To Poke or Not to Poke, That is the Question! A Children's Hospital Initiative to Decrease Vascular Access Attempts

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Press Ganey Negative Comments Test and Treatments 2013
Nursing Tool Box

• Accuvein Veinfinder
• LMX order on admission by Pharmacy
• Versed
• Child Life
  - Distraction
  - Comfort Positioning
Top Box Trends

Inpatient Pediatric
Cleveland Clinic
Question - Skill of the IV starter

Displayed by Discharge Date
Difficult Venous Access Considerations for Nursing Practice & Research

- Nursing Fellowship/Competency Tests for Pediatric Vascular Access using traditional & advanced technologies
- Guidelines & algorithms should be developed on assessment of the need for IV therapy
- Protocols for line insertion
- Standards for maximum number of insertion attempts

Kuensting, L et al., Journal of Emergency Nursing Sept 2009
Poke Plan

WHAT IS A POKE PLAN?

In an effort to help ease your child’s pain and anxiety, we ask that you or your child tell us what helps them most when dealing with needle pokes.

This card will be used as a reference to guide staff how to best help your child for these procedures.

Staff will make every attempt to honor your child’s choices, however there may be times when this is not possible.

**When available, the treatment room is a separate room for painful procedures in order to keep the patient room as a safe place**

DIAL DOWN the PAIN

Cleveland Clinic Children’s

PATIENT NAME:
ROOM #:

INSTRUCTIONS: Please select one of each below.

LABWORK & BLOOD DRAWS

☐ Awake
☐ Asleep
☐ Prefer to watch
☐ Prefer to look away
☐ Count before poking me
☐ Don’t tell me
☐ Prefer to be sitting up or in someone’s lap

NUMBING CREAM

☐ Yes
☐ No

IV STARTS

☐ Treatment room
☐ Hospital room (bedside)

NUMBING CREAM

☐ Yes
☐ No
Benner’s Theory

Novice to Expert Nursing Theory

1. Novice
2. Advanced Beginner
3. Competent
4. Proficient
5. Expert
Pediatric IV Grading Tool

Revised Pediatric IV Trading Tool
Pat Catudal

1. Available access sites:
   0-2 sites = 3 points       Score____
   3-4 sites = 2 points
   > 4 sites = 1 points

2. Patient age:
   0-2 years = 4 points       Score____
   3-5 years = 3 points
   > 6 years = 2 points

3. Anticipated Duration of IV Access Required:
   > 7 days = 3 points       Score____
   4-7 days = 2 points
   < 3 days = 1 point

4. Patient cooperation:
   Uncooperative/Difficult to restrain = 3 points
   Uncooperative/Easily to restrain = 2 points
   Cooperative / Minimal restraint = 1 point

5. Parent Cooperation:
   Extreme anxiety (e.g. 1 attempt only) = 5 points
   Expressing concern = 3 points
   Able to effectively assist or willing to leave if preferred = 1 point
   No parent present = 1 point

6. Patient History from parent or old chart:
   Known to be difficult access/ dehydrated, history of N/V/D,
   prematurity or chronically ill, developmentally delayed = 3 points
   No anticipated problems/history = 1 point

TOTAL SCORE_____

Assessment:
Grade I (score of 7-9): Novice/Advanced Beginner
Grade 2 (score 10-12): Competant/Proficient
Grade 3 (score of >13): Expert
Total number of attempts should be less <4
This tool is meant for use in a non-emergent situation
Putting It All Together

• Child Life
  - Poke Plan

• Nursing
  - Benner
  - IV Grading

• Pediatric Institute
  - Escalation Guidelines
  - Clear Quarterback
IV Start Algorithm

[Diagram of IV Start Algorithm]

Created By: Jane Hartman, MSN, RN, NP-C, John Baker, MSN, MBA, RN
Date: January 2, 2014
Nursing

Inpatient Venous Access Algorithm

IV Start

MD/NP/PA to Place order for IV Access
Consult Phlebotomy

Proficient/Expert Nurse to Attempt in accordance to level of expertise

STOP
Page resident to discuss plan of care

Venous access required?

NO
YES

Is there limited Access?

Was the IV successful?

Notify Expert for repeat attempts or consultation considerations

Expert Consultation Considerations
1. Expert nurses, APN, on any/ICU units
2. Pediatric Critical Care Transport
3. Pediatric Anesthesia Staff

Level of Expertise
1. Novice/Beginner: One attempt on child with reasonable good vascular access or no attempt on a child with limited vascular access
2. Competent/Proficient: Two attempts on a child with good vascular access or one attempt on a child with limited vascular access
3. Expert: Nurse discretion, generally two attempts then consider other experts

Nurse attempts IV Start according to level of expertise

Secure IV with Hubglass dressing and start therapy

Was the IV successful (2 attempts max?)

STOP
Page senior resident and start to discuss further options

Date: January 2, 2014

Created by: Jane Hartman, MSN, RN, NPG, John Baker, MSN, MBA, RN
Child Life

IV Start

Inpatient Venous Access Algorithm

MD/NP/PA to place order for IV Access

Access peripheral venous access

Consider Nurse level of expertise

Proficient/Expert Nurse to attempt in accordance to level of expertise

Is there Limited Access?

Nurse attempts IV Start according to level of expertise

Secure IV with Hubgard dressing and start therapy

Was the IV successful (2 attempts max)

STOP Document change of plan of care

STOP

Venous access required?

YES

Notify Expert for repeat attempts or consultation considerations

Expert Consultation Considerations
1. Expert nurses, APN, on any/all units
2. Pediatric Critical Care Transport
3. Pediatric Anesthesia Staff

NO

STOP

Page senior resident AND Start to discuss further action

Level of Expertise
1. Novice/Advanced Beginner: One attempt on child with reasonably good vascular access or no attempt on a child with limited vascular access
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Escalation Guidelines

**Alpha Page Intern**
Document encounter in EPIC. If a patient does not return to baseline or if continued concern then proceed with next step.

**Alpha Page Senior Resident and Notify Charge Nurse**
Team huddle (or conference call) if symptoms do not improve:
- Resident, Senior, Fellow/Staff, Bedside Nurse

**Alpha Page Senior Staff (Primary Service)**
Team huddle (or conference call) if symptoms do not improve:
- Resident, Senior, Fellow, Staff, Bedside Nurse

**Pediatric Clinical Triggers to Consider**
(Not All Inclusive – Go With Your Gut):
- PEWS score of 4 to 5 or change in PEWS score of 2 or greater
- Critical Value results
- Unmanageable pain
- Missing orders or unable to activate orders
- Change in mental status

**Additional Guidelines**:
- No more than two attempts for any step.
- Maximum of five minutes waiting time per step.

**Escalation Resources**
- Institute Chair
- Nursing Director
- Residency Director
- Department Chair
- Nurse Manager
- Chief Resident
- Unit Director
- RN
- Resident
- Physician

The following chain of escalation resources should be considered. It is not all inclusive. Some situations may require escalation to multiple people in multiple directions. Other resources and functional areas should be contacted, as applicable. For example, consulting services such as Child Life, Social Work, Respiratory Therapy, and/or paging the NOM.

**PMET is always appropriate!**
Clear Quarterback

Attending Physician

Consulting Services

Patient and Family

Resident/Fellow Nurse Practitioner

Nursing
Where Do We Go From Here?

- Validate Grading Tools
- Educate Stakeholders
- Implement and Monitor
Conclusion

- Evaluating Competence
- Identifying Children at Risk
- Parent/Patient Wishes
- Standardized Approach
Cleveland Clinic

Every life deserves world class care.