

Proposing a labor **productivity** benchmark model for vascular access to justify or create a team

What is productivity in healthcare?

Definition

When it comes to measuring the productivity of health care providers, most people look at the number of patients treated per day and focus on the time taken to complete each case.

When it comes to the time productivity metric, people consider:

The time needed to take care of a patient.
The number of patients a care provider sees over a given period.
The total time a health care employee spends with each patient.

Why measure productivity for vascular access?

Create

Create an FTE to initiate offering vascular access services

- Justify taking PICC lines out of IR/OR to the bedside

Justify

Justify additional FTE's (full time employees)

- Example: adding staffing for central line dressing changes or DIVA sticks

Validate

Validate current teams staffing

- With cutbacks hospital CEO's are using consultants to reduce FTE's

Demonstrate

Demonstrate the worth of the FTE in vascular access

- Solidify that there are enough procedures to warrant the FTE's hired

What elements do you measure

1. Walk or transport time to patient

2. Review of patient chart/order

3. Gathering supplies to perform procedure

4. Patient explanation and consent

5. Arrange patient room for procedure

6. Lay out supplies and perform procedure

7. Procedure clean up time

8. Documentation in chart of procedure

It is important to measure accurately

Painting an inaccurate picture of efficiency jeopardizes staffing levels

MD states it takes me 10 min. to do a PICC in a suite in the current literature

That means the CFO thinks IR does:

10 minute PICC

6 PICC hr.

48 PICC 8 hr. day

RN states it takes me 5 min. to place a PIV at the bedside

That means the CFO thinks the RN does:

5 minute PIV

12 PIV hr.

96 PIV 8 hr. day

Vascular access procedure*	Time and motion
PIV start/restart (simple)	15 to 20 minutes
PIV start/restart (difficult)	45 minutes
Long arm catheter (Midclavicular)	60 minutes
Midline (not specified type)	32.5 minutes
PICC line insertion	90-120 minutes
CVC assist	45 minutes
CVC dressing change	10-15 minutes
Discontinue PIC	10 minutes
Access implantable port	17.5-30 minutes
Lab blood draw	12-15 minutes
Discontinue CVC	10 minutes
Dec clotting central line	22 minutes – 2 hours
Site assessment/check	10 minutes

Proposed productivity table from the literature

*Proposed numbers include gathering supplies, procedure, clean up, documentation (exclude walking time)

Conclusion

To date there is no tested productivity scale for vascular access procedures

Most of the literature is inaccurate as it states it takes 5 to 10 minutes to place a PIV or 10 to 45 minutes to place a PICC

All elements of the time and motion are not accounted for

Literature search found that the Infusion Nursing Society (INS) has published in several pieces basic data for productivity

A benchmark tool is needed to help add FTE's or create FTE's

The proposed benchmark needs to be tested in the field

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Consultant vascular access

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