

Urinary incontinence

the management of urinary
incontinence in women

National Collaborating Centre for Women's
and Children's Health

Commissioned by the National Institute for
Health and Clinical Excellence

Excluded studies

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Assessment

History and physical examination

Bibliographic Information	Reason for rejecting study
Authors: Amundsen C, Lau M, English SF, McGuire EJ. Title: Do urinary symptoms correlate with urodynamic findings. Journal Name: J Urol. Year: 1999	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI.
Authors: Bent AE, Richardson DA, Ostergard DR. Title: Diagnosis of lower urinary tract disorders in postmenopausal patients. Journal Name: Am J Obstet Gynecol. Year: 1983	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI.
Authors: Bergman A;Bader K;. Title: Reliability of the patient's history in the diagnosis of urinary incontinence. Journal Name: International Journal of Gynecology and Obstetrics. Year: 1990	Evaluates the predicitive value of certain questions for diagnosing stress UI or DI. Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI.
Authors: Bruschini H;. Title: Medical history value in female urinary incontinence: Editorial comment. Journal Name: International Braz J Urol. Year: 2002	Contains insufficient detail to calculate sensitivity, specificity, PPV, or NPV of the symptom of stress, mixed or urge UI relative to a UD diagnosis.
Authors: Byrne DJ;Hamilton Stewart PA;Gray BK;. Title: The role of urodynamics in female urinary stress incontinence. Journal Name: British Journal of Urology. Year: 1987	Study reports urodynamic findings in pts presenting with stress UI, but insufficient information to calculate sensitivity, specificity, positive and negative predictive values.
Authors: Cardozo LD;Stanton SL;. Title: Genuine stress incontinence and detrusor instability - A review of 200 patients. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 1980	Study reports clinical and urodynamic diagnoses, but insufficient information to calculate sensitivity, specificity, positive and negative predictive values.
Authors: Clarke B;. Title: The role of urodynamic assessment in the diagnosis of lower urinary tract disorders. Journal Name: International Urogynecology Journal. Year: 1997	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI.
Authors: Diokno AC;Normolle DP;Brown MB;Herzog AR;. Title: Urodynamic tests for female geriatric urinary incontinence. Journal Name: Urology. Year: 1990 Nov	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI.
Authors: Farrar DJ;Whiteside CG;Osborne JL;Turner-Warwick RT;. Title: A urodynamic analysis of micturition symptoms in the female. Journal Name: Surgery, Gynecology and Obstetrics. Year: 1975 Dec	Contains insufficient detail to calculate sensitivity, specificity, PPV, or NPV of the symptom of stress, mixed or urge UI relative to a UD diagnosis.
Authors: Gray M;McClain R;Peruggia M;Patrie J;Steers WD;. Title: A model for predicting motor urge urinary incontinence. Journal Name: Nursing Research. Year: 2001 Mar	Cannot calculate sensitivity, specificity, PPV, or NPV for clinical vs UD diagnosis due to insufficient information - data not presented in a way that would allow 2x2 tables to be completed.
Authors: Haylen BT;Sutherst JR;Frazer MI;. Title: Is the investigation of most stress incontinence really necessary?. Journal Name: British Journal of Urology. Year: 1989	Cannot differentiate between those with stress UI and urgency or urge UI from those with stress UI and urge UI only therefore insufficient information to work out complete sensitivity, specificity, PPV, NPV.
Authors: Hilton P;Stanton SL;. Title: Algorithmic method for assessing urinary incontinence in elderly women. Journal Name: British Medical Journal Clinical Research Ed. Year: 1981 Mar 21	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI population.
Authors: Jarvis GJ, Hall S, Stamp S, Millar DR, Johnson A. Title: An assessment of urodynamic examination in incontinent women. Journal Name: Br J Obstet Gynaecol. Year: 1980	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI.
Authors: Kirschner-Hermanns R;Scherr PA;Branch LG;Wetle T;Resnick NM;. Title: Accuracy of survey questions for geriatric urinary incontinence. Journal Name: Journal of Urology. Year: 1998 Jun	Study evaluates predicitive value of 5 questions relative to UD diagnosis. Includes men and women and does not report results separately for women.

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Bibliographic Information	Reason for rejecting study
Authors: Kong TK;Morris JA;Robinson JM;Brocklehurst JC;. Title: Predicting urodynamic dysfunction from clinical features in incontinent elderly women. Journal Name: Age and Ageing. Year: 1990 Jul	Study reports clinical and urodynamic diagnoses, but insufficient information to calculate sensitivity, specificity, positive and negative predictive values.
Authors: Korda A;Krieger M;Hunter P;Parkin G;. Title: The value of clinical symptoms in the diagnosis of urinary incontinence in the female. Journal Name: Australian and New Zealand Journal of Obstetrics and Gynaecology. Year: 1987	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI.
Authors: Kujansuu E;Kauppila A;. Title: Scored urological history and urethrocystometry in the differential diagnosis of female urinary incontinence. Journal Name: Annales Chirurgiae et Gynaecologiae. Year: 1982	Evaluates correlation of urgency scores with UD findings. Not relevant to UI guideline questions on history or urodynamics.
Authors: Kujansuu E;Heikkinen J;Riippa P;Kauppila A;. Title: Degree of female stress urinary incontinence: An objective classification by simultaneous urethrocystometry. Journal Name: Gynecologic and Obstetric Investigation. Year: 1984	Study investigates correlation between stress UI severity and UPP. Does not address UI guideline questions.
Authors: Le Coutour X, Jung-Faerber S, Klein P, Renaud R. Title: Female urinary incontinence: comparative value of history and urodynamic investigations. Journal Name: Eur J Obs & Gynec and Reproductive Biology. Year: 1990	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI.
Authors: Matharu G;Donaldson MMK;McGrother CW;Matthews RJ;. Title: Relationship between urinary symptoms reported in a postal questionnaire and urodynamic diagnosis. Journal Name: Neurourology and Urodynamics. Year: 2005	The study explores the relationship between self-reported symptoms and urodynamic diagnoses; but these were separated by 8 weeks, during which women were included in a RCT evaluating a nurse-led continence service. Inappropriate to compare diagnoses after such an intervention as the initial diagnosis may have changed after intervention.
Authors: Ng RKW, Murray A. Title: Can we afford to take short cuts in the management of stress urinary incontinence?. Journal Name: Singapore Med J. Year: 1993	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI.
Authors: Phua SM;Low JJ;Chew SY;. Title: The role of urodynamics in evaluating incontinent females. Journal Name: Singapore Medical Journal. Year: 1992 Apr	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI. Stress UI population probably includes mixed UI.
Authors: Ramsay IN, Ali HM, Heslington K, Hilton P. Title: Can scoring the severity of symptoms help to predict the urodynamic diagnosis?. Journal Name: Int Urogynecol J. Year: 1995	Not relevant to the UI guideline question on test-retest reliability of symptom scoring, and insufficient data to calculate sensitivity, specificity, PPV or NPV for UD vs. history.
Authors: Ramsay IN, Hilton P, Rice N. Title: The symptomatic characterization of patients with detrusor instability and those with genuine stress incontinence. Journal Name: Int Urogynecol J. Year: 1993	Investigates the predictive value of certain symptoms from history in giving a urodynamic diagnosis, and builds a model based on the findings. Not relevant to UI guideline questions, as insufficient data given to calculate sensitivity, specificity, PPV or NPV for UD vs. history. Stress UI probably includes pts with mixed UI.
Authors: Roongruangsilp U;Lertsithichai P;Kochakarn W;Ratana-Olarn K;. Title: Correlation between symptoms and urodynamic findings in Thai female patients with urinary incontinence. Journal Name: Journal of the Medical Association of Thailand. Year: 2005 Mar	Study considers findings on history and urodynamics but the data presented cannot be used in a 2x2 diagnostic accuracy table.
Authors: Thiede HA, Saini VD. Title: Urogynecology: comments and caveatsq. Journal Name: Am J Obstet Gynecol. Year: 1987	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI.
Authors: Valente S. Title: The usefulness of urodynamics in urogynaecology disorders. Journal Name: Clin Exp Obs Gyn. Year: 1988	Study reports accuracy of history relative to UD diagnosis but gives no details of how either diagnosis reached. Excluded due to insufficient detail.
Authors: van Waalwijk van Doorn ES;Ambergen AW;Janknegt RA;. Title: Detrusor activity index: quantification of detrusor overactivity by ambulatory monitoring.[see comment]. Journal Name: Journal of Urology. Year: 1997 Feb	Insufficient data to calculate sensitivity, specificity, PPV and NPV for UD vs. clinical diagnosis of stress, mixed or urge UI.
Authors: Walters MD, Shields LE. Title: The diagnostic value of history, physical examination, and the Q-tip cotton swab test in women with urinary incontinence. Journal Name: Am J Obstet Gynecol. Year: 1988	Can't determine % with clinical diagnosis from papers, also mixed UI included in stress UI proportions.

Pelvic floor assessment

Bibliographic Information	Reason for rejecting study
Authors: Isherwood PJ;Rane A;. Title: Comparative assessment of pelvic floor strength using a perineometer and digital examination. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 2000	Compares 2 tests, no test-retest reliability information therefore does not address UI guideline questions.
Authors: Sartore A;Pregazzi R;Bortoli P;Grimaldi E;Ricci G;Guaschino S;. Title: The urine stream interruption test and pelvic muscle function in the puerperium. Journal Name: International Journal of Gynecology and Obstetrics. Year: 2002	Compared digital, vaginal manometry, and urine stream interruption test for assessing pelvic floor function. No test-retest data therefore not relevant to UI guideline questions.
Authors: Sartore A;Pregazzi R;Bortoli P;Grimaldi E;Ricci G;Guaschino S;. Title: Perineal evaluation in the puerperium: role of testing with a cotton-tipped swab. Journal Name: Journal of Reproductive Medicine. Year: 2002	Study describes use of digital test, perineometry, and urine stream interruption score in the assessment of pelvic floor in postpartum women. No test-retest reliability data therefore not relevant to UI guideline questions.

Neurophysiology

Bibliographic Information	Reason for rejecting study
Authors: Bakas P, Liapis A, Karandreas A, Creatsas G. Title: Pudendal nerve terminal motor latency in women with genuine stress incontinence and prolapse. Journal Name: Gynecol Obstet Invest. Year: 2001	Observational study, recording pudendal nerve terminal motor latency times in patients with SUI. Does not address the role of neurophysiology in the assessment of women with UI or OAB.

Assessment of prolapse - None excluded

Urine testing

Bibliographic Information	Reason for rejecting study
Authors: Anon. Title: European Urinalysis Guidelines. Journal Name: Scand J Clin Lab Invest. Year: 2000	Background information regarding urinalysis - guidelines checked for any relevant information to urine testing questions in UI guideline.
Authors: Hurlbut TA, Littenberg B, and the diagnostic technology assessment consortium. Title: The diagnostic accuracy of rapid dipstick tests to predict urinary tract infection. Journal Name: Clinical Microbiology and Infectious Diseases. Year: 1991	A systematic review of studies that considered accuracy of urine dipstick relative to culture in women with UTI (but no UI, therefore not relevant to guideline questions).
Authors: Lammers RL;Gibson S;Kovacs D;Sears W;Strachan G;. Title: Comparison of test characteristics of urine dipstick and urinalysis at various test cutoff points. Journal Name: Annals of Emergency Medicine. Year: 2001 Nov	A comparison of the diagnostic accuracy of urine reagent strips vs. urine culture for UTI in women presenting with dysuria, frequency, urgency (none had UI). Insufficient data presented to be able to calculate sensitivity, specificity, PPV, NPV. Authors main aim was to compare results of culture and dipstick at various cut-off points, and then determine how this affected the decision to treat UTI.
Authors: Lenke RR, van Dorsten JP. Title: The efficacy of the nitrite test and microscopic urinalysis in predicting urine culture results. Journal Name: Am J Obstet Gynecol. Year: 1981	The population was pregnant women at risk of pyelonephritis, not women with UI.
Authors: Ouslander JG;Schapira M;Schnelle JF;. Title: Urine specimen collection from incontinent female nursing home residents. Journal Name: Journal of the American Geriatrics Society. Year: 1995	Aim of study is to compared urine culture results when specimen obtained by clean catch or catheterisation. Dipstick testing and urine culture done but diagnostic results by both methods not presented, therefore it cannot inform the urine testing questions of UI guideline.

Urinary incontinence

Assessment of residual urine

Bibliographic Information	Reason for rejecting study
Authors: Alnaif B, Drutz HP. Title: The accuracy of portable abdominal ultrasound equipment in measuring postvoid residual volume. Journal Name: Int Urogynecol J. Year: 1999	Studied % of ultrasound values that were within 25% of the catheterised volume. Does not address the diagnostic accuracy question for residual urine.
Authors: Mainprize TC, Drutz HP. Title: Accuracy of total bladder volume and residual urine measurements: comparison between real-time ultrasonography and catheterization. Journal Name: Am J Obstet Gynecol. Year: 1989	Study does not consider accuracy per se, but whether a formula could be used to determine total bladder and residual urine volumes.
Authors: Roehrborn CG, Peters PC. Title: Can transabdominal ultrasound estimation of postvoiding residual (PVR) replace catheterization?. Journal Name: Urology. Year: 1988	Study comparing relationship of ultrasound measurement of residual urine with catheterised volumes. No details of the 81 pts given; % of women not stated; men included implicit by reasons given for assessment (incl prostatic hypertrophy).

Symptom scoring and QOL assessment

Bibliographic Information	Reason for rejecting study
Authors: Blackwell AL;Yoong W;Moore KH;. Title: Criterion validity, test-retest reliability and sensitivity to change of the St George Urinary Incontinence Score. Journal Name: BJU International. Year: 2004 Feb	Not a ICI Grade A questionnaire therefore not considered by GDG.
Authors: Coyne K;Revicki D;Hunt T;Corey R;Stewart W;Bentkover J;Kurth H;Abrams P;. Title: Psychometric validation of an overactive bladder symptom and health-related quality of life questionnaire: The OAB-q. Journal Name: Quality of Life Research. Year: 2002	No test retest reliability data.
Authors: Finkelstein MM;Skelly J;Kaczorowski J;Swanson G;. Title: Incontinence Quality of Life Instrument in a survey of primary care physicians. Journal Name: Journal of Family Practice. Year: 2002 Nov	Study evaluates use of I-QOL to measure impact of UI on QOL; does not consider use of questionnaire to measure UI severity as in the UI guideline questions.
Authors: Hajebrahimi S;Corcos J;Lemieux MC;. Title: International consultation on incontinence questionnaire short form: Comparison of physician versus patient completion and immediate and delayed self-administration. Journal Name: Urology. Year: 2004	Not a ICI Grade A questionnaire, therefore not considered by GDG.
Authors: Harvey MA;Kristjansson B;Griffith D;Versi E;. Title: The Incontinence Impact Questionnaire and the Urogenital Distress Inventory: a revisit of their validity in women without a urodynamic diagnosis. Journal Name: American Journal of Obstetrics and Gynecology. Year: 2001 Jul	Study assesses validity of short-forms of IIQ and UDI in women with a urodynamic diagnosis, but no test retest reliability data.
Authors: Ishiko O;Sumi T;Hirai K;Ogita S;. Title: Classification of female urinary incontinence by the scored incontinence questionnaire. Journal Name: International Journal of Gynaecology and Obstetrics. Year: 2000 Jun	Modified Gaudenz questionnaire evaluated which is not an ICI recommended questionnaire.
Authors: Lubeck DP;Prebil LA;Peeples P;Brown JS;. Title: A health related quality of life measure for use in patients with urge urinary incontinence: A validation study. Journal Name: Quality of Life Research. Year: 1999	Not a ICI Grade A questionnaire therefore not considered by GDG.
Authors: Reese PR;Pleil AM;Okano GJ;Kelleher CJ;. Title: Multinational study of reliability and validity of the King's Health Questionnaire in patients with overactive bladder. Journal Name: Quality of Life Research. Year: 2003	No test retest reliability data.
Authors: Sandvik H;Hunnskaar S;Seim A;Hermstad R;Vanvik A;Bratt H;. Title: Validation of a severity index in female urinary incontinence and its implementation in an epidemiological survey. Journal Name: Journal of Epidemiology and Community Health. Year: 1993	No test retest reliability data.
Authors: Shaw C;Matthews RJ;Perry SI;Assassa RP;Williams K;McGrother C;Dallosso H;Jagger C;Mayne C;Clarke M;. Title: Validity and reliability of an interviewer-administered questionnaire to measure the severity of lower urinary tract symptoms of storage abnormality: The Leicester Urinary Symptom Questionnaire. Journal Name: BJU International. Year: 2002	Not a ICI Grade A questionnaire therefore not considered by GDG.

Bibliographic Information	Reason for rejecting study
Authors: Shaw C;Matthews RJ;Perry SI;Williams K;Spiers N;Assassa RP;McGrother C;Dalosso H;Jagger C;Mayne C;Clarke M;. Title: Validity and reliability of a questionnaire to measure the impact of lower urinary tract symptoms on quality of life: The Leicester impact scale. Journal Name: Neurourology and Urodynamics. Year: 2004	Not a ICI Grade A questionnaire therefore not considered by GDG.
Authors: Shumaker SA;Wyman JF;Uebersax JS;McClish D;Fantl JA;. Title: Health-related quality of life measures for women with urinary incontinence: the Incontinence Impact Questionnaire and the Urogenital Distress Inventory. Continence Program in Women (CPW) Research Group. Journal Name: Quality of Life Research. Year: 1994 Oct	No test retest reliability data.
Authors: Stach-Lempinen B;Kirkinen P;Laippala P;Metsanoja R;Kujansuu E;. Title: Do objective urodynamic or clinical findings determine impact of urinary incontinence or its treatment on quality of life?. Journal Name: Urology. Year: 2004	No test retest reliability data.
Authors: van d;De L;Roovers J;Heintz APM;. Title: Measuring health-related quality of life in women with urogenital dysfunction: The urogenital distress inventory and incontinence impact questionnaire revisited. Journal Name: Neurourology and Urodynamics. Year: 2003	No test retest reliability data.
Authors: Yalcin I;Bump RC;. Title: Validation of two global impression questionnaires for incontinence. Journal Name: American Journal of Obstetrics and Gynecology. Year: 2003 Jul	Not a ICI Grade A condition-specific questionnaire therefore not considered by GDG.

Bladder diaries

Bibliographic Information	Reason for rejecting study
Authors: Dmochowski RR;Sanders SW;Appell RA;Nitti VW;Davila GW;. Title: Bladder-health diaries: an assessment of 3-day vs 7-day entries. Journal Name: BJU International. Year: 2005 Nov	No test-retest reliability data.
Authors: Larsson G;Blixt C;Janson G;Victor A;. Title: The frequency/volume chart as a differential diagnostic tool in female urinary incontinence. Journal Name: International Urogynecology Journal. Year: 1994	Study investigates differential diagnostic ability of bladder diaries, not test-retest reliability for assessing severity which is the question asked by the GDG.
Authors: Tincello DG;Richmond DH;. Title: The Larsson frequency/volume chart is not a substitute for cystometry in the investigation of women with urinary incontinence. Journal Name: International Urogynecology Journal. Year: 1998	Study investigates differential diagnostic ability of bladder diaries, not test-retest reliability for assessing severity which is the question asked by the GDG.

Pad testing

Bibliographic Information	Reason for rejecting study
Authors: Abdel-Fattah M;Barrington JW;Youssef M;. Title: The standard 1-hour pad test: Does it have any value in clinical practice?. Journal Name: European Urology. Year: 2004	Does not address UI guideline questions in relation to pad testing; considers whether 1-hr pad test findings correlate with subjective and QOL assessment.
Authors: Jakobsen H;Vedel P;Andersen JT;. Title: Objective assessment of urinary incontinence: An evaluation of three different pad-weighting tests. Journal Name: Neurourology and Urodynamics. Year: 1987	Study compares findings of 3 pad tests (40mins, 1 hr, 48 hrs), but does not consider test-retest reliability of each, therefore does not address guideline question.
Authors: Matharu GS;Assassa RP;Williams KS;Donaldson M;Matthews R;Tincello DG;Mayne CJ;. Title: Objective Assessment of Urinary Incontinence in Women: Comparison of the One-Hour and 24-Hour Pad Tests. Journal Name: European Urology. Year: 2004	Does not address the UI guideline questions in relation to pad testing.
Authors: Mayne CJ;Hilton P;. Title: Short pad test: Standardisation of method and comparison with 1-hour test. Journal Name: Neurourology and Urodynamics. Year: 1988	Evaluates correlation between 3 pad tests. Not relevant to the UI guideline questions.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Mouritsen L, Berlid G, Hertz J. Title: Comparison of different methods for quantification of urinary leakage in incontinent women. Journal Name: Neurourology and Urodynamics. Year: 1989	Provides limited data relevant to the UI guideline questions on pad testing - reports correlation coefficient for reliability of 24-hr pad tests, but did not report the actual findings of both 24-hours tests.
Authors: Paick JS;Ku JH;Shin JW;Park K;Son H;Oh SJ;Kim SW;. Title: Significance of pad test loss for the evaluation of women with urinary incontinence. Journal Name: Neurourology and Urodynamics. Year: 2005	Does not address the UI guideline questions regarding pad testing.
Authors: Persson J;Eten BC;Wolner-Hanssen P;. Title: An ultra-short perineal pad-test for evaluation of female stress urinary incontinence treatment. Journal Name: Neurourology and Urodynamics. Year: 2001	Study evaluated feasibility and reproducibility of a pad test based on a standardised 1-minute exercise. Not an accepted test and therefore not relevant to UI guideline.
Authors: Richmond DH;Sutherst JR;Brown MC;. Title: Quantification of urine loss by weighing perineal pads. Observation on the exercise regimen. Journal Name: British Journal of Urology. Year: 1987	Compares 2 exercise regimens used in a 2-hr pad test. Not relevant to UI guideline questions.
Authors: Ryhammer AM;Laurberg S;Djurhuus JC;Hermann AP;. Title: No relationship between subjective assessment of urinary incontinence and pad test weight gain in a random population sample of menopausal women. Journal Name: Journal of Urology. Year: 1998	Study investigates association between reporting of UI and pad test findings. Does not address UI guideline questions in relation to pad tests.
Authors: Sutherst JR;Brown MC;Richmond D;. Title: Analysis of the pattern of urine loss in women with incontinence as measured by weighing perineal pads. Journal Name: British Journal of Urology. Year: 1986	Does not address UI guideline questions in relation to pad testing; notes in the abstract that reproducibility of the test has been studied in 50 patients (study n=335) but no data in relation to this presented in the report.
Authors: Sutherst J, Brown M, Shawer M. Title: Assessing the severity of urinary incontinence in women by weighing perineal pads. Journal Name: Lancet. Year: 1981	Compared pad weight gain on 1-hr pad test in women with UI vs. women without UI. Study does not address UI guideline questions relating to pad testing.
Authors: Thind P;Gerstenberg TC;. Title: One-hour ward test vs. 24-hour home pad weighing test in the diagnosis of urinary incontinence. Journal Name: Neurourology and Urodynamics. Year: 1991	Evaluates correlation between 1-hr and 48-hr pad test findings, not test-retest reliability of each test. Therefore not relevant to UI guideline questions on pad testing.
Authors: Versi E;Cardozo LD;. Title: Perineal pad weighing versus videographic analysis in genuine stress incontinence. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 1986	Study compares pad test and urodynamic findings - does not address UI guideline questions in relation to either investigation.
Authors: Wall LL;Wang K;Robson I;Stanton SL;. Title: The Pyridium pad test for diagnosing urinary incontinence: A comparative study of asymptomatic and incontinent women. Journal Name: Journal of Reproductive Medicine for the Obstetrician and Gynecologist. Year: 1990	Investigates pad test findings in continent and incontinent women. Does not address UI guideline questions regarding pad testing.
Authors: Winkens R, Nelissen-Arets H, Stobberingh E. Title: Validity of the urine dipslide under daily practice conditions.. Journal Name: Family Practice. Year: 2003	Not relevant to guideline questions on urine testing.

Urodynamic testing

Bibliographic Information	Reason for rejecting study
Authors: Blaivas JG;Groutz A;Verhaaren M;. Title: Does the method of cystometry affect the incidence of involuntary detrusor contractions? A prospective randomized urodynamic study. Journal Name: Neurourology and Urodynamics. Year: 2001	Not relevant to UI guideline questions.
Authors: Castleden CM;Duffin HM;Asher MJ;. Title: Clinical and urodynamic studies in 100 elderly incontinent patients. Journal Name: British Medical Journal. Year: 1981	Observation of urodynamic findings in 100 patients aged over 65 yrs with UI. Does not address UI guideline questions.
Authors: Digesu GA;Hutchings A;Salvatore S;Selvaggi L;Milani R;Khullar V;. Title: Pressure Flow Study: A Useful Diagnostic Test of Female Lower Urinary Tract Symptoms. Journal Name: Neurourology and Urodynamics. Year: 2004	Observations of pressure flow parameters in women with LUTS; does not address guideline questions in relation to urodynamics.

Bibliographic Information	Reason for rejecting study
Authors: Faysal MH;Constantinou CE;Rother LF;Govan DE;. Title: The impact of bladder neck suspension on the resting and stress urethral pressure profile: A prospective study comparing controls with incontinent patients preoperatively and postoperatively. Journal Name: Journal of Urology. Year: 1981	Observations pre and post-op - does not consider whether the pre-op findings predict outcome therefore not relevant to UI guideline questions.
Authors: Hebert DB, Ostergard DR. Title: Vesical Instability: urodynamic parameters by microtip transducer catheters. Journal Name: Obstet Gynecol. Year: 1982	Study describes findings in women with DO using different UD techniques (urethrocystometry, UPP, but unable to calculate all diagnostic accuracy data from results given).
Authors: Holtedahl K;Verelst M;Schiefløe A;Hunnskaar S;. Title: Usefulness of urodynamic examination in female urinary incontinence. Lessons from a population-based, randomized, controlled study of conservative treatment. Journal Name: Scandinavian Journal of Urology and Nephrology. Year: 2000	Groups did not receive same treatment therefore inappropriate to analyse findings in respect of pre-tx UD due to confounding factors
Authors: Kujansuu E;Kauppila A;Lahde S;. Title: Correlation between urethrovesical anatomy and urethral closure function in female stress urinary incontinence before and after operation: Urethrocystographic and urethrocystometric evaluation. Journal Name: Urologia Internationalis. Year: 1983	Investigates whether pre-op urodynamics have prognostic value, but only reports pre- and post-operative observations. Does not address whether UD predict complications.
Authors: McLennan MT;Bent AE;. Title: Supine empty stress test as a predictor of low Valsalva leak point pressure. Journal Name: Neurourology and Urodynamics. Year: 1998	An investigation into whether the supine empty stress test was useful in predicting pts with low Valsalva LPP (above or below 60cm). Does not address guideline questions in relation to urodynamics.
Authors: McLennan MT;Melick CF;Bent AE;. Title: Leak-point pressure: clinical application of values at two different volumes. Journal Name: International Urogynecology Journal. Year: 2000 Jun	Investigates MUCP and LPP at different bladder volumes. Does not address UI guideline questions in relation to urodynamics.
Authors: Pajoncini C;Costantini E;Rociola W;Porena M;. Title: The maximum urethral closure pressure and the Valsalva leak point pressure in the diagnosis of intrinsic sphincter deficiency: Preliminary results. Journal Name: Acta Urologica Italica. Year: 1999	Correlates MUCP and VLPP values at different thresholds with pt characteristics. Does not address UI guideline questions in relation to urodynamics
Authors: Pajoncini C;Costantini E;Guercini F;Porena M;. Title: Intrinsic sphincter deficiency: do the maximum urethral closure pressure and the Valsalva leak-point pressure identify different pathogenic mechanisms?. Journal Name: International Urogynecology Journal. Year: 2002	Study considers severity of UI vs MUCP and VLPP findings. Does not address UI guideline questions in relation to urodynamics
Authors: Pajoncini C;Costantini E;Guercini F;Bini V;Porena M;. Title: Clinical and urodynamic features of intrinsic sphincter deficiency. Journal Name: Neurourology and Urodynamics. Year: 2003	Observations/ correlations of features with ISD - does not address guideline questions in relation to assessment.
Authors: Resnick NM;Brandeis GH;Baumann MM;DuBeau CE;Yalla SV;Abrams P;Blaivas JG;Malone-Lee J;. Title: Misdiagnosis of urinary incontinence in nursing home women: Prevalence and a proposed solution. Journal Name: Neurourology and Urodynamics. Year: 1996	Study compared findings of single- and multi-channel cystometry in women with 'detrusor hyperactivity with impaired contractility', which is not an accepted/standardised definition, therefore study excluded.
Authors: Richardson DA;. Title: Value of the cough pressure profile in the evaluation of patients with stress incontinence. Journal Name: American Journal of Obstetrics and Gynecology. Year: 1986	Considered UCP for diagnosis of stress UI - but pressure profilometry used to assess cause of stress UI not to confirm UI is stress UI, therefore exclude.
Authors: Versi E. Title: Discriminant analysis of urethral pressure profilometry data for the diagnosis of genuine stress incontinence. Journal Name: Br J Obs Gynae. Year: 1990	Study evaluates diagnostic accuracy of UPP vs video UD; pressure studies vs cystometry not a valid comparison therefore excluded.
Authors: Versi E;Cardozo L;Studd J;Cooper D;. Title: Evaluation of urethral pressure profilometry for the diagnosis of genuine stress incontinence. Journal Name: World Journal of Urology. Year: 1986	UPP not used to diagnose stress UI therefore study not relevant.

Urinary incontinence

Other tests of urethral competence

Bibliographic Information	Reason for rejecting study
Authors: Bergman A;McCarthy TA;Ballard CA;Yanai J;. Title: Role of the Q-tip test in evaluating stress urinary incontinence. Journal Name: Journal of Reproductive Medicine for the Obstetrician and Gynecologist. Year: 1987	Study aimed to assess correlation between Q-tip and UD findings of stress UI. Reports no correlation. Does not address guideline questions in relation to the Q-tip test.
Authors: Fedorkow DM;Sand PK;Retzky SS;Johnson DC;. Title: The cotton swab test: Receiver-operating characteristic curves. Journal Name: Journal of Reproductive Medicine for the Obstetrician and Gynecologist. Year: 1995	Study evaluated value of Qtip test for diagnosis of stress UI at different angles. Does not address use of the test in relation to hypermobility.
Authors: Montz FJ;Stanton SL;. Title: Q-Tip test in female urinary incontinence. Journal Name: Obstetrics and Gynecology. Year: 1986	Reports Q-tip results for 100 women with UI, and considers its diagnostic accuracy compared with UD for diagnosing stress UI. Does not consider use of the test for hypermobility.
Authors: Pollak JT;Jenkins P;Kopka SL;Davila GW;. Title: Effect of genital prolapse on assessment of bladder neck mobility by the Q-tip test. Journal Name: Obstetrics and Gynecology. Year: 2003	Study investigates effect of prolapse and bladder fullness on Q-tip angles, therefore addressing reliability of the test. Not a UI guideline question.
Authors: Tapp K;Connolly A;Visco AG;. Title: Evaluation of Aa point and cotton-tipped swab test as predictors of urodynamic stress incontinence. Journal Name: Obstetrics and Gynecology. Year: 2005	Comparison of the abilities of the Aa point and the Q-tip test to predict a diagnosis of stress UI, which is not the primary use of the test (hypermobility). Odds ratios for having a diagnosis of stress UI given for both tests. Sens, spec, PPV, NPV for the Qtip test also quoted but no raw data.

Endoscopy

Bibliographic Information	Reason for rejecting study
Authors: Groutz A;Samandarov A;Gold R;Pauzner D;Lessing JB;Gordon D;. Title: Role of urethroscopy in the evaluation of refractory idiopathic detrusor instability. Journal Name: Urology. Year: 2001 Oct	Urethroscopy and ultrasound of the urinary tract done in an exploratory study in women refractory to 6 months antimuscarinic treatment. Such 'routine' use does not reflect UK clinical practice. Nothing in the study indicated that cystoscopy was necessary.
Authors: Sokol ER, Patel SR, Sung VW et al. Title: Results of urine cytology testing and cystoscopy in women with irritative voiding symptoms. Journal Name: Am J Obstet Gynecol. Year: 2005	A survey of findings in women with irritative voiding symptoms, only 6% of whom had UI; does not inform the guideline in terms of the role of cystoscopy in the assessment of women with UI.

Imaging

Bibliographic Information	Reason for rejecting study
Authors: Bhatia NN;Ostergard DR;McQuown D;. Title: Ultrasonography in urinary incontinence. Journal Name: Urology. Year: 1987	Measurement of descent of urethrovesical junction undertaken by Q-tip and ultrasound in 13 women pre and post surgery for stress UI. Does not address the guideline questions in relation to imaging.
Authors: Dietz HP, Wilson PD. Title: Anatomical assessment of the bladder outlet and proximal urethra using ultrasound and videocystourethrography. Journal Name: Int Urogynecol J. Year: 1998	Observations of bladder descent & bladder neck by ultrasound and X-ray in women undergoing videocystometry. Study does not address the role of imaging in the assessment of women with UI.
Authors: Dietz HP, Clarke B. Title: Translabial color doppler urodynamics. Journal Name: Int Urogynecol J. Year: 2001	% agreement and kappa scores reported for translabial ultrasound plus MC urodynamics and (vs) videocystometry plus fluoroscopic imaging - no details of pts, and gender not stated although authors based at Women's hospital. Could probably calculate sens, spec, PPV, NPV from data in table 1.
Authors: Dietz HP, McNoulty L, Clarke B. Title: Translabial color Doppler for imaging in urogynecology: a preliminary report. Journal Name: Ultrasound Obstet Gynecol. Year: 1999	Study compares doppler with multichannel urodynamics; endpoint is "more than minimal leakage" which is imprecise and not defined, therefore excluded as not useable data.
Authors: Kolbl H, Bernaschek G, Wolf G. Title: A comparative study of perineal ultrasound scanning and urethroscopy in patients with genuine stress incontinence. Journal Name: Arch Gynecol Obstet. Year: 1988	Study does not report data in a way that allows calculation of diagnostic accuracy parameters; only posterior urethrovesical angles reported.

Bibliographic Information	Reason for rejecting study
Authors: Perk H;Oral B;Yesildag A;Serel TA;Ozsoy M;Turgut T;. Title: Magnetic resonance imaging for stress incontinence: evaluation of patients before and after surgical correction. Journal Name: European Journal of Radiology. Year: 2002 Oct	Authors measured bladder base descent, posterior urethrovesical angle, and angle of urethral inclination by MRI in 15 women pre and post surgical correction for UD stress UI. Does not address the guideline questions in relation to imaging.
Authors: Schaer GN, Koechli OR, Schuessler B, Haller U. Title: Perineal ultrasound for evaluating the bladder neck in urinary stress incontinence. Journal Name: Obstet Gynecol. Year: 1995	Study evaluates reproducibility of perineal ultrasonography for measurement of urethrovesical junction, compared with lateral chain urethrocystography. Not relevant to the UI guideline questions.
Authors: Yang JM;Huang WC;. Title: Discrimination of bladder disorders in female lower urinary tract symptoms on ultrasonographic cystourethrography. Journal Name: Journal of Ultrasound in Medicine. Year: 2002 Nov	Considers correlation of morphological and anatomical features of bladder disorders in women with LUTS. Does not address UI guideline quesitons in relation to imaging.

Information provision

Bibliographic Information	Reason for rejecting study
Authors: Herschorn S;Becker D;Miller E;Thompson M;Forte L;. Title: Impact of a health education intervention in overactive bladder patients. Journal Name: Canadian Journal of Urology. Year: 2004 Dec	Not relevant to question regarding impact of providing information to women in terms of their satisfaction with the outcomes of treatment (satisfaction was not an outcome) in the comparison of health education plus tolterodine vs. tolterodine alone.

Conservative management

Lifestyle

Bibliographic Information	Reason for rejecting study
Authors: Edelstein BA;. Title: Effects of caffeine withdrawal on nocturnal enuresis, insomnia, and behavior restraints. Journal Name: Journal of Consulting and Clinical Psychology. Year: 1984	Case-series (n=9), gender not stated, reporting effects of caffeine reduction on nocturnal enuresis. Higher evidence level studies found therefore exclude this study.
Authors: Griffiths DJ;McCracken PN;Harrison GM;Gormley EA;. Title: Relationship of fluid intake to voluntary micturition and urinary incontinence in geriatric patients. Journal Name: Neurourology and Urodynamics. Year: 1993	A study investigating the relationship between fluid intake and micturition over 24 hours in elderly men and women with UI (n=128, 59% women). Data not reported separately for women. Information does not add to info from other studies considered for this question.
Authors: Jirovec MM;. Title: The impact of daily exercise on the mobility, balance and urine control of cognitively impaired nursing home residents. (Research). Journal Name: International Journal of Nursing Studies. Year: 1991	Study about improved mobility in cognitively impaired adults. Does not address the question of the impact of physical exercise on UI.
Authors: Johnson II TM;Sattin RW;Parmelee P;Fultz NH;Ouslander JG;. Title: Evaluating potentially modifiable risk factors for prevalent and incident nocturia in older adults. Journal Name: Journal of the American Geriatrics Society. Year: 2005	Cannot tell % women, and while study looked at fluid and coffee intake, the level of intake was not defined.
Authors: Rasmussen KL;Krue S;Johansson LE;Knudsen HJ;Agger AO;. Title: Obesity as a predictor of postpartum urinary symptoms. Journal Name: Acta Obstetrica et Gynecologica Scandinavica. Year: 1997	Case-control study addressing whether pre-pregnancy obesity is a risk for post-partum UI. Sig more cases had UI and urgency at baseline; confounding invalidates comparison.
Authors: Simmons SF;Alessi C;Schnelle JF;. Title: An intervention to increase fluid intake in nursing home residents: prompting and preference compliance. Journal Name: Journal of the American Geriatrics Society. Year: 2001	Investigates increasing fluid intake in incontinent nursing home residents in terms of hydration status. No UI-related outcomes reported.
Authors: Sustersic O;Kralj B;. Title: The influence of obesity, constitution and physical work on the phenomenon of urinary incontinence in women. Journal Name: International Urogynecology Journal. Year: 1998	Cross-sectional survey in Slovenia (n=101). Covers BMI and physical activity and UI, but lacks detail and does not add anything new to other larger cross-sectional surveys found.
Authors: Turkan A;Inci Y;Fazli D;. Title: The short-term effects of physical therapy in different intensities of urodynamic stress incontinence. Journal Name: Gynecologic and Obstetric Investigation. Year: 2005	Not relevant to lifestyle interventions question. Relevant to physical therapies (48 patients with stress UI underwent PFMT + Electrical stimulation; results assessed according to severity of UI; no comparison group).

Physical and behavioural therapies

Bibliographic Information	Reason for rejecting study
Authors: Alewijnse D;Metsemakers JF;Mesters IE;van den BB;. Title: Effectiveness of pelvic floor muscle exercise therapy supplemented with a health education program to promote long-term adherence among women with urinary incontinence. Journal Name: Neurourology and Urodynamics. Year: 2003	Does not address a guideline question. Not a comparison of intensive vs. standard PFMT.
Authors: Berghmans LC;Hendriks HJ;Bo K;Hay-Smith EJ;de Bie RA;van Waalwijk van Doorn ES.;. Title: Conservative treatment of stress urinary incontinence in women: a systematic review of randomized clinical trials. Journal Name: British Journal of Urology. Year: 1998	Aim of review was to assess quality of RCT evidence (conservative treatment for stress UI). No numerical data for outcomes presented. 17 of 24 studies included in Cochrane systematic reviews.
Authors: Bower WF;Moore KH;Adams RD;Shepherd R;. Title: A urodynamic study of surface neuromodulation versus sham in detrusor instability and sensory urgency. Journal Name: Journal of Urology. Year: 1998	Before and after study; single application of TENS or control only. No longitudinal follow-up.
Authors: Burgio KL;Locher JL;Roth DL;Goode PS;. Title: Psychological improvements associated with behavioral and drug treatment of urge incontinence in older women. Journal Name: Journals of Gerontology Series B-Psychological Sciences and Social Sciences. Year: 2001	A secondary paper reporting psychological distress of women included in an RCT already included comparing behavioural management with oxybutynin and control.

Bibliographic Information	Reason for rejecting study
Authors: Burgio KL;Goode PS;Locher JL;Richter HE;Roth DL;Wright KC;Varner RE;. Title: Predictors of outcome in the behavioral treatment of urinary incontinence in women. Journal Name: Obstetrics and Gynecology. Year: 2003	Secondary analysis of data from 3 RCTs (Burgio 1998, Burgio 2002, Goode 2003).
Authors: De Kruijff YP;Van Wegen EEH;. Title: Pelvic floor muscle exercise therapy with myofeedback for women with stress urinary incontinence: A meta-analysis. Journal Name: Physiotherapy. Year: 1996	Includes studies of all designs, not only RCTs. The RCTs included are also included in the Cochrane systematic review of PFMT for UI in women (Hay-Smith).
Authors: Dumoulin C;Lemieux MC;Bourbonnais D;Gravel D;Bravo G;Morin M;. Title: Physiotherapy for persistent postnatal stress urinary incontinence: a randomized controlled trial. Journal Name: Obstetrics and Gynecology. Year: 2004	Not an appropriate control group (massage).
Authors: Engberg S;McDowell BJ;Donovan N;Brodak I;Weber E;. Title: Treatment of urinary incontinence in homebound older adults: interface between research and practice. Journal Name: Ostomy Wound Management. Year: 1997	Publication linked to a RCT included in Cochrane systematic review on Prompted voiding (Eustice 2000).
Authors: Ferguson KL;McKey PL;Bishop KR;Kloen P;Verheul JB;Dougherty MC;. Title: Stress urinary incontinence: effect of pelvic muscle exercise. Journal Name: Obstetrics and Gynecology. Year: 1990	A comparison of PFMT with a intravaginal resistance device. Not believed to be of relevance by the GDG.
Authors: Fujishiro T;Enomoto H;Ugawa Y;Takahashi S;Ueno S;Kitamura T;. Title: Magnetic stimulation of the sacral roots for the treatment of stress incontinence: an investigational study and placebo controlled trial. Journal Name: Journal of Urology. Year: 2000	A single session of magnetic stimulation with measurements after 1 week; as such does not address effectiveness of this intervention.
Authors: Fujishiro T;Takahashi S;Enomoto H;Ugawa Y;Ueno S;Kitamura T;. Title: Magnetic stimulation of the sacral roots for the treatment of urinary frequency and urge incontinence: an investigational study and placebo controlled trial.[see comment]. Journal Name: Journal of Urology. Year: 2002	A single session of magnetic stimulation with measurements after 1 week; as such does not address effectiveness of this intervention.
Authors: Goode PS;. Title: Behavioral and drug therapy for urinary incontinence. Journal Name: Urology. Year: 2004	A secondary analysis of data from a RCT (Burgio 1998 & Goode 2002).
Authors: Ishiko O;Ushiroyama T;Saji F;Mitsuhashi Y;Tamura T;Yamamoto K;Kawamura Y;Ogita S;. Title: beta(2)-adrenergic agonists and pelvic floor exercises for female stress incontinence. Journal Name: International Journal of Gynaecology and Obstetrics. Year: 2000	The intervention under evaluation is clenbuterol (with or without PFMT) which is not available in the UK.
Authors: Johnson VY;. Title: Effects of a submaximal exercise protocol to recondition the pelvic floor musculature. Journal Name: Nursing Research. Year: 2001	Compares submaximal vs. maximal contraction of pelvic floor muscle. Does not address a guideline question.
Authors: Nielsen AC, Sigsgaard I, Olsen M, Tolstrup M, Danneskiold-Samsoe B, Bock JE. Title: Trainability of the pelvic floor. A prospective study during pregnancy and after delivery. Journal Name: Acta Obstet Gynecol Scand. Year: 1988	Outcome is vaginal squeeze pressure. No UI outcomes. Does not address the questions re effectiveness of PFMT for prevention of UI.
Authors: Nissenkorn I;Shalev M;Radziszewski P;Dobronski P;Borkowski A;De Jong PR;. Title: Patient-adjusted intermittent electrostimulation for treating stress and urge urinary incontinence. Journal Name: BJU International. Year: 2004	Not a RCT; no control group.
Authors: Nygaard IE;Kreder KJ;Lepic MM;Fountain KA;Rhombert AT;. Title: Efficacy of pelvic floor muscle exercises in women with stress, urge, and mixed urinary incontinence. Journal Name: American Journal of Obstetrics and Gynecology. Year: 1996	No outcomes reported by treatment allocation, only by type of UI or total group.
Authors: O'Brien J;Austin M;Sethi P;O'Boyle P;. Title: Urinary incontinence: prevalence, need for treatment, and effectiveness of intervention by nurse.[see comment]. Journal Name: BMJ. Year: 1991	No useable data. Results not reported separately for PFMT and control arms during the controlled part of the study. Unclear whether tx allocation was random, although subsequent publications of the study (21596, 21597) state so. No information on whether active tx and control grps similar at baseline.
Authors: O'Brien J;Long H;. Title: Urinary incontinence: long term effectiveness of nursing intervention in primary care. Journal Name: BMJ. Year: 1995	Follow-up study of O'Brien 1991, which was excluded.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Parkkinen A;Karjalainen E;Vartiainen M;Penttinen J;. Title: Physiotherapy for female stress urinary incontinence: Individual therapy at the outpatient clinic versus home-based pelvic floor training: A 5-year follow-up study. Journal Name: Neurourology and Urodynamics. Year: 2004	Treatment allocation (home or clinic PFMT) not randomised.
Authors: Ramsay IN;Thou M;. Title: A randomised, double blind, placebo controlled trial of pelvic floor exercises in the treatment of genuine stress incontinence. Journal Name: Neurourology and Urodynamics. Year: 1990	Abstract publication of RCT (PFMT vs. sham PFMT), not subsequently published in full.
Authors: Salvesen KA;Morkved S;. Title: Randomised controlled trial of pelvic floor muscle training during pregnancy.[see comment]. Journal Name: BMJ. Year: 2004	Focuses on outcome of duration of labour (irrelevant to UI guideline) from Morkved 2003, which is included.
Authors: Schnelle JF;MacRae PG;Ouslander JG;Simmons SF;Nitta M;. Title: Functional Incidental Training, mobility performance, and incontinence care with nursing home residents.[see comment]. Journal Name: Journal of the American Geriatrics Society. Year: 1995	Comparison of functional incidental training vs no functional incidental training (in addition to prompted voiding). No urinary outcomes reported.
Authors: Tapp AJS;Hills B;Cardozo LD;. Title: Randomised study comparing pelvic floor physiotherapy with the Burch colposuspension. Journal Name: Neurourology and Urodynamics. Year: 1989	Abstract publication, not subsequently published in full.
Authors: Theofrastous JP;Wyman JF;Bump RC;McClish DK;Elser DM;Elser DP;Bland DR;Fantl JA;Lentz SF;Furberg C;Shumaker SA;Earle BB;Morgan TM;. Title: Effects of pelvic floor muscle training on strength and predictors of response in the treatment of urinary incontinence. Journal Name: Neurourology and Urodynamics. Year: 2002	Secondary analysis of a RCT included in the Cochrane systematic review of PFMT for UI in women (Hay-Smith).
Authors: Thorp JM, Stephenson H, Jones LH, Cooper G. Title: Pelvic floor (Kegel) exercises - a pilot study in nulliparous women. Journal Name: International Urogynaecology Journal. Year: 1994	Outcomes are vaginal and anal muscle strength, measured by EMG or digital assessment. No UI outcomes. Does not address question re: effectiveness of PFMT for prevention of UI.
Authors: Weatherall M;. Title: Biofeedback or pelvic floor muscle exercises for female genuine stress incontinence: A meta-analysis of trials identified in a systematic review. Journal Name: BJU International. Year: 1999	This is a meta-analysis of one comparison identified in the Berghmans systematic review on conservative treatment of stress UI (also excluded). This comparison is covered within the Hay-Smith systematic review on PFMT.
Authors: Wells TJ;Brink CA;Diokno AC;Wolfe R;Gillis GL;. Title: Pelvic muscle exercise for stress urinary incontinence in elderly women. Journal Name: Journal of the American Geriatrics Society. Year: 1991	A comparison of PFMT and phenylpropanolamine, a drug not used nor available in the UK.
Authors: Yalcin OT;Hassa H;Ozalp S;Yildirim A;Sener T;. Title: Results of the anti-incontinence operations and Kegel exercises in patients with type II anatomic stress incontinence. Journal Name: Acta Obstetrica et Gynecologica Scandinavica. Year: 1998	Cohort study comparing PFMT with surgery (needle suspension or open colposuspension). Because no single procedure used, cannot put findings into context.
Authors: Yamanishi T;Yasuda K;Sakakibara R;Hattori T;Ito H;Murakami S;. Title: Pelvic floor electrical stimulation in the treatment of stress incontinence: an investigational study and a placebo controlled double-blind trial. Journal Name: Journal of Urology. Year: 1997	Controlled but not randomised, before and after measurement only; no longitudinal follow-up.
Authors: Yamanishi T;Sakakibara R;Uchiyama T;Suda S;Hattori T;Ito H;Yasuda K;. Title: Comparative study of the effects of magnetic versus electrical stimulation on inhibition of detrusor overactivity. Journal Name: Urology. Year: 2000	No longitudinal follow-up so does not address effectiveness. 19 (60%) patients had neurogenic bladders. 47% of study population were men.

Drugs

Bibliographic Information	Reason for rejecting study
Authors: Abrams P;Mattiasson A;Lose GR;Robertson GL;. Title: The role of desmopressin in the treatment of adult nocturia. [Review] [15 refs]. Journal Name: BJU International. Year: 2002 Dec	Review of 2 primary studies; Lose 2003 which is included; and an identical study in men.
Authors: Abrams P;Swift S;. Title: Solifenacin is effective for the treatment of OAB dry patients: a pooled analysis. Journal Name: European Urology. Year: 2005 Sep	Studies included in the analysis already included in the guideline.
Authors: Ahlstrom K;Sandahl B;Sjoberg B;Ulmsten U;Stormby N;Lindskog M;. Title: Effect of combined treatment with phenylpropanolamine and estriol, compared with estriol treatment alone, in postmenopausal women with stress urinary incontinence. Journal Name: Gynecologic and Obstetric Investigation. Year: 1990	The study aims to establish whether adding phenylpropanolamine (PPA) to oestrogen affects outcomes, which is not a question that's relevant to the guideline because PPA is not used nor available in the UK.
Authors: Altan-Yaycioglu R;Yaycioglu O;Aydin Akova Y.;Guvel S;Ozkardes H;. Title: Ocular side-effects of tolterodine and oxybutynin, a single-blind prospective randomized trial. Journal Name: British Journal of Clinical Pharmacology. Year: 2005 May	Study investigates visual effects after 4 weeks treatment, more in relation to mechanism of ocular side effects than effectiveness of drug treatment.
Authors: Blom MW;Sommers DK;. Title: The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge incontinence in elderly women: A pilot study. Journal Name: Current Therapeutic Research Clinical and Experimental. Year: 1995	Cross-over RCT (n=16) with 3 arms (estradiol patch with or without naproxen, and placebo), but not clear of total duration of study. Lack of information about characteristics of patients other than they had 'established detrusor instability'. Results impossible to interpret - mean values of maximum bladder capacity and volume at first urge to void reported (unclear whether this was at endpoint), but no baseline data against which to compare the results. Bladder diaries kept, 'significant improvements' reported but no numerical data.
Authors: Blonski J;. Title: Is tolterodine (Detrol) or oxybutynin (Ditropan) the best for treatment of urge urinary incontinence?. Journal Name: Journal of Family Practice. Year: 2001 Dec	Not the primary report of the meta-analysis (Harvey 2001).
Authors: Cardozo LD;Wise BG;Benness CJ;. Title: Vaginal oestradiol for the treatment of lower urinary tract symptoms in postmenopausal women - A double-blind placebo-controlled study. Journal Name: Journal of Obstetrics and Gynaecology. Year: 2001	RCT of 104 women; no useable data (no numerical data reported for any results).
Authors: Chaliha C;Halaska M;Stanton SL;. Title: Trospium chloride for the treatment of detrusor instability: a placebo-controlled dose-finding study. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 1998	Abstract.
Authors: Coombes GM;Millard RJ;. Title: Urinary urge incontinence: randomised crossover trials of penthiolate versus placebo and propantheline. Journal Name: Medical Journal of Australia. Year: 1996 Nov 4	2 cross-over RCTs combined in 1 report; penthiolate vs. placebo (n=20) and propantheline vs. penthiolate (n=23).{22879} Penthiolate is an antimuscarinic drug, not used in the UK.
Authors: Chapple C;Steers W;Norton P;Millard R;Kralidis G;Glavind K;Abrams P;. Title: A pooled analysis of three phase III studies to investigate the efficacy, tolerability and safety of darifenacin, a muscarinic M<inf>3</inf> selective receptor antagonist, in the treatment of overactive bladder. Journal Name: BJU International. Year: 2005	Source of original trial data not referenced.
Authors: Chapple CR;Abrams P;. Title: Comparison of darifenacin and oxybutynin in patients with overactive bladder: assessment of ambulatory urodynamics and impact on salivary flow. Journal Name: European Urology. Year: 2005 Jul	7 days treatment only; main outcome urodynamic parameters. Does not address effectiveness for UI/OAB.
Authors: Dmochowski RR;Nitti V;Staskin D;Luber K;Appell R;Davila GW;. Title: Transdermal oxybutynin in the treatment of adults with overactive bladder: combined results of two randomized clinical trials. Journal Name: World Journal of Urology. Year: 2005 Sep	Pooled analysis of 2 RCTs that are already included.
Authors: Ek A;Andersson KE;Gullberg B;Ulmsten U;. Title: Effects of oestradiol and combined norephedrin and oestradiol treatment on female stress incontinence. Journal Name: Zentralblatt fur Gynakologie. Year: 1980	The study aims to establish whether treatment with norephedrin (phenylpropanolamine) plus estradiol is better than estradiol alone in 13 women with stress UI. This is not a question that is relevant to the guideline because we are not looking at PPA, as it is neither used nor available in the UK.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Fantl JA;Cardozo L;McClish DK;. Title: Estrogen therapy in the management of urinary incontinence in postmenopausal women: a meta-analysis. First report of the Hormones and Urogenital Therapy Committee. Journal Name: Obstetrics and Gynecology. Year: 1994	Systematic review outdated by several subsequent publications. Use as source of references.
Authors: Foote J;Glavind K;Kralidis G;Wyndaele J;. Title: Treatment of overactive bladder in the older patient: Pooled analysis of three phase III studies of darifenacin, an M3 selective receptor antagonist. Journal Name: European Urology. Year: 2005	Source of original trial data not referenced.
Authors: Freeman R;Hill S;Millard R;Slack M;Sutherst J;Tolterodine Study Group.;. Title: Reduced perception of urgency in treatment of overactive bladder with extended-release tolterodine. Journal Name: Obstetrics and Gynecology. Year: 2003 Sep	Secondary analysis of RCT (van Kerrebroeck, ref ID: 22836; included).
Authors: Garcia JMO, Agullo EM, Sugranes JC, Cruz JFJ. Title: A comparison of trospium chloride and oxybutynin in the treatment of hyperactive bladder; a randomized double-blind study. Journal Name: Urod A. Year: 1997	72% of study population (n=67) had neurogenic bladder which is outside the guideline scope. Assessment of urodynamic findings only - no baseline symptom data, and no outcomes related to symptoms.
Authors: Gleason DM;Susset J;White C;Munoz DR;Sand PK;. Title: Evaluation of a new once-daily formulation of oxybutynin for the treatment of urinary urge incontinence. Ditropan XL Study Group. Journal Name: Urology. Year: 1999 Sep	Case series of patients transferred from immediate-release oxybutynin to a controlled-release formulation, or taking oxybutynin (CR) for the first time. No control group.
Authors: Gruneberger A;. Title: Treatment of motor urge incontinence with clenbuterol and flavoxate hydrochloride. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 1984 Mar	Comparison group is clenbuterol which is not used in the UK.
Authors: Henalla SM;Hutchins CJ;Robinson P;MacVicar J;. Title: Non-operative methods in the treatment of female genuine stress incontinence of urine. Journal Name: Journal of Obstetrics and Gynaecology. Year: 1989	Abstract publication, not subsequently published in full.
Authors: Hilton P, Tweddell AL, Mayne C. Title: Oral and intravaginal estrogens alone and in combination with alpha-adrenergic stimulation in genuine stress incontinence. Journal Name: Int Urogynaecology. Year: 1990	RCT with 6 tx arms, including 2 of oestrogen only and placebo, and another 3 arms involving phenylpropanolamine alone or in combination with oestrogen (n=10 per grp). Only data for oestrogen alone or placebo of relevance to the guideline, but numerical data for symptom outcomes not reported (only in graphs); complete urodynamic data reported. Other RCTs in the guideline included have compared oestrogen with placebo in the same population over longer periods.
Authors: Homma Y;Kawabe K;. Title: Health-related quality of life of Japanese patients with overactive bladder treated with extended-release tolterodine or immediate-release oxybutynin: a randomized, placebo-controlled trial. Journal Name: World Journal of Urology. Year: 2004 Oct	Paper reports results for the Japanese patients included in the Homma 2003 study; study excluded due to duplication of data.
Authors: Junemann KP;Halaska M;Rittstein T;Murtz G;Schnabel F;Brunjes R;Nurkiewicz W;. Title: Propiverine versus tolterodine: efficacy and tolerability in patients with overactive bladder. Journal Name: European Urology. Year: 2005 Sep	4-week study that focused on cystometric capacity, therefore does not address effectiveness.
Authors: Kinn AC;Lindskog M;. Title: Estrogens and phenylpropanolamine in combination for stress urinary incontinence in postmenopausal women. Journal Name: Urology. Year: 1988 Sep	The study aims to establish whether treatment with phenylpropanolamine plus estriol is better than estriol alone in 36 women with stress UI. This is not a question that is relevant to the guideline because we are not looking at PPA, as it is neither used nor available in the UK.
Authors: Kuo H;. Title: Efficacy of desmopressin in treatment of refractory nocturia in patients older than 65 years. Journal Name: Urology. Year: 2002	Case series of desmopressin use in 30 patients (5 women). Evidence of higher level available to address this question.
Authors: Larsson G;Hallen B;Nilvebrant L;. Title: Tolterodine in the treatment of overactive bladder: analysis of the pooled phase II efficacy and safety data. Journal Name: Urology. Year: 1999 May	Pooled analysis from 4 placebo-controlled dose-ranging RCTs that evaluated tolterodine. 2 of the studies included patients with detrusor hyperreflexia which is outside the guideline scope. Relevant studies included were considered separately.
Authors: Milani R;Scalambrino S;Carrera S;Pezzoli P;Ruffmann R;. Title: Flavoxate hydrochloride for urinary urgency after pelvic radiotherapy: comparison of 600 mg versus 1200 mg daily dosages. Journal Name: Journal of International Medical Research. Year: 1988 Jan	Case series of women treated with flavoxate for urgency after pelvic radiotherapy.

Bibliographic Information	Reason for rejecting study
Authors: Millard RJ;Halaska M;. Title: Efficacy of solifenacin in patients with severe symptoms of overactive bladder: A pooled analysis. Journal Name: Current Medical Research and Opinion. Year: 2006	Source of data for one of the trials was 'data on file'.
Authors: Moore KH;Hay DM;Imrie AE;Watson A;Goldstein M;. Title: Oxybutynin hydrochloride (3 mg) in the treatment of women with idiopathic detrusor instability. Journal Name: British Journal of Urology. Year: 1990 Nov	Small cross-over study of oxybutynin and placebo, of short duration. Other more robust and recent studies that address the same question are included.
Authors: Radomski SB;Caley B;Reiz JL;Miceli PC;Harsanyi Z;Darke AC;. Title: Preliminary evaluation of a new controlled-release oxybutynin in urinary incontinence. Journal Name: Current Medical Research and Opinion. Year: 2004	Pilot study of immediate /controlled release oxybutynin (2wks/ 2wks washout/ 4 wks) in 12 patients who acted as their own controls. Other more robust studies included.
Authors: Riva D;Casolati E;. Title: Oxybutynin chloride in the treatment of female idiopathic bladder instability. Results from double blind treatment. Journal Name: Clinical and Experimental Obstetrics and Gynecology. Year: 1984	Small cross-over study of oxybutynin and placebo, of short duration. Other more robust and recent studies that address the same question are included.
Authors: Robinson JM;Brocklehurst JC;. Title: Emepronium bromide and flavoxate hydrochloride in the treatment of urinary incontinence associated with detrusor instability in elderly women. Journal Name: British Journal of Urology. Year: 1983 Aug	Emepronium plus flavoxate compared with placebo; emepronium not used in the UK.
Authors: Rud T;. Title: The effects of estrogens and gestagens on the urethral pressure profile in urinary continent and stress incontinent women. Journal Name: Acta Obstetrica et Gynecologica Scandinavica. Year: 1980	Does not address effectiveness; UPP and urethral length measured after 3 wks tx with estradiol or estriol, or after a single 1 gram dose of progesterone.
Authors: Salvatore S;Khullar V;Cardozo L;Milani R;Athanasios S;Kelleher C;. Title: Long-term prospective randomized study comparing two different regimens of oxybutynin as a treatment for detrusor overactivity. Journal Name: European Journal of Obstetrics, Gynecology, and Reproductive Biology. Year:	Comparison of 2 different starting dose regimens of oxybutynin (2.5mg bd or 5mg at night). No other control group.
Authors: Sartori MGF;Baracat EC;Girao MJBC;Goncalves WJ;Sartori JP;Rodrigues dL;. Title: Menopausal genuine stress urinary incontinence treated with conjugated estrogens plus progestogens. Journal Name: International Journal of Gynecology and Obstetrics. Year: 1995	Case series.
Authors: Sherman AM;Shumaker SA;Kancler C;Zheng B;Reboussin DM;Legault C;Herrington DM;. Title: Baseline health-related quality of life in postmenopausal women with coronary heart disease: the Estrogen Replacement and Atherosclerosis (ERA) Trial. Journal Name: Journal of Women's Health. Year: 2003	Does not address effectiveness of oestrogens for UI. This report analyses baseline health-related QOL data, including UI, from a study evaluating the effects of oestrogen with or without progestogen on coronary atherosclerosis.
Authors: Stanton SL;. Title: A comparison of emepronium bromide and flavoxate hydrochloride in the treatment of urinary incontinence. Journal Name: Journal of Urology. Year: 1973	Comparison of emepronium and flavoxate. Emepronium not used in the UK.
Authors: Sussman D;Garely A;. Title: Treatment of overactive bladder with once-daily extended-release tolterodine or oxybutynin: the antimuscarinic clinical effectiveness trial (ACET).[see comment]. Journal Name: Current Medical Research and Opinion. Year: 2002	Reported to be a comparison of 2 doses each of SR tolterodine and SR oxybutynin. It was effectively 2 separate trials, with the 340 centres that were involved in the study; each evaluating only 1 of the study drugs. However results are analysed as though they were comparisons of the different drugs, with little useful information about differences between the doses of different drugs. Endpoints were patient perception of benefit and dry mouth. ITT analysis done for those randomised and received ≥ 1 dose of study medication & had 1 efficacy assessment. No explanation for missing data.
Authors: Tapp AJ;Cardozo LD;Versi E;Cooper D;. Title: The treatment of detrusor instability in post-menopausal women with oxybutynin chloride: a double blind placebo controlled study.[see comment]. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 1990 Jun	Small cross-over study of oxybutynin and placebo, of short duration. Other more robust and recent studies that address the same question are included.
Authors: Weatherall M;. Title: The risk of hyponatremia in older adults using desmopressin for nocturia: a systematic review and meta-analysis. [Review] [37 refs]. Journal Name: Neurourology and Urodynamics. Year: 2004	This review pooled the incidence of hyponatraemia in studies where desmopressin was used to treat nocturia. Seven studies were included (including the Asplund RCT and Asplund dose-titration study, and Kuo 2002 [excluded]); 3 studies included only men, and 5 included men and women. No single definition of hyponatraemia was used in the studies included, nor a definition given in the

Urinary incontinence

Bibliographic Information	Reason for rejecting study
	review. Studies of any duration were included (3 days to 3 months). The pooled estimate reported was 7.6% (95% CI 3.1, 15.1). However, the review had unclear methods, and conflicting information about type of studies included (said controlled only, but case series included). The appropriateness of pooling the results is questionable as the largest study included (n=224 [56%], only men) reported a much higher incidence (21.9%) than the other studies (3.3-8.7%), and also because the lack of definition of hyponatraemia and variation in study durations makes it difficult to put the pooled estimate into any context.
Authors: Wein AJ;. Title: Treatment of urge-predominant mixed urinary incontinence with tolterodine extended release: a randomized, placebo-controlled trial. Journal Name: Journal of Urology. Year: 2005 Jun	Commentary on study included in guideline (ref ID 22918, Khullar 2004).
Authors: Weisberg E;Ayton R;Darling G;Farrell E;Murkies A;O'Neill S;Kirkegard Y;Fraser IS;. Title: Endometrial and vaginal effects of low-dose estradiol delivered by vaginal ring or vaginal tablet. Journal Name: Climacteric. Year: 2005	Although % reporting urgency and frequency at 48 weeks is given, neither the change from baseline, nor the baseline prevalence of these symptoms is reported therefore there are no useable data in this study in relation to UI.
Authors: Whitehead JA;. Title: Urinary incontinence in the aged. Propantheline bromide as an adjunct to treatment. Journal Name: Geriatrics. Year: 1967 Jan	A study evaluating 2 weeks propantheline and placebo tx in 20 female cognitively impaired elderly inpatients with UI. Pts were also undergoing habit training, but no details of this given. Lack of other details makes it difficult to decipher what actually happened in the study.
Authors: Zeegers A;Kiesswetter H;Kramer A;Jonas U;. Title: Conservative therapy of frequency, urgency and urge incontinence: a double blind clinical trial of flavoxate hydrochloride, oxybutinin chloride, emepronium bromide and placebo. Journal Name: World Journal of Urology. Year: 1987	Several limitations; 60 randomised, only 41 analysed (completers) - 8 of 19 withdrawals were due to emepronium side effects; study conducted at 2 centres and significant differences in baseline symptoms between the 2, with more in 1 having DO therefore results presented for the 2 centres separately.
Authors: Zinner N;Tuttle J;Marks L;. Title: Efficacy and tolerability of darifenacin, a muscarinic M3 selective receptor antagonist (M3 SRA), compared with oxybutynin in the treatment of patients with overactive bladder. Journal Name: World Journal of Urology. Year: 2005 Sep	2 weeks treatment only therefore insufficient duration to address effectiveness.
Authors: Zorzitto ML;Jewett MAS;Ferne GR;Holliday PJ;Bartlett S;. Title: Effectiveness of Propantheline bromide in the treatment of geriatric patients with detrusor instability. Journal Name: Neurourology and Urodynamics. Year: 1986	Majority of the population of 43 have neurogenic bladder, outside the guideline scope.
Authors: Zorzitto ML;Holliday PJ;Jewett MA;Herschorn S;Ferne GR;. Title: Oxybutynin chloride for geriatric urinary dysfunction: a double-blind placebo-controlled study.[see comment]. [Review] [28 refs]. Journal Name: Age and Ageing. Year: 1989 May	Small cross-over study of oxybutynin and placebo, of short duration. Other more robust and recent studies that address the same question are included.
Authors: Zullo MA;Plotti F;Calcagno M;Palaia I;Muzii L;Manci N;Angioli R;Panici PB;. Title: Vaginal estrogen therapy and overactive bladder symptoms in postmenopausal patients after a tension-free vaginal tape procedure: a randomized clinical trial. Journal Name: Menopause. Year: 2005 Jul	The question considered is whether oestrogen reduces the incidence of OAB as a complication of TVT surgery, and not the effectiveness of the procedure per se.

TENS

Bibliographic Information	Reason for rejecting study
Authors: Nakamura M;Sakurai T;Tsujiimoto Y;Tada Y;. Title: Bladder inhibition by electrical stimulation of the perianal skin. Journal Name: Urologia Internationalis. Year: 1986	Intervention not TENS.
Authors: Okada N;Igawa Y;Ogawa A;Nishizawa O;. Title: Transcutaneous electrical stimulation of thigh muscles in the treatment of detrusor overactivity. Journal Name: British Journal of Urology. Year: 1998 Apr	Majority of patients (14 of 19) had detrusor hyperreflexia which is outside the guideline scope.
Authors: Skeil D;Thorpe AC;. Title: Transcutaneous electrical nerve stimulation in the treatment of neurological patients with urinary symptoms. Journal Name: BJU International. Year: 2001 Dec	Case series of TENS in patients with neuropathic UI, which is a population excluded from the UI guideline scope.

Bibliographic Information	Reason for rejecting study
Authors: van Balken MR;Vandoninck V;Messelink BJ;Vergunst H;Heesakkers JP;Debruyne FM;Bemelmans BL;. Title: Percutaneous tibial nerve stimulation as neuromodulative treatment of chronic pelvic pain. Journal Name: European Urology. Year: 2003 Feb	Evaluates TENS for chronic pelvic pain, not UI.

Posterior tibial nerve stimulation

Bibliographic Information	Reason for rejecting study
Authors: Agro EF;Campagna A;Sciobica F;Petta F;Germani S;Zuccala A;Miano R;. Title: Posterior tibial nerve stimulation: Is the once-a-week protocol the best option?. Journal Name: Minerva Urologica e Nefrologica. Year: 2005	Duration of study unclear.
Authors: Ishigooka M, Zermann D, Doggweiler R, Schmidt RA. Title: Sacral nerve stimulation and diurnal volume. Journal Name: Eur Urol. Year: 1999	Patterns of changes in symptoms reported (inc or decrease) but no numerical data given. No adverse effects data

Non-therapeutic interventions

Bibliographic Information	Reason for rejecting study
Authors: Brubaker L, Harris T, Gleason D, Newman D, North B et al. Title: The external urethral barrier for stress incontinence: a multicenter trial of safety and efficacy. Journal Name: Obstetrics & Gynecology. Year: 1999	Device evaluated (miniguard) not relevant as withdrawn from the market for commercial reasons
Authors: Abu-Sitta MI;Kapur G;Enhorning G;. Title: Stress incontinence alleviated by an intravaginal device. Journal Name: International Urogynecology Journal. Year: 1995	Device evaluated (contiring) not known to be available
Authors: Bellin P;Smith J;Poll W;Bogojavlensky S;Knoll D;Childs S;Tuttle J;Barada J;Dann J;. Title: Results of a multicenter trial of the CapSure (Re/Stor) continence shield on women with stress urinary incontinence. Journal Name: Urology. Year: 1998	Device evaluated (CapSure) not relevant as withdrawn from the market for commercial reasons
Authors: Benvenuti F;Banfi R;D'Ippolito P;Cottenden A;Mencarelli MA;Di Benedetto P;. Title: Criteria for prescribing aids for the management of urinary incontinence. Journal Name: Europa Medicophysica. Year: 2003	Commentary on containment products available, and their performance. Does not address guideline questions.
Authors: Bernier F;Harris L;. Title: Treating stress incontinence with the bladder neck support prosthesis. Journal Name: Urologic Nursing. Year: 1995 Mar	Device evaluated (believed to be Introl) not relevant as withdrawn from the market for commercial reasons.
Authors: Dunn M;Brandt D;Nygaard I;. Title: Treatment of exercise incontinence with a urethral insert: a pilot study in women. Journal Name: Physician and Sportsmedicine. Year: 2002	Study of 6 women who used femsoft. A larger, longer-term case series evaluating this device has been included.
Authors: Dunn S;Kowanko I;Paterson J;Pretty L;. Title: Systematic review of the effectiveness of urinary continence products. Journal Name: Journal of WOCN. Year: 2002	Systematic review of effectiveness of continence products. Does not address the UI guideline questions. Covers which type of product is preferred, and their performance in terms of acceptability, comfort, keeping dry, skin reactions.
Authors: Eckford SD;Jackson SR;Lewis PA;Abrams P;. Title: The continence control pad - A new external urethral occlusion device in the management of stress incontinence. Journal Name: British Journal of Urology. Year: 1996	Device evaluated (Miniguard) not relevant as withdrawn from the market for commercial reasons.
Authors: Kohler-Ockmore J;Feneley RC;. Title: Long-term catheterization of the bladder: prevalence and morbidity. Journal Name: British Journal of Urology. Year: 1996 Mar	Survey of prevalence of, and complications associated with, catheter use in the community. Does not address guideline questions.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Miller JL;Bavendam T;. Title: Treatment with the reliance(TM) urinary control insert: One-year experience. Journal Name: Journal of Endourology. Year: 1996	Device evaluated (reliance) not relevant as withdrawn from the market for commercial reasons.
Authors: Niel-Weise BS;van den Broek PJ;. Title: Urinary catheter policies for short-term bladder drainage in adults. Journal Name: Cochrane Database of Systematic Reviews. Year: 2006	Not relevant to this guideline because we are looking at long- not short-term catheterisation.
Authors: Nielsen KK;Kromann-Andersen B;Jacobsen H;Nielsen EM;Nordling J;Holm HH;Larsen JF;. Title: The urethral plug: A new treatment modality for genuine urinary stress incontinence in women. Journal Name: Journal of Urology. Year: 1990	Urethral plugs not used in UK practice.
Authors: Nielsen KK;Walter S;Maegaard E;Kromann-Andersen B;. Title: The urethral plug II: An alternative treatment in women with genuine urinary stress incontinence. Journal Name: British Journal of Urology. Year: 1993	Urethral plugs not used in the UK.
Authors: North BB;. Title: A disposable adhesive patch for stress urinary incontinence. Journal Name: Family Medicine. Year: 1998 Apr	Device evaluated (believed to be Miniguard) not relevant as withdrawn from the market for commercial reasons.
Authors: Robinson H;Schulz J;Flood C;Hansen L;. Title: A randomized controlled trial of the NEAT expandable tip continence device. Journal Name: International Urogynecology Journal. Year: 2003 Aug	Devices evaluated (NEAT and Reliance) not relevant as withdrawn from the market for commercial reasons.
Authors: Sand PK;Staskin D;Miller J;Diokno A;Sant GR;Davila GW;Knapp P;Rappaport S;Tutrone R;. Title: Effect of a urinary control insert on quality of life in incontinent women. Journal Name: International Urogynecology Journal. Year: 1999	Device evaluated (Reliance) not relevant as withdrawn from the market for commercial reasons.
Authors: Tincello GD, Adams EJ, Bolderson J, Richmond DH. Title: A urinary control device for management of female stress incontinence. Journal Name: Obstet Gynecol. Year: 2000	Device evaluated (FemAssist) not relevant as withdrawn from the market for commercial reasons.
Authors: Versi E;Griffiths DJ;Harvey M;. Title: A new external urethral occlusive device for female urinary incontinence. Journal Name: Obstetrics and Gynecology. Year: 1998	Device evaluated (FemAssist) not relevant as withdrawn from the market for commercial reasons.
Authors: Warren JW;Damron D;Tenney JH;Hoopes JM;Deforge B;Muncie HL;. Title: Fever, bacteremia, and death as complications of bacteriuria in women with long-term urethral catheters. Journal Name: Journal of Infectious Diseases. Year: 1987 Jun	A study of fever and bacteruria associated with long-term catheter use. Does not address guideline questions.

Complementary therapies

Bibliographic Information	Reason for rejecting study
Authors: Kubista E;Altmann P;Kucera H;Rudelstorfer B;. Title: Electro-acupuncture's influence on the closure mechanism of the female urethra in incontinence. Journal Name: American Journal of Chinese Medicine. Year: 1976	Aim of study was to validate urethral closure pressure assessment as a way of objectively evaluating the effects of acupuncture. Does not address effectiveness.

Surgical management

Sacral nerve stimulation

Bibliographic Information	Reason for rejecting study
Authors: Abrams P;Blaivas JG;Fowler CJ;Fourcroy JL;MacDiarmid SA;Siegel SW;Van KP;. Title: The role of neuromodulation in the management of urinary urge incontinence.[see comment]. Journal Name: BJU International. Year: 2003 Mar	Narrative review, used as source/ check of references
Authors: Cappellano F, Ciotti MG, Pizzoccaro M, Catanzaro M, et al. Title: Sacral root neuromodulation in the treatment of female urge and mixed urinary incontinence. Journal Name: Urogynaecologia International Journal. Year: 1998	Most information in publications relates to results of peripheral nerve evaluation, not from insertion of the implant. 10 of 47 patients had a permanent implant, but gender not stated, and results presented in graphs only with little explanatory narrative.
Authors: Hijaz A;Vasavada S;. Title: Complications and troubleshooting of sacral neuromodulation therapy. Journal Name: Urologic Clinics of North America. Year: 2005	Narrative review of complications from sacral neuromodulation (data from Sacral Nerve Stimulation Group), and the authors experience of complications from 167 patients. No pt demographics reported and insufficient description of indications for the intervention, therefore cannot use the study.
Authors: Scheepens WA, van Koevinge GA, de Bie RA, Weil EHJ, van Kerrebroeck. Title: Urodynamic results of sacral neuromodulation correlate with subjective improvement in patients with an overactive bladder. Journal Name: European Urology. Year: 2003	Main objective of study was to investigate whether ambulatory urodynamic findings correlate with subjective outcomes in men and women who had sacral nerve stimulator implanted. Gender of all patient who underwent PNE stated, but not of those who had implant.
Authors: Van Voskuilen AC;Oerlemans DJAJ;Weil EHJ;de Bie RA;Van KP;. Title: Long term results of neuromodulation by sacral nerve stimulation for lower urinary tract symptoms: a retrospective single center study. Journal Name: European Urology. Year: 2006	Authors compare results (complications) with different devices; some of the earlier devices are not in use now therefore findings of historical interest only.

Augmentation cystoplasty

Bibliographic Information	Reason for rejecting study
Authors: Kayigil O;Atahan O;Metin A;. Title: Experiences with clam ileocystoplasty. Journal Name: International Urology and Nephrology. Year: 1998	Very limited information: series of 18 pts (4 women) who had clam ileocystoplasty for urge UI refractory to conservative tx (not described). The 4 women cured at follow-up 18 months, no definitions & no further outcomes.

Urinary diversion

Bibliographic Information	Reason for rejecting study
Authors: Ahlering TE;Weinberg AC;Razor B;. Title: Modified Indiana pouch. Journal Name: Journal of Urology. Year: 1991	Indications for diversion were cancer not urinary incontinence
Authors: Arai Y;Okubo K;Konami T;Kin S;Kanba T;Okabe T;Hamaguchi A;Okada Y;. Title: Voiding function of orthotopic ileal neobladder in women. Journal Name: Urology. Year: 1999	Indication for urinary diversion was cancer, no UI
Authors: Bastian PJ;Albers P;Hanitzsch H;Fabrzi G;Casadei R;Haferkamp A;Schumacher S;Muller SC;. Title: Health-related quality-of-life following modified ureterosigmoidostomy (Mainz Pouch II) as continent urinary diversion. Journal Name: European Urology. Year: 2004	Indications for urinary diversion carcinoma, not UI. This information not clear from the abstract.
Authors: Nabi G;Dublin N;McClinton S;N'Dow JMO;Neal DE;Pickard R;Yong SM;. Title: Urinary diversion and bladder reconstruction/replacement using intestinal segments for intractable incontinence or following cystectomy. Journal Name: Cochrane database of systematic reviews. Year: 2005	Population not relevant to guideline scope - the systematic review included 2 RCTs which included pts (predominantly men) with bladder cancer.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Navon JD;Weinberg AC;Ahlering TE;. Title: Continent urinary diversion using a modified Indiana pouch in elderly patients. Journal Name: American Surgeon. Year: 1994	Study included 25 patients (6 women). The indication for the urinary diversion was not UI.
Authors: Nordstrom G;Nyman CR;Theorell T;. Title: Psychosocial adjustment and general state of health in patients with ileal conduit urinary diversion. Journal Name: Scandinavian Journal of Urology and Nephrology. Year: 1992	Most of the patients included had urinary diversion for bladder cancer
Authors: Nordstrom GM;Nyman CR;Theorell T;. Title: The impact on work ability of ileal conduit urinary diversion. Journal Name: Scandinavian Journal of Social Medicine. Year: 1990	Of 66 men and women (39% women) included in the series, the indication for diversion was cancer in 66%; in others, of whom the % of women with UI is not possible to decipher, the indications were UI and/or 'bladder dysfunction of varying aetiologies'
Authors: Nordstrom GM;Nyman CR;. Title: Male and female sexual function and activity following ileal conduit urinary diversion. Journal Name: British Journal of Urology. Year: 1992	Of 66 men and women (39% women) included in the series, the indication for diversion was cancer in 66%; in others, of whom the % of women with UI is not possible to decipher, the indications were UI and/or 'bladder dysfunction of varying aetiologies'
Authors: Crivellaro S;Michaels MJ;Kocjancic E;Libertino JA;. Title: The Lahey clinic experience with continent urinary diversion. Journal Name: BJU International. Year: 2004	Only 1 of 238 had urinary diversion due to UI; most of the population included had bladder cancer
Authors: Lockhart JL;Pow-Sang JM;Persky L;Kahn P;Helal M;Sanford E;. Title: A continent colonic urinary reservoir: the Florida pouch. Journal Name: Journal of Urology. Year: 1990 Oct	Series of 65 patients (46 men). In the majority the indication for diversion was cancer or neurogenic disease. Not possible to extract data for women with UI.
Authors: Lockhart JL;Pow-Sang JM;Persky L;Sanford E;Helal M;. Title: Results, complications and surgical indications of the Florida pouch. Journal Name: Surgery, Gynecology and Obstetrics. Year: 1991 Oct	Series of 107 pts (73 men) having diversion for a range of indications, mostly cancer. Not possible to extract data for women with intractable incontinence.
Authors: Millard RJ;Wang Y;. Title: Early clinical experience with continent urinary diversion. Journal Name: Australian and New Zealand Journal of Surgery. Year: 1996 Dec	Series of 29 men and women; indication for most was cancer. Not possible to extract data for women with intractable UI, or to determine whether they were women.
Authors: Skolarikos A;Deliveliotis C;Alargof E;Ferakis N;Protogerou V;Dimopoulos C;. Title: Modified ileal neobladder for continent urinary diversion: Functional results after 9 years of experience. Journal Name: Journal of Urology. Year: 2004	Reason for diversion: transitional cell carcinoma in all patients - not relevant to guideline. [indication for op not given in abstract]
Authors: Wilson TG;Moreno JG;Weinberg A;Ahlering TE;Studer UE;. Title: Late complications of the modified Indiana pouch. Journal Name: Journal of Urology. Year: 1994	Indications for urinary diversion were all cancer - not evident from the abstract

Detrusor myectomy - none

Botulinum toxin

Bibliographic Information	Reason for rejecting study
Authors: Harper M;Popat RB;DasGupta R;Fowler CJ;Dasgupta P;. Title: A minimally invasive technique for outpatient local anaesthetic administration of intradetrusor botulinum toxin in intractable detrusor overactivity. Journal Name: BJU International. Year: 2003	Purpose of study was to describe botulinum toxin administration under LA as an outpatient procedure in a series of 39 pts (26 F) with IDO or neurogenic DO. No clinical outcomes reported (all pts said to had 'marked improvement') - only numerical data for mean max cystometric capacity, but unclear at what time point.
Authors: Kessler TM;Danuser H;Schumacher M;Studer UE;Burkhard FC;. Title: Botulinum A toxin injections into the detrusor: An effective treatment in idiopathic and neurogenic detrusor overactivity?. Journal Name: Neurourology and Urodynamics. Year: 2005	Study compares outcomes of botulinum-A toxin in idiopathic vs neurogenic DO. 22 pts included (14 women); the proportion of women with idiopathic DO not stated & data not reported separately for this group of pts.
Authors: Kuo HC;. Title: Urodynamic evidence of effectiveness of botulinum A toxin injection in treatment of detrusor overactivity refractory to anticholinergic agents. Journal Name: Urology. Year: 2004 May	Of 30 patients in the series, 18 were men & 12 overall had neurogenic bladder. Only limited results given for idiopathic DO subgroup, therefore study not considered further.

Bibliographic Information	Reason for rejecting study
Authors: Smith CP;Nishiguchi J;O'Leary M;Yoshimura N;Chancellor MB;. Title: Single-institution experience in 110 patients with botulinum toxin a injection into bladder or urethra. Journal Name: Urology. Year: 2005	Report includes 110 patients (75 women) treated with botulinum toxin; 74 patients had neurogenic bladder, 19 interstitial cystitis or idiopathic retention/pelvic floor spasticity, leaving 17 with idiopathic OAB. Results not reported separately for OAB pts therefore study not helpful.
Authors: Schurch B, de Seze M, Denys P et al. Title: Botulinum toxin type A is a safe and effective treatment for neurogenic urinary incontinence: results of a single treatment, randomized, placebo controlled 6-month study. Journal Name: J Urol. Year: 2005	Only patients with neurogenic DO included in the study.

Vanilloid receptor agonists (resiniferatoxin and capsaicin)

Bibliographic Information	Reason for rejecting study
Authors: Cerruto MA;Ficarra V;D'Amico A;Balzarro M;Artibani W;. Title: Is resiniferatoxin better than capsaicin? Literature review. Journal Name: Urologica. Year: 2003	Narrative review that describes rationale for using resiniferatoxin and capsaicin, & summarises clinical studies, none of which conducted in patients within the scope of the UI guideline.
Authors: Chandiramani VA;Peterson T;Duthie GS;Fowler CJ;. Title: Urodynamic changes during therapeutic intravesical instillations of capsaicin. Journal Name: British Journal of Urology. Year: 1996	Only 4/30 patients had non-neurogenic incontinence, not known whether these pts were male or female (19/30 were female).
Authors: Cruz F;Guimaraes M;Silva C;Rio ME;Coimbra A;Reis M;. Title: Desensitization of bladder sensory fibers by intravesical capsaicin has long lasting clinical and urodynamic effects in patients with hyperactive or hypersensitive bladder dysfunction. Journal Name: Journal of Urology. Year: 1997	Series of 16 pts who had capsaicin - 9 females of whom 3 had idiopathic DO. Some individual patient data reported but limited demographic data e.g. prior treatment not stated & limited information on baseline symptoms of relevance.
Authors: Kuo HC;. Title: Multiple intravesical instillation of low-dose resiniferatoxin is effective in the treatment of detrusor overactivity refractory to anticholinergics. Journal Name: BJU International. Year: 2005 May	Gender of population not stated - was referred to throughout as 'patients'; however, one outcome measure was the International Prostate Symptom Score, and 20/53 pts were stated to have BOO from BPH, both factors suggest that the population was male.

Intramural bulking agents

Bibliographic Information	Reason for rejecting study
Authors: Echols KT;Chesson RR;Breaux EF;Shobeiri SA;. Title: Persistence of delayed hypersensitivity following transurethral collagen injection for recurrent urinary stress incontinence. Journal Name: International Urogynecology Journal. Year: 2002	Case report
Authors: Eckford SD;Abrams P;. Title: Para-urethral collagen implantation for female stress incontinence. Journal Name: British Journal of Urology. Year: 1991	Case series of 25 pts with 3 months follow-up; larger series followed up for longer included
Authors: Faerber GJ;. Title: Endoscopic collagen injection therapy in elderly women with type I stress urinary incontinence. Journal Name: Journal of Urology. Year: 1996	Case series of 12 pts; larger series followed up for longer included
Authors: Kieswetter H;Fischer M;Wober L;Flamm J;. Title: Endoscopic implantation of collagen (GAX) for the treatment of urinary incontinence. Journal Name: British Journal of Urology. Year: 1992	Case series of 16 pts; larger series followed up for longer included
Authors: Mantovani F;Del NA;Confalonieri S;Pisani E;. Title: Collagen for U.I. minimal dose injections in scheduled steps to improve clinical results. Journal Name: Urogynaecologia International Journal. Year: 2002	Series of 24 pts who had collagen injection for UI. No baseline demographic data and no definitions for outcomes ('effectiveness').
Authors: Moore KN;Chetner MP;Metcalf JB;Griffiths DJ;. Title: Periurethral implantation of glutaraldehyde cross-linked collagen (contigen(TM)) in women with type I or III stress incontinence: Quantitative outcome measures. Journal Name: British Journal of Urology. Year: 1995	Case series of 12 pts; larger series followed up for longer included - only 8 weeks follow-up

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Pisani E;Mantovani F;Zanetti G;Ceresoli A;Seveso M;. Title: Mininvasive treatment with collagen of female urinary incontinence. Journal Name: Urogynaecologia International Journal. Year: 1995	Small series of 8 women who underwent collagen injections. Limited information on previous treatments; cure and improvement at 1 year reported but without definitions.
Authors: O'Connell HE;McGuire EJ;Aboseif S;Usui A;. Title: Transurethral collagen therapy in women. Journal Name: Journal of Urology. Year: 1995	Case series of 44 pts with 3 months follow-up; larger series followed up for longer included
Authors: Lim KB;Ball AJ;Feneley RCL;. Title: Periurethral teflon injection: A simple treatment for urinary incontinence. Journal Name: British Journal of Urology. Year: 1983	Type of UI that women had not stated.
Authors: Lopez AE;Padron OF;Patsias G;Politano VA;. Title: Transurethral polytetrafluoroethylene injection in female patients with urinary continence. Journal Name: Journal of Urology. Year: 1993	Retrospective review of women given teflon injections from 1964 to 1991. Different equipment used & experience level of users varied over this time period, as stated by authors. 58% had stress UI, others had UI of various aetiologies.
Authors: Politano VA;. Title: Periurethral polytetrafluoroethylene injection for urinary incontinence. Journal Name: Journal of Urology. Year: 1982	Series of 165 patients, 54 female, of whom 13 had stress UI. Results for population of interest not reported separately, and duration of follow-up not stated.

Artificial urinary sphincter

Bibliographic Information	Reason for rejecting study
Authors: Bosch JL;Klijn AJ;Schroder FH;Hop WC;. Title: The artificial urinary sphincter in 86 patients with intrinsic sphincter deficiency: satisfactory actuarial adequate function rates. Journal Name: European Urology. Year: 2000 Aug	Series of AUS insertions in 86 M/F (15 F). Unable to sort population by aetiology and gender, but most outside guideline scope (65% prostatectomy, 10% extrophy/ epispadias, 20% neurogenic bladder, 5% 'other').
Authors: Diokno AC;Sonda LP;MacGregor RJ;. Title: Long-term followup of the artificial urinary sphincter. Journal Name: Journal of Urology. Year: 1984 Jun	Population (30) had post-prostatectomy UI, neurogenic UI or pelvic trauma - none relevant to UI guideline scope.
Authors: Duncan HJ;McInerney PD;Mundy AR;. Title: Late erosion. A new complication of artificial urinary sphincters. Journal Name: British Journal of Urology. Year: 1993 Nov	Description of complications in 4 pts who had AUS inserted, 2 women both with neurogenic bladder.
Authors: Elliott DS;Barrett DM;. Title: The artificial urinary sphincter in the female: Indications for use, surgical approach and results. Journal Name: International Urogynecology Journal. Year: 1998	Narrative review with authors own experience reported loosely (n=400, 12 women, none of the women had idiopathic UI).
Authors: Elliott DS;Barrett DM;. Title: Mayo clinic long-term analysis of the functional durability of the AMS 800 artificial urinary sphincter: A review of 323 cases. Journal Name: Journal of Urology. Year: 1998	M/F included in series - 10 F. Only reoperation rate reported separately for women. Aetiology/ indication for AUS in women not stated.
Authors: Fishman IJ;Shabsigh R;Scott FB;. Title: Experience with the artificial urinary sphincter model AS800 in 148 patients. Journal Name: Journal of Urology. Year: 1989	Series of 148 pts, including 36 women. From table of aetiologies not possible to tell the gender of the 8 pts with stress UI.
Authors: Frank I;Elliott DS;Barrett DM;. Title: Success of de novo reimplantation of the artificial genitourinary sphincter. Journal Name: Journal of Urology. Year: 2000	Population: men only.
Authors: Furlow WL;. Title: Implantation of a new semiautomatic artificial genitourinary sphincter: Experience with primary activation and deactivation in 47 patients. Journal Name: Journal of Urology. Year: 1981	6 of 47 pts were female, 4 had stress UI. No results reported separately for these 4.
Authors: Goldwasser B;Furlow WL;Barrett DM;. Title: The model AS 800 artificial urinary sphincter: Mayo Clinic experience. Journal Name: Journal of Urology. Year: 1987	Of 109 pts in the series, 9 were women. Most pts had post-prostatectomy UI or neurogenic UI. No data for women with non-neurogenic UI.

Bibliographic Information	Reason for rejecting study
Authors: Keane PF;Walsh IK;Kernohan RM;. Title: The artificial urinary sphincter. A new solution for incontinent patients. Journal Name: Ulster Medical Journal. Year: 1993 Oct	Series of 12 pts who had a artificial urinary sphincter inserted. Population outside guideline scope (6 post prostatectomy UI, 2 other pathologies, 3 neurogenic UI).
Authors: Kil PJ;De Vries JD;van Kerrebroeck PE;Zwiers W;Debruyne FM;. Title: Factors determining the outcome following implantation of the AMS 800 artificial urinary sphincter. Journal Name: British Journal of Urology. Year: 1989 Dec	Of 17 patients included, 6 were female, only 2 with non-neurogenic UI.
Authors: Kowalczyk JJ;Spicer DL;Mulcahy JJ;. Title: Erosion rate of the double cuff AMS800 artificial urinary sphincter: Long-term followup. Journal Name: Journal of Urology. Year: 1996	All patients were male (not evident from abstract).
Authors: Kowalczyk JJ;Spicer DL;Mulcahy JJ;. Title: Long-term experience with the double-cuff AMS 800 artificial urinary sphincter. Journal Name: Urology. Year: 1996	Only men included in study (population not clear from abstract).
Authors: Lindner A;Kaufman JJ;Raz S;. Title: Further experience with the artificial urinary sphincter. Journal Name: Journal of Urology. Year: 1983	Of 78 pts in the series, only 2 were female, and neither had non-neurogenic UI
Authors: Maillet F;Buzelin J;Bouchot O;Karam G;. Title: Management of artificial urinary sphincter dysfunction. Journal Name: European Urology. Year: 2004	Series of 288 men and women (130 women) with variety of indications for AUS (28% neurological, 45% stress UI, 25% prostate surgery, 2% 'others'). Outcomes considered - revisions or replacements. Data not reported separately for each pt group.
Authors: Montague DK;. Title: The artificial urinary sphincter (AS 800): Experience in 166 consecutive patients. Journal Name: Journal of Urology. Year: 1992	Of series of 166 pts (10 females; 6 with stress UI). No data reported separately for women with stress UI.
Authors: Parulkar BG;Barrett DM;. Title: Application of the AS-800 artificial sphincter for intractable urinary incontinence in females. Journal Name: Surgery, Gynecology and Obstetrics. Year: 1990	Only 2 of the 24 females included in the series had non-neurogenic UI
Authors: Schettini M;Diana M;Gallucci M;. Title: Treatment of urinary incontinence with AMS 800 artificial urinary sphincter. Journal Name: International Surgery. Year: 1998 Jul	Series of 52 M/F (3F) with UI; postprostatectomy in men; in women 1 fistula, 1 neobladder, 1 congenital stricture of bladder neck.
Authors: Scott FB;. Title: The use of the artificial sphincter in the treatment of urinary incontinence in the female patient. Journal Name: Urologic Clinics of North America. Year: 1985 May	Narrative review, background information & check of references. Author also states own experience of sphincter insertion loosely - no useable data.
Authors: Ngninkeu BN;Van HG;Di GM;Debie B;Evans A;. Title: Laparoscopic artificial urinary sphincter in women for type III incontinence: Preliminary results. Journal Name: European Urology. Year: 2005	Series of 4 women who had a artificial urinary sphincter inserted laparoscopically. Larger case series of this device in women considered therefore this study excluded.
Authors: Nordling J;Holm-Bentzen M;Hald T;. Title: The AMS artificial urinary sphincter on the bulbous urethra. Journal Name: Scandinavian Journal of Urology and Nephrology. Year: 1986	Only men included in series; not evident from abstract
Authors: Nurse DE;Mundy AR;. Title: One hundred artificial sphincters. Journal Name: British Journal of Urology. Year: 1988	Of 100 pts (36 women; 10 had non-neuropathic UI). No useable outcome data regardless of UI aetiology.
Authors: ter Meulen PH;Zambon V;Kessels AG;van Kerrebroeck PE;. Title: Quality of life, functional outcome and durability of the AMS 800 artificial urinary sphincter in patients with intrinsic sphincter deficiency. Journal Name: Urologia Internationalis. Year: 2003	Series of 31 M/F (7 F) who had AUS inserted. Indication for device in 3 women was unsuccessful surgery, otherwise population outside guideline scope. No data reported separately for the population of relevance.
Authors: Thomas K;Venn SN;Mundy AR;. Title: Outcome of the artificial urinary sphincter in female patients. Journal Name: Journal of Urology. Year: 2002	Minority of population relevant to our guideline (26% had stress UI, 50% neuropathic bladder, 24% other indications). Outcomes reported for stress UI population were % with device in situ/ replaced.

Colposuspension

Bibliographic Information	Reason for rejecting study
Authors: Ankardal M;Ekerydh A;Crafoord K;Milsom I;Stjernedahl JH;Engh ME;. Title: A randomised trial comparing open Burch colposuspension using sutures with laparoscopic colposuspension using mesh and staples in women with stress urinary incontinence. Journal Name: BJOG: an International Journal of Obstetrics and Gynaecology. Year: 2004 Sep	All patients included in another publication by same author (Ankardal 2005), which is included.
Authors: Bulent TM;Sendag F;Dilek U;Guner H;. Title: Laparoscopic burch colposuspension: comparison of effectiveness of extraperitoneal and transperitoneal techniques. Journal Name: European Journal of Obstetrics, Gynecology, and Reproductive Biology. Year: 2004 Sep 10	Non-randomised comparison of 2 techniques of laparoscopic colposuspension (transperitoneal using sutures vs. extraperitoneal using mesh and tacks). Evidence of higher level for this comparison found.
Authors: Chung MK;Chung RP;. Title: Comparison of laparoscopic Burch and tension-free vaginal tape in treating stress urinary incontinence in obese patients. Journal Name: Journal of the Society of Laparoendoscopic Surgeons. Year: 2002 Jan	Study is a retrospective review of cases who had open colposuspension or TVT, with results compared in terms of BMI; however, groups were very different at baseline with 66% of the open colpo group being of 'normal' weight, and 66% in the TVT group being obese.
Authors: Demirci F;Yucel O;. Title: Comparison of pubovaginal sling and burch colposuspension procedures in type I/II genuine stress incontinence. Journal Name: Archives of Gynecology and Obstetrics. Year: 2001	Quasi-randomisation (procedures done 'consecutively') although baseline characteristics similar in both groups. No results presented for all pts included; no continence outcomes. Peri- and post-op complications reported for the 63% (of n=45) who did not have concurrent hysterectomy, and complications at 1-yr for 74%, with no explanation of withdrawals or losses to follow-up.
Authors: Dietz HP;Wilson PD;. Title: Long-term success after open and laparoscopic colposuspension: A case-control study. Journal Name: Gynaecological Endoscopy. Year: 2002	Evidence of a higher level (RCTs) considered for this comparison.
Authors: El-Toukhy TA;Davies AE;. Title: The efficacy of laparoscopic mesh colposuspension: Results of a prospective controlled study. Journal Name: BJU International. Year: 2001	Prospective cohort study of laparoscopic vs. open Burch colposuspension. We considered RCT evidence for this comparison.
Authors: Fowler Jr JE;. Title: Experience with suprapubic vesicourethral suspension and endoscopic suspension of the vesical neck for stress urinary incontinence in females. Journal Name: Surgery, Gynecology and Obstetrics. Year: 1986	Cohort study comparing open and laparoscopic suspension. Higher level evidence considered for this comparison.
Authors: Hegarty PK;Power PC;O'Brien MF;Bredin HC;. Title: Longevity of the Marshall-Marchetti-Krantz procedure. Journal Name: Annales Chirurgiae et Gynaecologiae. Year: 2001	Although case series has follow-up of ~8 yrs, no data on complications provided which is why case series/ cohort studies were included in the UI guideline.
Authors: Hodzic D;Njavro B;Navratil R;Ralis R;. Title: Comparison of tension-free vaginal tape and Burch colposuspension for surgical treatment of female stress urinary incontinence. Journal Name: Acta Clinica Croatica. Year: 2003	Non-randomised comparison of TVT and Burch colposuspension in 36 women, with 1 yr follow-up. RCT data for this comparison available and as the study does not report complications, excluded.
Authors: Huang WC;Yang JM;. Title: Anatomic comparison between laparoscopic and open Burch colposuspension for primary stress urinary incontinence. Journal Name: Urology. Year: 2004 Apr	Review of 157 cases who underwent laparoscopic vs. open Burch colposuspension, with 1-yr follow-up. We considered RCT evidence for this comparison.
Authors: Jongen VH;Brouwer WK;. Title: Comparison of the modified Pereyra procedure using permanent suture material and Burch urethropexy. Journal Name: European Journal of Obstetrics, Gynecology, and Reproductive Biology. Year: 1999 May	Cohort comparing Pereyra and Burch; only data on cure or failure; and immediate post-operative complications. No longer-term data on complications therefore excluded.
Authors: Kulseng-Hanssen S;Berild GH;. Title: Subjective and objective incontinence 5 to 10 years after Burch colposuspension.[see comment]. Journal Name: Neurourology and Urodynamics. Year: 2002	Study has up to 10 yrs follow-up but no safety data presented
Authors: Lavin JM;Lewis CJ;Foote AJ;Hosker GL;Smith ARB;. Title: Laparoscopic Burch colposuspension: A minimum of 2 years' follow up and comparison with open colposuspension. Journal Name: Gynaecological Endoscopy. Year: 1998	Retrospective review of 1st 139 cases of laparoscopic colposuspension at 1 centre compared with most recent 52 cases of open Burch; 2 yrs follow-up. RCTs considered for the comparison.
Authors: Lyons TL;Winer WK;. Title: Clinical outcomes with laparoscopic approaches and open Burch procedures for urinary stress incontinence. Journal Name: Journal of the American Association of Gynecologic Laparoscopists. Year: 1995	Non-randomised comparison of open Burch, laparoscopic colposuspension with sutures or with suture and staples, with 1-year follow-up (n=30). Higher evidence level for this comparison considered.

Bibliographic Information	Reason for rejecting study
Authors: Marinkovic S;Mian H;Evankovich M;Poplawsky D;Novi J;Frey C;Yap W;. Title: Analysis of early outcome: Burch procedure versus pubovaginal sling. Journal Name: International Urogynecology Journal. Year: 1998	Non-randomised comparison of Burch and pubovaginal sling in women with type 3 SUI. There were major differences in baseline characteristics of patients in both groups.
Authors: McDougall EM;Klutke CG;Cornell T;. Title: Comparison of transvaginal versus laparoscopic bladder neck suspension for stress urinary incontinence. Journal Name: Urology. Year: 1995	Retrospective comparison of Raz vs. 1 of 3 laparoscopic procedures (MMK, Burch, Richardson) in 42 pts with 1 yr follow-up. Higher level of evidence considered.
Authors: McDougall EM;Heidorn CA;Portis AJ;Klutke CG;. Title: Laparoscopic bladder neck suspension fails the test of time. Journal Name: Journal of Urology. Year: 1999	Cohort of lap colpo vs. transvaginal colpo in 100 pts with ~4 yrs follow-up. Follow-up not long enough to meet empirical inclusion criteria for case series or cohort studies of suspension procedures.
Authors: McLennan MT;Bent AE;. Title: Fascia lata suburethral sling vs. Burch retropubic urethropexy. A comparison of morbidity. Journal Name: Journal of Reproductive Medicine. Year: 1998 Jun	Cohort study only reporting peri-, immediate post-op and delayed post-op complications with fascia lata sling vs. Burch colposuspension. Mean follow-up only 12-13 months.
Authors: Miannay E;Cosson M;Lanvin D;Querleu D;Crepin G;. Title: Comparison of open retropubic and laparoscopic colposuspension for treatment of stress urinary incontinence. Journal Name: European Journal of Obstetrics, Gynecology, and Reproductive Biology. Year: 1998	Case-control study comparing laparoscopic vs. open Burch colposuspension. Higher level evidence (RCTs) of this comparison included.
Authors: Milani R;Scalambrino S;Quadri G;. Title: Marshall-Marchetti-Krantz procedure and Burch colposuspension in the surgical treatment of female urinary incontinence. Journal Name: British Journal of Obstetrics and Gynaecology. Year: 1985	Retrospective review of Burch and MMK procedures in a single centre. Higher level of evidence considered for this comparison.
Authors: Penttinen J;Kaar K;Kauppila A;. Title: Colposuspension and transvaginal bladder neck suspension in the treatment of stress incontinence. Journal Name: Gynecologic and Obstetric Investigation. Year: 1989	Non-randomised comparison of Burch and Raz in 48 patients with follow-up of about 1 year. We already have RCTs with longer follow-up for this comparison.
Authors: Polascik TJ;Moore RG;Rosenberg MT;Kavoussi LR;. Title: Comparison of laparoscopic and open retropubic urethropexy for treatment of stress urinary incontinence. Journal Name: Urology. Year: 1995	Non-randomised comparison of laparoscopic and open Burch colposuspension in 17 pts; unclear whether patients 'matched'. We have RCTs of this comparison so studies of lower evidence level not considered.
Authors: Pow-Sang JM;Lockhart JL;Suarez A;. Title: Female urinary incontinence: Preoperative selection, surgical complications and results. Journal Name: Journal of Urology. Year: 1986	Comparison of outcomes of Burch, Stamey, Pereyra from 1 centre. Duration of follow-up different in each group. Higher level evidence considered for comparison of effectiveness of these procedures.
Authors: Saidi MH;Gallagher S;Skop IP;Saidi JA;Sadler RK;Diaz KC;. Title: Extraperitoneal laparoscopic colposuspension: Short-term cure rate, complications, and duration of hospital stay in comparison with Burch colposuspension. Journal Name: Obstetrics and Gynecology. Year: 1998	Retrospective review of laparoscopic vs. open Burch colposuspension, in 157 cases, for mean follow-up ~13-16 months. We have RCTs that have evaluated this comparison therefore excluded studies of lower evidence level.
Authors: Stanton SL;Cardozo LD;. Title: A comparison of vaginal and suprapubic surgery in the correction of incontinence due to urethral sphincter incompetence. Journal Name: British Journal of Urology. Year: 1979	Non-randomised comparison of colposuspension and anterior repair. Higher level evidence considered for this comparison.
Authors: Washington JL;Somers K;. Title: Laparoscopic mesh and staple burch colposuspension. Journal Name: International Urogynecology Journal. Year: 2002	Comparison of laparoscopic colposuspension results with historical open colposuspension results. RCTs of this comparison included therefore studies of lower evidence level excluded.

Needle suspension

Bibliographic Information	Reason for rejecting study
Authors: Bump RC;Hurt WG;Theofrastous JP;Addison WA;Fantl JA;Wyman JF;McClish DK;. Title: Randomized prospective comparison of needle colposuspension versus endopelvic fascia plication for potential stress incontinence prophylaxis in women undergoing vaginal reconstruction for stage III or IV pelvic organ prolapse. The Continence Program for W. Journal Name: American Journal of Obstetrics and Gynecology. Year: 1996 Aug	None of the women included in the study had UI

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Chien GW;Tawadroas M;Kaptein JS;Mourad MS;Tebyani N;Aboseif SR;. Title: Surgical treatment for stress urinary incontinence with urethral hypermobility: what is the best approach?. Journal Name: World Journal of Urology. Year: 2002 Sep	Retrospective comparison of needle suspension, retropubic abdominal suspension, and cadaveric or autologous fascial sling in 189 cases, with mean follow-up of 30 months. Groups different at baseline in % having prior continence surgery, % with urgency.
Authors: Masson DB;Govier FE;Loughlin KR;. Title: Modified Pereyra bladder neck suspension in patients with intrinsic sphincter deficiency and bladder neck hypermobility: Patient satisfaction with a mean follow-up of 4 years. Journal Name: Urology. Year: 2000	Case series of 135 pts with ~4 yrs follow-up. No information given on long-term complications
Authors: Rodrigues NN;Lemos GC;Palma PC;Fiuza JL;. Title: Comparison of the Stamey bladder neck suspension procedure with a modified endoscopic suspension for the treatment of stress urinary incontinence. Journal Name: European Urology. Year: 1988	Cohort study with mean follow-up of 44 months; limited data provided. Study did not meet empirical inclusion criteria for cohort studies or case series of suspension procedures as it had insufficient duration of follow-up.
Authors: Shah PJ;Holder PD;. Title: Comparison of Stamey and Pereyra-Raz bladder neck suspensions. Journal Name: British Journal of Urology. Year: 1989 Nov	Non-randomised comparison of Stamey and Raz procedures in 47 women; follow-up ranging from 2 months to 2.5 years.

Synthetic slings

Bibliographic Information	Reason for rejecting study
Authors: Al-Singary W;Arya M;Patel HR;. Title: Tension-free vaginal tape: avoiding failure. Journal Name: International Journal of Clinical Practice. Year: 2005 May	Inconsistencies in report (case series).
Authors: Ansquer Y;Marcollet A;Yazbeck C;Salomon L;Poncelet C;Thoury A;Dhainaut C;Madelenat P;. Title: The suburethral sling for female stress urinary incontinence: A retropubic or obturator approach?. Journal Name: Journal of the American Association of Gynecologic Laparoscopists. Year: 2004	Cohort study comparing outcomes for retropubic approach to a sling (TVT) vs. obturator approach (using any tape - TVT, IVS, prolene mesh, mersuture mesh, IVS, uratape). As not a direct comparison of one tape vs. another, or of a different method of introducing another, study excluded.
Authors: Bafghi A;Valerio L;Benizri EI;Trastour C;Benizri EJ;Bongain A;. Title: Comparison between monofilament and multifilament polypropylene tapes in urinary incontinence. Journal Name: European Journal of Obstetrics, Gynecology, and Reproductive Biology. Year: 2005 Oct 1	Non-randomised comparison of TVT and IVS; we have higher evidence level for this comparison.
Authors: Barry C;Naidu A;Lim Y;Corsitaans A;Muller R;Rane A;. Title: Does the MONARC transobturator suburethral sling cause post-operative voiding dysfunction? A prospective study. Journal Name: International Urogynecology Journal. Year: 2006	Focuses on voiding parameters (urodynamic measurements 8 wks after a procedure); limited useful data.
Authors: Dietz HP;Foote AJ;Mak HL;Wilson PD;. Title: TVT and Sparc suburethral slings: a case-control series. Journal Name: International Urogynecology Journal. Year: 2004 Mar	Case-control of TVT vs. SPARC. We have RCTs that evaluated this comparison, and only cure, improvement, and satisfaction considered. Additionally, the TVT cases were also included in a longitudinal case series evaluating TVT outcomes.
Authors: Gandhi S;Abramov Y;Kwon C;Beaumont JL;Botros S;Sand PK;Goldberg RP;. Title: TVT versus SPARC: Comparison of outcomes for two midurethral tape procedures. Journal Name: International Urogynecology Journal. Year: 2006	Retrospective review of TVT and SPARC cases; we have higher level of evidence (RCTs) comparing these interventions.
Authors: Glavind K;Sander P;. Title: Erosion, defective healing and extrusion after tension-free urethropexy for the treatment of stress urinary incontinence. Journal Name: International Urogynecology Journal. Year: 2004	Described as a case-control study but is not; the details of women across 2 centres who had tape erosion, defective healing, or tape extrusion after TVT or IVS insertion were reported. No other details (success, or other complications) given.
Authors: Persson J;Iosif C;Wolner-Hanssen P;. Title: Risk factors for rejection of synthetic suburethral slings for stress urinary incontinence: A case-control study. Journal Name: Obstetrics and Gynecology. Year: 2002	Review of 386 cases who had PTFE (goretex) or polyethylene (Mersilene) sling procedure, focusing on rejection, and how the rate of this reduced from 1991 to 1998 with the introduction of different practices (antibiotic prophylaxis, using a second vaginal wash). Series reflects factors affecting rejection rather than outcomes of procedures per se.
Authors: Ulmsten U;Petros P;. Title: Intravaginal slingplasty (IVS): An ambulatory surgical procedure for treatment of female urinary incontinence. Journal Name: Scandinavian Journal of Urology and Nephrology. Year: 1995	Series of women who underwent a sling procedure with one of 4 materials, rather than a report of outcomes following insertion of a single product.

Bibliographic Information	Reason for rejecting study
Authors: Ulmsten U;. Title: The basic understanding and clinical results of tension-free vaginal tape for stress urinary incontinence. Journal Name: Urologe (Ausg. Year: 2001 Jul	Description of TVT technique and narrative of outcomes from published literature. Background information only.
Authors: Wang AC;Chen MC;. Title: The correlation between preoperative voiding mechanism and surgical outcome of the tension-free vaginal tape procedure, with reference to quality of life. Journal Name: BJU International. Year: 2003 Apr	Study compares continence and QOL outcomes in women with or without dysfunctional voiding (defined as having both max flow rate of 12 or less, and detrusor pressure at max flow rate of 20 or more). Does not fully address whether pre-op finding predict outcomes. Also some inconsistency in pt numbers reported (79 or 97), probably an error.
Authors: Wang AC;Lee L;Lin C;Chen J;. Title: A histologic and immunohistochemical analysis of defective vaginal healing after continence taping procedures: A prospective case-controlled pilot study. Journal Name: American Journal of Obstetrics and Gynecology. Year: 2004	Study investigates the pathogenesis of vaginal rejection reaction against prosthetic mesh (TVT or SPARC). Does not inform effectiveness of the intervention.
Authors: Wang AC;. Title: The techniques of trocar insertion and intraoperative urethrocystoscopy in tension-free vaginal taping: An experience of 600 cases. Journal Name: Acta Obstetrica et Gynecologica Scandinavica. Year: 2004	Considers identification & management of complications rather than effectiveness of the intervention.
Authors: Liapis A;Bakas P;Christopoulos P;Giner M;Creatas G;. Title: Tension-free vaginal tape for elderly women with stress urinary incontinence. Journal Name: International Journal of Gynecology and Obstetrics. Year: 2006	Suspected duplication of cases from case series by same author, already included.
Authors: Meschia M;Pifarotti P;Buonaguidi A;Gattei U;Spennacchio M;. Title: Tension-free vaginal tape (TVT) for treatment of stress urinary incontinence in women with low-pressure urethra. Journal Name: European Journal of Obstetrics, Gynecology, and Reproductive Biology. Year: 2005 Sep 1	Study considers outcomes of TVT in women with high or low MUCP; the groups are difference in nearly all characteristics at baseline, therefore excluded due to major confounding.
Authors: Morey AF;Medendorp AR;Noller MW;Mora RV;Shandera KC;Foley JP;Rivera LR;Reyna JA;Terry PJ;. Title: Transobturator versus transabdominal mid urethral slings: A multi-institutional comparison of obstructive voiding complications. Journal Name: Journal of Urology. Year: 2006	Study compared pooled data for selected outcomes for retropubic vs. transobturator tape - this was done by us independently in the guideline.

Traditional slings - none

Hysterectomy

Bibliographic Information	Reason for rejecting study
Authors: Altman D;Lopez A;Falconer C;Zetterstrom J;. Title: The impact of hysterectomy on lower urinary tract symptoms. Journal Name: International Urogynecology Journal. Year: 2003	Study evaluates impact of hysterectomy on UI, rather than hysterectomy being used as a treatment for UI.
Authors: Bai SW;Kim BJ;Kim SK;Park KH;. Title: Comparison of outcomes between Burch colposuspension with and without concomitant abdominal hysterectomy. Journal Name: Yonsei Medical Journal. Year: 2004 Aug 31	Study does not consider hysterectomy as a treatment for UI, but whether it impacts the outcomes of colposuspension which is not a question asked by the GDG.
Authors: Kayano CE;Sartori MGF;Baracat EC;Rodrigues De LG;Gira~o MJBC;. Title: Vaginal hysterectomy allied with Kelly-Kennedy surgery and perineal repair for the treatment of patients with a prolapsed uterus and urinary stress incontinence. Journal Name: Clinical and Experimental Obstetrics and Gynecology. Year: 2002	Study evaluates hysterectomy in combination with other procedures, rather than on its own, for the treatment of prolapse and UI.
Authors: Kjerulff KH;Langenberg PW;Greenaway L;Uman J;Harvey LA;. Title: Urinary incontinence and hysterectomy in a large prospective cohort study in American women. Journal Name: Journal of Urology. Year: 2002	Study evaluates impact of hysterectomy on UI, rather than hysterectomy being used as a treatment for UI.
Authors: Langer R;Ron-El R;Neuman M;Herman A;Bukovsky I;Caspi E;. Title: The value of simultaneous hysterectomy during burch colposuspension for urinary stress incontinence. Journal Name: Obstetrics and Gynecology. Year: 1988	Study does not evaluate hysterectomy as a treatment for UI, but considers whether it impacts cure rates when used in combination with colposuspension, which was not the question asked by the GDG.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
Authors: Long CY;Jang MY;Chen SC;Chen YH;Su JH;Hsu SC;. Title: Changes in vesicourethral function following laparoscopic hysterectomy versus abdominal hysterectomy. Journal Name: Australian and New Zealand Journal of Obstetrics and Gynaecology. Year: 2002	Study evaluates impact of hysterectomy on UI, rather than hysterectomy being used as a treatment for UI.
Authors: Vervest HA;Kiewiet de JM;Vervest TM;Barents JW;Haspels AA;. Title: Micturition symptoms and urinary incontinence after non-radical hysterectomy. Journal Name: Acta Obstetricia et Gynecologica Scandinavica. Year: 1988	Study evaluates impact of hysterectomy on UI, rather than hysterectomy being used as a treatment for UI.

Competence

Bibliographic Information	Reason for rejecting study
Authors: . Title: Training guidelines for the use of botulinum toxin for the treatment of neurologic disorders. Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Journal Name: Neurology. Year: 1994 Dec	Too specific for competence section, and also specific to population with neurologic dysfunction.
Authors: Beard JD;Jolly BC;Southgate LJ;Newble DI;Thomas EG;Rochester J;. Title: Developing assessments of surgical skills for the GMC Performance Procedures. Journal Name: Annals of the Royal College of Surgeons of England. Year: 2005	Pilot study investigating how surgeons perform on simulators. Not directly relevant to competence section of guideline. Too specific for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.
Authors: Berger DH;Ko CY;Spain DA;. Title: Society of University Surgeons position statement on the volume-outcome relationship for surgical procedures. Journal Name: Surgery. Year: 2003 Jul	Background information.
Authors: Birkmeyer JD;Siewers AE;Finlayson EV;Stukel TA;Lucas FL;Batista I;Welch HG;Wennberg DE;. Title: Hospital volume and surgical mortality in the United States.. Journal Name: New England Journal of Medicine. Year: 2002 Apr 11	Specific to cardiovascular and cancer-related procedures.
Authors: Birkmeyer JD;Stukel TA;Siewers AE;Goodney PP;Wennberg DE;Lucas FL;. Title: Surgeon volume and operative mortality in the United States.. Journal Name: New England Journal of Medicine. Year: 2003 Nov 27	Systematic review of volume-outcome studies included therefore individual studies excluded.
Authors: Christian CK;Gustafson ML;Betensky RA;Daley J;Zinner MJ;. Title: The volume-outcome relationship: don't believe everything you see.. Journal Name: World Journal of Surgery. Year: 2005 Oct	Background information.
Authors: Cundiff GW;. Title: Analysis of the effectiveness of an endoscopy education program in improving residents' laparoscopic skills. Journal Name: Obstetrics and Gynecology. Year: 1997 Nov	Not relevant to UI competence section as addressed within the guideline.
Authors: Cundiff GW;. Title: Graduate education. Analysis of the effectiveness of an endoscopy education program in improving residents' laparoscopic skills. Journal Name: Obstetrics and Gynecology. Year: 1997	Too specific for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.
Authors: Davies RJ;Hamdorf JM;. Title: Surgical skills training and the role of skills centres. Journal Name: BJU International. Year: 2003 Jan	Specific to Australia.
Authors: Daya S;. Title: Issues in surgical therapy evaluation: Technical skill of the surgeon. Journal Name: Evidence-based Obstetrics and Gynecology. Year: 2003	Discusses how different surgical skills may introduce bias into intervention studies re surgery. Of interest but not relevant to competence section.
Authors: Figert PL;Park AE;Witzke DB;Schwartz RW;. Title: Transfer of training in acquiring laparoscopic skills. Journal Name: Journal of the American College of Surgeons. Year: 2001	Too specific for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.
Authors: Goff BA;Nielsen PE;Lentz GM;Chow GE;Chalmers RW;Fenner D;Mandel LS;. Title: Surgical skills assessment: A blinded examination of obstetrics and gynecology residents. Journal Name: American Journal of Obstetrics and Gynecology. Year: 2002	Too specific for UI guideline section on competence; we did not consider acquisition of specific surgical skills.
Authors: Gupta R;Guillonneau B;Cathelineau X;Baumert H;Vallencien G;. Title: In vitro training program to improve ambidextrous skill and reduce physical fatigue during laparoscopic surgery: preliminary experience. Journal Name: Journal of Endourology. Year: 2003 Jun	Too specific for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.
Authors: Khuri SF;Henderson WG;. Title: The case against volume as a measure of quality of surgical care. Journal Name: World Journal of Surgery. Year: 2005	Background information.

Urinary incontinence

Bibliographic Information	Reason for rejecting study
<p>Authors: Panageas KS;Schrag D;Riedel E;Bach PB;Begg CB;. Title: The effect of clustering of outcomes on the association of procedure volume and surgical outcomes.. Journal Name: Annals of Internal Medicine. Year: 2003 Oct 21</p>	<p>Background information.</p>
<p>Authors: See WA;Fisher RJ;Winfield HN;Donovan JF;. Title: Laparoscopic surgical training: Effectiveness and impact on urological surgical practice patterns. Journal Name: Journal of Urology. Year: 1993</p>	<p>Too specific for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.</p>
<p>Authors: Shalhav AL;Dabagia MD;Wagner TT;Koch MO;Lingeman JE;. Title: Training postgraduate urologists in laparoscopic surgery: The current challenge. Journal Name: Journal of Urology. Year: 2002</p>	<p>Too specific to USA for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.</p>
<p>Authors: Siddiqui J;Tuffnell D;. Title: Minimising risk in gynaecological surgery. Journal Name: Reviews in Gynaecological Practice. Year: 2005</p>	<p>Discusses risk management in general terms.</p>
<p>Authors: Singh R;O'Brien TS;. Title: The relationship between volume and outcome in urological surgery.. Journal Name: BJU International. Year: 2004 May</p>	<p>Narrative review re volume-outcome, but not in relation to UI.</p>
<p>Authors: Traxer O;Gettman MT;Napper CA;Scott DJ;Jones DB;Roehrborn CG;Pearle MS;Cadeddu JA;. Title: The impact of intense laparoscopic skills training on the operative performance of urology residents. Journal Name: Journal of Urology. Year: 2001</p>	<p>Too specific for UI guideline section on competence; we did not consider how to acquire specific surgical skills, nor did we consider different methods of assessing them.</p>