

# Circles of Influence: Evidence-based Practices and Practice-based Evidence

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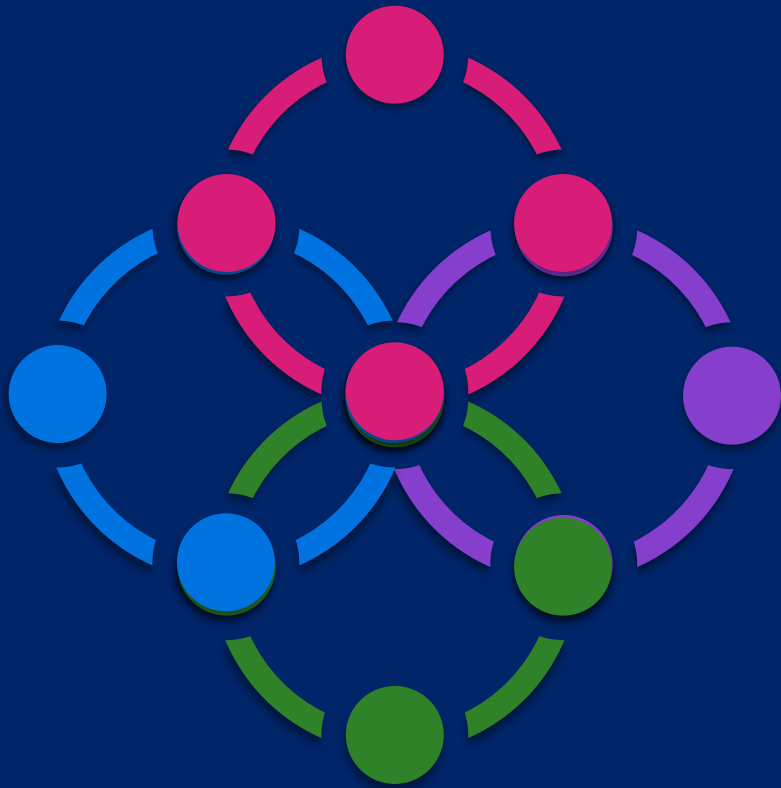
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**No disclosures.**



# Objectives



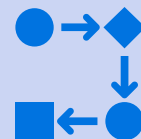
Research, Practice, Evaluation,  
You = New Evidence



Distinguish between **Evidence-Based Practice (EBP)** and **Practice-Based Evidence (PBE)**.



Describe how infection preventionists influence both evidence and practice.



Identify opportunities to strengthen feedback loops within your organizations.

# When making an infection prevention decision, which factors most influence you? Rank 1 – 4.

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3003 864**



# Setting the Stage

# WHY THIS MATTERS



## Purpose:

Explore how *evidence-based practice (EBP)* informs frontline infection prevention, and how *practice-based evidence (PBE)* enriches research and policy.

Infection prevention relies on both **science** and **situational experience**.

Evidence isn't static — it evolves through use.

Strengthen the bridge between EBP and PBE in your own circles of influence.

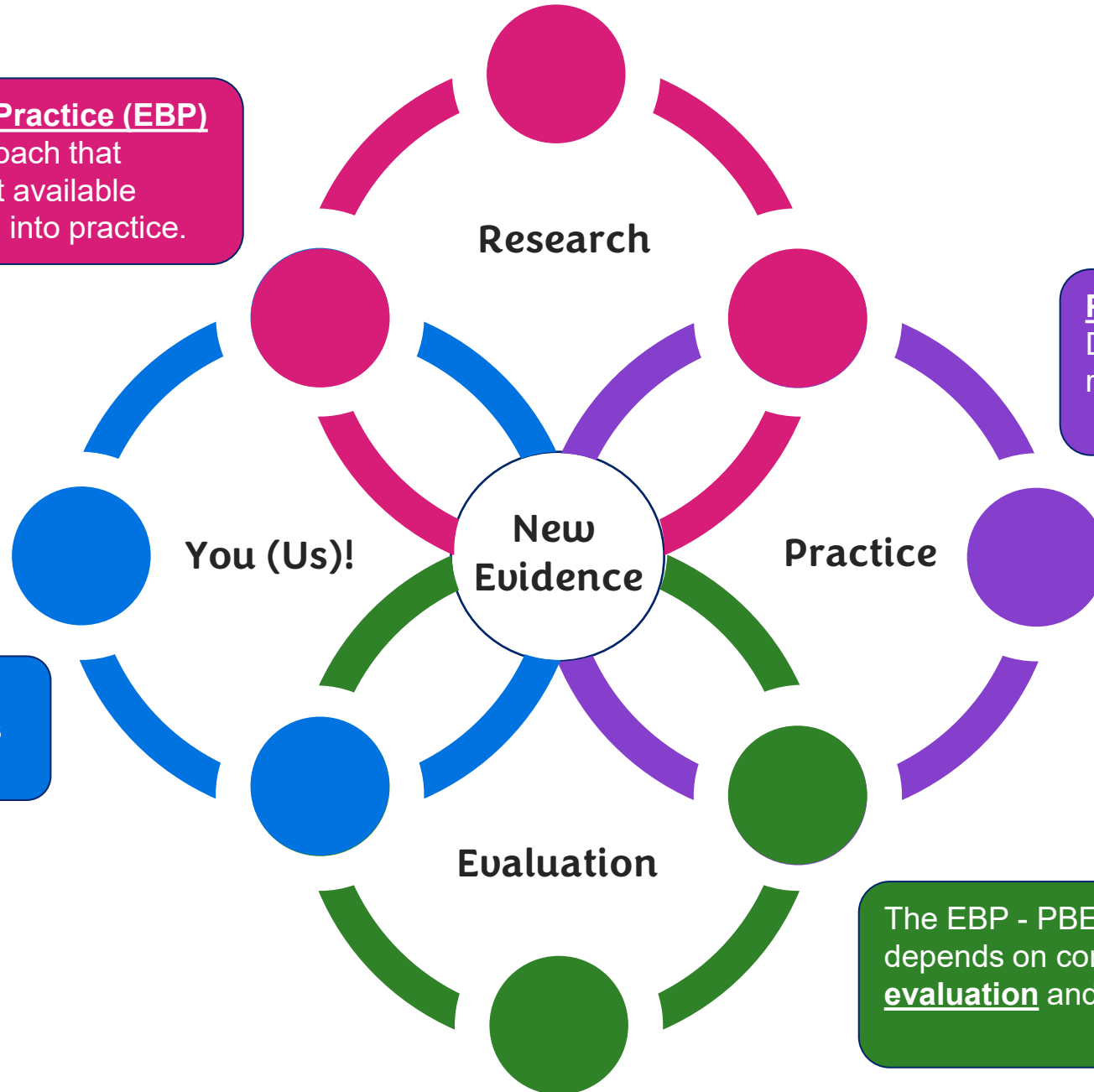
# Defining the Circles

## Evidence-based Practice (EBP)

A systematic approach that integrates the best available research evidence into practice.

## Practice-based Evidence (PBE)

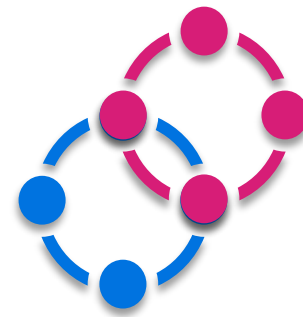
Data and insights gathered from real-world practice.



**Infection Prevention Professionals** – the process depends on us!

The EBP - PBE feedback loop depends on continuous evaluation and learning.

# Circle (Influence) of the Infection Preventionist - EBP



## How IPs Use and Model EBP

**Integrate** scientific literature, national guidelines, and surveillance data.

**Synthesize and translate information (into action)** from multiple sources into local policy and daily routines (CDC, APIC, SHEA, ACIPC, peer-reviewed studies).

**Lead, advise, and educate** on policy created from research literature.

Explain *why* practice matter, not just *what* to do, fostering a culture driven by understanding not just compliance.

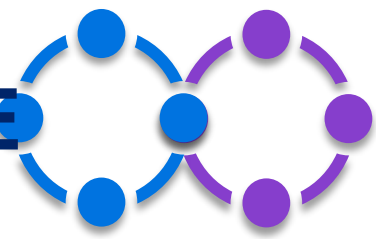
### Implementation Science

Act as knowledge brokers – identify barriers to implementation and apply performance improvement frameworks (Plan-Do-Study-Act) for sustained change. Use local data to tailor interventions.

## How IPs Model EBP Behaviors (Examples)

1. Adopting WHO's 5 Moments of Hand Hygiene into policy and workflow.
2. Isolation precautions, reprocessing standards, environmental cleaning procedures.
3. Using current research to demonstrate why preoperative bathing reduces surgical site infection rates.
4. Introducing chlorhexidine wipes in ICU using PDSA cycle to monitor uptake and refine process steps.

# Circle (Influence) of the Infection Preventionist - PBE



## How IPs Contribute to PBE

**Collect data** from surveillance, audit, outbreak investigations which is analyzed and become new evidence about what works in practice.

Capture **contextual adaptations** that make interventions successful in their setting—this **contextual evidence** is invaluable for scaling interventions.

Close the loop by **disseminating practice-based insights** through conference presentations (ACIPC, APIC, SHEA), journal publications/case reports or internal QI summits. These shared learnings expand the body of practical evidence and inform new guidelines.

**Participate in or co-lead multicenter studies**, audits, or collaborative learning projects. Ensures the realities of implementation are represented in research design, making findings more applicable and sustainable.

**Identify gaps and questions** – mismatch between policy and practice which forms basis for new research questions.

## Examples of IP Contributions to PBE

1. Local HAI reduction data demonstrating the impact of nurse-led device rounds → published or presented (conference).
2. Application of isolation precautions: Acute vs. Ambulatory vs. LTC vs. other congregate setting, etc.
3. Contributing facility data to a national study on environmental cleaning audits or device-associated infection prevention.
4. Realizing that isolation signage placement affects compliance more than the signage wording itself or vice versa.

# Circle of Organizational Influence

PBE demonstrates ROI (return on investment) and supports leadership decisions.



Embedding evidence in policy and education.



Leveraging quality improvement projects.



Using PBE to refine policies (e.g., isolation criteria).



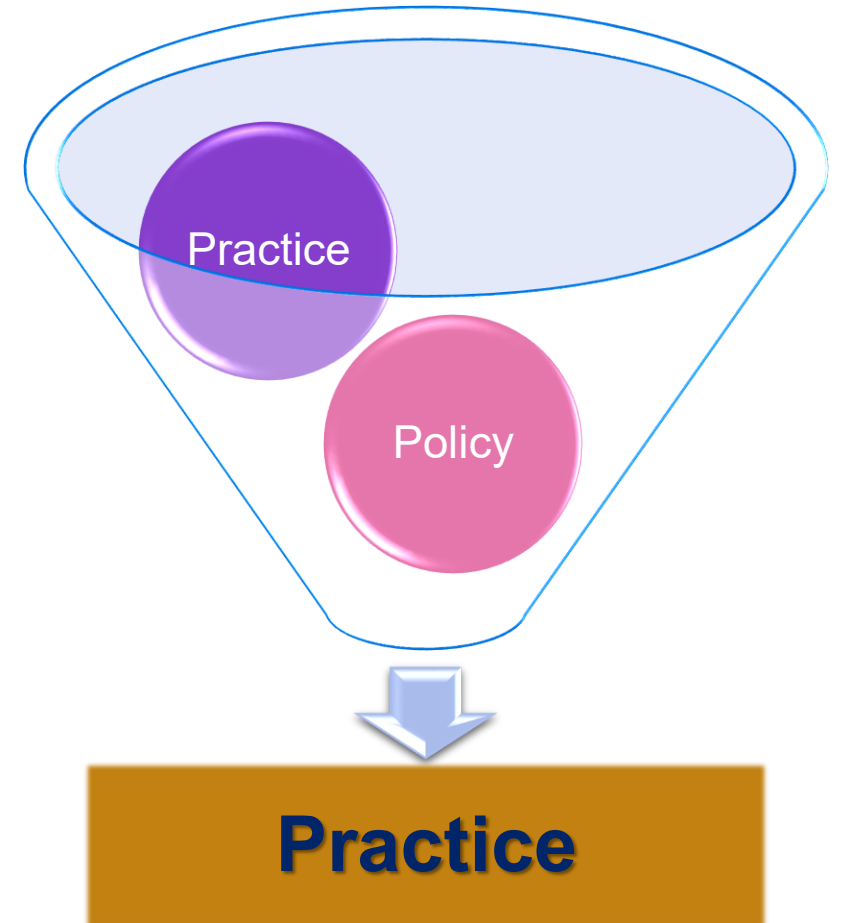
Data storytelling for leadership buy-in.



Creating structures for shared learning (e.g., infection prevention councils, multidisciplinary rounds).



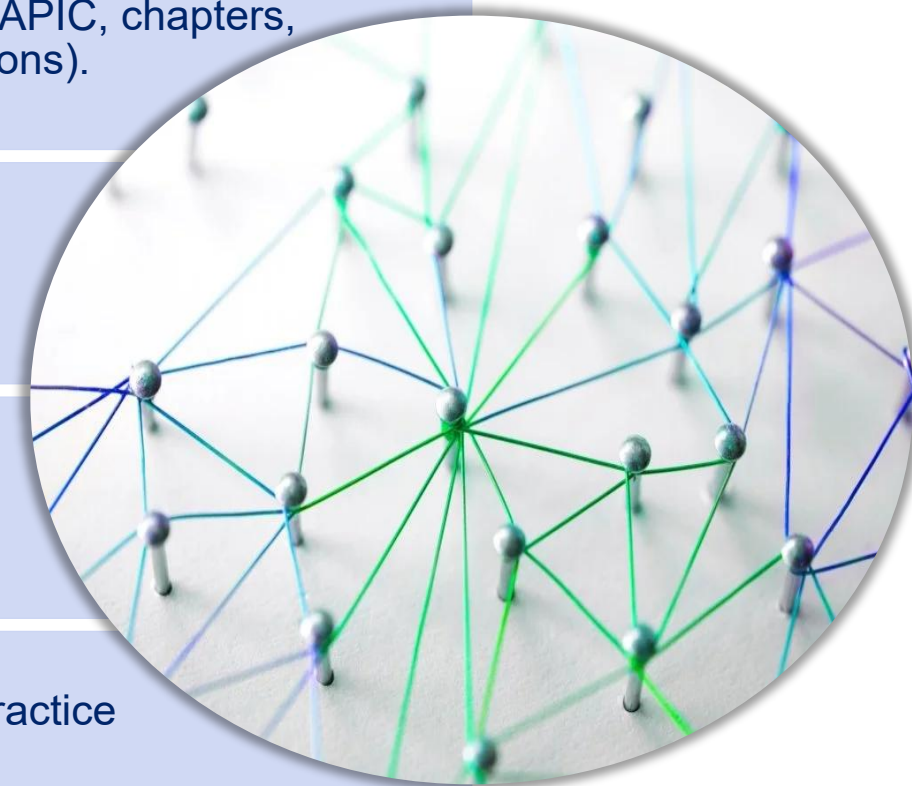
Embedding EBP and PBE into policy review and staff competency programs (e.g., career ladders).



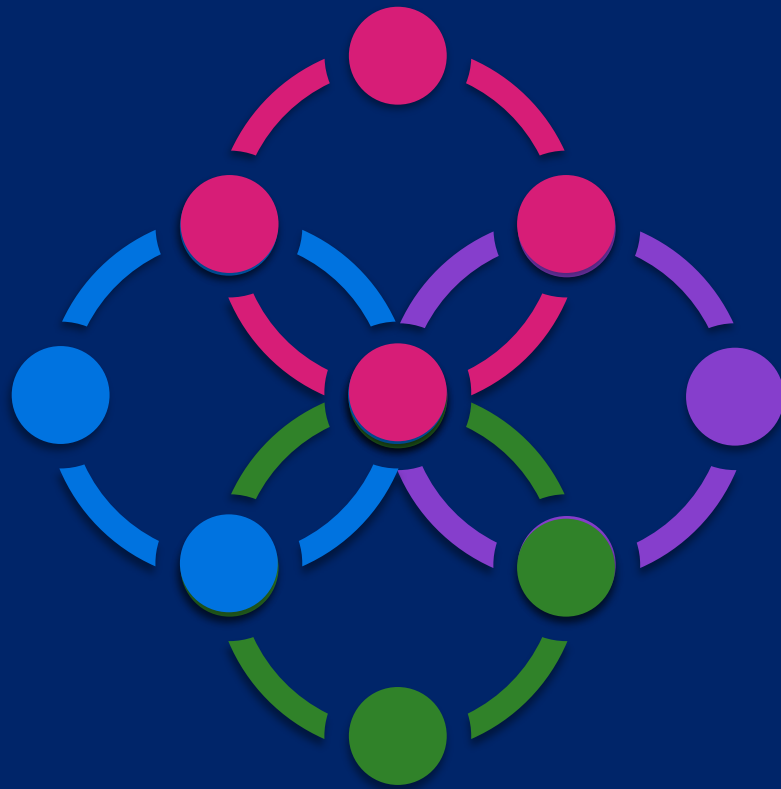
# Circle of System Influence

Local experiences feed system-level improvements — your data matters globally.

<b>Collaborating</b>	Collaborating across facilities and networks (e.g., ACIPC, APIC, chapters, conferences, networking, national organization collaborations).
<b>Benchmarking</b>	Benchmarking via CDC/other national data (National surveillance systems or benchmarking networks).
<b>Participating</b>	Participating in multi-site learning collaboratives (hospital associations).
<b>Sharing</b>	Sharing local insights → national guidance (aggregated practice data informing standards, HICPAC).



# The Dynamic Feedback Loop



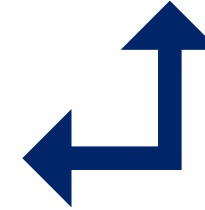
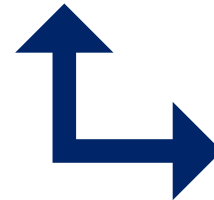
Research, Practice, Evaluation,  
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Research informs practice  
(EBP).



Practice generates new data  
(PBE).



Shared learning (and  
continuous evaluation)  
refines evidence.

# Evolution of COVID PPE Guidance

## The Dynamic Feedback Loop

Date	Guidance / Event	Key points & Implications for PPE
Feb 10, 2020	Early guidance document: “Strategies for Optimizing the Supply of N95 Respirators” (for 2019-nCoV) ( <a href="http://cthcc.org">cthcc.org</a> )	Recognized potential for PPE shortage; encouraged planning for respirator use, reuse, alternate options.
Mar 17, 2020	Updated CDC guidance: “Strategies for Optimizing the Supply of N95 Respirators: Crisis/Alternate Strategies” ( <a href="https://www.cdc.gov/media/releases/2020/s0317-n95-respirators.html">CDC Archive</a> )	Introduced "contingency" & "crisis" capacity strategies for respirators. Essence: normal PPE supply may not be feasible; need to prioritize respirators for highest risk situations.
Mar 21, 2020	Professional society update referencing the evolving PPE guidance (e.g., for anaesthesia professionals) ( <a href="https://www.asanet.org/press-releases/2020/03/21/20200321-01">American Society of Anesthesiologists</a> )	Acknowledged rapidly evolving guidance; emphasized correct use of PPE, especially respirators, gowns, eye protection.
Nov 23, 2020	Update to the respirator-supply document: clarified returning to conventional capacity when supply allows; limited reuse of N95 respirators to no more than ~5 uses when no manufacturer guidance. ( <a href="https://www.cdc.gov/media/releases/2020/s1123-n95-respirators.html">CDC Stacks</a> )	Reflects shift from crisis mode to more sustainable practices.
Sept 2021	CDC updates its Infection Prevention & Control (IPC) guidance for healthcare settings, emphasising correct PPE use among other IPC practices ( <a href="https://www.cdc.gov/infection-prevention/2021/09/21/210921-01">NACCHO</a> )	Re-emphasized: PPE remains key part of IPC, but sits within a broader framework (vaccination, ventilation, engineering controls).
May 8, 2023	CDC interim healthcare-setting IPC guidance update: notes that after the end of the Public Health Emergency, community transmission metrics changed; source control (masking) remains part of PPE strategy where risk is higher. ( <a href="https://www.cdc.gov/infection-prevention/2023/05/08/230508-01">CDC</a> )	Shows PPE guidance adapting to changing epidemiology and supply environment; emphasizes risk-based use of PPE.

## Raise Your Hand

**Have you ever  
changed practice  
based on...?**



A new research article  
or national guideline.

Local data or audit  
results.

Staff feedback or  
observation.

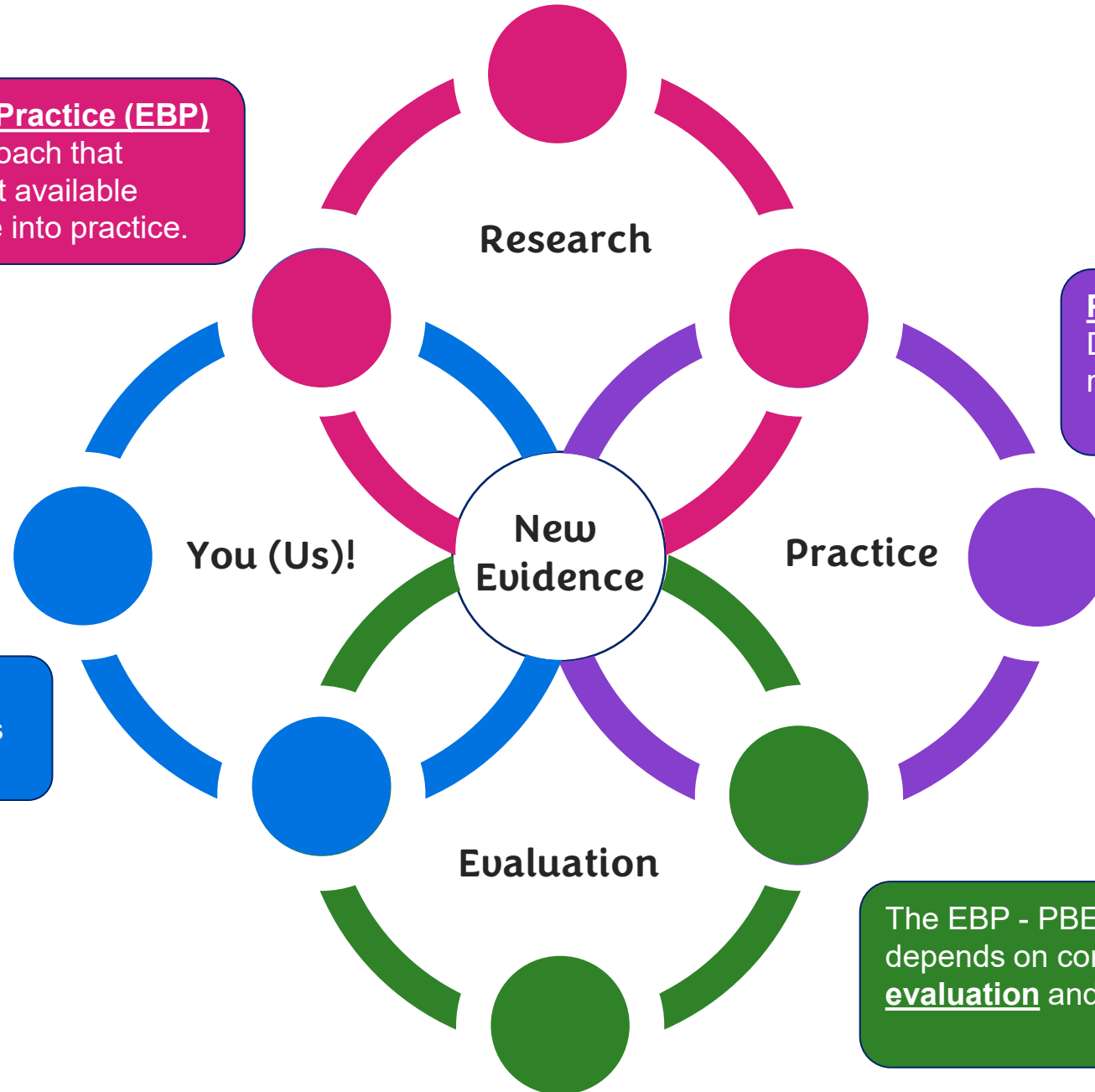
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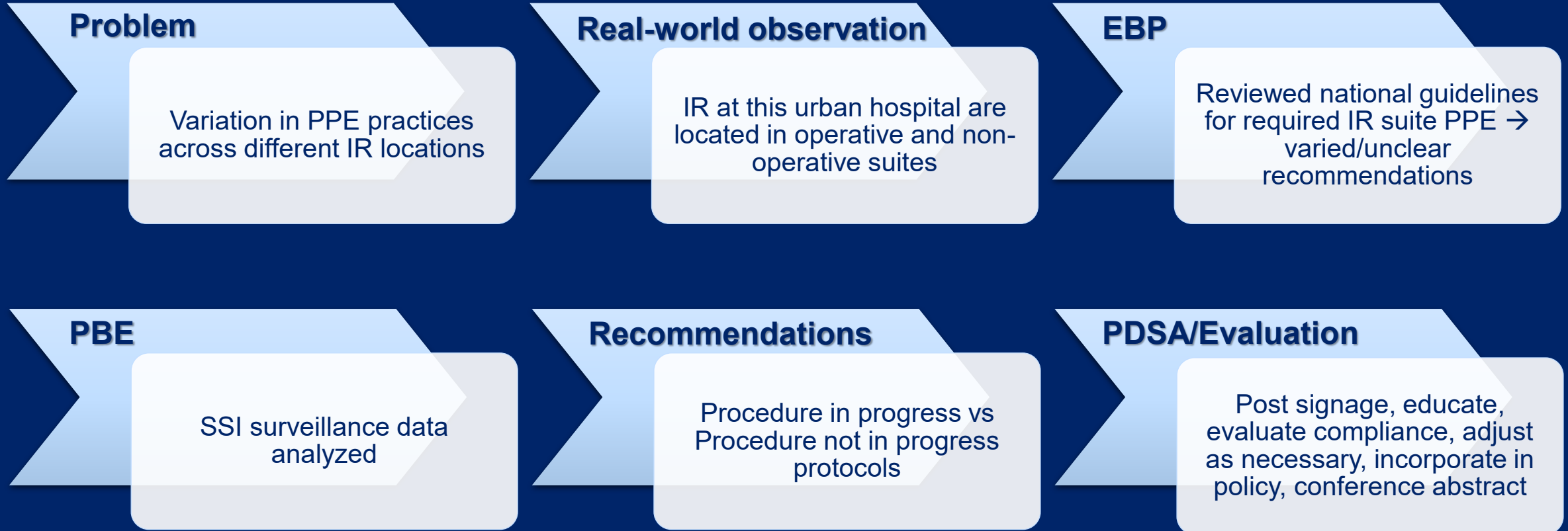
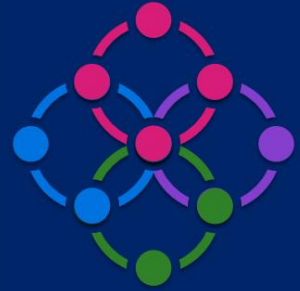


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# Case Study - Example Circle Completion

## Interventional Radiology PPE Requirements



# Leadership as a Circle Multiplier

All Infection Preventionists are leaders.



Leaders create psychological safety for inquiry.

Encourage curiosity and reflective practice.

Recognize staff who contribute PBE insights.

Recognize staff who use and generate EBP.

# Tools to Strengthen Circles of Influence

Make Evidence **VISIBLE** and **ACTIONABLE**. Use Storytelling.



Journal clubs with applied focus



Practice debriefing – local chapter or national meetings



QI dashboards and visual data sharing



Collaborative data reviews – weekly epi meetings

# Measure Influence!

**EVALUATE** both **PROCESS** and **IMPACT**.



Surveillance  
data trends

Compliance  
audits

Feedback  
surveys

Policy and  
outcome  
metrics

# Evidence-based Practices and Practice-based Evidence

## Hand Hygiene Improvement

Hand Hygiene



76%



Hand Sanitizer



Placed in targeted locations

Hand Hygiene

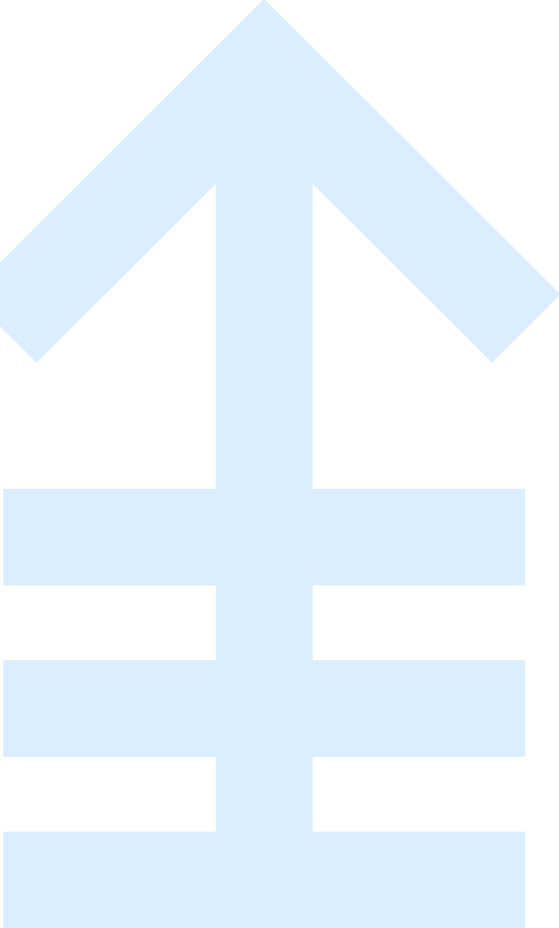


92%



# What will you do to strengthen your circle of influence?

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# Takeaways

Infection prevention thrives when we see ourselves as both users and creators of evidence.

EBP and PBE are complementary, not competing.

Every IP contributes to evidence creation. IPs are uniquely positioned at the intersection.

Every audit, every outbreak review, every improvement project is data. That data *is* evidence.

Influence grows when learning is shared. What starts as a local solution can evolve into regional or national guidance.

Infection preventionists are both implementers and innovators & operate in multiple circles of influence—from practice to policy creators.

Every observation, improvement, and shared success story contributes to the collective body of evidence.



We are not just users of evidence - we are creators of it.

Evidence doesn't just live in journals - it lives in practice



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