Considerations for future national infection control initiatives

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What is this presentation about?

- Hand hygiene
- Peripheral IV
- SSI bundle
- *C. difficile*
- AMS

...
Acknowledgements

♀ Hand Hygiene Australia
  • Jennifer Bradford
  • Sally Havers
  • Karen Olsen
  • Kate Ryan
  • Lindsay Grayson

♀ Phil Russo

But don’t hold them responsible.
One perspective
Overview

What is a national infection control initiative?

What are the potential benefits?

What are the challenges?

What lessons from the NHHI could be applied to future initiatives?
What is a national infection control guideline?

What is a national safety & quality standard?

What is a national infection control initiative?
What is a national infection control initiative?

A. National guideline
B. Standardised auditing (tool, auditor workshops)
C. National online learning system
D. Collection of educational and promotional resources
E. Workshops and forums on a specific topic
F. All of the above
National Infection Control Initiative

*Initiative:* An act or strategy intended to resolve a difficulty or improve a situation; a fresh approach to something

Oxford Dictionary
What are the benefits of a national infection control initiative?
1. Standardisation
‘Workarounds’ at jurisdictional interface

Triple gauge used in the station yards at Gladstone & Peterborough in South Australia

- Standard
- Broad
- Narrow

GAPS
- G1 = 533mm (1' 9'')
- G2 = 368mm (1' 2.1'')

1435mm (4' 8.5'')
1600mm (5' 3'')
1067mm (3' 6'')
2591mm (8' 6'')
Vic: Hand Hygiene Compliance Tool (HHCT)

- 8 HCW types
- 9 hand hygiene methods
- Gloves: Non-sterile vs. sterile
- 14 indications

NSW: Clean hands save lives program

- 4 HCW types
- Hand hygiene methods: NA
- Gloves: NA
- HH indications: before & after
  - Low-risk
  - Medium risk
  - High-risk
**Qld: hCAT™ Hand Hygiene Audit Tool**

- 4 HCW types
- Hand hygiene methods: 2
- Gloves: NA
- 10 HH indications
  - Before & after

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<table>
<thead>
<tr>
<th>Scene No</th>
<th>Hand Hygiene Opportunity</th>
<th>Pre-activity Hand Hygiene</th>
<th>Post-activity Hand Hygiene</th>
<th>Compliant</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Improve patient hygiene, touch hand with gloved hand.</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Patient hygiene, contact with inanimate object - infusion pump.</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Improve patient hygiene, touch hand with gloved hand.</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Invasive procedure as blood sugar level test – skin integrity breach – no device in situ.</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Improves patient hygiene, contact with blood tissue.</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Improves patient hygiene, contact with blood tissue.</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Potential contact with bodily fluids – IDC drainage bag.</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Improves patient hygiene, contact with chart.</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Improves patient hygiene, contact with inanimate objects.</td>
</tr>
</tbody>
</table>
1. Standardisation

- Consistency & credibility ~ potentially undermined by variability

- Migratory staff ~ avoid confusion & frustration

- Benchmarking ~ compare different hospitals
2. Efficiency

- Constrained resources
- Minimise duplication
3. Implementation

• ‘Guidelines do not implement themselves’

• A national initiative can help:
  • Resources and materials
  • Awareness raising
  • Executive/hospital leadership involvement
  • Exchange of ideas & innovations
  • Support framework
  • Solidarity
Q: Do you have any suggestions for other hospitals striving to improve their hand hygiene programs?

A: Knowing you are not alone.
Factors influencing implementation of patient safety practices

- Safety culture, teamwork & leadership involvement
- Structural organisational characteristics
  e.g. size, organisational complexity or financial status
- External factors
  e.g. financial or performance incentives or regulations
- Availability of implementation and management tools
  e.g. training resources or internal organisational incentives
How effective do you believe the following factors have been in improving or sustaining hand hygiene performance amongst healthcare workers in your organisation?

National Hand Hygiene Initiative

n = 71

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not at all effective</th>
<th>Extremely effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>86%</td>
<td></td>
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</table>

Hand Hygiene Australia
www.hha.org.au
How effective do you believe the following factors have been in improving or sustaining hand hygiene performance amongst healthcare workers in your organisation?

National Safety & Quality Health Service Standard 3

n = 74

- Not at all effective
- Extremely effective

88%
What are the challenges for a national infection control initiative?
1. Collection and use of data
Why collect data?

- Quality improvement
- Accountability & transparency

Better patient care

- Performance frameworks
- Public reporting
## Data use tension

<table>
<thead>
<tr>
<th></th>
<th>Quality improvement</th>
<th>Accountability &amp; transparency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim of audit</strong></td>
<td>Behaviour/culture change</td>
<td>Unbiased data</td>
</tr>
<tr>
<td><strong>Ward selection</strong></td>
<td>Flexible</td>
<td>Standardised</td>
</tr>
<tr>
<td><strong>Poor performers</strong></td>
<td>Maximise auditing</td>
<td>Pressure to minimise</td>
</tr>
<tr>
<td><strong>Auditor</strong></td>
<td>Peers/ward-based</td>
<td>External/independent</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Yes!</td>
<td>+/-</td>
</tr>
<tr>
<td><strong>Performance feedback</strong></td>
<td>Yes!</td>
<td>+/-</td>
</tr>
<tr>
<td><strong>Reporting</strong></td>
<td>+/-</td>
<td>Yes!</td>
</tr>
</tbody>
</table>
Levels of social influence

1. **Compliance**
   People appear to agree with others, but actually keep their dissenting opinions private.

2. **Identification**
   People are influenced by someone who is liked and respected

3. **Internalization**
   People accept a belief or behaviour and agree both publicly and privately

Use of Hand Hygiene Data

1. **Compliance**
   People appear to agree with others, but actually keep their dissenting opinions private.

   “You must reach X% hand hygiene compliance”
   Requires continuous/omnipresent auditors

2. **Identification**
   People are influenced by someone who is liked and respected

   “Your hand hygiene performance is X%”
   = culture change & sustainability

3. **Internalization**
   People accept a belief or behaviour and agree both publicly and privately

How effective do you believe the following factors have been in improving or sustaining hand hygiene performance amongst healthcare workers in your organisation?

**Auditing and performance feedback**

- **Not at all effective**
- **Extremely effective**

$n = 84$

85%
How effective do you believe the following factors have been in improving or sustaining hand hygiene performance amongst healthcare workers in your organisation?

Public reporting of hand hygiene compliance results

- Not at all effective
- Extremely effective

Anecdotes of major impact

n = 62

30%
2. Standardisation vs. Adaptation
Standardisation vs. Adaptation

**Standardisation**
- Consistent with evidence
- Standard approach

**Adaptation**
- Fosters local ownership
- Encourages innovation
“People will support what they help create.”
3. Sustainability

- Behaviour change
  - Culture change vs. compliance

- Program
  - Role of the central ‘project’ team
  - Funding
What lessons from the National Hand Hygiene Initiative could be applied to future initiatives?
1. Getting started

- Acknowledge & benefit from pre-existing programs and expertise
  - Rarely starting from zero

- Clinical leadership
  - Face-to-face meetings

- Governance that includes all stakeholders
  - NHHI & HAI Advisory Committees

- Plan carefully – but then get started
  - Don’t wait until it’s perfect

- Start ‘gently’
2. Evidence-based, validated tools

- Vital importance

- Audit tool

- Need a reason to move from local programs
3. Be clear about key components

Here is *exactly* what you must do.
3. Be clear about key components

The initiative

Here's what you can do. Adapt as you like
(The rest)

Here is what you must do.
(Core components)
4. Apply implementation science

Research findings → Policy & Practice

4. Apply implementation science

- Safety culture, teamwork & leadership involvement

- Structural organisational characteristics
  e.g. size, organisational complexity or financial status

- External factors
  e.g. financial or performance incentives or regulations

- Availability of implementation and management tools
  e.g. training resources or internal organisational incentives

Taylor et al. BMJ Qual Saf 2011;20:611-617
5. Share good ideas
6. Program Evaluation

- Evaluation of a national infection control initiative
  - Effectiveness
  - Cost-effectiveness

- Plan from the start
  - In parallel with the initiative itself
  - Not retrospective

- Recognition that an initiative is a dynamic process
  - Source of guidance for the program
  - Assist with iterative program improvement