

A Review of the National Infection Control and Prevention Initiative (NIPCI) Findings



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New York City Department of Health and Mental Hygiene

2018 APIC Chapter 13, Greater New York Long Term Care Conference
October 26, 2018

Impact of Infections in LTCFs

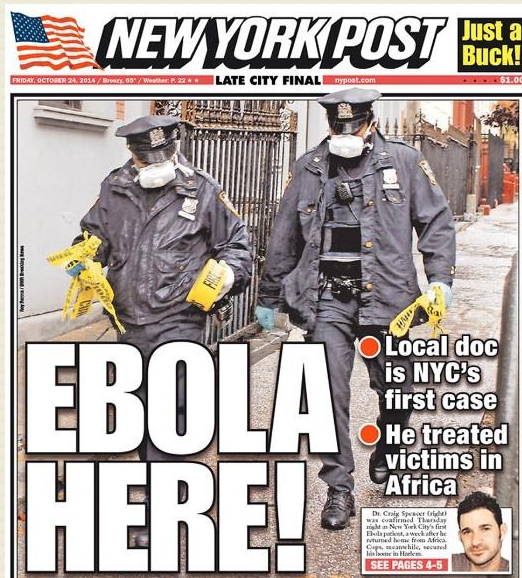
- 1,600,000 to 3,800,000 infections each year
- ~400,000 deaths
- \$673mil to \$2billion



American Journal of Infection Control
May 2011, Vol. 39, p.263

Shift in National Priorities

After Ebola



Back to the Basics!

- Surveillance
- Risk assessment
- Isolation precautions
- Personal protective equipment
- Hand and respiratory hygiene

National Priorities for Infection Prevention

FOR IMMEDIATE RELEASE
July 13, 2015

Contact: HHS Press Office
202-690-6343

HHS proposes to improve care and safety for nursing homes residents

Revisions mark first major rewrite of long-term care conditions of participation since 1991

A proposal announced today at the White House Conference on Aging would make major changes to improve the care and safety of the nearly 1.5 million residents in the more than 15,000 long-term care facilities or nursing homes that participate in the Medicare and Medicaid programs. If finalized, unnecessary hospital readmissions and infections would be reduced, quality care increased, and safety measures strengthened for the more than one million residents in these facilities.

“This proposal is just one part of the administration’s overall commitment to transform our health system to deliver better quality care and spend our health care dollars in a smarter way,” said HHS Secretary Sylvia M. Burwell. “Today’s measures set high standards for quality and safety in nursing homes and long-term care facilities. When a family makes the decision for a loved one to be placed in a nursing home or long-term care facility, they need to know that their loved one’s health and safety are priorities.”

Many of the proposals build on improvements that nursing homes have already made since 1991, the last time these conditions of participation were comprehensively updated. This rule would bring these best practices for resident care to all facilities that participate in Medicare or Medicaid and implement a number of important safeguards that have been identified by patient advocates and other stakeholders, and include additional protections required by the Affordable Care Act.



CMS Final Rules

FOR IMMEDIATE RELEASE
July 13, 2015

Contact: HHS Press Office
202-690-6343

Updating the nursing home's infection prevention and control program, including requiring an infection prevention and control officer, and an antibiotic stewardship program that includes antibiotic use protocols and a system to monitor antibiotic use.

and safety for

since 1991

make major changes to improve long-term care facilities or utilized, unnecessary hospital safety measures strengthened for

transform our health system to" said HHS Secretary Sylvia M. ng homes and long-term care nursing home or long-term care S."

The proposals build on improvements that nursing homes have already made since 1991, the last time the conditions of participation were comprehensively updated. This rule would bring these best practices for resident care to all facilities that participate in Medicare or Medicaid and implement a number of important safeguards that have been identified by patient advocates and other stakeholders, and include additional protections required by the Affordable Care Act.



The National Infection Prevention and Control Initiative (NIPCI)

- National Initiative
 - CDC funded
 - State and local health Departments
- Voluntary + Non-regulatory
- Utilize IC assessment tools developed by CDC

» Long term care facilities, Outpatient clinics, Hospitals, Dialysis



NIPCI Goals

To enhance infection control capacity in

- Individual facilities
- Long-term care sector
- NYC healthcare system



NIPCI Objectives

Build
Relationships

Assess
infection control
programs

Identify areas
for
improvement

Provide
education and
resources



Methods

**Complete survey prior
to visits**

**Information packets
distributed at the visit**

**Good ideas were
recorded during visits**

**Follow-up feedback
report to facilities**



Methods

- Who completed the survey
- How the survey was completed
- Length of time
- How the information was collected
 - Paper vs. electronic



Areas Assessed

- I. Infection Control Program and Infrastructure
- II. Healthcare Personnel and Resident Safety
- III. Surveillance and Disease Reporting
- IV. Hand Hygiene
- V. Personal Protective Equipment (PPE)
- VI. Respiratory/ Cough Etiquette
- VII. Antibiotic Stewardship
- VIII. Injection safety and Point of Care Testing
- IX. Environmental Cleaning



Section 2: Infection Control Program and Infrastructure

I. Infection Control Program and Infrastructure		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. The facility has specified a person (e.g., staff, consultant) who is responsible for coordinating the IC program.	<input type="radio"/> Yes <input type="radio"/> No	
B. The person responsible for coordinating the infection prevention program has received training in IC <i>Examples of training may include: Successful completion of initial and/or recertification exams developed by the Certification Board for Infection Control & Epidemiology; Participation in infection control courses organized by the state or recognized professional societies (e.g., APIC, SHEA).</i>	<input type="radio"/> Yes <input type="radio"/> No	
C. The facility has a process for reviewing infection surveillance data and infection prevention activities (e.g., presentation at QA committee).	<input type="radio"/> Yes <input type="radio"/> No	
D. Written infection control policies and procedures are available and based on evidence-based guidelines (e.g., CDC/HICPAC), regulations (F-441), or standards. <i>Note: Policies and procedures should be tailored to the facility and extend beyond OSHA bloodborne pathogen training or the CMS State Operations Manual</i>	<input type="radio"/> Yes <input type="radio"/> No	
E. Written infection control policies and procedures are reviewed at least annually or according to state or federal requirements, and updated if appropriate.	<input type="radio"/> Yes <input type="radio"/> No	
F. The facility has a written plan for emergency preparedness (e.g., pandemic influenza or natural disaster).	<input type="radio"/> Yes <input type="radio"/> No	

Post-Visit Feedback Reports



NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE
 Mary T. Bassett, M.D., M.P.H.
 Commissioner

July 10, 2017

To: Mr. Infection Preventionist, RN
 Assistant Director of Nursing Services
 Nursing Home for Rehabilitation and
 Nursing
 Brooklyn, NY 11236

FROM: Dr. Mary Foote, MD
 NYC Department of Health and Mental Hygiene (DOHMH)
 Office of Emergency Preparedness and Response (OEPR)
 Bureau of Healthcare Systems Readiness (BHSR)

RE: Participation in the National Infection Prevention and Control Initiative

Dear Mr. Carroll,

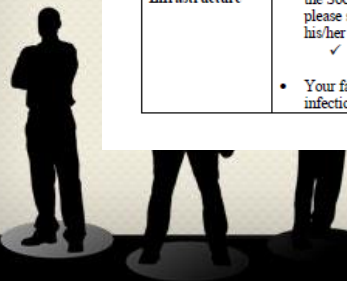
Thank you for your participation in the National Infection Prevention and Control Initiative (NIPCI), a federally funded project created to assess and improve infection prevention and control preparedness across the country. Your contribution to this critical effort during the site visit conducted at Atrium Center for Rehabilitation and Nursing, March 27, 2017, is greatly appreciated.

Overall, Atrium Center for Rehabilitation and Nursing has some key Infection Control (IC) policies and procedures in place, including a dedicated Infection Control Practitioner (ICP) staff position. A Best Practice observed at your facility is the robust implementation of the Antibiotic Stewardship Program.

The following is an abbreviated plan that addresses opportunities for improvement of infection control practice.

Areas for Improvement	Improvement Plan
I. Infection Control Program (IPC) and Infrastructure	<ul style="list-style-type: none"> Please consider supporting (financing and release from duty) your Infection Control Practitioner in obtaining training in infection control through either the Association for Professionals in Infection Control and Epidemiology (APIC) or the Society for Healthcare Epidemiology of America (SHEA). At a minimum, please support your Infection Control Practitioner's membership in APIC and his/her attendance at the monthly Greater New York Chapter APIC meetings. <ul style="list-style-type: none"> Formal training in infection prevention and control is a required element of the new CMS rules for long-term care facilities. Your facility is encouraged to have a system in place that will ensure that infection control policies and procedures are kept up to date: they should be

	<p>reviewed at least annually or according to state or federal requirements, and updated as appropriate.</p> <ul style="list-style-type: none"> Your facility is encouraged to have a written plan for emergency preparedness (e.g., pandemic influenza or natural disaster). <ul style="list-style-type: none"> You can contact Danielle Sollecito (ducas@health.nyc.gov) at the NYC DOHMH for further information on free emergency planning resources for long-term care facilities.
II. Healthcare Personnel and Resident Safety	<ul style="list-style-type: none"> Please ensure that your Staff are offered hepatitis B vaccination if they may be exposed to blood or body fluids as part of their duties. <ul style="list-style-type: none"> Please refer to the CDC guidance on healthcare worker vaccinations for more information: https://www.cdc.gov/vaccines/adults/rec-vac/hcw.html You are strongly encouraged to develop and implement an exposure control plan that addresses potential hazards posed by specific services provided by the facility. Your staff should receive training and competency validation on managing a blood-borne pathogen exposure; training should take place at the time of hire and should be repeated annually. <ul style="list-style-type: none"> See https://www.osha.gov/OshDoc/data/BloodborneFacts/bbfc01.pdf for an overview of requirements and https://www.osha.gov/Publications/OSHA3186.pdf for guidance on developing an exposure control plan. A sample employee training quiz can be found here http://www.piedmontcsb.org/intranet/BBP/Quiz%20-%26%20Answers.pdf Please refer to https://www.osha.gov/SLTC/bloodbornepathogens/index.html for additional information and resources
III. Surveillance and Disease Reporting	<ul style="list-style-type: none"> Your facility is encouraged to have a formal (written) system that will ensure notification of the infection prevention coordinator when antibiotic-resistant organisms or <i>C. difficile</i> are reported by the clinical laboratory. Your facility is encouraged to develop a system that will allow you to follow up on clinical information, (e.g., laboratory reports, procedure results and diagnoses), when residents are transferred to acute care hospitals for management of suspected infections, including sepsis. Your facility is encouraged to have a formal, written plan for outbreak response which includes a definition, procedures for surveillance and containment, and a list of syndromes or pathogens for which monitoring is performed.
IV. Hand Hygiene	<ul style="list-style-type: none"> Your facility is encouraged to routinely audit (monitor and document) adherence to Hand Hygiene (HH). Your facility is encouraged to provide feedback to personnel regarding their HH performance, a process you have already started.
V. Personal Protective Equipment (PPE)	<ul style="list-style-type: none"> Your facility is encouraged to have a policy on Transmission-based Precautions that includes the clinical conditions for which specific PPE should be used (e.g., <i>C. difficile</i>, Influenza). Your facility is encouraged to have appropriate personnel receive job-specific



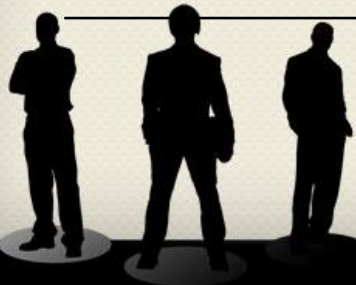


Summary of findings and Good Ideas



New York City: Total NIPCI Site Visits Completed

Facility Type	2016	2017	Total
Hospitals	6	1	7
Nursing Homes	33	40	73
Primary Care	9	10	19
Urgent Care	0	12	12
Dental	1	0	1
Total	49	63	112

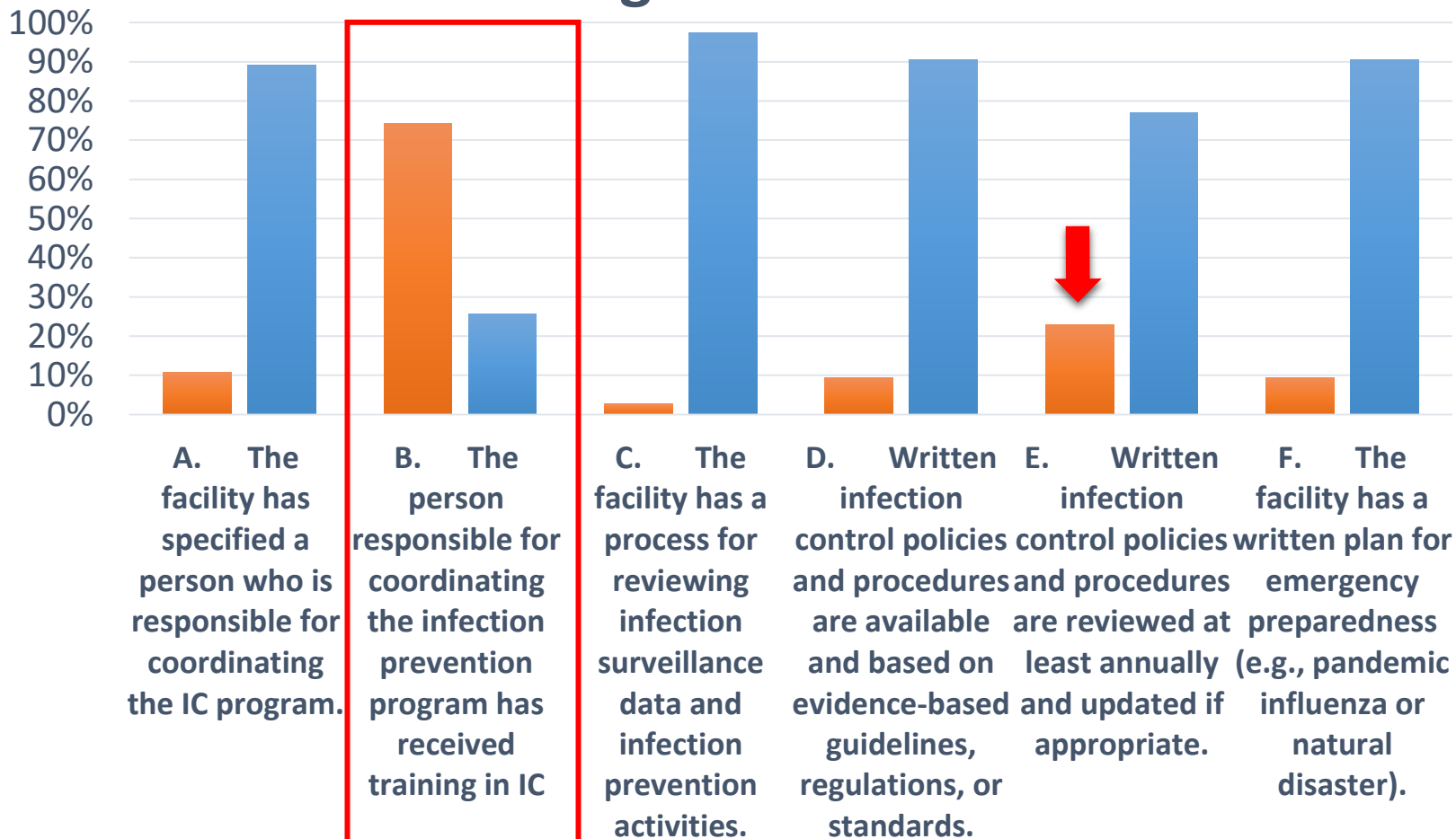


Facility Characteristics (N=73)

Characteristic	Median	Range
Number of Licensed Beds	200	30-850
Staff Hours/Week dedicated to IP activities	17.5	0-352
Affiliated with Hospital	13 (18%)	



I. Infection Control Program and Infrastructure



Opportunities (% No)	11%	74%	3%	9%	23%	9%
Strengths (%Yes)	89%	26%	97%	91%	77%	91%

Opportunities (% No) Strengths (%Yes)

Infection Control Program and Infrastructure

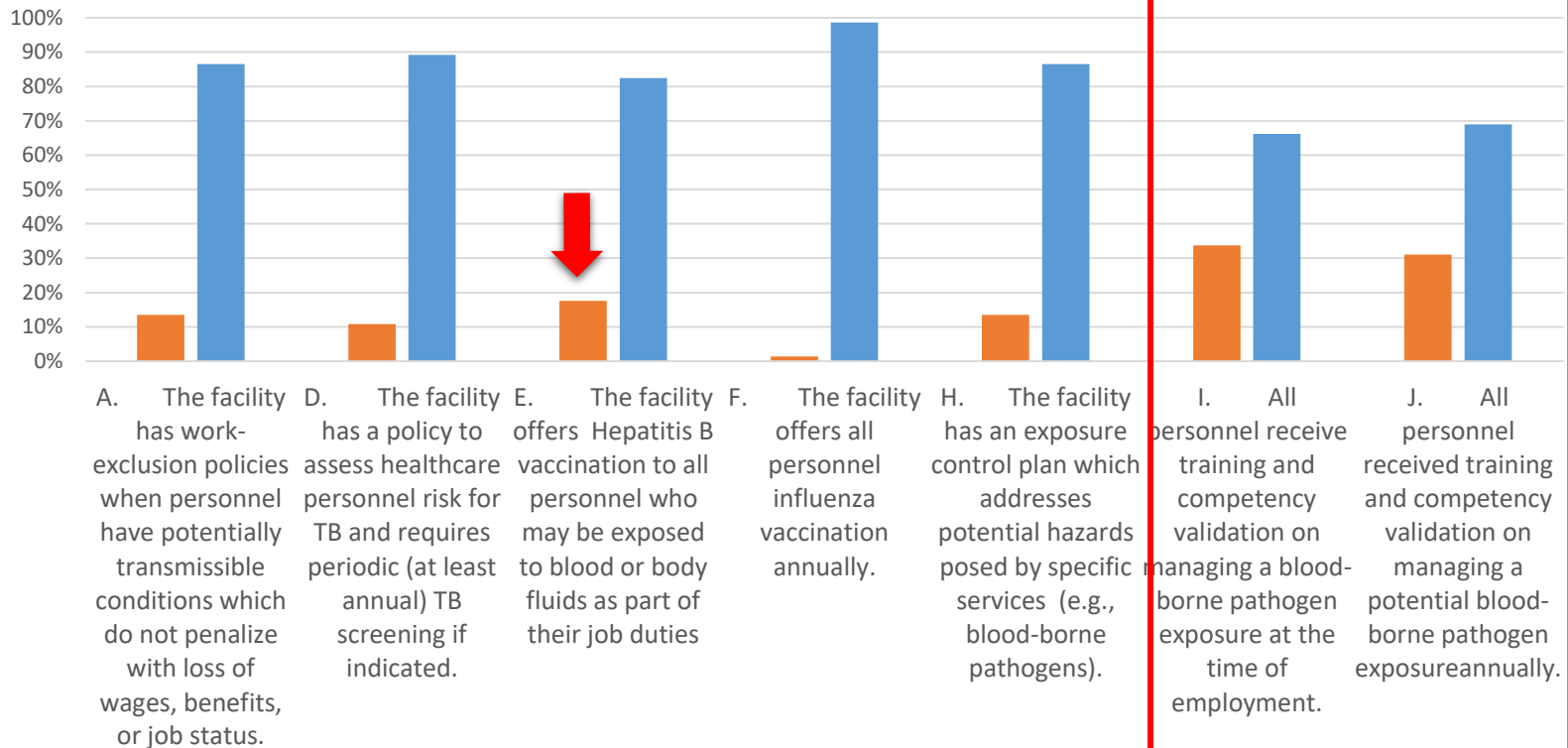
Good Ideas

- Engage with local APIC chapter
- Designate “Infection Control Champions” or “Mentors”
- Convene multidisciplinary IC team
- Host periodic “skills day” or “skills fairs”
- Phone app for competency checks

– E.g. Speedy Audit



II. Healthcare Personnel Safety



Opportunities (% No)	14%	11%	18%	1%	14%	34%	31%
Strengths (%Yes)	86%	89%	82%	99%	86%	66%	69%

Opportunities (% No) Strengths (%Yes)

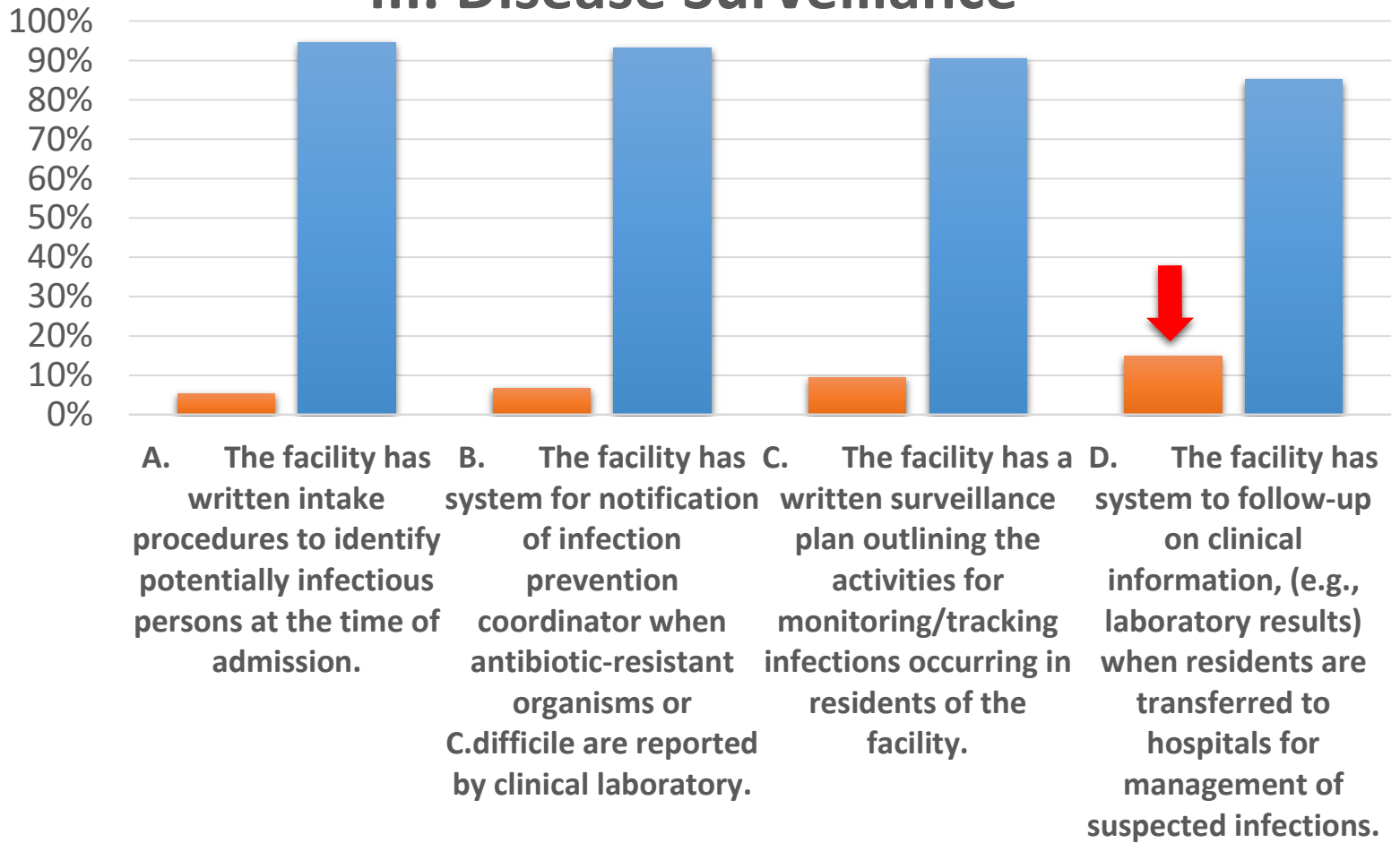
Healthcare Personnel & Resident Safety

Good Ideas

- Flu vaccine raffle
- Daily “safety huddles”
- Regular infection control in-services
 - Include non-clinical staff
- Family engagement
 - Family advisory council
 - Active outreach and communication



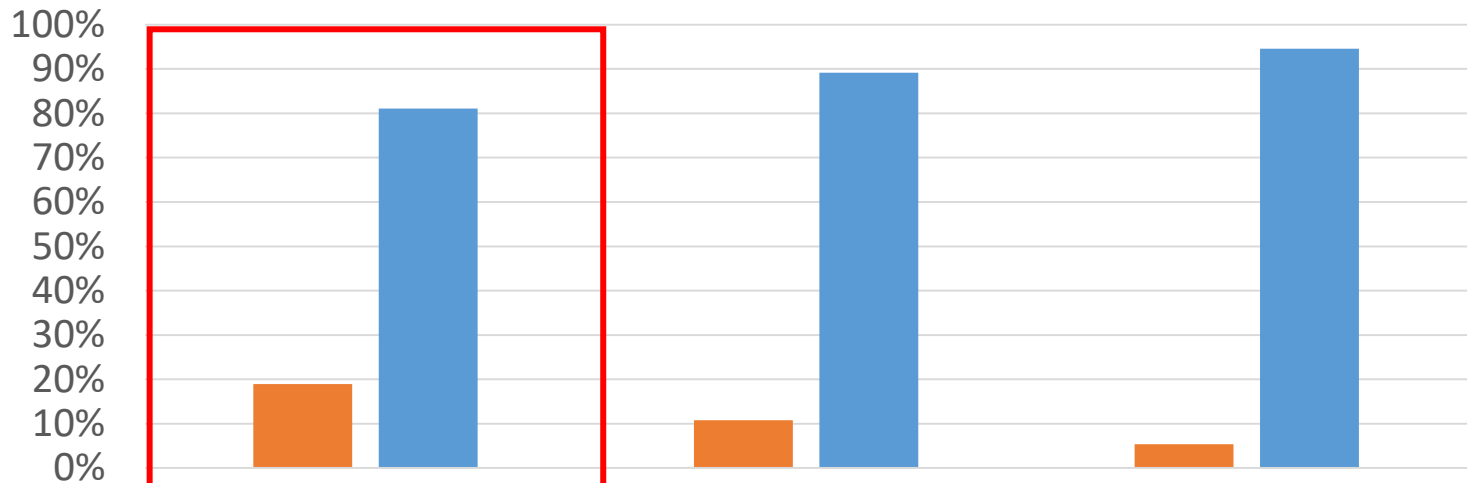
III. Disease Surveillance



Opportunities (% No)	5%	7%	9%	15%
Strengths (%Yes)	95%	93%	91%	85%

Opportunities (% No) Strengths (%Yes)



III. Disease Reporting





A. The facility has a written plan for outbreak response which includes a definition, procedures for surveillance and containment, and a list of syndromes or pathogens for which monitoring is performed.

B. The facility has a current list of diseases reportable to public health authorities.

C. The facility can provide point(s) of contact at the local or state health department for assistance with outbreak response.

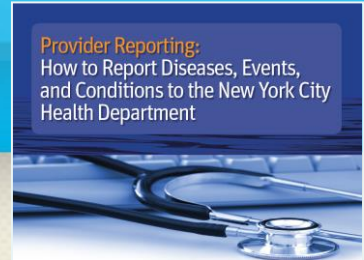
 Opportunities (% No)	19%	11%	5%
 Strengths (%Yes)	81%	89%	95%

 Opportunities (% No)  Strengths (%Yes)

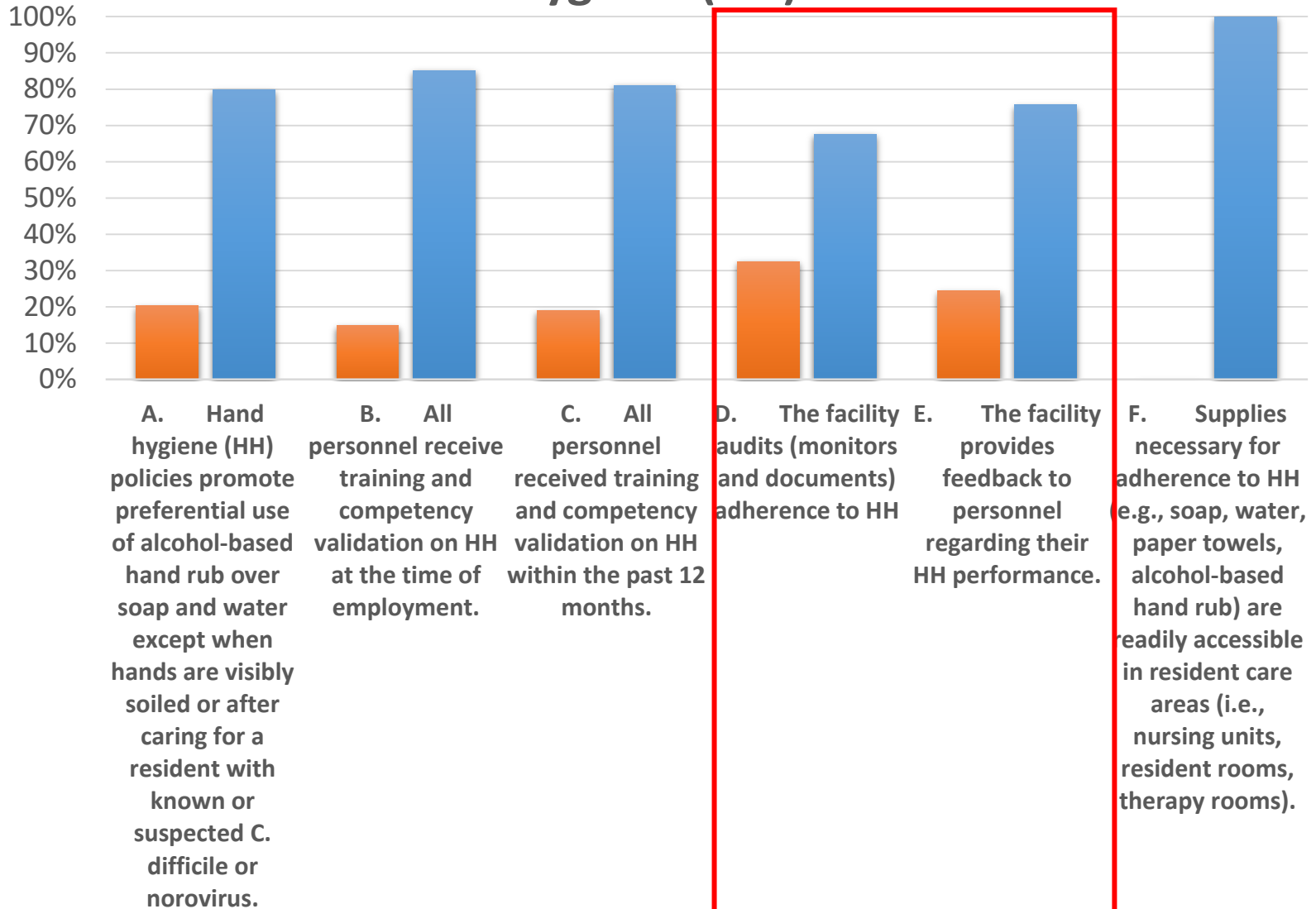
Surveillance and Disease Reporting

Good Ideas

- Daily infection control rounds
 - Discuss infections, antibiotic treatments, invasive devices, isolation needs
- Hospitalized patient rounds
 - Review course and IC issues in returning patients
- Use standard interfacility transfer forms



IV. Hand Hygiene (HH)



Opportunities (% No)	20%	15%	19%	32%	24%	0%
Strengths (%Yes)	80%	85%	81%	68%	76%	100%

Opportunities (% No) Strengths (%Yes)

Hand Hygiene

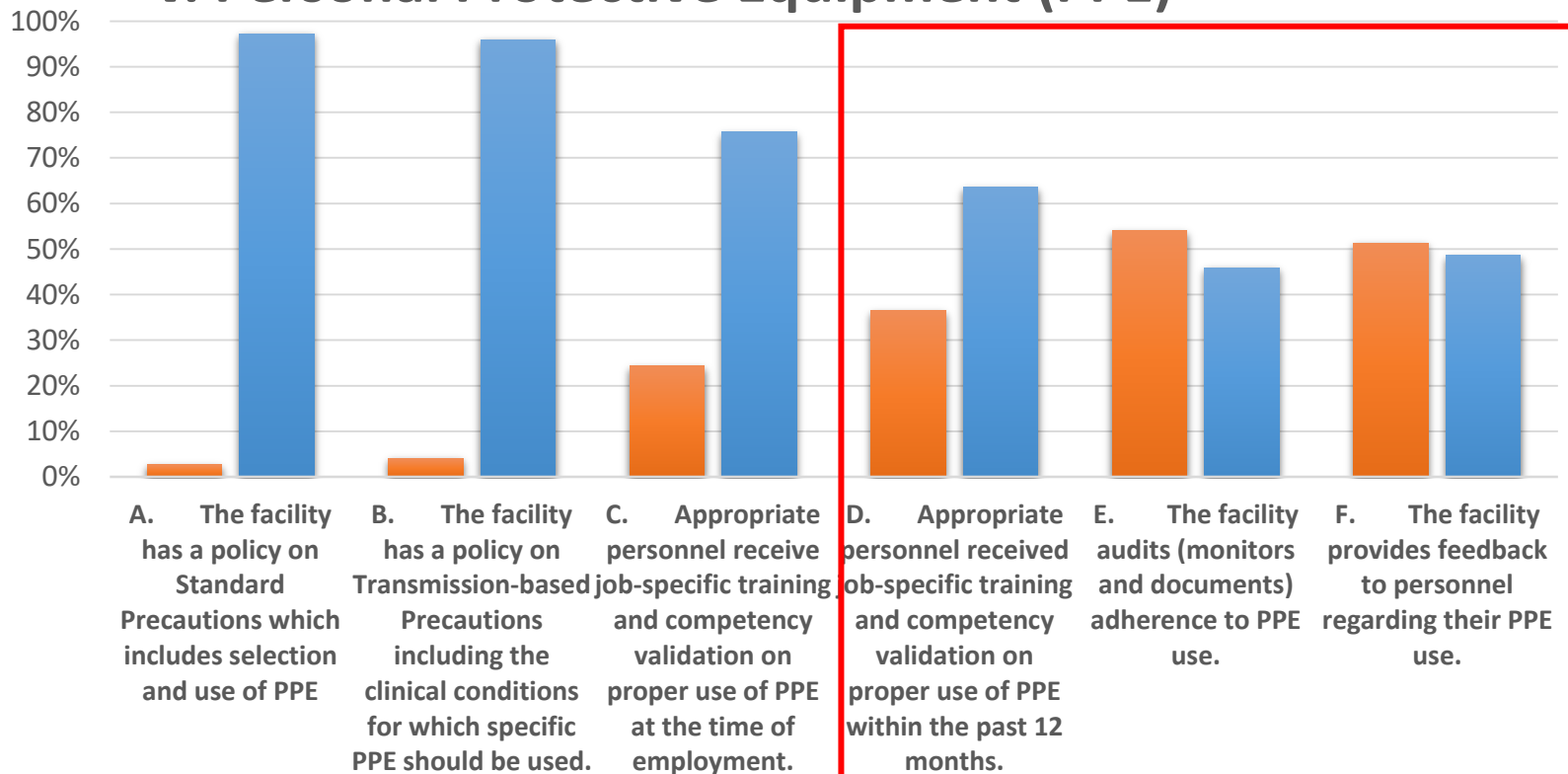


Good Ideas

- Have staff sign a “Hand Hygiene Pledge”
- Use “secret shoppers” for audits
- Post unit hand hygiene rates
- “Care Coins”
 - Recognize good performance
- Hand hygiene “champions”
 - Can educate and assist with audits



V. Personal Protective Equipment (PPE)



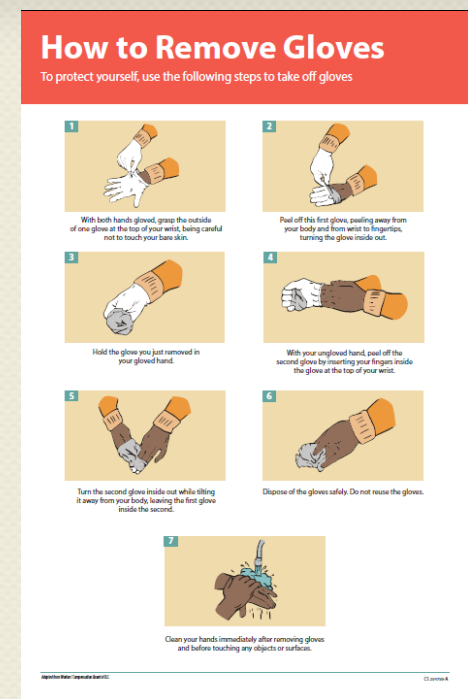
Opportunities (% No)	3%	4%	24%	36%	54%	51%
Strengths (%Yes)	97%	96%	76%	64%	46%	49%

Opportunities (% No) Strengths (%Yes)

Personal Protective Equipment

Good Ideas

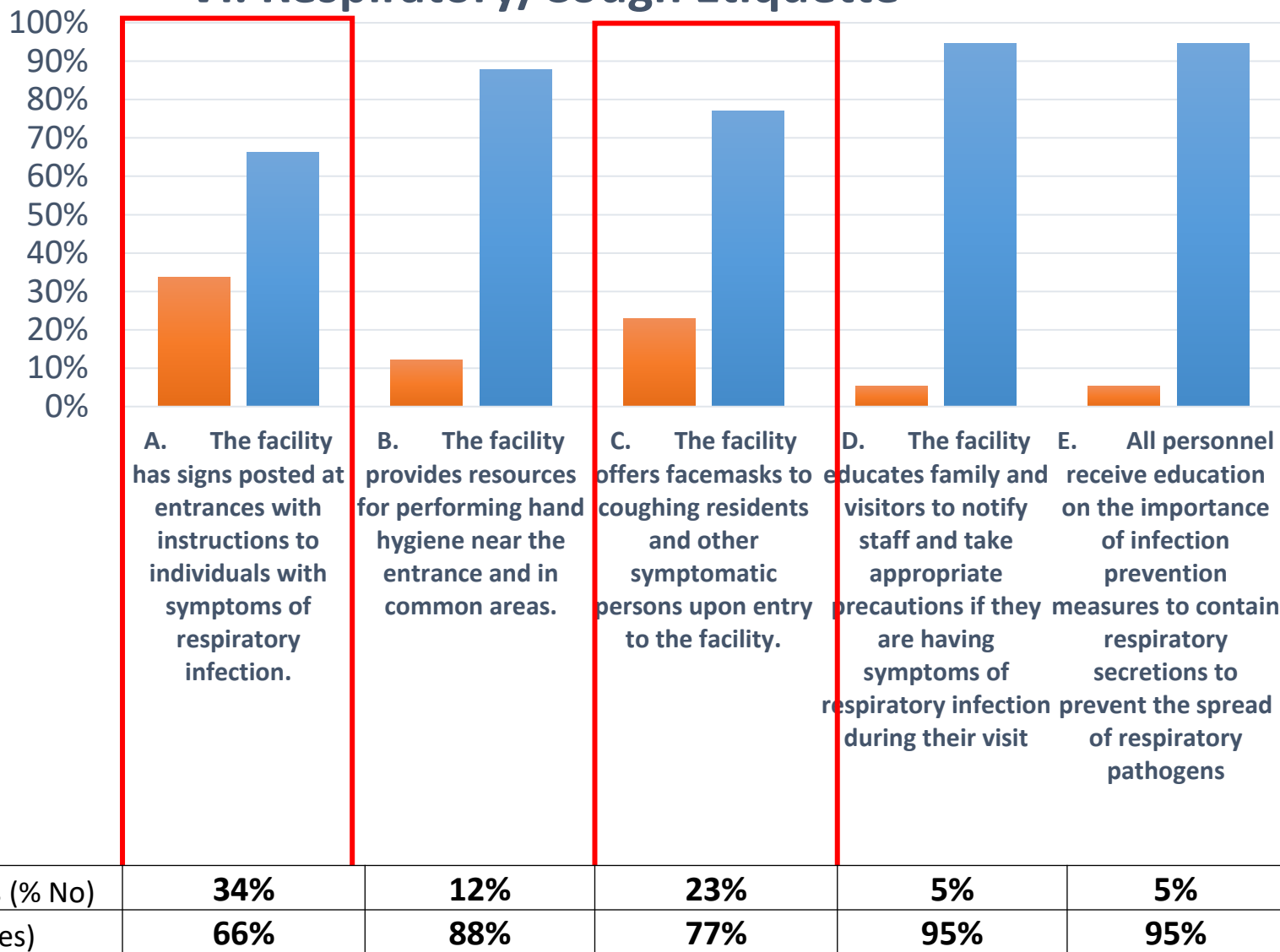
- Store PPE outside isolation rooms
- Utilize “secret shoppers” for audits
- Annual hands-on training
 - Skills in-services



[CDC.gov](https://www.cdc.gov)



VI. Respiratory/Cough Etiquette

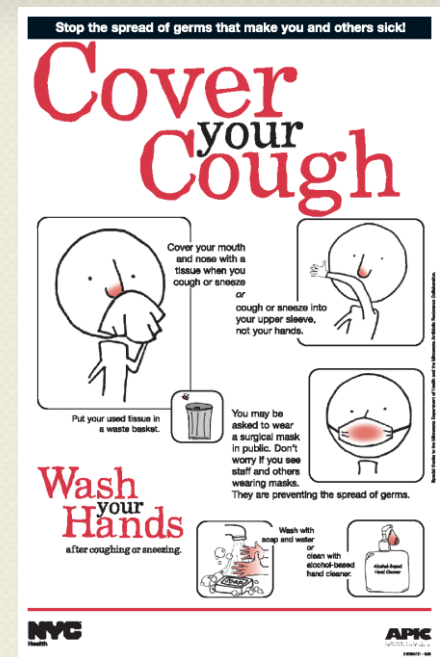


Opportunities (% No) Strengths (%Yes)

Respiratory Hygiene

Good Ideas

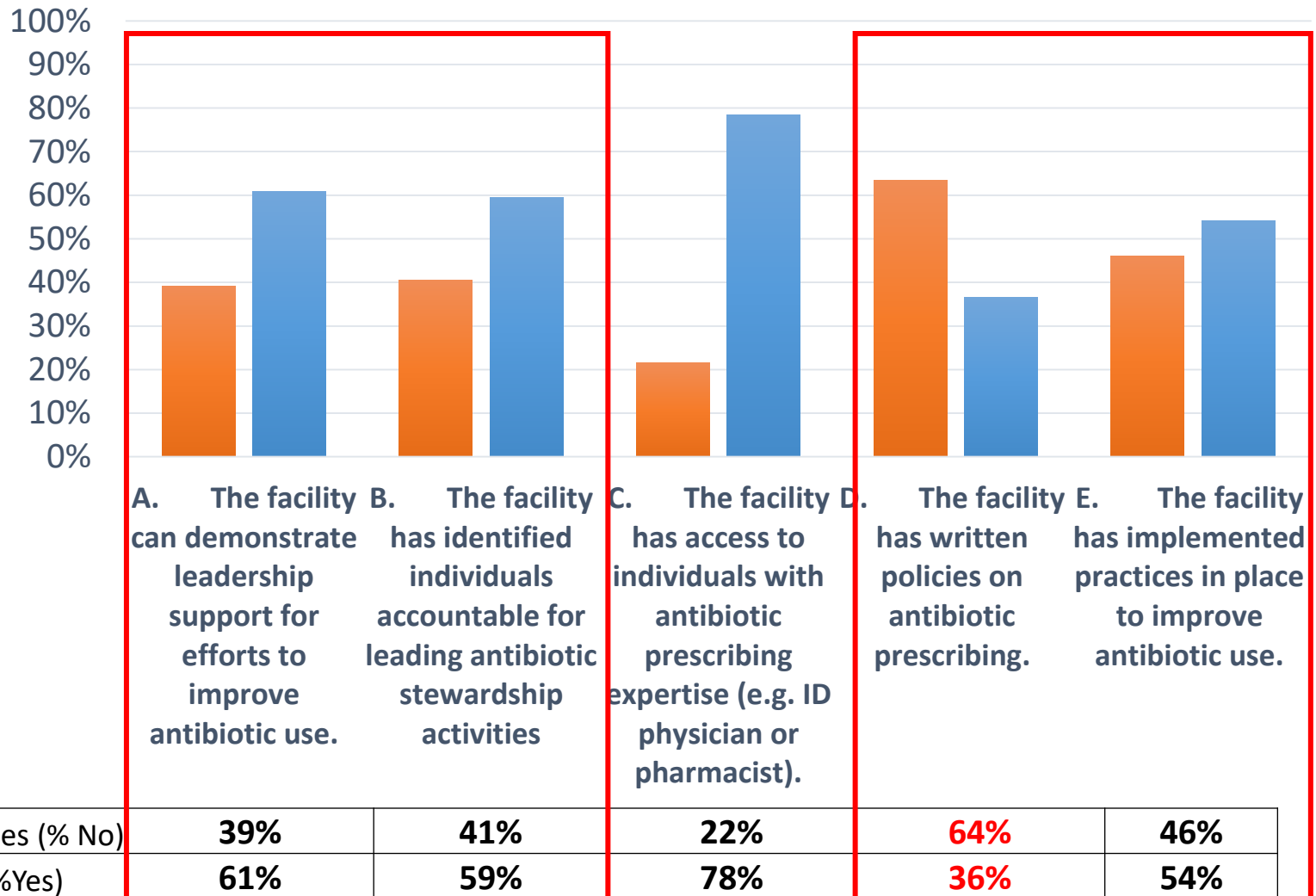
- Focus on front desk
 - Train how to recognize ill visitors and offer masks
- Influenza education sessions
 - Residents and families
- Make masks available in entrances and common areas



[NYC Health](http://www.nyc.gov/health)

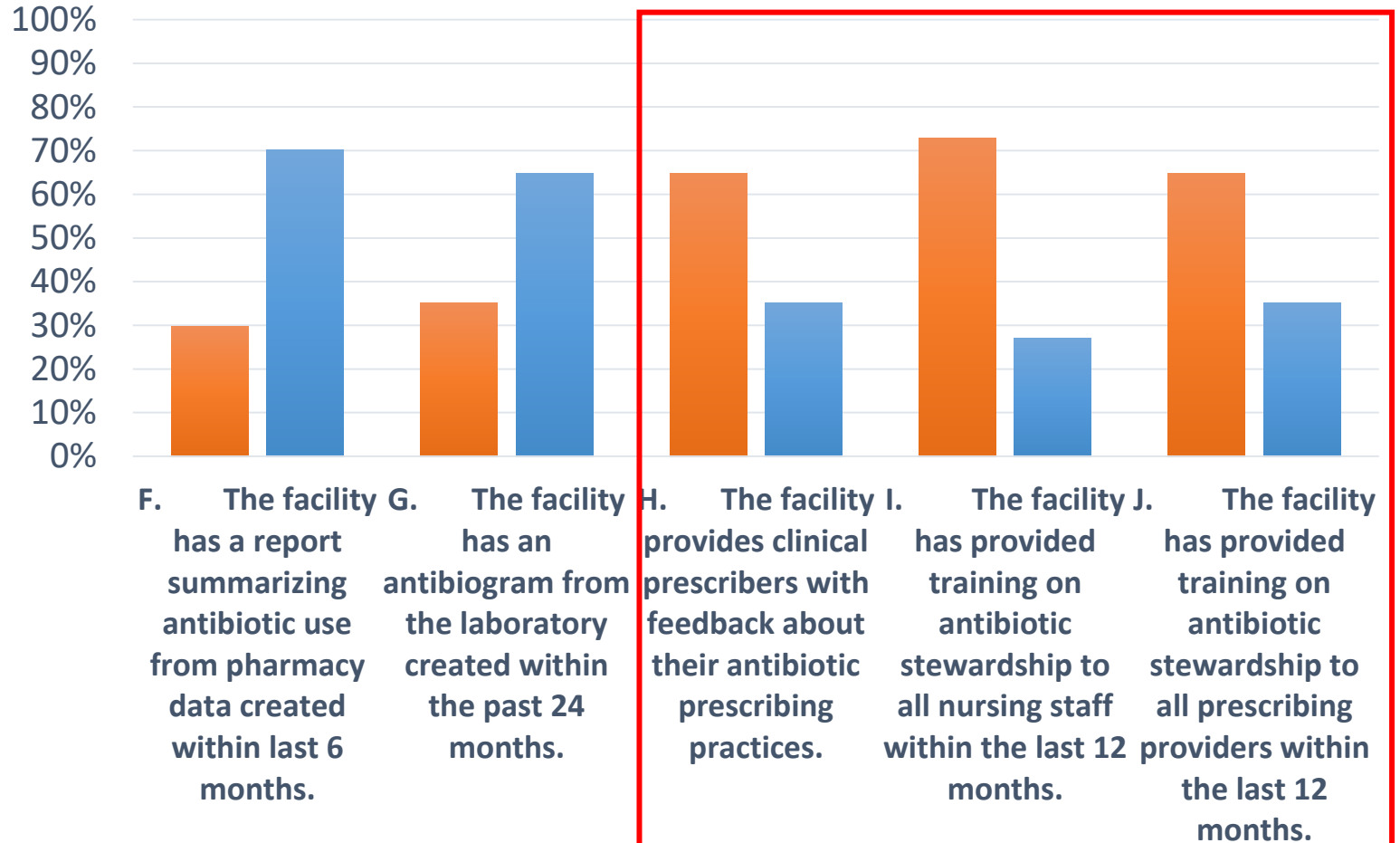


VII. Antibiotic Stewardship



Opportunities (% No) Strengths (%Yes)

VII. Antibiotic Stewardship cont.



Opportunities (% No)	30%	35%	65%	73%	65%
Strengths (%Yes)	70%	65%	35%	27%	35%

■ Opportunities (% No)
 ■ Strengths (%Yes)

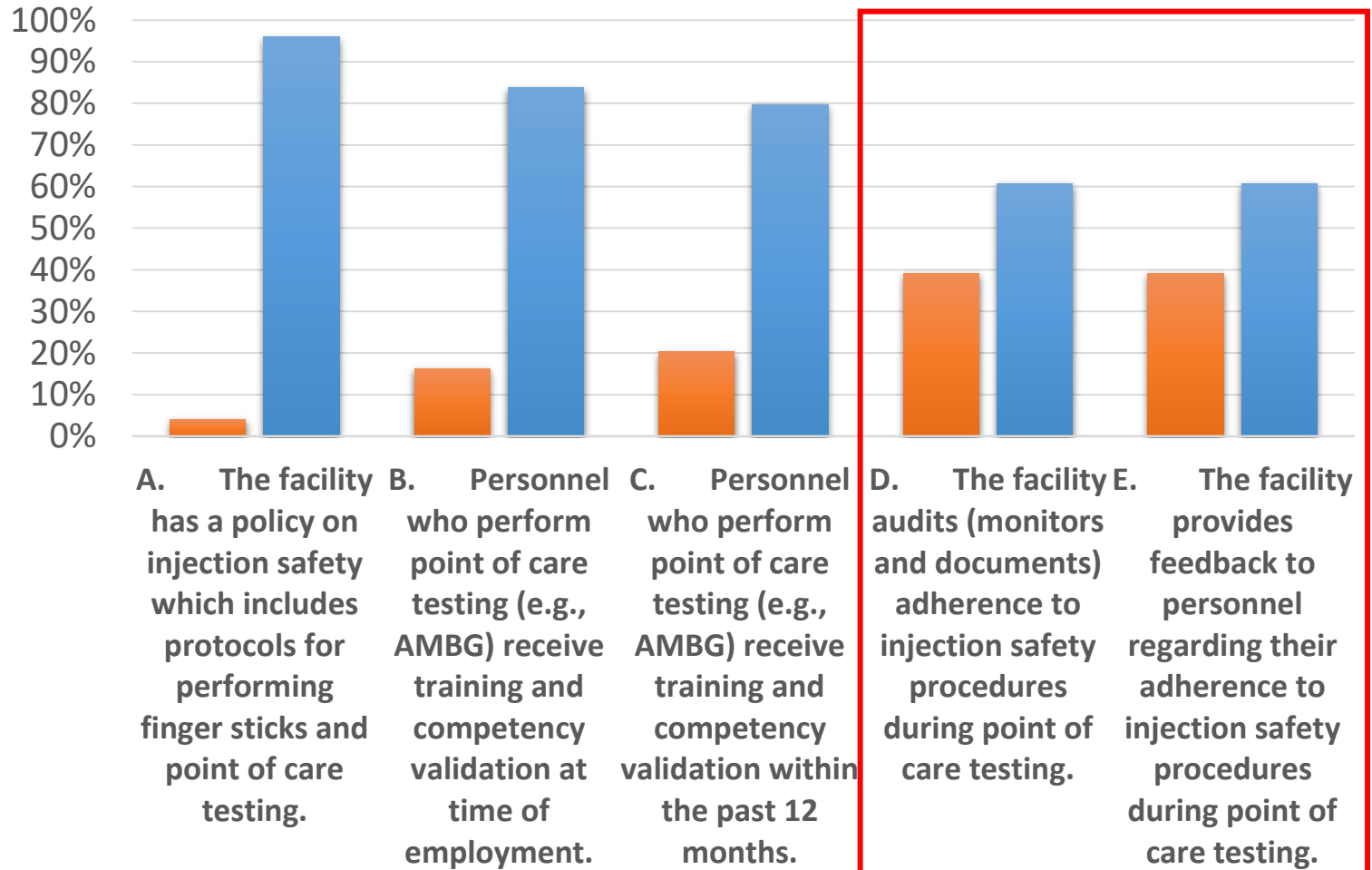
Antibiotic Stewardship

The good ideas...

- Daily stewardship rounds
 - Review abx need, treatment duration, test and culture results
- Standardize watchful waiting procedures
 - Offer alternate comfort therapies
- Engage with families on stewardship education



VIII. Injection Safety



Opportunities (% No)	4%	16%	20%	39%	39%
Strengths (%Yes)	96%	84%	80%	61%	61%

Opportunities (% No) Strengths (%Yes)

Injection Safety

Good Ideas

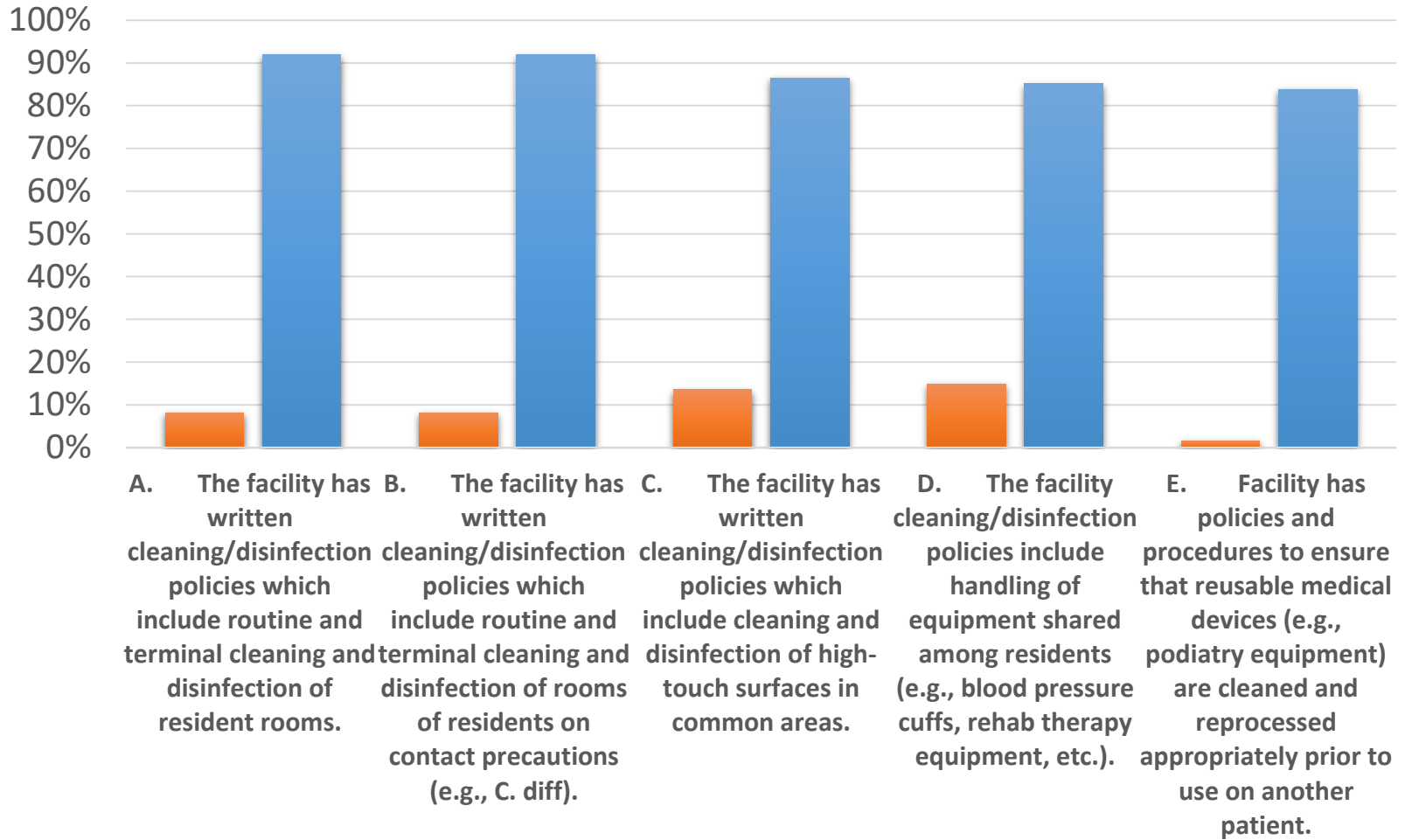
- Utilize “One and Only” campaign resources
- Injection safety “champions”
- Elicit staff input on safe injection equipment



[One and Only Campaign \(CDC, NYSDOH\)](#)



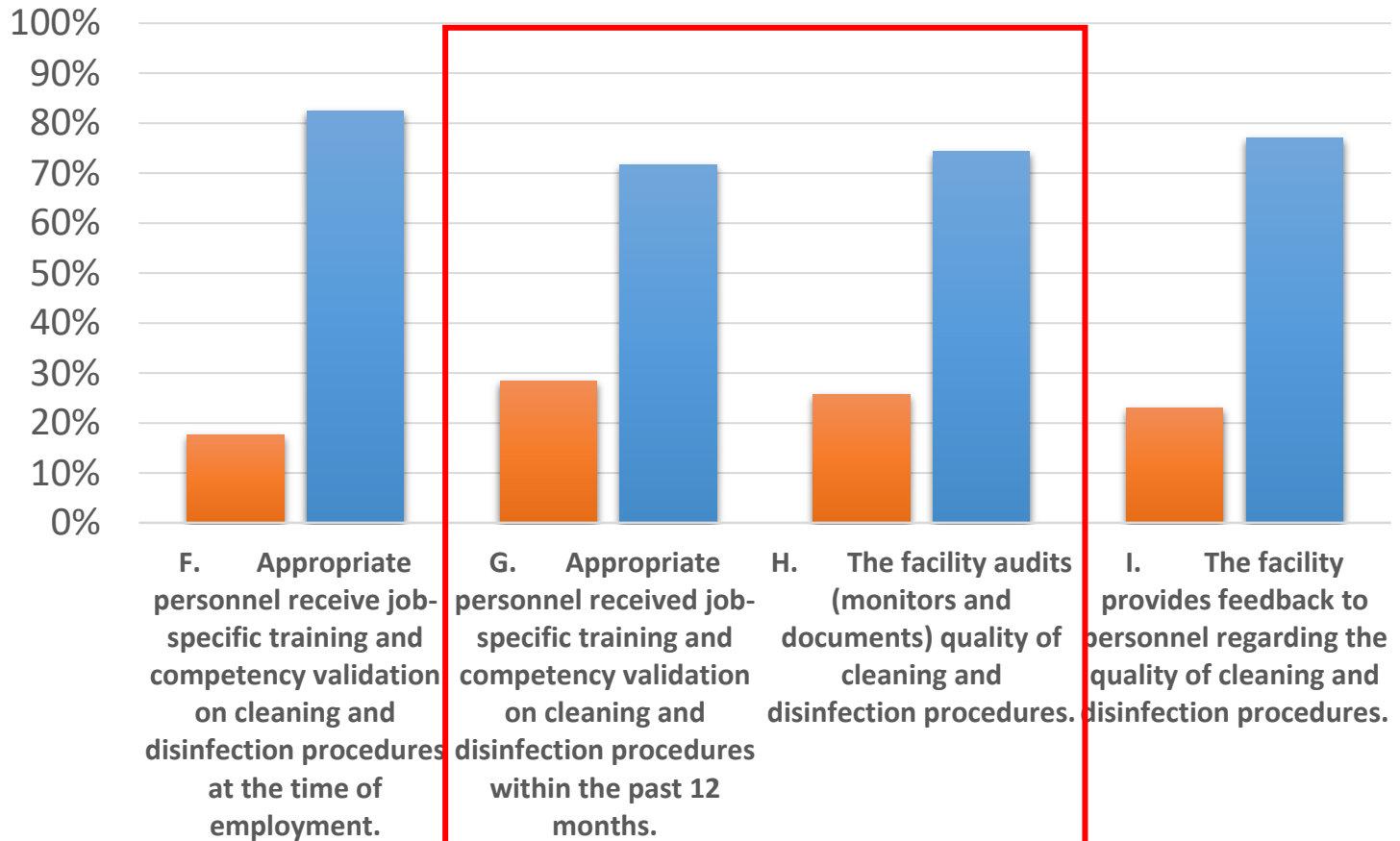
IX. Environmental Cleaning



Opportunities (% No)	8%	8%	14%	15%	2%
Strengths (%Yes)	92%	92%	86%	85%	84%

Opportunities (% No) Strengths (%Yes)

IX. Environmental Cleaning cont.



Opportunities (% No)	18%	28%	26%	23%
Strengths (%Yes)	82%	72%	74%	77%

Opportunities (% No) Strengths (%Yes)

Environmental Cleaning

Good Ideas

- Use a fluorescent marker for audits
 - Useful teaching tool as well
- Meet routinely with environmental services
 - Cleaning/disinfection checklists



[Evaluating Environmental Cleaning \(CDC\)](#)

*% of facilities who answered no



Thoughts?



How Did we Address Gaps?

Resources

- Information packets
 - Competency checklists
- Follow-up report with
 - Improvement plan
 - Links to resources
- “Best Practices and Good Ideas Handbook”
 - In development

Trainings

- Antibiotic Stewardship Symposia in March 2017
- Webinars series on antibiotic stewardship
- APIC EPI 101 and 102 for LTCF (May + July 2018)
 - Certificate course
 - Meets CMS training requirements



Follow-Up Evaluation Survey

Section 1

Question 1	
Have there been any of the following changes at your facility since you had your site visit?	
a) Change of Facility ownership	<input type="radio"/> Yes <input checked="" type="radio"/> No
b) Change in administrative leadership	<input type="radio"/> Yes <input checked="" type="radio"/> No
c) Change in infection prevention and control leadership	<input type="radio"/> Yes <input checked="" type="radio"/> No
d) Change in Nursing Leadership	<input type="radio"/> Yes <input checked="" type="radio"/> No
e) Inspection by the NY State Department of Health or other regulatory entity	<input type="radio"/> Yes <input checked="" type="radio"/> No
f) Outbreak of an infectious disease	<input checked="" type="radio"/> Yes <input type="radio"/> No
i. If yes, please specify the disease (e.g. norovirus, influenza, etc.):	Adenovirus
ii. Month and Year outbreak occurred:	Month: August Year: Choose an item. 2017
g) If 'Yes' to any of the above 'Changes', please explain their impact on your facility's infection control program.	Total of 18 cases of URI on a single Unit in
h) Please describe and other significant changes since you had your site visit that might have impacted (positively or negatively) your infection prevention and control program activities?	Several case of pneumonia in August and

Facility goals / plan	
Question 2 Please provide two (2) or more infection control goals that your facility had planned to address during the follow up period and state how these were addressed during the 6-12 months follow up period, after your site visit. (e.g. new plan/policy developed around PPE storage after discussion with lead infection preventionist)	
Goal #1 (Please state your 1st infection control goal here): The facility provides feedback to personnel regarding their adherence to injection safety procedure. Please describe how you have addressed/implemented this goal: All in service sign in sheets now have documentation of feedback.	
Goal #2 (Please state your 2nd infection control goal here): Supplies necessary for appropriate cleaning and disinfection procedures are available on all. Please describe how you have addressed/implemented this goal: Housekeeping has ordered and has on hand products that are EPA- registered including produ	
Question 3 Please describe how your facility benefitted from participating in the National Infection Prevention and Control Initiative (NIPCI) program: Made aware of various products on the market for efficient disinfection, assistance in expar	
Question 4 Are there additional infection control topics you would like more information/resources on? Please describe: MRSA and VRE treatments	

Areas for Improvement	
I. Infection Control Program and Infrastructure	
Improvement Plan Recommendations	Actions Taken
E. Written infection control policies and procedures are reviewed at least annually or according to state or federal requirements, and updated if appropriate?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Partial If No or Partial, please select the reason below (choose one best response): <input type="radio"/> 1. Lack of personnel <input type="radio"/> 2. Lack of subject matter experts <input type="radio"/> 3. Lack of IT Systems <input type="radio"/> 4. Lower priority Function <input type="radio"/> 5. Other - list a reason in the space Please describe any significant challenges and/or feedback on implementing this recommendation:
II. Healthcare Personnel and Resident Safety	
I. Do all personnel receive training and competency validation on managing a blood-borne pathogen exposure at the time of employment?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Partial If No or Partial, please select the reason below (choose one best response): <input type="radio"/> 1. Lack of personnel <input type="radio"/> 2. Lack of subject matter experts <input type="radio"/> 3. Lack of IT Systems <input type="radio"/> 4. Lower priority Function <input type="radio"/> 5. Other - list a reason in the space

- 99% completed follow-up survey!
- Data analysis in progress



Next Steps

- Complete data analysis
 - What are persisting gaps?
 - Identify facilitators and barriers to implementation
- Develop strategies to continue infection control support for LTCFs
 - How do we incorporate IC into ongoing programs?



Conclusions

- NYC LTCFs have significant strengths
 - IPC program infrastructure
 - Disease reporting and surveillance
- Opportunities for improvement
 - Formal IPC training
 - Competency-based training
 - Audits and feedback
 - Building out stewardship programs



Enhanced Infection Control = Enhanced Preparedness

- Prepare to **prevent** infections
- Prepare to **detect** in your facility
- Prepare to **protect** healthcare workers and patients
- Prepare to **respond** to an outbreak



Resources

Handouts available with list of resources

Standard Precautions: Observation Categories		Room 1	Room 2	Room 3	Room 4	Room 5	Summary of Observations	
							Yes	Total Observed
1	Are gloves readily available outside each patient room or any point of care?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2	Are cover gowns readily available near each patient room or point of care?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3	Is eye protection (face shields or goggles) readily available near each patient room or point of care?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4	Are face masks readily available near each patient room or point of care?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5	Are alcohol dispensers readily accessible and functioning?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Total YES and TOTAL OBSERVED								

<http://ipcobserationtools.site.apic.org/observation-tools-library/>



Acknowledgements

NIPCI Team

- Christian Oriuwa
- Pamela Kellner
- Gloria Airall-Simon
- Mary Foote
- Timothy Styles
- Danielle Sollecito
- Beth Nivin
- Alice Yeung



Questions and Feedback



Thank You



Gloria Airall-Simon
gairalls@health.nyc.gov
347.396.2604



**HEALTHCARE SYSTEM
READINESS**

Sponsored by the Office of Emergency Preparedness and Response