Equitable Distribution and Uptake of Remedies and Resources

October 22, 2020
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Director of Policy and Advocacy

American Society of Consultant Pharmacists (ASCP)
Housekeeping

• If you experience technical difficulties, please contact Claudia Bonilla via the chat or at CBonilla@NGA.org.

Unmute yourself to ask a question. OR Send a private chat to NGA staff, panelists, group members or the entire audience.
I. Welcome and Introductions

II. Gary A. Puckrein, PhD
   President & CEO, National Minority Quality Forum

III. Angela Riley, PharmD
   Clinical Pharmacist, Binghamton City Councilwoman
   Speaker of the House for the National Pharmaceutical Association

IV. Andrew (Andy) Pickett, MS
   Director
   Bureau of Emergency Preparedness and Response
   Pennsylvania Department of Health

V. Question & Answer
Gary A. Puckrein, PhD
President & CEO
National Minority Quality Forum
USING BIG Data to Promote Minority Health
Presentation Overview

• About the National Minority Quality Forum
• Flu Vaccines and Minority Communities
• Predicting COVID 19 By Zip Code
• The Minority and Rural Coronavirus Insights Study
Founded in 1998, NMQF is a non-profit Washington, D.C.-based, health care research and education organization whose mission is to reduce patient risk by assuring optimal care.
The National Minority Quality Forum (NMQF)

The NMQF has developed a comprehensive database comprised of over 5 billion patient records, which it uses to define disease prevalence, costs and outcomes for demographic subpopulations at the zip code level.
National Minority Quality Forum maintains **GARI**--a proprietary web-based, a geo-mapping and advanced research information system. GARI access over 5 billion patient records to power collaborative learning communities (known as an index) through claims and related medical data analytics for academic research, patient outcomes, advocacy, and clinical & commercial operational applications. Multiple years of patient, provider, diagnostic, cost, and prescription data can be queried and visualized in multiple geographic views including customized and standard boundaries, and compared across several population variables/demographics.

**GIS-based Data Visualization**

COVID 19 Index
COVID-19 Disparity Outcomes

Although no one is immune to the spread of coronavirus or COVID-19, certain populations are more vulnerable than others to serious complications as a result of a coronavirus infection. As COVID-19 sweeps across the United States, it appears to be infecting and killing African Americans and other minority populations at a disproportionately higher rate.

In Chicago, Illinois, rates of new COVID-19 cases per 100,000 are greatest among Latino (1000), African American (925), “other” racial groups (865) compared to white (389) residents. Mortality rates are substantially higher among African American/black individuals (73 per 100,000) compared with Latino (36 per 100,000) and white (22 per 100,000) residents.

In New York City, as of May 7, 2020, officials reported greater age-adjusted COVID-19 mortality among Latino persons (187 per 100,000) and African American individuals (184 per 100,000), compared with white (93 per 100,000) residents.
Flu Vaccination Rates Lag Among Racial and Ethnic Minority Groups

• Among adults (age 18 years and older), while the overall coverage estimate was 48% during the 2019-2020 flu season, flu vaccination coverage was:

  • 38% among Hispanic or Latino persons
  • 41% among non-Hispanic Black persons
  • 42% among American Indian or Alaska Native persons
  • 52% among Asian persons
  • And 53% among non-Hispanic White persons
When adjusted for demographic and clinical factors, blacks and Hispanics were 30% and 34% less likely to get any flu vaccine, respectively, in the Medicare program.
Age-adjusted Influenza-Associated Hospitalization Rates by Race and Ethnicity: FluSurv-NET, 2009-10 through 2018-19

*Rates are statistically adjusted to account for differences in age distributions within race/ethnicity strata in the FluSurv-NET catchment area. Rates are preliminary and not yet published. For more information on the methodology used this analysis, visit: Influenza Hospitalization Surveillance Network (FluSurv-NET).
Flu Vaccine Rates in Black Medicare FFS Beneficiaries, 2016-17
Two years ago we convened an expert panel to consider how to improve flu vaccine rates in underserved communities. With their guidance we launched quality improvement initiatives to increase flu vaccine rates in minority serving practices.

• Findings:
  • Research reveals continuing and even increasing flu vaccine disparities nationwide

  • Through our quality improvement initiatives we were able to increase flu vaccine rates in minority serving clinical practices.

  • With COVID-19 pandemic and ongoing disparities major efforts are immediately needed to promote flu vaccination in communities of color
Community and Clinical Leader Toolkit

- Press release template that you can modify and use to send to local media
- Social media graphics, infographics and messaging you can use to help educate your community

- A Letter to the Editor template that you can edit and make your own
- Printable flu and COVID-19 patient and community information cards to download and distribute, or to share with your community electronically

- Vaccine Locator (by CDC, Harvard Medical School) - to help your community find convenient flu vaccination locations
- COMING SOON! A sermon that can be modified for your congregation
We Have Some Resources

- Guide to safe and high-volume vaccination practices; making a strong recommendation
- DRIVE: Online toolkit supporting clinical QI and community programs
- Communication tools and infographics
Predicting COVID 19 by Zip Code
COVID-19 Index
National Minority Quality Forum
October 2020

Map displaying COVID-19 deaths across the United States. The map uses color coding to indicate the total count of patients in different regions.
The Minority and Rural Coronavirus Insights Study
The Centene Corporation, Quest Diagnostics and the National Minority Quality Forum are working collaboratively on the Minority and Rural Coronavirus Insight Study to assess the impact of coronavirus on racial minorities and underserved communities across the country.
MRCS is a multi-sponsored, prospective longitudinal investigation of the risk factors, biologics as well as social determinants of health, associated with the disproportionate impact that coronavirus is having on minority and rural communities. MRCS began enrolling study participants in June 8, 2020. Study participants are being recruited from 5 Federal Qualified Health Centers in five states (Illinois, Ohio, Michigan, Florida and California). Participants will be consenting to a 5-year study that investigates risk factors associated with COVID-19. Each center is recruiting 1,000 study participants.
At baseline all participants will be tested for the COVID-19 and the presence of antibodies. As a follow we would like them to have the following test: basic metabolic panel (Na, K, Cl, HCO3, BUN, Cr) including transaminases (AST, ALT), LDH, CRP, d-dimer, troponin, and also WBC, N/L ratio, platelets, HbA1c. All participants will get their laboratory test results and be followed by local primary care research personnel for 5 years post study start. All participants will be asked to provide access to their medical records.
Ancillary Studies

The 5,000 samples are powered to allow MRCS to have various ancillary studies that have distinct study objectives. These study ancillary studies will include:

- **The Antibody Testing Study**, which validates the sensitive and specificity of clinical assays to detect and measure variations in the virus ‘s impact on the biology and prognosis of minority populations.
- **The Antibody Quantity Testing Study**, which seeks to determine if SARS-CoV-2 antibody quantities vary by age, gender or race.
- **The Diabetes and Coronavirus Study**, which investigates whether minorities living with diabetes are at a higher risk for poor health outcomes if infected by the virus.
- **The Cardiovascular and Coronavirus Study**, which investigates whether minorities living with diabetes are at a higher risk for poor health outcomes if infected by the virus.
- **The Hispanic Coronavirus Study** examines the COVID 19 with Hispanics as the reference population. Study measurements will include: whole genome sequencing, antibody quantities, basic clinical assays, and social determinant surveys.
Thank You

Gary Puckrein
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Angela Riley, PharmD
Clinical Pharmacist
Binghamton City Councilwoman
Speaker of the House for the National Pharmaceutical Association
Pharmacists: Promoting Minority Health Amid COVID-19
Overview

• NPhA Overview
• Role of the Pharmacist
• Pandemic Effect
• The Intersection of Systemic Racism/Health Equity, Clinical Practice, Minority Health
• Next Steps
The National Pharmaceutical Association

• A national, professional organization of pharmacists founded by Dr. Chauncey I. Cooper in 1947 as a subgroup of the National Medical Association.

• Focused on the needs of the minority community.

• Promotes excellence and uniformity among minority health professionals in order to improve the quality of health care in minority communities.
Mission

• Represent the views and ideals of minority pharmacists on critical issues affecting health care and pharmacy.
• Advance the standards of pharmaceutical care among all practitioners.
• Over 1,000 members
  • Student National Pharmaceutical Association
    Educational service association of pharmacy students who are concerned about the profession of pharmacy, healthcare issues, and the poor minority representation in these areas.
Essential to Public Health

• Pharmacists:
  • Provide direct patient care daily
  • Accessible
    • 90% of the country living within 5 miles of a pharmacist
  • Key to immunization access and vaccination rates
    • 2018-2019 flu season, 1 in 3 adult influenza vaccines were provided by a pharmacist
    • 2009-H1N1 Vaccine Pharmacy Initiative
      • CDC released 5.5 million doses to pharmacists
      • Increase vaccine administration by 5.5 million
Consequences:
NPhA Acts:

• Joint Statement on Actions To Address Racial Injustice
• Created and Collaborated:
  • NMA COVID Task Force
    • NMA COVID-19 Commission on Vaccines and Therapeutics
  • Created a Racial Inequity Series for Healthcare Practitioners
  • Launched scholarship working group
    • Data collection
    • Patient advocacy and education
Supporting Communities Amid COVID-19 Pandemic

• Pharmacists offer additional access to COVID-19 testing & vaccines.

• Over 1,300 pharmacies have received approval to provide point-of-care tests including COVID-19.

• The US Department of Health and Human Services has authorized all state-licensed pharmacists and to administer vaccines for COVID-19 when available.
  • Includes student interns
Next Steps

• To prevent continued barriers to care, we must:
  • Recognize pharmacist as providers:
    • Equitably compensated for:
      • Telehealth
      • COVID-19 vaccination administration, and
      • Compound medications in short supply
  • Prioritize diversity on vaccine task force and working groups (e.g. Operation Warp Speed):
    • Ethnicity
    • Professions—include pharmacists
  • Advocate for Transparency:
    • Vaccine clinical trial process
      • Include diverse populations
    • CDC, State, and County Departments of Health
  • Increase funding to support community educational outreach
Thank You

Angela C. Riley, PharmD
Binghamton City Councilwoman
Speaker of the House, NPhA
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Andrew (Andy) Pickett, MS
Director
Bureau of Emergency Preparedness and Response
Pennsylvania Department of Health
Development and Implementation of an Ethical Distribution Process for Scarce Medical Countermeasures

Andrew Pickett, MS
Director, Bureau of Emergency Preparedness and Response

October 22, 2020
Pre COVID-19 baseline

• Recognition of the complexities of ethical values in emergency response

• Committee convened to develop a Crisis Standards of Care framework for health care entities statewide
  - Included health care, public health, and other partners
  - Initially developed a template document and path for further development and refinement
Emergence of COVID

- Rapidly changed framework from which the department was operating
- Many theoretical exercises became reality
- Rapid iteration to issue a Crisis Standards of Care framework during a pandemic with impending healthcare surge
Emergence of MCMs

• Initial announcement of Remdesivir as a viable treatment option for COVID-19
  ▪ Raised many questions
    ▪ Supply chain? How much, where, and when?
    ▪ Who would be responsible for managing?
    ▪ Who would benefit from the treatment?
Emergence of MCMs

• Recognition of two separate issues
  - Macro – how to get product to facilities that can use it
  - Micro – how to get facilities to provide to patients who need it
Emergence of MCMs

- Macro/Facility level distribution
  - Fairly easy
  - Based on EUA – intended for hospitalized individuals
  - Allocation formula based on number of COVID-19 positive individuals and COVID-19 positive individuals on ventilators each week over last 7 days
  - Not all facilities would receive product (based on minimum shipping quantities of 40 vials), but declined shipments were reallocated to next facilities in line
Emergence of MCMs

• Micro/Patient level distribution
  - Much harder
  - At peak, over 3000 PA residents were hospitalized
  - Scarce resource compared to number of inpatients
  - Recognition that an ethical allocation framework would be needed
Ethical Allocation Framework

- Ad hoc committee created to develop the framework
  - State Agencies
    - Dept of Health, Dept of Human Services, Emergency Management Agency
  - External partners
    - Health care delivery
    - Health ethics
    - Health law
• Development of framework
  - Multiple conference calls over a 2-3-week period
  - Several potential frameworks discussed
  - Best practices based on how facilities planned on implementing
  - Eventual system based on one facility’s plan, and improved with input from committee members and designed to fall in line with the Department’s Crisis Standards of Care framework
• Framework Goals
  - Be GUIDANCE that facilities can follow
  - Maximize benefit while ensuring health equity
  - Fall in line with current federal guidance and direction

“...when developing processes for the allocation of RDV it is important to determine what allocation methods should be avoided. "Completely randomized lottery" or "first-come, first-serve" processes do not satisfy the ethical goals outlined in this document, because they do not proactively mitigate health disparities in COVID-19 outcomes and do not allocate scarce resources to maximize community benefit.”
• Framework Established
  • Weighted lottery
    • Allows a level of “chance”, wherein if 3 courses are available to 10 individuals, each individual starts with a 30% chance of receiving the scarce treatment
  • Adjusts based on key factors
    • Heightened priority
      • Individuals from disadvantaged areas (ADI score of 8-10)
      • Essential workers
    • Lowered priority
      • Individuals with an end-stage condition (<1 year of life expectancy)
• Framework Established

Process document created by the committee to walk healthcare providers through the recommended process
Preliminary steps: The following three steps should be completed at the time that COVID-19 treatment is allocated to a hospital.

1. **Determine the number of available courses of the COVID-19 therapy.** This information will be provided by the Commonwealth of Pennsylvania or the agency responsible for distribution.

2. **Estimate the number of eligible patients over the time period in question for which the drug is allotted.** To accomplish this, first determine the average number of patients admitted daily over the last week who met eligibility criteria for the COVID-19 medication. Next, calculate the number of days the supply of medication is expected to last based on dosage, and the number of eligible patients.

3. **Determine the chances for each eligible “general population” patient to receive the drug.** These chances are determined by dividing the number of available courses of medication by the projected number of eligible patients. For example, if there are 25 courses of drug available and 100 patients expected to be eligible over the time period in question, the “general population” chances to receive the drug are 25 out of 100 (25%). This number will be used in step 4 below to calculate the chances for other populations.

**NOTE:** There may be uncertainty or changes in the number of treatment courses available, the time period that the supply of medication needs to last, or the average number of eligible patients per day. It is appropriate to recalculate the lottery chances as new information becomes available about these parameters.
Daily Steps to Allocate Scarce COVID-19 Medications

1. Proactively Identify eligible patients with COVID-19. Hospitals should take proactive steps to identify eligible patients as discussed previously in this framework, rather than placing this burden solely on treating physicians, who may not be aware of the availability of the scarce drug for their patient. This approach increases the chances that all eligible patients will be offered the opportunity to be in the lottery. The Crisis Triage Officer Team may be able to screen each COVID-19 patient in the hospital, or to use EHR-based screening mechanisms to identify patients with COVID-19 who are eligible to receive the scarce therapy. The optimal approach will depend on each hospital’s resources.

2. Confirm each COVID-19 patient’s eligibility with the attending physician. The Crisis Triage Officer Team should contact the attending physician of each patient with COVID-19 to confirm eligibility. This conversation should ascertain the following: 1) that the patient meets inclusion criteria to receive the scarce drug; 2) that the patient does not meet any clinical exclusion criteria for the scarce drug; and 3) the patient consents to receive the drug. Consent may also take place after the patient is selected to receive the drug in the lottery.

iii This Appendix represents one suggested approach, but it is not the only approach to satisfy the ethical goals identified by Pennsylvania’s Ethical Allocation Committee.
### Table 1. Weighted chances to receive treatment for each patient group

<table>
<thead>
<tr>
<th>Group</th>
<th>Chances to receive treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>General community chances</td>
<td>Number of available treatment courses / Number of eligible patients in the determined time period</td>
</tr>
<tr>
<td>Disadvantaged community member</td>
<td>$1.25 \times \text{(general community chances)}$</td>
</tr>
<tr>
<td>Essential worker</td>
<td>$1.25 \times \text{(general community chances)}$</td>
</tr>
<tr>
<td>Death likely within 1 year</td>
<td>$0.5 \times \text{(general community chances)}$</td>
</tr>
<tr>
<td>Disadvantaged community member + Essential worker</td>
<td>$1.5 \times \text{(general community chances)}$</td>
</tr>
<tr>
<td>Disadvantaged community member + death likely</td>
<td>$0.75 \times \text{(general community chances)}$</td>
</tr>
<tr>
<td>within 1 year</td>
<td></td>
</tr>
<tr>
<td>Essential worker + death likely within 1 year</td>
<td>$0.75 \times \text{(general community chances)}$</td>
</tr>
</tbody>
</table>
3. Determine patient’s characteristics relevant to the weighted lottery. The Crisis Triage Officer Team should assess the three characteristics relevant to the weighted lottery:

a. Is the patient from a disadvantaged community? The allocation team should determine whether the patient resides in a disadvantaged community, defined as their residential address being in an area with a score of 8, 9, or 10 on the Area Deprivation Index. This can be determined by entering the patient’s address in the Neighborhood Atlas website under the “mapping” tab.

b. Is the patient an essential worker? In conjunction with the patient’s attending physician, the Crisis Triage Officer Team should determine whether the patient meets the Commonwealth of Pennsylvania’s definition of an essential worker, as specified in this Industry Operation Guidance document.

c. Is the patient expected to die within a year from a chronic, end-stage condition? In conjunction with the patient’s attending physician, the Crisis Triage Officer Team should determine whether the patient is likely to die within a year from underlying condition(s) despite successful treatment of the COVID-19 infection. The objective medical evidence supporting this determination should be documented. If needed, specialist consultation should be sought (e.g., oncology, geriatrics, palliative care) to ensure the decision is an objective medical determination. If physicians are uncertain whether the patient is likely to die within a year, they should err on the side of assuming that the patient will survive for more than a year.
### Ethical Allocation Framework

Table 2. Example when the chances for treatment with the scarce COVID-19 treatment for the general community are 25 out of 100

<table>
<thead>
<tr>
<th>Group: Individuals who are...</th>
<th>Chances to receive treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>General community members</td>
<td>0.25 (25 out of 100)</td>
</tr>
<tr>
<td>From an area with Area Deprivation Index score of 8.9, or 10</td>
<td>1.25 x 0.25 = 0.31 (31 out of 100)</td>
</tr>
<tr>
<td>Essential workers</td>
<td>1.25 x 0.25 = 0.31 (31 out of 100)</td>
</tr>
<tr>
<td>Expected to die within a year from an end-stage condition</td>
<td>0.5 x 0.25 = 0.13 (13 out of 100)</td>
</tr>
<tr>
<td>From an area with Area Deprivation Index score of 8.9, or 10 AND are Essential workers</td>
<td>1.5 x 0.25 = 0.38 (38 out of 100)</td>
</tr>
<tr>
<td>From an area with Area Deprivation Index score of 8.9, or 10 AND Expected to die within a year from an end-stage condition</td>
<td>0.75 x 0.25 = 0.19 (19 out of 100)</td>
</tr>
<tr>
<td>Essential worker AND Expected to die within a year from an end-stage condition</td>
<td>0.75 x 0.25 = 0.19 (19 out of 100)</td>
</tr>
</tbody>
</table>
1. The second step is to randomly select a lottery number for each eligible patient. This can be done with a random number generator that are readily available online. The range of the lottery should be set to “1 to 100.” The drawing of each patient’s lottery number should be witnessed by two individuals and recorded. **Each patient is entered into the lottery only once, not every day that they are eligible to receive the scarce drug.** The only time a lottery should be re-run is if there is an abrupt, significant change in supply of the scarce drug.

   c. **Determine whether each patient’s lottery number is within the range to offer the scarce drug.** For example, if the lottery chances for the patient is 31 out of 100 and the patient’s randomly drawn lottery number is ≤ 31, then they should be offered the scarce drug. If the lottery number is >31, then they should not be offered the scarce drug.

5. **Inform the patient’s attending physician of the lottery result.** Immediately after the weighted lottery is conducted, the allocation team should inform the patient’s attending physician of the lottery results (i.e., whether the patient will be offered the treatment).

6. **If patient is to receive the drug, contact the pharmacy to provide the patient-specific medication order and authorize release of drug.** Facilities may have different ways to order the medication, because the drug may not be made readily available to order by all prescribers.

7. **Documentation:** The allocation team should document that each of the steps above was performed for each eligible patient. Two members of the allocation team should witness and attest to the correct conduct of the lottery, and should record each patient’s lottery number, as well as each patient’s lottery threshold to receive the scarce COVID-19 therapy.
Ethical Allocation Framework

- Recognition of Social Determinants of Health and impact on COVID-19 outcomes
  - Utilization of University of Wisconsin School of Medicine and Public Health’s “Neighborhood Atlas”
  - Provide block group (geographic area) data based on a number of SDOH factors and aggregated to a 1-10 score
Ethical Allocation Framework

- **Area Deprivation Index (ADI)**
  - The Area Deprivation Index (ADI) is based on a measure created by the Health Resources & Services Administration (HRSA) over two decades ago for primarily county-level use, but refined, adapted, and validated to the Census block group/neighborhood level by Amy Kind, MD, PhD and her research team at the University of Wisconsin-Madison. It allows for rankings of neighborhoods by socioeconomic status disadvantage in a region of interest (e.g. at the state or national level). It includes factors for the theoretical domains of income, education, employment, and housing quality. It can be used to inform health delivery and policy, especially for the most disadvantaged neighborhood groups.
Ethical Allocation Framework
Ethical Allocation Framework

• Pros
  - Relatively easy to implement across healthcare systems – uniform framework ensures consistency
  - Meets the Commonwealth’s expectations for health equity

• Cons
  - Requires data to implement
    - Number of patients expected versus quantity of treatment resources on-hand/expected
Future opportunities for ethical allocation

• Vaccine planning
  ▶ Discussion on a weighted formula model
    ▶ May be difficult to implement given data requirements/unknowns
  ▶ Discussion on targeted distribution (macro level)
    ▶ Provide vaccine first to communities with a higher ADI
Future opportunities for ethical allocation

- Future improvements to Crisis Standards of Care framework
  - Ensure that overarching framework includes information to allow for rapid implementation of this and other plans for ensuring ethical allocation of scarce resources
Questions?

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Questions?
Upcoming Webinars

Webinar #3: People Experiencing Homelessness  
Thursday, November 19, 2020 | 2:00 – 3:30 PM ET

Webinar #4: People Who Are Incarcerated  
Thursday, December 17, 2020 | 2:00 – 3:30 PM ET

Register at: https://rb.gy/ejyksq