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Elena P. Martel

University of Vermont

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Healthcare Gaps in Migrant Farmer Populations

Elena Martel

Colchester Family Medicine,
November 2020

Project Mentor: Ben Clements, MD



Various healthcare gaps identified in migrant farmer populations

- Preventative care, including routine vaccinations such as the influenza vaccine
- Continuity of care for chronic conditions
- Injury/ occupational hazards
- Mental health services
- *Barriers to care:*
 - Lack of insurance
 - Education about US healthcare system
 - Lack of transportation
 - Non-English speaking
 - Fear of immigration detainment when traveling for care



Public Health Cost

- Vaccines for this initiative were provided through Vermont Department of Health.
- Influenza creates a major economic burden on the US healthcare system, estimated to be \$11.2 billion annually due to direct and indirect costs.²
- Unique cost considerations:
 - Gas cost for traveling physicians, nurses, students
 - Cost of gloves, antibacterial wipes, hand sanitizer, masks for providers administering vaccines.
 - Cost of health care “kits” including Vitamin D supplements, hand sanitizer, masks, gloves, condoms, OTC medications (e.g. Bengay).
 - Health kits provided by Bridges to Health, and cost \$10-15 dollars per kit, depending on needs addressed and supplies provided.



Image: CDC

Community Perspective

Nelly Arabinar, RN

Bridges to Health

- Identified no-cost and sliding scale clinics available to migrant farmers, but described lack of transportation and fear of ICE detainment as major deterrents to traveling to access healthcare.
- Described this population as particularly susceptible to viral infection due to close living quarters.

Ben Clements, MD

Colchester Family Medicine

- “We actually just ordered 30 more flu vaccines from the state” for continued demand
- Plans to create 4th year medical student Global Health elective aimed toward providing care to this population.



Intervention and Methodology

- Alliance developed with Bridges to Health, an organization aimed toward meeting the needs (social, educational, health-related) of migrant farmer populations in the state of Vermont. ¹
- Over 250 influenza vaccines provided by the Vermont Department of Health.
- Traveled throughout Vermont to various farms to administer flu vaccines to migrant farmers (and some farm-owners).



Results/ Response

- 256 vaccines provided, 30 more ordered for continued demand.
- Most migrant farmers approached regarding a flu vaccine asked to be immunized.
- We were frequently asked about the availability of a Covid vaccine, indicating clear interest in immunization once vaccines become available.

Evaluation of Effectiveness and Limitations

- Effectiveness of this project could be assessed by surveying farm workers to if any contracted the flu, comparing those who received vaccinations to those who did not.
- Formally surveying migrant farmers to assess understanding of vaccine efficacy, and desire to receive other type of immunizations (e.g. Covid).
- Per Ting et al (2017), “Vaccination is cost-effective in most target groups. Results are sensitive to target population, herd immunity, and program design.”³
 - Herd immunity is particularly important in populations that live in close quarters, such as migrant farmers.

Limitations

- Vaccines were limited to farmers we were able to contact in the moment (this excluded those sleeping due to night shifts, those working on different parts of the farm).
- Limited funding creates the need to budget carefully when creating “care packages” that include OTC medications, medical supplies, etc.

Future directions...

- Annual clinics to provide flu vaccines to migrant farmers
- Implementing this model for Covid immunization as vaccines become approved & available
- 4th year medical student elective (October-November) specifically aimed at coordinating healthcare needs for migrant farmer populations
 - Course is currently being developed by Dr. Clements, and pending academic course approval



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- Ting EE, Sander B, Ungar WJ. Systematic review of the cost-effectiveness of influenza immunization programs. *Vaccine*. 2017;35(15):1828-1843. doi:10.1016/j.vaccine.2017.02.044