





The Front Lines of the Fight Against COVID-19

A TOWN HALL CONVERSATION XIX

We will begin at 1 p.m.



To receive a copy of Dr. Michael J. Klebuc's slides, please email <u>hmevent@houstonmethodist.org</u>



Facial Plastic Surgery Past, Present, and Future Eugene L. Alford MD FACS November 8, 2021



HMH Leaders in Facial Plastic Surgery



- 1956 S. Baron Hardy MD
- 1970 William K. Wright MD
- 1976 Melvin Spira MD DDS
- 1990 Bobby R. Alford MD
- 2005 Jeff Friedman MD























1991 - 2001 Results





More than 150 Patients

Functional and Cosmetic Improvement

Better Patient Care

Improved Outcomes

Collegial Cooperation



























Survivor of domestic violence Assaulted by boyfriend Mother killed No insurance 14 months of deformity November 2004





"Dream Team" Pro Bono Reconstruction 7 Surgeries over 10 months \$2,000,000 Free Care Oprah & Larry King Live \$37,000,000 Free PR















































Training of Residents Allow Independence Planning **Decision Making** Gain First-Hand Experience Enhanced Skills Improved Outcomes

Create a New Training Paradigm **Facial Deformities Clinic** Pro Bono Care Resident Control Staff Supervision Surgery 1 Friday per Month **Clinic 2 Fridays per Month**



Houston Methodist Update

Marc L. Boom, MD November 8, 2021



Houston Methodist COVID-19 Cases By Day





Houston Methodist COVID-19 Inpatient Projections





IHME COVID-19 Resource Use Projections





Source: https://covid19.healthdata.org/united-states-of-america/texas?view=resource-use&tab=trend&resource=all_resources

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COVID-19 Oral Antiviral Treatments



Merck & Ridgeback:

Molnupiravir

Preliminary results indicate 50% reduction in risk of hospitalization or death United Kingdom authorized use of this oral treatment on November 4, 2021

The FDA will discuss Emergency Use Authorization on November 30, 2021

<u>Pfizer</u>: Paxlovid

Preliminary results indicate 89% reduction in risk of hospitalization or death

As of November 5, 2021 Pfizer plans to submit its data to the FDA for Emergency Use Authorization as soon as possible

Houston Methodist COVID-19 Vaccine Accomplishment



COVID-19 VACCINE TRACKER
979,225
Vaccines Administered*
457,270
Vaccinations Dose 1*
435,522
Vaccinations Dose 2*
86,433
Vaccinations Dose 3*



Out of <u>400</u> Epic organizations documenting and tracking their vaccine administrations:

Houston Methodist is in the Top 2% and #1 in Texas

Biden's Vaccine Rules for 100 million Workers





Employees must be either fully vaccinated against COVID-19 by **Jan. 4** or that they test negative for COVID-19 at least once a week



Workers must get **paid time off** to get vaccinated



Employers do **not** need to pay for testing



Unvaccinated people must wear masks





Health care workers do not have **testing option** under separate rule

Pfizer Vaccine Approved for Children Ages 5-11



Children ages 5-11 began scheduling their vaccine with Houston Methodist November 4, 2021

The Washington Post

Health

FDA authorizes Pfizer-BioNTech vaccine for children 5 to 11

CDC's November 2, 2021 Statement

"Together, with science leading the charge, we have taken another important step forward in our nation's fight against the virus that causes COVID-19."

Summary: COVID-19 Epidemiology in Children Aged 5-11 years



Children aged 5–11 years are at least as likely to be infected with SARS-CoV-2 as adults

- Over 1.9 million reported cases; seroprevalence estimated to be ~38% in September 2021
- Seroprevalence data suggests that infections in children less likely to be reported as cases than infections in adults

Children aged 5-11 years are at risk of severe illness from COVID-19

- >8,300 hospitalizations to date
 - Hospitalization rates are 3x times higher for non-Hispanic Black, non-Hispanic American Indian/Alaska Native, and Hispanic children compared with non-Hispanic White children
 - Hospitalization rates are similar to pre-pandemic influenza-associated hospitalization rates
 - Severity was comparable among children hospitalized with influenza and COVID-19
 - Approximately 1/3 of hospitalized children aged 5-11 years require ICU admission
- At least 94 COVID-19-associated deaths occurred in children aged 5-11 years
- MIS-C was most frequent among children aged 5–11 years
- Post-COVID conditions have been reported in children
- All might have been more numerous had pandemic mitigation measures not been implemented

Secondary transmission from young school aged children occurs in household and school settings

COVID-19 Vaccinations for Children Ages 5-11



If children typically only have a mild case of COVID-19, why do they need to be vaccinated?

Texas children between the ages of 5 and 11:

- 22 have died from complications of COVID-19
- **118** have been diagnosed with Multisystem Inflammatory Syndrome in Children

	Age	Time Period	Average Deaths per year
Hepatitis A	<20 years	1990-1995	3
Meningococcal (ACWY)	11–18 years	2000-2004	8
Varicella	5-9 years	1990-1994	16
Rubella	All ages	1966-1968	17
Rotavirus	<5 years	1985-1991	20
COVID-19	5-11 years	Oct 2020-Oct 2021	66
United States COVID-19 Deaths by Age Group





Source: https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-11-2-3/03-COVID-Jefferson-508.pdf

United States Leading Causes of Death in Children 5-11 Years of Age



	Causes of Death	Death (n)	Crude rate per 100,000
	Accidents (unintentional injuries)	969	3.4
	Malignant neoplasms	525	1.8
	Congenital malformations, deformations and chromosomal abnormalities	274	1.0
66 COVID-19 associated deaths in children 5–11 10/3/20-10/2/2021	Assault (homicide)	207	0.7
	Diseases of the heart	115	0.4
	Chronic lower respiratory diseases	107	0.4
	Influenza and pneumonia	84	0.3
	Intentional self-harm (suicide)	66	0.2
	Cerebrovascular diseases	56	0.2
	Septicemia	48	0.2

Source: https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-11-2-3/03-COVID-Jefferson-508.pdf

Multisystem Inflammatory Syndrome in Children (MIS-C)



Severe hyperinflammatory syndrome occurring 2-6 weeks after acute SARS-CoV-2 infection, resulting in a wide range of clinical manifestations and complications

Incidence has been estimated as 1 MIS-C case in approximately 3,200 SARS-CoV-2 infections

60-70% of patients are admitted to intensive care, 1-2% die

- 5,217 MIS-C cases reported to national surveillance with date of onset between February 19, 2020–September 23, 2021
 - Median age of 9 years
 - 2,316 (44%) of these cases occurred in children aged
 5–11 years
- 61% occurred in children who are Hispanic/Latino or Black, Non-Hispanic
- Among children aged 5–11 years, 9 died (20% of MIS-C deaths)

Source: https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-11-2-3/03-COVID-Jefferson-508.pdf



Vaccinated vs. Natural Immunity



Unvaccinated individuals who previously had COVID-19 were

5x

More likely to test positive for COVID-19 again compared to vaccinated individuals

Source: https://www.cdc.gov/mmwr/volumes/70/wr/mm7044e1.htm

Who can get a booster?



	Self	CDC	<u>Symbol Key:</u>
Criteria	Schedule	Recommendation	Yes-please s
Received Pfizer or Moderna more than six r	your booster		
65 years and older	\checkmark	Should	You need a
Residents in long-term care settings	\checkmark	Should	schedule (P
50-64 years of age with <i>underlying medical conditions</i>	\checkmark	Should	`
18-49 years of age with <i>underlying medical conditions</i>	\checkmark	Мау	<u>Pfizer</u> is available
18-64 years of age who are at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting	\checkmark	Мау	Houston Metho locations
18-64 without an increased risk for COVID-19 exposure and transmission		Discuss with your physician	Moderna is only av at select Houst Methodist Primary
Received Pfizer or Moderna less than six m	nonths ago		Clinics
12+ who are immunocompromised	\checkmark	Should	
Received Johnson & Johnson more than two	available at Hou		
Anyone who is 18+	\checkmark	Should	Methodist

Mixing & matching: eligible individuals may choose which vaccine they receive as a booster dose

Yes-please schedule your booster

physician's order to schedule (*Pfizer only*)

is available at all ston Methodist locations

na is only available select Houston dist Primary Care Clinics

n & Johnson is not able at Houston Methodist

COVID-19 Vaccine Boosters' Mix-and-Match Efficacy







Source: https://www.wsj.com/articles/covid-19-vaccine-boosters-mix-and-match-efficacy-11635955315

Houston Methodist COVID-19 Stats



COVID-19 related patients through Houston Methodist as of November 7, 2021



Houston Methodist Hospital, Baytown, Clear Lake, Continuing Care, Sugar Land, West, Willowbrook, Woodlands

Data as of November 7, 2021; Hospitalized numbers as of 7pm and Total Positive Tests as of 11:59pm



THE VISION FOR THE SECOND CENTURY

Houston Methodist will set a new standard for leading academic medical centers through unparalleled safety, quality, service and innovation.



EXCELLENCE IN PATIENT CARE & SAFETY

Houston Methodist Hospital is recognized by U.S. News & World Report as NO. 1 INTEXAS and NO. 16 INTHE NATION.



hospitals evaluated this year 20

hospitals are on the Honor Roll

nationally ranked Honor Roll hospital in **Texas**

HONOR ROLL

2021 Vizient Q&A Prelim. results

Overall and domain final rankings (lower=better)



	Cohort #1: Academic <u>(n=101)</u>	Cohort #2: Specialized Complex Care <u>(n=117)</u>	Cohort #3: Complex Care <u>(n=121)</u>			Cohort #4: Community <u>(n=226)</u>	
	нмн	HMSL	НМВ	нмw	нмwв	нмтw	HMCL
Overall Rank	6	4	8	4	9	1	22
Star Rating	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * *
Mortality <u>(25%)</u>	1	6	7	10	12	2	32
Efficiency <u>(10%)</u>	34	5	2	5	8	9	33
Safety <u>(25%)</u>	9	3	24	16	17	1	9
Effectiveness <u>(20%)</u>	53 🔴	41	55 🦳	13	39 🦳	41	132 🔴
Patient Centeredness <u>(15%)</u>	51	40 🦳	40 🦳	43 🦳	61	27	129 🔴
Equity <u>(5%)</u>	77 🔴	61 🔴	34	42 🦳	36 🦳	1	1
	Top 10%	Between 1	1% & 25%	Between 2	26% & 50%	Below 50%	

2021 Leapfrog Hospital Safety Grade





Benchmark Scorecard					
	Honor Roll	CMS Star	Leapfrog	Vizient	
Mayo Clinic	1	$\star \star \star \star \star \star$	А	x x x x x x	
Cleveland Clinic	2	$\star \star \star \star \star \star$	А	-	
UCLA Medical Center	3	\mathbf{x}	В	x x x x x x	
Johns Hopkins Hospital	4	x x x x	Α	-	
Massachusetts General Hospital	5	xxxxx	Α	-	
Cedars-Sinai Medical Center	6	$\star \star \star \star \star \star$	С	-	
New York-Presbyterian Hospital	7	x x x x	С	-	
NYU Langone Hospitals	8	x x x x x x	А	x x x x x x	
UCSF Medical Center	9	x + x + x + x + x + x + x + x + x + x +	Α	-	
Northwestern Memorial Hospital	10	xxxxx	В	-	
University of Michigan Hospitals	11	$\Delta \Delta \Delta \Delta \Delta$	Α	-	
Stanford Health Care	12	xxxxx	Α	x x x x x x	
Hospitals of the University of Pennsylvania	13	x x x x	А	AAAAA	
Brigham and Women's Hospital	14	x x x x	А	$\dot{\mathbf{x}}$	
Mayo Clinic-Phoenix	15	$\Delta \Delta \Delta \Delta \Delta$	Α	-	
Houston Methodist Hospital	16	$\star \star \star \star \star \star$	Α	AAAAA	
Barnes-Jewish Hospital	17	${}{}{}{}$	С	xxxxx	
Mount Sinai Hospital	17	xxxx	В	-	
Rush University Medical Center	19	xxxxx	А	xxxxx	
Vanderbilt University Medical Center	20	☆☆☆☆	В	-	

Physician Organization Growth Over the Last Five Years





Selected Projects from Center for **Innovation Portfolio in 2021**

HMSL

61%

HOUSTON_ Methodist LEADING MEDICINE



RevSpring

another.

Using data-driven approach to patient engagement that tailored payment offers solutions through the right of communication type (paper or digital) to the right person at the right moment.



43% Reduction in "general requests" calls

74% Reduction in

calls to "create a payment plan"



MyMethodist Patient Tablets and Amazon

Alexas Bringing familiar technologies such as tablets and Amazon Alexa that patients utilize at their home to bedside.

2,150+

MvMethodist Patient Tablets deployed

Clinical Voice Technologies

Center for Innovation and Amazon Web Services are working to eliminate the keyboard in the clinic and bringing the power of voice to the Operating Room to achieve greater efficiencies.

6

Physicians in the pilot

159

Visits facilitated with

Ambient Listening*



Amazon Alexas deployed

powered aws by



dick. Next Lab



Application Drop-off Rate Comparison



6.8%

Top 25% National **Benchmark**

9.3%

POST-ICIMS



Devices installed across six hospitals and Research Institute

as setting a new

intelligent locations

Utilizing Bluetooth Low-Energy

(BLE) to provide real-time location

for asset management of wide

range of devices such as tablets

for

icims

as well

foundation

monitoring.

Talent management platform that makes applying to Houston Methodist jobs easy with tools like automated CV parsing, LinkedIn account linking and retail like "iobs cart".

DEI Timeline



SEPTEMBER

CEO Dr. Marc Boom created the Diversity, Equity & Inclusion Department



NOVEMBER

Diversity, Equity & Inclusion Grant, Social Equity Grant and Strategic Initiatives Fund established to support nonprofit organizations in the community



JANUARY

Virtual vaccine town halls hosted, including all-Spanish speaking, live translation and captions

JUNE

DEI Committee created, five goals established for 2020–2022



OCTOBER

DEI Corner added to every CEO newsletter, celebrating cultural holidays and awareness months



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DECEMBER

Website and @hmethodistcares Twitter handle launched







FEBRUARY

- First three employee resource groups (ERG) became official: Black Ties for Culture, Asian Heritage and LGBTQ+Allies
- · First ERG event hosted: Lunar New Year



MAY

First DEI grant recipients announced



JUNE

- LGBTQ+Allies ERG hosted first Pride lighting of Outpatient Center roofline
- DEI holiday announced



SEPTEMBER

Together We Grow training sessions launch for employees

- - - - - - -

MARCH Together We Grow training launched for leaders



APRIL DEI Leadership Council

quarterly meeting held



JULY DEI dashboard launched



AUGUST DEI toolkit distributed

to all managers



Methodist LEADING MEDICINE

--- Spring 2020---- 2022

May 2020: Set Goals for the New Normal

1. Houston Methodist will be the safest hospital system in the world

Methodist

- 2. Volumes will be back to normal by July 1
- 3. Achieve at least breakeven by the end of the year
- 4. Maintain full operations during a second surge
- 5. Avoid furloughs, layoffs, and pay cuts

These goals will be the guiding principles for ongoing decision making during this transition to the new normal. We will continue to adjust these goals as circumstances change.

Goals for the Remainder of 2020

Methodist

- 1. Houston Methodist will be the safest hospital system in the world
- 2. Volumes will again be back to normal by October 1
- 3. We will achieve ~75% of budgeted operating margin for September December
- 4. Maintain full operations throughout the COVID pandemic
- 5. Press our strategic advantage

Houston Methodist will use these guiding principles in decision making and goal setting. We will remain nimble and adjust these goals as circumstances change.

COVID-19 MAY BE A REASON, BUT IT WILL NEVER BE AN EXCUSE





- 1. Heighten focus on the Vision for the Second Century: Unparalleled Safety, Quality, Service and Innovation
- 2. COVID-19 does not define our strategy, but we will plan for endemic COVID-19 for the foreseeable future
- 3. Reinforce and accelerate our strategies that make us successful
- 4. Aggressively pursue our strategic advantages and achieve clear differentiation in our market, nationally and globally

Houston Methodist will use these guiding principles in decision making and goal setting. We will remain nimble and adjust these goals as circumstances change.

Taking Care of Our Employees







We're thankful for you! Happy Thanksgiving. to you and your family. Marc

Please use the attached gift card at any HEB location.



Controlling the Pandemic and Living with COVID-19: a User's Guide

Town Hall, November 9, 2021

H. Dirk Sostman, MD FACR, Ernest Cockrell, Jr. Presidential Distinguished Chair, EVP & Chief Academic Officer



Not This Way



Colorado could move to "crisis standards of care" because of COVID surge. What does that mean?

Formula could decide who gets an ICU bed, nurses could be asked to work longer shifts and calling up the National Guard is on the table





Smart Investment Decisions Start Here - GfK Investor Update

Hedge funds rely on GfK Boutique Research to make strategic and timely #investment decisions. Our demand insights cover 300+ product categories, from technology and home appliances to smaller consumer segments. Che...



Learn more



The Big Picture: Controlling Infectious Diseases



We Now Have All of These Measures Available to Fight COVID-19



Preventing Infection

Airborne and droplet transmission are principal risks – use good quality well-fitting masks & hand hygiene

Follow common-sense approach to using precautions



Precautions Work for All Respiratory Viruses







Vaccines Are Key: Updates



Vaccine Effectiveness: Age, Delta, Infection vs. Hospitalization



CDC Data, NYT graphic

Unvaccinated Fully vaccinated



Waning Immunity After Vaccination in Israel

Metholist

Goldberg et al, NEJM, October 27, 2021



Rate of infection goes up (protection wanes) in all age groups

Rate of severe disease goes up (protection wanes) only in > 60 yo

Protection from Vaccination vs. Infection

MMWR October 29, 2021



A study of hospitalized patients with symptoms similar to COVID-19* found...

Unvaccinated people with a previous infection were

more likely to have a positive COVID-19 test compared to vaccinated people[†]

*COVID-19-like illness hospitalizations 90-179 days after prior infection or full vaccination Received two doses of an InRNA vaccine and no previous infection

Get vaccinated as soon as possible

(COC

bit.ly/MMWR7044el



Family Herd Immunity

JAMA Internal Medicine October 2021







Medscape

Medscape

Vaccination for Kids 5 – 11



- Pfizer 1/3 strength of adult dose
- Reasons for vaccination
 - Children as likely to be infected with COVID as adults
 - -Severe disease occurs in children (similar rate to influenza) ~ 8500 so far with >140 deaths
 - MIS-C most frequent in kids 5 11
 - Post COVID conditions seen in kids
 - -Vaccination of young children is NORMAL
- Data
 - -Vaccine efficacy in kids = 90.9%
 - Immune responses and side effects similar to older kids and adults
 - No significant adverse effects in 1500 vaccinated subjects
 - No cases of myocarditis in 5 11 year olds
- Other benefits
 - -Continued schooling / social interactions
 - May reduce transmission
 - -Parents can work

Booster Shots

Before long everyone will probably be eligible for a booster

Future most likely includes additional booster shots but details unclear



Pfizer Booster and Severe Cases

Presentation by Israel MOH to FDA, October 14, 2021

Following the third dose, severe cases among vaccinated decreased sharply



LEADING MEDICINE

Severe disease (NIH definition)

resting respiratory rate

>30 breaths per minute

or O2 saturation <94%

or PaO2/FiO2 <300

HOUSTON

Absolute rates of severe disease

17

Mix & Match Boosters





Can Antibody Measurements Tell Us Who's Protected?



- Best population-level measure is neutralizing antibody levels (titers)
- Not all antibodies are neutralizing
- However, Houston Methodist data indicates that overall antibody titers correlate well with neutralizing antibodies
- Therefore, higher antibody titer is better protection
- Problems in applying this to individuals:
 - -No data on individual correlations
 - -Levels change over time, no standard time to measure
 - -Many labs only report semi-quantitative values
Outpatient Treatments

Early treatment of high-risk outpatients is a critical need



Data on Early mAb Therapy for COVID



- Lilly Long Term Care Prevention Study
 - 80% reduction in symptomatic infection in 299 nursing home residents who tested negative at study initiation
 - In 41 who tested positive at study start, 0/21 in treatment group died, 4/20 in placebo
- Regeneron Household Contacts
 Prevention
 - 100% prevention of symptomatic infection in people with household exposure to COVID
 - Reduction in asymptomatic infection (5.4% in mAB group versus 6.7% in placebo group)
 - Lower viral load and shorter duration of viral shedding

- Lilly Early Treatment Study (mAb "cocktail")
 - 1,035 high risk patients with COVID
 - mAb group 2.1% events, placebo group 7%
 - mAb group 0 deaths, placebo group 10 deaths
- Action versus viral variants
 - Dual mAb cocktail is **active** against all variants
 - Recent data show sub-Q injection as effective as IV
 - Prophylaxis for immune compromised a realistic idea but not yet EUA; Regeneron starting trial
- Pan-sarbecovirus mAb (NEJM Nov 2021)
 - $-\,85\%$ RR for progression to hospitalization
 - 97.2% RR for death
 - Neutralizes all variants even SARS-CoV-1

"COVID Pills": Molnupiravir Trial

Merck press release and ISDA conference presentation

 775 people with mild / moderate COVID

+At least one risk factor for progression +Within five days of symptom onset

- Consistent efficacy across viral variants
- No safety signals
- Could be combined with other therapy —Protease inhibitor
 - -mAb



November 3:

U.K.'s Medicines and Healthcare Products Regulatory Agency Authorizes Molnupiravir for the Treatment of Mild-to-Moderate COVID-19 in Adults With a Positive SARS-CoV-2 Diagnostic Test and at Least One Risk Factor



"COVID Pills": Paxlovid Trial

Pfizer press release



- 1,219 people with mild / moderate COVID
 - +At least one risk factor for progression
 - +Within three or five days of symptom onset
- No safety signals
- Could be combined with other therapy –Polymerase inhibitor
 - -mAb

Treated within 3 days	Treated	Placebo
Hospitalized	0.8%	7.0%
Death	0	1.8%

Treated within 5 days	Treated	Placebo
Hospitalized	1.0%	6.7%
Death	0	1.6%

Leading Anti-viral Drugs for COVID-19





Repurposed Drugs



• Ivermectin

- In vitro at high levels, interferes with viral replication and may have anti-inflammatory effects
- None of the published clinical trials have used doses that would achieve these levels
- Pivotal Elgazzar trial withdrawn
 - Contained patients who died before the trial started, etc.
- Only good quality trial (Canadian TOGETHER study) showed no benefit
- Literature review commissioned by BBC
 - 26 studies: 5 clearly faked, 5 major red flags, 14 authors would not provide data for review

• Fluvoxamine

- -Randomized clinical trial (JAMA July 2020)
 - 152 outpatients with symptomatic COVID-19
 - Clinical deterioration in 0% treated, 8.3% placebo (p = 0.009)
- -Randomized clinical trial (Lancet Global Health October 2021)
 - 1,497 high risk outpatients w symptomatic COVID-19
 - RR for extended ED stay or hospitalization = 0.68 (0.52 - 0.88)
 - OR for death = 0.09 (0.01 0.47)



At-home testing less sensitive but can rapidly identify those who have high viral loads Potentially major effect on transmission of infection & early treatment





Tools to control the pandemic exist now. They will continue to improve. We can control the pandemic and live with COVID-19 by using them correctly and consistently.

Masks, Hand Hygiene & Other Precautions



THANK YOU FOR ATTENDING OUR TOWN HALL CONVERSATION

If you'd like additional information about Reconstructive Surgery, or would like to get involved with the Reconstructive Surgery Task Force, please contact us at foundation@houstonmethodist.org.

Take care and be well

