National Institute for Health and Care Excellence

Final

Urinary incontinence and pelvic organ prolapse in women: management

[F] Evidence review for effectiveness of multidisciplinary teams for the assessment and management of urinary incontinence or pelvic organ prolapse

NICE guideline NG123

Evidence reviews

April 2019

Final

These evidence reviews were developed by The National Guideline Alliance hosted by the Royal College of Obstetricians and Gynaecologists

Disclaimer

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

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Contents

Effectiveness of multidisciplinary teams for the assessment and management of urinary incontinence or pelvic organ prolapse

Review question

What is the effectiveness of multidisciplinary teams (MDTs) of various compositions for the assessment and management of simple and complex cases of urinary incontinence (UI) or pelvic organ prolapse (POP), including mesh complications?

Introduction

At present, there is no evidence in the literature regarding the use of MDTs in urogynaecology (Balachandran & Duckett 2015). UI and POP are often complex and can co-exist in a considerable proportion of women. In addition, the surgical management of UI or POP can lead to complex complications including mesh complications. Therefore, women with these problems may benefit from a MDT assessment and management approach.

This review will examine the effectiveness of multidisciplinary teams for the assessment and management of simple and complex cases of urinary incontinence (UI) or pelvic organ prolapse (POP), including mesh complications.

Summary of the protocol

Please see Table 1 for a summary of the Population, Intervention, Comparison and Outcome (PICO) characteristics of this review.

Table 1: Summary of the protocol (PICO table)

Population	Women 18 years of age and older who are receiving care for UI or POP, including mesh complications
Intervention	Care provided through MDTs of various composition and various access routes, including (but not limited to) a urogynaecologist, a urologist with a sub-specialist interest in female urology, a specialist nurse, a specialist physiotherapist, a colorectal surgeon with a sub-specialist interest in functional bowel problems, for women with coexisting bowel problems, a member of the care of the elderly team and/or occupational therapist, for women with functional impairment.
Comparisons	MDTs of various composition, and access (local vs. regional) to these MDTs
Outcomes	**Critical** • Change in management decisions • Health-related quality of life (specific to UI or POP) **Important** • Patient satisfaction

MDTs: Multidisciplinary Teams; POP: Pelvic Organ Prolapse; UI: Urinary Incontinence

For further details see the review protocol in appendix A.

Methods and process

This evidence review was developed using the methods and process described in Developing NICE guidelines: the manual 2014. Methods specific to this review question are described in the review protocol in appendix A and for a full description of the methods see supplementary material C.

Declarations of interest were recorded according to NICE's 2014 conflicts of interest policy until 31 March 2018. From 1 April 2018, declarations of interest were recorded according to NICE's 2018 conflicts of interest policy. Those interests declared until April 2018 were reclassified according to NICE's 2018 conflicts of interest policy (see Register of Interests).

Clinical evidence

Included studies

A systematic review of the clinical literature was conducted but no studies were found which were applicable to this review question.

See the literature search strategy in appendix B and the study selection flow chart in appendix C.

Excluded studies

Studies not included in this review with reasons for their exclusions are provided in appendix K.

Summary of clinical studies included in the evidence review

No studies were found which were applicable to this review question.

Quality assessment of clinical studies included in the evidence review

No studies were found which were applicable to this review question.

Economic evidence

Included studies

A systematic review of the economic literature was conducted but no studies were identified which were applicable to this review question. See supplementary material D for further information.

Excluded studies

No studies were found which were applicable to this review question.

Summary of studies included in the economic evidence review

No economic evaluations were identified which were applicable to this review question.

Economic model

No economic modelling was undertaken for this review because the committee expected that there would be no clinical evidence to inform an economic evaluation and also agreed that other topics were higher priorities.

Clinical evidence statements

No studies were found which were applicable to this review question.

Economic evidence statements

No studies were found which were applicable to this review question.

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

The Committee decided that 'change in management decisions' and 'health-related quality of life' (specific to urinary incontinence or pelvic organ prolapse) were critical outcomes. Patient satisfaction was considered an important outcome.

The quality of the evidence

No clinical evidence on effectiveness of multidisciplinary teams for the assessment and management of urinary incontinence or pelvic organ prolapse, including mesh complications was found for this review.

Benefits and harms

In the absence of evidence the committee made all recommendations relevant to this evidence review based on their expertise and experience and by consensus. They agreed that it was important to make these recommendations because women with UI often have complex coexisting conditions such as POP and bowel symptoms, and therefore may benefit from a MDT assessment and management approach. In addition, women with mesh complications after UI and/or POP surgery using mesh may present with a variety of symptoms and management of these women may be complex. The decision on how to treat these women requires a team of expert health professionals within a region to ensure that all suitable options have been considered and offered.

The committee discussed the importance of outlining what an MDT is and setting out the composition of the various MDT teams. There is currently no definition of what comprises an effective MDT for the assessment and management of simple and complex cases of UI or POP, including mesh complications. Also there is currently no evidence to suggest when simple and/or complex UI or POP cases, including mesh complications, should be referred to an MDT. The committee decided that women with these complex conditions require more specialised care and input from a wider specialist team and they also agreed the different levels of MDT involvement. The committee agreed on two levels of MDT:

- Local (for women with primary SUI, OAB or primary prolapse);
- Regional (for women with recurrent UI and/or POP surgery, for those who require surgery that is not available locally or for those with complex pelvic floor dysfunction and mesh related problems).

The committee noted that some interventions may be offered for UI and/or POP which are not available locally. If local MDTs work within a regional clinical network with a regional MDT, women can be referred elsewhere in that network for treatment. Women with mesh complications may benefit from a MDT approach to future care planning.

The committee noted that it might be difficult to state exactly who should be in an MDT, as this will not only depend on the condition (UI or POP) but also on the resources available at local and regional levels. The committee wanted to be clear that more than one consultant

with expertise in the management of urinary incontinence and pelvic organ prolapse are needed to ensure that full discussion of care takes place. The committee wish to remove the risk of one individual making decisions without full consideration from other specialists with similar knowledge. The committee also agreed that Occupational therapists would not be needed as core members of the MTDT. Pelvic floor physiotherapy is directly involved in primary treatment of urinary incontinence and prolapse, and occupational therapists are there to advise on patients with co-morbidities who may have other considerations to take into account. As there are fewer women in this latter group, an occupational therapists would not be needed as a core member of the MDT.

The committee agreed that the recommendation on local MDT composition reflects the current arrangements throughout England and Wales because different trusts have different availability of MDT members.. They also noted that there may be circumstances in which continence services are provided by urologists rather than urogynaecologists and therefore the local MDT needs to reflect local arrangements. They agreed that all members of the local MDT should attend all local MDT meetings. They agreed that the regional teams are more likely to include more specialist members. The specific composition of the regional MDT meetings may vary depending on required expertise and case mix and therefore, and the committee noted that for regional MDTs members should attend when their specific expertise is needed.

When drafting the recommendations for this guideline, the committee highlighted the potential overlap with the recommendations in the commissioning review (NHS England's Complex Gynaecology Specialised Commissioning Team - https://www.engage.england.nhs.uk/consultation/gynaecology-surgery-and-complex-urogynecology/). The committee agreed that at a minimum, these two levels of MDT (local and regional) are required; however, the committee discussed the possibility of three levels of care, with a third level specialising in the care for women with complex pelvic floor dysfunction and mesh related complications (Supra regional). The committee are aware of the current NHS England consultation on specialised gynaecology surgery and complex urogynaecology conditions service specifications, which was launched in August 2018, and runs until November 2018. The committee are clear that women with complex pelvic floor dysfunction and mesh related complications require expert clinical teams at specialist centres, but the final distribution and definition of these centres may change after this NHS consultation period.

Cost effectiveness and resource use

There was no evidence on the cost effectiveness of multidisciplinary teams for the assessment and management of urinary incontinence or pelvic organ prolapse, including mesh complications.

The committee thought that women with mesh complications appear to be badly served by the current service configuration and that delays and inappropriate treatment may make symptoms that may need expensive secondary care management worse. The committee expressed the view that, in principle, if specialist mesh service MDTs improve their assessment and monitoring and this leads to the timely identification and appropriate treatment of mesh complications, then the additional costs associated with such a service configuration would probably be outweighed by the longer term improvements in health outcomes and the potential future cost savings to the healthcare system,.

The committee also noted that increasingly women cannot obtain care they want locally. For example, women who do not want the procedure they are offered locally (e.g. TVT), may need to be referred to another centre where they can have procedure they would prefer.

The committee discussed the benefits of different compositions of MDT services and agreed that having a tiered approach to MDTs (i.e. local, and regional, service MDTs) may result in substantial savings to the NHS. For example, the MDT would not require every single

specialist (e.g. pain specialist, colorectal surgeon or neurologist) for every with prolapse being discussed. By more closely defining the composition of the various MDTs (e.g. only regional MDTs would need to include pain specialists) scarce and expensive consultant time might be freed up. Given the large number of procedures undertaken, such a tiered approach could result in a significant overall cost saving to the NHS.

Other factors the committee took into account

The committee discussed the implications of these recommendations on resources and job planning. The committee noted the current lack of resources for MDT reviews which may limit implementation of these recommendations.

The committee also noted that the new recommendations should make it easier for MDTs to meet regularly.

References

Balachandran 2015

Balachandran A, Duckett J. What is the role of the multidisciplinary team in the management of urinary incontinence? Int Urogynecol J. 26, 791-3 2015

Appendices

Appendix A – Review protocols

Review protocol for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

Table 2: Review protocol for effectiveness of MDTs for assessment and management of UI or POP, including mesh complications

Field (based on PRISMA-P	Content
Review question	**Scope question** What is the most effective way of coordinating services, for example for managing complications associated with mesh surgery? **Amended question GC1** What is the effectiveness of multidisciplinary teams (MDTs) of various compositions for the assessment and management of simple and complex cases of urinary incontinence (UI) or pelvic organ prolapse (POP), including mesh complications?
Type of review question	Intervention
Objective of the review	The aim of this review is to assess if discussion within an MDT improves outcomes for women with simple and complex cases of UI or POP, as well as for women with mesh complications. In addition, this review will assess if discussion within an MDT alters surgical decision making. The evidence for this systematic review question will be interpreted in the context of the final NHSE Mesh Oversight Group Report. According to the recommendations made in this report, the "… national specialised commissioning team will develop, consult on, and publish a service specification for the centres providing an experienced team for mesh removal. This will include advice on referral, multidisciplinary assessment to consider mesh removal, and surgery by expert teams. There will be a procurement of a limited number of centres providing the balance between geographical access and maximising centre activity to rapidly build expertise. These centres will be linked by a national network to report their treatment outcomes. NHS England's Complex Gynaecology Specialised Commissioning Team is also revising the service specifications of nationally commissioned services for complex gynaecology. These will ensure that NHS England commissions only those services able to demonstrate they meet the defined treatment and quality requirements. As experience develops in the

Field (based on PRISMA-P	Content
	specialised centres for mesh removal, as defined above, and evidence of treatment outcomes are reported, the commissioning team will consider the formation of national clinical policy supporting the pathway of care."
Eligibility criteria – population/disease/condition/issue/domain	Women 18 years of age and older who are receiving care for UI or POP, including mesh complications.
Eligibility criteria – intervention(s)/exposure(s)/prognostic factor(s)	Care provided through MDTs of various composition and various access routes, including (but not limited to) a urogynaecologist, a urologist with a sub-specialist interest in female urology, a specialist nurse, a specialist physiotherapist, a colorectal surgeon with a sub-specialist interest in functional bowel problems, for women with coexisting bowel problems, a member of the care of the elderly team and/or occupational therapist, for women with functional impairment.
Eligibility criteria – comparator(s)/control or reference (gold) standard	MDTs of various composition, and access (local vs regional) to these MDTs
Outcomes and prioritisation	**Critical outcomes** Change in management decisions Health-related quality of life (specific to UI or POP) **Important outcomes** Patient satisfaction
Eligibility criteria – study design	Systematic reviews of RCTs RCTs Conference abstracts of RCTs will be considered in the absence of full-text evidence. Comparative cohort studies, controlled before-and-after or interrupted time series (only if RCTs unavailable or limited data to inform decision making)
Other inclusion exclusion criteria	**Inclusion:** English language **Exclusion:** None No sample size restriction for RCT

Field (based on PRISMA-P	Content
Proposed sensitivity/sub-group analysis, or meta-regression	**Population subgroups:** Complex cases versus simple cases UI vs POP **Complex cases to include:** Women with severe or chronic pain Women with mesh complications Women with recurrent UI or POP
Selection process – duplicate screening/selection/analysis	Duplicate screening will be performed using STAR - minimum sample size is 10% of the total for <1000 titles and abstracts, and 5% of the total for ≥1000 titles and abstracts. All discrepancies are discussed and resolved between 2 screeners. Any disputes will be resolved in discussion with the Senior Systematic Reviewer. Data extraction will be supervised by a senior reviewer. Draft excluded studies and evidence tables will be discussed with the Topic Advisor, prior to circulation to the Topic Group for their comments. Resolution of disputes will be by discussion between the senior reviewer, Topic Advisor and Chair.
Data management (software)	Where data is available, pair-wise meta-analysis using a fixed effects model, will be used to combine results from similar studies, this will be performed using Cochrane Review Manager (RevMan5). Heterogeneity will be considered, and if a random-effects model is considered more appropriate, it will be conducted. **Quality Assessment** Appraisal of methodological quality will be conducted using the appropriate tool: • ROBIS (systematic reviews and meta-analyses), • Cochrane risk of bias tool (RCTs or comparative cohort studies). • Cochrane risk of bias tool (Non-randomised studies) The quality of evidence for each outcome will be assessed using GRADEpro:

Field (based on PRISMA-P	Content
	Outcomes will be downgraded if the randomisation and/or concealment methods are unclear or inadequate. Outcomes will also be downgraded if there is considerable missing data (if there is a dropout of more than 20%, or if there is a difference of >20% between groups. Heterogeneity will be assessed using the I^2, outcomes will be downgraded once if I^2 >50%, twice if I^2 >80%.
Information sources – databases and dates	Sources to be searched: Medline, Medline In-Process, CCTR, CDSR, DARE, HTA, Embase. Limits (e.g. date, study design): All study designs. Apply standard animal/non-English language filters. Supplementary search techniques: No supplementary search techniques were used. For details please see appendix B. No date restriction will be set.
Identify if an update	Recommendations from previous guideline: 1.8.1 Inform any woman wishing to consider surgical treatment for UI about: the benefits and risks of surgical and non-surgical options their provisional treatment plan. Include consideration of the woman's child-bearing wishes in the counselling. [2006, amended 2013] 1.8.2 Offer invasive therapy for OAB and/or SUI symptoms only after an MDT review. [new 2013] 1.8.3 When recommending optimal management the MDT should take into account: the woman's preference past management

Field (based on PRISMA-P	Content
	comorbidities treatment options (including further conservative management such as OAB drug therapy). [new 2013] 1.8.4 The MDT for urinary incontinence should include: a urogynaecologist a urologist with a sub-specialist interest in female urology a specialist nurse a specialist physiotherapist a colorectal surgeon with a sub-specialist interest in functional bowel problems, for women with coexisting bowel problems a member of the care of the elderly team and/or occupational therapist, for women with functional impairment. [new 2013] 1.8.5 Inform the woman of the outcome of the MDT review if it alters the provisional treatment plan. [new 2013] 1.8.6 All MDTs should work within an established regional clinical network to ensure all women are offered the appropriate treatment options and high quality care. [new 2013]
Author contacts	Developer: The National Guideline Alliance https://www.nice.org.uk/guidance/indevelopment/gid-ng10035
Highlight if amendment to previous protocol	For details please see section 4.5 of Developing NICE guidelines: the manual 2014
Search strategy – for one database	For details please see appendix B.
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables).
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables) or H (economic evidence tables).
Methods for assessing bias at outcome/study level	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual 2014.

Field (based on PRISMA-P	Content
	The risk of bias across all available evidence was evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group http://www.gradeworkinggroup.org/
Criteria for quantitative synthesis (where suitable)	For details please see section 6.4 of Developing NICE guidelines: the manual 2014.
Methods for analysis – combining studies and exploring (in)consistency	For details of the methods please see supplementary material C.
Meta-bias assessment – publication bias, selective reporting bias	For details please see section 6.2 of Developing NICE guidelines: the manual 2014.
Assessment of confidence in cumulative evidence	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual 2014.
Rationale/context – Current management	For details please see the introduction to the evidence review.
Describe contributions of authors and guarantor	A multidisciplinary committee [add link to history page of the guideline] developed the guideline. The committee was convened by the National Guideline Alliance and chaired by Dr Fergus Macbeth in line with section 3 of Developing NICE guidelines: the manual 2014. Staff from the National Guideline Alliance undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost-effectiveness analysis where appropriate, and drafted the guideline in collaboration with the committee. For details of the methods please see supplementary material C.
Sources of funding/support	The National Guideline Alliance is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Name of sponsor	The National Guideline Alliance is funded by NICE and hosted by The Royal College of Obstetricians and Gynaecologists.
Roles of sponsor	NICE funds The National Guideline Alliance to develop guidelines for those working in the NHS, public health, and social care in England.
PROSPERO registration number	Not registered with PROSPERO.

Appendix B – Literature search strategies

Literature search strategies for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

Database: Medline & Embase (Multifile)
Last searched on Embase Classic+Embase 1947 to 2017 July 19, Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present.

Date of last search: 20th July 2017.

#	Searches
1	exp Pelvic Organ Prolapse/ use ppez
2	exp pelvic organ prolapse/ use emczd
3	(pelvic$ adj3 organ$ adj3 prolaps$).tw.
4	(urinary adj3 bladder adj3 prolaps$).tw.
5	((vagin$ or urogenital$ or genit$ or uter$ or viscer$ or anterior$ or posterior$ or apical or pelvi$ or vault$ or urethr$ or bladder$) adj3 prolaps$).tw.
6	Urinary Incontinence/ use ppez
7	urine incontinence/ use emczd
8	Urinary Incontinence, Urge/ use ppez
9	urge incontinence/ use emczd
10	Urinary Incontinence, Stress/ use ppez
11	stress incontinence/ use emczd
12	mixed incontinence/ use emczd
13	((mix$ or urg$ or urin$ or stress$) adj5 incontinen$).tw.
14	Patient Care Team/ use ppez
15	*patient care/ use emczd
16	"multidisciplinary team care"/ use emczd
17	(((patient$ or medical or health) adj1 care team) or healthcare team).tw.
18	((multiprofess$ or multi-profess$ or interprofess$ or inter-profess$ or transprofess$ or trans-profess$ or multidisciplin$ or multi-disciplin$ or interdisciplin$ or inter-disciplin$ or transdisciplin$ or trans-disciplin$ or crossdisciplin$ or cross-disciplin$) adj5 (clinic$ or center$ or centre$ or service$ or team$ or group$ or staff$ or care or therap$ or management or approach$ or treat$ or panel$ or program$ or system$ or setting$ or unit)).tw.
19	MDT$1.tw.
20	((integrat$ or network$ or accredit$) adj3 (clinic? or center? or centre? or service? or team? or group? or staff$ or care or therap$ or management or approach$ or treat$ or panel? or program$ or system? or setting$ or unit)).tw.
21	(speciali$ adj5 (clinic? or center? or centre? or service? or team? or group? or staff$ or care or therap$ or management or approach$ or treat$ or panel? or program$ or system? or setting$ or unit)).tw.
22	((cent$ or network$) adj2 (excellence or expert$)).tw.
23	((urogyn?ecolog$ or uro-gyn?ecolog$ or continence) adj3 (clinic? or center? or centre? or service? or team?)).tw.
24	(speciali$ adj3 (continence or nurs$ or physio$ or OT or occupation$ or therap$ or surgeon$ or surgical or urogyn?ecolog$ or uro-gyn?ecolog$ or urolog$ or doctor$)).tw.
25	management plan$.tw.
26	(teamwork$ or team-work$ or team work$).tw.
27	(refer$ adj3 (pattern$ or pathway$)).tw.
28	(caseload or case-load).tw.
29	Interdisciplinary Communication/ use ppez
30	interdisciplinary communication/ use emczd
31	((multiprofess$ or multi-profess$ or interprofess$ or inter-profess$ or transprofess$ or trans-profess$ or multidisciplin$ or multi-disciplin$ or interdisciplin$ or inter-disciplin$ or transdisciplin$ or trans-disciplin$ or crossdisciplin$ or cross-disciplin$) adj3 (communic$ or network? or collaborat$ or relation$)).tw.
32	(network meeting? or network communicat$).tw.
33	or/1-13
34	or/14-32
35	33 and 34
36	remove duplicates from 35
37	limit 36 to english language

Database: Cochrane Library via Wiley Online

Date of last search: 20th July 2017.

ID	Search
#1	MeSH descriptor: [Pelvic Organ Prolapse] explode all trees
#2	(pelvic* near/3 organ* near/3 prolaps*):ti,ab,kw (Word variations have been searched)
#3	(urinary near/3 bladder near/3 prolaps*):ti,ab,kw (Word variations have been searched)

ID	Search
#4	((vagin* or urogenital* or genit* or uter* or viscer* or anterior* or posterior* or apical or pelvi* or vault* or urethr* or bladder*) near/3 prolaps*):ti,ab,kw (Word variations have been searched)
#5	MeSH descriptor: [Urinary Incontinence] explode all trees
#6	MeSH descriptor: [Urinary Incontinence, Urge] explode all trees
#7	MeSH descriptor: [Urinary Incontinence, Stress] explode all trees
#8	((mix* or urg* or urin* or stress*) near/5 incontinen*):ti,ab,kw (Word variations have been searched)
#9	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8
#10	MeSH descriptor: [Patient Care Team] explode all trees
#11	(((patient* or medical or health) near/1 care team) or healthcare team):ti,ab,kw (Word variations have been searched)
#12	((multiprofess* or multi-profess* or interprofess* or inter-profess* or transprofess* or trans-profess* or multidisciplin* or multi-disciplin* or interdisciplin* or inter-disciplin* or transdisciplin* or trans-disciplin* or crossdisciplin* or cross-disciplin*) near/5 (clinic* or center* or centre* or service* or team* or group* or staff* or care or therap* or management or approach* or treat* or panel* or program* or system* or setting* or unit)):ti,ab,kw (Word variations have been searched)
#13	MDT*:ti,ab,kw (Word variations have been searched)
#14	((integrat* or network*) near/3 (clinic* or center* or centre* or service* or team* or group* or staff* or care or therap* or management or approach* or treat* or panel* or program* or system* or setting* or unit)):ti,ab,kw (Word variations have been searched)
#15	(speciali* near/5 (assess* or refer* or consult* or network* or clinic* or center* or centre* or service* or team* or group* or staff* or care or therap* or management or approach* or treat* or panel* or program* or system* or setting* or unit)):ti,ab,kw (Word variations have been searched)
#16	(accredit* near/3 (clinic* or center* or centre* or service* or team* or group* or staff* or care or therap* or management or approach* or treat* or panel* or program* or system* or setting* or unit)):ti,ab,kw (Word variations have been searched)
#17	((cent* or network*) near/2 (excellence or expert*)):ti,ab,kw (Word variations have been searched)
#18	((urogynecolog* or uro-gynecolog* or urogynaecolog* or uro-gynaecolog* or continence) near/3 (cent* or clinic* or service*)):ti,ab,kw (Word variations have been searched)
#19	(speciali* near/3 (continence or nurs* or physio* or OT or occupation* or therap* or surgeon* or surgical or urogynecolog* or uro-gynecolog* or urogynaecolog* or uro-gynaecolog* or urolog* or doctor*)):ti,ab,kw (Word variations have been searched)
#20	MeSH descriptor: [Interdisciplinary Communication] explode all trees
#21	((multiprofess* or interprofess* or transprofess* or multi-profess* or inter-profess* or trans-profess* or integrated) near/3 (communic* or network? or collaborat* or relation*)):ti,ab,kw (Word variations have been searched)
#22	((multidisciplin* or interdisciplin* or transdisciplin* or multi-disciplin* or inter-disciplin* or trans-disciplin*) near/3 (communic* or network? or collaborat* or relation*)):ti,ab,kw (Word variations have been searched)
#23	(network meeting* or network communicat*):ti,ab,kw (Word variations have been searched)
#24	#10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23
#25	#9 and #24
#26	management next plan*:ti,ab,kw (Word variations have been searched)
#27	(teamwork* or team-work* or team work*):ti,ab,kw (Word variations have been searched)
#28	(refer* near/3 (pattern* or pathway*)):ti,ab,kw (Word variations have been searched)
#29	(caseload or case-load):ti,ab,kw (Word variations have been searched)
#30	#26 or #27 or #28 or #29
#31	#9 and #30
#32	#25 or #31

Additional Grey Literature searching

Date of last search: 31st July 2017.

Search terms: MDT terms AND (Urinary Incontinence or Prolapse)

Sources searched: NHS Evidence, Google and the following organisations websites[a]:

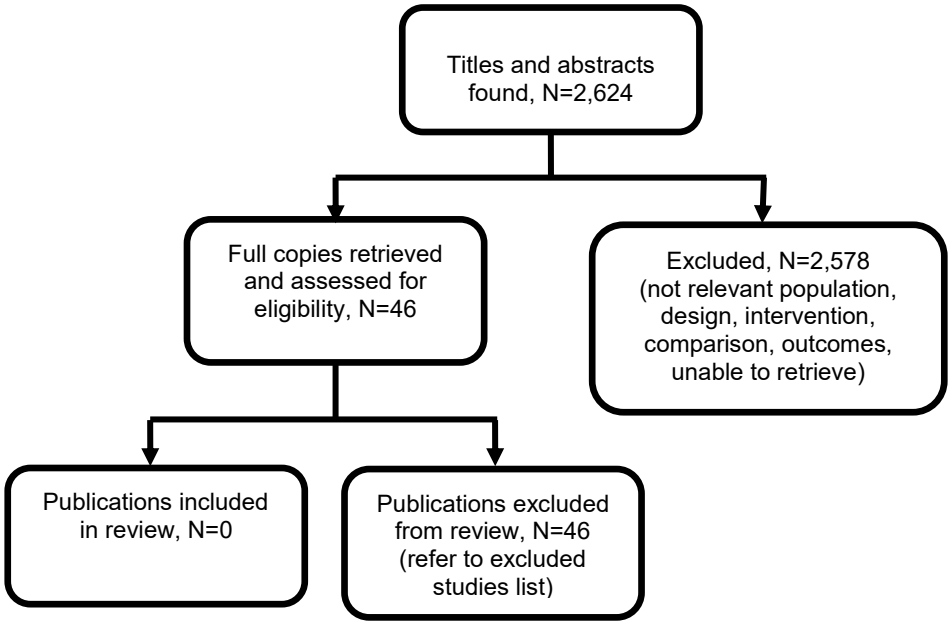
- British Association of Urological Surgeons (BAUS)
- British Association of Urological Nurses (BAUN)
- United Kingdom Continence Society (UKCS)
- British Society of Urogynaecologists (BSUG)
- International Continence Society (ICS) conference abstracts
- International Urogynecological Association (IUGA) conference abstracts

[a] Organisations highlighted in Review Protocol discussion with GC on 18th July 2017.

Appendix C – Clinical evidence study selection

Clinical evidence study selection for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

Figure 1: PRISMA flow chart for effectiveness of MDTs for the assessment and management of UP or POP



Appendix D – Clinical evidence tables

Clinical evidence tables for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

No studies were identified which were applicable to this review question.

Appendix E – Forest plots

Forest plots for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

No studies were identified which were applicable to this review question.

Appendix F – GRADE tables

GRADE tables for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

No studies were identified which were applicable to this review question.

Appendix G – Economic evidence study selection

Economic evidence study selection for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

No economic studies were identified for this review question.

Appendix H – Economic evidence tables

Economic evidence tables for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

No economic studies were identified for this review question.

Appendix I – Economic evidence profiles

Economic evidence profiles for review question: What is the effectiveness of MDTs for the assessment and management of urinary incontinence or pelvic organ prolapse, including mesh complications?

No economic studies were identified for this review question.

Appendix J – Economic analysis

Economic evidence analysis for review question: What is the effectiveness of MDTs for the assessment and management of urinary incontinence or pelvic organ prolapse, including mesh complications?

No economic studies were identified for this review question.

Appendix K – Excluded studies

Excluded studies for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

Clinical studies

Table 3: Excluded studies with reasons for exclusion

Excluded studies	
Study	**Reason for Exclusion**
al Baba, N., Spencer, P., Bower, C., Chiera Lyle, M., Soares, N., Continence management, Perspectives (Gerontological Nursing Association (Canada)), 24, 9-15, 2000	Population not relevant to the protocol
Albers-Heitner, C. P., Lagro-Janssen, A. L. M., Joore, M. A., Berghmans, L. C. M., Nieman, F., Venema, P. L., Severens, J. L., Winkens, R. A. G., Effectiveness of involving a nurse specialist for patients with urinary incontinence in primary care: Results of a pragmatic multicentre randomised controlled trial, International Journal of Clinical Practice, 65, 705-712, 2011	Population not relevant to the protocol
Albers-Heitner, P, Winkens, R, Berghmans, B, Joore, M, Nieman, F, Severens, J, Consumer satisfaction among patients and their general practitioners about involving nurse specialists in primary care for patients with urinary incontinence (Abstract number 382), Proceedings of the 42nd Annual Meeting of the International Continence (ics), 2012 Oct 15 to 19, Beijing, China, 2012	Conference abstract
Albers-Heitner, P., Berghmans, B., Joore, M., Lagro-Janssen, T., Severens, J., Nieman, F., Winkens, R., The effects of involving a nurse practitioner in primary care for adult patients with urinary incontinence: the PromoCon study (Promoting Continence), BMC Health Services Research, 8, 84, 2008	Population not relevant to the protocol
Anders, K., Recent developments in stress urinary incontinence in women.[Reprint of Nurs Stand. 2006 May 10-16;20(35):48-54; PMID: 16722123], Nursing StandardNurs Stand, Suppl, 25-7, 29-32, 2009	Narrative literature review - overview of stress urinary incontinence and its management

Excluded studies	
Anonymous,, Controlling urinary incontinence, Australian family physician, 31, 88-93, 2002	Narrative literature review - overview of bladder and urinary tract management
Attenberger, U. I., Morelli, J. N., Budjan, J., Herold, A., Kienle, P., Kleine, W., Hacker, A., Baumann, C., Heinzelbecker, J., Schoenberg, S. O., Michaely, H. J., The value of dynamic magnetic resonance imaging in interdisciplinary treatment of pelvic floor dysfunction, Abdominal Imaging, 40, 2242-2247, 2015	Descriptive paper - on the clinical benefit of performing dynamic pelvic floor MRI as part of an interdisciplinary approach to the treatment of pelvic floor dysfunction
Balachandran, A., Duckett, J., What is the role of the multidisciplinary team in the management of urinary incontinence?, International Urogynecology Journal and Pelvic Floor Dysfunction, 26, 791-793, 2015	Narrative literature review
Blomkvist, L., Jansson, A., Lindgren, A., Langeen, M., Ahsgren, L., Rentzhog, L., Continence clinic: Follow-up of treatment, Scandinavian Journal of Urology and Nephrology, Supplement, 19-20, 1994	Narrative literature review - on nitric oxide for smooth muscle activity
Borrie, Mj, Bawden, Me, Kartha, As, Kerr, Ps, A nurse/physician continence clinic triage approach for urinary incontinence: a 25 week randomized trial, Neurourology and Urodynamics, 11, 364-365, 1992	Intervention and outcomes not relevant - data on the association of urine temperature and the environmental temperature
Burns, P. A., A nurse led continence service reduced symptoms of incontinence, frequency, urgency, and nocturia, Evidence-Based NursingEvid Based Nurs, 9, 85, 2006	Conference abstract
Castledine, G., Continence nurse specialists: time for recognition, British journal of nursing (Mark Allen Publishing), 3, 576-578, 1994	Opinion paper - on the recognition of standards for education of specialist nursing practitioners
Chan, M. C., Schulz, J. A., Flood, C. G., Rosychuk, R. J., A retrospective review of patients seen in a multidisciplinary pelvic floor clinic, Journal of Obstetrics & Gynaecology Canada: JOGCJ Obstet Gynaecol Can, 32, 35-40, 2010	Population not relevant to the protocol
Charlton, C. A. C., Changing attitudes in the management of urinary-incontinence - the need for specialist nursing, British Medical Journal, 284, 826-826, 1982	Letter to the editor
Clarke, A, Ferguson, K, Craine, S, Promoting and developing a continence service in Highland, J Pelvic Obstet Gynecol Physiother, 74-5., 2015	Descriptive paper - on a continence service in Highland
Colley, W., Developing continence services through partnership, Nursing Times, 98, 63-64, 2002	Discussion paper - on planning the future for continence services and implementing government policies
Colley, W., Continence services in a changing NHS, Nursing Times, 98, 58-59, 2002	Narrative literature review - overview of continence issues in older people

Excluded studies	
Collinson, R., The descending perineum 'comes of age', ANZ Journal of Surgery, 82, 387-388, 2012	Opinion paper - on colorectal pelvic floor practice
Cosin, J. A., Carson, L. F., Multidisciplinary management of urinary pouch complications: a better way, Gynecologic OncologyGynecol Oncol, 69, 183-4, 1998	Opinion paper - on the management of postoperative complications related to the use of the continent ileocolonic urinary diversion
Davila, G. W., Ghoniem, G. M., Pelvic floor dysfunction: The importance of a multidisciplinary approach, Clinics in Colon and Rectal Surgery, 16, 3-4, 2003	Letter to the editor - for colorectal surgeons regarding the team approach to pelvic floor dysfunction
Digesu, G. A., Khullar, V., Candiani, M., Re: Urodynamic Measures Do Not Predict Stress Continence Outcomes After Surgery for Stress Urinary Incontinence in Selected Women. C. W. Nager, M. FitzGerald, S. R. Kraus, T. C. Chai, H. Zyczynski, L. Sirls, G. E. Lemack, L. K. Lloyd, H. J. Litman, A. M. Stoddard, J. Baker and W. Steers for the Urinary Incontinence Treatment Network J Urol 2008; 179: 1470-1474, Journal of Urology, 181, 415-417, 2009	Letter to the editor
Du Moulin, M. F. M. T., Hamers, J. P. H., Paulus, A., Berendsen, C. L., Halfens, R., Effects of introducing a specialized nurse in the care of community-dwelling women suffering from urinary incontinence: A randomized controlled trial, Journal of Wound, Ostomy and Continence Nursing, 34, 631-640, 2007	Population not relevant to the protocol
Du Moulin, M. F. M. T., Hamers, J. P. H., Paulus, A., Berendsen, C., Halfens, R., The role of the nurse in community continence care: A systematic review, International Journal of Nursing Studies, 42, 479-492, 2005	Narrative literature review
Du, Moulin M, Effects of introducing a specialized nurse in the care of community-dwelling women suffering from urinary incontinence (Trials registry number: NTR829), Netherlands Trial Register (http://www.trialregister.nl), 2013	Population not relevant to the protocol
Eustice, S., Continence specialists have the opportunity to inspire services, Nursing Times, 105, 31, 2009	Opinion paper - on the challenges facing continence services
Fiers, S., Siebert, C., Urinary incontinence: a multidisciplinary approach, Ostomy/wound management, 39, 14-17, 1993	Narrative literature review - overview on a multidisciplinary approach for assessment and treatment of urinary incontinence
Gibson, E., Continence. Co-ordinating continence care, Nursing Times, 85, 73-5, 1989	Unable to obtain full text
Gopinath, D., Jha, S., Multidisciplinary team meetings in urogynaecology, International Urogynecology Journal, 26, 1221-7, 2015	Comparison not relevant to the protocol - uncoordinated care

Excluded studies	
Gruenwald, I., Vardi, Y., The Center for Continence: A different concept for an old problem [1], Journal of the American Geriatrics Society, 47, 912-913, 1999	Letter to the editor
Hui,E., Lee,P.S., Woo,J., Management of urinary incontinence in older women using videoconferencing versus conventional management: a randomized controlled trial, Journal of Telemedicine and Telecare, 12, 343-347, 2006	Population not relevant to the protocol
Jallad, K., Gurland, B., Multidisciplinary Approach to the Treatment of Concomitant Rectal and Vaginal Prolapse, Clinics in Colon & Rectal SurgeryClin, 29, 101-5, 2016	Narrative literature review - on multidisciplinary approach to the treatment of pelvic organ prolapse and concomitant rectal prolapse
Jha, S., Moran, P. A., National survey on the management of prolapse in the UK, Neurourology and Urodynamics, 26, 325-331, 2007	Study design and intervention not relevant - National survey of clinicians' practice on the management of prolapse in the UK
Kapoor, D. S., Sultan, A. H., Thakar, R., A Retrospective Review of Patients Seen in a Multidisciplinary Pelvic Floor Clinic, Journal of Obstetrics and Gynaecology Canada, 32, 1028-1029, 2010	Letter to the editor
Kapoor,D.S., Sultan,A.H., Thakar,R., Abulafi,M.A., Swift,R.I., Ness,W., Management of complex pelvic floor disorders in a multidisciplinary pelvic floor clinic, Colorectal Disease, 10, 118-123, 2008	Study design not relevant - case series
Kelly, L., Harvey, K., Choy, N. L., Urinary incontinence assessment in hospital settings undertaken by a multidisciplinary team: are clinical guidelines applied in practice?, Australasian Journal on Ageing, 35, 48-48, 2016	Conference abstract
Lang, L., Incontinence considered at interdisciplinary conference, Gastroenterology, 124, 597, 2003	Consensus statement - report on an interdisciplinary consensus conference - Advancing the Treatment of Fecal and Urinary Incontinence Through Research: Trial Design, Outcome Measures and Research Priorities - references checked for inclusion
Lee, M. E., Changing attitudes in the management of urinary-incontinence - the need for specialist nursing, British Medical Journal, 284, 1196-1196, 1982	Intervention not relevant - descriptive study of the incontinence management in a nursing clinic
Mansson-Lindstrom, A., Dehlin, O., Isacsson, A., Urinary incontinence in primary health care. 2. Care routines and consequences - Perception of various categories of nursing personnel and care units, Scandinavian Journal of Primary Health Care, 12, 175-179, 1994	Population not relevant to the protocol
Nesbitt, R. E., Jr., Hofmann, J. C., Management of urinary incontinence in the female, Surgery, Gynecology & ObstetricsSurg Gynecol Obstet, 132, 588-96, 1971	Intervention not relevant - review of a regional service for the management of women with urinary incontinence. No multidisciplinary team was assessed

Excluded studies	
Newman, D. K., Brannan, P., Blackwood, N., Spencer, C., Wallace, J., Managed urinary incontinence: an independent NP model, NP NewsNP news, 3, 7-8, 1995	Unable to obtain full text
Pomfret, I., Developing a multidisciplinary continence service, Nursing Times, 98, 48, 2002	Narrative literature review - of continence services at a trust
Pomfret, I., Steele, W., Continence. A working service, Nursing Times, 87, 46-48, 1991	Unable to obtain full text
Pomfret, L., Multidisciplinary continence care, Nursing Times, 99, 59, 2003	Study design not relevant -descriptive study of a continence advisory service including a multi-professional continence team
Reisenauer, C., Viereck, V., Mesh-related complications in urogynecology - A multidisciplinary challenge, Acta Obstetricia et Gynecologica Scandinavica, 91, 869-872, 2012	Study design not relevant - case report
Resnick, N., Fenner, D., Toward optimal health: the experts respond to urinary incontinence, Journal of Women's Health, 7, 419-24, 1998	Study design not relevant - interview data from experts about urinary incontinence
Richter, K., Petri, E., Urodynamic diagnosis and surgical-treatment of stress-incontinence - an interdisciplinary problem in gynecologic urology, Archives of Gynecology and Obstetrics, 242, 107-110, 1987	Unable to obtain full text
Sander, P., Mouritsen, L., Andersen, J. T., Fischer-Rasmussen, W., Evaluation of a simple, non-surgical concept for management of urinary incontinence (minimal care) in an open-access, interdisciplinary incontinence clinic, Neurourology and Urodynamics, 19, 9-17, 2000	Population not relevant to the protocol
Smith, N. K. G., Continence advisory services in England, Health Trends, 20, 22-23, 1988	Study design not relevant - a postal survey of district health authorities regarding nurse continence advisors
Tattersall, A., Continence. Getting the whole picture, Nursing Times, 81, 55-8, 1985	Unable to obtain full text
Tophill, P., Abrams, P., Reply, BJU International, 102, 517-518, 2008	Letter to the editor
Vitale, S. G., La Rosa, V. L., Rapisarda, A. M. C., Lagana, A. S., The importance of a multidisciplinary approach or women with pelvic organ prolapse and cystocele, Oman Medical Journal, 32, 263-264, 2017	Study design not relevant - a clinical note

Economic studies

No economic studies were identified for this review question. See supplementary material D for further information.

Appendix L – Research recommendations

Research recommendations for review question: What is the effectiveness of MDTs for the assessment and management of UI or POP, including mesh complications?

No research recommendation was made for this review question.