Erectile Dysfunction Process of Care (PoC) 3.0 for Urologists

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History of PoC Pathway

• A Process of Care (PoC) Model was established in 1999 to develop an algorithm for treating patients with Erectile Dysfunction (ED)

• This PoC helped standardize and improve patient care

• An updated PoC, version 2.0, was created in 2018 (Mulhall et al, 2018). The updated AUA ED guideline was published shortly afterwards (Burnett et al, 2018). PoC 2.0 left certain areas unaddressed, and version 3.0 was therefore developed
What Gaps Still Exist in PoC 2.0?

<table>
<thead>
<tr>
<th>How PoC 2.0 Addressed Gaps from PoC 1.0</th>
<th>Gaps That Still Exist in PoC 2.0</th>
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<tbody>
<tr>
<td>• Comprehensive evaluation – medical and sexual history, physical examination, psychological evaluation, laboratory tests, and adjunctive tests</td>
<td>• Limited provider “tool kit”</td>
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<tr>
<td>• Psychological evaluation and patient/partner sexual dynamics should be addressed alongside pharmacological therapy</td>
<td>• Not Urology-specific</td>
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<td>• Introduced Shared decision-making (SDM)</td>
<td>• Still an algorithmic or tiered approach</td>
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<td>• Focused on a combination of first-line therapies</td>
<td>• pDUS can be used as an adjunctive test</td>
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<td>• ED is a symptom rather than a primary disease; as such refer patients to necessary specialists and discuss a broader range of risk factors</td>
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<td>• For wide range of healthcare providers</td>
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<tr>
<td>• Comprehensive evaluation – medical and sexual history, physical examination, psychological evaluation, laboratory tests, and adjunctive tests</td>
<td>• pDUS not considered a necessary adjunctive test</td>
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<td>• Introduced Shared decision-making (SDM)</td>
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<td>• Valid for men to begin with any type of treatment, regardless of invasiveness or reversibility</td>
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<td>• Use of questionnaires</td>
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<td>• ED as a risk marker for underlying cardiovascular disease (CVD) and other health conditions</td>
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<td>• Testosterone measurement should be done</td>
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<td>• Questionnaires should be considered first-line or necessary for treatment evaluation</td>
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<tr>
<td>• Removed tiered treatment approach</td>
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Urology ED Process of Care 3.0

- ED PoC 3.0 is an evidence-based treatment algorithm that draws on the most updated guidelines and literature in management of ED, fills in the gaps and has been tailored for the urologist

- ED PoC 3.0 for the urologist emphasizes:
  - Patient autonomy and shared decision-making
  - Provider-led assessment of ED (vs. self-diagnosis and treatment) and discussion of medical co-morbidities
  - A comprehensive Patient – Partner education module that highlights a variety of lifestyle issues
  - All treatment options can be offered at the outset, not tiered
  - Routine use of the penile duplex Doppler for ED evaluation
  - Urology specific
Urology PoC Model For ED 3.0 (2019-2020)

1. Identification of Erectile Dysfunction
   - Patient Self-Identification
   - Available Treatment Options: Oral erectogenic agents, Vacuum constriction devices, Couples/sexual therapy

2. Provider-led
   - Assessment
     - Sexual, medical and psychosocial history
     - Medication review and lifestyle assessment
     - Physical exam
     - Order Laboratory tests (at minimum, testosterone)
     - Order Penile Duplex Doppler Ultrasonography
   - Working diagnosis

3. The Provider Toolkit*
   - Patient/Partner Education
     - Lifestyle modification
     - CV Risk Assessment
     - Smoking cessation
     - Couples/sexual therapy
     - Experimental therapies
     - Medication review
   - Diagnostics
     - Analyze Penile Duplex Doppler Ultrasonography
     - Order Other Laboratory tests (provider’s discretion)
   - Available Treatment Options:
     - Oral erectogenic agents
     - Vacuum constriction devices
     - Intraurethral alprostadil
     - Intracavernosal self-injection
     - Surgical prosthesis
     - Medication change or discontinuation
     - Corrective surgery
     - Hormonal replacement

4. Review of tests
   - Review ED treatment satisfactory/unsatisfactory or not yet implemented
   - Barriers/issues reviewed

Pitfalls in Self-Treatment:
1. Missed opportunity to see provider for overall well-being
2. Missed opportunity to screen and assess for common comorbidities
3. Not medicalizing Erectile Dysfunction

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PoC 3.0: 1 – Identification

- Process begins with patient’s identification of unsatisfactory erectile quality
- Self-treatment should be discouraged and replaced with a provider-led assessment and treatment approach
- Select treatment options may help some men and not others
- The management of ED is best led by an experienced care provider
PoC 3.0: 2 – Assessment

- Process continues with a comprehensive sexual, medical, and psychosocial history
- The patient should discuss their goals and expectations
- If applicable, input from the patient’s partner should be encouraged at this time
- ED as a symptom of a larger pathophysiologic process
- pDUS to be used for all patients
PoC 3.0: 3 – The Provider Toolkit

The Provider Toolkit*

Patient/Partner Education
- Lifestyle modification
- CV Risk Assessment
- Smoking cessation
- Couples/sexual therapy
- Experimental therapies
- Medication review

Diagnostics
- Analyze Penile Duplex Doppler Ultrasonography
- Order other laboratory tests (provider’s discretion)

Available Treatment Options:
- Oral erectogenic agents
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- The treatment arm of PoC 3.0 condenses the previous tiered treatment process into a more streamlined diagnostic, education, and treatment suite
- Emphasis on shared decision-making
- All options are available upfront
- Broken up in three sub-domains:
  - Patient/partner education
  - Diagnostics
  - Available treatment options
• Follow-up with the patient after educational interventions, diagnostic tests, and/or treatments
• The patient and physician should maintain an open relationship in order to candidly discuss whether their specific intervention was satisfactory
• If a subsequent intervention is necessary, the provider toolkit can be re-utilized to properly manage their ED
• Can further identify comorbidities
Conclusions

• We have established the need for an updated Urology Process of Care Model for the Management of ED (PoC 3.0)
  • Previous pathways do not reflect the current literature and train of thought for patients with erectile dysfunction
• We have reviewed the most recent literature and guidelines to develop a revitalized PoC model that will streamline ED treatment and provide framework based on the most up-to-date evidence
• Through this new and improved model, patients will feel more involved in their medical care, better understand their clinical options, leverage the knowledge and resources of their urologist, and share in the decision making
References

