

JOINT TERMINOLOGY REPORT

POP-Q II: REVISION OF THE PELVIC ORGAN POSITION QUANTIFICATION SYSTEM

Developed by the Joint Writing Group of the American Urogynecologic Society; the International Urogynecological Association; Society of Gynecologic Surgeons, Society of Urodynamics, Female Pelvic Medicine & Urogenital Reconstruction.

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1 ABSTRACT [CURRENTLY 226 WORDS AND 250 IS THE LIMIT]

2 This article presents the first update of the Pelvic Organ Prolapse Quantification (POP-Q) system since
3 the original publication in 1996. A multi-society task force from the American Urogynecologic Society;
4 International Urogynecological Association; Society of Gynecologic Surgeons; and Society of
5 Urodynamics, Female Pelvic Medicine & Urogenital Reconstruction made four main revisions. The
6 existing system of stages is inconsistent with the updated international consensus on the definition of
7 prolapse as occurring when one of the vaginal walls is at or below the hymen or the cervix or vaginal cuff
8 descends half the total vaginal length. The former POP-Q stage I represented what we now consider to
9 be normal support, and stage II included patients with (leading edge of the anterior and / or posterior wall
10 0 & +1cm) and without clinical prolapse (leading edge of the anterior and / or posterior wall -1cm). POP-Q
11 II describes a continuum of pelvic organ support and provides a more evidence-based way of identifying
12 clinical prolapse as present or absent. No evidence of a specific cut point that affects prognosis or
13 outcomes exists on which to base "stages." Accordingly, the terms "stage" and "grade" are abandoned in
14 favor of a descriptive approach describing all 3 compartments (i.e., anterior wall, cervix or cuff, and
15 posterior wall). The genital hiatus (GH) size is now clearly recognized as predictive of prolapse
16 development and surgical outcomes and holds more prominence in this updated system. Definitions,
17 especially that of **Point D**, have been ambiguous and interpreted differently by experts. It is now
18 redefined as the highest point of the posterior vaginal wall above the hymen and is recorded for all
19 patients, including post-hysterectomy.

20 INTRODUCTION: RATIONALE FOR REVISING THE POP-Q

21 *"I'm in favor of progress; it's change I don't like." - Samuel Longhorn Clemens ("Mark Twain")*

22 The Pelvic Organ Prolapse Quantification system (POP-Q) was first published in 1996. [Bump 1996]
23 Since then, it has been widely adopted, and important new data have been published regarding pelvic
24 organ support that were not available to the group at the time it was being developed. All staging
25 systems used to characterize disease (e.g., endometriosis, cancer, etc.) need to undergo regular review
26 and refinement to keep pace with a growing understanding of the disease. The POP-Q is 30 years old,
27 and certain aspects of the system are no longer aligned with current evidence-based knowledge of
28 prolapse [Collins 2021], do not reliably predict outcomes, and have point definitions that are ambiguous.
29 Substantial advances in the understanding of pelvic organ prolapse, symptom correlation, pelvic floor
30 anatomy, and treatment outcomes have highlighted important limitations of the original system. To
31 address these issues, a task force representing the American Urogynecologic Society (AUGS);
32 International Urogynecological Association (IUGA); Society of Gynecologic Surgeons (SGS); and Society
33 of Urodynamics, Female Pelvic Medicine & Urogenital Reconstruction (SUFU) conducted a
34 comprehensive review and developed the first major revision of the POP-Q system, now referred to as
35 Pelvic Organ Position Quantification (POP-Q II). The American Urogynecologic Society provided staff
36 support and coordination.

37 After in depth discussions by the task force, four key issues were identified that required updating. 1). The
38 original POP-Q stage definitions were neither evidence-based nor served as predictors of outcomes after
39 intervention and do not conform with the recently established international consensus definition of what
40 constitutes prolapse. [Collins 2021] Specifically, the former POP-Q stage I does not describe clinically
41 significant prolapse, and POP-Q stage II describes anatomy that is both consistent and not consistent
42 with clinical prolapse. In addition, current stage definitions conflict with what the lay public understands
43 about disease "stages" -- that all stages represent some form or severity of disease. 2). Growing evidence
44 has accumulated that urogenital hiatus size is a factor influencing both surgical outcome [Vaughan 2018]
45 and prolapse development, [Handa 2021] yet it is not currently used in assigning disease severity. 3). The
46 original point descriptions have been confusing and are interpreted differently by different investigators,
47 particularly point D (unpublished data obtained by the Pelvic Floor Disorders network [PFDN] audit of
48 point placement consistency among examiners) and 4). The labels of the original POP-Q values have
49 been difficult for learners to grasp (i.e. Aa, Ba, Ap, Bp) and POP-Q II has developed clearer conventions.

The committee met each month over a one-year period to discuss potential improvements to the system and come to consensus on changes that could be made. A conservative approach was adopted recognizing that there are many aspects of the system that are working well while recognizing the need for change. Pros and cons of changes were thoroughly discussed until consensus was achieved. It is recognized that these changes will necessitate changes in workflow such as medical record plugins, quality metrics, and establishing concordance with the prior system. Those issues are outside of the committee's purview and can be solved once this more evidence-based system is implemented.

DEFINING PELVIC ORGAN PROLAPSE

Defining clinically meaningful pelvic organ prolapse has been challenging due to the poor concordance between anatomic descent and patient-reported symptoms and bother. When the original POP-Q system was developed, data were not available on which to base these decisions. Since that time, research has improved our understanding of prolapse, and a large volume of published literature establishes the hymen as an anatomic threshold that best correlates with the point where anatomic prolapse produces symptomatic POP. The International Urogynecological Consultation evaluated 31,931 references, of which 167 were used by the writing group in establishing their consensus definition of prolapse [Collins 2021]. It took into account data concerning the normal variation in vaginal wall and cervical / cuff location, during straining, that exist in normal women have become available. International consensus based on this extensive literature review and expert input now defines clinical prolapse as “...*anatomical prolapse with descent of at least one of the vaginal walls to or beyond the vaginal hymen with maximal Valsalva effort WITH the presence either of bothersome characteristic symptoms, most commonly the sensation of vaginal bulge, or of functional or medical compromise due to prolapse without symptom bother.*” [Collins 2021] This definition, by incorporating symptom bother and/or medical co-morbidity, correlates with a disease that is primarily a quality-of-life condition. For mechanistic research, vaginal wall descent to or below the hymen in an asymptomatic patient can be considered “anatomical prolapse” (as opposed to clinical prolapse). While anterior and/or posterior vaginal wall prolapse beyond the introitus are not reliably associated with bladder and bowel symptoms, respectively, there is now consistent evidence supporting the hymenal remnants as a clinically relevant anatomic landmark where prolapse causes the most common symptom of pelvic organ prolapse, a bothersome protrusion/bulge.

Population- and clinic-based analyses demonstrate that prolapse extending to or beyond the hymen is most strongly associated with the sensation of vaginal bulge—the hallmark symptom of pelvic organ prolapse—with a positive predictive value (PPV) of 81% and a negative predictive value (NPV) of 76% for clinically significant disease. [Trowbridge 2008, Tan 2005, Kowalski 2017] In contrast, when the vaginal walls or cervix are above the hymen, patients are typically asymptomatic. For example, women with vaginal walls at or above the hymen report fewer than one prolapse-related symptom, whereas descent beyond the hymen is associated with multiple symptoms. [Swift 2003] Receiver operating characteristic analyses further support this threshold, with cut points ranging from 0.5 cm above to 0.5 cm below the hymen demonstrating moderate sensitivity (63–69%) and specificity (62–97%) for bulge symptoms. [Dietz 2014] These studies demonstrate that the hymen is a reasonable cutoff. In addition, large cohorts show that most asymptomatic normal women meet criteria for what the original POP-Q system classified as “Stage I–II prolapse,” underscoring the limitations of purely anatomic staging systems. [Putnam 2019, Swift 2005, Trutnovsky 2019]

An exception to this concept arises when the vaginal apex is considered. Using the standard definition of descent at or below the hymen for the cervix or cuff is problematic and not based on evidence. A cervix that is 2 cm above the hymen is not normal [Trowbridge 2008], but in the absence of other support defects, it is possible for a patient with c -2 to be asymptomatic. Typically, a patient with the cervix this low in the vagina has associated anterior or posterior vaginal wall prolapse. However, there are some women in whom the cervix is at or below the hymen yet have normally supported vaginal walls. These are less common presentations, and no consensus has yet been reached on how to classify these women. To accommodate this uncertainty, the task force recommends using a definition of the cervix or cuff to half the total vaginal length or lower as representing apical prolapse. This is discussed in more detail in the section, “How should the severity of prolapse be categorized?”

The task force discussed use of the “Stage I” and early “Stage II” (e.g., Ba or Bp = -1) to describe prolapse and carefully considered how to classify the pelvic organ support of these women. Collectively, the task force agreed that the data support using the hymen as an evidence-based, pragmatic, and clinically meaningful boundary distinguishing clinical prolapse from support that is likely to be asymptomatic. It is recognized that the vaginal walls are not the only pelvic floor structures affected by vaginal birth and advancing age and that changes in the levator ani muscle and surrounding connective tissue structures occur. There are some women who have pelvic floor symptoms suggestive of bulge such as pressure or a feeling that her organs are “falling out” whose vaginal walls do not reach the threshold of the hymenal remnants. This may relate to other pelvic floor damage not related to vaginal wall descent, failure of an exam to elicit the degree of descent experienced during daily life, or other factors. Yet data to identify specific criteria for what is abnormal in these women are not available at present. A decision about whether or not these women’s problems can be improved by physical therapy, pessary, or surgery must be individualized and so this document does not argue against treatment in these women. There was consensus, however, that the benefit of having a clearly defined and evidence-based threshold to define prolapse justified a specific cutoff.

To summarize, the definition adopted by the taskforce represents the definition of “*clinical* prolapse” as protrusion of vaginal walls to or below the hymen or the apex to or below -TVL/2 associated with bothersome symptoms and/or medical co-morbidity. We also recognize the term “*anatomical* prolapse” that does not require symptoms.

THE POP-Q POINTS

Rationale for Revision

The task force considered two aspects of the point descriptions – definitions and labels. The original document relied on a single diagram to define the points leaving room for differences in interpretation. In addition, some of the point descriptions were interpreted differently by different clinicians and researchers. An internal audit conducted by the PFDN asked experienced clinician investigators to place POP-Q points on the vaginal wall of diagrams of different prolapse scenarios. They found significant inconsistencies in point placement, particularly for point D, with half indicating where the posterior vagina joined the cervix and half the highest point on the posterior vaginal wall. These and related issues make collection of reliable data challenging [Myers 2025]. This revision will attempt to resolve these issues by clarifying the definition for points C and D. Also, because the labels for the points (Aa, Ba, Ap, Bp) have been confusing for many learners, an alternative labeling system was developed.

Point Position Descriptors

The terms proximal/distal, above/below, highest/lowest, etc. can be ambiguous, yet the terms cranial and caudal, which are anatomically precise, are not intuitive for clinicians. In describing the vaginal wall, we will refer to points as “proximal,” “above” or “higher” for points more cranial to the hymen and points “distal,” “below” or “lower” as being more caudal to the hymen.

Point Labels

Table 1. Point Labels

Former Term	New Term
Aa	3A
Ba	Max A
Ap	3P
Bp	Max P

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The terms “Aa, Ba, Ap and Bp” have been difficult to learn because there are different meanings for “A” and “a” and because the vaginal wall referred to is indicated with a lower-case letter (a or p) following a capitalized main designator (A or B). New labels were developed after discussion regarding clarity and ease of use (Table 1). In this way, the points that refer to the locations 3 cm along the vaginal wall above / proximal to the hymen anteriorly and posteriorly (former Aa and Ap) will now be labeled 3A and 3P, respectively. The points of maximal protrusion of the anterior and posterior vaginal walls will be designated as Max A and Max P (former Ba and Bp). The task force believes this will be easier for new learners to assimilate. Throughout this document we use the new names with hope that the new labels are easier for students and learners new to the system to internalize.

Point Definitions

The following schematic has been developed to help with clarifying point definitions (Figure 1). Panel a illustrates positions of the pelvic organs (vagina, bladder, and rectum) while panel b shows point locations without the organs represented, for simplicity, and to maintain the convention of not suggesting the viscera behind the vaginal structures. The grid represents centimeter intervals with 0cm at the hymen ring (dashed line) and positive numbers reflecting locations below this landmark while negative numbers indicate locations above this landmark. The solid line indicates the vaginal wall between 3A / 3P and the apex. While the dotted line indicates the vaginal wall between the hymen and 3A / 3P. The dotted line portion of the vaginal wall does not play a role in assigning POP-Q measures. The points 3A and 3P are three centimeters proximal to the hymen along the vaginal wall. A key concept with point 3A and 3P is that their values can only be between -3 and +3 (panel c). This is shown for the anterior vaginal wall but is also true for the posterior vaginal wall.

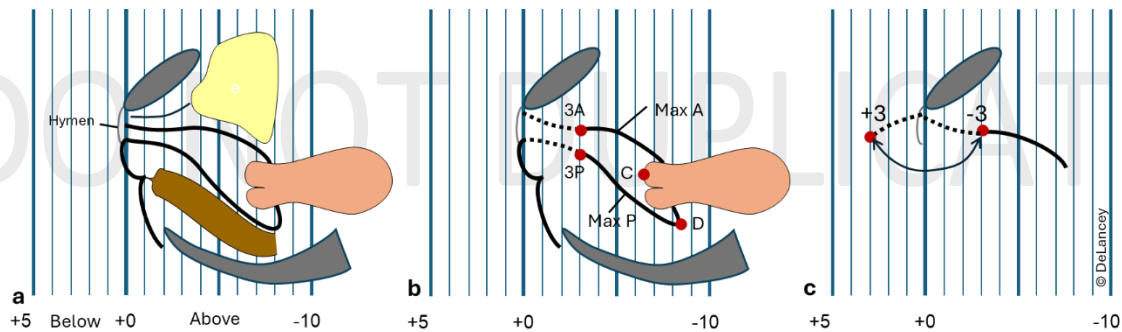


Figure 1. Diagram to describe POP-Q points. Panel a represents the pelvic organs. Because the bladder and rectum are not part of the consideration, they are omitted unless helpful in understanding Panel b. The dotted lines represent the 3 cm of vaginal wall between the hymen and the 3A / 3P points and the solid line represents that portion between these points and the cervix. By definition, Points 3A and 3P are limited to values between -3 and +3 (c).

Measurements for all points will be recorded to the nearest centimeter. Although some may have chosen to record to the closest half centimeter in the previous POP-Q system, that degree of precision is not reproducible. Therefore, it is recommended that only whole centimeter integers are recorded. It is also considered best practice to explicitly include the + and - sign when recording POP-Q points 3A, 3P, Max A, Max P, C and D, to lessen the chance of error during data entry. For example, in the past, if no sign precedes a numerical value it is most perceived as a positive value when in fact it may be a case where the “-” sign was accidentally forgotten.

Anterior vaginal wall points

Two points for the anterior vaginal wall will remain unchanged except for nomenclature. Point 3A (originally POP-Q point Aa) is located in the midline of the anterior vaginal wall 3 cm proximal to the external urethral meatus, confluent with the hymen, along the vaginal epithelium. Point 3A still corresponds to the approximate location of the “urethrovesical junction crease,” a landmark of variable prominence that is obliterated in many patients. By definition, the range of position of point 3A relative to

the hymen is -3 to +3 cm as previously shown (Figure1). Figure 2 displays specific examples of point 3A and Max A placement.

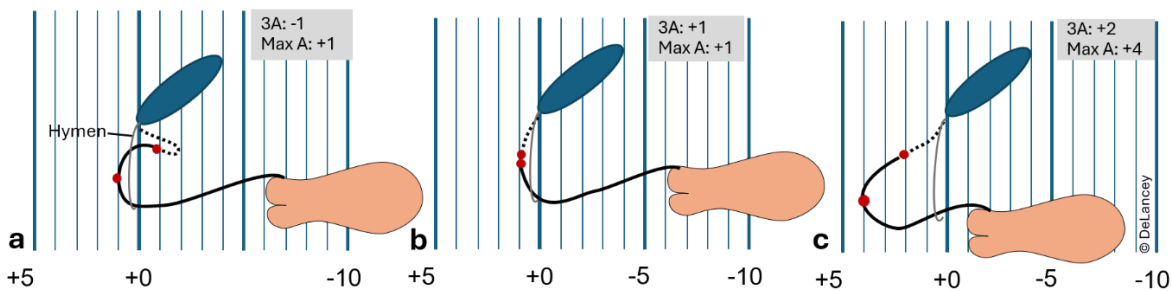


Figure 2. Examples of anterior wall points. Notice that point 3A represents the location of the point on the vaginal wall that was 3 cm above the hymen when the vaginal wall is reduced. Panels a and b represent two different positions for point 3A despite both being +1 cm anterior prolapse. Panel c demonstrates point Max A as maximal descent of the anterior vaginal wall that cannot be demonstrated using 3A alone.

Point Max A is unchanged, except in name, from original POP-Q point Ba, and represents the lowest or maximally prolapsed position of any part of the upper anterior vaginal wall from point 3A to the vaginal junction with the cervix (cervicovaginal junction) or the vaginal cuff. The original POP-Q system used the term “anterior fornix” for the upper margin of the anterior vaginal wall. However, in many elderly postmenopausal women and women with anterior vaginal wall prolapse, the anterior fornix is often obliterated (Figure 3 panel b). Therefore, the task force endorses the term “cervico-vaginal junction.” This means that in some instances Point MaxA and Point C can be different values.

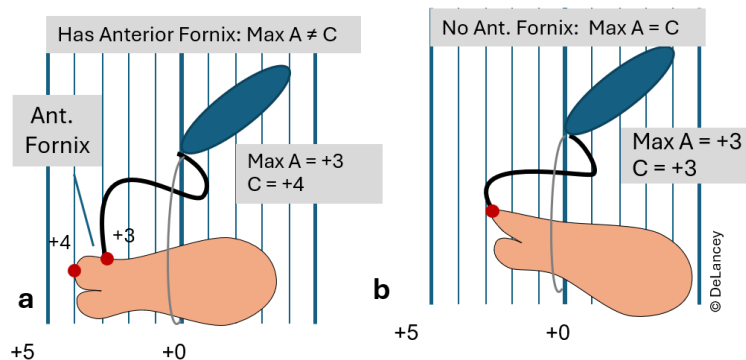


Figure 3. The normal anterior fornix (panel a) is often less prominent or lost in prolapse or after the menopause but there is still a cervico-vaginal junction (panel b) that can be noted as indicated by Max-A. Therefore, the description of this point has been changed from “anterior fornix” to “cervico-vaginal” junction.

Posterior vaginal wall points

Analogous to the conventions for the anterior wall, point 3P is unchanged, except by name, from the original POP-Q point Ap, and is located in the midline of the posterior vaginal wall 3 cm proximal to the hymen. By definition, the range of position of point 3P relative to the hymen is -3 to +3 cm.

Point Max P will remain unchanged, except by name from the original POP-Q point Bp. It is defined as a point that represents the lowest position of any part of the upper posterior vaginal wall from the point 3P to Point C or D. By definition, point Max P has a minimum value of -3 cm and could have a positive value equal to the position of the cervicovaginal junction or vaginal cuff in women with total post hysterectomy vaginal prolapse.

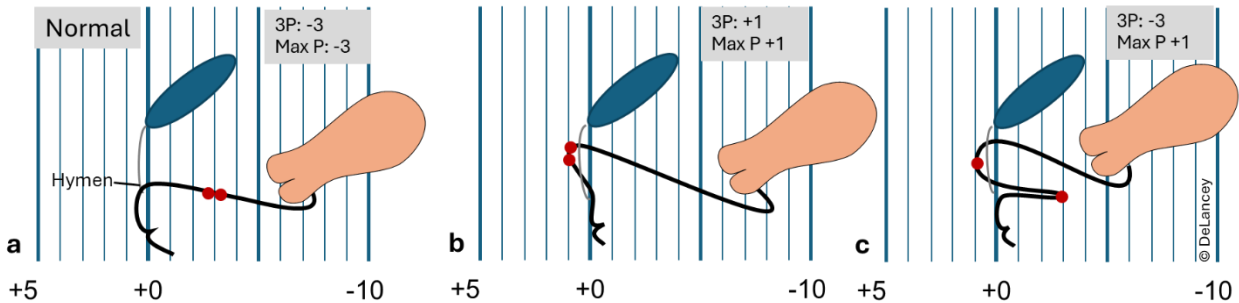


Figure 4. Examples of Point 3P and Max P in different types of posterior vaginal wall prolapse.

Examples are shown in Figure 4 with specific appreciation for the potential differences in the location of posterior wall descent.

Apical points (C and D)

Points C and D describe the upper vagina and cervix as they did in the original POP Q system. **However, the revised system now includes point D in all patients, including those who have undergone hysterectomy.**

Point C is unchanged from the original POP-Q description with the caveat that it can refer to the cervix (designated Cx), or to the vaginal cuff after hysterectomy (designated Cu). Point Cx/Cu represents the lowest edge of the cervix or cuff. For the cervix it can be either the anterior or less commonly the posterior lip; whichever descends the furthest. Previously, the absence of a point D immediately conveyed to the user that the patient was post-hysterectomy. Since all POP-Q exams will now include a point D, the Cx/Cu nomenclature was adopted to make the hysterectomy status of a patient clear to the user.

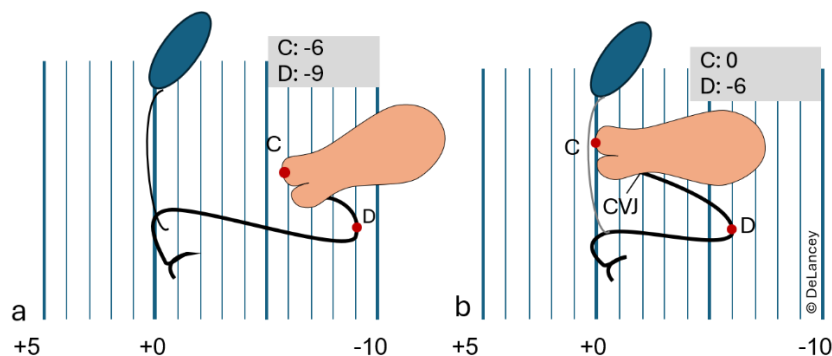


Figure 5. Panel a, Points C and D with normal support. Panel b shows new definition of point D as the highest point on the posterior vaginal wall rather than the cervico-vaginal junction (CVJ).

Point D (Figure 5) will no longer represent “the level of the uterosacral ligament attachment to the proximal or posterior cervix” but rather the highest point of the posterior vaginal wall supported above the hymen. If there is no posterior support above the hymen, then the D point is 0.

The rationale for this change is that there have been two different ways in which clinicians have interpreted the former definition for point D. In an unpublished study conducted by the PFDN, several international experts on the POP-Q and prolapse were sent a series of POP-Q diagrams representing various types of prolapse. They were asked to mark on the diagrams where the various POP-Q points were located. For points Aa, Ba, Ap, Bp and C (for the cervix) there was substantial concordance. However, the group was not in agreement on interpretation for point D or point C following a total hysterectomy. One group placed point D at the cervicovaginal junction, while another used the highest point in the posterior wall. Each has their advantages. The cervicovaginal junction helps estimate cervical elongation and the highest point identifies remaining upper posterior vaginal support. Because this highest point can be present whether or not the uterus is present, the task force agreed that describing it with point D should be universal.

In POP-Q II the definition of point D represents *the highest point on the posterior vaginal wall above the hymeneal remnants* at maximal demonstrable prolapse, consistent with the unpublished PFDN study findings. Point D is independent of the point where the vagina attaches to the cervix and will allow description of the vaginal support profile whether or not the cervix is present. This also better reflects how point D is currently being used by many experts in the field. This does not prevent practitioners from recording the cervico-vaginal junction location for their clinical practice if they choose. It simply standardizes what is meant by point D and extends this information to include women who have had a hysterectomy.

Since point D represents the highest or best supported vaginal segment *above the hymeneal remnants*, it has a value of $\leq$ to 0 cm. If the patient has complete uterovaginal prolapse or complete vaginal vault eversion and there is no posterior vaginal segment remaining above the hymen during maximal demonstrable prolapse then *by definition*, point D will have a value of 0 cm. (Figure 6). It will be negative if there is any posterior vaginal wall segment remaining above the hymen. Point D will never have a positive value.

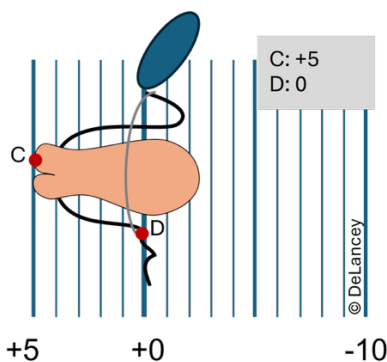
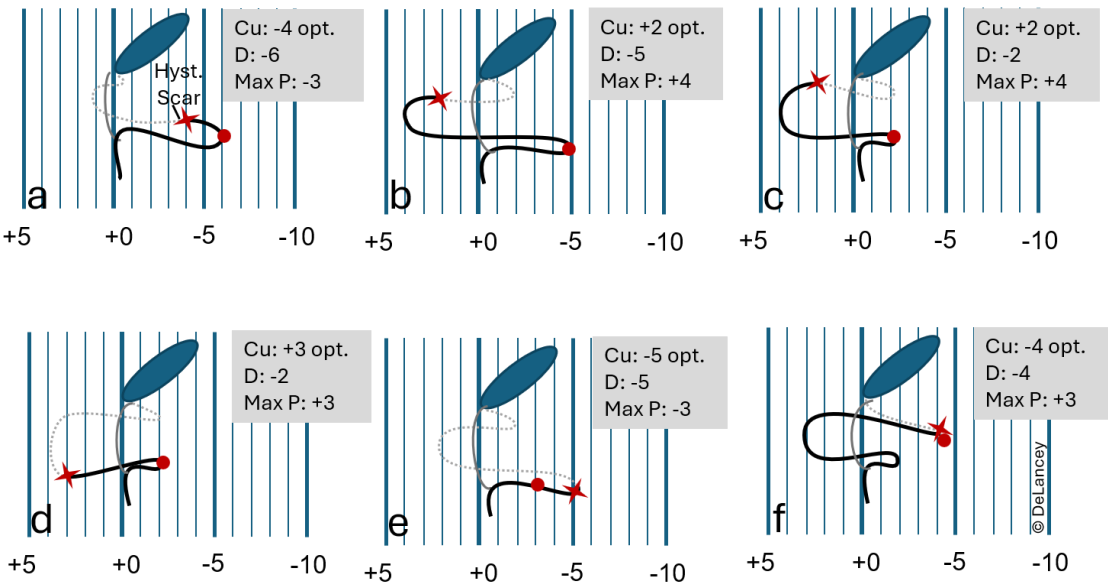


Figure 6. Point D when there is complete eversion of the vagina.

In a woman with normal support, its location is the posterior fornix and has a negative value. If the woman had a prior hysterectomy and has normal support of the vaginal cuff, point D would be similar to point Cu as a negative value. If the woman has some degree of pelvic organ prolapse but has a point anywhere on the posterior vaginal wall that remains above the hymen, then that point is point D. As already mentioned, it can only have a value of less than or equal to 0 cm. Examples of different situations for points Cu and D are presented in Figure 7.



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Figure 7. Examples of issues related to apical points Cu, D, and Max P after hysterectomy; the red x indicates location of the hysterectomy scar (anterior points not shown).

272 **GENITAL HIATUS, PERINEAL BODY AND TOTAL VAGINAL LENGTH**

273 The descriptions for lengths of the genital hiatus (GH), perineal body (PB), and total vaginal length (TVL)
274 will remain unchanged from the original POP-Q.

275 “The GH is measured from the middle of the external urethral meatus to the posterior midline
276 hymen. If the location of the hymen is distorted by a loose band of skin without underlying muscle
277 or connective tissue, the firm palpable tissue of the perineal body should be substituted as the
278 posterior margin for this measurement. The PB is measured from the posterior margin of the
279 genital hiatus to the mid-anal opening. Measurements of the genital hiatus and perineal body are
280 expressed in centimeters. The TVL is the greatest depth of the vagina in centimeters when point
281 C or D is reduced to its full normal position.” [Bump 1996]

282 These values are always positive so no +/- signs are used.

283 **EXAMINATION ISSUES**

284 The goal of the POP-Q examination is to record vaginal and cervical locations when the maximum extent
285 of prolapse, as experienced by the patient in her daily activities, is demonstrated in the clinical setting.
286 During examination, the patient can be asked to Valsalva / strain and then to cough, allowing the patient
287 to try both methods to demonstrate maximal pelvic organ descent. Persistence in this maneuver until the
288 full extent of the prolapse is seen is important and several efforts may be needed. To confirm that the full
289 extent of the prolapse is being clinically demonstrated the clinician can use one of several techniques.
290 Identifying tense vaginal epithelium over the prolapsing organ is one technique to identify the maximum
291 extent of the prolapse. One may also ask the patient to describe their prolapse and determine if the exam
292 is congruent with the description. Digital palpation by the patient or visualization using a handheld mirror
293 can be used to allow the patient to feel or see their prolapse. Finally, using a disarticulated speculum to
294 open the hiatus is another technique that can help allow for full prolapse of the segment being examined.
295 Care must be taken not to inadvertently support the apex if this technique is used. For posterior vaginal

296 wall prolapse often a gloved finger placed into the rectum can assist in best defining prolapse of that
297 segment.

298 During strain, the GH and PB lengths should be measured as straight line dimensions, not “over the
299 curve” of the prolapse. The location of cervix and point D can be established by palpation, visualization,
300 or with an inserted swab/measuring spatula. The most prominent (“lowest”) position for each point should
301 be recorded and care taken not to artificially elevate these points during examination.

302 Because the prolapse may recede in the supine or lateral decubitus position and will often reduce with
303 placement of a speculum, visualizing the anatomy while the patient is standing may be needed to
304 determine the extent of her prolapse. This can be performed by asking the patient to stand, leaning
305 forward slightly with her knees slightly bent. In this high “squatting” position, she is likely to be able to
306 perform a Valsalva maneuver while the examiner sits on a stool or kneels on the floor, retracting the labia
307 if necessary. After visually assessing the anatomy at maximal strain, the examiner can place a lubricated
308 gloved finger or swab/spatula into the vagina to assess the C and D points if they are not visible.

309 If the examination does not begin with the patient standing and there remains a discrepancy between the
310 patient’s history and the extent of visualized prolapse, or if the clinician does not think the full prolapse
311 has been seen in the standard supine exam or lateral decubitus position, examination in the standing
312 position as described above should be carried out. The method that produces the most descent can be
313 used for the remainder of the examination.

314 Measurements made under anesthesia

315 The POP-Q values used to characterize prolapse extent should *not* be based on measurements made in
316 the operating room, especially as it relates to descent of the cervix with traction. It is well established that
317 these measurements differ by several centimeters compared to what is seen on examination in the clinic.
318 [Crosby 2013, Brazell 2012] This is not to say that surgeons should not perform these assessments to
319 help with operative planning, but this technique should not be used to represent disease severity or
320 record a POP-Q exam.

321 **HOW SHOULD SEVERITY OF PROLAPSE BE CATEGORIZED**

322 *Rationale for Staging Modifications*

323 The original POP-Q description included an ordinal staging system for grading the severity of prolapse
324 [Bump 1996]. The authors defined stages of prolapse ranging from stage 0 to stage IV based on the
325 most distal point of prolapse, regardless of what part of the genital tract was prolapsed. The authors of
326 that document conceded that this was a somewhat arbitrary system since no evidence-based criteria
327 existed on which to distinguish between stages. However, they felt this would provide a means for
328 performing research and making comparisons.

329 Since that time, published research has made the POP-Q ordinal staging system a source of confusion
330 [DeLancey 2025]. For example, “stage I prolapse” and even some “stage II prolapse” in asymptomatic
331 women does not represent clinical prolapse as we now understand it. The original POP-Q ordinal staging
332 system also does not account for the various configurations or clinical phenotypes in which prolapse
333 presents. [Sayler 2025, Lowder 2024]) Patients can have anterior predominant, posterior predominant,
334 apical predominant or multi-compartment prolapse. For example, a patient with anterior vaginal wall and
335 apical prolapse to just beyond the hymen with normal posterior wall support would have the same “stage
336 II” label as a patient with normal anterior wall and apical support but with posterior wall prolapse just
337 beyond the hymen. Although these two patients had the same prolapse stage in the prior system, the
338 underlying pathophysiology, symptomatology, best treatment options, and recurrence risk between these
339 two clinical phenotypes may be very different. Therefore, we sought to align the system for the description
340 of prolapse with the currently available evidence.

As discussed previously, based on the International Urogynecology Consultation consensus document (Collins *et al*), the task force has established that *clinical* prolapse is anatomical prolapse with descent of at least one of the vaginal walls to or beyond the vaginal hymenal remnants OR the vaginal apex (cuff or cervix) to or beyond half the total vaginal length (-TVL/2) with maximal Valsalva effort, and the presence of one or both of the following: (1) bothersome characteristic symptoms, most commonly the sensation of vaginal bulge, or (2) functional or medical compromise (e.g. urinary retention).

Change in the Definition of Prolapse

A significant change in POP-Q II is that vaginal points above the hymen will no longer be referred to as stage I or stage II “prolapse” as previously discussed. This is an important change for patients because many women, upon hearing that they had “stage I” or “stage II” prolapse, assumed they had prolapse in the same way they would understand they had stage I or II breast cancer. They assumed this was a pathologic diagnosis requiring treatment. Evidence now shows that women with vaginal support above the hymen are *usually* asymptomatic. Additionally, there is a lack of evidence to support the assertion that any specific point exists to delineate a difference in symptoms, disease progression or clinical recurrence after surgery. Some studies suggest that more advanced anatomic prolapse is associated with increased risk of prolapse persistence or recurrence following surgery. [Meyer 2020 PMID 32146521] However, other studies do not. Jelovsek *et al* found that compared to women with stage II prolapse, women with advanced prolapse pre-operatively were actually less likely to have symptoms post-operatively even if they still had anatomic prolapse to or beyond the hymen. [Jelovsek PMID 34157280] Furthermore, while there may be an association between the severity of pre-operative anatomic prolapse and the risk of post-operative anatomic prolapse, there are no specific “cut-off” points that are consistently associated with increasing levels of recurrence risk. Thus, this was part of the impetus to adopt a continuous measure of prolapse severity rather than an arbitrarily defined ordinal measure.

Additionally, the inclusion of maximal points of descent spanning -1 to +1 in a single stage is antithetical to the basis of most high quality prolapse trials conducted over the past 20 years. Surgical prolapse trials published by the Pelvic Floor Disorders Network and from other groups around the world typically include maximal descent of -1 post-operatively as “success.” [Menefee 2024 38776067, Barber 2014 24618964, Enklaar 2023 37581670] This is certainly logical since an abundance of research supports the fact that most women do not have relevant bulge symptoms with the vaginal walls supported at -1.

Although there is good evidence that most women become symptomatic from loss of vaginal support when the vaginal walls or cervix descend to the hymen or beyond, less is understood about what constitutes abnormal support of the apex, especially in the context of normal anterior and posterior vaginal wall support. The clinical definition of prolapse adopted by Collins *et al*, and used in this manuscript, does not specifically address the apical support issue. [Collins 2021] For example, consider a patient with point Max A of -1 cm, point Max P of -1 cm and Cx of -1 cm. Although no portion of the vagina or cervix descend to or beyond the hymen, a cervix at -1 cm clearly does not represent normal support, and the patient could have vaginal bulge symptoms, particularly if the genital hiatus is enlarged. Therefore, as described below, we chose to set the definition of prolapse for Cx/Cu as descending to or beyond half the total vaginal length. This is consistent with prior research suggesting that prolapse symptoms are associated with apical support loss to -5 and that normal women without prolapse symptoms have apical support at about -7 to -6. (Trutnovsky 2019 Patnam 2018) However, we acknowledge that this is an area that needs additional research.

New System for Prolapse Description

Because the original POP-Q ordinal staging system implied an association between “stage” and disease severity, prognosis, and/or risk of disease recurrence that has not been demonstrated in the published literature, they are not included in POP-Q II. To describe prolapse, the task force felt using a descriptive system that describes the size of the prolapse in centimeters for each prolapsed compartment avoids this problem. It demonstrates phenotypes would help both the clinician and researchers to better understand mechanisms of disease and therapeutic outcomes. Phenotypes are the observable characteristics of an organism arising from its response to the environment. (Hoehndorf PMID 2605359) By adopting a

classification system that clusters patient's similar observable traits (i.e. a phenotype) we may be able to identify closely related presentations of prolapse based on common etiological, anatomical and physiological underpinnings. (Hoehndorf PMID 2605359) This is currently how many clinicians and researchers are already describing prolapse (i.e. "anterior-predominant uterovaginal prolapse" or "isolated rectocele"), and the task force felt this should be codified and standardized. Instead of describing prolapse by "stage", the revised system will describe A (for anterior), C (for cervix/cuff), P (for posterior) with each designation carrying a number describing the maximal descent of that landmark.

In addition, clinicians and researchers can now choose to use the complete 9-measurement POP-Q reporting system using the POP-Q II Phenotypes designations *or* a Simplified System to provide an overall description/designation of prolapse (Tables 2 and 3). The Simplified System was developed to be easy to use for any health care professional caring for women with prolapse by providing a descriptive value of the prolapse that is meaningful and easy to understand. The POP-Q II Phenotypes will provide a more detailed, robust mechanism for describing prolapse that can be utilized by any health care professional but will be most beneficial for specialists and researchers. Furthermore, we hope that the design of these reporting systems will facilitate research that allows for better understanding of prolapse phenotypes and more meaningful prognostic reporting systems in the future.

A significant body of evidence suggests a relationship between GH and prolapse development, progression, and therapeutic success (either with pessary or surgery). [DeLancey 1998, Lowder 2016, Vaughan, 2018, Handa 2021, Bradley 2023, Ma 2020]) Specifically, a GH of greater than 4-5 cm increases the chance of prolapse developing in a patient with adequate current support. Likewise, there is evidence that a GH greater than 4-5 cm is associated with unsuccessful pessary fitting and recurrence following corrective surgery. Therefore, in addition to reporting the anterior (A), apical (C) and posterior (P) compartments, the POP-Q II Phenotypes system will also report the GH.

POP-Q II Phenotypes

The system for reporting prolapse includes reporting the value of each compartment (anterior, apical, and posterior) *with prolapse* as well as the genital hiatus. Prolapse is present in the anterior compartment if Max A ≥ 0 , the apex when Cx/Cu $\geq$ -TVL/2 and in the posterior compartment when Max P ≥ 0 . This is followed by the GH. Examples of this system are seen in Table 2.

Table 2. Examples of POP-Q II Phenotypes

Complete POP-Q II Examination Results	POP-Q II Phenotypes: Abnormal Values and GH
3A +3, Max A +3, Cx +3 GH 4, PB 2, TVL 9 3P -1, Max P -1, D-6	A+3 Cx+3 GH 4
3A -2, Max A -2, Cu-7 GH 3, PB 3, TVL 9 3P +1, Max P +1, D-7	P+1 GH 3
3A -1, Max A -1, Cx-7	No prolapse GH 2

GH 2, PB 4, TVL 9 3P -1, Max P -1, D -9	
3A -1, Max A -1, Cx-1 GH 2, PB 3, TVL 8 3P-1, Max P -1, D -5	Cx -1 GH 2

420 Again, a plus (+) or minus (-) sign should always be included for the A, P, and C values when they are
421 reported other than zero. The intent of this system is to provide the user with an easy-to-read designation
422 summary of the prolapse that conveys which compartments (anterior (A), apical (Cx/Cu), posterior (P))
423 are affected and the severity of prolapse in those segments.

424 Focusing on the phenotype of the prolapse which is composed of the size of the prolapse and the vaginal
425 segments involved is more compelling than trying to use an overall staging system with cutoffs. This will
426 allow for a simple and complete clinical description, which many clinicians are already doing in some
427 form, and should help researchers focus on phenotypes as a predictor of success with various
428 therapeutic measures. If future data become available to have evidence-based cutoffs, this issue can be
429 addressed in the next revision of the POP-Q system. Phenotyping may provide evidence-based cutoffs
430 which can improve the predictive value of this model in the future.

431 *Simplified System*

432 The Simplified System for reporting prolapse includes the greatest overall value of the point of maximal
433 descent (MD) of the segment with the most prolapse. This should be written as “MD” followed by the
434 numerical value. Importantly, this should only be reported if there is prolapse in at least one compartment.
435 Prolapse is present in the anterior compartment if Max A ≥ 0 , in the apex when Cx/Cu $\geq$ -TVL/2 and in the
436 posterior compartment when Max P ≥ 0 . A plus sign or minus sign should always be included when the
437 value is not zero. Examples of this system are in Table 3.

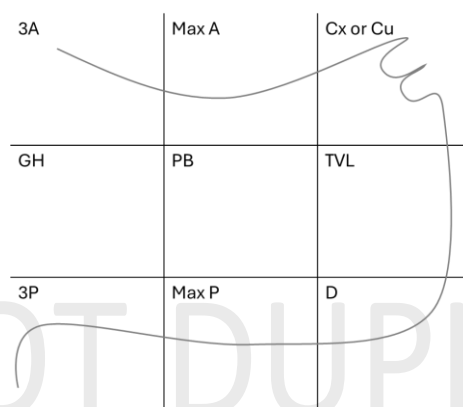
438 Table 3. Examples of the Simplified System

Complete POP-Q II Examination Results	Simplified POP-Q II Maximal Descent (MD)
3A +3, Max A +3, Cx +3, GH 3, PB 3, TVL 9 3P -1, Max P -1, D -6	MD +3
3A -2, Max A -2, Cu -7 GH 2, PB 4, TVL 9 3P +1, Max P +1, D -7	MD +1
3A -1, Max A -1, Cx -7	No prolapse

GH 4, PB 2, TVL 9	
3P -1, Max P -1, D -9	
3A -1, Max A -1, Cx -1	MD -1
GH 3, PB 3, TVL 8	
3P -1, Max P -1, D -5	

439

440 “TIC TACK TOE” GRID



441

442 *Figure 8. Grid on which to record values.*

443 A 3x3 grid has been widely used to record the original POP-Q values. The idea behind the location of the
444 various boxes was to record values for the vaginal wall and cervix points as relates to the orientation of a
445 sagittal view of the vagina and cervix (Figure 8). The top and bottom row show point locations. The
446 middle row was reserved for length measurements as opposed to points and contains the genital hiatus,
447 perineal body, and total vaginal length. This logic is helpful in explaining the annotation to new learners
448 and a simple overlay of the vaginal profile as noted in Figure 8 should provide a reference for learners.

449 FUTURE DIRECTIONS

450 As is true for all established systems for classifying disease (e.g. endometriosis, cervical cancer), revision
451 is needed as data accumulate. The task force recognizes that there are aspects of this revision that will
452 need to be modified in the future as more studies are conducted. A regular cadence for revision is not set
453 at present but would probably be undertaken to have the next revision in about 6 years or so. The exact
454 nature of these improvements will be determined by the accumulating evidence and the limitations that
455 still are present due to lack of evidence on which to base decisions.

456

457 CONCLUSION

458 All systems for describing disease in its various presentations require updating as new evidence on the
459 disease in question is understood. The POP-Q system has advanced the understanding of pelvic organ
460 prolapse. However, as data accumulated certain aspects became confusing to researchers, clinicians,

461 learners and patients. This update to the original POP-Q is a first step to making the system more
462 congruent with current understanding.

463 Two major changes involve better defining the apex (points D and C) and abandoning the staging system.
464 The updated point D is in line with how most experts are currently using it. Changing point C from a
465 hybrid point that could represent either the cervix or the cuff and negating point D in patients without a
466 cervix was confusing to learners and did not depict what many researchers and clinicians were trying to
467 describe. Future committees charged with reviewing and updating the POP-Q system in the future will be
468 able to decide if this update has clarified these issues.

469 Abandoning the POP-Q staging system was necessary but not taken lightly. However, the data on its
470 inability to truly quantify the disease of pelvic organ prolapse and the confusion it wrought among
471 researchers, clinicians and patients warranted the change. Many investigators will be concerned that the
472 original POP-Q staging system grouped patients into stages and the updated system does not. The
473 members of the POP-Q II task force felt that replacing stage with the POP-Q II Phenotypes will allow
474 researchers to better define the various phenotypes of pelvic organ prolapse populations by providing a
475 more detailed description of the population being studied. For example, for a population of predominantly
476 anterior vaginal prolapse, using the new POP-Q II Phenotypes, the theoretical population might be
477 described as;

478 Median A +3 (range of 0-+5)

479 Median C -5 (range -4 to-8)

480 Median P -1 (range -1 to -3)

481 Median GH 4 (range of 3-7).

482 Compare this to a description using the original POP-Q system that might report 25%of the population
483 had stage II and 75% stage III anterior prolapse with normal support in the other compartments. The
484 newer system, by commenting on all three compartments, alerts the reader that this population was
485 phenotypically a predominantly anterior vaginal wall prolapse with good apical support, Median C -5
486 (range-4 to -8), and posterior vaginal support, Median P-1 (range -1 to -3). It also gives a GH median and
487 range that may prove very helpful with future studies as this value along with phenotype may be the best
488 predictor of successful therapy or recurrence.

489 For more complex multicompartiment phenotypes of pelvic organ prolapse the POP-Q II Phenotypes
490 system provides more detail and is also a short-hand version of describing populations compared to the
491 original POP-Q system.

492 The POP-Q II system represents progress along a continuum. Researchers and clinicians will provide
493 future iterations as the science advances.

494

495

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