



Ministero della Salute



Agenzia Nazionale per i Servizi Sanitari Regionali

Appendices to the HTA Report:

Sling operation for urinary incontinence in women and men



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Appendix 1 – The Agenas adaptation of the EUnetHTA Core Model[®]

Health Technology Assessment (HTA) is the multidisciplinary evaluation of one or more health interventions in their context of use. Since 2006 Agenas has been involved in the EU HTA network EUnetHTA (<http://www.eunethta.eu/contactus/all/356/all>). EUnetHTA's main aim is to increase collaboration and avoid inefficiencies and duplications by using shared, standardised and agreed methods. These in a continuous development cycle. One of the methods produced and used is the HTA Core Model[®] (<http://mekat.thl.fi/htacore/BrowseModel.aspx>). The idea behind the Model is the provision of a standard method for HTA evidence synthesis, structuring and presenting in a standard format to facilitate its use by network agencies and others.

The Core Model is divided into domains which represent the various aspects of the assessment of health technologies' research. Each domain contains a series of research questions or Assessment Elements (AEs). Ver 2.0 of the EUnetHTA Core Model is divided into domains:

- Health problem and current use of technology (CUR)
- Description and technical characteristics of technology (TEC)
- Safety (SAF)
- Clinical effectiveness (EFF)
- Costs and economic evaluation (ECO)
- Ethical analysis (ETH)
- Organisational aspects (ORG)
- Social aspects (SOC)
- Legal aspects (LEG)

While using the Core Model in both Joint Actions 1 and 2 with the European Commission, Agenas identified some recurring common problems with the Core Model requiring further development work if the Model were to be used in the production of Health Technology Assessment reports in Italy.

The problems are mainly AE repetition, partial or complete overlap of AE content and likely answers, as well as lack of definition and clarity.

As a consequence Agenas undertook its own review of the Model to streamline its use and increase its relevance to everyday work of both HTA doers and HTA users. The Model basis for the review was version 2.0, medical and surgical intervention application.

The review process included a visual inspection of the 104 AEs with linked clarifications to identify any likely overlaps. The second phase consisted in grouping all AEs related to a unique concept (such as informed consent, technology and comparator(s) descriptions, regulatory information,

mortality as a burden of illness measure, mortality as an outcome measure) into the likeliest domain of relevance. Agenas also attempted to link some of the text of each AE's clarification note more closely with the AE and corrected any English syntax problems. In addition a single AE containing multiple questions was divided into sub questions. All original AE identifiers were maintained to denote the origin of the AE. To make identification of the information quicker and unpack some domains, Agenas also introduced two new domains Regulatory aspects (REG) and Environmental Hazard (HAZ) for the assessment of possible harms not directly caused to the technology's recipient.

Agenas started using its Core Model adaptation for the 2014-2015 crop of Agenas HTA reports. Although some Agenas HTA reports are adaptations to Italy of up to date reports produced elsewhere or updates of previous Agenas work. In these cases, the Agenas Core Model adaptation use will be partial. Agenas plans to evaluate and develop the Model further.

Appendix 2 – List of selected Assessment Element (AE)

Domain: Health problem and current use of the technology (CUR)

ID	Revised AE	Revised Clarification	Motivation for exclusion
A0001	<p>A0001a: For which health condition is the technology proposed?</p> <p>A0001b: Which group of patients represents the target population for the technology?</p> <p>A0001c: For what purposes is the technology used?</p>	<p>A0001a: All relevant conditions and populations for which the technology is proposed should be included. This question is especially relevant when there are multiple potential target conditions and populations for which the technology is used, and multiple intended uses, both indicated and other.</p> <p>A0001b: Describe the specific group(s) of patients on which the technology is used within the present assessment.</p> <p>A0001c: Describe the aims of the technology (in terms of benefits to the target population).</p>	-
A0002	<p>What is the health condition in the scope of this assessment?</p>	<p>Give a brief description of the health condition; Use ICD codes defined in the scope of the project and refer to the latest guidelines and/or medical handbooks for a more comprehensive description in terms of description of anatomical site, disease aetiology and pathophysiology, types of disease or classification according to origin, severity, stages, or risk level, and different manifestations of the condition.</p>	-
A0006	<p>What are the statistics of incidence, prevalence, morbidity, and mortality of the health condition?</p>	<p>Report the most updated figures of incidence, prevalence, morbidity, disability, mortality, and life years lost.</p>	-
A0024	<p>How is the health condition identified/diagnosed?</p>	<p>Describe the diagnostic pathway that leads to the identification of the health condition; Refer to the latest guidelines and/or medical handbooks for a more detailed description.</p>	-

A0003	<i>What are the known risk factors for the health condition?</i>	<i>Describing risk factors is especially important when they suggest possibilities for primary and secondary prevention. This information may affect the choice of comparator or the appraisal of the overall value of the technology under assessment. The risk factors for acquiring the condition, and the risk factors for relapses or worsening of the condition should be reported here, separately. The prevalence of the various risk factors might differ in different geographic areas and among different sub-populations. Refer to the latest guidelines and/or medical handbooks for a more detailed description.</i>	-
A0004	<i>What is the natural course of the health condition?</i>	<i>This assessment element should provide in brief information on the prognosis and course of the condition when untreated. This information is relevant for appraising the overall value of the technology. It may also guide the assessment of the predicted value or effectiveness of the technology, as technologies may work differently at different stages or severity grades of the disease, and there may be a relationship between earlier intervention and better prognosis. This element should also provide information on the time lag between the onset of disease and the symptoms or other findings that eventually trigger the need of diagnostics and care. Refer to the latest guidelines and/or medical handbooks for a more detailed description.</i>	
A0005	<i>What are the symptoms for the patient at different stages of the health condition?</i>	<i>This issue is especially relevant when the patient or individual is expected to undergo a substantial change in pain, disability, psychosocial issues, or other determinants of quality of life. This element should describe in brief the patient's relevant symptoms before intervention with the technology, their severity and whether they are persistent, intermittent, or undulating. Refer to the latest guidelines and/or medical handbooks for a more detailed description.</i>	
A0017	<i>What are the differences in the management for different stages of the health condition?</i>	<i>Report in brief the variations in the management due to differences in the forms, stages or severity of the health condition. Refer to the latest guidelines and/or medical handbooks for a more detailed description.</i>	-
A0018	<i>What are the alternatives to the current management of the health condition?</i>	<i>Provide a brief overview of all the treatment alternatives. Refer to the latest guidelines and/or medical handbooks for a more detailed description.</i>	-

A0011	What is the diffusion of the technology in Italy?	Provide national data (or estimates) of trend and current utilisation rates of the technology under assessment. Variations in utilisation reflect market access, sales figures, actual usage in hospital level and adherence to the use of the technology by both professionals and patients. Data on current and previous utilisation reflect the phase of the technology (experimental, emerging, established or obsolete). This also has implications for the availability of evidence and the level of uncertainties.	-
B0001b	What is(are) the comparator(s)?	This is relevant in all assessments. Use the descriptions of the comparator(s) defined in the scope of the project and elaborate them here in more detail. The term “comparator(s)” may include a single device, or a sequence of devices and procedures. The assessment should address all the competitor devices within a certain level. Describe in detail each of the devices identified in terms of type of device, mechanism of action.	-
B0003b	What is the phase of development of the comparator(s)?	Most technologies are introduced at approximately the same time in several countries. This information is relevant for the assessment while the evidence base may change rapidly for technologies that are at an earlier stage in their development. It is also important to establish whether new versions of the technology with substantial improvements are expected in the near future.	-
G0009	G0009a: Who decides which people are eligible for the technology? G0009b: On what basis is the eligibility for the technology decided?	Provide information on the key actors who decide on the use of the technology. Do most important decisions take place on the national level (e.g. population screening) or are they, for example, made by individual professionals (e.g. surgical method for a specific disease)? How is the decision made – are there some documented criteria? Information about the possible variations on the decision level and decision criteria has ethical implications. This issue may be especially important in the context of rare diseases.	
B0004b	Who performs or administers the comparator(s)?	Describe the following aspects: - Which professionals (nurses, doctors, and other professionals) use the comparator(s)? Describe the staff involved in terms of skills and number of units. - Do the patients themselves, or their carers, administer the comparator(s)? - Which professionals select the patients, make referrals, decide to initiate the use of the comparator(s), or interpret the outcome?	Comparator and intervention are performed by the same specialist.

B0005b	In what context and level of care is(are) the comparator(s) used?	<i>Describe the level of care in which the comparator(s) is(are) used: self-care, primary care, secondary or tertiary care. If secondary or tertiary care, describe whether it is intended to be used in the outpatient or inpatient setting.</i>	Comparator and intervention are performed at the same level of care.
B0008b	What kind of special premises are needed to use the comparator(s)?	<i>Many technologies require purpose-built premises (e.g., radiation-secured areas, Faraday cages, dressing rooms for the patient, or specific premises for storage and reconstitution of chemotherapy pharmaceuticals equipped with fume cupboards). A clear description of necessary facilities is needed instead of general statement (e.g. to be used in hospitals only).</i>	Not relevant for the present assessment. No special premises need to be considered for the use of comparator.
B0009b	What equipment and supplies are needed to use the comparator(s)?	<i>Describe all required disposable items necessary for using the comparator(s), such as: syringes, needles, pharmaceuticals and contrast agents, fluids, bandages and tests to identify patients eligible for treatment.</i>	Overlap with E0001 and E0002 (resource-use identification and measurement).

Domain: Description and technical characteristics of technology (TEC)

ID	Proposed Revised AE	Proposed Revised Clarification	Motivation for exclusion
B0001	<i>What is this technology?</i>	<i>This is relevant in all assessments. Use the descriptions of the technology defined in the scope of the project and elaborate them here in more detail. The term “technology” may include a single device, or a sequence of devices and procedures. The assessment should address all the competitor devices within a certain level. Describe in detail each of the devices identified in terms of type of device, mechanism of action. Describe briefly how the devices differ from their predecessors.</i>	-
B0003	<i>What is the phase of development of the technology?</i>	<i>Most technologies will be introduced at approximately the same time in several countries. This information is relevant for the assessment while the evidence base may change rapidly for technologies that are at an earlier stage in their development. Report when the technology has been introduced across the European countries and if new versions with substantial improvements are expected in the near future (6 months).</i>	-
B0004	<i>How is the technology used?</i>	<i>Describe the following aspects:</i> <ul style="list-style-type: none"> - Which professionals (nurses, doctors, and other professionals) use the technology? Describe the staff involved in terms of skills and number of units. - Do the patients themselves, or their carers, administer the technology? - Which professionals select the patients, make referrals, decide to initiate the use of the technology, or interpret the outcome? 	-

B0005	<i>In which setting and level of care is the technology used?</i>	<i>Describe the level of care in which the technology is used: self-care, primary care, secondary or tertiary care. If secondary or tertiary care, describe whether it is intended to be used in the outpatient or inpatient setting.</i>	-
B0007	<i>Does the technology require additional/special equipment/tools or accomodation?</i>	<i>List those parts of the technology (devices, equipment, software, etc.) that need to be purchased (and often installed) by an organisation in order to use the technology. Includes need for back-up investment to cover for breakdowns in use.</i>	-
B0008	<i>Does the technology require special/ad hoc facilities or structural interventions?</i>	<i>Many technologies require purpose-built premises (e.g., radiation-secured areas, Faraday cages, dressing rooms for the patient, or specific premises for storage and reconstitution of chemotherapy pharmaceuticals equipped with fume cupboards). A clear description of necessary facilities is needed instead of general statement (e.g. to be used in hospitals only).</i>	<i>Not relevant for the present assessment. No special facilities/structural interventions need to be considered for the use of the technology.</i>
B0009	<i>What disposables and supplies are needed to use the technology?</i>	<i>Describe all required disposable items necessary for using the technology, such as: syringes, needles, pharmaceuticals and contrast agents, fluids, bandages and tests to identify patients eligible for treatment.</i>	-
F0001	<i>F0001a: Is the technology new/innovative?</i> <i>F0001b: Is the technology a add-on, a replacement or a modification of the standard mode of care?</i>	<i>F0001a: Explain how the possible use/non-use of the technology would affect the current treatment process and practices. How substantial is the change to current practices? Notice that the technology may be in a different phase of utilisation for different health conditions or purposes of use.</i> <i>F0001b: Describe the role of the technology in the management pathway as: i) substitution technology; ii) additive or complementary.</i>	-

Domain: Regulatory aspects (REG)

ID	Proposed Revised AE	Proposed Revised Clarification	Motivation for exclusion
A0020	<i>What is the marketing authorisation status of the technology?</i>	<i>There are both international and national market authorisation systems. An overview of the status with regard to key processes, e.g. CE marking, EMA/FDA approval is recommended. Also information on national data and an analysis of possible discrepancies can be highly useful.</i>	-

A0021	<i>What is the reimbursement status of the technology across countries?</i>	<i>Information on national reimbursement status from different countries for the technology. Notice that reimbursement status may differ for different purposes: e.g. treatment vs. prevention. Information on full coverage, co-payments, coverage under special circumstances/conditional coverage is useful.</i>	-
I0015	<i>Does the technology require further specific regulations?</i>	<i>Report if the technology needs to follow a special regulatory pathway due to its nature (e.g., borderline medical device).</i>	<i>Not relevant for the present assessment: the technology does not use borderline devices.</i>
I0016	<i>Does the technology need to be listed in a national/EU database?</i>	<i>Report if national or European databases exists for the technology and describe in brief the data collected, the level of access and who manage and own the database.</i>	-
I0017	<i>Are there particular product safety requirements that the technology need to fulfil?</i>	<i>Many novel health technologies may utilise human cells or tissue (so called advanced therapy medicinal products). These products must fulfil the safety requirements issued by EC Directive 2004/23/EC.</i>	<i>Not relevant for the present assessment: the technology does not use advanced therapy medicinal products.</i>
I0020	<i>Does the introduction of the technology presume some additional licensing fees to be paid?</i>	<i>As novel technologies build up on existing knowledge, the use of the technology may involve the payment of some additional fees to additional patent holders etc. In principle, the manufacturer should be able to clarify this to the health care unit/health care system in question.</i>	<i>Not relevant for the present assessment: the technology does not presume payment of additional fees.</i>
I0022	<i>Is the user guide of the technology comprehensive enough?</i>	<i>The wording and clarity of the user guide of the technology can have legal effects on the liability issues in case the technology is not working as expected.</i>	<i>Out of the scope of the present assessment.</i>
I0023	<i>Is the technology subject to price control?</i>	<i>Report and describe if the price of the technology is regulated and at which level.</i>	<i>Not relevant for the present assessment. The technology is not classified as expensive or purchased in great volumes.</i>
I0024	<i>Is the technology subject to acquisition regulation?</i>	<i>Report and describe if the acquisition of the technology is regulated and at which level. This is especially relevant for expensive technologies.</i>	<i>Not relevant for the present assessment. The technology is not classified as expensive or purchased in great volumes.</i>
I0025	<i>Is the marketing of the technology to the patients restricted?</i>	<i>Report and describe if the way by which the technology can be marketed to consumers is regulated and at which level.</i>	<i>Not relevant for the present assessment. The technology does not have the patients as direct customers.</i>

Domain: Clinical effectiveness (EFF)

ID	Proposed Revised AE	Proposed Revised Clarification	Motivation for exclusion
D0001	<i>What is the effect of the intervention on all cause mortality?</i>	<i>Mortality is the preferred, objective endpoint for assessments of life- threatening conditions. All- cause mortality is expressed either as mortality rates (incidence in given population, at given time point and usually risk standardised), or survival (number of people alive for a given period after an intervention). Several methods are used to adjust mortality rates and survival curves, e.g. relative survival (observed versus expected survival), which can be quite misleading; and hazard ratio (derived from a statistical method comparing the median survivals in the two groups). Note that progression-free survival is not a mortality endpoint; it describes the time from the beginning of an intervention until a patient shows signs of disease progression. Consider separately absolute mortality (compared to placebo or waiting list) and mortality relative to the comparator. See also Methodological guideline for REA of pharmaceuticals: Endpoints used for relative effectiveness assessment of pharmaceuticals, clinical endpoints http://www.eunetha.eu/sites/5026.fedimbo.belgium.be/files/Clinical%20endpoints.pdf</i>	Irrelevant to the aim of the device/procedure
D0002	<i>What is the effect on the disease-specific mortality?</i>	<i>Disease-specific mortality is a proportion of the all- cause mortality. Even if a given treatment reduces one type of death, it could increase the risk of dying from another cause, to an equal or greater extent. Disease-specific mortality is typically presented as rates and as age- and risk- adjusted measures such as hazard ratio.</i>	Irrelevant to the aim of the device/procedure
D0005	<i>D0005a: How does the technology affect symptom frequency of the target condition? D0005b: How does the technology affect symptom severity of the target condition? D0005c: How does the technology affect</i>	<i>D0005a: Describe the efficacy and effectiveness of the technology on frequency of relevant disease outcomes and other changes in physical and psychological conditions. Report changes in frequency of symptoms, both in absolute terms and relative to the comparator. D0005b: Describe the efficacy and effectiveness of the technology on the severity of relevant disease outcomes. Outcomes such as function, quality of life and patient satisfaction are reported in other assessment elements of this domain. Report</i>	-

	<p><i>symptom duration of the target condition?</i></p>	<p><i>changes in severity of symptoms and findings, both in absolute terms and relative to the comparator.</i></p> <p><i>D0005c: Describe the efficacy and effectiveness of the technology on the duration of relevant disease outcomes. Outcomes such as function, quality of life and patient satisfaction are reported in other assessment elements of this domain. Report changes in duration of symptoms and findings, both in absolute terms and relative to the comparator.</i></p>	
D0006	<p><i>D0006a: How does the technology affect the progression of the target condition?</i></p> <p><i>D0006b: How does the technology affect the recurrence of the target condition?</i></p>	<p><i>D0006a: Report here outcomes such as complete cure, progression-free survival, time-to-event (next stage of disease, relapse). Describe here the duration of intervention effect on symptoms and findings: permanent, short term, long term, intermittent, undulating. Report the results both in absolute terms and relative to the comparator.</i></p> <p><i>D0006b: Report here whether there is a recurrence despite intervention or whether cessation of the intervention produces a recurrence.</i></p>	-
D0012	<p><i>What is the effect of the technology on generic health-related quality of life?</i></p>	<p><i>Health related quality of life (HRQL) is typically measured with self- or interviewer-administered questionnaires to measure cross-sectional differences in quality of life between patients at a point in time (discriminative instruments) or longitudinal changes in HRQL within patients during a period of time (evaluative instruments). Two basic approaches to quality-of-life measurement are available: generic instruments that provide a summary of HRQL; and specific instruments that focus on problems associated with single disease states, patient groups, or areas of function. Generic instruments include health profiles and instruments that generate health utilities. Each approach has its strengths and weaknesses and may be suitable for different circumstances. See also Methodological guideline for REA of pharmaceuticals: Health-related quality of life and utility measures.</i></p> <p><i>http://www.eunetha.eu/sites/5026.fedimbo.belgium.be/files/Health-related%20quality%20of%20life.pdf. If disease specific data are available, these can be reported</i></p>	

		<i>separately.</i>	
D0014	<i>What is the effect of the technology on work ability?</i>	<i>Describe the effects of the intervention on sick leave, absenteeism from work or place of production return-to-work, retirement and other relevant outcomes describing working capacity.</i>	Irrelevant to the aim of the device/procedure
D0015	<i>What is the effect of the technology on return to previous living conditions?</i>	<i>Re integration of a dischargée or patient to the living conditions in which patients lived before intervention is one of the most important intervention goals particularly for elderly patients.</i>	Irrelevant to the aim of the device/procedure
D0018	<i>Do differences in acceptability predict the overall uptake of the technology?</i>	<i>Differences in acceptability may predict the overall uptake of the technology and would impact on the overall effectiveness.</i>	Irrelevant to the aim of the device/procedure

Domain: Safety (SAF)

ID	Proposed Revised AE	Proposed Revised Clarification	Motivation for exclusion
C0001	<i>What harms are associated with the use of the technology?</i>	<i>Here one should identify and describe the direct harms of the use and the administration of the technology. User dependent harms are described in C0007, and comparative harms in C0008. Harms are identified in placebo-controlled trials, observational studies, vigilance and in registries. It is important to refer to the source and report separately harms identified in spontaneous reporting databases. Harms should be reported per indication or target population. The identified harms should be categorised according to their severity and frequency. The seriousness of harm is typically graded based on events that pose a threat to a patient's life or functioning. Frequency of occurrence for each harm is usually presented in comparison with placebo or no treatment, as percentages or risk ratios. Finally, the harms should be grouped by their severity and frequency and ordered so that the severe and/or frequent harms are presented first. If there are many different harms reported in the literature, concentrate on reporting the most serious and the most frequent harms.</i>	-
C0002	<i>Are the harms related to the exposure to the technology?</i>	<i>Information should be included if safe use of the technology is sensitive to even small changes of the dose or type of device or procedure because this may have implications for the training and</i>	Irrelevant to study question

		<i>organisation of care. The potential for accumulated harm due to repeated dosage or testing should also be considered.</i>	
C0005	<i>Are there susceptible patient groups that are more likely to be harmed through the use of the technology?</i>	<i>Typically, people with comorbidities and co-medication, pregnancy, intolerances, or specific genetic profiles, elderly people, children and immunosuppressed patients.</i>	Irrelevant to study question
C0007	<i>Are there applications or maintenance procedures of the technology which may increase the risk of harmful events?</i>	<i>Describe here what is known of the harms caused by the properties or behaviour of professionals, patients or other individuals who apply or maintain the technology. Is there e.g. a noteworthy risk of malfunction of a device, due to deficient user training or personal attitude; or a risk of errors related to reconstitution, dosage, administration, or storage of medicines, that may have serious consequences; or, is there a risk of addiction? Describe what is known of the learning curve, intra- or inter-observer variation in interpretation of outcomes, errors or other user-dependent concerns in the quality of care.</i>	Irrelevant to study question
C0060	<i>How does the safety profile of the technology vary between different generations, approved versions or products?</i>	<i>No clarification needed.</i>	-
C0061	<i>Can different organizational settings increase or decrease harms?</i>	<i>No clarification needed.</i>	Irrelevant to study question
C0062	<i>How can the safety risks for patients be reduced?</i>	<i>Is there a requirement for specific training, use of a protocol or available guideline which may reduce the occurrence or severity of the harm. Information on what risk communication is needed for patients, citizens and decision makers may be included.</i>	Irrelevant to study question
C0063	<i>How can the safety risks for professionals be reduced?</i>	<i>Is there a requirement for specific training, use of a protocol or available guideline which may reduce the occurrence or severity of the harm. Information on what risk communication is needed for patients, citizens and decision makers may be included.</i>	Irrelevant to study question

F0003	<p><i>Are there any other hidden or unintended consequences of the technology and its applications for different stakeholders (patients/users, relatives, other patients, organisations, commercial entities, society etc.)?</i></p>	<p><i>The technology may be used for other indications (extended use) or other purposes, e.g., in combination with other technologies (unintended use). It may have harms in addition to those following from the intended use. Ethical analysis of the technology should consider not only the consequences of the formal intended use of the technology, but also the ethical consequences of unintended and extended use. If unintended consequences are not well-known, they should be speculated and elaborated upon. The intended purpose and uses of the technology should be evaluated against the likely uses and consequences of the technology in reality. The mode of delivery, the need of laboratory tests or clinical follow-up to ensure safe and effective dose, and way of delivery (at home, outpatient or in-patient) may have large impact on the health care processes, systems and on individuals. They may also change the concepts of disease and normality (e.g. change an untreatable cancer into a chronic disorder or changing the border values when the concept of normality also changes). New technologies tend to lead to new areas of inventions and give rise to new ethical questions (e.g. IVF and development of genetic testing has led to questions of preimplantation genetic diagnostics (PGD)). As pre-symptomatic screening tests have become available, the health care system has to be prepared to handle moral issues raised by true positive and false negative findings. The mode of delivery, the need of laboratory tests or clinical follow-up to ensure safe and effective dose, and way of delivery (at home, outpatient or in-patient) may have large impact on the health care processes, systems and on individuals. They may also change the concepts of disease and normality (e.g. change an untreatable cancer into a chronic disorder or changing the border values when the concept of normality also changes). Another relevant aspect is whether or not there will be a moral obligation related to the implementation, withdrawal, or use of the technology (e.g. check-ups or alternative procedures).</i></p>	<p>Irrelevant to study question</p>
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Domain: Costs and economic evaluation (ECO)

ID	Proposed Revised AE	Proposed Revised Clarification	Motivation for exclusion
E0001	<i>Can you identify what types of resources are used when delivering the assessed technology and its comparators (resource-use identification)?</i>	<i>Report the resource items taken into account in the analysis of the assessed technology and its comparator(s), the reasons for their inclusion as well as the sources of information used when identifying these. It must be included the resources related to the use of the technology and/or resources due to the use of technology. It is relevant the analysis perspective for the identification of resources. Providing the results in tabular form is recommended. (e.g. length of stay in hospital).</i>	-
E0002	<i>Can you quantify what amounts of resources are used when delivering the assessed technology and its comparators (resource-use measurement)?</i>	<i>Report the quantity of resource required to estimate overall costs (e.g. 5 days of stay in hospital(E0009). Include the appropriate values, ranges, probability distributions as well as all references used. Providing the results in tabular form is recommended. Report the methods and data source(s) used to measure resource use associated with the technologies.</i>	-
E0009	<i>What were the measured and/or estimated unit costs of the resources used by the assessed technology and its comparator(s)?</i>	<i>For each technology report mean values of estimated costs and, where possible, information concerning distributions surrounding these estimates. Cost estimates from different viewpoints can be reported here (e.g., patient, hospital, societal). In addition, reporting disease-stage-specific cost estimates and costs estimated using varied discount rates. Providing the results in tabular form is recommended.</i>	-
E0005	<i>What is(are) the measured and/or estimated health-related outcome(s) of the assessed technology and its comparator(s)?</i>	<i>For each technology report mean values of estimated effects and, where possible, information concerning distributions surrounding these estimates. It is suggested that estimates are expressed both in natural units, whenever possible, and in alternative forms, such as QALYs. Report the methods and data source(s) used to estimate the outcomes associated with the technologies.</i>	-

H0003	<i>What types of resources are needed after the introduction of the new technology (intervention) in its own context?</i>	<i>This issue is about any kind of support and resources (practical, physical, emotional, personal social, nurturing, financial etc.) that need to be mobilized, and organized - or might be released - in order for the patient to use the technology with satisfactory results. It covers all arrangements or adjustments that may be needed (e.g. alteration of special tasks, working time, adjustments in the physical environment, emotional support). This issue is about any kind of support and resources (practical, physical, emotional, personal social, nurturing, financial etc.) that need to be mobilized, and organized - or might be released - in order for the patient to use the technology with satisfactory results. It covers all arrangements or adjustments that may be needed in the major life areas (e.g. alteration of special tasks, working time, adjustments in the physical environment, emotional support).</i>	AE not pertinent in this domain (H003 is included in E0001)
E0006	<i>What are the estimated differences in costs and outcomes between the technology and its comparator(s)?</i>	<i>There are numerous ways of calculating or comparing the differences in the costs and effects of the assessed technology and its comparator(s); typically, one or more of the following approaches are used when reporting the results of health-economic evaluations: - listing the costs and outcomes of each technology in tabular form - an incremental cost-effectiveness ratio (ICER) - an incremental cost effectiveness plane or efficiency frontier - the net monetary benefit (NMB) and/or net health benefit (NHB).</i>	-
E0010	<i>What are the uncertainties surrounding the inputs and economic evaluation(s) of the technology and its comparator(s)?</i>	<i>The effects of uncertainty should be reported separately for parameter values, assumptions and analytical methods used in the analysis, whenever possible. For example: - deterministic sensitivity analysis in tabular form or using a Tornado diagram - probabilistic sensitivity analysis, e.g., in the form of a CEAC - value-of-information analysis. The methods used in the sensitivity analysis should be reported in detail here.</i>	-
E0011	<i>To what extent can differences in costs, outcomes, or 'cost effectiveness' be explained by variations between any subgroups using the technology and its comparator(s)?</i>	<i>If applicable, describe differences in costs, outcomes, or cost effectiveness that can be explained, e.g., by variations between (pre-defined) subgroups of patients with different baseline characteristics or other observed variability in effects. Providing the results in tabular form is recommended, but graphical representation using, e.g., 'Forest' plots may also be useful.</i>	We already carry out two different systematic review for subgroups (women and men).

E0012	<i>To what extent can the model estimates of inputs, outcomes, or economic evaluation(s) be considered as providing valid descriptions of the technology and its comparator(s)?</i>	<i>It would be valuable to report any of the numerous ways of assessing to what extent the estimates for the technologies can be considered valid, For example: - How well the model predicts health effects - Whether model includes all aspects of resource use and costs considered important - Estimates of the potential direction and/or potential magnitude of bias induced - An attempt to identify key factors that could compromise the validity of the model. The process of validation and the types of validation addressed in the model should be reported here.</i>	-
D0023	<i>How does the technology modify the use of resources?</i>	<i>This item aims to take into account the amount of resources resulting from organizational impact produced by the introduction of technology. It is based on results of ORG domain.</i>	<i>AE not pertinent in this domain (is not an economic goal. It's strictly org domain).</i>
G0007	<i>What are the likely budget impacts of implementing the technologies being compared?</i>	<i>Whenever a technology is introduced, there will be an impact on health care budgets. Budget impact analysis attempts to examine the likely impact of introducing a technology on financial outlays from, e.g., the perspective of different payers. Different payers include: government-level institutions; regions; municipalities; employers; insurance companies and patients/participants. The relevant perspective from which to estimate budget impact may change during different phases of the management process Budget impact analysis provides data to inform an assessment of the affordability of a technology. It also provides a service planning tool to inform decisions about taking the technology into use.</i>	<i>Not addressed in the present report</i>

Appendix 3 – Demographics

Mean Italian population in the years 2010–2014

Geographic area	Region	Men	Women
North	Piemonte	2,134,454	2,279,962
North	Valle d'Aosta	62,493	65,337
North	Lombardia	4,797,871	5,044,661
North	Trentino Alto Adige	508,976	528,392
North	Veneto	2,392,314	2,510,190
North	Friuli-Venezia Giulia	593,525	634,253
North	Liguria	754,514	836,922
North	Emilia-Romagna	2,130,081	2,268,533
Centre	Toscana	1,787,420	1,930,793
Centre	Umbria	429,788	464,906
Centre	Marche	752,448	800,323
Centre	Lazio	2,723,521	2,944,140
South	Abruzzo	644,616	682,210
South	Molise	154,137	162,107
South	Campania	2,819,189	2,993,383
South	Puglia	1,974,877	2,098,410
South	Basilicata	284,762	296,947
South	Calabria	966,672	1,016,911
South	Sicilia	2,436,967	2,600,791
South	Sardegna	811,663	846,316
Total Italy		29,160,287	31,005,487

Appendix 4 – Manufacturers survey

Manufacturers' involvement

Methods

The manufacturers of slings for urinary incontinence in women and men were invited to contribute to the assessment in the early stages of preparation by providing relevant information. Manufacturers' attention was asked to notify their interest by responding to a call on the Agenas website.

Individual manufacturers' face-to-face meetings with the authors were held to present the project objectives and describe terms of collaboration. Manufacturers who did not respond to the web notice were not involved further.

During the meetings, manufacturers were informed that all the material shared with the authors before, during, and after the meeting (information and data) should not be confidential and could be published in the final document. Confidential information was not requested and if given would not be used for the assessment.

A structured questionnaire was developed by the authors and sent to each responding manufacturer before the meeting to gather information on: the health condition addressed by the technology, standard of care for the condition, technical characteristics of the technology, current use of the technology, regulatory aspects, published/ongoing clinical studies, registries, costs data, and economic evaluations performed. Up to three weeks were given to the manufacturers to fill and return the questionnaire.

Results

One manufacturer of slings for urinary incontinence in women and men responded to the Agenas call and agreed to meet the authors' team: Boston Scientific. No responds were received from the other manufacturers.

Appendix 5 – Search strategy for EFF-SAF domains – Women

MEDLINE						
POPULATION	AND	INTERVENTION		COMPARATOR		EFF SAF
<p>Urinary incontinence Mesh term OR (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia. title/abstractOR</p>		<p>TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR "ALIGN TO" OR "ALIGN R" OR "ALIGN S" OR AJUST OR "AJUST HELICAL" OR Obtryx or Lynx OR Advantage OR "Advantage FIT" OR Solyx OR Desara OR "I Stop tape" OR Supris OR Aris OR Altis OR "contasure Knotless" OR "Contasure Needleless" OR Remeex OR "Ingyne S" OR "Ingyne MIS" OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR "GYNECARE TVT ABBREVO" OR "Dynamesh SIS" OR Emerald OR "ECS Evolution" OR (T-SLING PP code TS06) OR (T-SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR "sling surgery" title/abstract OR Suburethral Slings Mesh termOR "Suburethral sling" title/abstract OR "Mid-urethral sling" title/abstractOR "female sling" title/abstract OR "sling surgery" title/abstract OR "distal urethral</p>	AND	<p>"Artificial urinary sphincter" . title/abstract OR "adjustable continence therapy" . title/abstract OR "Burch colposuspension". title/abstract OR laparoscop* AND "vaginal tapes" OR "autologous vaginal tapes" . title/abstract OR "tension free vaginal tape" . title/abstractOR tvt OR "transvaginal tape" . title/abstractOR "transobturator tape". title/abstract OR (colposuspension* . title/abstract OR Vesicosuspension* . title/abstract OR Urethrosuspension* . title/abstract OR Colpourethrosuspension* . title/abstract OR Urethropexy . title/abstract OR Cystourethropexy OR urethropex* OR urethrocystopex* or cystourethropex* OR urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>		<p>AND</p> <p>((Urinary Incontinence MESH term OR continenceOR Stress MESH termOR Urge MESH termOR "Urinary Distress" title/abstractOR "adverse effects" title/abstractOR Failure title/abstractOR "urine loss" title/abstract OR "vaginal tipe erosion" title/abstract OR "sexual functions" title/abstractOR improvement title/abstractOR Pain title/abstractOR "urinary retention" title/abstract OR "bladder control" title/abstract OR "bladder damage" title/abstract) AND (outcome OR "surgical outcomes" OR "after surg*" OR "surg* effects" OR effects OR post-surgery))</p> <p>"intraoperative complications" title/abstractOR Re-operation title/abstractOR (duration AND operation) title/abstract OR (time AND operation) title/abstract Or "surgery times" title/abstract OR "blood loss" title/abstract OR "urinary tract infection" title/abstract OR "length of inpatient stay" title/abstract OR "normal activity level" title/abstract OR "Adverse events" title/abstract OR "vascular injury" title/abstract OR "visceral injury" title/abstract OR "bladder perforation" title/abstract OR "urethral perforation" title/abstract OR "bowel perforation" title/abstract OR "nerve damage"</p>

		<p>polypropylene sling” OR “intravaginal slingoplasty”OR “anterior vaginal repacbc cvcir” OR (sling* AND (procedure* or operat*)) OR ((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR ((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retro pubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (tension AND vagina*) OR (slingplast* or sling plast*)</p>			<p>title/abstractOR “perioperative surgical complications” OR “voiding dysfunction” title/abstract OR “long-term catheterisation” title/abstract OR (infection and “synthetic mesh”) OR “tape erosion” title/abstract OR “tape extrusion” title/abstract OR “urinary tract infection” title/abstractOR “Subjective cure” title/abstractOR “Objective cure” title/abstractOR “Vascular haematoma” title/abstractOR “Bladder perforation” title/abstractOR “ Voiding dysfunction” title/abstractOR “De novo urgency” title/abstractOR</p>
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EMBASE EFF SAF						
POPULATION	A N D	INTERVENTION		COMPARATOR		EFF SAF
<p>Urine incontinence/exp EMTREE term OR Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR “Stress incontinence”/exp EMTREE termOR “Urge incontinence”/exp EMTREE term</p> <p>(bladder or stress or urg* or urine or“urinary dysfunction”) AND (incontinen* OR continen*) OR</p> <p>“lower urinary tract symptom” OR “sphincter deficiency” OR ISD OR “urinary bladder overactive” OR</p>		<p>TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR “MiniArc Precise” OR “Miniarc Pro” OR “Surgimesh sling VS12X” OR “Surgimesh sling VS15X” OR “ALIGN TO” OR “ALIGN R” OR “ALIGN S” OR AJUST OR “AJUST HELICAL” OR Obtryx or Lynx OR Advantage OR “Advantage FIT” OR Solyx OR Desara OR “I Stop tape” OR Supris OR Aris OR Altis OR “contasure Knotless” OR “Contasure Needleless” OR Remeex OR “Ingyne S” OR “Ingyne MIS” OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR “GYNECARE TVT ABBREVO” OR “ Dynamesh SIS” OR</p>	A N D	<p>“tension free vaginal tape”/exp EMTREE term Artificial urinary sphincter” :ab,tiOR “adjustable continence therapy” :ab,tiOR “Burch colposuspension”:ab,tiOR laparoscop* AND “vaginal tapes” OR “autologous vaginal tapes” :ab,tiOR “tension free vaginal tape” :ab,tiOR tvf OR “transvaginal tape” :ab,tiOR TOT sling:ab,ti OR “transobturator tape”/expOR (colposuspension* :ab,tiOR Vesicosuspension* :ab,tiOR Urethrosuspension* :ab,tiOR Colpourethrosuspension* :ab,tiOR</p>	A N D	<p>((Urine Incontinence EMTREE termDiurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR “Stress incontinence”/exp EMTREE termOR “Urge incontinence”/exp EMTREE term OR continenceOR Stress OR Urge OR “Urinary Distress”:ab,tiOR “adverse effects”:ab,tiOR Failure :ab,tiOR “urine loss” :ab,tiOR “vaginal tipe erosion”:ab,tiOR “sexual functions”:ab,tiOR improvement :ab,tiOR Pain :ab,tiOR “urinary retention”:ab,tiOR “bladder control” :ab,ti”OR</p>

<p>((urg* or urin*) AND incontinen*) OR nocturia::ab,ti</p>	<p>Emerald OR "ECS Evolution" OR (T-SLING PP code TS06) OR (T-SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings/expEMTREE term OR "Mesh sling"/exp EMTREE term OR "Mid-urethral sling":ab,ti OR "Midurethral sling":ab,ti OR "Pubovaginal sling":ab,ti OR "retropubic tension free sling":ab,ti OR "retropubic tension sling":ab,ti OR "SPARC mideruthral sling":ab,ti OR "suprapubic arc sling"/exp OR "Suburethral sling"/exp OR "tension free sling":ab,ti OR "tension free vaginal sling":ab,ti OR "Suburethral sling":ab,ti OR "Mid-urethral sling" :ab,ti OR "female sling" :ab,ti OR "sling surgery" :ab,ti OR "distal urethral polypropylene sling" OR "intravaginal slingoplasty" OR "anterior vaginal repair" OR (sling* AND (procedure* or operat*)) OR</p> <p>(bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*) OR</p> <p>(urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*) OR</p> <p>tension AND vagina* OR (slingplast* or sling plast*)</p>	<p>Urethropexy :ab,tiOR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	<p>"bladder damage":ab,ti) AND (outcome OR "surgical outcomes" OR "after surg*" OR "surg* effects" OR effects OR post-surgery)) OR "intraoperative complications" :ab,tiOR Re-operation :ab,tiOR (duration AND operation) :ab,tiOR (time AND operation) :ab,tiOR "surgery times" :ab,tiOR "blood loss" :ab,tiOR "urinary tract infection:ab,tiOR "length of inpatient stay" :ab,tiOR "normal activity level" :ab,tiOR "Adverse events" :ab,tiOR "vascular injury" :ab,tiOR "visceral injury" title/a:ab,tibstract OR "bladder perforation" :ab,tiOR "urethral perforation" :ab,tiOR "bowel perforation" :ab,tiOR "nerve damage" :ab,tiOR "perioperative surgical complications" OR "voiding dysfunction" :ab,tiOR "long-term catheterisation":ab,tiOR (infection and "synthetic mesh") OR "tape erosion" :ab,tiOR "tape extrusion:ab,tiOR "urinary tract infection" :ab,tiOR "Subjective cure" :ab,tiOR "Objective cure" :ab,tiOR "Vascular haematoma" :ab,tiOR "Bladder perforation":ab,tiOR "Voiding dysfunction" :ab,tiOR "De novo urgency" :ab,tiOR</p>
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Cochrane Database EFF SAF						
POPULATION		INTERVENTION		COMPARATOR		EFF SAF
Urinary incontinence Mesh term OR (bladder or stress or urg* or urine or"urinary dysfunction") AND	A N D	TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR	A N D	"Artificial urinary sphincter" . ti,ab,kw OR "adjustable continence therapy" ti,ab,kw OR "Burch colposuspension".	A N D	((Urinary Incontinence MESH term OR continenceOR Stress MESH termOR Urge MESH termOR "Urinary Distress" ti,ab,kwOR

<p>(incontinen* OR continen*) OR</p> <p>“lower urinary tract symptom” ti,ab,kw OR</p> <p>“sphincter deficiency” ti,ab,kw OR</p> <p>ISD ti,ab,kw OR</p> <p>“urinary bladder overactive” ti,ab,kw OR</p> <p>((urg* or urin*) AND incontinen*) OR</p> <p>nocturia ti,ab,kwOR</p>	<p>“ALIGN TO” OR “ALIGN R” OR “ALIGN S” OR AJUST OR “AJUST HELICAL” OR Obtryx or Lynx OR Advantage OR “Advantage FIT” OR Solyx OR Desara OR “I Stop tape” OR Supris OR Aris OR Altis OR “contasure Knotless” OR “Contasure Needleless” OR Remeex OR “Ingyne S” OR “Ingyne MIS” OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR “GYNECARE TVT ABBREVO” OR “Dynamesh SIS” OR Emerald OR “ECS Evolution” OR (T-SLING PP code TS06) OR (T-SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR “Unitape VS” OR “Unitape T Plus” OR “Unitape T” OR “Safyre VS” OR “Safyre T” OR Ophira OR “SVS 01030 IO” OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings Mesh termOR “Suburethral sling” ti,ab,kw OR</p> <p>“Mid-urethral sling ti,ab,kwOR</p> <p>“male sling” ti,ab,kw OR</p> <p>“female sling” ti,ab,kw OR</p> <p>“sling surgery” ti,ab,kw OR</p> <p>“distal urethral polypropylene sling” OR</p> <p>“intravaginal slingoplasty”OR</p> <p>“anterior vaginal repair” OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR</p> <p>(tension AND vagina*) OR (slingplast* or sling plast*)</p>	<p>ti,ab,kw OR</p> <p>laparoscop* AND “vaginal tapes” OR</p> <p>“autologous vaginal tapes” . ti,ab,kw OR</p> <p>“tension free vaginal tape” . ti,ab,kwOR</p> <p>tvf OR</p> <p>“transvaginal tape” . ti,ab,kwOR</p> <p>“transobturator tape” . ti,ab,kw OR</p> <p>(colposuspension* . ti,ab,kw OR</p> <p>Vesicosuspension* . ti,ab,kw OR</p> <p>Urethrosuspension* . ti,ab,kw OR</p> <p>Colpourethrosuspension* . ti,ab,kw OR</p> <p>Urethropexy ti,ab,kw OR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR “Burch colpourethropexy” OR</p> <p>“Marshall Marchetti Operation” OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>“anti-incontinence procedures” AND surg*</p>	<p>“adverse effects” ” ti,ab,kwOR</p> <p>Failure ” ti,ab,kwOR</p> <p>“urine loss” ” ti,ab,kw OR</p> <p>“vaginal tipe erosion” ti,ab,kw OR</p> <p>“sexual functions” ti,ab,kwOR</p> <p>improvement ” ti,ab,kwOR</p> <p>Pain ” ti,ab,kwOR</p> <p>“urinary retention” ti,ab,kw OR</p> <p>“bladder control” ti,ab,kw "OR</p> <p>“bladder damage”” ti,ab,kw</p> <p>AND</p> <p>(outcome OR “surgical outcomes” OR “after surg” OR “surg* effects” OR effects OR post-surgery))</p> <p>“intraoperative complications” ” ti,ab,kwOR</p> <p>Re-operation ” ti,ab,kwOR (duration AND operation) ” ti,ab,kw OR</p> <p>(time AND operation) ” ti,ab,kw Or</p> <p>“surgery times” ” ti,ab,kw OR</p> <p>“blood loss” ” ti,ab,kw OR</p> <p>“urinary tract infection” ti,ab,kw OR</p> <p>“length of inpatient stay” ” ti,ab,kw OR</p> <p>“normal activity level” ” ti,ab,kw OR</p> <p>“Adverse events” ” ti,ab,kw OR</p> <p>“vascular injury” ” ti,ab,kw OR</p> <p>“visceral injury” ” ti,ab,kw OR</p> <p>“bladder perforation” ti,ab,kw OR</p> <p>“urethral perforation” ” ti,ab,kw OR</p> <p>“bowel perforation” ” ti,ab,kw OR</p> <p>“nerve damage” ” ti,ab,kw OR</p> <p>“perioperative surgical complications” OR</p> <p>“voiding dysfunction” ” ti,ab,kw OR</p> <p>“long-term catheterisation”” ti,ab,kw OR</p> <p>(infection and “synthetic mesh”) OR</p> <p>“tape erosion” ” ti,ab,kw OR</p> <p>“tape extrusion” ” ti,ab,kw OR</p> <p>“urinary tract infection” ” ti,ab,kwOR</p> <p>“Subjective cure” ti,ab,kwOR</p> <p>“Objective cure” ” ti,ab,kwOR</p> <p>“Vascular haematoma” ”</p>
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						ti,ab,kwOR "Bladder perforation" ti,ab,kwOR "Voiding dysfunction" ti,ab,kwOR "De novo urgency" ti,ab,kwOR
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MEDLINE – Quality of life

POPULATION	A N D	INTERVENTION		COMPARATOR		OUTCOME QUALITY OF LIFE
Urinary incontinence MESH term OR (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia.title/abstractOR		(TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR "ALIGN TO" OR "ALIGN R" OR "ALIGN S" OR AJUST OR "AJUST HELICAL" OR Obtryx or Lynx OR Advantage OR "Advantage FIT" OR Solyx OR Desara OR "I Stop tape" OR Supris OR Aris OR Altis OR "contasure Knotless" OR "Contasure Needleless" OR Remeex OR "Ingyne S" OR "Ingyne MIS" OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR "GYNECARE TVT ABBREVO" OR "Dynamesh SIS" OR Emerald OR "ECS Evolution" OR (T-SLING PP code TS06) OR (T-SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings Mesh termOR "Suburethral sling" title/abstract OR "Mid-urethral sling" title/abstractOR "female sling" title/abstract OR	AN D	"Artificial urinary sphincter" .title/abstract OR "adjustable continence therapy" .title/abstract OR "Burch colposuspension".title/abstract OR laparoscop* AND "vaginal tapes" OR "autologous vaginal tapes" .title/abstract OR "tension free vaginal tape" .title/abstractOR tvt OR "transvaginal tape" .title/abstractOR "transobturator tape".title/abstract OR (colposuspension* .title/abstract OR Vesicosuspension* .title/abstract OR Urethrosuspension* .title/abstract OR Colpourethrosuspension* .title/abstract OR Urethropexy .title/abstract OR Cystourethropexy OR urethropex* OR urethrocytopex* or cystourethropex* OR urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR Burch* (marshall* or marchetti* or krantz* or mmk*).OR "anti-incontinence procedures" AND surg*	A N D	QoL title/abstract OR "Quality of life" title/abstract OR "social activities" title/abstract OR wellbeing title/abstract OR "Patient Compliance" MESH term OR "Patient Participation" MESH term OR "Patient Preference" MESH term OR "Patient Satisfaction" MESH term OR "Quality of Life" MESH term OR "Patient Acceptance of Health Care" MESH term OR "Adaptation, Psychological MESH term OR "patient compliance" Title/Abstract OR "Patient Participation" Title/Abstract OR "Patient Preference" Title/Abstract OR "Patient Satisfaction"Title/Abstract OR "Quality of Life"Title/Abstract OR "Patient Acceptance" Title/Abstract

		<p>“sling surgery” title/abstract OR “distal urethral polypropylene sling” OR “intravaginal slingoplasty”OR “anterior vaginal repair” OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retro pubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (tension AND vagina*) OR (slingplast* or sling plast*)</p>			
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EMBASE – Quality of life

POPULATION	A N D	INTERVENTION		COMPARATOR		ECO
<p>Urinary incontinence/exp EMTREE term OR Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR “Stress incontinence”/exp EMTREE termOR “Urge incontinence”/exp EMTREE term</p> <p>(bladder or stress or urg* or urine or“urinary dysfunction”) AND (incontinen* OR continen*) OR</p> <p>“lower urinary tract symptom” OR “sphincter deficiency” OR ISD OR “urinary bladder overactive” OR (urg* or urin*) AND</p>		<p>(TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR “MiniArc Precise” OR “Miniarc Pro” OR “Surgimesh sling VS12X” OR “Surgimesh sling VS15X” OR “ALIGN TO” OR “ALIGN R” OR “ALIGN S” OR AJUST OR “AJUST HELICAL” OR Obtryx or Lynx OR Advantage OR “Advantage FIT” OR Solyx OR Desara OR “I Stop tape” OR Supris OR Aris OR Altis OR “contasure Knotless” OR “Contasure Needleless” OR Remeex OR “Ingyne S” OR “Ingyne MIS” OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR “GYNECARE TVT ABBREVO” OR “Dynamesh SIS” OR Emerald OR “ECS Evolution”</p>	A N D	<p>“tension free vaginal tape”/exp EMTREE term Artificial urinary sphincter” :ab,tiOR “adjustable continence therapy” :ab,tiOR “Burch colposuspension”:ab,tiOR laparoscop* AND “vaginal tapes” OR “autologous vaginal tapes” :ab,tiOR “tension free vaginal tape” :ab,tiOR tvt OR “transvaginal tape” :ab,tiOR TOT sling:ab,ti OR “transobturator tape”/expOR (colposuspension* :ab,tiOR Vesicosuspension* :ab,tiOR Urethrosuspension* :ab,tiOR Colpourethrosuspension* :ab,tiOR Urethropexy :ab,tiOR</p>	A N D	<p>"Patient Compliance"/exp EMTREE termOR “Patient Attitude”/exp EMTREE term: OR "Patient Participation":ab,ti OR "Patient Preference" :ab,tiOR "Patient Satisfaction" :ab,tiOR "Quality of Life"/exp EMTREE termOR "Patient Acceptance of Health Care" OR "Patient Adaptation":ab,ti</p>

<p>incontinen*) OR nocturia::ab,ti</p>	<p>OR (T-SLING PP code TS06) OR (T-SLING PP code TS11)OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings/expEMTREE termOR "Mesh sling"/exp EMTREE term OR "Mid-urethral sling":ab,tiOR "Midurethral sling":ab,ti OR "Pubovaginal sling":ab,ti OR "retropubic tension free sling":ab,ti OR "retropubic tension sling":ab,ti OR "SPARC mideruthral sling":ab,ti OR "suprapubic arc sling"/exp OR "Suburethral sling"/exp OR "tension free sling":ab,ti OR "tension free vaginal sling":ab,ti OR "Suburethral sling":ab,tiOR "Mid-urethral sling" :ab,tiOR "female sling" :ab,tiOR "sling surgery" :ab,tiOR "distal urethral polypropylene sling" OR "intravaginal slingoplasty"OR "anterior vaginal repair" OR (sling* AND (procedure* or operat*)) OR</p> <p>(bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*) OR</p> <p>(urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*) OR</p> <p>tension AND vagina* OR (slingplast* or sling plast*)</p>	<p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	
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Cochrane Database – Quality of life

POPULATION		INTERVENTION		COMPARATOR		ECO
<p>Urinary incontinence Mesh term OR</p> <p>(bladder or stress or urg* or urine or"urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom"</p>	<p>A N D</p> <p>(TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR "ALIGN TO" OR "ALIGN R" OR "ALIGN S" OR AJUST OR</p>	<p>A N D</p> <p>"Artificial urinary sphincter" . ti,ab,kw OR</p> <p>"adjustable continence therapy" ti,ab,kw OR</p> <p>"Burch colposuspension". ti,ab,kw OR</p> <p>laparoscop* AND "vaginal</p>	<p>A N D</p>	<p>QoL title/abstract OR "Quality of life" title/abstract OR "social activities" title/abstract OR wellbeing title/abstract OR "Patient Compliance" MESH term OR "Patient Participation" MESH term OR</p>		

<p>ti,ab,kw OR "sphincter deficiency" ti,ab,kw OR ISD ti,ab,kw OR "urinary bladder overactive" ti,ab,kw OR ((urg* or urin*) AND incontinen*) OR nocturia ti,ab,kwOR</p>	<p>"AJUST HELICAL" OR Obtryx or Lynx OR Advantage OR "Advantage FIT" OR Solyx OR Desara OR "I Stop tape" OR Supris OR Aris OR Altis OR "contasure Knotless" OR "Contasure Needleless" OR Remeex OR "Ingyne S" OR "Ingyne MIS" OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR "GYNECARE TVT ABBREVO" OR "Dynamesh SIS" OR Emerald OR "ECS Evolution" OR (T-SLING PP code TS06) OR (T-SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings Mesh termOR "Suburethral sling" ti,ab,kw OR "Mid-urethral sling ti,ab,kwOR "female sling" ti,ab,kw OR "sling surgery" ti,ab,kw OR "distal urethral polypropylene sling" OR "intravaginal slingoplasty"OR (sling* AND (procedure* or operat*)) OR ((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR ((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (tension AND vagina*) OR (slingplast* or sling plast*</p>	<p>tapes" OR "autologous vaginal tapes" . ti,ab,kw OR "tension free vaginal tape" . ti,ab,kwOR tvt OR "transvaginal tape" . ti,ab,kwOR "transobturator tape" . ti,ab,kw OR (colposuspension* . ti,ab,kw OR Vesicosuspension* . ti,ab,kw OR Urethrosuspension* . ti,ab,kw OR Colpourethrosuspension* . ti,ab,kw OR Urethropexy ti,ab,kw OR Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR Burch* (marshall* or marchetti* or krantz* or mmk*).OR "anti-incontinence procedures" AND surg</p>	<p>"Patient Preference" MESH term OR "Patient Satisfaction" MESH term OR "Quality of Life" MESH term OR "Patient Acceptance of Health Care" MESH term OR "Adaptation, Psychological MESH term OR "patient compliance" . ti,ab,kw OR "Patient Participation" . ti,ab,kw OR "Patient Preference" . ti,ab,kw OR "Patient Satisfaction". ti,ab,kw OR "Quality of Life". ti,ab,kw OR "Patient Acceptance" . ti,ab,kw</p>
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Appendix 6 – Search strategy for EFF-SAF domains – Men

MEDLINE EFF SAF						
POPULATION	A N D	INTERVENTION		COMPARATOR		EFF SAF
<p>Urinary incontinence Mesh term OR (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia. title/abstractOR</p>		<p>ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbis OR OR "sling surgery" title/abstract OR Suburethral Slings Mesh termOR "Suburethral sling" title/abstract OR "Mid-urethral sling" title/abstractOR "male sling" OR "sling surgery" title/abstract OR "distal urethral polypropylene sling" OR "anterior vaginal repacbc c cvci" OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (tension AND vagina*) OR (slingplast* or sling plast*)</p>	AND	<p>"Artificial urinary sphincter" . title/abstract OR "adjustable continence therapy" . title/abstract OR "Burch colposuspension". title/abstract OR laparoscop* AND "vaginal tapes" OR "transobturator tape". title/abstract OR (colposuspension* . title/abstract OR Vesicosuspension* . title/abstract OR Urethrosuspension* . title/abstract OR Colpourethrosuspension* . title/abstract OR Urethropexy . title/abstract OR Cystourethropexy OR urethropex* OR urethrocystopex* or cystourethropex* OR urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>		<p>A N D</p> <p>((Urinary Incontinence MESH term OR continenceOR Stress MESH termOR Urge MESH termOR "Urinary Distress" title/abstractOR "adverse effects" title/abstractOR Failure title/abstractOR "urine loss" title/abstract OR "sexual functions" title/abstractOR improvement title/abstractOR Pain title/abstractOR "urinary retention" title/abstract OR "bladder control" title/abstract "OR "bladder damage" title/abstract) AND (outcome OR "surgical outcomes" OR "after surg*" OR "surg* effects" OR effects OR post-surgery))</p> <p>"intraoperative complications" title/abstractOR Re-operation title/abstractOR (duration AND operation) title/abstract OR (time AND operation) title/abstract OR "surgery times" title/abstract OR "blood loss" title/abstract OR "urinary tract infection" title/abstract OR "length of inpatient stay" title/abstract OR "normal activity level" title/abstract OR "Adverse events" title/abstract OR "vascular injury" title/abstract OR "visceral injury" title/abstract OR "bladder perforation" title/abstract OR "urethral perforation" title/abstract OR "bowel perforation" title/abstract OR "nerve damage"</p>

					title/abstract OR "perioperative surgical complications" OR "voiding dysfunction" title/abstract OR "long-term catheterisation" title/abstract OR (infection and "synthetic mesh") OR "tape erosion" title/abstract OR "tape extrusion" title/abstract OR "urinary tract infection" title/abstract OR "Subjective cure" title/abstract OR "Objective cure" title/abstract OR "Vascular haematoma" title/abstract OR "Bladder perforation" title/abstract OR "Voiding dysfunction" title/abstract OR "De novo urgency" title/abstract OR
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EMBASE EFF SAF						
POPULATION	A N D	INTERVENTION		COMPARATOR		EFF SAF
Urine incontinence/exp EMTREE term OR Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR "Stress incontinence"/exp EMTREE term OR "Urge incontinence"/exp EMTREE term (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia::ab,ti		ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbas OR Suburethral Slings/exp EMTREE term OR "Mesh sling"/exp EMTREE term OR "Mid-urethral sling":ab,ti OR "Midurethral sling":ab,ti OR "Pubovaginal sling":ab,ti OR "retropubic tension free sling":ab,ti OR "retropubic tension sling":ab,ti OR "SPARC mideruthral sling":ab,ti OR "suprapubic arc sling"/exp OR "Suburethral sling"/exp OR "tension free sling":ab,ti OR "tension free vaginal sling":ab,ti OR "Suburethral sling":ab,ti OR "Mid-urethral sling" :ab,ti OR "sling surgery" :ab,ti OR "distal urethral polypropylene sling" OR "intravaginal slingoplasty" OR (sling* AND (procedure* or operat*)) OR (bladder* or surgical* or	A N D	Artificial urinary sphincter" :ab,ti OR "adjustable continence therapy" :ab,ti OR "Burch colposuspension":ab,ti OR laparoscop* AND "vaginal tapes" OR "autologous vaginal tapes" :ab,ti OR TOT sling:ab,ti OR "transobturator tape"/exp OR (colposuspension* :ab,ti OR Vesicosuspension* :ab,ti OR Urethrosuspension* :ab,ti OR Colpourethrosuspension* :ab,ti OR Urethropexy :ab,ti OR Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR Burch* (marshall* or marchetti* or krantz* or mmk*).OR	A N D	((Urine Incontinence EMTREE term Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR "Stress incontinence"/exp EMTREE term OR "Urge incontinence"/exp EMTREE term OR continence OR Stress OR Urge OR "Urinary Distress":ab,ti OR "adverse effects":ab,ti OR Failure :ab,ti OR "urine loss" :ab,ti OR "sexual functions":ab,ti OR improvement :ab,ti OR Pain :ab,ti OR "urinary retention":ab,ti OR "bladder control" :ab,ti OR "bladder damage":ab,ti) AND (outcome OR "surgical outcomes" OR "after surg" OR "surg* effects" OR effects OR post-surgery)) OR "intraoperative complications" :ab,ti OR Re-operation :ab,ti OR (duration AND operation) :ab,ti OR (time AND operation)

	<p>synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*) OR</p> <p>(urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*) OR (slingplast* or sling plast*)</p>		<p>“anti-incontinence procedures” AND surg*</p>		<p>:ab,tiOR “surgery times” :ab,tiOR “blood loss” :ab,tiOR “urinary tract infection:ab,tiOR “length of inpatient stay” :ab,tiOR “normal activity level” :ab,tiOR “Adverse events” :ab,tiOR “vascular injury” :ab,tiOR “visceral injury” title/a:ab,tibstract OR “bladder perforation” :ab,tiOR “urethral perforation” :ab,tiOR “bowel perforation” :ab,tiOR “nerve damage” :ab,tiOR “perioperative surgical complications” OR “voiding dysfunction” :ab,tiOR “long-term catheterisation”:ab,tiOR (infection and “synthetic mesh”) OR “tape erosion” :ab,tiOR “tape extrusion:ab,tiOR “urinary tract infection” :ab,tiOR “Subjective cure” :ab,tiOR “Objective cure” :ab,tiOR “Vascular haematoma” :ab,tiOR “Bladder perforation”:ab,tiOR “ Voiding dysfunction” :ab,tiOR “De novo urgency” :ab,tiOR</p>
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Cochrane Database EFF SAF

POPULATION		INTERVENTION		COMPARATOR		EFF SAF
<p>Urinary incontinence Mesh term OR</p> <p>(bladder or stress or urg* or urine or“urinary dysfunction”) AND (incontinen* OR continen*) OR</p> <p>“lower urinary tract symptom” ti,ab,kw OR</p> <p>“sphincter deficiency” ti,ab,kw OR</p> <p>ISD ti,ab,kw OR</p> <p>“urinary bladder overactive” ti,ab,kw OR</p> <p>((urg* or urin*) AND incontinen*) OR nocturia ti,ab,kwOR</p>	<p>A N D</p>	<p>ATOMS OR “Advance XP” OR “I-Stop TOMS” OR Virtue OR Remeex OR “Andromesh MSI” OR “Dynamesh PRM” OR “HERACLE HC01” OR Argus OR Phorbas OR Suburethral Slings Mesh termOR</p> <p>“Suburethral sling” ti,ab,kw OR</p> <p>“Mid-urethral sling ti,ab,kwOR</p> <p>“male sling” ti,ab,kw OR</p> <p>“sling surgery” ti,ab,kw OR</p> <p>“distal urethral polypropylene sling” OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or</p>	<p>A N D</p>	<p>“Artificial urinary sphincter” . ti,ab,kw OR</p> <p>“adjustable continence therapy” ti,ab,kw OR</p> <p>“Burch colposuspension”. ti,ab,kw OR</p> <p>laparoscop* AND “vaginal tapes” OR</p> <p>“autologous vaginal tapes” . ti,ab,kw OR</p> <p>“transobturator tape”. ti,ab,kw OR</p> <p>(colposuspension* . ti,ab,kw OR</p> <p>Vesicosuspension* .ti,ab,kw OR</p>	<p>A N D</p>	<p>((Urinary Incontinence MESH term OR continenceOR Stress MESH termOR Urge MESH termOR “Urinary Distress” ti,ab,kwOR “adverse effects” ” ti,ab,kwOR Failure ” ti,ab,kwOR “urine loss” ” ti,ab,kw OR “sexual functions” ti,ab,kwOR improvement ” ti,ab,kwOR Pain ” ti,ab,kwOR “urinary retention” ti,ab,kw OR “bladder control” ti,ab,kw "OR “bladder damage”” ti,ab,kw</p> <p>AND</p>

	<p>tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (slingplast* or sling plast*)</p>	<p>Urethrosuspension* . ti,ab,kw OR</p> <p>Colpourethrosuspension* . ti,ab,kw OR</p> <p>Urethropexy ti,ab,kw OR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR</p> <p>"Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	<p>(outcome OR "surgical outcomes" OR "after surg*" OR "surg* effects" OR effects OR post-surgery))</p> <p>"intraoperative complications" " ti,ab,kwOR</p> <p>Re-operation " ti,ab,kwOR (duration AND operation) " ti,ab,kw OR (time AND operation) " ti,ab,kw Or</p> <p>"surgery times" " ti,ab,kw OR</p> <p>"blood loss" " ti,ab,kw OR</p> <p>"urinary tract infection" ti,ab,kw OR</p> <p>"length of inpatient stay" " ti,ab,kw OR</p> <p>"normal activity level" " ti,ab,kw OR</p> <p>"Adverse events" " ti,ab,kw OR</p> <p>"vascular injury" " ti,ab,kw OR</p> <p>"visceral injury" " ti,ab,kw OR</p> <p>"bladder perforation" ti,ab,kw OR</p> <p>"urethral perforation" " ti,ab,kw OR</p> <p>"bowel perforation" " ti,ab,kw OR</p> <p>"nerve damage" " ti,ab,kw OR</p> <p>"perioperative surgical complications" OR</p> <p>"voiding dysfunction" " ti,ab,kw OR</p> <p>"long-term catheterisation" ti,ab,kw OR</p> <p>(infection and "synthetic mesh") OR</p> <p>"tape erosion" " ti,ab,kw OR</p> <p>"tape extrusion" " ti,ab,kw OR</p> <p>"urinary tract infection" " ti,ab,kwOR</p> <p>"Subjective cure" ti,ab,kwOR</p> <p>"Objective cure" " ti,ab,kwOR</p> <p>"Vascular haematoma" " ti,ab,kwOR</p> <p>"Bladder perforation" ti,ab,kwOR</p> <p>" Voiding dysfunction ti,ab,kwOR</p> <p>"De novo urgency" ti,ab,kwOR</p>
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MEDLINE – Quality of life						
POPULATION	A N D	INTERVENTION		COMPARATOR		OUTCOME QUALITA' DELLA VITA
Urinary incontinence MESH term OR (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia.title/abstractOR		ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbas OR Suburethral Slings Mesh termOR "Suburethral sling" title/abstract OR "Mid-urethral sling" title/abstractOR "sling surgery" title/abstract OR "distal urethral polypropylene sling" OR (sling* AND (procedure* or operat*)) OR ((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR ((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retro pubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (slingplast* or sling plast*)	AN D	"Artificial urinary sphincter" .title/abstract OR "adjustable continence therapy" .title/abstract OR "Burch colposuspension".title/abstract OR "transobturator tape".title/abstract OR (colposuspension* .title/abstract OR Vesicosuspension* .title/abstract OR Urethrosuspension* .title/abstract OR Colpourethrosuspension* .title/abstract OR Urethropexy .title/abstract OR Cystourethropexy OR urethropex* OR urethrocystopex* or cystourethropex* OR urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR Burch* (marshall* or marchetti* or krantz* or mmk*).OR "anti-incontinence procedures" AND surg*		A N D QoL title/abstract OR "Quality of life" title/abstract OR "social activities" title/abstract OR wellbeing title/abstract OR "Patient Compliance" MESH term OR "Patient Participation" MESH term OR "Patient Preference" MESH term OR "Patient Satisfaction" MESH term OR "Quality of Life" MESH term OR "Patient Acceptance of Health Care" MESH term OR "Adaptation, Psychological" MESH term OR "patient compliance" Title/Abstract OR "Patient Participation" Title/Abstract OR "Patient Preference" Title/Abstract OR "Patient Satisfaction"Title/Abstract OR "Quality of Life"Title/Abstract OR "Patient Acceptance" Title/Abstract

EMBASE – Quality of life						
POPULATION	A N D	INTERVENTION		COMPARATOR		ECO
Urinare incontinence/exp EMTREE term OR Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR "Stress incontinence"/exp EMTREE termOR "Urge incontinence"/exp EMTREE term		ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbas OR Suburethral Slings/expEMTREE termOR "Mesh sling"/exp EMTREE term OR	A N D	Artificial urinary sphincter" :ab,tiOR "adjustable continence therapy" :ab,tiOR "Burch colposuspension":ab,tiOR laparoscop* AND "vaginal tapes" OR "autologous vaginal tapes" :ab,tiOR		A N D "Patient Compliance"/exp EMTREE termOR "Patient Attitude"/exp EMTREE term: OR "Patient Participation":ab,ti OR "Patient Preference" :ab,tiOR "Patient Satisfaction"

<p>(bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia::ab,ti</p>	<p>"Mid-urethral sling":ab,tiOR "Midurethral sling":ab,ti OR "retropubic tension free sling":ab,ti OR "retropubic tension sling":ab,ti OR OR "SPARC mideruthral sling":ab,ti OR "suprapubic arc sling"/exp OR "Suburethral sling"/exp OR "tension free sling":ab,ti OR "Suburethral sling":ab,tiOR "Mid-urethral sling" :ab,tiOR "sling surgery" :ab,tiOR "distal urethral polypropylene sling" OR (sling* AND (procedure* or operat*)) OR</p> <p>(bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*) OR (urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*) OR (slingplast* or sling plast*)</p>	<p>sling:ab,ti OR "transobturator tape"/expOR (colposuspension* :ab,tiOR Vesicosuspension* :ab,tiOR Urethrosuspension* :ab,tiOR Colpourethrosuspension* :ab,tiOR Urethropexy :ab,tiOR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	<p>:ab,tiOR "Quality of Life"/exp EMTREE termOR "Patient Acceptance of Health Care" OR "Patient Adaptation":ab,ti</p>
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Cochrane Database –Quality of life

POPULATION	INTERVENTION	COMPARATOR	ECO
<p>Urinary incontinence Mesh term OR</p> <p>(bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom" ti,ab,kw OR "sphincter deficiency" ti,ab,kw OR ISD ti,ab,kw OR "urinary bladder overactive" ti,ab,kw OR ((urg* or urin*) AND incontinen*) OR nocturia ti,ab,kwOR</p>	<p>A N D</p> <p>ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbas OR Suburethral Slings Mesh termOR "Suburethral sling" ti,ab,kw OR "Mid-urethral sling ti,ab,kwOR "sling surgery" ti,ab,kw OR "distal urethral polypropylene sling" OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or transobturator* or</p>	<p>A N D</p> <p>"Artificial urinary sphincter" . ti,ab,kw OR</p> <p>"adjustable continence therapy" ti,ab,kw OR</p> <p>"Burch colposuspension". ti,ab,kw OR</p> <p>laparoscop* AND "vaginal tapes" OR</p> <p>"transobturator tape". ti,ab,kw OR</p> <p>(colposuspension* . ti,ab,kw OR</p> <p>Vesicosuspension* . ti,ab,kw OR</p> <p>Urethrosuspension* . ti,ab,kw OR</p> <p>Colpourethrosuspension* . ti,ab,kw OR</p> <p>Urethropexy ti,ab,kw OR</p> <p>Cystourethropexy OR urethropex* or</p>	<p>A N D</p> <p>QoL title/abstract OR "Quality of life" title/abstract OR "social activities" title/abstract OR wellbeing title/abstract OR "Patient Compliance" MESH term OR "Patient Participation" MESH term OR "Patient Preference" MESH term OR "Patient Satisfaction" MESH term OR "Quality of Life" MESH term OR "Patient Acceptance of Health Care" MESH term OR "Adaptation,Psychological MESH term OR "patient compliance" . ti,ab,kw OR "Patient Participation" . ti,ab,kw OR "Patient Preference" . ti,ab,kw OR "Patient Satisfaction". ti,ab,kw OR "Quality of Life". ti,ab,kw OR "Patient Acceptance" .</p>

	<p>trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR</p> <p>(slingplast* or sling plast*)</p>	<p>urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR</p> <p>"Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	<p>ti,ab,kw</p>
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Appendix 7 – List of analyses presented (from Lapitan et al., 2016)

Types of interventions

In the review by Lapitan et al. 2016, the following comparisons were made:

1. open retropubic colposuspension versus no treatment or sham operation for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
2. open retropubic colposuspension versus conservative interventions (pelvic floor muscle training, electrical stimulation, biofeedback) for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
3. open retropubic colposuspension versus drug therapy for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
4. open retropubic colposuspension versus vaginal anterior repair (anterior colporrhaphy) for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
5. open retropubic colposuspension versus sling procedures (abdominal and vaginal approach, including self-fixing slings) for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
 - i) *open retropubic colposuspension versus traditional sling procedures (abdominal and vaginal approach) for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);*
 - ii) *open retropubic colposuspension versus self-fixing sling procedures (tension-free vaginal tape (TVT), transobturator tape (TOT)) for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);*
 - iii) *open retropubic colposuspension versus single-incision sling procedures for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);*
6. open retropubic colposuspension versus bladder neck needle suspension for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
7. open retropubic colposuspension versus laparoscopic retropubic colposuspension for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
8. open retropubic colposuspension versus periurethral injection procedures for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis);
9. methods of open retropubic colposuspension versus other methods of open retropubic colposuspension for the management of urodynamic stress incontinence and for symptoms of stress or mixed incontinence (clinical diagnosis):
 - i) *Burch colposuspension versus Marshall-Marchetti-Krantz procedure,*
 - ii) *Burch colposuspension versus paravaginal defect repair or vaginal obturator shelf repair,*
 - iii) *Marshall-Marchetti-Krantz procedure versus paravaginal defect repair or vaginal obturator shelf repair.*

Appendix 8 – Search strategy for ECO domain – Women

MEDLINE ECO

POPULATION	AND	INTERVENTION		COMPARATOR		ECO
Urinary incontinence Mesh term OR (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia. title/abstractOR		TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR "ALIGN TO" OR "ALIGN R" OR "ALIGN S" OR AJUST OR "AJUST HELICAL" OR Obtryx or Lynx OR Advantage OR "Advantage FIT" OR Solyx OR Desara OR "I Stop tape" OR Supris OR Aris OR Altis OR "contasure Knotless" OR "Contasure Needleless" OR Remeex OR "Ingyne S" OR "Ingyne MIS" OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O code 810081L) OR (GYNECARE TVT EXACT code TVTRL) OR "GYNECARE TVT ABBREVO" OR " Dynamesh SIS" OR Emerald OR "ECS Evolution" OR (T-SLING PP code TS06) OR (T- SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings Mesh termOR "Suburethral sling" title/abstractOR "Mid-urethral sling" title/abstractOR "male sling" title/abstractOR "female sling" title/abstractOR "sling surgery" title/abstractOR "distal urethral polypropylene sling" OR "intravaginal slingoplasty"OR tvt-o OR ivs OR uretrex OR	AND	"Artificial urinary sphincter" . title/abstractOR "adjustable continence therapy" . title/abstractOR "Burch colposuspension". title/abstractOR laparoscop* AND "vaginal tapes" OR "autologous vaginal tapes" . title/abstractOR "tension free vaginal tape" . title/abstractOR tvt OR "transvaginal tape" . title/abstractOR "transobturator tape". title/abstractOR (colposuspension* . title/abstractOR Vesicosuspension* . title/abstractOR Urethrosuspension* . title/abstractOR Colpourethrosuspension* . title/abstractOR Urethropexy . title/abstractOR Cystourethropexy OR urethropex* OR urethrocystopex* or cystourethropex* OR urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR Burch* (marshall* or marchetti* or krantz* or mmk*).OR "anti-incontinence procedures" AND surg*	AND	(Cost . title/abstractAND analysis . title/abstract) OR ("cost minimization" . title/abstractOR (cost mimisation" title/abstract CMA . title/abstractOR ("cost effectiveness" . title/abstractOR CEA . title/abstractOR "cost utility" . title/abstract OR CUA . title/abstractOR ("health care" [Text Word] AND cost*[Text Word])OR ((economic [Text Word] AND (evaluation OR analysis OR aspect OR assessment) [Text Word])) OR "Budget Impact Analysis" . title/abstractOR BIA title/abstract OR Economics: title/abstract. OR "costs and cost analysis" title/abstract OR "cost allocation" title/abstractOR "cost benefit" OR"cost control" "cost saving" OR"hospital costs" OR "health resources" title/abstractOR "healt priorities" title/abstractOR "health expenditures" title/abstractOR "financial management" title/abstract OR "resource* allocation" title/abstractOR Budget title/abstract OR CBA title/abstractOR "cost benefit analysis"OR "Cost consequences analysis"

		<p>safyre OR I-stop OR sparc OR lynx OR monarc OR obtryx OR obtape OR aris OR "anterior vaginal repair" OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (tension AND vagina*) OR (slingplast* or sling plast*)</p>			
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EMBASE ECO						
POPULATION	AND	INTERVENTION		COMPARATOR		ECO
<p>Urinare incontinence/exp EMTREE term OR Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR "Stress incontinence"/exp EMTREE term OR "Urge incontinence"/exp EMTREE term</p> <p>(bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive"</p>		<p>TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR "ALIGN TO" OR "ALIGN R" OR "ALIGN S" OR AJUST OR "AJUST HELICAL" OR Obtryx or Lynx OR Advantage OR "Advantage FIT" OR Solyx OR Desara OR "I Stop tape" OR Supris OR Aris OR Altis OR "contasure Knotless" OR "Contasure Needleless" OR Remeex OR "Ingyne S" OR "Ingyne MIS" OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR "GYNECARE TVT ABBREVO" OR</p>	AND	<p>"tension free vaginal tape"/exp EMTREE term Artificial urinary sphincter" :ab,tiOR "adjustable continence therapy" :ab,tiOR "Burch colposuspension":ab,tiOR laparoscop* AND "vaginal tapes" OR "autologous vaginal tapes" :ab,tiOR "tension free vaginal tape" :ab,tiOR tvt OR "transvaginal tape" :ab,tiOR TOT sling:ab,ti OR "transobturator tape"/expOR (colposuspension* :ab,tiOR Vesicosuspension* :ab,tiOR Urethrosuspension* :ab,tiOR Colpourethrosuspension*</p>	AND	<p>'cost analysis'/exp OR 'cost minimization': :ab,ti OR "cost minimisation": ab,ti. OR cma:ab,ti OR 'cost effectiveness':ab,ti OR cea:ab,ti OR 'cost utility':ab,ti OR cua:ab,ti OR 'health care'/exp AND cost* OR</p> <p>(economic AND 'evaluation'/exp OR 'analysis'/exp OR aspect OR assessment)) OR</p> <p>('budget impact analysis':ab,ti OR</p>

<p>OR ((urg* or urin*) AND incontinen*) OR nocturia::ab,ti</p>	<p>" Dynamesh SIS" OR Emerald OR "ECS Evolution" OR (T- SLING PP code TS06) OR (T- SLING PP code TS11) OR (T- SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings/expEMTREE termOR "Mesh sling"/exp EMTREE term OR "Mid-urethral sling":ab,tiOR "Midurethral sling":ab,ti OR "Pubovaginal sling":ab,ti OR "retropubic tension free sling":ab,ti OR "retropubic tension sling":ab,ti OR "SPARC mideruthral sling":ab,ti OR "suprapubic arc sling"/exp OR "Suburethral sling"/exp OR "tension free sling":ab,ti OR "tension free vaginal sling":ab,ti OR "Suburethral sling":ab,tiOR "Mid-urethral sling" :ab,tiOR "male sling" :ab,tiOR "female sling" :ab,tiOR "sling surgery" :ab,tiOR "distal urethral polypropylene sling" OR "intravaginal slingoplasty"OR tvt-o OR ivs OR uretrex OR safyre OR I-stop OR sparc OR lynx OR monarc OR obtryx OR obtape OR aris OR "anterior vaginal repair" OR (sling* AND (procedure* or operat*)) OR</p> <p>(bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*) OR</p> <p>(urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*) OR</p> <p>tension AND vagina* OR (slingplast* or sling plast*)</p>	<p>:ab,tiOR Urethropexy :ab,tiOR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	<p>bia:ab,ti)</p> <p>OR</p> <p>Economics:ab,ti. OR "costs and cost analysis" ab,ti OR "cost allocation" ab,ti OR "cost benefit" ab,ti OR "cost control" ab,ti "cost saving" ab,ti OR "hospital costs" ab,ti OR "health resources" ab,ti OR "healt priorities" ab,ti OR "health expenditures" ab,ti OR "financial management" ab,ti OR "resource* allocation" ab,ti OR Budget ab,ti OR CBA OR "cost benefit analysis"OR "Cost consequences analysis"</p>
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Cochrane Database ECO

POPULATION		INTERVENTION		COMPARATOR		ECO
<p>Urinary incontinence Mesh term OR</p> <p>(bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom" ti,ab,kw OR</p> <p>"sphincter deficiency" ti,ab,kw OR</p> <p>ISD ti,ab,kw OR</p> <p>"urinary bladder overactive" ti,ab,kw OR</p> <p>((urg* or urin*) AND incontinen*) OR nocturia ti,ab,kwOR</p>	<p>AND</p>	<p>TOA5021; TVA5121 OR PFR5021 OR Monarc Or Sparc OR Retroarc OR "MiniArc Precise" OR "Miniarc Pro" OR "Surgimesh sling VS12X" OR "Surgimesh sling VS15X" OR "ALIGN TO" OR "ALIGN R" OR "ALIGN S" OR AJUST OR "AJUST HELICAL" OR Obtryx or Lynx OR Advantage OR "Advantage FIT" OR Solyx OR Desara OR "I Stop tape" OR Supris OR Aris OR Altis OR "contasure Knotless" OR "Contasure Needleless" OR Remeex OR "Ingyne S" OR "Ingyne MIS" OR (GYNECARE TVT code 810041BL) OR (GYNECARE TVT O (code 810081L) OR (GYNECARE TVT EXACT (code TVTRL) OR "GYNECARE TVT ABBREVO" OR "Dynamesh SIS" OR Emerald OR "ECS Evolution" OR (T-SLING PP code TS06) OR (T-SLING PP code TS11) OR (T-SLING PLUS code TS-DP) OR "Unitape VS" OR "Unitape T Plus" OR "Unitape T" OR "Safyre VS" OR "Safyre T" OR Ophira OR "SVS 01030 IO" OR SB410400SPE OR SB410400TOE OR SB410400DGE OR Suburethral Slings Mesh termOR "Suburethral sling" ti,ab,kw OR "Mid-urethral sling ti,ab,kwOR "male sling" ti,ab,kw OR "female sling" ti,ab,kw OR "sling surgery" ti,ab,kw OR "distal urethral polypropylene sling" OR "intravaginal slingoplasty"OR tvt-o OR ivs OR uretrex OR safyre OR I-stop OR sparc OR lynx OR monarc OR obtryx OR obtape OR aris OR "anterior vaginal repair" OR (sling* AND (procedure* or operat*)) OR ((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR ((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retro pubic*</p>	<p>AND</p>	<p>"Artificial urinary sphincter" . ti,ab,kw OR</p> <p>"adjustable continence therapy" ti,ab,kw OR</p> <p>"Burch colposuspension". ti,ab,kw OR</p> <p>laparoscop* AND "vaginal tapes" OR</p> <p>"autologous vaginal tapes" . ti,ab,kw OR</p> <p>"tension free vaginal tape" . ti,ab,kwOR</p> <p>tvt OR</p> <p>"transvaginal tape" . ti,ab,kwOR</p> <p>"transobturator tape". ti,ab,kw OR</p> <p>(colposuspension* . ti,ab,kw OR</p> <p>Vesicosuspension* . ti,ab,kw OR</p> <p>Urethrosuspension* . ti,ab,kw OR</p> <p>Colpourethrosuspension* . ti,ab,kw OR</p> <p>Urethropexy ti,ab,kw OR</p> <p>Cystourethropexy OR urethropex* or urethrocytopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR</p> <p>"Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	<p>AND</p>	<p>'cost analysis':ti,ab,kwOR</p> <p>'cost minimization': ti,ab,kw OR cma) OR</p> <p>"cost minimisation" : ti,ab, kw OR CMA</p> <p>('cost effectiveness': ti,ab,kw OR cea)OR</p> <p>('cost utility': ti,ab,kw OR cua)OR</p> <p>'health care' and cost*:ti,ab,kw OR</p> <p>economic and (evaluation or analysis or aspect or assessment):ti,ab,kwOR</p> <p>('budget impact analysis': ti,ab,kw OR bia) OR</p> <p>Economics:ab,ti. OR</p> <p>"costs and cost analysis" OR</p> <p>"cost allocation" OR</p> <p>"cost benefit" OR</p> <p>"cost control"</p> <p>"cost saving" OR</p> <p>"hospital costs" OR</p> <p>"health resources" OR</p> <p>"health priorities" OR</p> <p>"health expenditures" OR</p> <p>"financial management" OR</p> <p>"resource* allocation" OR</p> <p>Budget OR</p> <p>CBA OR</p> <p>"cost benefit analysis"OR</p> <p>"Cost consequences analysis"</p>

		orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (tension AND vagina*) OR (slingplast* or sling plast*)				
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Appendix 9 – Search strategy for ECO domain – Men

MEDLINE

POPULATION	AND	INTERVENTION		COMPARATOR		ECO
<p>Urinary incontinence Mesh term OR (bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR "lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR ((urg* or urin*) AND incontinen*) OR nocturia. title/abstractOR</p>		<p>ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbas OR Suburethral Slings Mesh termOR "Suburethral sling" title/abstractOR "Mid-urethral sling" title/abstractOR "male sling" title/abstractOR "sling surgery" title/abstractOR "distal urethral polypropylene sling" OR (sling* AND (procedure* or operat*)) OR ((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR ((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retro pubic* or retro pubic* orsuprapubic* or supra pubic* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR (slingplast* or sling plast*)</p>	AND	<p>"Artificial urinary sphincter" . title/abstractOR "adjustable continence therapy" . title/abstractOR "Burch colposuspension". title/abstractOR laparoscop* AND "vaginal tapes" OR "transobturator tape". title/abstractOR (colposuspension* . title/abstractOR Vesicosuspension* . title/abstractOR Urethrosuspension* . title/abstractOR Colpourethrosuspension* . title/abstractOR Urethropexy . title/abstractOR Cystourethropexy OR urethropex* OR urethrocystopex* or cystourethropex* OR urethrocervicopex* OR copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR Burch* (marshall* or marchetti* or krantz* or mmk*).OR "anti-incontinence procedures" AND surg*</p>	AND	<p>(Cost . title/abstractAND analysis . title/abstract) OR ("cost minimization" . title/abstractOR (cost mimisation" title/abstract CMA . title/abstractOR ("cost effectiveness" . title/abstractOR CEA . title/abstractOR "cost utility" . title/abstract OR CUA . title/abstractOR ("health care" [Text Word] AND cost*[Text Word])OR ((economic [Text Word] AND (evaluation OR analysis OR aspect OR assessment) [Text Word])) OR "Budget Impact Analysis" .title/abstractOR BIA title/abstract OR Economics: title/abstract. OR "costs and cost analysis" title/abstract OR "cost allocation" title/abstractOR "cost benefit" OR"cost control" "cost saving" OR"hospital costs" OR "health resources" title/abstractOR "healt priorities" title/abstractOR "health expenditures" title/abstractOR "financial management" title/abstract OR "resource* allocation" title/abstractOR Budget title/abstract OR CBA title/abstractOR "cost benefit analysis"OR "Cost consequences analysis"</p>

EMBASE

POPULATION	AND	INTERVENTION		COMPARATOR		ECO
<p>Urinary incontinence/exp EMTREE term OR Diurnal Enuresis/exp EMTREE term OR Mixed incontinence/exp EMTREE term OR "Stress incontinence"/exp EMTREE term OR "Urge incontinence"/exp EMTREE term</p> <p>(bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom" OR "sphincter deficiency" OR ISD OR "urinary bladder overactive" OR (urg* or urin*) AND incontinen*) OR nocturia::ab,ti</p>		<p>ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbas OR Suburethral Slings/exp EMTREE term OR "Mesh sling"/exp EMTREE term OR "Mid-urethral sling":ab,ti OR "Midurethral sling":ab,ti OR "retropubic tension free sling":ab,ti OR "retropubic tension sling":ab,ti OR "SPARC mideruthral sling":ab,ti OR "suprapubic arc sling"/exp OR "Suburethral sling"/exp OR "tension free sling":ab,ti OR "tension free vaginal sling":ab,ti OR "Suburethral sling":ab,ti OR "Mid-urethral sling":ab,ti OR "male sling":ab,ti OR</p> <p>"sling surgery":ab,ti OR "distal urethral polypropylene sling" OR (sling* AND (procedure* or operat*)) OR</p> <p>(bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*) OR</p> <p>(urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retropubic* or retro pubic* or supra pubic* or supra pubic* transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*) OR (slingplast* or sling plast*)</p>	AND	<p>Artificial urinary sphincter" :ab,ti OR "adjustable continence therapy":ab,ti OR "Burch colposuspension":ab,ti OR laparoscop* AND "vaginal tapes" OR sling:ab,ti OR "transobturator tape"/exp OR (colposuspension* :ab,ti OR Vesicosuspension* :ab,ti OR Urethrosuspension* :ab,ti OR Colpourethrosuspension* :ab,ti OR Urethropexy :ab,ti OR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR "Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	AND	<p>'cost analysis'/exp OR 'cost minimization': :ab,ti OR "cost minimisation": ab,ti. OR cma:ab,ti OR 'cost effectiveness':ab,ti OR cea:ab,ti OR 'cost utility':ab,ti OR cua:ab,ti OR 'health care'/exp AND cost* OR</p> <p>(economic AND 'evaluation'/exp OR 'analysis'/exp OR aspect OR assessment)) OR</p> <p>('budget impact analysis':ab,ti OR bia:ab,ti)</p> <p>OR</p> <p>Economics:ab,ti. OR "costs and cost analysis" ab,ti OR "cost allocation" ab,ti OR "cost benefit" ab,ti OR "cost control" ab,ti OR "cost saving" ab,ti OR "hospital costs" ab,ti OR "health resources" ab,ti OR "health priorities" ab,ti OR "health expenditures" ab,ti OR "financial management" ab,ti OR "resource* allocation" ab,ti OR Budget ab,ti OR CBA OR "cost benefit analysis" OR "Cost consequences analysis"</p>

Cochrane Database

POPULATION		INTERVENTION		COMPARATOR		ECO
<p>Urinary incontinence Mesh term OR</p> <p>(bladder or stress or urg* or urine or "urinary dysfunction") AND (incontinen* OR continen*) OR</p> <p>"lower urinary tract symptom" ti,ab,kw OR "sphincter deficiency" ti,ab,kw OR</p> <p>ISD ti,ab,kw OR</p> <p>"urinary bladder overactive" ti,ab,kw OR</p> <p>((urg* or urin*) AND incontinen*) OR nocturia ti,ab,kwOR</p>	AND	<p>ATOMS OR "Advance XP" OR "I-Stop TOMS" OR Virtue OR Remeex OR "Andromesh MSI" OR "Dynamesh PRM" OR "HERACLE HC01" OR Argus OR Phorbis OR Suburethral Slings Mesh term OR</p> <p>"Suburethral sling" ti,ab,kw OR</p> <p>"Mid-urethral sling" ti,ab,kwOR</p> <p>"male sling" ti,ab,kw OR</p> <p>"sling surgery" ti,ab,kw OR</p> <p>"distal urethral polypropylene sling" OR (sling* AND (procedure* or operat*)) OR</p> <p>((bladder* or surgical* or synthetic* or biologic* or autologous*) AND (sling* or tape* or mesh*)) OR</p> <p>((urethra* or suburethra* or midurethra* or mid urethra* or transurethra* pubovesical* or pubo vesical* or retro pubic* or retro pubic* orsuprapubic* or supra pubic* or pubovagina* or transvaginal* or intravaginal* or vagina* or transobturator* or trans obturator* or tension* or lyodura*) AND (sling or tape* or mesh or implant*)) OR</p> <p>(slingplast* or sling plast*)</p>	AND	<p>"Artificial urinary sphincter" . ti,ab,kw OR</p> <p>"adjustable continence therapy" ti,ab,kw OR</p> <p>"Burch colposuspension". ti,ab,kw OR</p> <p>laparoscop* AND "vaginal tapes" OR</p> <p>"autologous vaginal tapes" . ti,ab,kw OR</p> <p>"transobturator tape". ti,ab,kw OR</p> <p>(colposuspension* . ti,ab,kw OR</p> <p>Vesicosuspension* . ti,ab,kw OR</p> <p>Urethrosuspension* . ti,ab,kw OR</p> <p>Colpourethrosuspension* . ti,ab,kw OR</p> <p>Urethropexy ti,ab,kw OR</p> <p>Cystourethropexy OR urethropex* or urethrocystopex* or cystourethropex* or urethrocervicopex* OR</p> <p>copofixation* OR "Burch colpourethropexy" OR</p> <p>"Marshall Marchetti Operation" OR</p> <p>Burch* (marshall* or marchetti* or krantz* or mmk*).OR</p> <p>"anti-incontinence procedures" AND surg*</p>	AND	<p>'cost analysis':ti,ab,kwOR</p> <p>'cost minimization': ti,ab,kw OR cma) OR "cost minimisation" : ti,ab, kw OR CMA</p> <p>('cost effectiveness': ti,ab,kw OR cea)OR</p> <p>('cost utility': ti,ab,kw OR cua)OR</p> <p>'health care' and cost*:ti,ab,kw OR</p> <p>economic and (evaluation or analysis or aspect or assessment):ti,ab,kwOR</p> <p>('budget impact analysis': ti,ab,kw OR bia) OR</p> <p>Economics:ab,ti. OR "costs and cost analysis" OR "cost allocation" OR "cost benefit" OR "cost control" OR "cost saving" OR "hospital costs" OR "health resources" OR "health priorities" OR "health expenditures" OR "financial management" OR "resource* allocation" OR Budget OR CBA OR "cost benefit analysis"OR "Cost consequences analysis</p>

Appendix 10 – Included economic studies (women and men)

Women:

Laudano MA, Seklehner S, Chughtai B, Lee U, Tyagi R, Kavalier E, et al. Cost-effectiveness analysis of tension-free vaginal tape vs burch colposuspension for female stress urinary incontinence in the USA. *BJU Int.* 2013;112(2):E151-8.

Ankardal M, Jarbrink K, Milsom I, Heiwall B, Lausten-Thomsen N, Ellstrom-Eng M. Comparison of health care costs for open Burch colposuspension, laparoscopic colposuspension and tension-free vaginal tape in the treatment of female urinary incontinence. *Neurourol Urodyn.* 2007;26(6):761-6.

Men:

None.

Appendix 11 – Excluded economic studies (with reasons)

Women

No valid comparators:

Boyers D, Kilonzo M, Mostafa A, Abdel-Fattah M. Comparison of an adjustable anchored single-incision mini-sling, Ajust((R)) , with a standard mid-urethral sling, TVT-O(TM) : a health economic evaluation. BJU Int. 2013;112(8):1169-77.

Hana D, Amir I, Amel K, Author A, Resident physician in Gynecology a, obstetrics DoG, et al. Assessment of clinical effectiveness and economic viability of the obturator tension free vaginal tape method for the treatment of stress urinary incontinence by cost benefit analysis. European Journal of General Medicine. 2012;9(3):178-82.

Lier D, Ross S, Tang S, Robert M, Jacobs P, Calgary Women's Pelvic Hlth Res G. Trans-obturator tape compared with tension-free vaginal tape in the surgical treatment of stress urinary incontinence: a cost utility analysis. Bjog-an International Journal of Obstetrics and Gynaecology. 2011;118(5):550-6.

Jacklin P, Duckett J, Renganathan A. Analytic model comparing the cost utility of TVT versus duloxetine in women with urinary stress incontinence. Int Urogynecol J. 2010;21(8):977-84.

Mostafa A, Lim CP, Hopper L, Madhuvrata P, Abdel-Fattah M. Single-incision mini-slings versus standard midurethral slings in surgical management of female stress urinary incontinence: an updated systematic review and meta-analysis of effectiveness and complications. Eur Urol. 2014;65(2):402-27.

Seklehner S, Laudano MA, Te AE, Kaplan SA, Chughtai B, Lee RK. A cost-effectiveness analysis of retropubic midurethral sling versus transobturator midurethral sling for female stress urinary incontinence. Neurourol Urodyn. 2014;33(8):1186-92.

Descriptive study:

Kondo A, Isobe Y, Kimura K, Kamihira O, Matsuura O, Gotoh M, et al. Efficacy, safety and hospital costs of tension-free vaginal tape and pubovaginal sling in the surgical treatment of stress incontinence. J Obstet Gynaecol Res. 2006;32(6):539-44.

No economic evaluation:

Foglia G, Mistrangelo E, Lijoi D, Alessandri F, Ragni N. Transfascial vaginal tape (TFT): a simple, safe and cost-effective procedure for stress urinary incontinence. A preliminary study. Archives of gynecology and obstetrics. 2007;276(1):59-63.

Fritel X, Fauconnier A, Bader G, Cosson M, Debodinance P, Deffieux X, et al. Diagnosis and management of adult female stress urinary incontinence: guidelines for clinical practice from the French College of Gynaecologists and Obstetricians. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2010;151(1):14-9.

Preoperative evaluation study:

Feng TS, Perkins CE, Wood LN, Eilber KS, Wang JK, Bresee C, et al. Preoperative Testing for Urethral Sling Surgery for Stress Urinary Incontinence: Overuse, Underuse and Cost Implications. J Urol. 2016;195(1):120-4.

Not comparative:

Montesino-Semper MF, Jimenez-Calvo JM, Cabases JM, Sanchez-Iriso E, Hualde-Alfaro A, Garcia-Garcia D. Cost-effectiveness analysis of the surgical treatment of female urinary incontinence using slings and meshes. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2013;171(1):180-6.

Study protocol:

Labrie J, van der Graaf Y, Buskens E, Tiersma SESM, van der Vaart HCH. Protocol for Physiotherapy Or TVT Randomised Efficacy Trial (PORTRET): a multicentre randomised controlled trial to assess the cost-effectiveness of the tension free vaginal tape versus pelvic floor muscle training in women with symptomatic moderate to severe stress urinary incontinence. BMC women's health. 2009;9:24.

Ross S, Robert M, Lier D, Eliasziw M, Jacobs P. Surgical management of stress urinary incontinence in women: safety, effectiveness and cost-utility of trans-obturator tape (TOT) versus tension-free vaginal tape (TVT) five years after a randomized surgical trial. BMC Womens Health. 2011;11:34.

Primary operative treatment:

Valpas A, Rissanen P, Kujansuu E, Nilsson C-G. A cost-effectiveness analysis of tension-free vaginal tape versus laparoscopic mesh colposuspension for primary female stress incontinence. Acta Obstetrica Et Gynecologica Scandinavica. 2006;85(12):1485-90.

Surgical evaluation:

Kapoor R, Maheshwari R, Kapoor D, Singh UP, Upadhyay R. Is modified Raz technique of midurethral sling a reliable and cost-effective method of treating stress urinary incontinence? Indian journal of urology : IJU : journal of the Urological Society of India. 2011;27(1):34-8.

Not second line option:

Richardson ML, Elliott CS, Shaw JG, Comiter CV, Chen B, Sokol ER. To sling or not to sling at time of abdominal sacrocolpopexy: a cost-effectiveness analysis. J Urol. 2013;190(4):1306-12.

Not clear if intervention was second line treatment:

Wu JM, Visco AG, Weidner AC, Myers ER. Is Burch colposuspension ever cost-effective compared with tension-free vaginal tape for stress incontinence? Am J Obstet Gynecol. 2007;197(1):62.e1-5.

Men

Conference abstract/Poster:

Cohn J, Johnsen N, Brown ET, Kaufman M, Milam D, Penson D, et al. MALE SLING VERSUS ARTIFICIAL URINARY SPHINCTER AS PRIMARY MANAGEMENT OF POST-PROSTATECTOMY INCONTINENCE: A COST-EFFECTIVENESS ANALYSIS. Neurourology and Urodynamics. 2016;35:S69-S70.