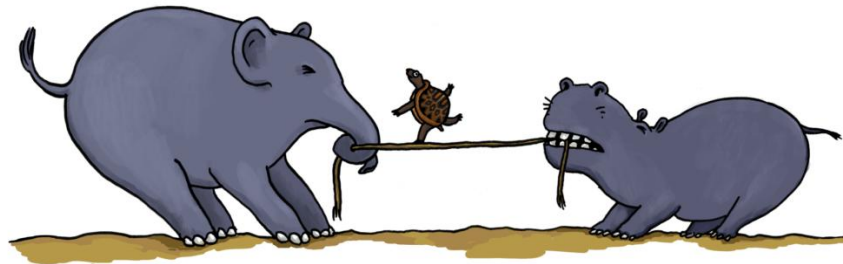


Infection Prevention Research Should **Not Soley** Drive Infection Prevention and Control Practice

Tania N. Bubb, PhD, RN, CIC, FAPIC

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ACIPC 2025 Conference



Memorial Sloan Kettering
Cancer Center

No disclosures.

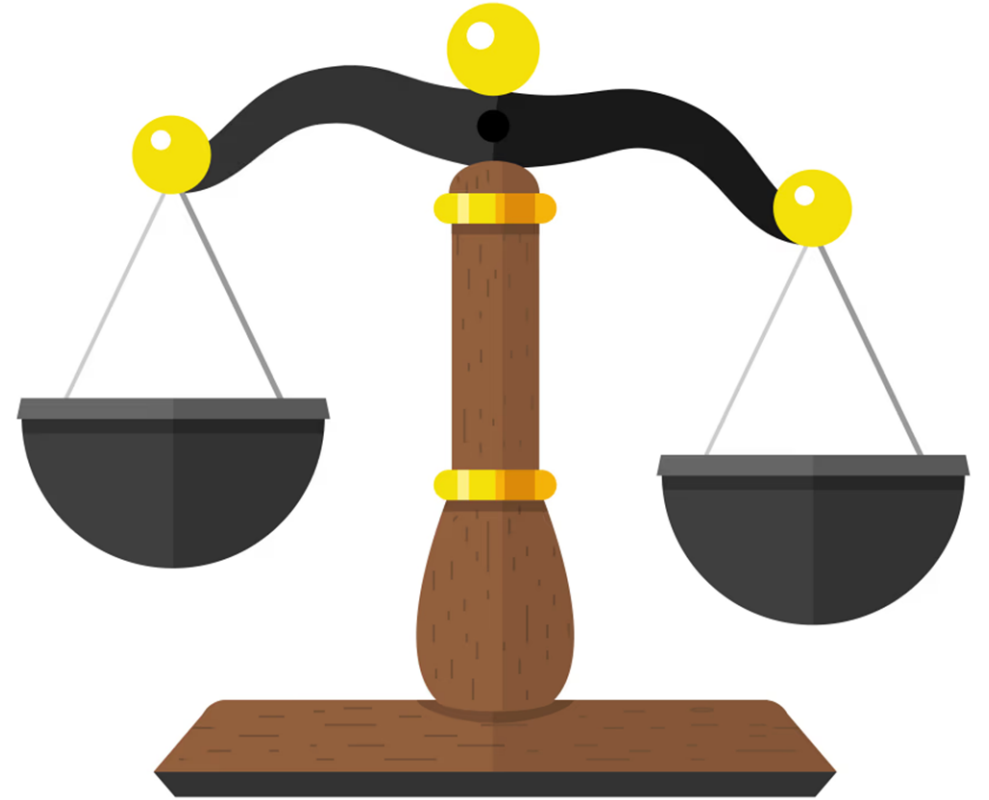
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Infection Prevention Research Should Drive Infection Prevention and Control Practice



Practice is evidenced informed, not
research-driven

We value research, but it cannot be
the sole driver of infection
prevention practice



The Reality of Infection Prevention



Complex, multidisciplinary,
context-dependent

Real-world conditions rarely
match research settings

Evidence \neq Implementation

1

The Research – Practice Gap

Controlled Evidence
vs. Complex Reality



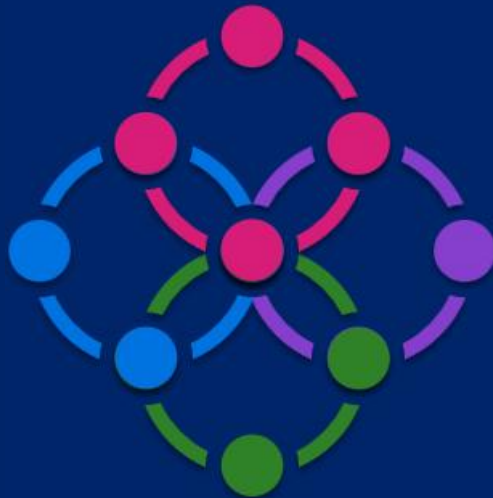
Research settings are often idealized; practice environments are not.

Context (staffing, patient mix, culture) changes outcomes.

Practice must adapt evidence, not just apply it.

2 Practice-based Evidence is Powerful

Practice Creates Evidence
Too



Research, Practice, Evaluation,
You = New Evidence

Local surveillance, QI projects, and audits generate real-time data.

Many IPC innovations start from frontline experience (e.g., environmental cleaning workflows).

PBE informs future research — it's a two-way street.



Prevention

Reducing the risk of infection

strategist

- Rural/CAH Hospital, Minnesota
- 4-level masking system
- Based on real-time local respiratory trends
 - Patient/employee COVID positivity
 - State/county hospitalization, ER visits
 - CDC flu activity
- ≥3 indicators
- Color coded signage

FEATURE

Adapting Masking Policies Using Local Data: How One Rural Hospital Built a Flexible, Data-Driven Masking Policy

Justyna Holcombe, MA, BSN, RN, CIC, is an infection preventionist for Mora Hospital.

Lessons Learned for Other IPs

If you're facing similar challenges, there are a few key lessons we learned along the way. First, start with the data you already have—don't wait for a perfect dashboard or real-time analytics. Even imperfect data can guide meaningful decisions when reviewed consistently. Second, make your system visual and easy to follow. Our color-coded levels helped staff, patients, and visitors quickly understand expectations without needing to review long policy memos. Communication was also critical. Regular updates, shared weekly and reinforced during daily huddles, kept everyone on the same page and reduced confusion during transitions. Perhaps most importantly, we found that success depended on teamwork. Infection prevention isn't a one-person job—it requires support from leadership and active participation from frontline staff. While every healthcare setting is different, the core idea is the same: by tracking the right trends early, you can respond sooner—and better protect your patients and teams.

3

The Ethical and Operational Imperative

In IPC, Waiting for Research
Can Cost Lives



COVID-19: IPC teams made real-time PPE and isolation decisions before evidence existed.

“Best available evidence” often comes from experience first.

Ethical obligation: act now, refine later.

4

Research is Not Infallible

Evidence Has Limitations



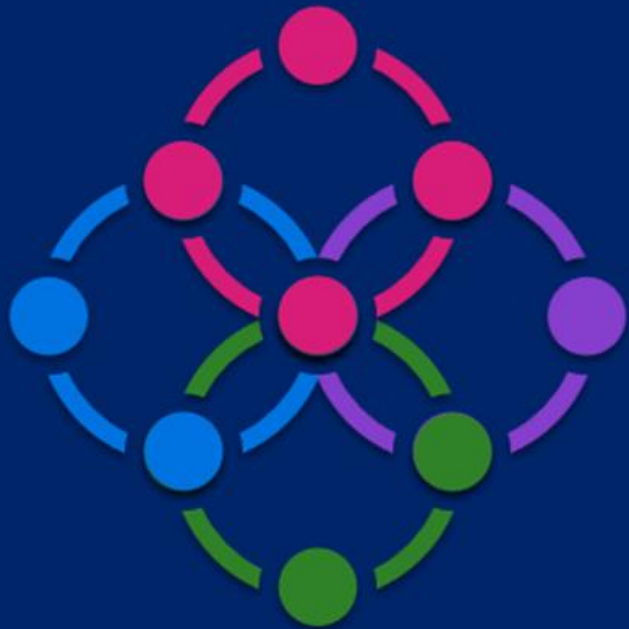
Bias, funding priorities,
publication lag.

Evidence evolves — what’s
“best” today may change
tomorrow.

Effective practice blends
evidence, expertise, and
judgment.

Research Informs; Practice Transforms

Our patients don't benefit from a perfect paper — they benefit from adaptable practice.



Research, Practice, Evaluation,
You = New Evidence

Infection prevention is both a science and a practice.

Research lights the path, but practice clears the way.

If we let research *drive* practice, we risk missing the nuance, agility, and innovation that come from the frontline.

Instead, let us advocate for a *partnership* — where research informs, and practice transforms.”

