# Influenza Vaccine Offered to Homeless Patients in a Central London Emergency Department

Dr Kitty Acheson HST Emergency Medicine

Dr Laura Hunter Consultant Emergency Medicine & Clinical Toxicology

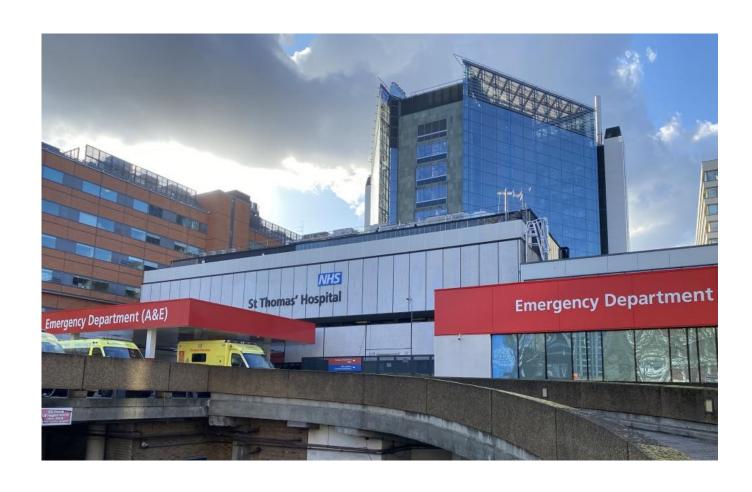
Guy's & St Thomas' NHS Foundation Trust, London

#### **Aims**

- ► To offer all patients in our emergency department registering as 'no fixed abode' (NFA) the influenza vaccine between the winter months of November and February
- ► To see if this was a feasible health intervention that could be carried out in our emergency department
- ➤ To ascertain what challenges may occur and how we can overcome these in order to make this a sustainable health intervention

#### St Thomas' Emergency Department

- St Thomas' hospital is a teaching hospital situated in central London
- We see over 175,000 attendances per year<sup>1</sup>
- On Average 450-550 patients every 24 hours
- So we are busy!



# St Thomas' Hospital

- Situated in Lambeth borough and next door to Westminster borough
- Estimated rough sleepers<sup>2</sup> on a single autumn night in 2019 in:
  - > Lambeth: 43
  - Westminster: 333

- Number of rough sleeper patients seen annually in our emergency department<sup>1</sup>:
  - **>** 2018: 753
  - > 2019: 717

#### Homeless Health Care at St Thomas'

- Inpatient homeless health team
- ► Homeless health boxes¹ in the emergency department:
  - > Safe discharge checklist for homeless patients
  - Homeless information by borough
  - > Maps to homeless day centres
  - > Maps to specialist homeless GP surgeries
  - Local rough sleepers' magazine ('The Pavement')

# So Why Offer the Influenza Vaccine to Homeless Patients?

- Homeless people are at increased risk of dying from:
  - > HIV
  - Hepatitis
  - Chronic lower respiratory diseases
  - Alcohol-related disease<sup>3</sup>
- Both the World Health Organisation and the European Centre for Disease Prevention and Control identify:
  - All persons with chronic medical conditions as an at-risk group for developing severe disease if they contract influenza
  - Recommends influenza vaccination each year for this group<sup>4,5</sup>





# National Institute for Health and Care Excellence

# Flu vaccination: increasing uptake

**Expert testimony** 

NICE guideline NG103

Expert paper 3: homeless outreach

22 August 2018

Final

Developed by Public Health – Internal Guideline Development team



### **Initial Considerations**

#### Costs<sup>7</sup>:

Quadrivalent: £8.00

> Trivalent: £9.79

What if patient's accidently receive two doses over the winter period?

More paper work for doctors and nurses to fill out

### <u>Methods</u>

- Influenza vaccine offered to all homeless patients attending St Thomas' emergency department between:
  - November 2018 & February 2019
  - November 2019 and February 2020
- ► The top 18 most frequent attenders registered as NFA were identified from 392 frequent attenders
- ► An electronic 'alert' was placed on these patients as a reminder to doctors to offer an influenza vaccine

A paper flow chart was developed to assist doctors in offering the flu vaccine

#### Flu Vaccination for Homeless Patients attending ED- WINTER 2018/19 Patient Name: 1. Is the patient homeless? Yes Hospital No: 2. Flu vaccine received 2018/9? Or Patient sticker (→Q3) (Document in notes. No further action required 3. Do they have any contra-indication to the flu vaccine? No contraindications to flu vaccine Declined Offer flu vaccination: Accepted 4. Patient < 65 years old? - Prescribe: Quadrivalent Influenza Vaccine (available in ED) - Dose: 0.5ml - Route: IM - Ensure batch number, expiry date and injection site are documented 5. Is the patient > 65 years? - Prescribe: Trivalent Influenza Vaccine (order from pharmacy) - Dose: 0.5ml - Route: IM - Ensure batch number, expiry date and injection site are documented All patients: · Provide information leaflet. Trivalent Influenza Vaccine (order from pharmacy), · Scan flow chart to symphony with patient's notes. · Please place a patient sticker in the yellow book in the Major's omnicell room. Inform GP flu vaccine ADMINS

### Results: winter 2018-2019

- ▶ 344 patients registered as NFA between Nov 2018 & Feb 2019
- ▶ 13 homeless patients were successfully vaccinated
- ► Vaccinating **3.8**% of NFA attendances
- ▶ Out of the 18 frequent attenders identified, 6 patients attended the department during this period
- ► However, none of these 6 patients received the vaccine

# Key 3- Influenza Vaccination for homeless patients.

#### Why?

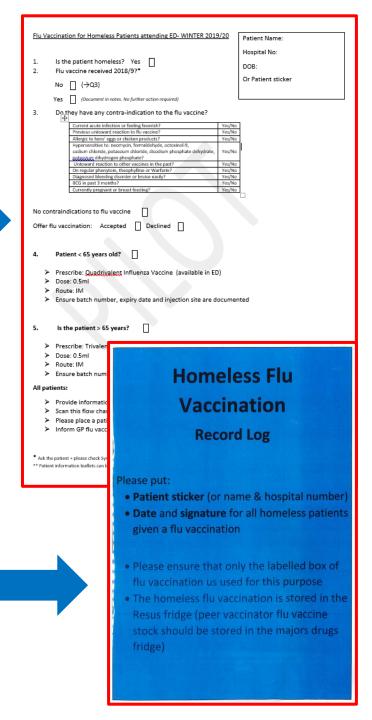
In 2017, 597 homeless people died in England & Wales<sup>8</sup> with the average age of death for a homeless male being 47 years and 43 years for a homeless female.<sup>3,9</sup>

#### What?

Homeless people are at increased risk of influenza and predisposed to severe complications due to high rates of chronic disease. NICE recommends influenza vaccination in this underserved group of patients.<sup>6</sup> Between 2017-2018, 31,924 homeless patients attended Emergency Departments across England,<sup>9</sup> the Emergency Department therefore provides an innovative opportunity to offer relevant vaccinations in this hard to reach population.

#### How?

- Offer flu vaccination to all patients registering as NFA.
- Check for prior vaccination this winter.
- Use flow chart (found with record log book on top of resus fridge) to guide you through contra-indications and prescribing.
- Place a patient sticker in the homeless flu vaccination record log book.
- Put flow chart in with the patient's notes.
- Inform GP in discharge letter.
- (NB: homeless flu vaccination store in resus fridge, staff vaccination store in majors fridge).



### Results: winter 2019-2020

▶ 331 patient's registered as NFA between the months of November 2019 & February 2020

▶ 14 patient's vaccinated

► Vaccinating **4.2**% of NFA attenders

Patient factors Departmental factors Busy department Capacity to consent Contra-indications Non-emergency care Vaccine beliefs Barriers to **Vaccination** More paperwork Unaware of initiative/ Education **New starters** Locum/bank Staff Alert system **Staff Factors** Methods

## **Staff Survey**

- ▶ 70% staff surveyed were aware of the initiative
- > 20% staff surveyed had offered a homeless patient a flu vaccine
- ▶ 100% of staff said they did not see it as a burden of another form to fill out
- > 75% of staff said they saw homelessness as a medical issue
- Out of the staff who had offered a patient flu vaccine:
  - > 100% said it was an easy process
  - > 100% said it wasn't time consuming

"Homeless people are less likely to attend a GP clinic/have less access to healthcare"

"Less likely to engage with primary care/other healthcare providersgood opportunity to offer in ED."

"More susceptible patients, often have no GP, so opportunistic vaccination seems sensible."

"Good preventative strategy."

"Prevent morbidity & mortality, often not linked in with primary services, so may not have another opportunity."

"Poor access to healthcare and vulnerable patients."

## Looking Forward & Recommendations

- Challenges identified
- Certain factors unable to change
- Ways to overcome these

- Remind staff more regularly
- Email reminders for staff
- Discuss at induction for new rotations
- Posters in the Emergency department
- Education little and often
- Offer it on arrival
- Make it part of the triage process
- ► Alert on symphony for all NFA patients
- Leaflets to be offered to homeless patients

#### Conclusion

- ▶ Between 2017-2018, **31,924** homeless patients attended Emergency Departments across England<sup>9</sup>
- The Emergency Department therefore provides an innovative opportunity to offer relevant vaccinations in this hard to reach population
- Despite low numbers, the vaccination of patients over two winters demonstrates that this is a feasible health intervention in the Emergency Department
- Easy to replicate in other emergency departments
- Raising awareness among staff about our homeless health population and their specific needs
- Minimal costs involved
- Good addition to other homeless interventions available in our emergency department

#### References

- 1. Gallaher C, Herrmann S, Hunter L, et al. The St Thomas' Hospital Emergency Department Homeless Health Initiative: improving the quality, safety and equity of healthcare provided for homeless patients attending the ED. BMJ open Quality 2020;9:e000820.doi: 10.1136/bmjoq-2019-000820.
- 2. Ministry of Housing, Communities & Local Government. *Rough sleeping snapshot in England: autumn 2019*. Gov. Avaliable from: <a href="https://www.gov.uk/government/publications/rough-sleeping-snapshot-in-england-autumn-2019/rough-sleeping-snapshot-in-england-autumn-2019">https://www.gov.uk/government/publications/rough-sleeping-snapshot-in-england-autumn-2019/rough-sleeping-snapshot-in-england-autumn-2019 [accessed 04/03/2020].</a>
- 3. Thomas B. Homelessness Kills: An Analysis of the mortality of homeless people in early twenty-first century England. Available from: <a href="https://www.crisis.org.uk/media/236799/crisis\_homelessness\_kills\_es2012.pdf">https://www.crisis.org.uk/media/236799/crisis\_homelessness\_kills\_es2012.pdf</a>. [Accessed: 6<sup>th</sup> June 2019].
- 4. World Health Organisation regional office for Europe. Vaccination. Available from: <a href="http://www.euro.who.int/en/health-topics/communicable-diseases/influenza/vaccination">http://www.euro.who.int/en/health-topics/communicable-diseases/influenza/vaccination</a>. [Accesses 6<sup>th</sup> June 2019].
- 5. European Centre for Disease Prevention and Control. Risk groups for severe influenza. Available from: <a href="https://ecdc.europa.eu/en/seasonal-influenza/prevention-and-control/vaccines/risk-groups">https://ecdc.europa.eu/en/seasonal-influenza/prevention-and-control/vaccines/risk-groups</a>. [Accessed 6<sup>th</sup> June 2019].
- 6. National institute for Health and Care Excellence (NICE), Flu Vaccination: increasing uptake: NICE Guideline [NG 103]. 2018. Avaliable from: <a href="https://www.gov.uk/government/publications/rough-sleeping-snapshot-in-england-autumn-2019/rough-sleeping-snapshot-in-england-autumn-2019/rough-sleeping-snapshot-in-england-autumn-2019">https://www.gov.uk/government/publications/rough-sleeping-snapshot-in-england-autumn-2019/rough-sleeping-snapshot-in-england-autumn-2019</a>. [Accessed 9<sup>th</sup> January 2020].
- 7. National institute for Health and Care Excellence (NICE), Influenza Vaccine. Available from: <a href="https://bnf.nice.org.uk/medicinal-forms/influenza-vaccine.html">https://bnf.nice.org.uk/medicinal-forms/influenza-vaccine.html</a> [Accessed 27th February 2020]
- 8. Office for National Statistics. Deaths of homeless people in England and Wales local authority estimates: 2013 to 2017. Available from: <a href="https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsofhomelesspeopleinengland-andwales/localauthorityestimates2013to2017">https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsofhomelesspeopleinengland-andwales/localauthorityestimates2013to2017</a>. [Accessed 6th June 2019].
- 9. British Medical Association, 2019. Streets of Shame, Homelessness and the NHS a tome of tragedies. Available from: <a href="https://www.bma.org.uk/features/streetsofshame">https://www.bma.org.uk/features/streetsofshame</a>. [Accessed 6<sup>th</sup> June 2019]
- 10. Email from Sam Douthwaite to Laura Hunter 30 April 2019 16:41
- 11. Wilson W, Barton C. *Rough Sleeping (England)*. House of Commons Library. Report number 02007, 2019. Available from: <a href="https://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN02007#fullreport">https://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN02007#fullreport</a>. [Accessed 6<sup>th</sup> June 2019].
- 12. Hewett N.(ed.) Standards for commissioners and service providers. Faculty for Homeless and Inclusion Health. Version 3.1, 2018.

### With thanks

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