

# PR26: Venipuncture - Ethical Decision Making

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## Applicable To

■ PCP and higher

## Introduction

Initiating out-of-hospital intravenous (IV) access, "just in case it is needed in hospital," is not a justifiable reason.

When should paramedics initiate peripheral IV access? What questions do we need to ask ourselves to help us make an ethical and clinical appropriate decision?

The criteria can be found in the BCEHS Ethics Framework Manual. Paramedics can also utilize the "JAY" tool to evaluate the risk versus benefit of out-of-hospital IV access.

## Indications

The clinical requirements for out-of-hospital IV access:

1. To provide a saline bolus to treat hypotension, severe dehydration, or shock; to keep vein open (TKVO) is not generally a reasonable requirement
2. As a route to provide IV medication bolus administration (e.g., dimenhydrinate)
3. As a route to provide an IV infusion of medications (e.g., 10% dextrose or TXA)
4. As directed by Clinical Practice Guidelines (e.g., FAST-VAN positive patients)
5. For PCPs, in preparation for on-scene or en route rendezvous of ACPs or CCPs when it is expected that IV medications will be administered (e.g., epinephrine for cardiac arrest)

Additional considerations for PCP intraosseous cannulation:

- The tibial site is the only site approved for PCP use. PCPs are limited to two collective attempts per patient only. Do not attempt to re-cannulate a site that has failed or been dislodged.
- IOs **may** be placed under **direct** supervision by ACPs or higher. The ACP (or higher) remains responsible for any anesthesia or pain management requirements.
- PCPs may place intraosseous devices in patients **in cardiac arrest** where there is a **clear clinical history of intravascular volume depletion from a non-traumatic source**, where fluid administration is a critical component of the resuscitation plan. **OnCall must be consulted** prior to placement of an intraosseous device.

## Procedure

### Ethical Decisions: Establishing Out-of-Hospital Intravenous Access

When consolidating the care plan, paramedics should consider:

1. Does the patient require IV access for treatments within the out-of-hospital care plan?  
**Yes.** For reasons of fluid administration, medication administration, or CPG requirement.  
**No.** Then don't attempt an IV in the field.
2. Why am I initiating this IV start?
  - For patient care that requires fluid administration, medication administration, or CPG direction – (Apply the JAY tool)
    - JUSTIFIABLE:
      - The patient is hypovolemic, severely dehydrated, in shock, and requires fluid administration.
      - The patient is actively vomiting and requires dimenhydrinate.
      - The patient has significant blunt or penetrating trauma and requires TXA.
      - The patient is hypoglycemic and requires IV dextrose.

- ACCOUNTABLE:
  - This procedure will benefit the patient and my peers would offer the same or similar care to this patient.
- YOU:
  - If I were the patient, I would appreciate the benefit of fluid replacement and the relief the medication offers for my dignity and comfort.
- Skill maintenance or learning purposes – (Apply the JAY tool)
  - JUSTIFIABLE:
    - Skill maintenance would not be defensible in an adverse patient event.
    - Out-of-hospital IV access increases the patient's risk to harm due to preventable infection and potential for embolism or thrombosis.
    - Did you inform the patient of the reason(s) and the risks associated with the IV start? (Informed consent for skill maintenance or learning only purposes.)
    - Did you ask the patient for permission to start the IV?
  - ACCOUNTABLE:
    - Practicing skills on patients are poor arguments for skill maintenance or learning. We don't practice chest compressions on a patient that has a pulse. We have simulators available for skill maintenance purposes.
  - YOU:
    - Would you want an unnecessary IV insertion if you didn't require one? Knowing the evidence of infection rates, increased ED stays, and other complications of out-of-hospital IV access, I would want to avoid this risk.
- The hospital might need an IV – (Apply the JAY tool)
  - JUSTIFIABLE:
    - There is no written direction from clinical and medical programs or the receiving hospital to have an out-of-hospital IV in place.
  - ACCOUNTABLE:
    - The practitioner who places the out-of-hospital IV catheter is responsible for any adverse events that may happen if treatment is not justifiable.
  - YOU:
    - If I were the patient, and knowing the evidence, I would not want an out-of-hospital IV insertion done if the paramedic was not going to utilize it.

## Notes

The risks or adverse events which can occur with out-of-hospital IV access include:

- Pain/anxiety
- Infection
- Infiltration
- Hematoma
- Air embolism
- Catheter tip or thromboembolism
- Phlebitis

## Resources

1. BC Emergency Health Services. BCEHS Ethics Framework Manual. [\[Link\]](#)
2. BC Emergency Health Services. JAY Tool. [\[Link\]](#)

