

Stroke Awareness in the Time of COVID-19

September 1, 2020



Speakers



Peter Panagos, MD

Chair of the AHA/ASA Stroke Council; Director of Neurovascular Emergencies; Co-Director, BJC Washington University School of Medicine Stroke Network



Mohannad Kusti, MD

President & Chief Medical Officer
Optimal Workplace & Environmental Wellness Corporation



Gaye Fortner

Chief Executive Officer
HealthCare 21
Business Coalition



Jessica Brooks

President & CEO
Pittsburgh
Business Group on Health

Maintaining Stroke As A Priority During COVID-19

Peter Panagos, MD, FAHA, FACEP
Professor, Emergency Medicine and Neurology,
Washington University School of Medicine, St Louis, MO
Chairman, American Heart Association/American Stroke
Association Stroke Council

September 1, 2020



**American
Stroke
Association.**
*A division of the
American Heart Association.*



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DISCLOSURES

I have no financial interests or
relationships to disclose.



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STROKE BY THE NUMBERS

Every
40 seconds
someone
has a
stroke



55,000



About 55,000 more
women than men
have a stroke each year



1 in 4

strokes
are in people who have had
a previous stroke

#5

**Cause of
death
in the USA**



**80% OF ALL STROKES
CAN BE PREVENTED**



**Together
to End Stroke™**

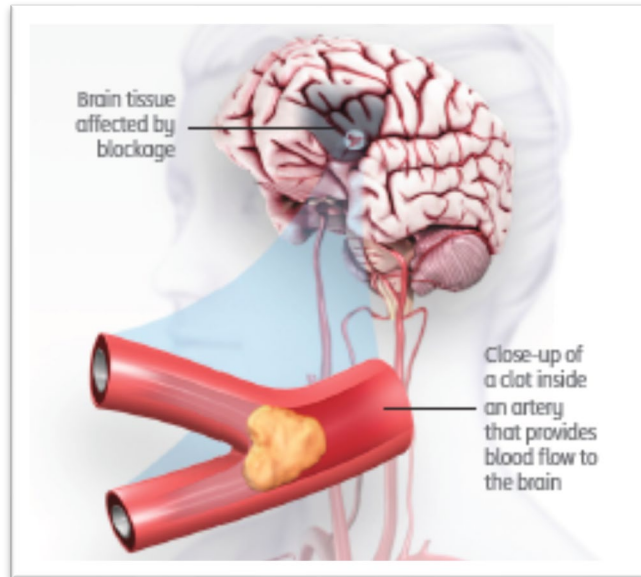


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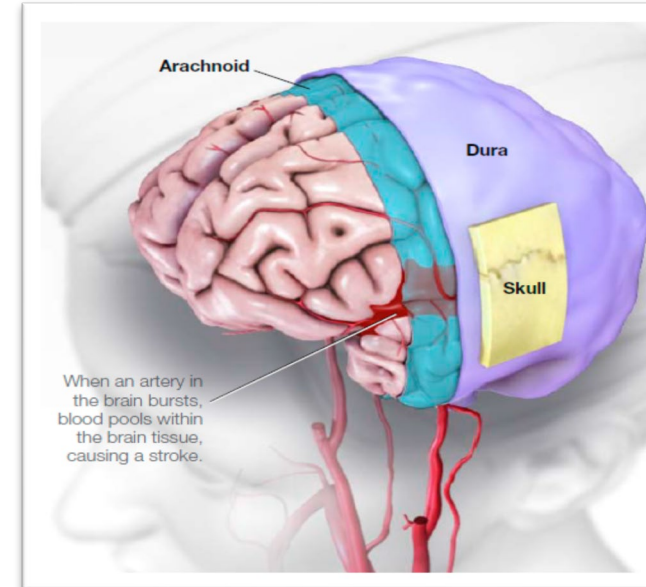
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WHAT IS A STROKE?

A brain injury caused when a blood vessel to the brain becomes blocked (**blood clot**) or bursts (**hemorrhage**), cutting off blood flow and oxygen to the brain



Ischemic Stroke



Hemorrhagic Stroke





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WHAT ARE STROKE WARNING SIGNS?

Remember:

F.A.S.T.

Face
Drooping

Arm
Weakness

Speech
Difficulty

Time to
Call 911

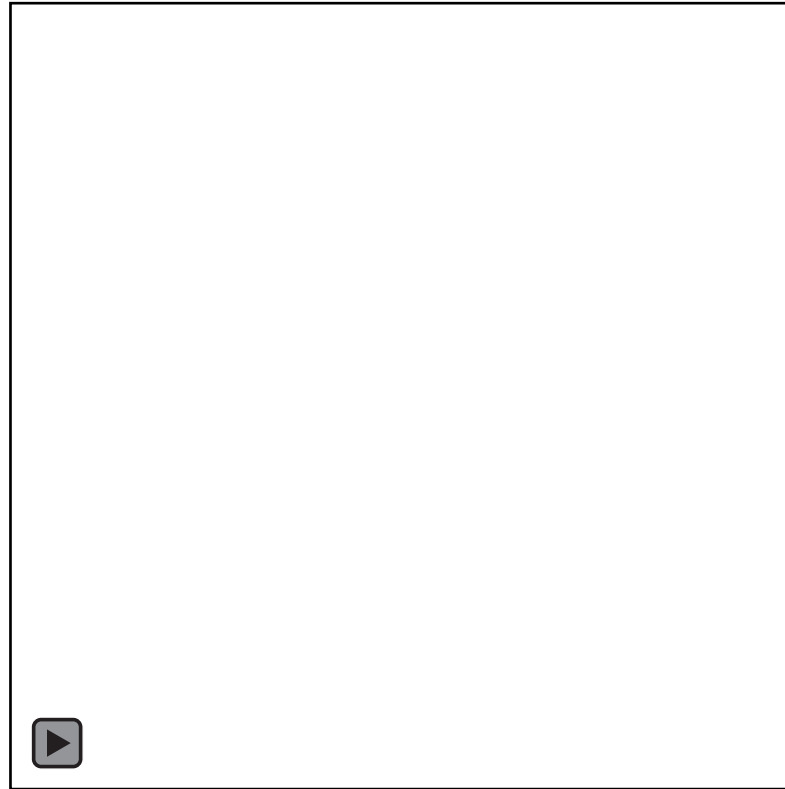
Additional Stroke Warning Signs:

- Sudden weakness or numbness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headaches with no known cause



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WHEN STROKE OCCURS, TIMELY TREATMENT IMPROVES RECOVERY



*Every second counts in preventing
brain damage!*



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LEARNINGS ABOUT COVID-19 & STROKE

The New York Times

Coronavirus May Pose a New Risk to Younger Patients: Strokes

Doctors have reported a flurry of cases in Covid-19 patients — including a healthy 27-year-old emergency medical technician in Queens. After a month in the hospital, he is learning to walk again.

The Washington Post

Blood thinners show promise for boosting the survival chances of the sickest covid patients

New York hospital system's observational study looked at 2,733 patients in and out of the intensive care unit.



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THE PROBLEM

**Data shows that fewer people called
911 between
January 1, 2020 through April 12, 2020**



**But, strokes don't stop for
COVID-19**

COVID-19 may be stopping people from
calling 911 and going to the hospital





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THE PROBLEM: VALIDATED BY LITERATURE

Effect of COVID-19 on Emergent Stroke Care

A Regional Experience

Jessica Hsiao, Emily Sayles, Eleni Antzoulatos, Robert J. Stanton, Heidi Sucharew, Joseph P. Broderick, Stacie L. Demel, Matthew L. Flaherty, Aaron W. Grossman, Charles Kircher, Natalie Kreitzer, Katrina Peariso, Charles J. Prestigiacomo, Peyman Shirani, Kyle B. Walsh, Holly Lampton, Opeolu Adeoye, Pooja Khatri ✉

Originally published 8 Jul 2020 | <https://doi.org/10.1161/STROKEAHA.120.030499> | Stroke. 2020;51:e2111–e2114

Decline in Stroke Presentations During COVID-19 Surge

Ken Uchino ✉, Murali K. Kolikonda, Dena Brown, Shivakrishna Kovi, Dana Collins, Zeshaun Khawaja, A. Blake Buletto, Andrew N. Russman, M. Shazam Hussain

Originally published 18 Jun 2020 | <https://doi.org/10.1161/STROKEAHA.120.030331> | Stroke. 2020;51:2544–2547

Blacks Are Less Likely to Present With Strokes During the COVID-19 Pandemic

Observations From the Buckle of the Stroke Belt

Cori Cummings, Eyad Almallouhi ✉, Sami Al Kasab, Alejandro M. Spiotta, Christine A. Holmstedt

Originally published 5 Aug 2020 | <https://doi.org/10.1161/STROKEAHA.120.031121> | Stroke. ;0

Acute Stroke Presentation, Care, and Outcomes in Community Hospitals in Northern California During the COVID-19 Pandemic

Mai N. Nguyen-Huynh ✉, Xian Nan Tang, David R. Vinson, Alexander C. Flint, Janet G. Alexander, Melissa Meighan, Molly Burnett, Stephen Sidney, Jeffrey G. Klingman

Originally published 7 Aug 2020 | <https://doi.org/10.1161/STROKEAHA.120.031099> | Stroke. ;0

≈39% decline
in stroke
consultations
(IN, KY, OH)

≈30%
decline ED
presentatio
n
(NE Ohio)

≈31% decline
in stroke
consultations
(Stroke Belt)

≈26%
decline in
stroke alerts
(No CA)

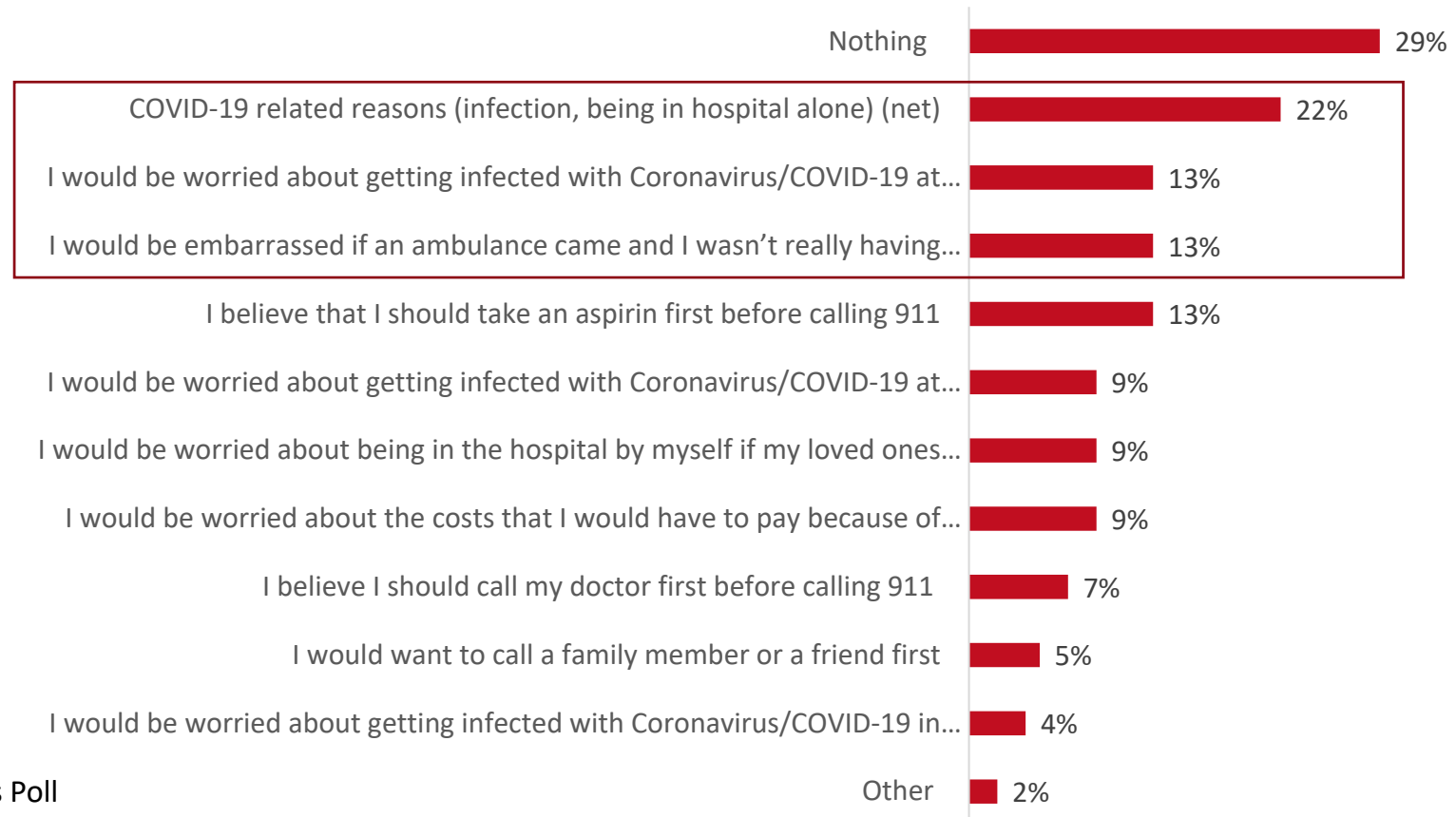


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BARRIERS TO CALLING 911

Most common reasons for not calling 911 = COVID-19 related - worry about infection/being alone in hospital (22%), as well as embarrassment (13%)

Reason Would Not Call 911



Source: AHA/The Harris Poll



Hispanics, Blacks More Likely to Stay Home

Non-Hispanic Blacks and Hispanics are significantly more worried about getting infected at the hospital & significantly more likely to say they'd stay home, compared with non-Hispanic Whites

	Non-Hispanic White	Non-Hispanic Black	Hispanic
I would be scared to go to the hospital if I thought I was having a heart attack or stroke because I might get infected with Coronavirus/COVID-19.	40%	45%	*55%
If I thought I was having a heart attack or stroke, I would rather stay home than risk getting infected with Coronavirus/COVID-19 at the hospital.	24%	*33%	*41%
I believe my hospital would give me the same quality of care that they give everyone else.	*89%	74%	78%



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DON'T DIE OF DOUBT

www.heart.org/dontdieofdoubt

OUT OF HOME

American Stroke Association.
A division of the American Heart Association.
Don't Die of Doubt™

**Strokes don't wait to
see if you feel better.**

Call 9-1-1. Get to the hospital.

Locally supported by

DIGITAL BANNERS

American Heart Association.
A division of the American Heart Association.
Don't Die of Doubt™

**Strokes
don't stay
home.**

**Hospitals are
the safest places
to be when
seconds count.**

**Call 9-1-1.
Get to a
hospital.**

TV PSA



PRINT ADS

American Heart Association.
A division of the American Heart Association.
Don't Die of Doubt™

**Heart attacks and
strokes don't stay home.**

Don't avoid the ER out of anxiety.
Don't die of doubt.
Don't stay silent and don't stay home.
If you have an emergency, call 9-1-1.
When seconds count, the hospital is the safest place to be.

Heart.org/Don'tDieOfDoubt



American Heart Association®
Don't Die of Doubt™

CAMPAIGN ASSETS

(also available in Spanish)

- Broadcast TV
- Broadcast Radio
- Digital Assets
- Social Media Ads
- Out of Home
- Print Ads
- Localizable Microsite
- Press Release
- Media Pitch
- Key Messaging
- Rip-and-Read
- Letter to Editor
- Infographic(s)



The Business Case For Employers: The Needs of the patient, barriers to treatment

Mohannad Kusti, MD, MPH

Regional Medical Director at Pivot Onsite Innovation
Pittsburgh Business Group on Health – Medical Director
Email: mkusti@pivoths.com

The Business Case For Employers

- Current Health and Wellness Status of the workforce!
- Population at risk for Stroke/Heart Attacks: Increase age, atherosclerosis, Cancer, High blood pressure, high cholesterol, smoking, obesity, and diabetes.
- Population at risk for severe illness with COVID-19: Increase age, Cancer, Chronic kidney disease, Obesity, atherosclerosis, coronary artery disease, diabetes, Cerebrovascular disease, high blood pressure, and Smoking.

References:

- <https://www.cdc.gov/stroke/facts.htm>
- <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#:~:text=People%20of%20any%20age%20with,Chronic%20kidney%20disease.>
- <https://www.cancer.gov/news-events/cancer-currents-blog/2017/heart-attack-stroke-risk-cancer#:~:text=A%20diagnosis%20of%20cancer%20can,seen%20in%20people%20without%20cancer.>

The Value of Wellness Programs

- Current Health and Wellness Status of the workforce!
- Healthier workforce were less susceptible to severe outcome from COVID-19 infection and for Stroke.
- Wellness Program proactively prevent these risk factor and could have benefited the workforce.

References:

- <https://www.cdc.gov/stroke/facts.htm>
- <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#:~:text=People%20of%20any%20age%20with,Chronic%20kidney%20disease.>
- <https://www.cancer.gov/news-events/cancer-currents-blog/2017/heart-attack-stroke-risk-cancer#:~:text=A%20diagnosis%20of%20cancer%20can,seen%20in%20people%20without%20cancer.>

What Self-Funded/Self-Insured Employers can Expect?

- Cardio-cerebrovascular disease is associated with an increase in the risk of severe illness and death among COVID-19 patients.
- Many patients have delayed routine physicals, preventive exams, elective procedure, and in general seeking medical attention during early onset of symptoms.
- Delay in treatment, leads to more complication and therefore more complex claims.

References:

- Yu JN, Wu BB, Yang J, Lei XL, Shen WQ. Cardio-Cerebrovascular Disease is Associated With Severity and Mortality of COVID-19: A Systematic Review and Meta-Analysis [published online ahead of print, 2020 Aug 27]. Biol Res Nurs. 2020;1099800420951984. doi:10.1177/1099800420951984.

Take Away for Employer

- Have a discussion with your Health plan TPA, PBM, & any other chronic disease management program (HTN, DM, Sleep, etc.).
- Need to do an outreach to all members and covered lives under the plan. Educational materials on early signs.
- Best not to plan healthcare cost budgets on the results of 2020 and think of this year as an outlier.
- Expect a surge in healthcare claim costs in 2021.



Pittsburgh
Business Group
ON HEALTH



National Alliance
of Healthcare Purchaser Coalitions
Driving Innovation, Health and Value



We teach our people.
We learn from our people.
At every site.
Every day.

Mohannad Kusti, MD, MPH
Email: mkusti@pivoths.com

Virus Action Brief



COVID and Coalitions In Cars

Gaye Fortner, CEO HealthCare 21 Business Coalition

Jessica Brooks, CEO Pittsburg Business Group on Health

Purpose

To provide employers with mini briefs on potential health gaps created by the coronavirus pandemic

- Include action items the employer can take to:
 - Monitor the topic via claims or other data vendor
 - Consider benefit design implications
 - Use for employee messaging
 - Provide links for additional information



I keep thinking about *COVID and 19 Crimes* (like the wine)

Funny. How about: *Coalitions in Cars Talking about Corona*.
Like Jerry Seinfeld does with *Comedians in Cars Getting Coffee*.

You can sit in the front seat of your car and conduct the webinar or minute brief –

Stop laughing.

Perfect!

Business Groups Band Together to Use Healthcare Data to Gauge the Impact of COVID-19 Virus

PITTSBURGH – March 24, 2020 – [Central Penn Business Group on Health](#), [HealthCare 21](#) in Knoxville, TN, and the [Pittsburgh Business Group on Health](#) today announce they are launching an initiative to help better inform employers about the impact of COVID-19.

In response to the current crisis, all three have directed Innovu to track COVID-19 testing beginning in April when the codes are released to the providers for billing.

In addition to tracking COVID-19 testing, they have asked Innovu to track certain claims categories that may be impacted in utilization or cost.

Of specific benefit to Innovu clients is the ability for them to access customized dashboards and view any subset of their population as frequently as they desire.

Additionally, the Business Groups are concerned about the other societal impacts, so they have asked Innovu to measure changes to claims regarding mental health and substance abuse, overall claim trends, and impact on patients with chronic conditions.

The analysis requested will be compared against Innovu's vast benchmark to identify cohorts by age bands, geography and industry.

Virus Action Brief



SUICIDE AND COVID-19



MIGRAINE AND COVID-19



Virus Action Brief



Virus Action Brief



Focus on Stroke

The Importance of Recognizing the Signs and Acting Urgently During COVID-19



health issues and access to services related to health have skyrocketed during the recent pandemic. U.S. sales of alcoholic beverages in the week ending March 21, according to research firm Nielsen, and calls to domestic

Obesity and COVID-19

The Enhanced Risk of Severe Outcomes for Obese Populations



Introduction

In the midst of the COVID-19 pandemic, we are all continuing to navigate our lives, trying to keep ourselves safe, protect our waters and to manage our employees and families' health and wellbeing. In March of 2020 the United States declared a national emergency in response to the pandemic and many states issued stay-at-home orders to slow the spread of COVID-19. As being said, health experts feared that COVID-19 may cause people to avoid going to hospital or calling 911 for non-COVID emergencies and that is exactly what happened. According to the CDC emergency rooms have experienced a 42% drop in visits in March of 2020 and a 20% drop in their stroke departments. Strokes are a leading cause of long-term disability in the United States and on average cost \$16,000 each year. As COVID-19 continues it is crucial to remember that: 1. Most people do not know the symptoms during a pandemic and 2. Most people do not know the symptoms. Even if you think you are healthy, it's important to call your doctor if you experience any of the following symptoms:

Abstract

COVID could be hitting some patients harder than others. The Centers for Disease Control and Prevention (CDC) warns that those with pre-existing medical conditions, such as obesity are at risk of severe outcomes related to COVID-19 even if under the age of 65. While conditions such as lung disease and heart conditions are most commonly discussed, obesity, which the CDC reports affects more than 40% of America's workforce, may be the most important predictor to consider. Even in young patients, a BMI of 30 or higher could mean doubling the odds of hospitalization as a result of

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Focus on Hypertension

Stroke Demographics in the U.S.

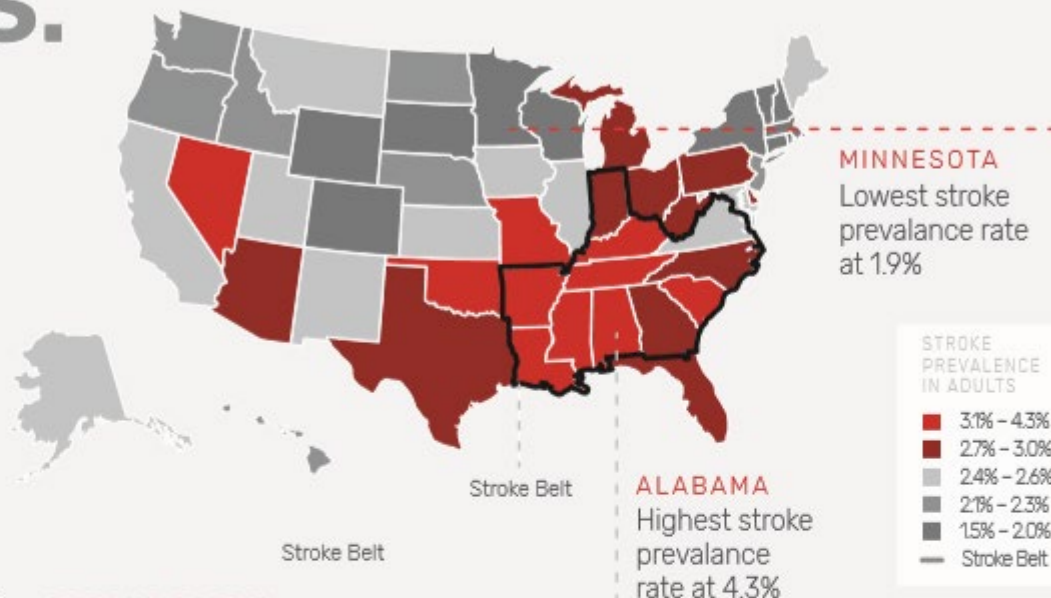
Genentech

A Member of the Roche Group

Every year, close to
800,000
AMERICANS
have a stroke.

Even during a pandemic, a stroke can happen to
ANYONE, of **ANY AGE**,
at **ANY TIME**.

Learn the
STROKE SYMPTOMS
and **RISK FACTORS**.



STROKE FACTS

You can control and treat several risk factors for stroke.

Manageable risk factors of stroke include high blood pressure, atrial fibrillation (AFib), high cholesterol, smoking, diabetes, poor circulation, lack of physical activity, and obesity.

BE FAST when you suspect a stroke. Recognizing the signs and calling 911 can help a loved one get the medical attention he or she needs.

IF YOU SUSPECT STROKE, DON'T HESITATE, CALL 911 IMMEDIATELY.

STROKE CARE IS AVAILABLE AND SHOULD NOT BE DELAYED, EVEN DURING A HEALTH CRISIS. LEARN MORE AT **STROKEAWARENESS.COM**

BE FAST was developed by Intermountain Healthcare, as an adaptation of the FAST model implemented by the American Stroke Association. Reproduced with permission from Intermountain Healthcare. © 2011 Intermountain Healthcare. All rights reserved.

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Organization Risk by Medical Condition

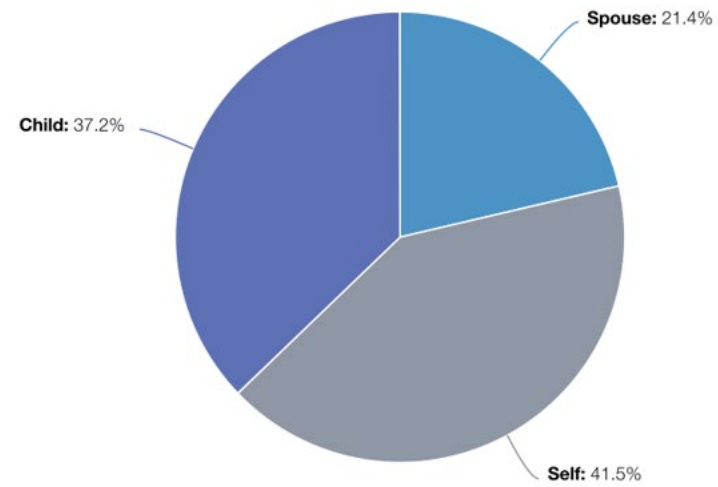
COVID-19 - Potential Employer Impact
Cohort: PBGH



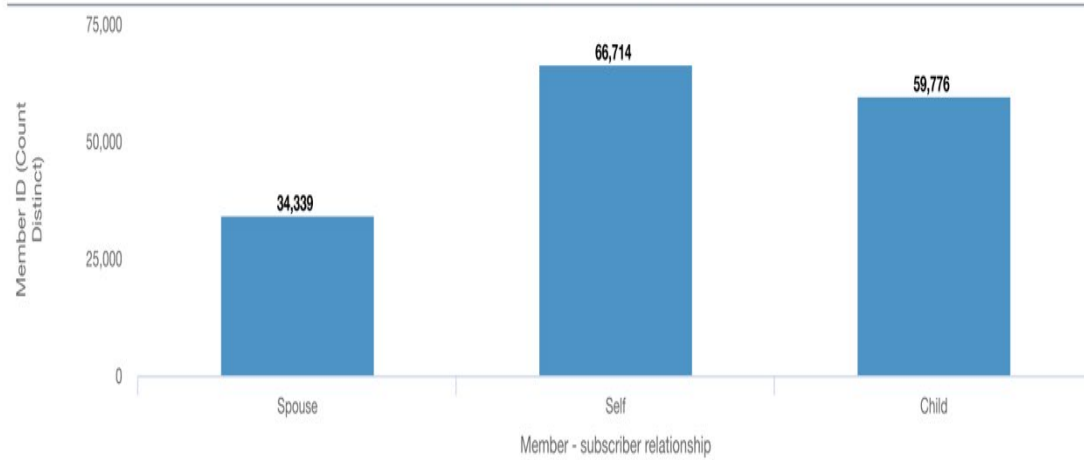
Organization Risk by Medical Condition



Percent of Membership - Jan 2020 - June 2020

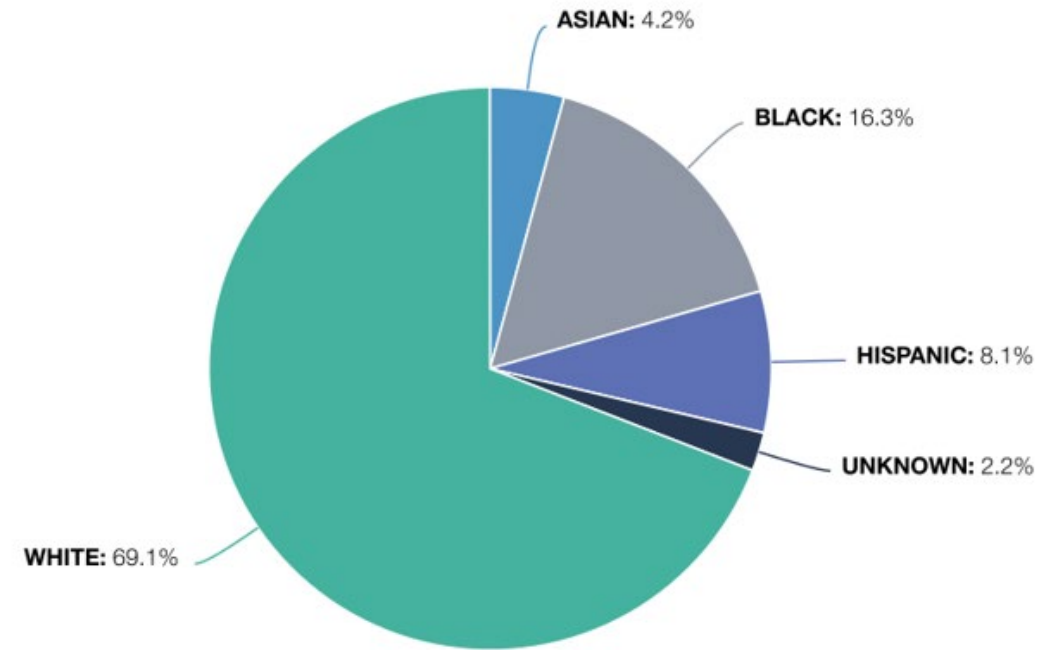


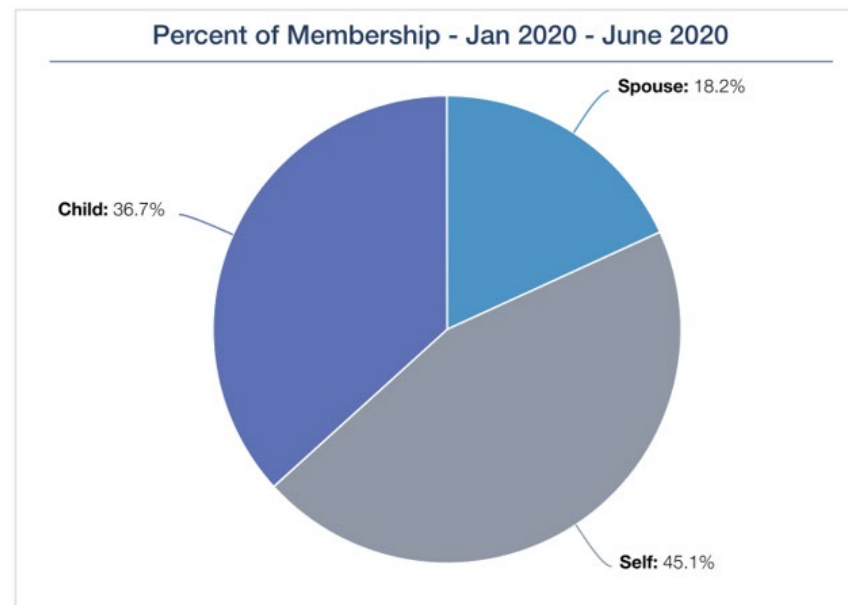
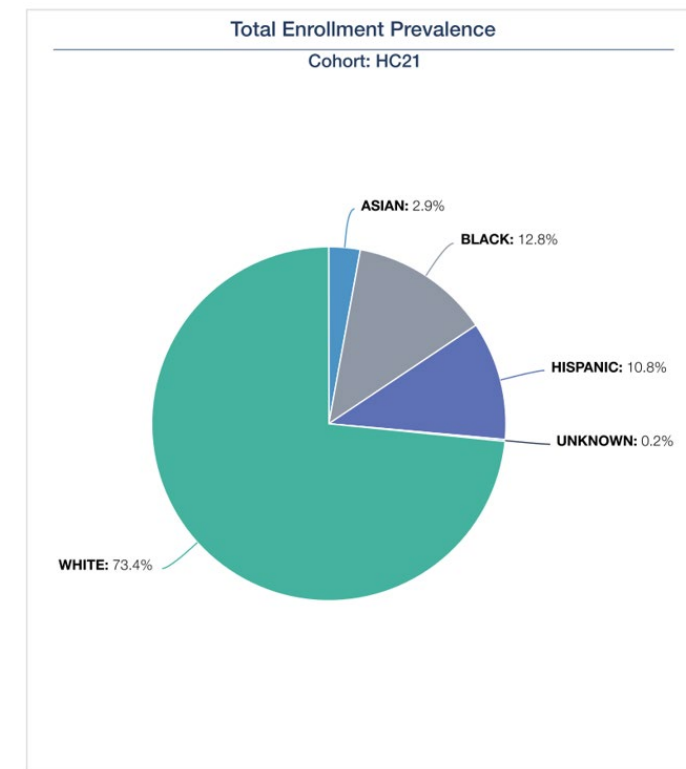
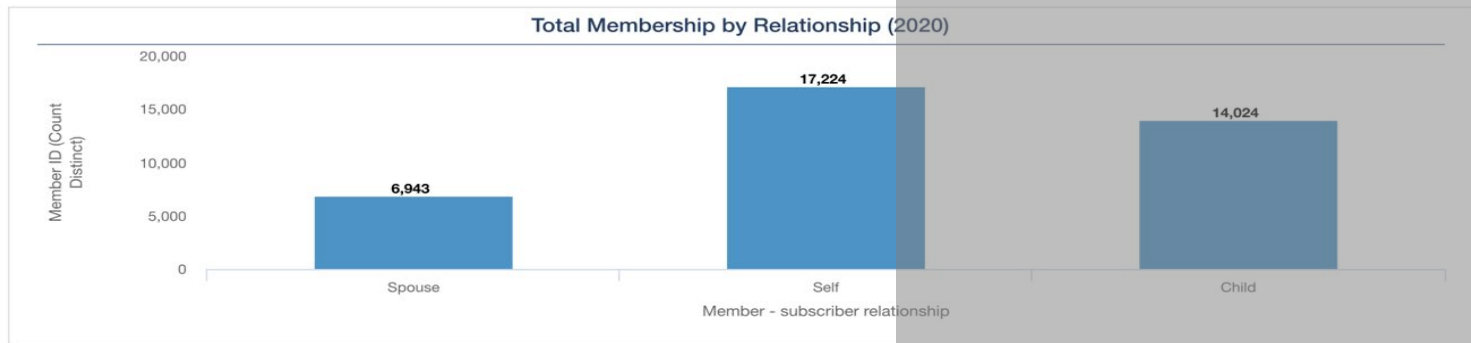
Total Membership by Relationship (2020)



Total Enrollment Prevalence

Cohort: PBGH



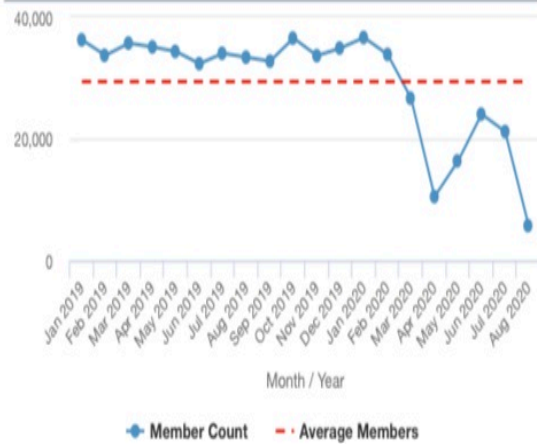


COVID-19 - Potential Employer Impact

Cohort: PBGH



Office Visits



Office Visits Incurred by Amount Paid

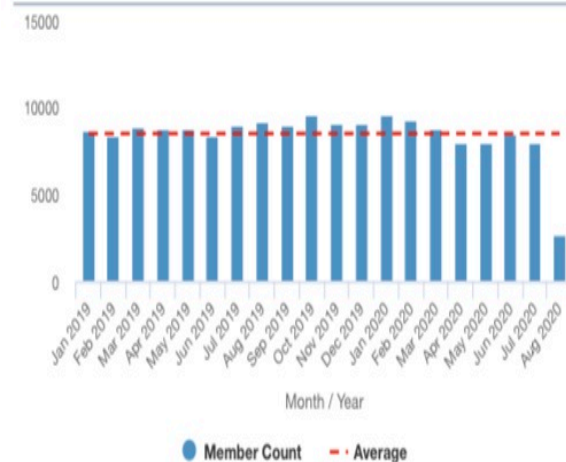


Data for current month may be incomplete until new data is received.

Preventive Visits



Mental Health



COVID-19 - Potential Employer Impact

Cohort: PBGH

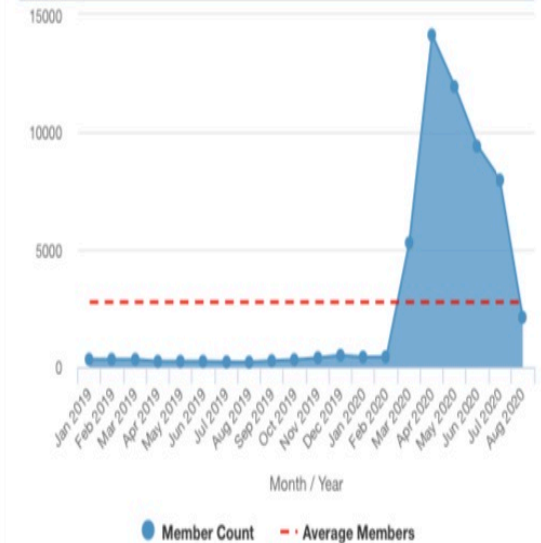


Telemedicine is billed in two primary ways reported here as Telehealth and Additional Billed Telemedicine.
Data for current month may be incomplete until new data is received.

Top Telehealth Services Incurred since March 1, 2020

	Procedure Short Description	Member Count	Paid
1	OFFICE/OUTPATIENT VISIT EST	22,492	\$2,999,756
2	PSYTX W PT 60 MINUTES	4,102	\$2,509,320
3	OFFICE/OUTPATIENT VISIT NEW	2,054	\$273,278
4	PSYTX W PT 45 MINUTES	1,590	\$377,948

Telehealth Services



Additional Billed Telemedicine Incurred since March 1, 2020

	Procedure Short Description	Member Count	Paid
1	Brief check in by md/qhp	569	\$9,259
2	HC PRO PHONE CALL 5-10 MIN	81	\$1,325
3	HC PRO PHONE CALL 21-30 MIN	61	\$4,037
4	PHONE E/M PHYS/QHP 11-20 MIN	3,750	\$124,341

Additional Billed Telemedicine



Virus Action Brief

COALITIONS IN CARS
TALKING ABOUT CORONA

SUICIDE AND COVID-19

COALITIONS IN CARS
TALKING ABOUT CORONA

MIGRAINE AND COVID-19

DID YOU KNOW?

more common than

Virus Action Brief

Focus on Stroke

The Importance of Recognizing the Signs and Acting Urgently During COVID-19



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The Enhanced Risk of Severe Outcomes for Obese Populations

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Virus Action Brief

Focus on Hypertension
The Importance of Managing Chronic Conditions During COVID-19

Questions?



Peter Panagos, MD

Chair of the AHA/ASA Stroke Council; Director of Neurovascular Emergencies; Co-Director, BJC Washington University School of Medicine Stroke Network



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Jessica Brooks

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Available Resources

ACTION BRIEF
Employer Strategies that Drive Value



STROKE AWARENESS

URGING EMPLOYEES TO GET EMERGENCY CARE DURING THE PANDEMIC


ACTION STEPS FOR EMPLOYERS:

1. Learn why people delay or forego emergency care and why they are doing so in greater numbers during the pandemic.
2. Understand stroke risks and signs, including increased risk of stroke in COVID-19 patients.
3. Review benefits to ensure appropriate coverage for urgent and emergency care.
4. Evaluate health plan benefits and services to promote cardiovascular health and prevent heart disease and stroke.
5. Educate and involve employees.

Visits to the hospital emergency department (ED) declined 20% for strokes, 29% for heart attacks, and 10% for high-blood-sugar crises between March 15 and May 23, 2020, compared to the previous 10 weeks, according to the CDC.

"Unrecognized fatalities" from COVID-19 suggest that many patients are suffering from serious conditions are dying as a result of delaying or not seeking care, as the outbreak progresses and overwhelms many hospitals. With stroke the leading cause of long-term disability in the US, there is an urgent need to calm fears and encourage people to seek emergency care, even during these uncertain times.


Of additional concern is the fact that COVID-19 is an independent risk factor for acute ischemic stroke, according to the first major peer-reviewed study on the subject. "Patients with COVID-19 should be evaluated early for acute neurological changes," says Dr. Puneet Belani, researcher for the Mount Sinai School of Medicine. "Timely workup in patients suspected to have stroke may reduce morbidity and mortality."



Stroke Facts for Employers

- Someone in the US has a stroke every 40 seconds every four minutes someone dies of stroke.
- Stroke costs the US an estimated \$24 billion each year. This includes the cost of health care services, medicines to treat stroke, and missed days of work.
- Stroke is the leading cause of long-term disability.
- Patients who arrive at the emergency department within three hours of their first symptoms often have less disability three months later than those who received delayed care.

—From Centers for Disease Control Stroke Facts



"The striking decline in ED visits for acute life-threatening conditions might partially explain excess mortality not associated with COVID-19."

—CDC Researchers

OVERREACT2STROKE

Know the 10 Symptoms

Get Stroke Facts


Spread the Word

STROKE— ALWAYS AN EMERGENCY

911 STILL THE RIGHT CALL, ESPECIALLY NOW.

WOULD YOU RECOGNIZE THE SIGNS?

LEARN MORE



KNOW

Know when to OVERREACT

You might know **BE FAST**®, but could you recognize 10 symptoms of stroke?

KNOW THE 10 SYMPTOMS

RECOGNIZE

Stroke occurs EVERY 40 SECONDS

And it's the 5th leading cause of death in the United States.

LEARN THE RISKS

ACT

Give others the tools to RECOGNIZE STROKE before it's too late

Share your knowledge and empower others to act without hesitation.

SPREAD AWARENESS

Public Resource on Stroke Awareness:
<https://www.strokeawareness.com/>

Will be launched early September!

Quick Survey after the Webinar!

- Please complete the 3-question survey after the webinar
- Pop up box after the end of the session - before you close out of the webinar
- Appreciate your feedback!

UPCOMING EVENTS

Returning to work safely during a global pandemic

September 10 | 2:00 PM ET

How COVID-19 Changes How We Address Workforce Health

September 15 | 4:00 PM ET

Key Employer Insights: What makes Primary Care ADVANCED
Primary Care and How does it Add Value to Healthcare?

September 22 | 3:00 PM ET

