

# Evidence Based Recommendations for Management of Peripherally Inserted Intravenous Therapy

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## Background

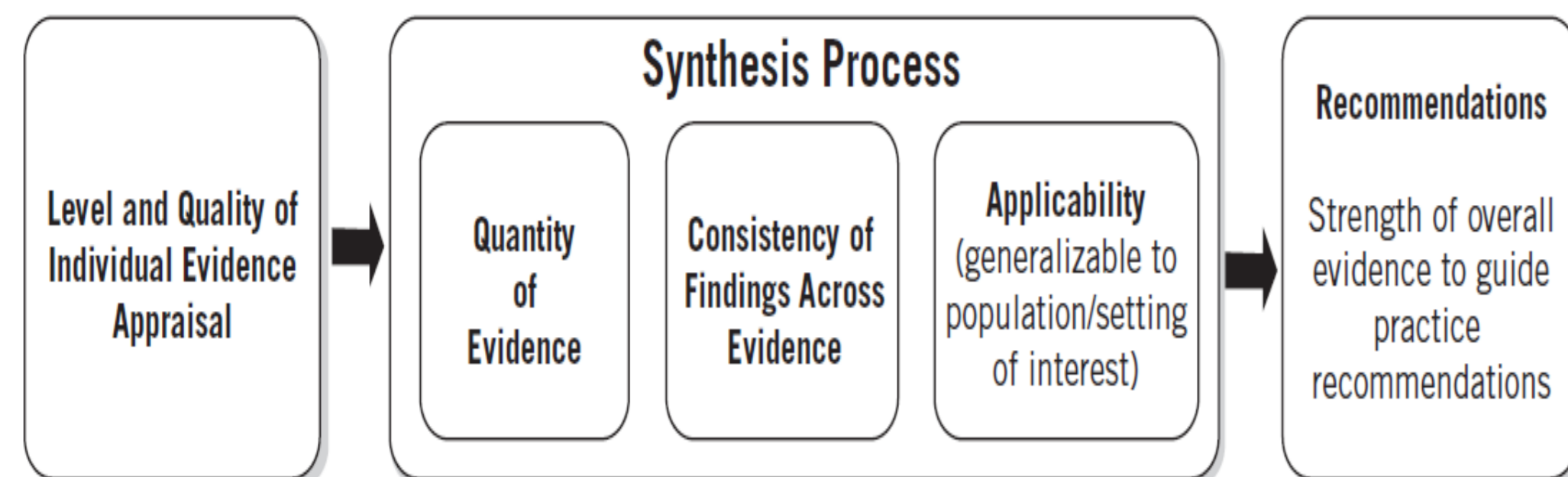
- Evidence-based practice (EBP) standards for management of the patient with a peripheral intravenous line (PIV) have changed over the past two decades to move beyond time-based rotation of PIVs.
- The BWFH IV team recognized a gap in practice and began work to align their practice with current evidence.

## Setting

- A 171-bed Magnet *with Distinction*™ designated community teaching hospital in the Northeast U.S.

## Purpose

- To review evidence-based research, quality improvement work, and national/local standards to provide recommendations for management of PIV.
- To launch a nurse-led EBP change to:
  - Maintain the safety and efficacy of peripheral IV therapy
  - Improve the patient experience
  - Standardize research-based assessment and rotation of existing PIV sites.



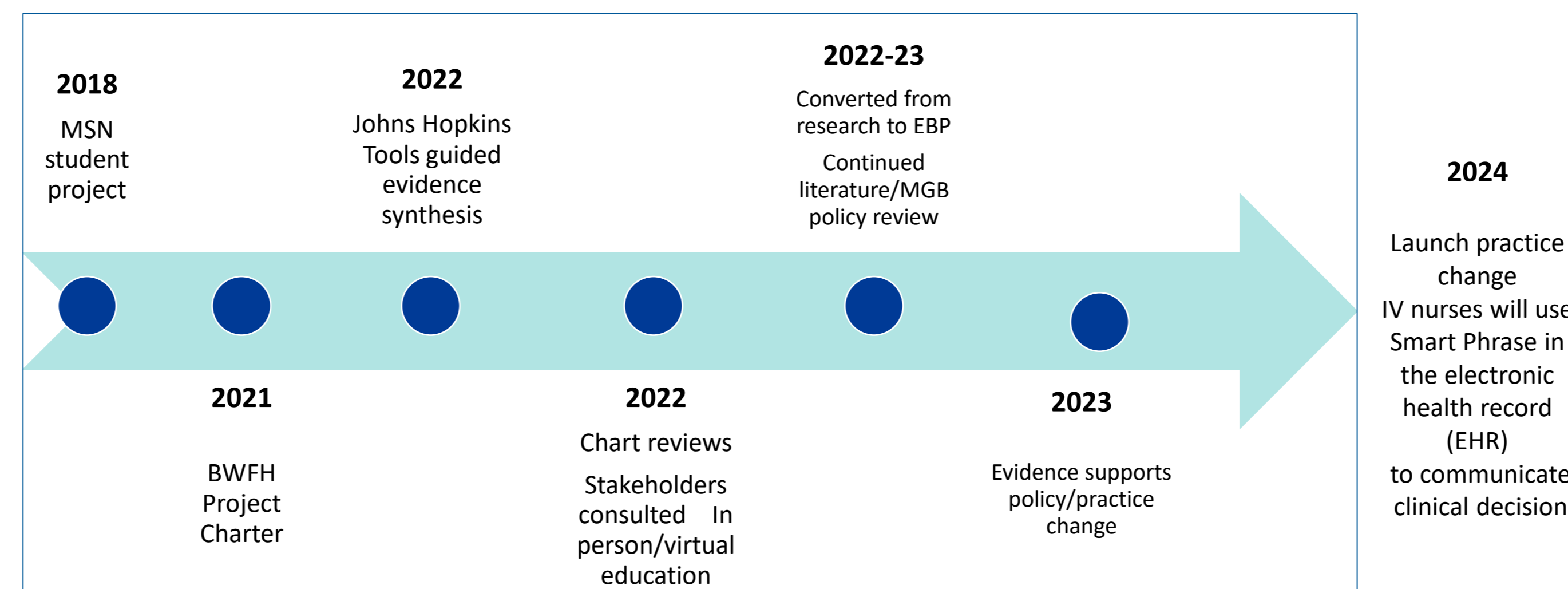
## Process

The IV nurse EBP workgroup, including IV nurses and nurse leaders:

- Reviewed current practice (IV workflow, assessment tools, policies) at BWFH and MGB Hospitals.
- Utilized the John Hopkins EBP Model to review existing evidence and propose practice changes.
- Advocated for development of tools (SmartPhrases) to support documentation of IV nurse assessment and clinical decisions.
- Developed communication and education plans to support implementation.

## PICOT

<b>P</b>	Patients
<b>I</b>	Nurse driven clinical assessment/decision to guide replacement, rotation, or discontinuation of PIV devices
<b>C</b>	Routine replacement of PIV every 96 hours
<b>O</b>	Safe and effective care of the patient requiring PIV therapy, consistent with reduction of complications and increased patient and provider satisfaction
<b>T</b>	2023: Policy and practice change      2024: Documentation and Audits
<b>PICOT Question</b>	For patients in the acute care setting (P), does leaving a PIV line intact until clinically indicated (I) (by end of therapy, redness, occlusion, leakage, or pain) versus the customary practice of changing the PIV after 96 hours of dwell time (C) impact the rates of phlebitis, infection, or function (O)?



## Outcomes

- This EBP change supports IV nurses' expert assessment to guide decisions for removal of PIVs as clinically indicated.
- Smart Phrases were validated using intra-rater reliability to direct nursing recommendation in the EHR.



## Implications

- Moving from a time-based rotation of PIV sites to a nurse-led, clinically indicated decision:
  - ✓ Reduces pain and distress of an unnecessary invasive procedure
  - ✓ Maintains safe and effective PIV access
  - ✓ Improves shared decision making between the patient and the clinician

## Next Steps

- Launch smart phrase within EHR to standardize documentation of IV team nurse recommendation
- Continue education and support for all staff
- Audit and chart review 2024

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### References

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