A Procedural Competency Evaluation Process: Systematic and Consistent

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Our Plan for this Session

We would like to share our experience determining procedural competence.

We would like to discuss how you have tried to achieve success or challenges that you have faced with this process.

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Our Residency

- Community-based program
- Large HMO
- Our medical office is the PCMH for over 45,000 patients
- 6 residents per year
- Essentially unopposed

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Competency

Set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of behaviors in participants

Procedural Competency in a Family Medicine Residency

Residents must complete a certain number of procedures with supervision and be deemed competent before they can perform that procedure independently without supervision.

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What method do you use now to supervise and evaluate residents' procedures?

The traditional model was "see one, do one, teach one."

Some learners need to practice a skill numerous times before they are competent.

We need to always promote high-quality care and safe patient care.

Our Performance Improvement Process

1. Create a list of agreed upon required outpatient office procedures
2. Find consensus on the steps needed to complete those procedures competently
3. Use objective measuring tools to assess competent completion of a specific procedure
4. Study and revise our plan

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List of Required Our Procedures

- Anoscopy (1)
- Cryotherapy (1)
- Chest x-ray interpretation (10)
- EKG interpretation (10)
- Excisional biopsy (10)
- Fluorescein eye exam (1)
- Incision and drainage of abscesses (2)
- Ingrown toenail partial nail excision/surgery (2)
- Knee or Shoulder joint injection/joint aspiration (2)
- Laceration repair (2)
- Pap smear (1)
- Punch biopsy (1)
- Shave biopsy (3)
- Wet mount and KOH preps (1)

Basic Skills Qualification Forms (BSQ)

- Shave biopsy
- Excisional biopsy
- Punch biopsy
- Joint injections
- Incision and drainage of abscesses
- Toenail Excisions

- Forms adapted from M. Geurin and E. Colson, Determining and Tracking Resident Procedural Competency, STFM Presentation S65 April 2015, Montana Family Medicine Residency

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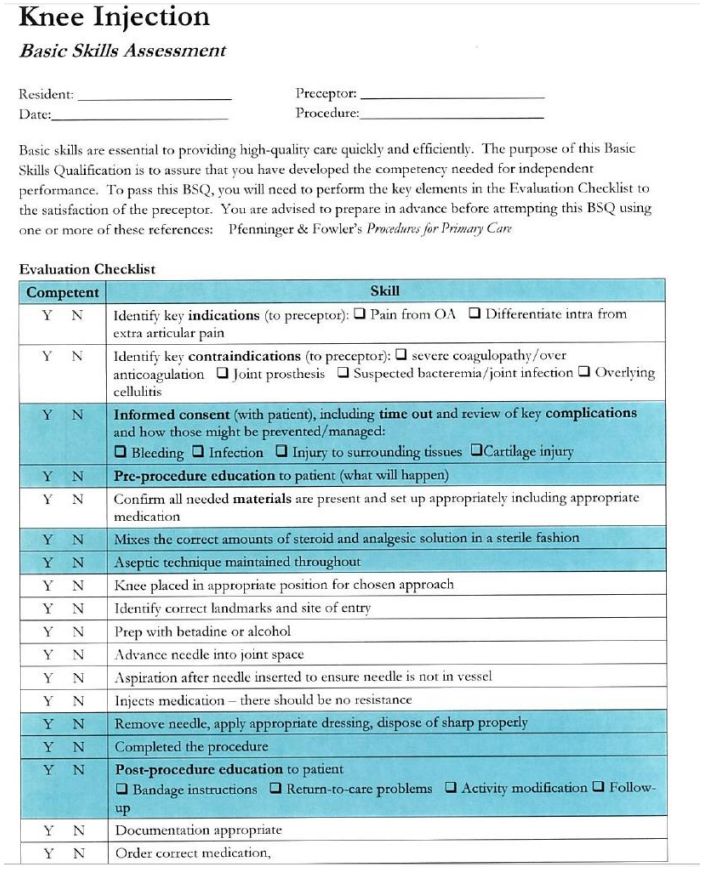
Basic Skills Qualification Forms (BSQ)



Knee Injection

Basic Skills Assessment

Resident: _____ Preceptor: _____
Date: _____ Procedure: _____

Basic skills are essential to providing high-quality care quickly and efficiently. The purpose of this Basic Skills Qualification is to assure that you have developed the competency needed for independent performance. To pass this BSQ, you will need to perform the key elements in the Evaluation Checklist to the satisfaction of the preceptor. You are advised to prepare in advance before attempting this BSQ using one or more of these references: Pfenninger & Fowler's *Procedures for Primary Care*

Evaluation Checklist

Competent	Skill
Y N	Identify key **indications** (to preceptor): ❑ Pain from OA ❑ Differentiate intra from extra articular pain
Y N	Identify key **contraindications** (to preceptor): ❑ severe coagulopathy/over anticoagulation ❑ Joint prosthesis ❑ Suspected bacteremia/joint infection ❑ Overlying cellulitis
Y N	**Informed consent** (with patient), including **time out** and review of key **complications** and how those might be prevented/managed: ❑ Bleeding ❑ Infection ❑ Injury to surrounding tissues ❑Cartilage injury
Y N	**Pre-procedure education** to patient (what will happen)
Y N	Confirm all needed **materials** are present and set up appropriately including appropriate medication
Y N	Mixes the correct amounts of steroid and analgesic solution in a sterile fashion
Y N	Aseptic technique maintained throughout
Y N	Knee placed in appropriate position for chosen approach
Y N	Identify correct landmarks and site of entry
Y N	Prep with betadine or alcohol
Y N	Advance needle into joint space
Y N	Aspiration after needle inserted to ensure needle is not in vessel
Y N	Injects medication – there should be no resistance
Y N	Remove needle, apply appropriate dressing, dispose of sharp properly
Y N	Completed the procedure
Y N	**Post-procedure education** to patient ❑ Bandage instructions ❑ Return-to-care problems ❑ Activity modification ❑ Follow-up
Y N	Documentation appropriate
Y N	Order correct medication,

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Basic Skills Qualification Forms (BSQ)

Y N	Diagnosis and procedure codes correct
Y N	Resident conducts in a professional manner (arrives on time, receptive to feedback, respectful)

☐ Performed competently and independently

Recommendations before next attempt:

Resident: _____ Preceptor: _____

Date: _____ Procedure: _____

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Peer Review of Faculty for Competency

- All faculty evaluated each other using the BSQ form on shave biopsy technique using pig's feet at a faculty development meeting
- Models for knee and shoulder injections
- Models for IUD placement, Nexplanon and OB ultrasound

Minor Surgery Clinics with Dedicated Faculty

- Residents each have 4 procedure appointments per half day during Minor Surgery Clinic
- Focus on booking excisional and occasional punch & shave biopsies
- One faculty for one resident (or two residents if R3)
- Second year residents have a 4 week Surgery block where they have Minor Surgery Clinic at least ten half days

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Minor Surgery Clinics with Dedicated Faculty

- 4 Family Medicine faculty received specialized training in Minor Surgery
- Each does/supervises Minor Surgery one half day per week
- The faculty meet monthly to review evaluations, to agree upon competency and to report recommendations to our Clinical Competency Committee (CCC)

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Clinical Competency Committee (CCC)

- Each resident is reviewed at least once every 3 months
- Four core faculty
- Meet once a month
- Advisors are encouraged to attend
- Report out to Program Director

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Faculty Advisors

- Each resident has a faculty advisor
- Each first-year resident meets with their advisor once per month
- Each second and third-year resident meets with their advisor at least once per quarter after the CCC reviews their performance
- Advisors inform residents which procedures they can perform independently

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A chart of who is competent for each procedure is kept in the precepting room.

BSQ Tracking for Competency Sign off
(green boxes = procedure signed off as competent)

PGY 3

	Shoulder Injection (2)	Knee Injection (2)	I&D (2)	Toenail Excision (2)	Punch Bx (1)	Shave Bx (1)	Excisional Bx (5)
Akhtar		2		1	1	4	8
DiMarco		1	1	2		4	9
Inzunza	1	2	1	3		3	7
Romero		1		2	1	2	5
Tessema	1	2		1	3	7	6
Van	1		2	2	1	5	12

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Procedure Slots in Continuity Clinic

Second and third year residents have one appointment per half day (their last appointment) for the Call Center or nursing staff to book a procedure.

The appointment is converted to a Same Day Team appointment is not booked.

These appointments are used for joint injections, toenails, incision and drainage, IUD placement, Nexplanon and shave biopsies for now. All of our faculty supervise these procedures.

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Hospital Cards

X-ray interpretation

EKG interpretation

Transitions of Care

10 each: supervising faculty sign them off

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Hospital Cards

Expectations to be Deemed Competent:

EKG:

- Approaches EKG in a systematic manner.
- Reports the rate and identifies rhythm correctly.
- Identifies abnormal intervals (if present).
- Identifies signs of infarction (if present).

CXR:

- Approaches CXR in a systematic manner.
- Checks the quality of the film (penetration, inspiration, rotation).
- Checks the cardiac silhouette, costophrenic angles, hilar region, and aorta.
- Is able to identify abnormalities including infiltrate, nodules, masses, congestion, absence of sharp margins, pneumothorax.

TOC:

- Appropriate description of issues important to patient care with documentation.
- Exhibits appropriate knowledge of patient's condition, workup, and differential diagnosis.
- Reviews appropriate intervention and plan for disposition based on scientific diagnosis.
- Demonstrates appropriate interpersonal skills with organized, articulate discussion that results in effective information exchange.

Hospital Cards

Resident_____

EKG		CXR		TOC		
Date	Initial	Date	Initial	Date	Initial	Attendings – If resident completes the following competently (see back side), please initial.

Return to hardcopy or text photo to Jan Kerr

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Improved Outcomes

Quality of care from residents has improved

Standardization of post-procedural instructions on After Visit Summary

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Our Challenges

- Finding consensus on which procedures to track
- Completing and collecting feedback/forms
- Getting enough volume for certain procedures for a given resident
- Finding consensus on competent performance of a procedure/strictness of interpretation
- For residents: having infrequent exposure may lead to difficulty maintaining these skills

Discussion: Procedural Competency Evaluation Process

What are you doing?

How are you doing?

Any feedback for us?