# Worcester Public School Flu Clinics

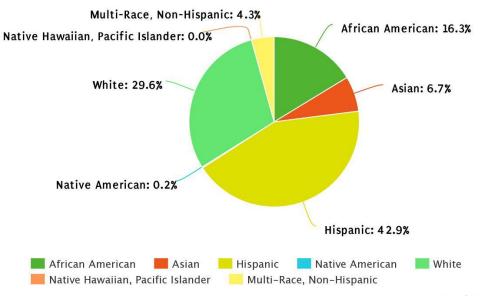
MS2s: Maimuna Ahmad, Andrea Chin, Ben Maxner, Mani Raman, Sina Salimy, Megan Yuen Advisor: Dr. Heather-Lyn Haley

## **Population of Focus**

## 25,415

Worcester Public Schools student enrollment 2018-2019

#### Enrollment by Race/Ethnicity 2018-2019



meta-chart.com

## Students in Public School (youths age ~4-18+) are a key population for healthcare focus



"Healthy students are better learners, and academic achievement bears a lifetime of benefits for health."

- personal, community, societal health
- understanding of physical, mental and social health
- promoting healthy eating and physical activity
- understanding nutrition and environment

## Many social/structural factors influence the health of the student population

- Family Health
- Food and water security
- Insurance coverage
- Parental/guardian involvement in medical management
- Neighborhood safety
- Physical activity
- Access to healthcare services
- Education



#### **Medical**:

- Asthma
- Contraception/STI/pregnancy
- Mental and behavioral health
- Acne and skin disorder
- Chronic illnesses obesity, diabetes
- Disorders of puberty
- Menstrual disorders
- Substance abuse

#### **Social:**

- E-cigarettes and vaping
- Peer pressures
- Bullying
- Image/body insecurities
- Alcohol and drug use
- Unsafe driving

 $\frac{\text{https://www.umassmemorialhealthcare.org/umass-memorial-medical-center/services-treatments/childrens-medical-center/services-we-provide/adolescent-medicine}{\text{https://www.hhs.gov/ash/oah/tag/why-tag/adolescent-health-risks-and-protective-factors/index.html}}$ 

https://www.uhhospitals.org/-/media/Images/Science-and-Compassion-Blog/UTR/utr-s18-4-big-myths-about-asthma.jpg

http://frf.rayseaman.com/wp-content/uploads/2018/09/Sex-Ed-United-States.png

https://www.npr.org/assets/img/2015/02/20/aces-1 custom.jpg



incy alth

liabetes

- Menstrual disorders
- Substance abuse

#### **Social:**

- E-cigarettes and vaping
- Peer pressures
- Bullying
- Image/body insecurities
- Alcohol and drug use
- Unsafe driving

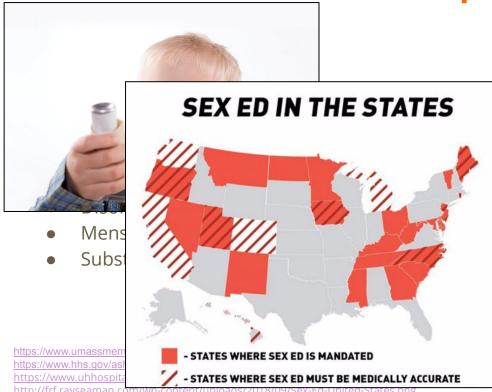
https://www.umassmemorialhealthcare.org/umass-memorial-medical-center/services-treatments/childrens-medical-center/services-we-provide/adolescent-medicine https://www.hhs.gov/ash/oah/tag/why-tag/adolescent-health-risks-and-protective-factors/index.html

https://www.uhhospitals.org/-/media/Images/Science-and-Compassion-Blog/UTR/utr-s18-4-big-myths-about-asthma.jpg

http://frf.rayseaman.com/wp-content/uploads/2018/09/Sex-Ed-United-States.png

https://www.npr.org/assets/img/2015/02/20/aces-1 custom.jpg

https://s4.reutersmedia.net/resources/r/?m=02&d=20191014&t=2&i=1440781237&r=LYNXMPEF9D19S&w=1280



#### **Social:**

- **E-cigarettes and vaping**
- Peer pressures
- Bullying
- Image/body insecurities
- Alcohol and drug use
- Unsafe driving

ens-medical-center/services-we-provide/adolescent-medicine

https://www.npr.org/assets/img/2015/02/20/aces-1 custom.jpg

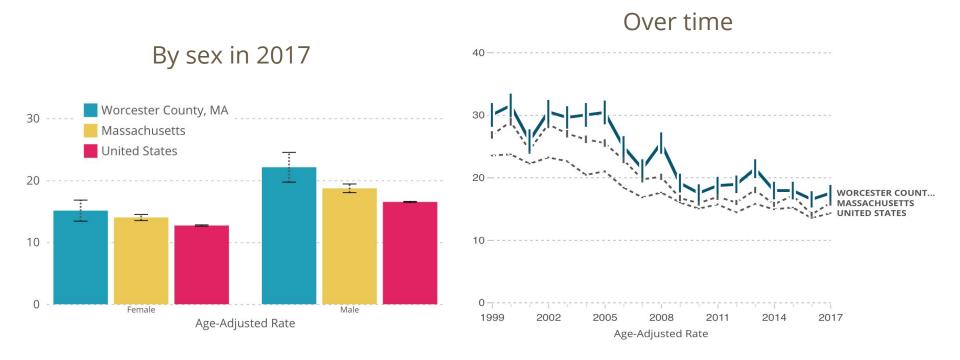
https://s4.reutersmedia.net/resources/r/?m=02&d=20191014&t=2&i=1440781237&r=LYNXMPEF9D19S&w=1280



https://s4.reutersmedia.net/resources/r/?m=02&d=20191014&t=2&i=1440781237&r=LYNXMPEF9D19S&w=1280



## Influenza & Pneumonia Deaths per 100k



## Students in Public School (youths age ~4-18+)

The American Academy of Pediatrics (AAP) recommends that all children ages 6 months and older are vaccinated for influenza for the 2019-2020 season, preferably by the end of October, with either the flu shot or the nasal spray vaccine.

## **Health Advocacy**

## School-Based Health Centers (SBHC) promote health, resilience and academic success

Edward M Kennedy Community Health Center

- Licensed health centers staffed by interdisciplinary team of medical and mental health professionals
- 11,000 children served
- Improve access and quality care for youth particularly in hard-to-reach and underserved populations
- Medical examinations, nutrition education, immunizations, behavioral health services, sports medicine, treatment for acute and chronic illnesses

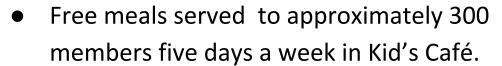
- Require a signed parental consent form
- Do NOT replace school nurses; NPs and PAs collaborate with school staff



## Boys and Girls Club of Worcester increases access to sports and recreation, nightly meals, college prep, and employment programs









 100% of the Club's Classes of 2016, 2017, and 2018 graduated high school and were accepted to college



 80% of the Club's teens complete job readiness programs and apply for either Club or outside jobs/internships



## **Interprofessional Teams of Care**

#### **Nurses, Pharmacists, Therapists, Administrators**

#### Interprofessional Team:

- 1. Nurses: RNs, NPs
- 2. Pharmacists
- 3. Therapists
- 4. Administrators
- 5. Physicians
- 6. Educators
- 7. Social Workers
- 8. PTA

- Level of involvement is variable and includes injections for children, paperwork review, child soothing and comforting techniques, etc.
- Most people serve multiple roles
- Collaboration between team members:
  - Administrators: need healthy students in order to best serve education
  - Nurses: serve clinical/medical needs
  - Therapists: focus on social and psychological factors

#### **Nurses, Pharmacists, Therapists, Administrators**

How/Where is care provided for the population members?

- Nurses: schools, SBHCs, medical centers
- **Pharmacists**: Local pharmacies
- **Therapists**: schools, medical centers
- Administrators: schools
- **Physicians**: medical centers
- **Educators**: schools
- Social Workers: schools, medical centers

Strengths and limitations of the team:

- Allow a student to be served holistically
- Everyone has a different area of expertise
- Many moving parts, so sometimes hard to communicate
- Potential conflicts of interest

#### **Future Team Interactions**

- As future clinicians, we will be working in teams to deliver multidisciplinary care to our patients
- Everyone has different strengths and areas of expertise
- It is important to consult other providers and to know who to consult and when to do so



https://micmrc.org/topics/patient-centered-medical-home-and-team-based-care

## Service/Experiential Learning

#### Flu Clinics for Worcester Public Schools



#### **Activities Included:**

- Checking consent forms to assess eligibility
- Overseeing an interprofessional team at 24 clinics
- Administering over 1500 vaccinations as of 10/31/2019 (just 4 days of clinics)
- Child soothing and distracting
- Educating students about the importance of health (and herd immunity!)

#### **Needs Addressed:**

- Overall health of the Worcester community
  - Increase herd immunity
- Access to vaccinations:
  - Done in the schools during the actual school day
  - Parents do not need to be present
  - Consent forms
     printed in 6 different
  - No insurance needed

#### • Statistics:

- immunization rates before and after the flu clinics
- Population that is under-insured
- Inspire children of lower income backgrounds to learn about careers in healthcare
  - Demographics of medical community does not match that of the population it serves

- **Collaboration** amongst the many affiliated medical centers and colleges in the area:
  - MCPHS
  - QCC Nursing
  - UMass
  - Fitchburg State



http://nymag.com/strategist/article/best-kids-doctor-kits-amazon.html

# ~1750

Vaccines administered in the first week

with

~1200

Consents for Week 2

Number of Students Vaccinated at WPS School Flu Vaccination Clinics (2015-18): 2015: 1179 2016: 1175 2017: 1174 2018: 2243

#### **What We Learned:**

- Worcester is a HUGE city
- Rich diversity of the Worcester population
- Many language barriers
- Large underserved community
  - Requires many moving parts to engage families in the flu clinics
- Vast differences amongst different age groups
- Great differences amongst the numerous WPS



https://i.pinimg.com/originals/50/c4/c7/50c4c716c6591ce2f5c2983ff91ea19b.jpg

## Acknowledgements

### Thank you!

Worcester Public Schools Nursing Administration (Dr. Debra

McGovern, Catherine Perry, Diane Cowes, Kristin McFarland)

Worcester Division of Public Health (Pat Bruchmann)

**UMass Medical School** (Dr. Beverly Nazarian, Dr. Heather-Lyn Haley, Michelle Shabo MS3)

**UMass Memorial** Community Relations (Kim Reckert); Child Life (Kendra Frederick); Diversity and Inclusion (John Trobaugh); Professional Development (Dr. Robert Milner)

**Edward M. Kennedy Community Health Center** (Courtney Pelley) **School Based Health Centers** - Burncoat Middle & High School (Robynn Eisley), Worcester Technical High School (Jamie Kerr), North High School (Bronwyn Alfred)

Central Community Branch YMCA

Boys and Girls' Club of Worcester YouthConnect (Judi Kirk)

Worcester State University (Dr. Lori Dawson)

Worcester Addresses Childhood Trauma (ACTs) (Amy Ebbeson)



















## **Questions?**

### (Presentation Guidelines)

- Peer and community learning session with 10-minute oral presentations that
- Use data to describe and characterize the population that was the focus of the team's work.
- Share key points gleaned from experience in community.
- Discuss lessons learned through interprofessional exposure and service activity.
- Explain actual and potential advocacy strategies relevant to improving a population's health, highlighting roles and responsibilities for various actors/sectors doing this work.

## **Suggestions**

fix numbers