flu fighter conference
2019
#fluconf19
Welcome
Michelle Wayt
Assistant Director, NHS Employers

#fluconf19
The seven elements and flu vaccination uptake

Nathan Critchlow @n_critchlow, University of Stirling @StirUni

#fluconf19
The seven benchmarks good practice: What are they, how are they used, and do they work?

Dr. Nathan Critchlow
Institute for Social Marketing, University of Stirling
Flu Fighters Conference – 25th March 2019

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Improving uptake of seasonal influenza vaccination by healthcare workers: Implementation differences between higher and lower uptake NHS trusts in England

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Abstract. Background: Uptake of influenza vaccination by healthcare workers (HCWs) may be related to how influenza campaigns are implemented. This study explores differences in annual influenza campaign implementation between NHS trusts (healthcare organisations) with higher and lower vaccine uptake.

Methods: A cross-sectional survey with influenza campaign staff in 2016/2017 in 87 NHS trusts in England. The survey measured vaccination policy and uptake target, staff involvement, accessibility, use of peer vaccinators, communication strategies, strategies to address HCW concerns, use of incentives, and management support. The analysis considered implementation differences between higher (≥ 75%) and lower (< 75%) uptake trusts.

Results and Conclusions: Higher uptake trusts were more likely to set higher uptake targets,
What factors influence flu vaccination uptake in healthcare staff?

**Individual factors:**
- Demography
- Attitudes about vaccine
- Knowledge of vaccine safety and perceived risk

**Organisational factors:**
- Vaccination policy in trust
- Social and community norms about vaccination among healthcare staff

**Practical factors**
- Availability and access of vaccine
- Communications and mythbusting
- Rewards or incentives

Vaccination uptake among healthcare staff
Our study


• Responses from 87 individual trusts (33% of all trusts) and 72 completed survey in full.

• No difference in responding and non-responding trusts (e.g. number of healthcare staff involved in direct patient care or uptake rate).

• 57% Acute Trusts, 25% Mental Health, 12% Community and 6% Ambulance. No area teams responded.

• Split sample into either ‘higher uptake’ (met 65% CQUIN minimum target; \( n = 57\% \)) and ‘lower uptake’ (did not meet 65% CQUIN minimum target, \( n = 43\% \)).
What did we measure?

The survey was designed to capture a comprehensive overview of each trust’s flu campaign in 2016/2017 flu season, and whether the Flu Fighter benchmark criteria of good practice helped to explain differences between higher and lower uptake Trusts?

The Seven Key Benchmarks of Good Practice

1. ‘Balanced flu team’ – Multidisciplinary team co-ordinated by a central flu lead.
2. ‘Support from board to ward’ – Support at every level in the organisation.
3. Communication – Keep staff updated throughout the campaign.
4. ‘Mythbusting’ – To challenge misconceptions about vaccine.
5. Accessibility – Making it easy to get the vaccine.
6. Peer vaccinators – Make it easy to deliver vaccine in all staff groups.
7. Rewards and incentives – A small treat can have a big impact.
RESULTS
## Benchmark One - Having a balanced flu team.

| Staff groups who helped to plan, promote, and deliver the flu vaccine in 2016/2017 | Type of Trust |
|---|---|---|
| | Overall | Lower uptake | Higher uptake |
| **Variable** | Valid n\(^1\) | % | % | % |
| Communications Teams | 87 | 100 | 100 | 100 |
| Occupational Health Team | 85 | 94 | 95 | 94 |
| Executive or Senior Managers | 87 | 91 | 87 | 94 |
| **Department or Line Managers** | 87 | 85 | 76 | 92 |
| Flu Fighter Team | 76 | 84 | 76 | 91 |
| Frontline Health Care Staff | 87 | 84 | 84 | 84 |
| Infection Control Teams | 87 | 83 | 81 | 84 |
| Admin Groups | 81 | 67 | 67 | 67 |
| HR | 86 | 66 | 67 | 66 |
| **IT teams** | 83 | 53 | 37 | 65 |
| **Estates and facilities teams** | 83 | 34 | 20 | 44 |
| Volunteers | 76 | 24 | 18 | 28 |
| Students | 76 | 15 | 15 | 14 |

**Note:**

\(^1\) Excludes N/A or missing responses. Percentages are valid % (i.e. excl. missing or N/A responses).

\(^2\) Based on Chi Square or Fisher’s Exact 2x2 comparisons (Yes/No v Higher/Lower).
Benchmark Two - Support from ‘the board to the ward’

Perceived importance of flu vaccine uptake to executive & senior management in 2016/2017

...and to line and department managers in 2016/2017
Benchmark Three - Comprehensive communications and ‘feedback loops’

Average number of communication channels to feedback information about uptake

All forms of communication channel
(max: n = 19)

Direct communication channel
(max: n = 5)

Electronic communication channel
(max: n = 7)

Ads and promotion
(max: n = 7)

Note: Between group tests based on Chi-Square (Higher/Lower vs. Yes/No)
## Benchmark Four – ‘Mythbusting’ activities

<table>
<thead>
<tr>
<th>Mythbusting activity</th>
<th>Overall (n = 77)</th>
<th>Lower uptake (n = 33)</th>
<th>Higher uptake (n = 44)</th>
<th>Sig¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided facts in promotional materials</td>
<td>90%</td>
<td>91%</td>
<td>89%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Messages from Flu Fighter Champions</td>
<td>78%</td>
<td>76%</td>
<td>80%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Messages from senior management</td>
<td>68%</td>
<td>61%</td>
<td>73%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Offered concern contact service</td>
<td>51%</td>
<td>55%</td>
<td>48%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Testimonials</td>
<td>42%</td>
<td>46%</td>
<td>39%</td>
<td>n.s.</td>
</tr>
<tr>
<td>E-learning resources</td>
<td>35%</td>
<td>36%</td>
<td>34%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Mythbusting quizzes or games</td>
<td>22%</td>
<td>18%</td>
<td>25%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Q&amp;A sessions</td>
<td>17%</td>
<td>9%</td>
<td>23%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Education seminars or workshops</td>
<td>16%</td>
<td>18%</td>
<td>14%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Mandatory staff training</td>
<td>16%</td>
<td>21%</td>
<td>11%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>6%</td>
<td>9%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1%</td>
<td>0%</td>
<td>2%</td>
<td>n.s.</td>
</tr>
<tr>
<td><strong>Cumulative mean used by trusts (SD)</strong></td>
<td>4.42 (1.84)</td>
<td>4.36 (1.80)</td>
<td>4.45 (1.90)</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Note:

¹ Based on Chi Square or Fisher’s Exact 2x2 comparisons (Yes/No v Higher/Lower) or, for cumulative number used, independent samples t-test.
Benchmark Five – Accessibility of the vaccine, by method of delivery

| Access methods used by Trusts to deliver the flu vaccine in 2016/2017 | Type of trust | Overall | Lower uptake | Higher uptake | Sig
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods of vaccine access</td>
<td>Valid n¹</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Routine staff events</td>
<td>86</td>
<td>99</td>
<td>92</td>
<td>100</td>
<td>n.s.</td>
</tr>
<tr>
<td>Peer Vaccinators</td>
<td>85</td>
<td>97</td>
<td>100</td>
<td>94</td>
<td>n.s.</td>
</tr>
<tr>
<td>OHT³ - Drop In</td>
<td>85</td>
<td>95</td>
<td>97</td>
<td>94</td>
<td>n.s.</td>
</tr>
<tr>
<td>Mobile or Visiting Service</td>
<td>85</td>
<td>94</td>
<td>91</td>
<td>96</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pop up clinics</td>
<td>84</td>
<td>91</td>
<td>82</td>
<td>96</td>
<td>n.s.</td>
</tr>
<tr>
<td>Alt. or extended clinic hours</td>
<td>84</td>
<td>91</td>
<td>83</td>
<td>96</td>
<td>n.s.</td>
</tr>
<tr>
<td>OHT³ - By appointment</td>
<td>81</td>
<td>82</td>
<td>77</td>
<td>85</td>
<td>n.s.</td>
</tr>
<tr>
<td>Flu Fighter Events</td>
<td>83</td>
<td>74</td>
<td>69</td>
<td>77</td>
<td>n.s.</td>
</tr>
<tr>
<td>Voucher for external purchase</td>
<td>70</td>
<td>33</td>
<td>37</td>
<td>32</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Note:
¹ Excludes N/A or missing responses. Percentages are based on valid % (i.e. excl. missing or N/A responses).
² Based on Chi Square or Fisher’s Exact 2x2 comparisons (Method used Y/N v Higher/Lower).
³ OHT = Occupational Health Team.
Benchmark Five – Accessibility of the vaccine to staff group without significant disruption to their day

<table>
<thead>
<tr>
<th>Staff groups</th>
<th>Valid n¹</th>
<th>Overall %</th>
<th>Lower uptake %</th>
<th>Higher uptake %</th>
<th>Sig²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied and health professionals</td>
<td>82</td>
<td>90</td>
<td>82</td>
<td>96</td>
<td>n.s.</td>
</tr>
<tr>
<td>Bank nurses or agency staff</td>
<td>78</td>
<td>83</td>
<td>74</td>
<td>89</td>
<td>n.s.</td>
</tr>
<tr>
<td>Dentists</td>
<td>45</td>
<td>80</td>
<td>75</td>
<td>83</td>
<td>n.s.</td>
</tr>
<tr>
<td>Doctors</td>
<td>80</td>
<td>91</td>
<td>82</td>
<td>98</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Midwives</td>
<td>51</td>
<td>94</td>
<td>80</td>
<td>100</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Nurses</td>
<td>80</td>
<td>91</td>
<td>82</td>
<td>98</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Paramedics and ambulance staff</td>
<td>25</td>
<td>76</td>
<td>88</td>
<td>71</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>73</td>
<td>95</td>
<td>90</td>
<td>98</td>
<td>n.s.</td>
</tr>
<tr>
<td>Remote staff</td>
<td>76</td>
<td>74</td>
<td>61</td>
<td>82</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Students</td>
<td>75</td>
<td>92</td>
<td>86</td>
<td>96</td>
<td>n.s.</td>
</tr>
<tr>
<td>Volunteers</td>
<td>70</td>
<td>89</td>
<td>81</td>
<td>93</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Note:
For the analysis the original response options were collapsed into binary categories (Yes staff group had easy vaccine access and No staff group did not have easy access to vaccine).

¹ Excludes N/A or missing responses. Percentages are based on valid % (i.e. excl. missing or N/A responses).
² Based on Chi Square or Fisher’s Exact 2x2 comparisons ( Ease of access Y/N vs. Higher/Lower).
Benchmark Six – Use of peer vaccinators

Between higher and lower uptake trusts, no difference in:

- Trusts using peer vaccinators
- Staff groups reached by peer vaccinators (see table).
- Incentives offered to staff to become peer vaccinators.

<table>
<thead>
<tr>
<th>Staff groups reached by peer vaccinators in 2016/2017</th>
<th>Overall</th>
<th>Lower uptake</th>
<th>Higher uptake</th>
<th>Sig²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Groups</td>
<td>Valid n¹</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Nurses</td>
<td>66</td>
<td>97</td>
<td>93</td>
<td>100</td>
</tr>
<tr>
<td>Allied and clinical health professionals</td>
<td>67</td>
<td>85</td>
<td>83</td>
<td>87</td>
</tr>
<tr>
<td>Midwives</td>
<td>40</td>
<td>85</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Doctors</td>
<td>62</td>
<td>81</td>
<td>76</td>
<td>85</td>
</tr>
<tr>
<td>Staff who work remotely</td>
<td>61</td>
<td>77</td>
<td>74</td>
<td>79</td>
</tr>
<tr>
<td>Line or department managers</td>
<td>67</td>
<td>76</td>
<td>70</td>
<td>81</td>
</tr>
<tr>
<td>Executive and senior managers</td>
<td>67</td>
<td>73</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td>Students</td>
<td>61</td>
<td>71</td>
<td>69</td>
<td>71</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>61</td>
<td>67</td>
<td>63</td>
<td>71</td>
</tr>
<tr>
<td>Paramedics or ambulance staff</td>
<td>22</td>
<td>55</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Dentists</td>
<td>37</td>
<td>51</td>
<td>47</td>
<td>55</td>
</tr>
<tr>
<td>Others</td>
<td>33</td>
<td>36</td>
<td>33</td>
<td>38</td>
</tr>
</tbody>
</table>

Note:
For the analysis the original response options were collapsed into binary categories (Yes group reached by peer vaccinators and No group not reached by peer vaccinators).

1 Excludes N/A or missing responses. Percentages are based on valid % (i.e. excl. missing or N/A responses).

² Based on Chi Square or Fisher’s Exact 2x2 comparisons (Group reached Y/N vs. Higher/Lower).
<table>
<thead>
<tr>
<th>Incentives offered to healthcare workers to receive flu vaccine in 2016/2017</th>
<th>Type of Trust</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall (n = 77)</td>
<td>Lower uptake (n = 33)</td>
<td>Higher uptake (n = 44)</td>
<td>Sig$^1$</td>
</tr>
<tr>
<td>Incentives offered to HCWs</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Entry to a prize draw</td>
<td>56</td>
<td>52</td>
<td>59</td>
<td>n.s.</td>
</tr>
<tr>
<td>Giveaways</td>
<td>51</td>
<td>39</td>
<td>59</td>
<td>n.s.</td>
</tr>
<tr>
<td>Food and drink vouchers</td>
<td>20</td>
<td>6</td>
<td>30</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>No incentives offered</td>
<td>20</td>
<td>24</td>
<td>16</td>
<td>n.s.</td>
</tr>
<tr>
<td>Collective prizes</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>n.s.</td>
</tr>
<tr>
<td>Free food during vaccination clinics</td>
<td>12</td>
<td>9</td>
<td>14</td>
<td>n.s.</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>n.s.</td>
</tr>
<tr>
<td>Charity related incentive</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>n.s.</td>
</tr>
<tr>
<td>Discounted or group vaccination</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>n.s.</td>
</tr>
<tr>
<td>Indicator of staff performance</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>n.s.</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>n.s.</td>
</tr>
<tr>
<td>Cumulative mean (SD)</td>
<td>1.73 (1.24)</td>
<td>1.39 (1.12)</td>
<td>1.98 (1.28)</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Note: $^1$ Based on Chi Square and Fisher’s Exact 2x2 comparisons (Yes/No v Higher/Lower) or, for cumulative mean, independent samples t-test
Do the findings support the seven benchmark criteria of best practice?

Practical implementation and design of Flu Campaign really matters!
Components of the following benchmarks (BM) explained differences between higher and lower uptake trusts:

BM1: Balanced flu team  
BM2: Support from board to the ward  
BM3: Comprehensive communications  
BM4: Making vaccine accessible to all staff groups  
BM7: Offering incentives to be vaccinated

Although no differences for BM4 (mythbusting) and BM6 (peer vaccinators) most higher and lower uptake trusts already using these – so don’t reduce emphasis!
Improving uptake of seasonal influenza vaccination by healthcare workers: Implementation differences between higher and lower uptake NHS trusts in England

Martine Stead a,*, Nathan Critchlow b, Rupal Patel c, Anne Marie MacKintosh a, Fay Sullivan b

a Institute for Social Marketing, Faculty of Health Sciences and Sport, University of Stirling, Stirling FK9 4LA, UK
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c Received 2 July 2018; received in revised form 3 September 2018; accepted 5 September 2018
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KEYWORDS
Influenza; Implementation; National health service; Flu; Vaccination

Abstract. Background: Uptake of influenza vaccination by healthcare workers (HCWs) may be related to how influenza campaigns are implemented. This study explores differences in annual influenza campaign implementation between NHS trusts (healthcare organisations) with higher and lower vaccine uptake.

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Results and Conclusions: Higher uptake trusts were more likely to set higher uptake targets,
Many thanks

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Co-authors:
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Fay Sullivan (NatCen)
Hayley Lepps (NatCen)
Rupal Patel (NatCen)
Question time

@n_critchlow, 
@StirUni

#fluconf19
Social care - bridging the gap

Jeanette Woods, Leeds Community Healthcare NHS Trust @LCH_IPC
and Kevin McGready, Leeds City Council @lccpublichealth

#fluconf19
Influenza vaccination for social care staff

Context

• 15th October NHS England - support for social care staff agreed

• In addition to social care staff, eligible in 2017-18, health and care workers offering direct patient care in the hospice sector were included

• To promote uptake in the wider cohort, NHS England – North (Yorkshire and the Humber) provided a one-off sum of £20,000 to Leeds City Council
The Campaign

1. Immunisation clinics
2. Baseline survey to support future influenza campaigns:
   - Do you currently record staff influenza vaccine uptake?
   - How many staff do you have?
   - Do you know how many staff had their influenza vaccine?
   - Do you record centrally resident influenza vaccine uptake?
   - How many residents do you have?
   - How many residents had their influenza vaccine?
   - Where do you receive information from regarding influenza vaccine availability?
3. Development and support of local communications for the 19/20 campaigns
Immunisation clinics

- 159 Care Homes, 12 Home Care providers and 3 Hospices
- 60 clinics were offered over a 2 week period - 19th and 26th November - a further 15 as a second opportunity in December
- A clinic booking form emailed - returns collated and a clinic schedule was developed
- 500 vaccines were ordered
- 23 clinics were booked including 2 Hospices and 2 Home Care providers (domiciliary services).
Results

- The clinics were successful in immunising 254 additional social care staff that had not accessed existing arrangements with GPs or pharmacies.
- 4 sites had two clinics
- All sites found the extra support to be effective and well received.
- Certificates of Achievement presented to all participating sites and signed by the Director of Adult Social Care and the Director of Public Health.
How do Leeds Community Healthcare NHS Trust and Leeds City Council join up?

- NHS vaccinating council staff for 5 years
- 2016/17 750 council staff vaccinated
- 2017/18 1000 council staff vaccinated
- 2018/19 1000 council staff vaccinated
- 2018/19 health and social care staff - eventually all council staff
- Feb 2019 144 additional council staff
What is the overall vaccines given by LCH NHS 2018/19?

End of January 2019 - 2980 total jabs given by NHS:

• 1960 NHS staff (with removed monthly denominators)
• 971 Council staff
• 144 Additional council staff
• 49 Other staff

• Over 1/3 of vaccines given to council
How was it promoted?

• Council - in house promotion
• Electronic clinic schedule shared with council teams
• Paper schedules shared around NHS bases and health centres (next year will include A3 posters)
• Myth busting advice attached to schedule leaflet
How was it delivered?

- Piggy backed onto LCH vaccination campaign
- Background work – ordering vaccines, cold chain storage, porta fridges, equipment, documentation, PDG, admin, data input/devices, printing, reaction management etc
- 7 reactions 2018/19 – 5 NHS, 1 Council and 1 care home
• Scheduled clinics Oct – November 2018 - in community integrated sites, NHS health centres and bases
• 6 dedicated LCC sites early November
• Group events i.e. conferences and team meetings
• Nurse walk arounds December - January 2019
• 2 add hoc full days in February 2019
• Class nurse(s) – Imms and vac trained and mandatory training completed
• Class nurse welcome session – walk through procedure and PDG sign off
• Group email communication
• Resource file – contact details, procedure, access to buildings, equipment check list etc
• Travel to clinics – porta fridges, trolley, devices, sharps bins and back packs
Plan for winter 2019/20

• Open to all council staff – Staff Welfare

• Estimated 3000 council staff vaccines

• Schedule - ½ - full day dedicated vaccination clinics – council premises
Question time

@LCH_IPC
@lccpublichealth

#fluconf19
Exhibition/networking
20 mins

#fluconf19
Motivation in healthcare worker’s flu vaccination decisions

Professor Gaëlle Vallée-Tourangeau @ProfGaelle and Karis Moon @KarisMoon_, Kingston University @KingstonUni @DARTresearch

#fluconf19
Motivation in healthcare workers’ flu vaccination decisions
Gaëlle Vallée-Tourangeau, professor of behavioural science
Karis Moon, PhD candidate
Outline

1. Motors of HCWs flu vaccinations. (Gaëlle)
2. Autonomous motivation. (Karis)
3. Practical recommendations (Gaëlle)
Why do we need behavioural decision research for flu vaccination in HCWs?

You have scientific evidence for...

Flu kills
You can spread flu to others with no symptoms
Flu vaccination lowers the risk of influenza infection

But what about...

The problem

The facts

How people make decisions
This article outlines the development and validation of a 9-item measure of cognitive empowerment towards flu vaccination (MoVac-flu scale) and an 11-item measure of cognitive empowerment towards vaccination advocacy.

Both scales were administered to 784 frontline NHS HCWs with direct patient contact between June 2014 and July 2015.
The problem with true facts and statistics

“I am needle phobic. I feel pressure from my manager to have it and I DO NOT WANT IT, IT IS MY CHOICE. RESPECT MY CHOICE AND DO NOT GUILT TRIP ME INTO HAVING IT.”

“I don’t really feel that it would benefit me.”

“I am healthy and don’t feel the need to get it.”

— MoVaC Survey respondents, June 2014 (emphasis added).

HCWs who did not take the flu vaccine were over 11 times more likely to mention the word “feel” in their choice justification compared to HCWs who got the flu jab.
This conception misses two key important drivers: emotional and social influences.

Beyond cognition: emotions and values

The MoVac-flu tool

9 validated questions to assess and monitor HCWs’ sentiments towards flu vaccination.

Flu vaccination is generally conceived as a decision under uncertainty driven by beliefs about the flu and flu vaccination.

One-unit increase in the MoVac score increases the odds of vaccine uptake by a factor of 9.78

Source: 784 frontline NHS HCWs with direct patient contact between June 2014 and July 2015.
Over to Karis
The role of autonomous motivation in HCWs’ flu vaccination decisions

Karis Moon, PhD candidate

Supervisors:
Prof. Gaëlle Vallée-Tourangeau,
Dr. Amélie Gourdon-Kanhukamwe & Dr. Anine Riege
Overview

WHY AUTONOMY IS IMPORTANT

WHICH FEELINGS MOTIVATE BEHAVIOUR

COMMUNICATION CAN IMPACT EMOTION

NEXT STEPS
Understanding Autonomy

- Better quality of behaviour.
- Increased persistence to engage.

Extrinsic Motivation:
- External Pressure
- Guilt avoidance
- Value Importance
- Personal belief

Intrinsic Motivation:

Amotivation

Not motivated

Self-determined
Flu Motivation

534 respondents
44% were NHS Nurses
95% had direct patient contact

Example Items

Personal belief
I personally believe that having the flu vaccine will protect my health.

Guilt avoidance
I would feel bad about myself if I didn't get the flu jab.

External Pressure
I want my line-manager to think I'm a good employee.
Flu Motivation

- Feeling of value: Yes > No > Hesitant
- Feeling of guilt: Yes > No > Hesitant
- Feeling of pressure: Yes > No > Hesitant
Promotional Health Messages can...

...increase negative attitudes
...reduce positive behavioural intentions
... provoke unintentional emotional responses

Reactance  
behavioural & cognitive effort to re-establish freedom.  
accompanied by emotion
Can the use of **autonomy-supportive language** reduce perceived threat to autonomy?

- **Autonomy Supportive**: Understand, Consider, Opportunity, Could, We
- **High Controlling**: Should, Duty, Ought, Responsibility, Must, Don’t Be
Next research steps

“You could be spreading flu right now”

“Don't let the ones you love become the ones you treat”

“Don't delay, book your flu jab early”
Back to Gaëlle
Beyond cognition: emotions and values

Active listening → Root cause analyses → Community mobilisation, public engagement, social marketing
Implications for practice
Implications for practice

Monitor and address context-specific drivers and barriers towards to cognitive empowerment

*Increase perceived value, impact, knowledge, and autonomy for vaccination decisions*

Focus efforts on line managers

*Remember that staff who knew their managers was vaccinated were 5 times more likely to be vaccinated themselves.*

Aim to increase perceived risk of flu infection

*But be mindful of selective exposure and avoidance of information contradictory to one’s beliefs.*
What can you do next?

Try our tool to promote conversations about, and monitor feelings of empowerment towards flu vaccination and let us know how it goes!

Point your phone camera towards this square to join the Vaccination @ work network mailing list and get access to the free pdf version of this tool.

Contribute to research and help Karis by sharing her research survey among your staff k1656343@kingston.ac.uk
Thank you!

Acknowledgments

Angus Thomson, Christina Klein & Laura Millet (Sanofi Pasteur, Lyon); Michael Watson (Valera; formerly Sanofi Pasteur, Lyon); Nick Sevdalis & Ana Wheelock (Kings College, London); Marianne Promberger (formerly Kingston University London); Christine Norton (King’s college London); Anine Riege (Kingston University London); Amélie Gourdon-Kanhukamwe (Kingston University London)
Panel to discuss opt out

Nicola Meredith, Public Health Wales @PublicHealthW

Claire Hobbs, Milton Keynes University Hospital NHS Foundation Trust @MKHospital

Angela Lovell, Weston Area NHS Health Trust @WestonNHS

Q&A

chaired by Michelle

#fluconf19
After lunch please go straight to your chosen workshop

Innovation in Point of Care Testing (POCT) for influenza diagnosis – Abbott
Chester suite

Leading change
Derby suite

Finding stories
Victoria suite

Seven Elements Living Gallery to share good practice
Main room

#fluconf19
Lunch/networking/exhibition
1 hour

#fluconf19
Finding Stories

Dawn Williams, Samantha Robinson, Helen Robinson (AMBU Health Board) @AMBhealth
and Joe O’Hagan (NHS Employers) @NHS_AV

#fluconf19
Flu lead perspective: finding a story

Dawn Williams – Senior Nurse Manager
Occupational Health and Wellbeing Service
ABMU Heath Board @AMBhealth
Our Flu Fighter Journey

Dawn Williams - Senior Nurse Manager
Occupational Health and Wellbeing Service
ABMU Heath Board
Flu immunisation of Healthcare Workers protects them, their family, their patients and their colleagues
Percentage of ABMU Staff Immunised

PERCENTAGE OF FRONT LINE STAFF VACCINATED

- Percentage of Front Line Staff Vaccinated


Percentage: 0.00%, 10.00%, 20.00%, 30.00%, 40.00%, 50.00%, 60.00%, 70.00%
Change in Strategy

• Worked closely with Communications team and Immunisation Co-ordinator to plan the campaign

From - Professionals responsibilities and Welsh Government Targets

To - Staff telling their stories, firmly basing the flu experiences of Health Board staff at the centre of the campaign

Aim – For staff to encourage and promote the flu vaccine
Engaging With Your Workforce

Accessibility of Vaccine - walking the patch

Non-judgemental approach

In house staff flu video and photos

Emphasis on staff telling stories

Use of social media

Staff bulletins encouraging comments and debates

Training of flu champions / peer vaccinators

Work closely with colleagues
Positive Impact on Campaign

• Increase in up-take amongst frontline staff

• Within the first eight weeks of the campaign reached the Welsh Government target following a change of strategy
How to Handle the Story

- Good communication skills
- Be visible, don’t shy away or be afraid to engage
- Be sensitive
- Use clinical evidence or facts to support dispelling myths
Questions?
Story giver perspective: how we became involved

Samantha Robinson and Helen Watts
How we became involved with the Flu Campaign
Why we chose to share our story

• To raise awareness of how anyone can be affected

• To show the comparison of one twin receiving the vaccination and the other not

• To dispel the myths of the vaccination

• Helping to prevent this happening to others
Emotional Impact

• Very well supported by Dawn and the Flu Fighter Team
• Overwhelming response ‘going viral’!
• Initially, emotional/reliving the experience
• Frustration – people believing myths
• Being aware that not everyone who has experienced flu has such a positive outcome – sensitivity.
Spreading the Word

• Flu leads/flu champions to look out for powerful stories

• Benefits of vaccination not just to patients but to staff members and their families

• Seeking opportunities to make presentations interesting/different

• Good relations with Communications Department – team work
What this has meant to us personally

• Realisation of just how unwell the flu can make you

• The importance of ‘at risk’ groups being vaccinated

• The fear of potentially losing a loved one

• The anxiety/post traumatic stress that has resulted

• Immense gratitude to the NHS
THANK YOU!
Communications / AV perspective: producing the content

Joe O'Hagan - Senior AV Services Officer, NHS Confederation

@NHS AV
Think of it like a Hollywood film (lights, camera, action...)

Firstly it needs:

• A strong beginning

• Meaty middle

• Powerful ending
Like a Hollywood film, it also has to...

- Be an engaging **story**
- Have relevant **characters**
- **Challenge** the audience
- Have a substantial **script**
- And impactful **music**
Themes used in the video*

- Imagine scenario


- **Personal instead of authoritarian** - “Nurses’ perception of being surrounded by an untrustworthy environment, which restricts their autonomy and seemingly is in opposition to their goal of maintaining a strong and healthy body. This illustrates the nurses’ perception of health authorities, pharmaceutical companies and scientists, which are often seen as opposing, non-trustworthy authorities.” (https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-017-0215-5)

*(although these can be applied to any form of comms...)*
• Family… particularly children

(Salford CCG Stay Well This Winter video campaign 2016)

• Archive

• Lifestyle
What can we offer?

• Digital Diaries - https://t.co/5w7P2Jleu9

• Hire out our services – www.nhsemployers.org/av

• Follow us on Twitter @NHS_AV
Activity:

We would like to split you into groups of three to represent the three different perspectives of flu lead, communications, story-giver.

In your groups you will explore the hypothetical scenario you'll be given from this perspective.

We will come back together in the room to share answers and feedback.
Leading Change

Aliya Rehman and Steph Foley
Flu leads as leaders
When you see the need for change in your team or organization, you’ll likely be keen to get moving.

But not everyone will be so enthusiastic about your plan.

And you can probably think of new systems that failed badly when they launched.

So, look before you leap! If you don’t prepare, you could fall flat on your face.

MAKE CHANGE HAPPEN

with Kotter’s 8-Step Model

NHS Employers
Part of the NHS Confederation
Kotter’s 8 step change model

- Create a sense of urgency
- Institute change
- Build a guiding coalition
- Sustain acceleration
- Form a strategic vision and initiatives
- Generate short-term wins
- Enlist a volunteer army
- Enable action by removing barriers
Over to you!
Thanks for coming!
Innovation in Point of Care Testing (POCT) for influenza diagnosis

Stephanie Carson from Abbott @AbbottGlobal and Dr. Raza from Sheffield Teaching Hospital NHS Foundation Trust @SheffieldHosp

#fluconf19
Influenza Burden: Unblocking the blocked resources: 

New technology to the rescue?

Dr Mohammad Raza  MRCP FRCPath 
Consultant Medical Virologist 
Sheffield Teaching Hospitals NHS Foundation Trust
Talk Outline

• Winter Pressures and POCT testing
• Key findings from our study
• Our POCT experience
• Lessons learnt and future strategies

• Important Note:
  POCT
  – Within 300 yards of patients
  – Outside Labs
  – Performed by non-lab staff
  – Rapid TAT
Disclaimer

• Alere i evaluation study performed independently
• One off Expert advisory role for Alere
• Talks sponsored by Alere/Abbott
Box 1: Health impacts of cold weather

Cold causes blood pressure to rise

Lungs resistance to infection is weakened

Cold makes blood thicker, increasing the risk of thrombosis

Stroke

Chest infection

Heart attack

Source: Department of Health 2009 annual Report of the Chief Medical officer
Direct effects of winter weather include an increase in incidence of:

- heart attack
- stroke
- respiratory disease
- influenza
- falls and injuries
- hypothermia

Box 3: Cold weather death sequence

Day 2: Heart deaths peak
Day 12: Respiratory deaths peak
Coldest day
Day 5: Stroke deaths peak

Day 40: Deaths return to normal

Source: Adapted from Donaldson GC, Keatinge WR. Early increases in ischaemic heart disease mortality dissociated from and later changes associated with respiratory mortality after cold weather in south east England. *Journal of Epidemiology and Community Health* 1997; 51(6): 643–8
The A&E winter crisis: lessons from last year

- Winter crises in A&E are caused by blockages in moving patients through hospital beds and sending them home – not by more people turning up.

- These blockages happen because NHS wards are fuller than they should be. The Health Service is 14,000 beds short of a level that would provide reliable capacity.

- 41% of extra winter funding last year was spent on simply adding additional beds and staff. But there is nowhere near enough funding to actually close the gap in number of beds.

- Instead, money and focus should be used more strategically. 3.6% of patients account for 37% of time in NHS beds. Finding ways to safely treat these people outside hospital should be a major priority.

“England’s A&E system is near crisis. With the financial squeeze set to continue, there is no relief in sight if we keep up the current approach. We need to rethink our assumptions as many of the ‘magic bullet’ solutions suggested miss the point. It’s not about more people turning up, but about a system with a squeeze on hospital space and staff, which needs to get better at discharging people safely and on time.”

Nigel Edwards, Chief Executive and briefing co-author

“The major issue centres on emergency admissions and the number of people requiring hospital care predominantly with respiratory conditions or decompensating other conditions – for example the failure of the heart to maintain adequate blood circulation, after long-standing vascular disease - usually brought on by cold weather and viruses”

“Understanding Winter Pressures in A&E Departments”

Reducing the Flu burden

• $\frac{1}{3}$rd of Winter related illnesses: Infections
  – Respiratory predominantly
  – Main cause Influenza

• Primary prevention: Active immunisation

• Natural history of uncomplicated influenza
  – Target this group and avoid admissions
  – Diagnose and send them home with short LOS (Length of Stay)?

40,074 episodes: 3months
3878 Flu features (2017/18)

Local Sheffield data

Flu Fighters Conference
25/03/2019
Front line work and diagnosis

• Front line workers
  – High volumes of work
  – Need to meet targets
  – Rapid decisions
  – Patient flow

• Traditional diagnostic tools
  – Diagnostic tools for high impact conditions (Troponin)
  – Antibody testing by CFT ~14-21 days
  – Culture: ~5 days
  – PCR tests gold standard but takes days to report
Clinical diagnosis of influenza in the ED.


Author Information

Abstract

BACKGROUND:
Timely and accurate diagnosis of influenza is essential to initiate effective therapy. This study determined the test characteristics of the electronic medical record (EMR) diagnosis of influenza, and influenza-like illness (ILI), and the effect on treatment according to Centers for Disease Control and Prevention (CDC) guidelines. In addition, we evaluated the compliance with CDC antiviral guidelines.

METHODS:
A prospective cohort of adults presenting to a tertiary care ED with an acute respiratory illness who met CDC criteria for recommended antiviral treatment were enrolled and tested for influenza. A clinical diagnosis of influenza was assessed by asking the clinician: "Do you think this patient has influenza?" Influenza-like illness was defined according to current CDC criteria.

RESULTS:
In this cohort of 270 subjects, 42 (16%, 95% confidence interval [CI], 11%-20%) had influenza. Clinician diagnosis had a sensitivity of 36% (95% CI, 22%-52%) and specificity of 78% (95% CI, 72%-83%); EMR final ED diagnosis had a sensitivity of 26% (95% CI, 14%-42%) and specificity of 97% (95% CI, 94%-99%); ILI had a sensitivity of 31% (95% CI, 18%-47%) and specificity of 88% (95% CI, 83%-92%). Only 15 influenza-positive patients (36%) received antiviral treatment.

CONCLUSION:
Clinician diagnosis, final ED EMR diagnosis, and ILI have low sensitivity for diagnosing influenza, and there is overall poor compliance with CDC antiviral guidelines.

Only 36% influenza positive patients received treatment
Only 16% of patients with laboratory-confirmed influenza received antiviral treatment. 30% were prescribed one of three common antibiotics.

19% of patients at high risk presenting within 48 hrs.
• High grade fever
  – Consultant level decision
  – Default
  – Referral, delays, admissions, discharge
Evaluation of Three Immunoassay Kits for Rapid Detection of Influenza Virus A and B

Adriana Weinberg¹,² and Miranda L. Walker¹

Positive results in 15 minutes
Hands on time not more than 3 min

TABLE 1.

Diagnostic characteristics for three rapid diagnostic kits:

<table>
<thead>
<tr>
<th>Kit</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Positive Predictive Value</th>
<th>Negative Predictive Value</th>
</tr>
</thead>
</table>

Is it good enough?
**Rapid, near patient test (NPT) for Flu A & B**

Clinical performance evaluation of a rapid nucleic acid amplification near patient test for Influenza A and B.

Recruitment – Winter 14/15
- Multicentre study (4 sites)
- Target ~800 patients

- Primary aim: **sensitivity and specificity of Alere™ i NPT** in the UK NHS
- Secondary aims:
  - Impact of rapid test on use of assessment suite isolation facilities and onward transmission of influenza.
  - Cost-consequences.

Newcastle In Vitro Diagnostics Co-operative
Data recorded

- Time to result reference test (standard laboratory test) and the index test (Alere NPT test).
  - Time to standard test result 2.8 days vs. 15 minutes (Alere NPT).

- Isolation precautions used.

- Antivirals given.
Turn around time of results

• Time delay for standard lab test result in
  • District general Hospital: > 5 days
  • Hosp with offsite lab: > 40 hours
  • Hosp with onsite lab: >25 hours
Data recorded

- Time to result reference test (standard laboratory test) and the index test (Alere NPT test).
  - Time to standard test result 2.8 days vs. 15 minutes (Alere NPT).

- Isolation precautions used.
  - 75% (68/91) of patients with influenza, were not isolated
  - 69% (343/489) of patients without influenza, were isolated.

Sensitivity = 75% (95% CIs: 64.53% - 83.25%), Specificity = 70% (95% CIs: 65.87% - 74.17%)

- Antivirals given.
Data recorded

- Time to result reference test (standard laboratory test) and the index test (Alere NPT test).
  - Time to standard test result 2.8 days vs. 15 minutes (Alere NPT).

- Isolation precautions used.
  - 75% (68/91) of patients with influenza, were not isolated
  - 69% (343/489) of patients without influenza, were isolated.

- Antivirals given.
  - 54% (49/91) of patients with influenza, were given antivirals
  - 12% (59/498) of patients without influenza, were given antivirals.
Results:
Cost analysis

PoCT testing strategy would save £215,000 per 1000 cases suspected influenza compared to RT-PCR
Cost implications for the NHS of using the Alere™ i Influenza A & B near patient test with nasal swabs


Diagnostic and Prognostic Research 2018 2:15
https://doi.org/10.1186/s41512-018-0031-8 © The Author(s) 2018
Received: 16 February 2018 | Accepted: 18 May 2018 | Published: 1 August 2018

• Cost associated with diagnosis & management of Flu MODELLED
• Hypothetical cohort of 1000 patients
• Total cost of testing
  – Cost of isolation
  – Antiviral prescriptions
  – Prophylaxis for exposed patients
Strategy 1: service laboratory RT-PCR testing for influenza (current practice, and base case for comparisons)

Strategy 2: Alere™ i Influenza A & B near patient test (new test, nasal swabs, higher sensitivity)

Strategy 3: Alere™ i Influenza A & B near patient test (new test, throat swabs, lower sensitivity)
Table 2
Cost analysis of the RT-PCR and Alere™1 Influenza A & B near patient testing strategies for patients with suspected influenza. Cells with italicized text identify the NPT testing strategy that provides the lowest cost and maximum saving for that line item.

<table>
<thead>
<tr>
<th>Test</th>
<th>RT-PCR</th>
<th>Alere flu NPT with:</th>
<th>Maximum saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of:</td>
<td></td>
<td>Nasal swab</td>
<td>Throat swab</td>
</tr>
<tr>
<td>Isolation</td>
<td>£295,356</td>
<td>£104,489</td>
<td>£71,298</td>
</tr>
<tr>
<td>Influenza testing</td>
<td>£70,000</td>
<td>£23,450</td>
<td>£82,571</td>
</tr>
<tr>
<td>Antiviral treatment</td>
<td>£10,294</td>
<td>£4357</td>
<td>£2395</td>
</tr>
<tr>
<td>Nosocomial infection</td>
<td>£0</td>
<td>£622</td>
<td>£7529</td>
</tr>
<tr>
<td>Total cost</td>
<td>£375,650</td>
<td>£132,919</td>
<td>£163,793</td>
</tr>
</tbody>
</table>

Putting Alere i into practice
Why should we diagnose Flu

- Uncomplicated cases could be safely sent home
- Earlier start of treatment has prognostic implications
- Control nosocomial spread of infection
- Targeted antivirals
- Antibiotic stewardship
- Rationalise use of side room facilities
Swab taken at Day x Post admission
Point of Care Testing at STH

• 5 years experience of influenza PoCT
  – From research to clinical service
• Start of Trust Flu season – PoCT deployed
  (12th Dec-27th April)
  – 14,146 RTPCR lab samples processed
Winter preparation – key areas

• Clinical areas identified for PoCT
  – A&E
  – Medical Assessment Centre (MAC)
  – Medical Admissions Unit (MAU)
  – Frailty Unit (FU) and Infectious Diseases (ID)

• Champions for each of those areas

• Engagement with the clinical support workers and nursing teams in those areas
Point of care Team involvement

• They were essential and supported;
  – Training
  – Competency sign off
  – Designed simple instructions
  – Monitored stocks
  – Point for trouble shooting
  – Solve machines errors
% Tests performed in each clinical area

- A&E: 39%
- MAC: 15%
- AMU: 17.5%
- Frailty: 13%
- ID: 5.5%
- Other: 10%
Utilising IT resources

• Intranet/homepage information
  – Declaration of the season & real time flu graphs
• Made additions on Lorenzo for ‘Flu flagging’
• Electronic referral pathway for ID patients
• Whiteboard infection control advice and PPE
EPR flags symptomatic patients
Laboratory Results - Year on Year

### 2016-17
- 1\textsuperscript{st} Dec - 10\textsuperscript{th} March (13 wks)
- 5,492 STH respiratory samples were processed
- 2,901 PoCT performed, 417 flu positive (14%).
- 18 Flu B, 374 Flu A and 25 dual

### 2017-18
- 12\textsuperscript{th} Dec - 27\textsuperscript{th} April (19 wks)
- 8,754 STH respiratory samples were processed
- 4,069 PoCT performed, 976 flu positive (24%).
- 507 Flu B, 438 Flu A and 31 dual
Moving from the lab to the patient

Declaration of flu season
Can I pass Influenza on to anyone else?

Yes! Influenza is very infectious. Ways to stop the spread include:

- Cover your mouth when you cough and sneeze, discard used tissues
- Wash your hands regularly and clean surfaces
- Keep away from crowded spaces and avoid contact with other people who may be at risk (see above)
- Encourage any loved ones in an ‘at risk group’ to have the flu vaccine.

To be effective, vaccination needs to be given annually, usually in the Autumn.

You can help stop the spread by remembering to:

**CATCH IT**
**BIN IT**
**KILL IT**

---

**Influenza**

Information for patients
Sheffield Teaching Hospitals

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Alternative formats can be available on request. Email: alternativeformats@sth.nhs.uk

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25/03/2019

Flu Fighters Conference
You have been diagnosed with Influenza, "Flu". Flu is an infection of the airways, caused by the Influenza virus. However, you have been assessed by a doctor and are well enough to go home. This leaflet gives you some information about flu and how to look after yourself at home.

**What symptoms can I expect?**
- Fever: often 38 - 40°C
- Headache, muscle aches, feeling very tired
- Chills and shivers
- Sore throat and runny nose
- Cough

Flu symptoms usually last for up to a week, but you may feel more tired than usual for up to two weeks. Flu is very infectious so please use tissues and wash your hands to help stop the spread to others.

**What is the treatment?**
Most people with flu get better on their own and do not require hospital admission, antibiotics do not work against the flu virus.

We recommend that you:
- Stay at home and rest
- Drink plenty of fluid (avoid alcohol and caffeine)
- Take regular pain relief such as Paracetamol and/or Ibuprofen (if you are able to take it). Pharmacists can advise on other symptom relief remedies.

Doctors may prescribe anti-viral medication for flu. They do this if a person is at a higher risk of the complications of influenza. These medications are not needed by everybody who has influenza.

**What if I am not getting better?**
Seek advice from your GP or call 111 if your symptoms get worse or last longer than one week. Seek emergency advice by attending Accident & Emergency or calling 999 if you experience any of the following:
- Sharp chest pains when you breathe
- Sudden shortness of breath or increased wheezing
- Coughing up blood
- Severe dizziness on standing or vomiting

**What are the complications of Influenza?**
If you are usually fit and well, you shouldn’t experience any complications. If you are in a ‘high-risk’ group, you may be more likely to suffer from a complication such as pneumonia or bronchitis. You are in a high risk group if you:
- Are over 65 years old
- Are pregnant
- Suffer from other illnesses such as diabetes, kidney failure, heart disease, liver disease or lung disease (including asthma, COPD)
- Have a problem with your immune system e.g. you have had your spleen removed, have HIV, have recently received chemotherapy/ radiotherapy for cancer or have had an organ or bone marrow transplant.
### Average length of stay (LOS)

<table>
<thead>
<tr>
<th>Swab taken &lt;3 days of admission</th>
<th>POCT Done (Pathway followed)</th>
<th>POCT Not Done (Pathway not followed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>5.75 n=235</td>
<td>7.87 n=106</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.56 n=199</td>
</tr>
<tr>
<td>&lt;65</td>
<td>3.61 n=96</td>
<td>4.18 n=45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.9 n=88</td>
</tr>
<tr>
<td>&gt;65</td>
<td>7.28 n=139</td>
<td>10.69 n=61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.87 n=111</td>
</tr>
</tbody>
</table>

- This data includes Frailty unit and the average age of pts this winter was 65 (median 68)
- We removed everyone flu + >3 days from admission to exclude nosocomial cases.
5 Steps to be taken following a confirmed diagnosis of Influenza A or B

1. Place patient in isolation (see isolation guidelines)¹

2. Ensure medical team considering antiviral therapy for index patient

3. Trace ‘significant contacts’:
   Patients +/- staff in close contact and not wearing a mask whilst index patient symptomatic AND significant contact eg. patients in bed spaces immediately adjacent to the patient if not in side room or face to face contact

4. Document exposure in contacts’ notes

5. Determine if contact vaccinated
   Yes
   No

5a) Identify if high risk:
   - Pregnancy (including up to 2 weeks post partum)
   - Age > 65
   - Chronic cardiac, pulmonary, renal, hepatic or neurological disease
   - Diabetes Mellitus
   - Immunosuppression²
   - Morbid Obesity

---

Observe contacts for symptoms
Isolate/swab/treat as appropriate if symptoms develop

Low risk
Contact >48hrs (its too late, expect symptoms)

High risk
Contact <48hrs

**Prophylaxis (for 10 days):**
1st line: Oseltamivir Oral 75mg OD 10 days if CrCl>60ml/min

¹Respiratory infection control precautions to include gloves, aprons and handwashing. Surgical mask worn for contact within 1m of patient. FFP3 mask worn for aerosol-generating procedures.
²Severely immunosuppressed – see criteria defined on next slide (taken from HPA guidance on antiviral agents for the treatment and prophylaxis of influenza)

If in doubt, contact the virology team for advice on extension 66477 or bleep NGH 2537
Nosocomial data

- PoCT has a dramatic effect on infection control
- Clinical ops and nurse directors managing flu cohorting
- Significant increase in cohort wards
  - Only 2 cohort bays/wards in 2016-17
  - 14 cohort bays/wards 2017-18
Results:

Cost analysis

@4000 POCT tests this equates to £860,000

POCT tests would save £215,000 per 1000 cases suspected flu compared to RT-PCR
Further improvements

• Next generation (version 2) Alere i kits
  – Early call out for positive results 5 min (neg in 13 minutes)
  – Kit can now be stored at room temperature (fridge no longer required)
  – Lowering of invalid results to <1%

Data from Kit manufacturer and kit insert
Are You Too Busy to Improve?

No thanks!

We're too busy!
Conclusions

• Technology has improved allowing accurate diagnosis of influenza
• Influenza results in as low as 5 min
• Rationalise use of precious public resources
• Have to break the ‘Too busy’ approach
• Leadership and vision
Thank you—any questions?

Acknowledgements:
Frontline staff in ED/Medical Assessment Centre and Acute Medical Unit
Outbreak System Resilience Group
Point of Care Test Team
Infection Control Nurses
Laboratory staff
Clinical Virology Team

Sheffieldvirology.co.uk
Seven Elements Living Gallery to share good practice

Communications – Sussex Community NHS Foundation Trust
Accessibility – University Hospitals of North Midlands NHS Trust
Support: all hands on Deck – Walsall Healthcare NHS Trust
Balanced team – Sherwood Forest Hospitals NHS Foundation Trust
Myth busting – Wirral Community NHS Foundation Trust
Rewards – University Hospitals Bristol NHS Foundation Trust
Peer Vaccination – West Midlands Ambulance Service NHS Foundation Trust

#fluconf19
Exhibition/networking
20 mins

#fluconf19
Behaviour change
Paul Taylor-Pitt, Assistant Director at NHS Employers @NHSE_Paul

#fluconf19
Behaviour change:
Why won’t they?

Paul Taylor-Pitt

#fluconf19
70.3%
Self as inquirer

• Turn judgement into curiosity
• Turn disagreement into shared exploration
• Turn defensiveness into self-reflection
• Turn assumptions into questions.

HSD Institute
Environment

Others

Self
Strategy

Environment

Capability

Culture

Engagement

Skills

Structure

Systems

Leadership
FACT
Group is the unit of change
“The success of any intervention depends entirely on the interior condition of the intervener”

– Otto Scharmer
Welcome to ACCEPTANCE

ENJOY THE JOURNEY
Using your voice
Thank you for coming!

Michelle Wayt, NHS Employers

#fluconf19