Variation in Postprocedural Escalation Guidance Following Interventional Pain Procedures:

A Quality Improvement Initiative

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BACKGROUND

Serious complications following interventional pain procedures are rare but can result in significant morbidity if not recognized and escalated promptly. Clear, standardized discharge instructions are critical for facilitating early identification of warning signs. Postprocedural instructions often vary among providers and procedure types.

OBJECTIVE

Evaluate patient discharge instructions
for common interventional pain procedures and identify variation in postprocedural safety and escalation guidance.

METHODS

A quality improvement review was conducted for 5 patient discharge instructions within the institutional EHR:

1. Epidural steroid injection
2. Medial branch block
3. Radiofrequency ablation
4. Sacroiliac joint injection
5. Selective nerve-root block

Instructions were assessed using a 7-domain safety-communication checklist informed by published literature and consensus guidance.

No patient-level data or PHI were accessed.

RESULTS

71.4% — **25 of 35 possible safety-domain elements were present** across the 5 discharge instruction sets reviewed.

5 instruction sets × 7 safety domains = 35 possible elements

1 / 5 — **included specific ED / 911 guidance** when emergency escalation was appropriate.

SAFETY DOMAINS ASSESSED

Safety Domain	Documents
Expected symptoms	5/5 (100%)
Neurologic warning signs	4/5 (80%)
Infectious warning signs	4/5 (80%)
Severe/worsening pain	4/5 (80%)
Contact treating clinician	4/5 (80%)
Procedure-specific warning signs	4/5 (80%)
ED evaluation	3/5 (60%)

PROPOSED STANDARDIZED DISCHARGE INSTRUCTION TEMPLATE

1	EXPECTED SYMPTOMS	Mild soreness or temporary discomfort may occur after your procedure.
2	NEUROLOGIC WARNING SIGNS	New or progressive weakness, numbness, or bowel/bladder dysfunction requires urgent assessment.
3	INFECTIOUS WARNING SIGNS	Contact your treating team for fever, redness, swelling, drainage, or other signs of infection.
4	SEVERE / WORSENING PAIN	Contact your treating team for severe, rapidly worsening, or unexpected pain.
5	CONTACT TREATING CLINICIAN	Provide a clear clinic phone number and instructions for non-emergent postprocedural concerns.
6	PROCEDURE-SPECIFIC WARNING SIGNS	Include additional warning signs and restrictions specific to the procedure performed.
7	ED / 911 ESCALATION	Seek immediate emergency evaluation for acute neurologic or life-threatening symptoms.

Green = Expected recovery • Teal = Clinician contact • Red = Emergency escalation

DISCUSSION

1. Discharge instructions differed substantially in warning signs and escalation guidance; only 1/5 (20%) of the instructions included specific ED/911 guidance.
2. Discharge instruction language varied across departments and within EHR discharge templates.
3. Language barriers and limited health literacy may impair understanding of discharge instructions and escalation criteria.
4. Patients should receive clear instructions distinguishing non-urgent symptoms that warrant clinician contact from acute neurologic or life-threatening symptoms such as new weakness or bowel/bladder dysfunction that require immediate emergency evaluation.

Managing patient expectations is critical for patient safety and satisfaction.

CONCLUSION

Standardization of discharge instructions may improve the consistency of postprocedural education, facilitate recognition of serious complications, and promote timely escalation to emergency care.

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