HPI 101: CRITICAL STEPS & DEFENSES
“The HPI 5+5”

<table>
<thead>
<tr>
<th>HPI Principles</th>
<th>Through continual learning, we constantly improve the defenses that protect us from the errors all of us can make</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>We all make errors – it’s a matter of when, not if</td>
</tr>
<tr>
<td>2</td>
<td>These errors follow a recurring pattern, and are predictable and manageable</td>
</tr>
<tr>
<td>3</td>
<td>Curiosity drives us to examine our practices and learn from our errors</td>
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<td>4</td>
<td>As employees, we are the solution, not the problem</td>
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<td>5</td>
<td>Excellence is not the absence of failure, but the presence of process and defenses</td>
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Core HPI Concepts

- Questioning Attitude
- Errors
- Defenses
- Critical Steps
- Drift
Review

System 1 → Skill-based
       ↓ Rule-based
       ↓ Knowledge-based
       ↑ System 2

S → T → A → R
Agenda

• Definition of Critical Step
• Practice/Examples
  o Recognizing a Critical Step
  o Choosing appropriate Defenses
Critical Step

An action that, if performed improperly, will trigger immediate, irreversible, and/or intolerable harm.

- Entering a confined space
- Clicking “Send” on an email
- Responding to an angry customer
- Remembering anniversaries
- Stepping onto ice
- Energizing a line
- Merging onto a busy freeway
- Performance discussion with an employee
- Buckling a child’s seatbelt
- Turning the key in the ignition
James Reason’s “Swiss Cheese”

**Summarize Critical Steps**

**A**nticipate errors / error precursors

**F**oresee probable, worst-case for each

**E**valuate defenses to prevent or recover from errors
Planned detailed steps
Rest (get energy back)
Sit down & use hands
Call Lisa

Summarize Critical Steps
Anticipate errors / error precursors
Foresee probable, worst-case for each
Evaluate defenses to prevent or recover from errors
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<th>Performance Mode</th>
<th>Description</th>
<th>Long Term Error Rate</th>
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<td>Skill-based</td>
<td>Something I’ve practiced to muscle memory</td>
<td>1 in 1000</td>
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<td>Rule+</td>
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<tr>
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<td>Everything else: the new, the unproceduralized, and the unmastered</td>
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The Art of Taking A Charge

John Autey-St. Paul Pioneer Press

Getty Images

Rick Madonik/Toronto Star

Thearon W. Henderson / Getty Images

Andrew Tulliver
Expert NBA Pest
Anatomy of Taking a Charge

• **Visualize:** Opponent’s path
• **Don’t touch:** No ‘check’
• **Get set:** squared to opponent
• **Stop:** commit & don’t move
• **Feet firm:** both planted
• **Court vision:** Outside of restricted arc
• **Take a hit:** you must fall down – backwards!
Anatomy of Taking a Charge

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**Rule + : a great procedure I’ve practiced**