

Clinical Guidelines

Indonesian Society of Obstetrics and Gynecology Guideline on Urogynecology

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EXECUTIVE SUMMARY

Pelvic floor disorders, including urinary incontinence, overactive bladder, pelvic organ prolapse, voiding dysfunction, recurrent urinary tract infection, genitourinary syndrome of menopause, defecatory dysfunction, obstetric anal sphincter injury, and genitourinary fistula, are chronic conditions that may substantially impair mobility, sleep, sexual health, mental wellbeing, social participation, and quality of life. A recent Indonesian national-referral-centre series showed that many women with pelvic organ prolapse presented at advanced stages and were treated operatively, underscoring the need for earlier recognition, conservative care, and clearer referral pathways.¹

This executive summary proposes an integrated, person-centred framework for adult and adolescent women with non-neurogenic pelvic floor dysfunction, including women who are pregnant, postpartum, or planning future pregnancy. It prioritises symptom burden and patient goals rather than anatomical findings alone; standardises basic assessment; promotes supervised pelvic floor rehabilitation, bladder training, lifestyle optimisation, and pessary care as first-line options; and supports shared decision-making for medication, minimally invasive treatment, and surgery.^{2–7} Each core recommendation is accompanied by a provisional quality-of-evidence rating and strength of recommendation, derived through the method described below.

Diagnostic testing should be proportionate. Most women can be assessed with a structured history, focused examination, urinalysis, bladder diary, validated patient-reported outcome

measures, and measurement of post-void residual when clinically indicated. Diagnostic urodynamics, outpatient diagnostic cystoscopy, and imaging should be reserved for complex presentations or when results are likely to alter management. This restriction does not apply to intraoperative cystoscopy performed as a procedure-specific safety check.^{2,4,5,8}

Surgical treatment should be offered only for bothersome symptoms after counselling on non-surgical alternatives, expected benefits, recurrence, adverse events, recovery, fertility and sexual-function considerations, and the possibility of additional procedures. Uterine-preserving prolapse surgery should be discussed as one option within balanced shared decision-making when clinically appropriate. Synthetic mesh should never be treated as a generic solution, and its two principal contexts must be distinguished: a midurethral sling remains an evidence-based option for appropriately selected women with stress urinary incontinence, whereas transvaginal synthetic mesh augmentation for primary anterior or posterior prolapse is not standard routine care. Any mesh use requires procedure-specific indications, explicit informed consent, credentialed surgeons, complication pathways, and auditable outcomes.^{4,9–12}

Implementation in Indonesia should use a tiered model linking primary care, general obstetrics and gynaecology, urology, colorectal surgery, rehabilitation, geriatrics, pain services, and specialised urogynecology centres, supported by explicit referral criteria, minimum equipment at each level, teleconsultation, and named referral destinations. Minimum national datasets, Indonesian-language questionnaires with documented validation status, POP-Q

documentation, procedure registries, complication reporting, and regular audit are essential to reduce unwarranted variation and improve equitable access.

SCOPE

The proposed guideline applies to prevention, assessment, initial management, referral, procedural care, and follow-up for common female pelvic floor disorders, including pelvic floor symptoms in pregnancy and the postpartum period. It includes recognition of neurological red flags, immediate safety assessment (including post-void residual and renal-risk evaluation when indicated), and referral when neurogenic lower urinary tract dysfunction is suspected. It does not cover definitive diagnosis, surveillance, or treatment of neurogenic lower urinary tract dysfunction, which should follow disease-specific neuro-urology guidance. It also does not replace disease-specific oncology, paediatric urology, complex congenital anomaly, or acute obstetric emergency guidance; obstetric anal sphincter injury and genitourinary fistula are addressed in separate pathways (Section 6). Individualised clinical judgement remains essential.

Operational boundaries and definitions

In this summary, an uncomplicated presentation means symptoms consistent with a common non-neurogenic pelvic floor disorder without haematuria, recurrent unexplained infection, severe urinary retention, renal impairment, suspected fistula or malignancy, neurological signs, previous failed pelvic-floor surgery, mesh complications, or major diagnostic uncertainty. The term "index patient" is therefore replaced by "otherwise uncomplicated patient" throughout.

"Appropriately trained personnel", "trained operator", and "demonstrated competence" mean a licensed clinician working within their professional scope who has completed documented procedure-specific education, supervised clinical training, formal competency assessment and sign-off, and institutional privileging where applicable; maintains a procedure or case log; participates in complication review and outcome audit; and has access to

escalation and referral pathways. Procedure-specific requirements, including those applying to subspecialist procedures in Indonesia, are set out in the competency and credentialing framework (Section 5).

Guideline Development Methods and Evidence Grading

This executive summary was developed by adapting current, high-quality international guidance to the Indonesian context. Source documents were eligible if they were published or formally reaffirmed within the preceding ten years, were produced by a recognised professional society or national guideline body using an explicit development methodology, and addressed the diagnosis or management of female pelvic floor disorders. Priority was given to the most recent editions of guidance from the European Association of Urology, the National Institute for Health and Care Excellence, the American Urological Association and Society of Urodynamics, Female Pelvic Medicine & Urogenital Reconstruction, the American Urogynecologic Society and its joint publications with partner societies, the American College of Obstetricians and Gynecologists, the Royal College of Obstetricians and Gynaecologists, and the World Health Organization. Where source guidance pre-dated important trials or systematic reviews, key randomised controlled trials and Cochrane reviews were added, together with Indonesian studies relevant to disease burden and questionnaire validation. Consensus statements based mainly on expert opinion were used only where higher-level evidence was unavailable and are identified as such.

The certainty of evidence supporting each core recommendation was rated as high, moderate, low, or very low, and the strength of recommendation as strong or conditional, following the principles of the GRADE approach. Ratings were informed by the ratings reported in the source guidelines and by the design, consistency, and directness of the underlying evidence, and took account of benefits and harms, patient values, resource use, and feasibility within the Indonesian health system. Statements for which the benefit is unequivocal but formal evidence is not expected (for example, organisational and governance

requirements) are labelled Good Practice Statements (GPS). Service-delivery targets such as review intervals are identified explicitly as consensus-based implementation targets rather than evidence-derived thresholds.

The ratings presented here are provisional. Before adoption as a national guideline, PP POGI should convene a multidisciplinary panel, including urogynecology, general obstetrics and gynaecology, urology, colorectal surgery, rehabilitation medicine and physiotherapy,

nursing, and patient representation, to review the evidence-to-decision summaries and ratify each recommendation through a structured consensus process such as a modified Delphi method with a predefined agreement threshold. The full search strategy, databases and search dates, eligibility criteria, evidence tables, conflict-of-interest declarations, and voting results should be published in an accompanying methodological report. The guideline should be reviewed at least every five years, or earlier when major new evidence or regulatory changes emerge.

Core Recommendations

Recommendation	Practice statement	Evidence; strength
Organize care around symptoms and goals	Treat only clinically meaningful or bothersome pelvic floor dysfunction. Establish the patient's priorities, reproductive plans, sexual concerns, functional limitations, treatment preferences, and acceptable trade-offs before selecting therapy. ^{2,4}	GPS
Standardize the initial assessment	Use a structured history; abdominal, pelvic and pelvic-floor examination; urinalysis; symptom-specific validated questionnaires; and a 3-day bladder diary for urinary frequency, urgency, nocturia, or incontinence. Record POP-Q as the standard objective documentation of prolapse when treatment is considered, recognising that POP-Q stage alone does not determine treatment. ^{2,4,9}	Low; Strong
Identify red flags and complex disease	Expedite specialist evaluation for gross or persistent microscopic haematuria, recurrent unexplained infection, suspected fistula, pelvic mass, hydronephrosis, renal impairment, severe retention, neurological signs, significant pelvic pain, mesh complication, or recurrent failed surgery. ^{2,4}	GPS
Make conservative care the default first step	Offer education, fluid and caffeine review, constipation management, weight optimisation, smoking cessation, supervised pelvic floor muscle training, bladder training, and activity modification. Ensure access to trained pelvic-floor physiotherapists. ^{3,4}	High (PFMT); Strong
Manage stress and mixed urinary incontinence stepwise	Offer supervised pelvic floor muscle training for at least 3 months. Consider a continence pessary or urethral support device when appropriate. For persistent bothersome stress incontinence, discuss sling surgery, Burch colposuspension, and urethral bulking according to patient factors and local expertise. For mixed urinary incontinence, classify the presentation as stress- or urgency-predominant where possible, treat the most bothersome component, and offer pharmacological treatment for the urgency component according to symptom predominance and clinical indication. ^{4,6,11,13}	High (PFMT, slings); Moderate (other options); Strong
Individualize overactive bladder treatment	Begin with bladder training and behavioural therapy. Offer an antimuscarinic or beta-3 agonist through shared decision-making, considering cognition and anticholinergic burden, constipation, glaucoma, blood pressure, drug interactions, and affordability. Distinguish treatment-naïve, partially responding, and intolerant patients; consider switching or combination therapy for partial response. Offer botulinum toxin, tibial nerve stimulation, or sacral neuromodulation when conservative and pharmacological treatment is inadequate or not desired. ^{2,4,5}	Moderate; Strong
Treat pelvic organ prolapse according to bother, compartment, and goals	Observation is appropriate for asymptomatic or minimally symptomatic prolapse. Offer pelvic floor muscle training for selected mild prolapse and pessary treatment across stages. Before surgery, perform compartment-specific assessment including apical support and evaluate overt and occult stress incontinence and voiding function. Select surgery according to the apical, anterior, and posterior defects, previous operations, comorbidity, sexual goals, and an individualised discussion of uterine preservation. ^{4,7,9,10}	Moderate; Strong (uterine preservation); Low; Conditional

Integrate recurrent UTI and genitourinary syndrome of menopause care	Confirm recurrent UTI with documented symptomatic episodes and urine cultures whenever feasible. Do not screen or treat asymptomatic bacteriuria in non-pregnant women. Use a layered, antibiotic-sparing prevention plan that may include increased water intake when baseline intake is low and local low-dose vaginal oestrogen when appropriate. Consider antibiotic prophylaxis only after shared decision-making when non-antibiotic strategies are ineffective or unsuitable. ^{14,15}	Moderate; Strong
Use advanced testing selectively	Do not routinely perform diagnostic urodynamics, diagnostic cystoscopy, or imaging in otherwise uncomplicated presentations. Use them when diagnosis is uncertain, voiding dysfunction is present, prior surgery has failed, haematuria or fistula requires evaluation, or results will change treatment. Neurological signs should prompt immediate safety assessment and referral to neuro-urology rather than definitive management under this guideline. This recommendation does not apply to intraoperative cystoscopy used as a procedural safety check. ^{2,4,8}	High (urodynamics before SUI surgery); Strong
Embed procedural safety and mesh governance	Use explicit procedure-specific consent, competency-based credentialing, perioperative checklists, and intraoperative cystoscopy when indicated. Distinguish midurethral slings for stress incontinence from mesh augmentation for prolapse. Each service must maintain a severity-based mesh-complication pathway specifying symptom triggers, urgency category, initial assessment, consensus-based review targets, specialist or multidisciplinary review, targeted investigations, treatment counselling, implant traceability, and registry and adverse-event reporting. ^{4,11,16}	Moderate (mesh indications); GPS (governance)
Measure and audit outcomes that matter to patients	Use a standardised voiding-trial protocol after pelvic-floor surgery that documents the trial method, voided volume, post-void residual, pass/fail criteria, recatheterisation plan, patient instructions, and follow-up. Prefer the shortest safe catheter duration while preventing bladder overdistension. ¹⁷	Low; Conditional
Measure and audit outcomes that matter to patients	Incorporate validated questionnaires into the clinical pathway, at least before intervention and at defined follow-up points. Select instruments according to the purpose of assessment, including symptom severity, clinical outcome, treatment response, patient global impression, and quality of life, and according to the clinical condition. Audit complications, reoperation, recurrence, catheter duration, infection, and treatment discontinuation, and report outcomes by procedure, centre, and relevant equity variables. ^{18,19}	GPS
Address pregnancy, postpartum, and fertility considerations	Enquire about pelvic floor symptoms during pregnancy and after birth, offer pelvic floor muscle training, identify and manage postpartum urinary retention, and counsel women who have had or are considering prolapse or incontinence surgery about future pregnancy and mode of birth. ^{3,20}	Low; Conditional

Evidence ratings are provisional and subject to PP POGI panel ratification. PFMT, pelvic floor muscle training; SUI, stress urinary incontinence; GPS, good practice statement.

ASSESSMENT AND DIAGNOSTIC FRAMEWORK

Clinical history and patient-reported outcomes

Assessment should characterise storage, voiding, post-micturition, prolapse, bowel, pain, and sexual symptoms; onset and severity; degree of bother; obstetric history and current pregnancy or breastfeeding status; future pregnancy plans; menopause; pelvic surgery and radiation; medical and neurological comorbidity; medication use and anticholinergic burden; mobility and cognition; and previous treatment. Clinicians should ask what outcome would make

treatment worthwhile to the patient.^{2–4,9}

Patient-reported outcome measures (PROMs) are a core component of the clinical pathway, not only a quality indicator. Administer a validated condition-specific questionnaire before any intervention and at defined follow-up points (for example, after completion of conservative therapy and at 3–12 months after procedural treatment).¹⁸

Select instruments according to the purpose of assessment: symptom severity and bother (for example, ICIQ instruments, PFDI-20, or the Overactive Bladder Symptom Score), condition-specific quality of life (for example, PFIQ-7), sexual function where relevant, treatment response, and

patient global impression of improvement.¹⁸

Document the validation status of the Indonesian version of each instrument used. The Indonesian PFDI-20 has published validity and reliability data, and the Indonesian Overactive Bladder Symptom Score has published test-retest reliability data.^{19,21} For instruments without a published Indonesian validation, use a formal, licensed translation where required, report results as provisional, and prioritise national validation studies. Use a bladder diary for at least 3 days when frequency, urgency, nocturia, polyuria, or urinary incontinence is reported.^{2,4} Assess bowel function and screen for constipation, faecal incontinence, and obstructed defecation because symptoms frequently coexist.

Focused examination

Examination should be respectful, consented, and clinically targeted. It may include general and abdominal examination, cough stress test with an adequately filled bladder, inspection for atrophy or dermatological disease, digital assessment of pelvic floor muscle strength and tenderness, and evaluation of urethral mobility.^{4,9}

For women with prolapse symptoms, POP-Q is the standard for objective documentation and longitudinal comparison but is not the sole determinant of treatment. Prolapse assessment should include compartment-specific evaluation of the anterior, apical, and posterior compartments; assessment of apical support; genital hiatus, perineal body, and total vaginal length where sexual function or vaginal capacity is relevant; urinary and bowel symptoms; and evaluation for overt and occult stress urinary incontinence. Preoperative POP-Q documentation should be audited as a quality indicator.^{9,12}

Basic tests and selective advanced testing

Perform urinalysis in women with new lower urinary tract symptoms; obtain urine culture when infection is suspected or recurrent UTI is being evaluated.^{2,14} Measure post-void residual in women with voiding symptoms, recurrent UTI, advanced prolapse, neurological signs or known neurological disease, prior incontinence or prolapse surgery, or before treatments that may

impair emptying. When neurogenic lower urinary tract dysfunction is suspected, assess immediate risks such as retention, infection, hydronephrosis, or renal impairment and refer for definitive neuro-urology evaluation.^{2,4}

Do not use urodynamics routinely for uncomplicated overactive bladder or clearly demonstrable stress urinary incontinence in an otherwise uncomplicated patient; consider it for diagnostic uncertainty, mixed or complex symptoms, voiding dysfunction, prior failed surgery, or when the result will change treatment.^{4,6,8}

Reserve diagnostic cystoscopy and upper-tract imaging for haematuria, suspected fistula or urinary-tract injury, recurrent complicated infection, mesh erosion, malignancy concern, or other specific indications. This recommendation concerns diagnostic evaluation and does not restrict intraoperative cystoscopy performed to identify procedural urinary-tract injury.

Prevention and First-Line Non-surgical Care

Pelvic floor rehabilitation should be accessible early and should not be viewed merely as a prerequisite before "definitive" treatment. High-quality conservative care requires assessment by personnel who meet the competency standards defined above, an individualised programme, adherence support, and reassessment of symptom response.³

Provide education on pelvic floor anatomy, normal bladder and bowel function, symptom triggers, and realistic treatment goals. Address fluid extremes, excessive caffeine, constipation, smoking, obesity, chronic cough, and activities that repeatedly provoke symptoms. Offer supervised pelvic floor muscle training for at least 3 months for stress or mixed urinary incontinence and for selected women with mild symptomatic prolapse.^{3,4}

Offer bladder training for at least 6 weeks for urgency, urgency urinary incontinence, and mixed urinary incontinence with a predominant urgency component.⁴

Offer a pessary as a first-line or long-term option for symptomatic prolapse, including women who wish to defer or avoid surgery. Establish fitting, self-care or clinic-care plans, vaginal examination intervals, and pathways for

discharge, bleeding, pain, ulceration, or urinary retention.^{7,12}

Condition-Specific Management

Stress urinary incontinence

Women with stress-predominant symptoms should first receive pelvic floor muscle training and modification of reversible risk factors. When symptoms remain bothersome, options include a continence pessary, urethral bulking, sling surgery (synthetic midurethral or autologous fascial), or retropubic colposuspension. Counselling should compare expected effectiveness, invasiveness, recovery, retreatment, voiding dysfunction, pain, and material-specific risks. Urodynamics may be omitted in an otherwise uncomplicated patient when stress leakage is clearly demonstrated and no complicating features are present.^{4,6,8,11,13}

Mixed urinary incontinence

Where possible, women with mixed urinary incontinence should be classified as stress-predominant or urgency-predominant using the history, bladder diary, and validated questionnaires. Initial management combines pelvic floor muscle training, bladder training, and lifestyle measures. Pharmacological treatment for the urgency component should be offered according to symptom predominance and clinical indication, using the same selection principles as for overactive bladder. Treatment should target the most bothersome component while explaining that stress-directed surgery does not guarantee resolution of urgency and may occasionally worsen it; persistent urgency after surgery should be reassessed and treated independently. In complex, recurrent, or diagnostically uncertain cases, bladder diary review and selective urodynamics may be considered before surgery.^{2,4,6}

Overactive bladder and urgency urinary incontinence

The current approach should move away from rigid step therapy. Behavioural therapy, pharmacotherapy, and minimally invasive therapy can be sequenced or combined according

to symptom severity, comorbidity, patient preference, access, and previous response.^{4,5}

Treatment-naïve patients: antimuscarinic drugs and beta-3 agonists are both reasonable first pharmacological options alongside continued behavioural therapy. Choice should account for cognitive vulnerability, constipation, glaucoma, gastric emptying, blood pressure, drug interactions, and cost. Reassess efficacy and adverse effects after 4–8 weeks.^{4,5} Anticholinergic burden: before prescribing an antimuscarinic, review the total anticholinergic load of all current medications and discuss the potential association between long-term anticholinergic exposure and cognitive impairment, particularly in older or frail women and in those with existing cognitive impairment, for whom a beta-3 agonist is generally preferred.^{2,5} Beta-3 agonists: follow product-specific precautions. Mirabegron should not be used in severe uncontrolled hypertension, and blood pressure should be measured before treatment and monitored during treatment, particularly in women with pre-existing hypertension. Review interactions with drugs metabolised by relevant cytochrome P450 pathways.^{2,5}

Partial responders: confirm adherence, adequate dose, and treatment duration; re-evaluate the diagnosis, post-void residual, and contributing factors; then consider dose adjustment, switching to another agent or class, or combination therapy with an antimuscarinic and a beta-3 agonist.⁵

Intolerant patients or patients with contraindications: switch class or proceed to minimally invasive therapy rather than repeatedly substituting drugs with similar adverse-effect profiles.⁵ For inadequate response or intolerance, offer evidence-based procedural options such as intradetrusor onabotulinumtoxinA, percutaneous or transcutaneous tibial nerve stimulation where supported, and sacral neuromodulation. Patients considering botulinum toxin should understand urinary retention and UTI risks and the possible need for intermittent catheterisation.^{4,5}

Pelvic organ prolapse

Prolapse is treated because it causes bothersome bulge, pressure, urinary, bowel, sexual, or activity-related symptoms—not

because of POP-Q stage alone. Observation, pelvic floor muscle training, and pessary use should be offered according to symptom burden and preference. Before surgery, evaluate each vaginal compartment and apical support, assess voiding and bowel symptoms, and discuss the risk of recurrence and de novo symptoms.^{4,9,12}

Before prolapse surgery, overt and occult stress urinary incontinence should be evaluated explicitly, particularly in women with advanced prolapse. Assessment may include a cough stress test with a comfortably full bladder performed with the prolapse reduced (for example, with a pessary, speculum, or swab) where clinically appropriate, together with measurement of post-void residual and assessment of voiding dysfunction. The results should inform counselling about the risk of de novo stress incontinence and the options of concomitant or staged continence surgery. Urodynamics is not required routinely but may be considered in complex cases or when the result is likely to change the surgical plan.^{4,9,12}

Surgical planning should restore apical support when apical prolapse is present and should avoid unnecessary procedures.^{4,12}

Uterine preservation should be presented as a legitimate option for appropriately selected women, alongside hysterectomy-based repair, within balanced shared decision-making; it is not a universal recommendation to retain the uterus. The discussion should consider age, fertility wishes, risk factors for uterine or cervical disease (including abnormal uterine bleeding, postmenopausal bleeding, cervical screening history, and endometrial pathology), the ability to adhere to ongoing surveillance, the evidence available for the specific uterus-sparing procedure proposed, and the possibility of later uterine disease or recurrent prolapse.¹⁰

Synthetic mesh: distinguishing continence and prolapse indications

Mesh used to treat stress urinary incontinence and mesh used to treat prolapse differ in evidence base, indications, risk profile, and governance requirements and should not be discussed as a single category.^{4,11,12}

Stress urinary incontinence: the synthetic midurethral sling remains one of the evidence-based surgical options for appropriately selected

women. Counselling should include alternatives (autologous fascial sling, colposuspension, and urethral bulking) and material-specific risks such as mesh exposure, pain, dyspareunia, voiding dysfunction, and the difficulty of complete removal.^{4,6,11}

Prolapse: transvaginal synthetic mesh augmentation for primary anterior or posterior prolapse is not standard routine care and should not be offered outside tightly defined indications, formal governance, or research. Abdominal or laparoscopic sacrocolpopexy with mesh is a distinct procedure with its own indications and risk profile and should be undertaken only by credentialed operators.^{4,12}

For any mesh-based procedure, require careful indication, an operator who meets the competency and privileging standards defined in Section 5, implant traceability, procedure-specific written consent, auditable outcomes, and access to multidisciplinary management of complications.¹⁶

Recurrent urinary tract infection and genitourinary syndrome of menopause

Recurrent UTI should be distinguished from overactive bladder, GSM, bladder pain syndrome, voiding dysfunction, and asymptomatic bacteriuria. Whenever feasible, symptomatic episodes should be documented with urinalysis and culture before antibiotics. Routine diagnostic cystoscopy or imaging is not required in an otherwise uncomplicated patient without risk factors. Surveillance cultures and treatment of asymptomatic bacteriuria should be avoided in non-pregnant women.¹⁴

Prevention should use a layered, antibiotic-sparing approach. Recommend local low-dose vaginal oestrogen to peri- and postmenopausal women with GSM and recurrent UTI when not contraindicated, and encourage increased water intake when usual intake is below approximately 1.5 L/day and additional fluid is clinically appropriate. When these measures are ineffective or unsuitable, post-coital or continuous low-dose antibiotic prophylaxis may be considered after culture review and shared decision-making.^{14,15}

Cranberry products, methenamine hippurate, and D-mannose are not positioned as standard therapy in this guideline. Evidence on cranberry

products remains heterogeneous with respect to formulation, dose, and the populations most likely to benefit; methenamine hippurate has shown promising results in a non-inferiority trial but requires further evaluation of effectiveness, safety, and optimal patient selection; and a large randomised trial did not show benefit of D-mannose over placebo.^{22–24} These interventions may be discussed individually as part of shared decision-making, with contraindication and interaction review, but further research, including in Indonesian populations, is needed to define their clinical role. Probiotics, immunoactive preparations, intravesical glycosaminoglycans, and other supplements should likewise not be presented as established standard prophylaxis where evidence, regulation, product standardisation, or local access is insufficient.

Vaginal energy-based devices (including fractional CO₂ and erbium:YAG lasers, radiofrequency devices, and other modalities) differ in mechanism, device type, and regulatory status and should not be treated as a single evidence category. Evidence on efficacy and long-term safety is currently insufficient to support their routine use for genitourinary syndrome of menopause, stress urinary incontinence, prolapse, or vaginal laxity. Their use should be restricted to appropriate research or governance frameworks, with indication-specific and device-specific informed consent and confirmation of local regulatory approval.^{15,25}

Pelvic pain and defecatory dysfunction

Pelvic floor tenderness, hypertonicity, dyspareunia, bladder pain, faecal incontinence, and obstructed defecation require multidisciplinary evaluation. Repeated empirical antibiotics or surgery should be avoided when infection or a correctable anatomical lesion is not demonstrated. Management may include pelvic floor physiotherapy focused on relaxation and coordination, bowel optimisation, pain-informed care, colorectal or urological consultation, and psychological support where indicated.

Pregnancy, postpartum, and fertility considerations

Ask about urinary incontinence, faecal and

flatal incontinence, prolapse symptoms, and dyspareunia during antenatal care and at postpartum review, and offer pelvic floor muscle training during pregnancy and after birth.³

Pelvic floor muscle training may begin antenatally and can be resumed after birth once comfortable; women with obstetric anal sphincter injury, persistent symptoms, or poor pelvic floor contraction should be referred for supervised pelvic floor physiotherapy.³

Assess bladder emptying after birth, particularly after epidural analgesia, instrumental birth, prolonged labour, or perineal trauma. Use a standardised protocol for recognising and managing postpartum urinary retention, including timed voiding, post-void residual measurement, and catheter management, to prevent bladder overdistension.

Postpartum prolapse symptoms and signs frequently improve during the first months after birth. Surgery should generally be deferred until childbearing is complete and pelvic floor recovery has been assessed; pelvic floor muscle training and a pessary are appropriate interim options.

Recognise that breastfeeding is associated with a low-oestrogen state that may cause vaginal atrophy, dyspareunia, and urinary symptoms; local vaginal moisturisers or lubricants may be offered, and local vaginal oestrogen may be considered after individual assessment.

Counsel women who have had prolapse or incontinence surgery, or who are considering it before childbearing is complete, about the limited evidence on the effect of subsequent pregnancy and birth on surgical outcomes, the risk of symptom recurrence, and the need for individualised planning of mode of birth with the obstetric team.²⁰

Surgery, Perioperative Care, and Safety

Surgery should follow shared decision-making and should be performed by a clinician who meets the competency standards defined in Section 5 for the intended procedure and management of its complications, holds current institutional privileges, and participates in prospective outcome and complication audit. Consent must include non-surgical alternatives, expected symptom and anatomical outcomes, recurrence, urinary retention, infection, organ injury, pain,

dyspareunia, impact on sexual function, implant risks, and the possibility of reoperation.

Use enhanced recovery principles, multimodal analgesia, thromboembolism risk assessment, antimicrobial prophylaxis when indicated, and early mobilisation.²⁶

Intraoperative cystoscopy is a procedural safety check, not routine diagnostic screening. Perform it when urinary-tract injury is possible, when the procedure may compromise the bladder, urethra, or ureters, or when required by the selected prolapse or continence procedure. Document the findings and any injury-management steps.

Maintain a registry of prolapse, incontinence, fistula, and mesh-related procedures, including device identification, complications, revision, and patient-reported outcomes.

Postoperative voiding trial

Use a written, standardised voiding-trial protocol after surgery associated with postoperative urinary retention risk, specifying whether a retrograde-fill (active) or spontaneous-fill (passive) trial is used.¹⁷ Document the trial method, instilled volume where applicable, voided volume, post-void residual and how it was measured, and the predefined pass and fail criteria used by the unit.¹⁷ For women who fail the trial, document the recatheterisation plan (indwelling or clean intermittent self-catheterisation), duration, date and place of repeat trial, and responsible clinician.¹⁷ Provide a written catheter plan, red-flag advice, and a defined review interval, and record postoperative urinary retention and its resolution as an audited outcome.¹⁷

Mesh-complication pathway

Services that implant mesh or receive patients with previous mesh surgery should use the following severity-based minimum pathway.^{4,16} The review intervals stated below are consensus-based service-delivery targets for implementation and audit; they are not evidence-derived thresholds. They may be shortened according to clinical severity, and regional services may adapt them to local capacity provided that the urgency category, escalation route, and reasons for any delay are documented.

Initial assessment for all suspected mesh

complications: document implant type, date, route, and site; symptom onset, type, and severity; vaginal examination; urinalysis; and post-void residual. Add rectal and focused neurological examination when indicated, and assign an urgency category. Emergency category: sepsis, haemorrhage, acute urinary retention, hydronephrosis or renal impairment, suspected urinary-tract or bowel perforation or fistula, or an acute neurological deficit. Arrange same-day emergency assessment and stabilisation, with early contact with the designated referral service. Urgent category: suspected organ erosion, infection without sepsis, severe or escalating pelvic, groin, or neuropathic pain, or major voiding or bowel dysfunction. Refer on an expedited basis to a designated tertiary mesh service, with a consensus target for specialist review within 2 weeks. Routine category: small, uncomplicated vaginal exposure without red flags, mild dyspareunia, or stable symptoms. Consider local vaginal oestrogen where appropriate and refer for specialist review, with a consensus target within 6 weeks.

Use targeted investigations according to the suspected complication, which may include cystourethroscopy, ultrasound, MRI, CT, examination under anaesthesia, bowel evaluation, urinary flow and post-void residual testing, or urodynamics. Obtain multidisciplinary review before planned mesh excision or complex revision.¹⁶

Counsel that partial or complete mesh removal may not resolve symptoms and may cause recurrent incontinence or prolapse, organ injury, fistula, or new pain. Record the assessment, shared decision, implant details, complications, revision, and patient-reported outcomes in a registry, and report serious device events through the applicable national mechanism.^{4,16}

Competency and Credentialing Framework

Competency should be defined for each procedure rather than for urogynecology as a whole. PP POGI should publish a procedure-specific credentialing annex describing, for each procedure, the prerequisite qualification, required supervised training, method of competency assessment and sign-off, requirements for maintaining competence, and the complications

the operator must be able to recognise and manage or refer.

The annex should differentiate minimum competencies for at least the following: native-tissue prolapse repair; vaginal hysterectomy for prolapse; apical suspension procedures; abdominal, laparoscopic, or robotic sacrocolpopexy; synthetic midurethral sling; autologous fascial sling; urethral bulking; intradetrusor botulinum toxin; sacral neuromodulation; diagnostic and intraoperative cystoscopy; management of mesh complications, including mesh excision; primary and secondary repair of obstetric anal sphincter injury; and genitourinary fistula surgery.

In Indonesia, these procedures should be performed by obstetrician-gynaecologists (SpOG) who have completed consultant or subspecialist training in Urogynecology, Reconstruction and Aesthetics and who hold a valid certificate of competence, or by trainees in these programmes under appropriate supervision. Because obstetric anal sphincter injury requires prompt repair, primary repair in settings where a subspecialist is not immediately available should be performed by the most experienced available SpOG with documented training in OASIS repair, followed by early subspecialist review; complex, fourth-degree, recurrent, or failed repairs should be referred to a subspecialist.

Minimum case volumes should not be specified without supporting evidence or formal national consensus. Until such thresholds are adopted, competence should be governed by institutional credentialing committees using documented training, supervised assessment, case logs, periodic re-credentialing, and procedure-specific outcome audit.

Obstetric Pelvic Floor Injury and Genitourinary Fistula

Obstetric anal sphincter injury and genitourinary fistula differ from elective adult urogynecology in timing, urgency, and care setting and should each follow a dedicated pathway.

Obstetric anal sphincter injury pathway

Recognition, after every vaginal birth where perineal injury is possible, perform a systematic

perineal, vaginal, and rectal examination with consent and adequate analgesia, and classify any injury accurately.²⁷

Timing and setting: arrange repair promptly by an operator meeting the requirements in Section 5, in an operating theatre or equivalent setting with adequate lighting, analgesia, and assistance; document the classification, technique, and materials used.²⁷

Immediate post-repair care: give antibiotics according to local protocol, stool-softening measures, and analgesia; ensure bladder emptying is monitored; and provide written information on symptoms requiring urgent review.²⁷

Follow-up: offer pelvic floor physiotherapy and review at approximately 6–12 weeks, or earlier if needed, for pain, wound problems, faecal urgency or incontinence, sexual dysfunction, and psychological distress. Refer women with persistent symptoms to a specialist perineal or pelvic floor service with access to endoanal ultrasound and anorectal physiology where available.²⁷

Subsequent pregnancy: counsel about mode of birth according to symptoms and, where available, anal sphincter assessment, within a multidisciplinary discussion.²⁷ The RCOG Green-top Guideline No. 29 referenced here is the 2015 edition; a fourth edition is in development, and this pathway should be updated when it is published.

Genitourinary fistula pathway

Recognition: continuous leakage after obstructed labour, pelvic surgery, radiation, or trauma should prompt assessment for genitourinary fistula.²⁸ Initial care and referral urgency: provide skin protection, bladder drainage where appropriate, infection and renal assessment, and social and psychological support, and refer promptly to an experienced fistula centre. Early catheter drainage may allow spontaneous closure of selected small, recent fistulas.²⁸ Definitive repair: repair should be undertaken by a team that meets the procedure-specific competency, privileging, case-log, complication-management, and audit standards in Section 5, with attention to timing, tissue condition, continence mechanisms, ureteric involvement, and multidisciplinary input from

urology, colorectal surgery, and radiology where needed.²⁸ Follow-up: provide rehabilitation, assessment for residual incontinence, reintegration support, and future pregnancy counselling, including planned cesarean birth where indicated.²⁸

Proposed Indonesian Service and Referral Model

The guideline should be operationalised through explicit criteria for each level of the national referral system, so that it is not only evidence-based but also feasible in Indonesian health facilities. Table 1 summarises the proposed minimum capability, equipment, and referral triggers for each level.

Table 1. Proposed Minimum Capability and Referral Triggers by Level of Care

Level of care	Minimum capability and equipment	Refer onward when
Primary care (FKTP, including puskesmas and primary clinics)	Symptom enquiry and bother assessment; urinalysis (dipstick); bladder diary; basic pelvic examination; lifestyle advice; pelvic floor muscle training and bladder training by trained staff; constipation management; teleconsultation access to a secondary or tertiary centre.	Any red flag; bothersome symptoms not improving after 3 months of conservative care; symptomatic prolapse needing pessary or surgery; suspected fistula or OASIS complications; request for procedural treatment.
Secondary care (general obstetrics and gynecology services)	POP-Q examination; urine culture; post-void residual measurement by bladder scanner or catheter; access to pelvic-floor physiotherapy; pessary fitting and supply with follow-up; first-line pharmacotherapy; selected surgery by credentialed operators.	Complex, recurrent, or failed prior surgery; need for urodynamics, cystoscopy, or advanced imaging; mesh complications; fistula; neurological signs; need for subspecialist procedures.
Tertiary and subspecialist urogynecology centres	Multidisciplinary clinic; urodynamics; diagnostic and operative cystoscopy; pelvic floor ultrasound and access to MRI; full range of prolapse and continence surgery; botulinum toxin and neuromodulation where available; mesh-complication and fistula services; registries and audit; teleconsultation hub.	Rare or highly complex conditions requiring national referral centres or cross-specialty surgery not available locally.

Primary and secondary care

Normalise proactive enquiry about urinary leakage, urgency, vaginal bulge, bowel leakage, and antenatal and postpartum pelvic-floor symptoms during reproductive, menopausal, and chronic-disease care. Provide urinalysis, basic pelvic examination, pelvic floor muscle training, bladder training, constipation management, and first-line pessary access only where personnel satisfy documented training, competency assessment, supervision, and referral requirements. Ensure a reliable supply of pessaries in a range of types and sizes, access to trained pelvic-floor physiotherapists or trained midwives and nurses, and a clear pathway for pessary follow-up and complications. Refer women meeting the criteria in Table 1 to a named receiving service, using a standard referral form that includes symptoms and bother, bladder diary, urinalysis, post-void residual where

available, POP-Q where available, and previous treatment.

Tertiary and referral centres

Provide multidisciplinary clinics linking urogynecology, female urology, colorectal surgery, pelvic-floor physiotherapy, radiology, geriatrics, pain medicine, psychiatry/psychology, and specialised nursing. Implement and audit regional fistula and mesh-complication referral pathways with named receiving services, emergency, urgent, and routine referral criteria, consensus-based review targets, required referral information, and access to urodynamics, cystoscopy, advanced imaging, pain services, and complex reconstructive surgery. Map and publish the regional availability of urodynamics, cystoscopy, pelvic-floor physiotherapy, and subspecialist surgeons so that referring facilities know where to send patients. Support

teleconsultation and shared-care follow-up for geographically remote patients while retaining clear criteria for in-person examination.

Minimum quality indicators

Percentage of women with documented symptom bother and treatment goals. Percentage completing a validated patient-reported outcome measure before intervention and at defined follow-up. Percentage with urinalysis and indicated post-void residual before invasive treatment. Percentage offered supervised pelvic floor muscle training or pessary before prolapse surgery when appropriate. Percentage of prolapse operations with documented preoperative POP-Q and documented evaluation for occult stress urinary incontinence. Percentage of postoperative voiding trials documented according to the standardized protocol. Postoperative urinary retention, UTI, organ injury, transfusion, readmission, reoperation, mesh exposure, chronic pain, and recurrence rates. Patient global improvement, quality of life, sexual and bowel outcomes, and treatment regret. Equity of access by region, socioeconomic status, age, disability, and referral level.

Research Priorities

National priorities include population-based prevalence studies, including in pregnancy and after birth; validation of Indonesian-language patient-reported outcome measures that currently lack published validation; comparative effectiveness of pelvic floor muscle training, pessary, and surgery; long-term outcomes of uterine-preserving prolapse repair; locally appropriate OAB pharmacoeconomics; the effectiveness, safety, and optimal populations for cranberry products, methenamine hippurate, and other non-antibiotic prophylaxis; the role of vaginal energy-based devices within controlled research frameworks; obstetric pelvic-floor injury surveillance; fistula burden and outcomes; mesh-complication registries; and implementation studies that address geographic and workforce inequity.

CONCLUSION

Urogynecology care should be organised as a longitudinal, person-centred service rather than a procedure-focused subspecialty. Standardised assessment, early conservative care, judicious testing, shared decision-making, procedure-specific credentialing, clear mesh governance, multidisciplinary referral, and national outcome audit can improve quality of life while reducing late presentation, unnecessary intervention, and avoidable harm. Ratification of the provisional evidence ratings through formal PP POGI consensus, publication of the methodological report, and development of the credentialing annex are the next steps required to convert this draft into an authoritative Indonesian guideline.

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