CITY COUNCIL CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

of the

COMMITTEE ON HEALTH

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December 12, 2012 Start: 1:12 p.m. Recess: 2:48 p.m.

HELD AT:

Council Chambers City Hall

BEFORE:

MARIA DEL CARMEN ARROYO Chairperson

COUNCIL MEMBERS:

Inez E. Dickens Mathieu Eugene Julissa Ferreras Helen D. Foster Rosie Mendez Joel Rivera Peter F. Vallone, Jr. Albert Vann Deborah L. Rose James G. Van Bramer

## A P P E A R A N C E S

Robin Vitale American Stroke Association

Dr. Dana Leifer New York City Stroke Task Force

Dr. Susanna Horvath Columbia University

Dr. Salman Azhar Lutheran Medical Center

1	COMMITTEE ON HEALTH 3
2	CHAIRPERSON ARROYO: Good afternoon
3	everyone. Thank you all for being here. It is
4	actually a really nice day, so the fact that you
5	are here and not walking out and about is a
6	testament to how important you think what we are
7	going to talk about here today is. I'm Maria del
8	Carmen Arroyo, and I have the privilege of
9	chairing the Committee on Health here in the
10	Council. Today we are going to be conducting a
11	hearing on proposed Resolution 982-A, sponsored by
12	my colleague, Council Member Eugene-Doctor Eugene.
13	The resolution is calling upon the United States
14	Congress and the president of the United States to
15	increase funding for research on stroke prevention
16	and treatment. I'd like to thank Council Member
17	Eugene for his leadership, and his relentless
18	energy to make sure that we are having this
19	conversation here today. Thank you, Council
20	Member. Many of us understand the seriousness of
21	stroke, and some of the things that we learn when
22	we prepare for these hearings-sometimes the
23	numbers really disturb us, which is why it is
24	important for us to continually research and have
25	public discourse about the things that concern us

1	COMMITTEE ON HEALTH 4
2	as a city. A stroke occurs when a clot blocks the
3	blood supply to the brain or when a blood vessel
4	in the brain bursts. An individual suffering a
5	stroke can experience brain cell damage that could
6	result in significant disability, such as
7	paralysis, speech difficulties, emotional problems
8	or even death. According to the United States
9	Centers for Disease Control and prevention, a
10	stroke is the fourth leading cause of death in our
11	country, accounting for approximately 130,000
12	deaths a year. It is important to know that this
13	is a recent milestone, as stoke was formerly the
14	third leading cause of death in the country. This
15	is a great achievement and represents an
16	advancement in stroke research, of treatment and
17	care; however, despite these positive strides,
18	every year approximately 795,000 people in the
19	United States have a stroke with 610,000 of those
20	experiencing a stroke for the first time, while
21	the remaining 185,000 endure subsequent episodes.
22	Stroke does not just have a significant personal
23	impact; it also has a significant economic impact.
24	The annual cost of stroke in the United States is
25	an estimated \$54 billion, and that is with a B

COMMITTEE ON HEALTH

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factoring in the cost of healthcare services, 2 medication and missed days at work, not to mention 3 the impact on family and the quality of life that 4 5 individuals have to deal with. In terms of prevention individuals can greatly reduce their 6 7 risk of stroke by making lifestyle changes 8 including eating healthy diet, maintaining healthy 9 weight, engaging in physical activity, not smoking and limiting alcohol use, and taking preventive 10 11 medication. Additionally, death rates from stroke 12 have dropped 70% since 1940 due in large part to 13 the National Institute of Health funded researchand the acronym is NIH, and yet the NIH dedicates 14 15 a mere one percent of its budget towards research 16 on stroke prevention and treatment. Stroke 17 funding is at risk of receiving additional cuts due to the recent federal law and ongoing budget 18 19 negotiations happening right now in Congress. 20 Given the tremendous impact that stroke has on the 21 United States, it is necessary to invest in 22 developing treatment options to improve health of 23 all Americans. Today we will discuss the 24 importance of stroke research and federal funding 25 for treatment prevention and care. We will hear

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1	COMMITTEE ON HEALTH 6
2	from medical experts and advocates on the
3	importance of further research and the tangible
4	impact that it has on the lives of those affected
5	by stroke and their families. I want to
6	acknowledge my colleagues, who are here now, and
7	those will float through. There is a lot going on
8	and the fact that they are not all here does not
9	at all mean that this conversation is not
10	important. I'd like to acknowledge Council Member
11	Inez Dickens from Manhattan, Council Member
12	Julissa Ferreras from Queens, and that is
13	Elizabeth bringing me my lunch-coffee. I want to
14	thank the Committee staff for their work and
15	preparation. I want to say a special thank you to
16	Joe Mancino, who I've been fussing about the fact
17	that he went to law school, and he got incredible
18	news actually the weekend of the storm that he
19	passed the bar exam, and that means that he is
20	going to be leaving us to work for the District
21	Attorney's office, and their gain is our
22	incredible loss. I want to thank you for the work
23	that you have always done, and I'm not happy. I
24	just want to make that public, but absolutely wish
25	you the best and a great deal of success and know

1	COMMITTEE ON HEALTH 7
2	that we are going to meet again, so when I go take
3	over the world, I am going to take you with me. I
4	want to give an opportunity to the sponsor of this
5	legislation an opportunity to give us a few words
6	and remind those who are here to testify that if
7	you have not signed up with the sergeant and given
8	him one of these, we won't know you want to say
9	something, and we want to hear from you. Council
10	Member Eugene?
11	COUNCIL MEMBER EUGENE: Thank you
12	very much. First and foremost let me thank
13	Chairwoman Council Member Carmen Arroyo for
14	bringing Reso 982-A before the Committee on
15	Health, and I also want to thank all of you here-
16	all the advocates—all of you here for coming.
17	Thank you for your time, and thank you for your
18	dedication also to help those people who are
19	suffering from stroke and those who are probably
20	will be suffering from stroke. I want to thank
21	also all the staff members from the city and your
22	staff also who worked hard to make this hearing
23	possible. I want to take the opportunity to thank
24	also my staff, the one who did all of the
25	. Thank you very much. I also want to thank

1	COMMITTEE ON HEALTH 8
2	those who are sponsors of the bill and encourage
3	others to sign on. This resolution would address
4	this critical health issue facing our communities
5	by supporting increased funding for research so we
6	can develop better treatment, better healthcare
7	and better medicine to prevent this condition. As
8	we know, stroke is a serious life threatening
9	condition that affects over 750,000 people
10	nationwide each year, and is often fatal. Stroke
11	is the front leading cause of death in the United
12	States and although not always fatal, it can often
13	result in severe conditions such as paralysis,
14	emotional trauma and disability. Survivors of
15	stroke face many difficulties recovering and
16	living functional and productive lives. A person
17	who suffered from a stroke can need a lot care and
18	medical attention throughout the day, so it not
19	only affects that one person, but their friends
20	and their families who must often step in to care
21	for that person. This can put a lot of pressure
22	on the family members and change their lives also.
23	Through awareness and better funding programs we
24	can lower the risks in order to prevent the onset
25	of stroke, and prevention through positive

9 1 COMMITTEE ON HEALTH lifestyle change would then significantly reduce 2 the number of people who suffer from a stroke. 3 Over the last decade, there has been a substantial 4 5 reduction in the number of people dying from stroke. Funding and research from the National 6 Institute of Health play an important role in this 7 reduction; however, we need to make sure that 8 9 leaders at the federal level devote more resources 10 toward stroke prevention and research. For that 11 reason, I was delighted to draft a resolution 12 supporting this goal, calling upon the United states Congress and the president of the United 13 14 States to increase funding for research on stroke 15 prevention and treatment. Funding from the 16 federal level can have an enormous impact on the 17 local level. More research can lead to new medication, new forms of care and new methods of 18 19 helping survivors of stroke and their families. 20 As the largest city in the United States, I think 21 it is important that we take a strong stance on 22 this issue and I look forward to discussing this further in this afternoon's hearing. Let me just 23 24 conclude by saying that it is very sad that every 25 time that we walk on the street we see people

1	COMMITTEE ON HEALTH 10
2	losing their right side or their left side, people
3	that cannot even talk properly. It is very sad.
4	If you don't have somebody, a close friend or a
5	family member who is suffering from stroke, but
6	you have seen so many people and it is very
7	important that we do everything that we can do to
8	prevent that, and as the Chairperson said, it is
9	very important, even from an economical point of
10	view because when somebody is suffering from
11	stroke, that person won't be able to provide for
12	his family, he won't be able to provide to support
13	himself, and also, he won't be able to contribute
14	to the system by working and paying taxes. Thank
15	you very much, Madam Chair. Thank you so much.
16	CHAIRPERSON ARROYO: Thank you,
17	Council Member. We have been joined by Council
18	Member Vallone. Thank you for being here. I have
19	four individuals signed up to testify, and what
20	I'm going to do is I'm going to split them up into
21	panels, so we are going to ask Robin Vitale,
22	American Stroke Association, to join us, and Dr.
23	Dana Leifer, New York City Stroke Task Force and
24	also from Cornell. I think you guys have done
25	this before, so choose who is going to-I think we

1	COMMITTEE ON HEALTH 11
2	are going to hear from Robin first , and we
3	will save the questions for after you both
4	testify.
5	ROBIN VITALE: Absolutely. Thank
6	you so much, Chairperson Arroyo, and obviously
7	thank you, Council Member Eugene for sponsoring
8	this important resolution. Thanks to your
9	comments I am able to skip a good portion of my
10	written testimony. For those that might be in the
11	room that would not consider themselves to be
12	stroke experts, I do encourage you to read through
13	the first half of my testimony `cause I really
14	wanted to provide a very basic introduction to the
15	disease of stroke, so that all of us can be on the
16	same page as the clinicians that are joining us
17	today are going to dive in a little bit deeper
18	into the possibilities around stroke research,
19	both the benefits that we are experiencing here in
20	new York City and where the lapses might be in
21	order to improve the stroke systems of care down
22	the road, which are obviously of vital interest to
23	NIH funding in the future. So with that, I am
24	going to be skipping a good portion of that
25	introduction to stroke-a stroke 101 if you will,

1	COMMITTEE ON HEALTH 12
2	but I do want to make sure that this esteemed
3	Council is—the Committee is aware of the American
4	Stroke Association's efforts regarding funding for
5	stroke research. While typically we like to focus
6	on the month of May as an opportunity to promote
7	awareness around stroke as it is American Stroke
8	Month, the time to promote greater awareness of
9	stroke and its symptoms is really appropriate for
10	this Committee to support this resolution right
11	now. Funding for the National Institutes of
12	Health may be cut by about two and a half million
13	dollars or roughly eight percent in January as a
14	result of automatic across the board cuts required
15	by the Budget Control Act of 2011. It's often
16	referred to as the fiscal cliff. These reductions
17	would be in addition to any made in the regular
18	funding process for fiscal year 2013. This
19	financial loss would mean that approximately 2300
20	grants that the NIH currently plans to fund would
21	not be awarded and could ultimately result in the
22	loss of 33,000 jobs across the United States and
23	four and a half billion dollar decline in economic
24	activity. I have enclosed copies of the testimony
25	today a letter from the American Heart

1	COMMITTEE ON HEALTH 13
2	Association's CEO, Nancy Brown, regarding the
3	subject. The letter which is addressed to the
4	president of the United States encourages our
5	federal decision makers to protect research
6	funding as part of the negotiations in order to
7	avoid this fiscal cliff. In addition, I have also
8	attached a copy of the testimony provided by Dr.
9	Gordon Tomaselli [phonetic], who is the current
10	president of the American Heart Association, to
11	Congress regarding the concerns around the fiscal
12	year 2013 budget. It's our hope that we may
13	overcome both budgetary dynamics and also might
14	secure a stable and appropriate funding level for
15	the NIH in order to continue the positive
16	trajectory regarding stroke care in our country
17	and certainly here in New York City. With that, I
18	am going to conclude my official comments.
19	Obviously, we do have other stroke experts here
20	that will speak more specifically to the efforts
21	here in New York City, and I want to make sure
22	they have as much time as possible to address the
23	Committee.
24	CHAIRPERSON ARROYO: I'm sorry. I
25	have been remised is asknowledging that we are

25 have been remiss is acknowledging that we are

1	COMMITTEE ON HEALTH 14
2	joined by Tai Meah, right? sitting in as
3	committee counsel because the committee counsel,
4	Lacey Clarke, left about a month ago, so thank you
5	for sitting in for us, and to introduce
6	Francisco, our fiscal analyst, who I think this is
7	your first public hearing. Welcome, and good luck
8	to you.
9	DR. DANA LEIFER: First of all, I'd
10	like to thank you, Chairperson Arroyo and
11	Councilman Eugene and the other members of the
12	Council Committee on Health for the opportunity to
13	testify here today in support of the Council's
14	proposed Resolution 982-A, which calls upon our
15	federal government to expand vital funding for
16	stroke research. The mission of the American
17	Heart Association/American Stroke Association's
18	New York City Stroke Task Force, of which I serve
19	as the chair, is to promote improvements to the
20	care of stroke patients in New York City by
21	several things: by highlighting advances in stroke
22	treatment, by education healthcare professionals
23	and the public at large about how to recognize and
24	how to treat stroke and by engaging the EMS system
25	and the Department of Health in development of

COMMITTEE ON HEALTH

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protocols to transport stroke patients to the most 2 appropriate hospitals. The underlying goal of our 3 taskforce is to optimize the care that stroke 4 5 patients receive here in New York City and to maximize their chance for a good recovery. While 6 I am prepared to attempt to answer any questions 7 that the Committee has about diagnosis and 8 9 treatment of stroke, I really want to emphasize the importance of funding for stroke research. 10 As 11 we have already heard, I think, stroke is the 12 fourth leading cause of death in our nation and 13 the number one source of disability. 14 Approximately 800,000 strokes each year in the 15 United States and about 134,000 people die of 16 stroke annually. About a third of stroke patients 17 suffer from some permanent disability, and the 18 current calculation regarding the cost of stroke 19 in the United States runs to approximately \$34.3 20 billion. Despite these alarming statistics 21 though, the NIH budget consistently allocates a 22 mere one percent of NIH spending to stroke related 23 research. The discrepancy between this low level 24 of funding and the magnitude of stroke as a public health problem and an economic burden needs to be 25

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1	COMMITTEE ON HEALTH 16
2	corrected. Additional funding for stroke research
3	will benefit not only stroke patients and their
4	families, but also the economic health of our
5	nation. NIH funded research has shown that
б	patients treated with TPA, tissue plasminogen
7	activator, which is the only FDA approved
8	emergency treatment for the most common type of
9	stroke, ischemic stroke, within three hours of the
10	first signs of stroke, those patients are 30
11	percent more likely to show minimal or no residual
12	disability after three months. Additionally,
13	another study indicated that this level of
14	improved outcomes for stroke patients could result
15	in a net ten year benefit of \$6.47 billion. In
16	this background, our task force really commends
17	the Council for working to expand funding for
18	stroke research. To emphasize the importance of
19	stroke research, I'd like to highlight several
20	recent developments. Newly approved devices allow
21	us to use special catheters that can extract blood
22	clots and reopen arteries of up to 89 percent of
23	patients with certain types of strokes. By
24	reopening these arteries, we can restore blood
25	flow to the brain and limit the damage that

1	COMMITTEE ON HEALTH 17
2	strokes cause. In addition, newly developed
3	anticoagulant drugs that thin the blood can
4	prevent certain types of strokes more effectively
5	and more safely than older drugs without the need
6	for the frequent blood tests that have to be
7	performed for older drugs such as Coumadin.
8	Moreover research here in New York City and in
9	other countries has demonstrated that designation
10	of appropriate hospitals as primary stroke centers
11	can speed delivery of clot dissolving drugs and
12	ensure delivery of these drugs to more patients.
13	In this regard, I'd like to point out that New
14	York took the lead in designating stroke centers
15	almost a decade ago now. Early results from a
16	pilot project that we conducted in Brooklyn and in
17	Queens indicated that with designation of stroke
18	centers, the percentage of stroke patients who
19	arrived quickly enough to be treated with clot
20	dissolving drugs more than doubled from 3.4 to 7.7
21	percent of all stroke patients. This result
22	actually came from a research project that many
23	members of our stroke taskforce participated in,
24	and this initial success has helped to lead to the
25	designation of stroke centers throughout New York

1	COMMITTEE ON HEALTH 18
2	state and nationally. Numerous subsequent studies
3	have confirmed the benefits of such centers, and
4	recently because of the success of these primary
5	stroke centers here in New York and throughout the
6	country and because of new research suggestion
7	that creation of a second more specialized level
8	of stroke centers for more complex patients will
9	improve outcomes. Comprehensive stroke centers
10	are now being designated and criteria are being
11	developed to measure their performance.
12	Furthermore, several recent studies have
13	demonstrated that stroke center performance is
14	enhanced if EMS providers pre-notify emergency
15	room physicians when they are bringing in an acute
16	stroke patient. By allowing the ER to prepare for
17	an incoming patient and even by allowing
18	physicians to communicate directly with family
19	members accompanying the patient ahead of time,
20	the administration of clot dissolving drugs can be
21	dramatically speeded up. In view of these
22	research findings, my colleagues and I on the New
23	York City Stroke Task Force are initiating
24	discussions with the Fire Department here to
25	incorporate these results into the care of stroke

1	COMMITTEE ON HEALTH 19
2	patients through the EMS system here in New York.
3	We are hoping that this will further improve the
4	care that New Yorkers receive if they have a
5	stroke. I want to emphasize that in each of these
6	cases, practical improvements in stroke care
7	depend on research. To optimize stroke care in
8	the future, additional funding for stroke research
9	will be critical, and I therefore urge the Council
10	to adopt Resolution 982-A. Before I conclude, I
11	want to thank the Council deeply for inviting me
12	here today. On behalf of the AHA's New York City
13	Stroke Task Force, I am honored to have the
14	opportunity to support the Council's interest in
15	promoting stroke research and I look forward to
16	positive results from the passage of this
17	resolution. Thank you again for the invitation to
18	testify and I'll be happy to answer any questions
19	that you may have about stroke research or more
20	generally, about the care of stroke patients.
21	CHAIRPERSON ARROYO: We're
22	chatting, but we are listening. We are planning
23	and plotting and that is usually what happens when
24	we are having these conversations back here. We
25	have heard numbers regarding national. Do you

1	COMMITTEE ON HEALTH 20
2	have anything specific to the state and the city
3	in terms of the incidents of strokes and how the
4	city is doing in terms of the recovery of
5	patients?
6	DR. DANA LEIFER: There are a few
7	numbers that I can give, and Robin maybe can add
8	some others, but I think about 58,000 strokes in
9	New York States, and about 5,000 deaths related to
10	stroke in the state and according to the one
11	statistic that I have seen, about 1400 stroke
12	related deaths here in the city, so that is just
13	to give some idea of the sort of specific
14	magnitude of the problem that we have right here.
15	ROBIN VITALE: Obviously, I concur
16	with everything that Dr. Leifer has shared with
17	you, and pleased to report on many levels that
18	stroke is actually the sixth leading cause of
19	death here in New York City compared to it being
20	ranked just fourth across the country and New York
21	state, so I think ultimately the city should be
22	commended on many levels for doing some wonderful
23	innovate policy work to address those risk factors
24	that you outlined in your opening remarks.
25	Unfortunately, we still do have quite a bit of

1	COMMITTEE ON HEALTH 21
2	work yet to do. There is elements around physical
3	activity and nutrition, certainly smoking. The
4	city has done some fantastic work with, but there
5	remains some unfortunate populations we have not
6	been able to achieve a reasonable mark with those
7	risk factors, and there are some risk factors
8	unfortunately that are out of our control-
9	certainly looking at ethnicity. There is a
10	disparity regarding African Americans and stroke.
11	Really focusing in o-there are disparate risk
12	factors around hypertension, obesity and tobacco
13	use specifically, and also with gender. While
14	more men will suffer from stroke, more women will
15	ultimately die from the disease, so there is
16	certainly more work that has to be done reaching
17	those populations, and also, I think that begs for
18	more research as well-really looking at specific
19	therapies, focusing in on both women and race and
20	ethnicity.
21	CHAIRPERSON ARROYO: We have been
22	joined by Council Member Van Bramer. I think he
23	came in. What's the research dollar for New York
24	City? Do we know how much we are investing in
25	that?

1	COMMITTEE ON HEALTH 22
2	ROBIN VITALE: We have a list and I
3	can certainly follow up through Joe the full list
4	of NIH grants that are currently funded in New
5	York state and that would detail New York City's
6	specific research as well. It's anybody's guess
7	as far as what institutions will be impacted
8	should the fiscal cliff happen and should the
9	fiscal year 2013 negotiations be at a detriment to
10	NIH funding, but we can certainly share with you
11	the current status of those projects as well.
12	CHAIRPERSON ARROYO: We are joined
13	by Council Member Mendez, Rosie Mendez. Thank you
14	for being here. So we are asking for the federal
15	government to increase funding for research, but
16	are we trying to save what we have already and ask
17	for more? What is it that we really want to say
18	to the president and his guys up there?
19	ROBIN VITALE: I think ultimately
20	as Dr. Leifer's testimony has outlined, and what
21	you will hear from the other clinicians, there is
22	a need to expand NIH funding, so I would encourage
23	you to maintain the language. Certainly, we need
24	to protect what we have. I think again going back
25	to my comments-the timing of this resolution is

1	COMMITTEE ON HEALTH 23
2	pivotal because we are unfortunately looking at
3	the potential of a pretty extreme cut within the
4	next few weeks, and unfortunately, NIH is always a
5	target for funding during every fiscal year budget
6	to negotiation.
7	CHAIRPERSON ARROYO: Currently the
8	federal government is putting one percent of the
9	larger dollars in. What are we asking them? No
10	cuts to the current spending, but increased to
11	what?
12	ROBIN VITALE: The percentage I
13	will have to do a little math for you to determine
14	that. I think we would like to ultimately see an
15	expansion to at least 32 million. I believe that
16	is the American Stroke Association's request for
17	this year.
18	CHAIRPERSON ARROYO: And currently
19	we are receiving?
20	ROBIN VITALE: Oh, what is the
21	current dollar amount? I don't know if I have
22	that. I will have to follow up with you.
23	CHAIRPERSON ARROYO: That is
24	important for details. Okay.
25	ROBIN VITALE: Numbers are

1	COMMITTEE ON HEALTH 24
2	important. We will make sure we get those.
3	CHAIRPERSON ARROYO: Doctor, in
4	your testimony, you-on page 2 the second
5	paragraph, there is the pilot in Brooklyn and
6	Queens indicating that with the designation of
7	stroke centers the percentage of patients who
8	arrive quickly enough has increased from 3.7 to
9	7.7. what do we attribute that to?
10	DR. DANA LEIFER: I think we
11	attribute that to several things. One is that
12	along with the designation of stroke centers there
13	was an effort for EMS to identify stroke patients
14	more quickly and to bring those patients to the
15	stroke centers rather than to other hospitals so
16	that they would be arriving at a hospital that was
17	set up to treat them and therefore, able to treat
18	them more quickly because there are sort of are
19	two aspects to the time. One is how much time
20	elapses before the patient arrives at the
21	hospital. The other is how much time it takes for
22	the hospital to be ready to treat the patient, so
23	if a patient can arrive later as it were if they
24	are getting to a hospital that can work more
25	quickly and still get the patient treated within

1	COMMITTEE ON HEALTH 25
2	the three hours that we had at that time to treat
3	people with tPA from the onset on their symptoms.
4	CHAIRPERSON ARROYO: So does that
5	also—I would imagine it also involves a patient's
6	awareness to call 911
7	DR. DANA LEIFER: [interposing]
8	Yes, that is correct too.
9	CHAIRPERSON ARROYO:earlier in
10	the process. So do we know how much of that is
11	influencing the-it more than doubled?
12	DR. DANA LEIFER: I don't think
13	that we can say from the information that we have
14	in that study, I don't think that we can say how
15	much of that was a result of people calling more
16	quickly, although I don't think there was a big
17	effort to get people to call more quickly at that
18	time. There was an effort to prioritize acute
19	stroke calls through EMS and there was a big
20	effort on the part of the strokes of the newly
21	designated stroke centers to be more efficient
22	once the patient arrived there.
23	CHAIRPERSON ARROYO: And in being
24	efficient just being able to intervene medically
25	quickly?

1	COMMITTEE ON HEALTH 26
2	DR. DANA LEIFER: That is correct,
3	so that means that the patient is recognized as
4	having an acute stroke as soon as they arrive.
5	They get the appropriate lab tests drawn
6	immediately, that they get a cat scan done
7	quickly, and that that scan is interpreted
8	efficiently and that the drug, the tPA is prepared
9	quickly, and that whole process gets done. So
10	there are sort of multiple steps that are involved
11	in treating an acute stroke patient efficiently,
12	and improvements in any one of those steps it
13	makes a significant difference. We are looking
14	essentially at chopping minutes off at each of
15	multiple steps along the way, and I think that the
16	research has shown that designating a hospital,
17	having an established protocol for treatment of
18	stroke patients helps to make the process more
19	efficient. Having a designated stroke team helps
20	to make the process more efficient. I think we
21	are learning now from research and experience that
22	has been developed in other places. The pre-
23	notification making sure that EMS notifies the
24	hospital that a stroke patient is coming in can
25	make a difference. In this country the Heart

1	COMMITTEE ON HEALTH 27
2	Association has now set a goal of door to needle
3	time of 60 minutes of getting patients from-
4	CHAIRPERSON ARROYO: [Interposing]
5	What? What does that mean? Door to needle?
6	DR. DANA LEIFMAN: That means the
7	time from the time that the patient arrives at the
8	door of the hospital until the needle with the tPA
9	is inserted and is given, getting all of those
10	things, the labs, the cat scan, the drug readied,
11	all of that done within 60 minutes. There are
12	actually reports from other areas particularly
13	actually from Finland, from Helsinki that they are
14	starting to get those times to 30 and 20 minutes
15	even and part of the success there involves pre-
16	notification, communicating between the hospital
17	and the ambulance, so that the physicians can get
18	the details of the history, can find out when the
19	stroke really started from the family before the
20	patient ever arrives, so I think there are other
21	ways that we can sort of try to be even better if
22	they can do that there, we should be able to do
23	this here as well.
24	CHAIRPERSON ARROYO: So in-I'm
25	going to ask I guess a question that is going to

1	COMMITTEE ON HEALTH 28
2	have a couple of parts to it. In your testimony
3	you indicate that you and your colleagues on the
4	taskforce have begun conversations with the fire
5	department to incorporate that pre-notification to
6	emergency rooms physicians. So we're not doing
7	that already? Just duh.
8	DR. DANA LEIFMAN: very
9	efficiently, but yes that is in a sense, that is a
10	reasonable reaction to the way that things stand
11	right now.
12	CHAIRPERSON ARROYO: So how many
13	hospitals have been given this stroke designation
14	or what is the term-stroke center designation?
15	ROBIN VITALE: New York City,
16	I'd have to double check.
17	CHAIRPERSON ARROYO: Speak into the
18	mic a little better
19	ROBIN VITALE: Specific to New York
20	City, I do want to double check that information
21	before I share that. Obviously it is something
22	that we do keep a database on as well as the New
23	York State Department of Health, so we will double
24	check and get that to you.
25	CHAIRPERSON ARROYO: You come here

1	COMMITTEE ON HEALTH 29
2	with an idea, right, to highlight a problem. I
3	send you back with homework always. So as a city,
4	how many of our facilities have the mechanism in
5	place to be able to respond to that EMT that is
6	calling saying I have someone en route to the
7	hospital; this is what we believe it is, so that
8	that hospital can gear up that team? I have
9	actually had a personal experience and have seen
10	the stroke designation response to an individual
11	who was suspected of having had a stroke and
12	between and door and cat scan, it was less than
13	ten minutes. We know that treatment and
14	intervention is critical to the outcome of the
15	patient's health, but I don't have a clue how many
16	hospitals in our city, be they private, voluntary,
17	public, and whether or not these designations-how
18	many exist and a larger conversation of the ones
19	that don't have the designation, what do we need
20	to do to get them there?
21	ROBIN VITALE: I think we are
22	ourselves in the process of really outlining that
23	and specific to the point of pre-notification, a
24	lot of that is going to be dependent upon the
25	feedback that we are receiving from the fire

1	COMMITTEE ON HEALTH 30
2	department in New York as well because the
3	ambulance team is pivotal as part of that matrix,
4	so we are having conversations with them and we do
5	expect to gather a good amount of knowledge within
6	the coming weeks on that topic, and we will gladly
7	share that with you once we have more information.
8	CHAIRPERSON ARROYO: So also how
9	does the hospital become a stroke designated
10	center?
11	ROBIN VITALE: There is a protocol
12	that is outlined within the New York State
13	Department of Health and through the guidelines
14	that are both American Stroke Association as well
15	as JCAHO, which is the Joint Commission, they have
16	to implement various parameters in order to be
17	designated as a stroke center.
18	CHAIRPERSON ARROYO: I have some
19	more questions, but I am going to-Council Member
20	Eugene?
21	COUNCIL MEMBER EUGENE: Thank you,
22	Madam Chair, and thank you to the members of the
23	panel continue to follow up on the pre-
24	notification that these questions that I am going
25	to ask probably may be technical questions. Do

1	COMMITTEE ON HEALTH 31
2	you have an idea what is the best way to handle
3	pre-notification? What is the best thing to do to
4	inform the hospital that this patient who is
5	coming right now may be suffering from a stroke?
6	Do you have an idea how we can do that-the best
7	way to do that? It may not be a medical question,
8	but I'm just asking.
9	ROBIN VITALE: I think it's
10	interesting that those entities, those
11	municipalities that are doing pre-notification,
12	doing it well have really adapted to the specific
13	needs of that community, so I think to get to the
14	point about what is best for New York City, that
15	is yet to be determined. I know that the fire
16	department will likely have some insight into what
17	he best mechanism could be and what the
18	limitations might be to get to that point, so that
19	can certainly part of the conversation that we
20	follow up with the Committee once we do hear from
21	the FDNY.
22	DR. DANA LEIFER: I think that in
23	other locations there has been now use of cell
24	phones, so that the ambulance can communicate
25	directly with the hospital. At the moment that is

1	COMMITTEE ON HEALTH 32
2	not an option here, but it is something that we
3	might be looking into.
4	COUNCIL MEMBER EUGENE: I like the
5	idea of the ambulance communicating directly to
б	the hospital because the ambulance they are
7	carrying the patient to the hospital on their way
8	to the hospital. I think that is something we
9	should look into. Thank you very much. We have
10	been talking about stroke and many people they
11	know about stroke but some people they are going
12	to have a stroke that don't even know that. They
13	don't even know the signs and the symptoms. Could
14	you just briefly elaborate-talk about the sign and
15	the symptoms of stroke? Because people are going
16	to have a stroke, they don't know that. Could you
17	just briefly please?
18	DR. DANA LEIFMAN: There maybe are
19	two aspects to that. One is knowing that you
20	might have a stroke because of the risk factors
21	that you have and being educated-hypertension,
22	high blood pressure, high cholesterol, diabetes,
23	smoking are all problems that increase the risk of
24	stroke and if they are dealt with, they can reduce
25	that risk. The second aspect to it is recognizing

1	COMMITTEE ON HEALTH 33
2	that someone is actually having or might be having
3	a stroke right at the moment based on the symptoms
4	that they have. The most important one of those
5	being sudden onset of weakness on one side of the
6	body, but there are others, such as sudden
7	difficulty in speaking, sudden problems with
8	vision such as loss of vision or double vision,
9	sudden problems in coordination, sometimes simply
10	becoming acutely confused or becoming dizzy or
11	developing a very, very severe headache-the so
12	called "worst headache of one's life." So those
13	are kind of the immediate things that people need
14	to recognize to know that they are having a stroke
15	or that someone around them is having one.
16	COUNCIL MEMBER EUGENE: Thank you
17	very much. We know and you know-I know that you
18	know that prevention is the best medicine, and
19	people don't suffer, but what American Association
20	has as a system of prevention to prevent people to
21	have stroke? Do you have any-
22	ROBIN VITALE: [interposing]
23	Specific to preventing stroke, we do have-
24	[crosstalk]
25	ROBIN VITALE: We have a few

1	COMMITTEE ON HEALTH 34
2	different programs I want to make sure you are
3	aware of. One we mentioned the disparate risk to
4	African Americans, so I encourage you to look at
5	the Power to End Stroke. You can find that
6	powertoendstroke.org. And that is a series of
7	educational programs, initiatives and education
8	specific to the African American community and
9	their disparate risk. We also have a more general
10	concept regarding the risk factors for stroke the
11	My Heart, My Life initiative which outlines the
12	seven simple parameters that you can help to
13	address that will ultimately help you to live a
14	healthier life and that will help to reduce your
15	risk for both stroke and heart disease.
16	COUNCIL MEMBER EUGENE: You
17	mentioned in your testimony that more men suffer
18	from stroke and more women die from it. What is
19	the medical explanation for that? Do you have an
20	explanation? Could you explain it to us based on
21	your medical experience and knowledge why the men
22	are suffering from stroke and the women die from
23	it? Is there any explanation?
24	DR. DANA LEIFER: I'm not sure that
25	I really have a very good explanation for that.

1	COMMITTEE ON HEALTH 35
2	One of the possibilities I think also that women
3	may be tending to have strokes at later ages, and
4	that may have something to do with it, but I don't
5	think that we really have a solid explanation for
6	that.
7	ROBIN VITALE: That was going to be
8	my response as well. I think that this is an area
9	that begs for additional research. There are some
10	complicating factors regarding women specifically
11	regarding our risk of stroke increasing due to
12	pregnancy, also use of birth control pills can
13	exacerbate women's risk, and also just
14	anecdotally, myself being a female, I can tell you
15	it's very easy for us to get distracted and ignore
16	symptoms and not be as perhaps forthcoming with
17	our own medical care, so I think that that is an
18	area that really begs for additional science and
19	research and ultimately we encourage men and women
20	both because again, there is a disparate risk of
21	being men and suffering a stroke, even though they
22	are more fatal for women. We need to make sure
23	that we are reaching the population as a whole and
24	encourage them to address their risk factors.
25	COUNCIL MEMBER EUGENE: I agree

1	COMMITTEE ON HEALTH 36
2	with you. This is a wise answer. I will say the
3	same thing that the reason-because there are so
4	many disease, we don't know the mechanism, we
5	don't know them yet, but I believe this is a
6	reason why we should invest in this-we should put
7	more money for research, and thank you. If you
8	will allow me, Madam Chair, can I have one or two
9	more questions?
10	CHAIRPERSON ARROYO:
11	COUNCIL MEMBER EUGENE: Okay, very
12	good. Thank you very much. In your testimony,
13	you mentioned that newly approved device
14	special that can extract blood clots in
15	the arteries of 89 percent of patients with
16	certain types of stroke. Could you tell us where
17	this technology is available? What hospital,
18	where exactly? How many hospitals in?
19	DR. DANA LEIFER: I can you that it
20	is available at our hospital at New York
21	Presbyterian-I believe both at the Cornell site
22	where I am located at the Columbia, and I think
23	it's most likely available at several other of the
24	large tertiary care hospitals in the city,
25	COUNCIL MEMBER EUGENE: Because you
1	COMMITTEE ON HEALTH 37
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2	know stroke is such a devastating disease and this
3	technology is very important also, I think they -
4	- also with the stroke center. In Brooklyn I know
5	they have these stroke centers. What do you
6	think that we should do, we City Council Members,
7	we from the government to make sure that-of course
8	funding—to make sure that this technology is
9	available also in more hospitals stroke centers
10	because you know that it is—when you treat a
11	patient suffering from stroke it is about time.
12	There is a time factor. Do you think that there
13	is something that we can do in the City Council to
14	help you or to help the hospital get this type of
15	technology?
16	DR. DANA LEIFER: I think that it
17	may be important to centralize some technologies
18	like this and that the best way of getting the
19	technology available to patients is to get them to
20	the right hospital. I don't think that this is
21	going to be a kind of technology that can be at
22	every single hospital. I think that giving
23	intravenous tPA really should be within the
24	capability of any hospital that has an emergency
25	room. I think by its nature this kind of

1	COMMITTEE ON HEALTH 38
2	procedure is more complicated and requires a lot
3	of specialized resources, so that we are not going
4	to be able to get it to every hospital, but we
5	need to be able to get the patients who need it to
6	those hospitals as quickly as possible, and I
7	think that as so called comprehensive stroke
8	centers are developed and certified, we will need
9	to think a lot about how that interacts with the
10	EMS system and to make sure that there is adequate
11	coverage of the entire city with hospitals that
12	are comprehensive centers and that are able to
13	deliver care of this kind and other kinds of
14	advanced procedures.
15	COUNCIL MEMBER EUGENE: Okay. My
16	last one. Okay. My last one. We know that
17	ischemic stroke and hemorrhagic strokes, and my
18	question is, we in New York City where we are ate,
19	are we capable really to provide good treatment
20	when the patient goes to the hospital or do we
21	need additional resources or technology to make
22	sure that we protect people who are suffering from
23	stroke? Are we doing a good job or not because -
24	- we know the consequences of stroke are enormous
25	and that people after stroke-most of the people

1	COMMITTEE ON HEALTH 39
2	don't get back to normal life. What's going on?
3	Are we doing good or not?
4	ROBIN VITALE: I would say on first
5	we are doing reasonable good. I think there
6	is room for improvement, and we really do hope to
7	dig in a little deeper with the pre-notification
8	angle and specific to your question not about the
9	particular technology that Dr. Leifer was
10	referring to, but just in general, I think there
11	will be aspects that Council would be useful in
12	knowing about and advocating for in order to help
13	improve the overall system of care. So we will
14	certainly follow up with all of you on that level
15	and make sure that once a clear call to action is
16	defined that you are all in a position to assist
17	us in implementing those measures.
18	COUNCIL MEMBER EUGENE: Thank you
19	very much to both of you. Thank you, Madam Chair.
20	Thank you.
21	CHAIRPERSON ARROYO: Thank you.
22	Thank you both for your testimony. Know that we
23	certainly will be calling on you to further the
24	conversation. Just for me personally to
25	understand why not every emergency room is ready

1	COMMITTEE ON HEALTH 40
2	or maybe they are and we are not aware, so
3	understand our capacity to respond to a patient
4	presenting with a stroke city-wide, so Doctor, you
5	said that we may not be able to get the resources
6	to all of the hospitals, and that concerns me
7	because that ultimately means that in some
8	communities somewhere in the city patients are
9	going to get a different level of care than
10	somewhere else, and that is something that we
11	cannot allow to happen. It seems that with the
12	benefits of early intervention and the better
13	outcomes that we can experience that every single
14	emergency room in our city has to be prepared to
15	respond in the same manner so that regardless of
16	where you are living and the resources still
17	available to you. You can respond. You don't
18	have to.
19	[crosstalk]
20	DR. DANA LEIFER: To put it into
21	perspective, there is a lot of equipment and
22	expertise that is needed to use procedures like
23	this type of clot retrieval. It's important that
24	the people who do it are doing it frequently
25	because if they don't have a volume of patients to

1	COMMITTEE ON HEALTH 41
2	be working on and to essentially be practicing on
3	and keeping their skills well-honed and up to
4	date, it is going to be difficult to do it
5	properly, so it's not something that you can do at
6	a small hospital once or twice a year. If you are
7	not doing this frequently, you are not really
8	going to be doing it as well as you should be
9	doing it, and there is a lot of experience with
10	this, with other kinds of patients really showing
11	that a hospital needs to have a certain volume of
12	patients with a particular disease or getting a
13	particular kind of procedure in order to get good
14	results from it, and I think that is the reason
15	for saying that certain things like this may need
16	to be centralized and the patients brought to the
17	hospital quickly, and someone in the field even
18	making a decision that this patient should bypass
19	the closest hospital and go to the more
20	centralized, more comprehensive center and bearing
21	in mind that here in New York having six, seven,
22	eight—and I'm not being very specific—but a large
23	number of very highly specialized tertiary care
24	centers available actually brings all of these
25	resources much closer to the population than they

1	COMMITTEE ON HEALTH 42
2	are in many other areas where the distances are
3	much, much greater and these kinds of problems are
4	actually much bigger.
5	CHAIRPERSON ARROYO: I appreciate
6	that, and then the next level of discussion has to
7	be at if it is going to be centralized then how
8	patients get to those centers of excellence then
9	becomes the next level of conversation in making
10	sure that the EMS and everyone else is
11	coordinating the transport of the patient as
12	quickly as possible. I understand not every
13	hospital it may not be possible to set up every
14	single emergency room with the kind of resources
15	needed to provide the appropriate intervention as
16	quickly as we'd like but then the mechanism that
17	gets patients to those centers then becomes very,
18	very critical and important in the conversation,
19	so I look forward to an ongoing dialogue around
20	how we can better organize this process and more
21	importantly understand where are these centers,
22	how many do we have certified or designated in the
23	city and how do we work to strengthen their
24	capacity to respond to the needs of patients that
25	show up? I thank you for your advocacy and your

1	COMMITTEE ON HEALTH 43
2	work and for being part of this conversation, and
3	I look forward to the ongoing conversation. Thank
4	you.
5	ROBIN VITALE: Thank you.
6	DR. DANA LEIFER: Thank you.
7	CHAIRPERSON ARROYO: Okay. Our
8	next panel, Dr. Susanna Horvath from Columbia
9	University and Dr. Salman Azhar, Lutheran Medical
10	Center. Thank you both for being here. So that
11	we don't get repetitive in the questioning, if you
12	have some thoughts that you want to add to some of
13	the questions that we have posed to the first
14	panel, you can please interject that into your
15	testimony. It will help us move the conversation
16	along. I'm not going to rush you, but hopefully,
17	you were paying attention and you can address some
18	of those questions as well. So, whoever is going
19	to do first, identify yourself for the record,
20	speak into the mic or the sergeant yells at you
21	because he can't pick it up on the recording, and
22	you may begin when you are ready.
23	DR. SUSANNA HORVATH: My name is
24	Susanna Horvath, and I am stroke physician at
25	Columbia University. I also sit on the New York

44 1 COMMITTEE ON HEALTH City Task Force, and have been an active member of 2 the American Stroke Association. Prior to working 3 4 at Columbia, I worked at New York Baptist Hospital 5 in Brooklyn as a community stroke neurologist, so I sort of come at it from both ends. I wanted to 6 make a couple of comments before I start what my 7 formal testimony is. Just going back to some of 8 9 the things that were mentioned earlier. One of the things-so in the state of New York-I don't 10 11 know the city numbers-in the state of New York 12 there is I think 230 some odd hospitals and 119 of 13 those have been designated as stroke centers and-14 119 in the state. I don't know the city numbers, 15 but I have asked somebody to look them up for me, 16 and in order to become a center, you have to meet a lot of different qualifications including this 17 18 door to needle time of 60 minutes, and in order to 19 do that, you need to have cat scan availability 24 20 hours a day. You need to have a neurosurgeon 21 available 24 hours a day, a lab that is open 24 22 hours a day and there are these certain targets 23 that you have to meet and one of the things that 24 there is a great deal of stress on is education 25 and patient and family education so that when

1	COMMITTEE ON HEALTH 45
2	somebody before they leave the hospital, they know
3	their own stroke risk factors. They know the
4	signs and symptoms of stroke. They know what
5	medicines they are taking and why. They know the
6	need for follow up, and they know how to call 911.
7	Some of our research at Columbia has focused on
8	teaching these patients. We had a study where
9	someone would walk around with a toy telephone,
10	and have the person pick up the phone and call 911
11	and show what do they say to get that ambulance
12	there, and so some of the results of these studies
13	are actually very interesting in terms of prior
14	notification. So along the same lines, the
15	difference between a primary stroke center that
16	can give you a drug intravenously, and a center
17	that we are hoping will be designated as a
18	comprehensive center where things can be done that
19	are a little more elaborate such as going in with
20	catheters into the brain and taking clots out.
21	The other important distinction is the time
22	window, so the door to needle time three hours,
23	and many people, but research has also shown that
24	in certain groups of people it can be stretched
25	out to four and a half hours. In terms of getting

COMMITTEE ON HEALTH

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a clot out of the brain, you have more time than 2 that, so we have a window of at least six hours to 3 4 do that. In some people we have a window that is 5 a little bit longer. So typically what happens today in the city is that a person will be taken 6 to a stroke center where intravenous tPA can be 7 8 administered and when we assess the person in that 9 community stroke center, the nearest stroke center 10 that you can get to, if that person is within the 11 time to do something else and there is something 12 else that can be done. For example, going in with 13 the catheter into the larger arteries and taking out that-we have a mechanism in place where there 14 15 is a lot of communication and interface between the larger teaching institutions that have this 16 17 capability and the smaller hospitals that may not have this capability and the ambulances readily 18 19 transfer these patients to those larger 20 institutions. So this is a work in progress that 21 has been going on for many years in the city, and 22 we do try to do that, and there is also a certain amount of prior notification that exists already 23 24 in the city. And again, we are trying to sort of fine tune it and make it better. It's not as 25

1	COMMITTEE ON HEALTH 47
2	though there is no notification at all. Often the
3	ambulances do call the emergency room where they
4	are headed, so we know that the patient is coming,
5	and in certain institutions for example, at
6	Cornell they have the resident neurology person
7	who is going to be the first responder has a cell
8	phone and the ambulances have that number, and so
9	they are able to-and this is a new project that we
10	are trying to sort of talk about at other
11	institutions and see if we can do this where you
12	know that that person is the one who is going to
13	be making the decision about whether this person
14	gets the drug or not, and what is going to happen
15	and they are there in the emergency room to meet
16	the patient, so all of these are sort of works in
17	progress. I just wanted to sort of bring those
18	additional thoughts to the Council, and I want to
19	thank you and commend you on your proactive
20	support of stroke research and to urge Congress to
21	take up this resolution. New York Presbyterian
22	Hospital and the Columbia University Medical
23	Center has a long history of federally funded
24	research, which has advanced treatment
25	capabilities in our region and across the country

1	COMMITTEE ON HEALTH 48
2	and enabled more citizens of New York to be
3	treated more effectively as a result of this, and
4	we offer our full support for this resolution. I
5	don't want to recap what we have already talked
6	about in terms of the number of stroke patients-
7	the fourth leading cause of disability and death
8	in the country—but one of the things that I do
9	want to tell you is that we are a generation that
10	actually this is the first generation that they
11	are talking about the fact that we may outlive our
12	children, and that has to do with childhood
13	obesity, hypertension, diabetes not being
14	addressed properly and for the year 2030, they are
15	actually predicting that not only will there be
16	5.6 million strokes as there are today, but there
17	will be an additional 4 million strokes on top of
18	that, so it's a pervasive condition. It's
19	exceedingly common, and it's something that is
20	really underfunded in terms of the NIH. In terms
21	of the disability, it is the number one cause of
22	disability in our country. 20 percent of people
23	have some sort of communication disorder, 50
24	percent have some loss of motor function, so they
25	can't walk anymore. They can't use their arms

1	COMMITTEE ON HEALTH 49
2	anymore, and so this is a really vital place where
3	research money should be placed. I have listed
4	some of-we actually have 19 ongoing stroke
5	research projects at Columbia right now, and some
6	of them are treatment based, so when the person
7	who comes in with the acute stroke, they get sort
8	of triaged into what research project would they
9	be most appropriate for, and we look at what are
10	the best drugs used in the acute stroke setting.
11	Are they appropriate for intervention? What are
12	the drugs that they should be sent home on? And
13	treatments have changed over the years because of
14	these research studies. Beyond that, we look at
15	stroke prevention, and primary and secondary
16	stroke prevention research studies and we have
17	listed some of those as well, and then finally,
18	one of the things that I wanted to talk a little
19	bit about is a project that has been really wildly
20	successful in the city called Hip Hop Stroke, and
21	this is something that started out in Harlem, and
22	it was a stroke neurologist at Harlem Hospital,
23	who got together with a hip hop artist called Doug
24	E. Fresh, and they put together a video teaching-
25	Oh, you know this?

1	COMMITTEE ON HEALTH 50
2	COUNCIL MEMBER DICKENS: Thank you
3	for your testimony, but we in the City Council we
4	fund that program.
5	DR. SUSANNA HORVATH: Oh, that is
6	marvelous. So you know all about it?
7	[crosstalk]
8	DR. SUSANNA HORVATH: Oh, that is
9	marvelous. I did not know that. Thank you very
10	much for that funding.
11	[crosstalk]
12	DR. SUSANNA HORVATH: Exactly, Dr.
13	Williams, so Dr. Williams has-
14	COUNCIL MEMBER DICKENS:
15	DR. SUSANNA HORVATH: This project,
16	this Hip Hop Stroke, had requests as far as China
17	and Germany and all across the United States.
18	People have been looking at this, trying to see
19	how they can translate it into their own
20	communities, and for those of you who don't know,
21	in Harlem there are many instances where
22	grandparents live with their grandchildren, and
23	it's teaching children in schools the signs and
24	symptoms of stroke and how to reach out to 911 in
25	the event of strokes. So it's actually a very

1	COMMITTEE ON HEALTH 51
2	marvelous project that has had great success, and
3	so what they are looking at is something called
4	stroke in a box where they can actually mail this
5	out to various communities in the country. People
6	can get online. They can learn about stroke
7	through the website rather than in class
8	education, so it's very interesting and it is sort
9	of a new paradigm in terms of education in the
10	community about stroke. Thank you.
11	DR. SALMAN AZHAR: Thank you,
12	Susanna. My name is Salman Azhar. I work at
13	Lutheran Medical Center, and for all of you
14	familiar with Lutheran, we are a fairly large
15	network, which is sort of has one hospital
16	Lutheran Healthcare in Sunset Park and then we
17	have a very large family health network, which is
18	present all of the boroughs, in homeless shelters
19	and schools, as well as in our own primary care
20	sites. We have nursing homes as well as some
21	senior housing, so we sort of run the gamut of
22	healthcare and taking care of people, and why that
23	is important-and I'm the chief of stroke and
24	neurology there-and why that is important is
25	because when we think about stroke, yes, it's the

1	COMMITTEE ON HEALTH 52
2	fourth leading cause of death in our city, but
3	it's also the leading cause of disability. The
4	number of people as Councilman Eugene, you so
5	correctly pointed out that walk around with
6	disability from their stroke, the number of people
7	who are stopped from living full lives, the number
8	of people who cannot pick up their grandchildren
9	is incredibly-it's like the silent group even in
10	stroke care. We have talked a lot about early
11	treatment. Early treatment is very sexy. There
12	is nothing better than—I had a patient like this
13	last night-came into the emergency room within an
14	hour of having a stroke. We were able to give her
15	intravenous tPA, and she had a very good reversal,
16	and she looks great today. There is nothing
17	sexier about that. There is nothing more that you
18	can do in sort of almost miraculous fashion in the
19	emergency room that will make that kind of
20	dramatic change, but at our hospital in our health
21	system about 15 patient of our patients get
22	intravenous tPA, which is one of the highest rates
23	of giving this drug in the country, but that still
24	leaves 85 percent of people who if we are going to
25	have an impact on in our city, it is going to be

1 COMMITTEE ON HEALTH 2 with prevention and then it's going to be with preventing the second stroke from happening, and 3 it's going to be with treating the disability that 4 5 happens from that stroke so we can get people back 6 to work, get people back to living a more fuller 7 life. Numbers mean a lot and I think it's very 8 important to think about the research what the 9 impact of research that the NIH has funded, but I always like to bring it down to sort of people. I 10 11 have a patient of mine, her name is Katie, she is 12 a 311 operator, and she lives in Sunset Park. She 13 is 28 years old. She showed up in our emergency room with car service, and for people that know 14 15 Brooklyn-that is certainly how a lot of people get 16 to the emergency rooms, and so not knowing that 17 she was having a stroke, and had a stroke. We actually thanks to the City Council funding us 18 19 have actually the ability to do comprehensive 20 stroke. We have a - - that we are able to do all 21 of these fancy catheter based treatments, so we 22 were able to get to her fast, even though she was 23 out of that initial window, get to her fast, take 24 out her clot, and save as much brain as possible,

25 but if that is where it stops, then we haven't

1	COMMITTEE ON HEALTH 54
2	done our job.
3	CHAIRPERSON ARROYO: Doctor, you
4	said she is 28?
5	DR. SALMAN AZHAR: 28. A large
6	number of strokes happen in young people, and when
7	we start talking about prevention, it's about
8	recognizing what your risk factors are-not just at
9	age 50 or 65, it is what your risk factors are at
10	age 21, and depending on your ethnicity, depending
11	on your family history—so how do we get that
12	information across? We get it by starting to get
13	into the communities, and one of the things I
14	think which is very important for the NIH to
15	continue funding and fund at a much higher level
16	is we know what saves strokes, we know what
17	prevents strokes. How do I get that into the home
18	of a Chinese family living in Sunset Park? How do
19	I get that into Katie's home? How do I get that
20	into someone who the kids of the mother who is
21	going to have that stroke so the kids recognize
22	the stroke and call 911? That is the key. So
23	Katie comes in. We treat her. We have done-but
24	she still walked out with significant disability.
25	We put her through an intensive rehabilitation,

1	COMMITTEE ON HEALTH 55
2	and she still gets rehabilitation at this point,
3	but she got engaged. Her boyfriend has
4	been amazing-her fiancé, and she is back at work.
5	That is a success story that happens not just
б	because we do what we do upfront, and I agree with
7	you that we do have somewhat of a notification
8	system, but we need to expand it, and teach it,
9	and get people to sort of understand what it means
10	to call 911, but it's what we do at the other end
11	of it. So I'm going to talk today about I'm a big
12	proponent of more research dollars on prevention,
13	but not just prevention, but prevention that is
14	effective in our different cultural communities,
15	prevention that is able to get and get from
16	people with different ethnicities, different
17	language barriers, different socioeconomic status.
18	We know that our Asian and Hispanic patients do
19	less well than our Caucasian patients do. We know
20	that their blood pressure often times less well
21	controlled. We know that people who don't have a
22	primary care physician are more likely to have
23	worse outcomes from their stroke even if they get
24	to the right hospital. This is clearly where we
25	can have the biggest impact is having the NIH fund

1	COMMITTEE ON HEALTH 56
2	research that actually looks at how we get our
3	message across and our teaching across through
4	culturally diverse communities, and
5	socioeconomically diverse communities. Lutheran
6	is a comprehensive rehab center, a stroke center
7	and I am one of those people who believe that
8	while it's very important to have big academic
9	centers in Manhattan, it's also important to have
10	strong community academic centers that can do the
11	comprehensive care, so we are not crossing the
12	bridge to get to Manhattan, but Maimonides and
13	Lutheran being two such places where we can do
14	this right in our borough, so that a smaller
15	center that is just a primary center that can give
16	the intravenous tPA can then ship that patient
17	over to us or Maimonides or Methodist so that we
18	can actually have faster treatment, so we can save
19	more brain. The other place where we can spend
20	money is in rehab, and that has been-the American
21	Stroke Association is very key at sort of pushing
22	that. That has been a very recent expansion of
23	research dollars has been in the area of recovery
24	from your stroke. We now know that certain types
25	of technologies can actually allow you to continue

б

1	COMMITTEE ON HEALTH 57
2	recovering, and here is the rub—and Councilman
3	Eugene, you said something which I always find
4	very interesting, wouldn't it be great if all of
5	the people walking down the street in front of
6	this building who had the difficulty that one arm
7	or one leg-they are obviously walking, they are
8	obviously living at home, but still with
9	difficulty, knew that they had many more options
10	to keep getting better? Wouldn't it be great to
11	know that they don't stop recovering from their
12	stroke three months or six months after their
13	stroke, but we have people who continue recovering
14	five years after their stroke, if you can get them
15	married to the right kind of recovery, rehab
16	therapy. So this is where not just the
17	dissemination of information but where the NIH has
18	been very instrumental at funding new trials that
19	will allow us to understand how we can change the
20	brain's chemistry so that other areas of the brain
21	can take over and actually allow you to walk
22	again. We have trials that are coming up that
23	actually are looking at stem cells. We have
24	trials that are coming up that are actually
25	looking at stimulating the brain electronically,

1	COMMITTEE ON HEALTH 58
2	and we have trials that are coming up that
3	actually are looking at robotic prosthetics, so
4	you put something on your leg that makes your leg
5	walk, but it's connected to your brain, so when
6	you think about walking, you can walk. These are
7	not for the most amazing city in the world; this
8	is I think our birthright. This is where the
9	research needs to come, and this is where our
10	hospitals, all of us, have the ability to deliver
11	a level of care, and I think we are, and I wanted
12	to answer that question where are we in terms of
13	how good are we? We are very good. Our system
14	sometimes is fragmented and sometimes we compete
15	against each other, but we are very good at
16	delivering care. We need to understand with
17	better research what are the most effective ways
18	of teaching, of delivering in the early stages,
19	and continuing-which patients will continue to get
20	better with the different treatments we have for
21	rehabilitation. So Katie is back at work at 311,
22	and her most common complaint is whether she gets
23	a chair that faces this way or this way because
24	her left side is still weak, but that is not bad
25	from a lady who came in with a major stroke and a

1	COMMITTEE ON HEALTH 59
2	complete paralysis of the left side, who could not
3	walk for the first six weeks after her stroke, so
4	it's important to think when we think about what
5	this money means and what this research means, it
6	means Katie. It means the people that we take
7	care of on a daily basis in our city, who could
8	benefit because if they remember to call 911, they
9	will get to the right hospital in time. And I was
10	just counting this. We have about nine hospitals
11	in Brooklyn that are designated centers out of
12	about 12. So a very high percentage. So the
13	state-and I'm a member of the state's advisory
14	group on stroke-has been very good at designating
15	a lot of hospitals for the primary stroke care.
16	We have work to do about the comprehensive. We've
17	got work to do about improving EMS delivering
18	these patients, but they already do to some
19	degree. We can do better, and that is where the
20	money needs to go into. And I again, I just want
21	to thank the City Council. As I said, in fiscal
22	year 2012, you funded us to get a biplane machine,
23	and that has allowed us to deliver this level of
24	care as a community academic center right in
25	Brooklyn, and that is impressive for any city, but

60 1 COMMITTEE ON HEALTH I'm glad I'm in New York City. Thank you. 2 CHAIRPERSON ARROYO: Thank you for 3 your testimony. I'd like a map with dots-4 5 DR. SALMAN AZHAR: [interposing] We 6 have such a map. 7 CHAIRPERSON ARROYO: I'm more 8 visual. What I am going to do is I'm going to ask 9 the previous panel to join this panel in case you 10 want to chime in and support each other in this 11 conversation. So a map with those designated 12 centers, so that I can see-13 DR. SALMAN AZHAR: [interposing] I wish I could have read your mind. I have a map 14 15 sitting next to my computer. 16 CHAIRPERSON ARROYO: For the city? 17 DR. SALMAN AZHAR: Of the city-of 18 just the city. Yes. 19 DR. SUSANNA HORVATH: So for the 20 city the text I got was 47 hospitals. 21 CHAIRPERSON ARROYO: Okay, and 22 where are they? And that is where the map becomes 23 useful. Best practices, and I think if they're so 24 good everyone should be doing it. Do we agree on 25 what those best practices are? Why aren't they

1	COMMITTEE ON HEALTH 61
2	used at every single facility? Is it an issue of
3	competition? I don't understand-the fact that you
4	are all sitting here collegially and sharing, and
5	then when you go back home, Columbia and Lutheran,
6	are you guys playing in the sandbox?
7	DR. SUSANNA HORVATH: I think we
8	are.
9	DR. SALMAN AZHAR: I appreciate
10	that you included Lutheran in the same breath as
11	Columbia. It's always nice.
12	CHAIRPERSON ARROYO: Why wouldn't
13	I?
14	DR. SALMAN AZHAR: I agree with
15	you.
16	CHAIRPERSON ARROYO: If you are in
17	Brooklyn, you are Columbia as far as I'm
18	concerned, so it's not about geography. It's
19	about what service is available in the community
20	and how that service is going to improve the
21	quality of our lives, so Columbia, Manhattan,
22	Lutheran in Brooklyn, Lincoln in the Bronx. So
23	it's not an issue of status for me at all. I
24	don't think anyone is better than the other.
25	DR. SALMAN AZHAR: I think as a

1	COMMITTEE ON HEALTH 62
2	stroke group we are very collegial, and New
3	York City group that meets very frequently and
4	sort of discusses cases on how to manage them. We
5	have a statewide group that does exactly the same
б	things, so there is a lot of crosstalk. We ask
7	each other about their opinions, so that we can
8	help each other sort of manage cases. I think New
9	York City is special, and a lot of it is driven by
10	the American Stroke Association's New York City
11	Stroke Chapter because it really sort of fosters
12	that level of crosstalk.
13	CHAIRPERSON ARROYO: Anybody else?
14	My husband if he doesn't get me on one phone, he
15	calls the other. No? Best practices. Why aren't
16	we sharing those ideas with each other and
17	implementing? You talked about competing and when
18	it comes to how we can improve the health of our
19	communities, competition is nice, but it is
20	something that I'm not sure should be part of this
21	conversation.
22	ROBIN VITALE: I appreciate your
23	concern about that, and the American Stroke
24	Association has been working diligently to really
25	to your point continue fostering this dialogue

1	COMMITTEE ON HEALTH 63
2	amongst the stroke leaders in our city. We do
3	have a white paper, a document that was printed
4	several years ago that outlines the best practice
5	that you speak to, and it really details the six
6	parameters, everything from prevention of a
7	primary stroke to stroke rehab, and the components
8	that we would like to see addresses within that.
9	That is another document I'll gladly share with
10	you, but I wasn't sure how far we were going to go
11	into diving into the weeds on this subject, but
12	I'm glad
13	CHAIRPERSON ARROYO: [Interposing]
14	We will do it offline. I think it is important.
15	I'm not sure I'm happy about the fact that our
16	public hospital system is not here, but since this
17	Committee has absolute direct oversight of that
18	system, the conversation with HHC about our want
19	of those, or several of those docs, our public
20	institutions, and where are they in their
21	implementation of these approaches to treatment.
22	So the staff do most of the work, and they prepare
23	the questions, and Joe scribbled here, am I the
24	only one who doesn't know what I biplane is?
25	Machine?

1	COMMITTEE ON HEALTH 64
2	DR. SALMAN AZHAR: Since you funded
3	it, you should know what it is. A biplane machine
4	is basically, it's a fancy x-ray machine that is
5	able to look at blood vessels very carefully when
6	dye is put in them.
7	CHAIRPERSON ARROYO: It doesn't
8	fly.
9	DR. SALMAN AZHAR: It does not fly.
10	Right. But it really helps us able to get into
11	the microscopic blood vessels with a catheter and
12	think about how small these blood vessels are-they
13	are smaller than this—and pull that clot out, and
14	so you can think about a biplane having basically
15	two heads, and it's got these x-rays that are able
16	to look in a very detailed manner, and give us
17	almost a three dimensional view of the blood
18	vessels in the brain, and by doing that, they are
19	allowing us to be able to get in very, very small
20	blood vessels and remove clots that prior to this,
21	we would have never been able to get out, and by
22	doing that, we can save brain.
23	CHAIRPERSON ARROYO: So my
24	suspicion is that we funded it because someone at
25	Lutheran brought it to us as a request for

1	COMMITTEE ON HEALTH 65
2	improving or enhancing the technology that the
3	hospital has. How common are they in our
4	hospitals?
5	DR. SALMAN AZHAR: For in Brooklyn,
6	we have five hospitals that have it right now.
7	CHAIRPERSON ARROYO: Do you know
8	how many? No?
9	DR. SUSANNA HORVATH: I'd be
10	curious to find out actually.
11	CHAIRPERSON ARROYO: So am I.
12	Okay. Maybe when you do the map with the dots,
13	you can add another dot for those that have that
14	kind of equipment. One of the things that I
15	always work on is as a Council we can designate
16	capital dollars to help our institutions whether
17	they be education, health institutions, our part
18	is to improve the quality of the services that are
19	provided, and medical equipment is by far some of
20	the easiest funding that we can make available.
21	It's going to get out. I'll repeat it publically.
22	We often do not get enough requests to help our
23	institutions, be they public or private, improve
24	the quality of the service that they can provide
25	by having more state of the art equipment, medical

1	COMMITTEE ON HEALTH 66
2	equipment that can aid our healthcare professions
3	in the diagnosis of stroke, whatever condition the
4	patients come in with. So don't be shy. Go to
5	your delegations and ask for money because it is
6	something that we deeply committed to making
7	happen in our city, so now that I am a little
8	smarter about what a biplane is. I appreciate
9	that. Council Member Eugene, did you have some
10	questions?
11	COUNCIL MEMBER EUGENE: Probably
12	one or two questions. You are talking about
13	collaboration between big hospitals, specialized
14	centers and that don't have this facility when
15	there is a patient probably if you estimate that
16	that patient should be transferred to another
17	hospital, you give the okay for that to happen,
18	but what about if there is no time for that? No
19	time to get the patient from this point to the
20	other point, so what do you at the small
21	centers who are not specialized in the situation?
22	Because we know that if the patient is in a stroke
23	center this is the best way to be. Everything
24	would be taken care of very properly, efficiently.
25	What about those hospitals that are not stroke

1	COMMITTEE ON HEALTH 67
2	centers, and then the patient is there? How do
3	those centers handle the situation in terms of
4	providing the best treatment possible to the
5	stroke patient?
6	DR. SALMAN AZHAR: I can certainly
7	try to answer that. I think telemedicine is an
8	incredibly important aspect of this, and the
9	reason why I say that is that-
10	FEMALE VOICE:
11	DR. SALMAN AZHAR: Sorry.
12	Telemedicine is an incredibly important aspect.
13	So what prevents a hospital from becoming a stroke
14	center? Yes, it's the hardware, the machinery,
15	but it's also the doctors and the nurses and the
16	ER doctors who are comfortable with the disease
17	and are able to recognize it early and move
18	quickly, so for example, neurologists there are
19	not that many neurologists around, so with
20	telemedicine we can deliver a neurologist to that
21	patient's bedside in pretty much any hospital, and
22	they can evaluate that patient, they can move the
23	patient through a system that gets the cat scan
24	quickly, and in fact, based on those
25	recommendations, and this has clearly been shown

1	COMMITTEE ON HEALTH 68
2	out in studies funded by the NIH that it's safe to
3	give tPA based on the recommendations of a
4	neurologist using telemedicine, and people use it
5	in sort of rural upstate a fair amount, but we
6	could use it in New York City. There are some
7	hospitals that just cannot afford to have a
8	neurologist on call who can come in 24-7, but they
9	can certainly afford to have—or we can help them
10	put up a telemedicine unit into their emergency
11	room, so we can—our neurologist who is already on
12	call can take of the patient. The first thing is
13	how do we improve the delivery of this drug and
14	the care of stroke patients in every hospital?
15	That is the first thing, and then how do we help
16	our partners in these hospitals learn to sort of
17	move these patients quickly through the process so
18	that we get them to the larger hospitals much,
19	much quickly. I think that is the important
20	thing. I do want to point out one thing, and I
21	think we sometimes get lost, and I said this in
22	the beginning in the sexy stuff. What really has
23	made a difference in stroke outcomes is not
24	just that biplane machine and the tPA. It's been
25	very important, but what we do for that patient

1	COMMITTEE ON HEALTH 69
2	after they have had any of this stuff-the stroke
3	unit, the nurses, the therapists, the
4	nutritionists, who have educated themselves and we
5	have educated to take better care of these
б	patients so they don't get pneumonia, so they
7	don't get a clot in their leg, which makes them
8	worse. So there is a lot of what I call heavy
9	lifting that we know with studies funded by the
10	NIH that makes a huge difference in outcomes, so
11	it's important that from the moment they hit the
12	door before they hit the door to all the way
13	through we help these smaller hospitals actually
14	do better because we are able to provide them some
15	resources such as via telemedicine and protocols
16	and systems that we can share with them, and I
17	think that is an important way to sort of expand
18	our system and access to the care.
19	CHAIRPERSON ARROYO: Council
20	Member, if you can allow me. The care once the
21	patient has been stabilized and you're discussing-
22	how you are presenting it is during their
23	inpatient stay, the staff training nurses,
24	everyone that surrounds the patient to provide the
25	services, what about when-upon discharge aftercare

1	COMMITTEE ON HEALTH 70
2	and support for caretakers? Can you talk a little
3	bit about that? What should we be looking at or
4	having a conversation about in terms of up the
5	backend of the patient's care to reduce the amount
6	of time that it takes Katie to go from treatment
7	to her desk at work?
8	DR. SALMAN AZHAR: Yes.
9	Absolutely.
10	ROBIN VITALE: I would say one area
11	that any decision maker in the government needs to
12	be cognizant of is Medicaid and Medicare coverage
13	for stroke rehab. That has been another element
14	that has been threatened in the past. We have
15	worked hard to protect those inclusions in the
16	Medicaid and Medicare, but it is something that is
17	rather consistently a threat, so that is one area
18	that I would encourage your oversight.
19	DR. DANA LEIFER: Sort of just
20	following up on that, the physical therapy,
21	occupational therapy are very important not only
22	in sort of the short term recovery period but they
23	also are really important in a sense as
24	maintenance therapy so that people maintain, keep
25	the progress that they have made. At the moment

1	COMMITTEE ON HEALTH 71
2	there is a great tendency for these therapies to
3	stop once the patient is no longer improving and
4	what tends to happen then is that they become less
5	active that they are doing less, and they actually
6	lose some of the progress that they have made
7	initially. I think that as we think about sort of
8	what insurance covers, what Medicare or Medicaid
9	should cover, and I think there has been some
10	movement in this direction, but we ought to be
11	thinking about providing for longer term kinds of
12	physical therapy that will enable people to keep
13	the progress that they have made and even to
14	continue to make more progress at a slow rate over
15	longer periods.
16	CHAIRPERSON ARROYO: I don't want
17	to misunderstand what you have just said, Doctor.
18	So there comes a point in the patient's care or
19	rehab, rehabilitation, beyond which they stop
20	receiving intervention if they are not
21	demonstrating improvement?
22	DR. DANA LEIFER: In general, that
23	is the way that our system seems to work at the
24	moment.
25	CHAIRPERSON ARROYO: In general?

1	COMMITTEE ON HEALTH 72
2	DR. SUSANNA HORVATH: So in other
3	words an insurance company will pay for you to
4	have say eight weeks of rehab and that is it or
5	you will get a certain number of visits a year,
6	and then when you run out of those visits, you are
7	done or they will say that you are no longer
8	improving as quickly as we'd like to see. We no
9	longer see you reaching certain milestones, so you
10	have plateaued, so at that point, they say okay,
11	no more rehab.
12	CHAIRPERSON ARROYO: Wow. Okay.
13	I'm sorry. Okay.
14	COUNCIL MEMBER EUGENE: One more
15	question about prevention because I love
16	prevention. I know that you love prevention too.
17	You were talking about the importance of bringing
18	the information to the community, to the Chinese
19	people and it is like bringing the cookies
20	from the to , and my question is what
21	Lutheran is doing to educate the people to bring
22	awareness to the people to prevent stroke? Any
23	program that you have for-community program,
24	outreach to let people know about the signs and
25	symptoms, the importance of preventing stroke and

1	COMMITTEE ON HEALTH 73
2	lifestyle?
3	DR. SALMAN AZHAR: So what we do
4	really well Lutheran is actually partnered with
5	our community organizations that are in the
6	community itself to actually bring this
7	information, and a lot of this just is about
8	getting it out there enough, getting it out there
9	in ways that are accessible, so we work within
10	Brooklyn's Chinatown we work with community
11	organizations in that center, and we have a center
12	there that actually does a lot of free education,
13	but actually looks at things like diet, the
14	Chinese diet, and doesn't come up with sort of
15	what we think is right, but actually asks them,
16	well, if you had to make this meal and you wanted
17	to cut down the fat that you ate in that meal and
18	cut down some of the sugars, how would you make
19	it? And we actually do this so we can come up
20	with recipes that actually come from the community
21	that sort of help understand what is a good diet.
22	When we talk about smoking cessation, there's a
23	lot of good data on smoking cessation, but how do
24	we get that person in that community to stop
25	smoking? Well, it's not just by going to that

1	COMMITTEE ON HEALTH 74
2	person. We have got to get the family, the
3	church, the community members involved in that
4	process because as we all know, we all think we
5	have amazing willpower, but it's really our
б	families and our neighborhood and our communities
7	that help us do better. So we have done a lot of
8	outreach through our family health centers,
9	through our partnerships with our community
10	organizations, through the churches group. We
11	have a churches roundtable in Brooklyn that we
12	actually meet with a number of different pastors
13	from different denominations and talk about how we
14	are doing, and then we go out and actually see are
15	we doing better? Are we having an impact? I
16	think that is one of the principles that we have
17	always used. There's a lot of work to be done.
18	We can be doing this work in the homeless
19	shelters. We already do this in the schools, but
20	we can be doing a better job in the schools so we
21	are actually getting the message. We have nurse
22	practitioners that are in the schools and we are
23	actually teaching them to start talking about
24	smoking cessation, about checking if you have high
25	blood pressure, if your family has a history of

1	COMMITTEE ON HEALTH 75
2	high blood pressure. I don't think it's a one
3	stop kind of thing. We have to tailor our message
4	and our means to our communities, and I think that
5	is the something that we take a lot of pride in at
6	Lutheran is the whole cultural competency part of
7	this. How do we access the community? And it's
8	not us telling the community how we access; we ask
9	them, how do we get this information out to you in
10	the most effective manner? And then you have got
11	to do it again and again and again.
12	COUNCIL MEMBER EUGENE: thank you
13	very much. Thank you, Madam Chair.
14	CHAIRPERSON ARROYO: Thank you. If
15	there is no one else here to testify, I want to
16	thank you all for your conversation here today,
17	and the primary reason why we are doing the
18	hearing is to discuss the resolution sponsored by
19	Council Member Eugene, 982-A, and you know, the
20	formal process of the Council and whether it is
21	going to come up for a vote is something that we
22	will-or when we will sort out over the next week
23	or so, but the larger conversation about how we
24	while supporting the message to the president and
25	to our federal government not to reduce funding

1	COMMITTEE ON HEALTH 76
2	for stroke research, to increase funding so that
3	we can have greater opportunity to fund the very
4	particular nuances of what we need to do as a city
5	to provide services and community. Whether it be
6	prevention or more direct hands on care is a
7	conversation that we need to continue having, and
8	I look forward to the ongoing conversation. Thank
9	you all very much, and I think this is the last
10	hearing this month for this Committee. I wish you
11	all an incredible holiday and an incredible New
12	Year. Bring back a lot of energy. We have got a
13	lot of work to do. This hearing is adjourned.
14	[gavel]

## CERTIFICATE

I, Kimberley Uhlig certify that the foregoing transcript is a true and accurate record of the proceedings. I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

Signature Kimberley Uhlig

Date \_\_\_\_\_12/16/12\_\_\_