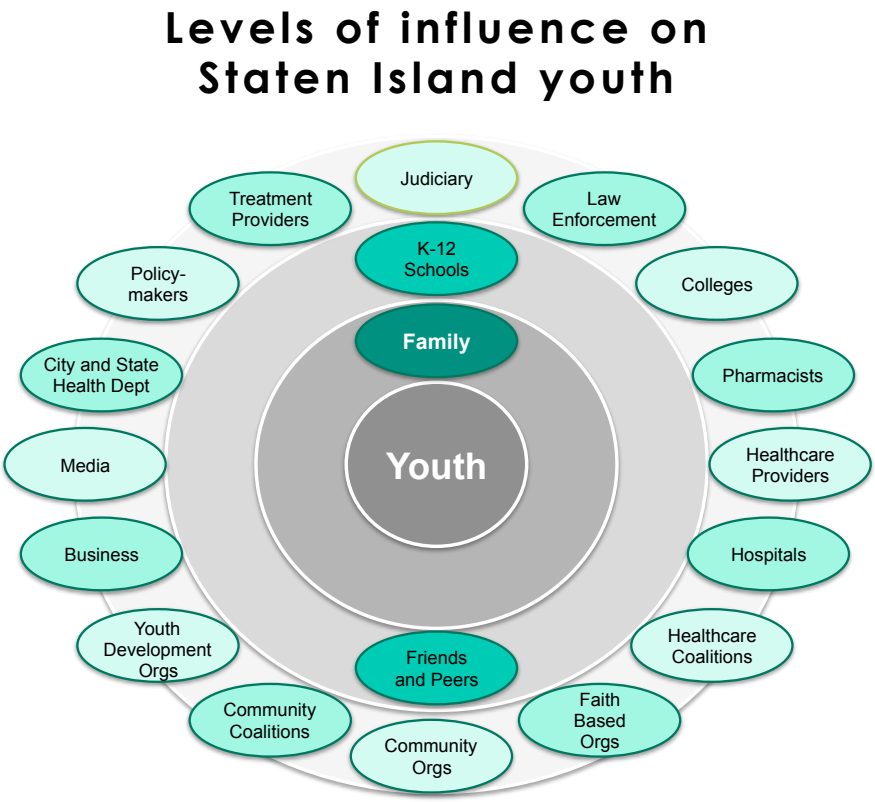


Exhibit 10: Risk and Protective Factors

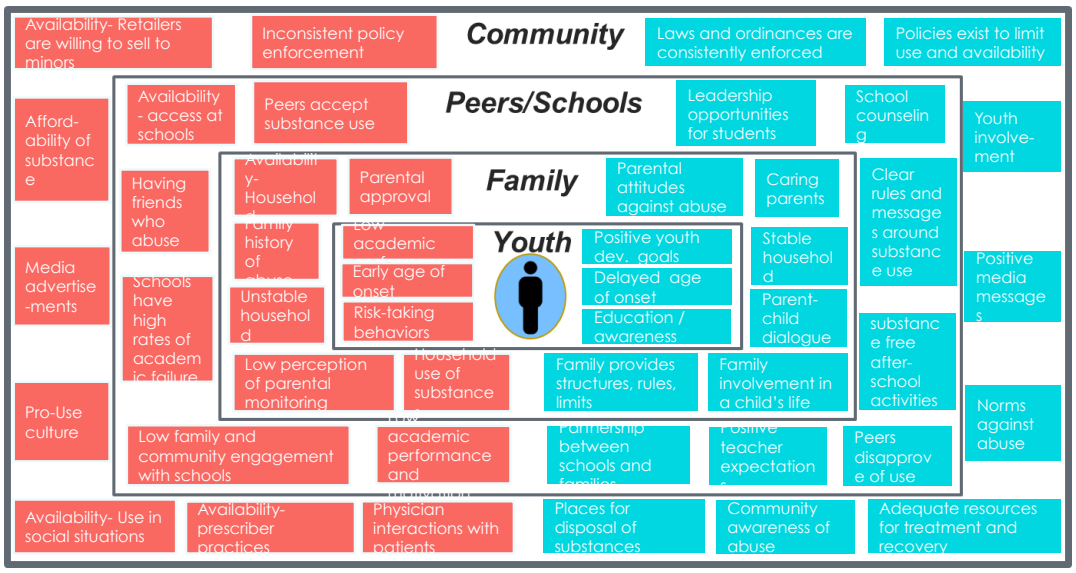


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Exhibit 11: TYSA Organizational Structure

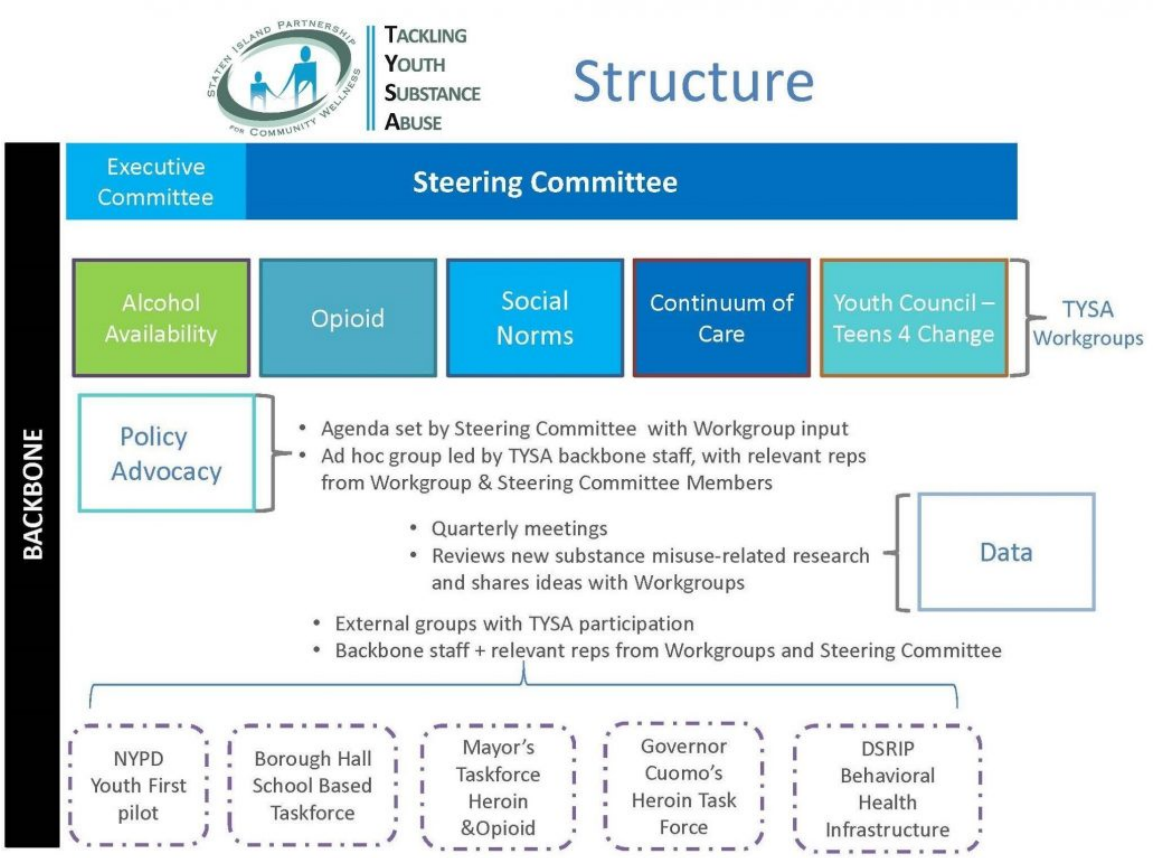


Exhibit 12: TYSA Workgroups

Workgroups

	Focus of group	*WG members & partners*	*WG Priorities*
Opioid	Supply of prescription drugs (opiates, benzos, etc.) to youth for illicit use and opioid overdose prevention	Pharmacists Physicians Law enforcement Relevant government entities (DOHMH) Treatment providers	▪ Increase awareness of misuse of opioids amongst youth and young adults ▪ Increase healthcare professional's capacity to prevent and treat opioid use disorders ▪ Limit availability of prescription drugs for misuse ▪ Identify appropriate harm reduction strategies to reduce opioid death and increase access to treatment
Alcohol Availability	Supply of alcohol to youth	Liquor stores Restaurants and bars Law enforcement Relevant government entities (licensing)	▪ Change youth attitudes and perceptions of alcohol ▪ Change the availability of alcohol in homes and retail stores ▪ Promote trusted adult/child dialogue about alcohol use ▪ Promote positive youth development
Social Norms	Adult and youth attitudes and beliefs about substance abuse	Parents Schools Religious entities Community organizations	▪ Change youth attitudes and perceptions of alcohol and prescription drug use ▪ Change parent attitudes and perceptions of prescription drug use and abuse ▪ Promote trusted adult/child dialogue about substance use ▪ Promote positive youth development
Continuum of Care	Availability of high-quality, coordinated care and recovery services for youth	Treatment providers Relevant government entities (OASAS)	▪ Expand early detection and intervention models to detect risky behaviors early on and prevent more serious abuse problems ▪ Identify and expand treatment providers and services to meet the needs of all youth suffering from substance use disorders ▪ Implement and disseminate high quality treatment practices to improve co-occurring services and recovery outcomes ▪ Enhance ongoing recovery services beyond formal treatment to support life stability, recovery, and healthy outcomes
Youth Council	Voice of youth in identifying problems and developing strategies	Youth leaders Backbone or backbone-like support	▪ Change youth attitudes and perceptions of alcohol and prescription drug use ▪ Promote positive youth development

Exhibit 13: Agreement Forms for Service on Various TYSA Committees

Steering Committee Agreement

As a participant in the TYSA Steering Committee for Staten Island, I agree to:

- Adopt and commit to supporting the TYSA impact goal:
  - *Staten Island Youth Make Healthy Choices and Decrease Their Use of Alcohol, Opioids, and Prescription Drugs by 2020.*
- Contribute to the strategic planning process and participate in the decision-making process for TYSA
- Champion TYSA broadly in the Staten Island community and represent TYSA at events
- Be a community leader amongst your represented sector
- Align the actions of my agency to the goals, indicators, and strategies of TYSA where possible
- Promote the effective use of data for continuous improvement in the work of my organization and other TYSA partners
- Share data from my own agency with TYSA to inform decision making, progress assessment, and learning
- Provide guidance to workgroup efforts
- Commit to yearlong membership of the Committee and dedicate 4 hours per month on average to TYSA work
- Provide representation to at least 1 subcommittee
- Participate in the regularly scheduled meetings and community events
- Review pre-read materials prior to meetings and come prepared for engaged discussion, active listening, and respectful dialogue
- Participate in sustaining the coalition's capacity, involvement and energy
- Participate in a minimum of 8 meetings per year.

_____	_____
Coalition Representative's Name	Sector Representative's Name
_____	_____
Coalition Representative's Signature	Sector Representative's Signature
_____	_____
Title Date	Title Date

Executive Committee Agreement

As a participant in the TYSA Executive Committee, I agree to:

- Adopt and commit to supporting the TYSA impact goal:
  - *Staten Island Youth Make Healthy Choices and Decrease Their Use of Alcohol and Prescription Drugs by 2020.*
- Provide long term strategic direction to and help make decisions for TYSA
- Champion TYSA broadly in the Staten Island community
- Align the actions of my agency to the goals, indicators, and strategies of TYSA where possible
- Promote the effective use of data for continuous improvement in the work of my organization and other TYSA partners
- Provide strategic oversight of TYSA, including:
  - Monitor the full prevention and treatment continuum against common agenda goals and indicators to ensure continued advancement and to uncover any obstacles
  - Working with SIPCW, determine staff and resource needs to ensure sustainability
- Commit to 2 years of membership and dedicate 6 hours per month on average to TYSA work
- Participate in the regularly scheduled meeting with the Project Director and any feedback calls between meetings

Representative Name: _____

Date: _____

Printed Name: _____

Organization: _____

Workgroup Chair Agreement

As a member of the ____Workgroup of TYSA and supported by TYSA leadership, I agree to:

- Adopt and commit to supporting the TYSA impact goal:
  - *Staten Island Youth Make Healthy Choices and Decrease Their Use of Alcohol and Prescription Drugs by 2020.*
- Participate on the TYSA Steering Committee
- Schedule regular and special meetings for the workgroup
- Recruit appropriate stakeholders for workgroup membership
- Collaborate with workgroup members to develop strategies and make decisions
- Ensure that the strategies of the workgroup are aligned with the impact goals of TYSA
- Ensure that the work is distributed evenly among the workgroup
- Document and report on workgroup activities and progress to the TYSA Steering Committee
- Disseminate information from the Steering Committee to workgroup members
- Champion TYSA broadly in the Staten Island community
- Commit to a 2 yearlong membership to chair the workgroup and dedicate 6 hours per month on average to TYSA work

Representative Name: _____

Date: _____

Printed Name: _____

Organization: _____

Exhibit 14: TYSA Partner Organizations

Exhibit 15: Measuring Impact: 2020 Goals for Staten Island Youth[11]

Goal for Youth	Indicator	Baseline	2020 Goal[12]
Decrease Use of Alcohol	Use of alcohol in last 30 days	37.3%	**32%**
	Binge drinking in the last 30 days	16.9%	**10%**
Decrease Use of Prescription Drugs	Use of opioids in lifetime	11.9%	**8%**
	Use of opioids in last 30 days	TBD in year 1	**TBD in year 1**
Make Healthy Choices	Use of alcohol or drugs before sexual encounter	25.3%	**20%**
	Teen pregnancy	52.5 per 1000[13]	**45 per 1000**

[11] Baseline data in this table refer to youth in 9th–12th grades drawn from NYC Department of Health and Mental Hygiene. "NYC Youth Risk Behavior Survey," 2009.
[12] 2020 goals for Staten Island youth match the reported 2009 rates for youth behavior in NYC on average.
[13] Pregnancy rate, youth aged 15-19: NYC Department of Health and Mental Hygiene, Bureau of Maternal, Infant, and Reproductive Health, "Teen Pregnancy in New York City: 2000-2009."

Exhibit 16: Data on Unintentional Drug Poisoning Deaths, New York City, 2013-2016

Table 2. Number and rate of unintentional drug poisoning (overdose) deaths involving heroin, New York City, 2013-2016*

Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

Rates per 100,000 New Yorkers are age adjusted, except those for specific age groups.

	2013			2014			2015*			2016*		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Total Unintentional Drug Poisoning Deaths												
	788	**100%**	**11.6**	**800**	**100%**	**11.7**	**937**	**100%**	**13.6**	**1374**	**100%**	**19.9**
Total Unintentional Drug Poisoning Deaths Involving Heroin												
	424	**54%**	**6.2**	**460**	**58%**	**6.7**	**556**	**59%**	**8.0**	**751**	**55%**	**10.8**
Gender												
Male	326	77%	10.0	350	76%	10.7	434	78%	13.2	602	80%	18.2
Female	98	23%	2.7	110	24%	3.0	122	22%	3.3	149	20%	4.1
Race/ethnicity†^												
Black (non-Latino)	64	16%	3.9	81	18%	4.9	89	17%	5.4	147	20%	8.7
Latino	146	36%	7.8	126	29%	6.8	196	36%	10.3	257	36%	13.7
White (non-Latino)	195	48%	8.8	229	53%	10.5	252	47%	11.6	317	44%	14.3
Age group (years)												
15-24	32	8%	2.9	34	7%	3.1	44	8%	4.0	52	7%	4.7
25-34	92	22%	6.2	105	23%	7.0	146	26%	9.7	159	21%	10.6
35-44	84	20%	7.1	95	21%	8.0	110	20%	9.3	146	19%	12.4
45-54	125	29%	11.2	129	28%	11.5	154	28%	13.8	210	28%	18.8
55-64	78	18%	8.2	80	17%	8.2	90	16%	9.3	156	21%	16.1
65-84	13	3%	1.4	17	4%	1.8	12	2%	1.3	26	3%	2.8
Age group (years)												
15-34	124	29%	4.8	139	30%	5.3	190	34%	7.3	211	28%	8.1
35-54	209	49%	9.1	224	49%	9.7	264	47%	11.5	356	48%	15.5
55-84	91	21%	4.9	97	21%	5.1	102	18%	5.3	182	24%	9.5
Borough of residence†												
Bronx	94	27%	8.7	103	26%	9.5	146	30%	13.0	176	27%	16.1
Brooklyn	84	24%	4.2	116	29%	5.7	136	28%	6.6	164	25%	7.7
Manhattan	61	17%	4.2	69	17%	4.9	78	16%	5.8	118	18%	8.6
Queens	81	23%	4.3	71	18%	3.7	83	17%	4.4	120	19%	6.2
Staten Island	32	9%	8.6	42	11%	11.6	38	8%	10.7	67	10%	18.8
Borough of death												
Bronx	109	26%	10.1	112	24%	10.3	165	30%	14.7	201	27%	18.4
Brooklyn	102	24%	5.0	138	30%	6.8	164	29%	7.9	196	26%	9.2
Manhattan	89	21%	6.2	90	20%	6.3	103	19%	7.6	167	22%	12.2
Queens	91	21%	4.8	79	17%	4.1	86	15%	4.6	123	16%	6.3
Staten Island	33	8%	9.1	41	9%	11.2	38	7%	10.6	64	9%	18
Neighborhood poverty†◊												
Low (wealthiest)	78	22%	5.7	67	17%	4.9	75	16%	5.5	109	17%	7.7
Medium	90	26%	3.5	120	30%	4.7	143	30%	5.4	185	29%	7.1
High	73	21%	4.5	91	23%	5.7	112	23%	7.1	176	27%	10.8
Very High	110	31%	9.7	121	30%	10.4	151	31%	12.5	173	27%	15

Top 5 NYC neighborhoods^^	2015* rate		2016* rate	
	Hunts Point-Mott Haven	18.8	East Harlem	24.1
	Crotona-Tremont	18.4	South Beach-Tottenville	22.4
	Highbridge-Morrisania	15.9	Stapleton-St George	22.2
	Fordham-Bronx Park	15.4	Hunts Point-Mott Haven	22.0
	South Beach-Tottenville	14.9	Highbridge-Morrisania	21.2

*Data for 2015 and 2016 are provisional and are subject to change.

†Percentage of deaths within subgroup are calculated among categories presented.

^For the purpose of this publication, Latino includes persons of Hispanic origin based on ancestry reported on the death certificate, regardless of reported race; Latino excludes reported ancestry from non-Spanish speaking Central/South American countries, and non-Spanish speaking Caribbean islands. Black and White race categories do not include persons of Latino origin.

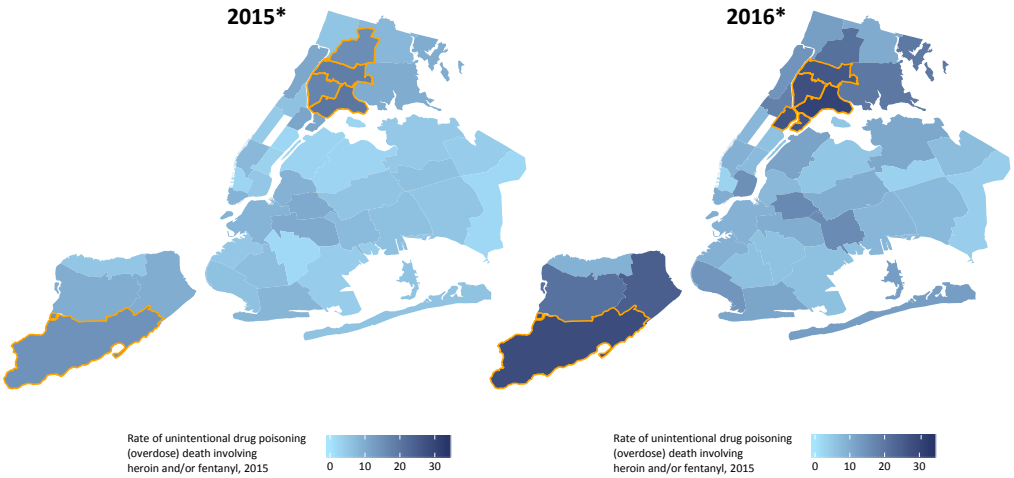
◊Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL) per American Community Survey 2007-2011, in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high (>=30%).

Source: NYC Health Epi Data Brief, June 2017, No. 89
https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief89.pdf

Exhibit 17: Data on Unintentional Drug Poisoning Deaths, New York City, 2015-2016

Map 2. Top five New York City neighborhoods: Rates of unintentional drug poisoning (overdose) involving heroin and/or fentanyl by neighborhood^ of residence, 2015 and 2016*

Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.



*Data for 2015 and 2016 are provisional and subject to change.

^The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes.

Source: NYC Health Epi Data Brief, June 2017, No. 89
https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief89.pdf