Scottish Intercollegiate Guidelines Network

Management of urinary incontinence in primary care

A national clinical guideline

December 2004

KEY TO EVIDENCE STATEMENTS AND GRADES OF RECOMMENDATIONS

LEVELS OF EVIDENCE

1^{++}	High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias
1^{+}	Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1^{-}	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias
2^{++}	High quality systematic reviews of case control or cohort studies High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal
2^{+}	Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2^{-}	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, eg case reports, case series
4	Expert opinion

GRADES OF RECOMMENDATION

Note: The grade of recommendation relates to the strength of the evidence on which the recommendation is based. It does not reflect the clinical importance of the recommendation.

A	At least one meta-analysis, systematic review of RCTs, or RCT rated as 1^{++} and directly applicable to the target population*; or* A body of evidence consisting principally of studies rated as 1^{+}, directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2^{++}, directly applicable to the target population, and demonstrating overall consistency of results*; or* Extrapolated evidence from studies rated as 1^{++} or 1^{+}
C	A body of evidence including studies rated as 2^{+}, directly applicable to the target population and demonstrating overall consistency of results*; or* Extrapolated evidence from studies rated as 2^{++}
D	Evidence level 3 or 4*; or* Extrapolated evidence from studies rated as 2^{+}

GOOD PRACTICE POINTS

☑	Recommended best practice based on the clinical experience of the guideline development group

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1 Introduction

1.1 THE NEED FOR A GUIDELINE

Estimates of the prevalence of urinary incontinence vary widely due to differences in definition, and the expectation that many of those affected will not admit to having continence difficulties. It is estimated that between 210,000 and 335,000 adults in Scotland have significant problems with urinary continence (5-9% of the adult population).[1]

Urinary incontinence is not a condition in itself but is a symptom resulting from one or more underlying conditions. Effective treatment depends on thorough assessment and diagnosis. There is evidence that patient care could be improved by enhanced training within primary care and promotion of a greater understanding of the potential for improvement offered by the various treatment options.[2-4]

Urinary incontinence has significant negative effects on the quality of life and there is increasing evidence that it could have a detrimental effect on wider aspects of health. Urge incontinence in older women for example, may be associated with an increased risk of falls and fractures.[5]

1.2 REMIT OF THE GUIDELINE

The aim of this national guideline is to identify opportunities and effective techniques within primary care for assessing and treating urinary incontinence in adults, and to offer the primary care practitioner an indication of the factors which should lead to an onward referral. The guideline cannot take the place of clinical judgement in the assessment of each patient as an individual but aims to collate current research evidence, in an accessible format, to support clinical decision making.

The guideline should be of particular value to general practitioners, community nurses, specialist continence physiotherapists and continence nurse specialists. It will also be of interest to patients who have continence difficulties.

1.3 DEFINITIONS

Urinary incontinence is the complaint of any involuntary leakage of urine. **Stress urinary incontinence** is involuntary leakage on effort or exertion, or on sneezing or coughing. **Urge urinary incontinence** is involuntary leakage accompanied by or immediately preceded by urgency. **Urgency**, with or without urge incontinence, usually with frequency and nocturia, can be described as **overactive bladder syndrome, urge syndrome** or **urgency-frequency syndrome**. **Detrusor overactivity incontinence** is incontinence due to an involuntary detrusor contraction. **Mixed urinary incontinence** is involuntary leakage associated with urgency and also with exertion, effort, sneezing or coughing. **Voiding symptoms** are experienced during the voiding phase and include: **slow stream, splitting or spraying** of the urine stream, **hesitancy** and **straining**. A **frequency volume chart** (FVC) records the volumes voided as well as the time of each micturition, day and night, for at least 24 hours.[6]

1.4 STATEMENT OF INTENT

This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the appropriate healthcare professional, following discussion of the options with the patient, in light of the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.

1.5 REVIEW AND UPDATING

This guideline was issued in 2004 and will be considered for review as new evidence becomes available. Any updates to the guideline will be noted on the SIGN website: **www.sign.ac.uk**

2 Quality of life, patient information and health promotion

2.1 QUALITY OF LIFE

Urinary incontinence is consistently associated with adverse effects on quality of life for patients. Adverse effects include social isolation, loneliness and sadness, psychiatric illness including depression, embarrassment that affects the activities of daily living, stigmatisation, effects on sexual relationships and disturbed sleep. Practical inconveniences associated with the leakage of urine, such as frequent changes of clothes and bed linen and the need to bathe more often, will have an adverse effect on quality of life.[7-14]

The patient's perception of the impact of their urinary incontinence on their lifestyle is important.[15] Even mild urinary incontinence has a significant effect on a patient's quality of life.[14]

☑ Clinicians should be aware of and take into consideration the potentially serious adverse effects that even mild urinary incontinence has on a patient's quality of life.

2.1.1 OBJECTIVE ASSESSMENT

An objective assessment of the impact of urinary incontinence on quality of life is essential when assessing the effectiveness of clinical interventions and management strategies.

Symptoms of incontinence and their impact on patients' quality of life can be assessed in a number of ways, but the only valid way of measuring the patients' perspective is through the use of psychometrically robust self completion questionnaires. A comprehensive systematic review has described a number of questionnaire tools for use specifically in patients with urinary incontinence.[16] 2++

The questionnaires have been validated for measuring the severity of the condition and effects on quality of life. There is considerable overlap between questionnaires, highlighting the number of clearly definable issues that are important in terms of the effects of urinary incontinence on quality of life. Validated shortened versions of these questionnaires have been developed for ease of application in the primary care setting.

Questionnaires that assess symptoms of incontinence:

- Urogenital Distress Inventory (UDI)
- UDI-6
- Urge-UDI
- King's Health Questionnaire
- Incontinence Severity Index (women only)
- Danish prostatic symptom score (Dan - PSS1; men only)
- ICS male (men only)
- ICS male SF (men only)

Questionnaires that assess the impact of incontinence on quality of life:

- IQOL (quality of life in people with urinary incontinence)
- King's Health Questionnaire
- Incontinence Impact Questionnaire (IIQ)
- IIQ-7 (women only)
- Urge IIQ (women only)
- Modified IIQ and IIQ-7 (men only)

Two of the most commonly used questionnaires, UDI-6 and IIQ-7, are distributed by The Women's Health Center of Excellence, Wake Forest University Baptist Medical Centre, Winston-Salem, NC, USA and are available from their website; **www.wfubmc.edu/women/whcoe_iiq_udi_instrument.htm**[11,12]

A validated questionnaire produced by the International Consultation on Incontinence (ICIQ – UI SF)[17] is displayed in full in Annex 1.

B **Healthcare practitioners should consider using a validated quality of life and incontinence severity questionnaire to evaluate the impact of urinary symptoms and to audit the effectiveness of any management strategy.**

☑ Practitioners who have developed their own assessment and audit tools are encouraged to confirm that they are consistent with the validated tools and encompass questions on both quality of life and severity of urinary incontinence.

Questionnaires that have not yet been validated are available to assess the adverse impact of urinary incontinence on sexual and mental health and wellbeing.[16]

2.2 PATIENT INFORMATION, ADVICE AND SUPPORT

Patients should be offered information on the investigation and treatment options available to them and details of where they can obtain help and advice, both from the health service,[15,18] and through support groups in the voluntary sector.[19] They should also be made aware that further treatment options are available if initial interventions are unsuccessful. 3 4

Available evidence suggests that adults with urinary incontinence benefit from lifestyle and behavioural advice given by appropriately trained healthcare professionals. The embarrassment associated with the condition means that direct access or self referral routes to continence advisers and other professionals with a special interest or expertise in urinary incontinence is helpful in encouraging patients to access support.[20-23] 3

D **Patients with urinary incontinence should be offered information and advice on the treatment options available to them in both primary and secondary care.**

D **Patients with urinary incontinence should have access to trained healthcare professionals who have the relevant knowledge and skills to offer appropriate advice and information.**

D **Patients with urinary incontinence should be made aware that they are able to access specially trained staff in primary care without GP referral.**

☑ Effective communication within the primary care team and across the community/ hospital interface is essential if the optimal standard of care is to be achieved.

2.3 HEALTH PROMOTION

It is estimated that less than half of the adults with moderate or severe urinary incontinence seek help from healthcare providers. The barriers to seeking help include embarrassment, lack of awareness of treatment options or a perception that urinary incontinence is a normal part of ageing.[24,25] Many adults with urinary incontinence attempt to manage the problem themselves often using inappropriate measures which may make their situation worse. For example, limiting fluid intake and frequent voiding exacerbates symptoms of detrusor overactivity. Awareness raising campaigns may encourage more people with urinary incontinence to seek help.[8,15,22] 4 2+

Strategies for raising continence awareness such as advertising (television, radio, newspapers, posters etc), information provided by continence organisations, direct contact with health professionals and information available on the internet and from friends and family all give individuals information and encouragement to seek help from the primary care team. Barriers to obtaining help include embarrassment and difficulty accessing appropriately trained and motivated healthcare providers.[8,19] 2+

It is difficult to assess the impact of any one health promotion initiative due to the many interacting variables and the fact that individuals obtain information from many sources. Employing a range of strategies is necessary to encourage people to seek help or undertake lifestyle changes to improve their urinary symptoms.[21,26] 2+

Telephone helplines provide an opportunity for individuals suffering from urinary incontinence to obtain information and advice without having to go through the embarrassment of a face-to-face consultation with a healthcare professional. A survey of callers to the Continence Foundation telephone helpline found that 42% of respondents sought professional help following their call.[19] 4

An individual may be more likely to be influenced in seeking professional help by the severity of their urinary incontinence rather than by awareness of health promotion strategies.[15,18] 3

C **Strategies using a number of different approaches and delivery media should be employed to raise awareness of urinary continence and promote incontinence services to a range of target audiences.**

3 Assessment of urinary incontinence

This section reviews the literature on assessing urinary incontinence to enhance routine clinical examination and history taking. This is particularly important where a patient is unable to consent to a thorough examination of their symptoms but may benefit from an individually tailored assessment and treatment process. Patients with co-existing pathologies (eg diabetes or neurological conditions) who undergo planned assessment and treatment which is appropriate to their primary condition, may also benefit from a generic continence assessment. The guideline is not designed to replace clinical judgement.

3.1 RISK FACTORS FOR DEVELOPING URINARY INCONTINENCE

Several factors are significant in terms of identifying patients who are at increased risk of developing urinary continence problems. Health professionals need to be aware of these factors and ensure that the subject of continence is raised with patients.

3.1.1 RISK FACTORS IN MEN AND WOMEN

Age is a significant risk factor with prevalence of urinary incontinence rising with increasing age up to 46% in women and 34% in men aged over 80 years.[27,28] | 3

The prevalence of urinary incontinence is higher in adults who have suffered nocturnal enuresis or daytime wetting as children.[29] | 3

3.1.2 RISK FACTORS IN MEN

Although urinary continence problems often follow prostate surgery, there are no studies clearly identifying risk factors for the development of urinary continence problems in men.

3.1.3 RISK FACTORS IN WOMEN

There is a robust body of evidence linking the development of urinary continence problems with pregnancy and childbirth. In particular:

- the effects of pregnancy on urinary continence have been shown to be more than purely mechanical. Women without previous incontinence can develop urinary problems during pregnancy that may start in early pregnancy and continue into the puerperium. These are not related to the size of the gravid uterus pressing on the bladder[30-34]
- the prevalence of urinary incontinence is increased during pregnancy and the immediate weeks following childbirth[35,36] | 2+
- the use of forceps in childbirth is implicated in the development of stress incontinence[35]
- urinary incontinence which develops during pregnancy or after childbirth and which persists for three months post partum, is a prognostic indicator for long term continence problems[36]
- increasing maternal age, parity and babies of heavier birth weight are associated with a detrimental impact on urinary continence.[37,38] | 3

In addition

- women with higher body mass index (BMI) are more likely to develop urinary incontinence[39,40]
- changes associated with the menopause have a detrimental impact on continence[39,41] Menopause is probably a contributory rather than a causative factor. | 3

B **Health professionals should be vigilant and adopt a proactive approach in consultations with patients who are at greatest risk of developing urinary incontinence through factors including age, the menopause, pregnancy and childbirth, high BMI and experience of continence problems in childhood.**

3.2 INITIATING AN ASSESSMENT OF URINARY INCONTINENCE

Many studies highlight the fact that women with continence problems find seeking help from health professionals difficult, mainly due to the belief that little or nothing can be done to help. Embarrassment or uncertainty about how to raise the issue of continence in a consultation may be a barrier to seeking help.[42] Men with continence problems and women with the most severe problems are the most likely to ask for help.[28,43] Studies show that even patients with less severe problems would like help in managing their continence.[44] 2+ 2++

There is evidence to support the need for a change in attitudes of health professionals to become more proactive in the approach to continence and its positive management.[45] This evidence is applicable to all staff working in the primary care setting who should recognise that there are many consultations when it would be appropriate to raise the issue of continence, provided it is done in a sensitive manner. 2+

C **Health professionals should recognise the difficulty that some patients have in raising concerns about continence and should be proactive in questioning patients about continence during consultations.**

C **Health professionals should have a positive attitude to continence problems.**

B **Assessment, treatment and referral, as appropriate, should be offered to all patients with urinary continence problems.**

3.3 PRIMARY CARE ASSESSMENT TOOLS

Clinical history taking is an essential part of initial assessment.

☑ A routine clinical history for urinary incontinence should cover:

- medication
- bowel habit
- functional status and toilet access
- sexual dysfunction
- quality of life.

A clinical history may be supplemented by appropriate use of the following tools:

3.3.1 QUESTIONNAIRES

Questionnaires can provide a measure of the severity of symptoms (*see section 2.1.1*).

3.3.2 PELVIC FLOOR ASSESSMENT

The assessment of pelvic floor function is an essential prerequisite for pelvic floor muscle rehabilitation and is addressed in section 4.

3.3.3 URINALYSIS

Urinalysis to exclude underlying pathologies should be conducted as part of initial assessment in all patients presenting with urinary incontinence.[46,47] 4

3.3.4 POST VOID RESIDUAL VOLUME

Assessment of post void residual volume forms an important part of assessment for patients with symptoms of voiding dysfunction or recurrent urinary tract infection, which may be a symptom of incomplete bladder emptying.

Catheterisation is the most accurate technique for determining the actual post void residual volume. There are inherent risks of trauma and infection and there may be issues around patient dignity and acceptability that should be considered.[48] | 4

Ultrasound bladder scanners offer some advantages over catheterisation with regard to risk of infection and patient acceptability but are less accurate and require a well trained and skilled operator.[49] | 4

3.3.5 FLOW RATE

The need for an initial assessment of urinary flow is disputed.[50] Within primary care, indications of reduced flow rates can be ascertained by detailed clinical history.[51] | 2++

3.3.6 DIGITAL RECTAL EXAMINATION

A digital rectal examination should be included in the initial examination of a male patient presenting with urinary incontinence to assess prostate size, shape and consistency, and to check for other rectal pathologies.[52] | 4

3.3.7 VOIDING DIARIES (FREQUENCY VOLUME CHARTS)

Information from a voiding diary is beneficial to assessment in adding to the overall clinical picture but should not be used in isolation.[53-58] The optimum reported duration for completing a voiding diary varies between 24 hours and seven days. A healthcare professional's knowledge of an individual patient should be used to determine appropriate duration of voiding diary, to take likely compliance into consideration. | 2+

A sample frequency volume chart is shown in Annex 2

3.3.8 PAD TESTS

The usefulness of pad tests as part of the assessment of urinary incontinence remains unclear. Four studies found that completing a pad test may add to the overall clinical picture.[55,59-61] There is some discrepancy as to how beneficial the information is, as data collection can be negatively affected by patient anxiety and patient compliance. One study found that patient reporting of wet clothing gave similar information to that collected by pad weighing.[55] | 2+

3.3.9 ASSESSMENT TOOL RECOMMENDATIONS

D **Initial assessment of a male patient with urinary incontinence should include completion of a voiding diary, urinalysis, estimation of post void residual volume and digital rectal examination.**

D **Initial assessment of a female patient with urinary incontinence should include completion of a voiding diary, urinalysis and, where symptoms of voiding dysfunction or repeated UTIs are present, estimation of post void residual volume.**

4 Physical therapies

4.1 PELVIC FLOOR MUSCLE EXERCISES

Pelvic floor muscle exercises (PFME) are effective in the treatment of stress and mixed urinary incontinence,[62-64] but there is insufficient evidence to assess their efficacy in the treatment of urge incontinence.[65] Expert opinion suggests that pelvic floor muscle exercises may have a role in treatment of urge incontinence in combination with bladder training.[66] 1++ 4

An assessment of pelvic floor muscle function should be undertaken prior to instigation of any pelvic floor muscle intervention.[67,68] Digital anal or vaginal assessment is suitable for measuring pelvic floor muscle strength and endurance in males and females. 4

A wide range of pelvic floor muscle exercise regimens is reported in the literature and it is clear that programmes need to be tailored to be achievable by the individual patient. The Chartered Society of Physiotherapy has recommended parameters which may be useful in developing programmes (*see Annex 3*).[68] No evidence of any adverse effects of pelvic floor muscle exercises was identified. 4

Two studies were found which compared the effectiveness of group and individual physiotherapy. Physiotherapy was equally effective in improving incontinence severity in both treatment arms.[69,70] In one of the studies 35% of eligible patients did not wish to be included in group treatment.[69] 1++

A **Pelvic floor muscle exercises should be the first choice of treatment offered to patients suffering from stress or mixed incontinence. Exercise programmes should be tailored to be achievable by the individual patient.**

D **Pelvic floor muscle exercises should be considered as part of a treatment plan for patients with urge urinary incontinence.**

D **Digital assessment of pelvic floor muscle function should be undertaken prior to initiating any pelvic floor muscle exercise treatment.**

☑ Digital assessment of pelvic floor muscle function should only be carried out by an appropriately trained clinician.

A **Where group physiotherapy is available patients should be offered the choice of attending or being seen individually.**

☑ Where group physiotherapy is offered individual assessment and monitoring should be carried out.

4.2 PELVIC FLOOR MUSCLE EXERCISES IN MEN UNDERGOING RADICAL PROSTATECTOMY

Urinary symptoms post radical prostatectomy tend to improve with time, irrespective of management. Pelvic floor muscle training may be of benefit post prostatectomy particularly in the first few months after surgery.[71] Expert opinion suggests there may be at least some benefit when PFME are offered preoperatively.[72] 1++ 4

B **Pelvic floor muscle exercise treatment should be considered for patients following radical prostate surgery.**

4.3 TOOLS TO ASSIST PELVIC FLOOR MUSCLE REHABILITATION

4.3.1 BIOFEEDBACK

Biofeedback was found to be no more effective than pelvic floor muscle exercises alone in alleviating symptoms of urinary incontinence.[73,74] Two high quality systematic reviews found that the use of weighted vaginal cones is effective in reducing symptoms of stress incontinence.[75,76] No evidence was found to suggest that use of vaginal cones is more effective than exercises alone. 1++

4.3.2 ELECTRICAL STIMULATION

No conclusion can be drawn from the current literature on the effectiveness of using electrical stimulation in treating urinary incontinence.[66] This is largely due to the wide range of electrical stimulation parameters used in studies.

4.4 INTRAVAGINAL DEVICES

Intravaginal devices which support the bladder neck are effective in reducing episodes of urinary incontinence and may be suitable in the short term for women during pelvic floor muscle rehabilitation or as an alternative to containment for women in whom surgery is contraindicated (*see section 6.1*).[66] 4

4.5 ACUPUNCTURE

One small study has demonstrated a transient beneficial effect in women with frequency, urgency and dysuria,[77] but no strong evidence was identified to support the use of acupuncture in the treatment of urinary incontinence. 3

4.6 BLADDER RETRAINING

Two high quality systematic reviews provide weak evidence that retraining for an overactive bladder is more effective than no treatment in urge urinary incontinence.[65,78] Bladder retraining is most effective if symptoms are mild. 1++

C **Bladder retraining should be offered to patients with urge urinary incontinence.**

4.7 LIFESTYLE INTERVENTIONS

A review of conservative treatment in women examined the evidence for the use of lifestyle interventions in the management of urinary incontinence.[66] Massive (surgically induced) weight loss significantly decreases incontinence in morbidly obese women. Moderate weight loss may also result in decreased incontinence. Fluid intake has only a minor, if any, role in the pathogenesis of incontinence. Although large cross-sectional surveys of caffeine intake indicate no association with incontinence, small clinical trials do suggest that decreasing caffeine intake improves continence. No conclusive association between smoking and urinary incontinence has been found. 4

☑ As excessively small or large urine output can contribute to urinary incontinence, patients should be encouraged to adjust their fluid intake to produce a 24 hour urinary output of between 1,000 ml and 2,000 ml.

5 Pharmacotherapy

5.1 INTRODUCTION

This section considers medical therapies for stress and urge incontinence. Medical treatments that are only suitable for hospital settings, such as the intravesical instillation of capsaicin or injection of botulinum toxin, and treatments for nocturnal enuresis have been excluded.

5.2 STRESS INCONTINENCE

Urethral muscle tone and the passive quality of the mucosa can be influenced by medication, unlike anatomical factors involved in the development of stress incontinence such as urethral support and vesical neck and urethral muscle function.

5.2.1 OESTROGENS

Published RCTs have reported conflicting evidence for the efficacy of oestrogens in treating stress incontinence in women. A meta-analysis showed that, when taken alone for a short period (3-6 months), oestrogens had a higher cure and improvement rate compared with placebo, with combined oestrogen and progestogen therapy being less effective than oestrogen alone.[79] There was insufficient data to determine the influence of type of oestrogen, route of administration or duration of therapy on treatment outcome. Oestrogens are not licensed in the UK for the treatment of stress incontinence. 1++

5.2.2 ADRENORECEPTOR AGONISTS

Drugs with an alpha 1A-adrenoreceptor agonist effect, such as ephedrine, pseudoephedrine, phenylpropanolamine and methoxamine, have been used to treat stress incontinence. These drugs are not selective for urethral alpha adrenoreceptors and the potential for side effects has limited their use. A meta-analysis concluded that there was weak evidence that adrenergic agonists were more effective than placebo in reducing the number of pad changes and incontinence episodes.[80] Side effects were noted to be minor, although rare and potentially serious effects, such as cardiac arrhythmias and hypertension, were reported. The review included the beta adrenoreceptor agonist clenbuterol, whose mode of action has not yet been fully determined. None of the drugs listed above are licensed in the UK for the treatment of stress incontinence. 1++

5.2.3 ANTIDEPRESSANTS

Imipramine has been used clinically to treat stress incontinence but no RCTs are available to support its use and the drug is not licensed in the UK for this purpose.

5.2.4 COMBINED NORADRENALINE AND SEROTONIN REUPTAKE INHIBITORS

A phase 2 double blinded randomised controlled trial has demonstrated that duloxetine is associated with a dose dependent decrease in incontinence episode frequency and parallel improvements in subjective quality of life measures.[81] A phase 3 double blinded randomised controlled trial demonstrated a 50% decrease in incontinence episode frequency, compared with a placebo response of 27%.[82] Nausea was the most commonly reported adverse event but was of mild or moderate intensity in most cases and usually of limited duration. Two other phase 3 trials have demonstrated similar findings.[83,84] The duration of each of these studies was 12 weeks, although therapeutic effects were achieved within four weeks. 1++

Duloxetine is the only drug licensed for treatment of moderate to severe stress incontinence, and, as such, its use is currently recommended, although its long term place in clinical therapy is still to be determined. 1+

A **Duloxetine should be used only as part of an overall management strategy in addition to pelvic floor muscle exercises and not in isolation. A 4 week trial of duloxetine is recommended for female patients with moderate to severe stress incontinence. Patients should be reviewed again after 12 weeks of therapy to assess progress and determine whether it is appropriate to continue treatment.**

5.3 DETRUSOR OVERACTIVITY AND URGE INCONTINENCE

5.3.1 ANTIMUSCARINICS

Four antimuscarinics; oxybutynin, tolterodine, tropsium and propiverine are effective in reducing detrusor overactivity and hence urgency and urge incontinence.[85-88] The drugs depress both voluntary and involuntary detrusor contractions by blocking muscarinic receptors on the bladder smooth muscle. They are effective in the elderly,[89,90] following transurethral resection of the prostate [91] and over periods of twelve months.[92] It should be noted that in many of these trials a high placebo response was observed. Comparative studies of the effectiveness of detrusor selective antimuscarinics have shown all the drugs to be equally effective.[85-88,93] 1++ 1+

Randomised controlled trials of the effectiveness of the antimuscarinic, propantheline, in the treatment of detrusor overactivity have confirmed a positive but unreliable response.[94] 1-

The most common side effects of antimuscarinic drugs are dry mouth, blurred vision, abdominal discomfort, drowsiness, nausea and dizziness. Urinary retention is a potentially serious but less common side effect. Oxybutynin immediate release (IR) preparation has the highest incidence of side effects.[85-87,95] 1++

Two M3 receptor selective antimuscarinics have been developed, solifenacin and darifenacin. Evidence from a phase 2 clinical trial has shown solifenacin to be as effective as tolterodine with a low incidence of side effects.[96] Data from a phase 3 randomised controlled trial demonstrated a 55% decrease in mean number of urgency episodes per 24 hours for a 10 mg dose of solifenacin compared with a 32% response with placebo and 38% response with tolterodine 2 mg twice a day.[97] Solifenacin has been granted a marketing authorisation for the treatment of overactive bladder symptoms. Darifenacin has been shown to improve the major symptoms of overactive bladder, with no CNS or cardiac antimuscarinic related adverse effects.[98] 1+

Several studies have shown sustained release (SR) preparations to be associated with a lower incidence and severity of side effects than IR preparations.[99-101] Sustained release oral preparations of oxybutynin and tolterodine are available in the United Kingdom. 1++

Two studies from the United States show that transdermal oxybutynin is safe and effective.[102,103] Sustained release transdermal preparations are currently available. 1+

A **A trial of oxybutynin, propiverine, tolterodine, or trospium should be given to patients with significant urgency with or without urge incontinence. The dose should be titrated to combat adverse effects** *(see British National Formulary for dose ranges).*

☑ Antimuscarinic therapy should be tried for a period of six weeks to enable an assessment of the benefits and side effects. Treatment should be reviewed after six months to ascertain continuing need.

5.3.2 FLAVOXATE

Flavoxate has an inhibitory action on the smooth muscle of the bladder, but its mechanism of action is not well understood, and it has no antimuscarinic properties. Studies of the efficacy of flavoxate have shown mixed results. Some have suggested efficacy equal to oxybutynin,[104] whilst others have failed to show any beneficial effects.[105,106] Few adverse effects were reported. 1+

5.3.3 ANTIDEPRESSANTS

Several tricyclic antidepressants have been reported to have beneficial effects in urge incontinence but only imipramine has been widely used in this context. There are no good quality randomised controlled trials to support its use in detrusor overactivity and its cardiotoxic side effects limit its use. Imipramine is not licensed for the treatment of detrusor overactivity.

5.3.4 OESTROGENS

A meta-analysis showed that when taken alone for a short period (1-6 months), oestrogens had a statistically higher cure and improvement rate for the treatment of urge incontinence compared with placebo.[79] The likelihood of cure or improvement with oestrogen therapy was approximately a quarter higher for urge incontinence than stress incontinence. Combined oestrogen and progestogen therapy was less effective than oestrogen alone. There was insufficient data to determine the influence of type of oestrogen, route of administration or duration of therapy on treatment outcome. Oestrogens are not licensed for the treatment of urge incontinence. 1++

5.4 COMBINATION THERAPY

There is no evidence to date for combining therapy in a patient with mixed urge and stress incontinence.

6 Containment

6.1 PRODUCT EVALUATION

Containment products are an essential component in the management of incontinence, but they should only be issued after an initial assessment or when a management plan has been completed and reviewed. Offering disposable pads prematurely can lead to psychological dependence upon them and reluctance to accept active treatment.[107] Patients starting physical or medical therapies may require containment products in the short term; this will depend upon their symptoms, leakage incidence, personal choice and lifestyle. Patients with intractable urinary incontinence will require products long term. 4

A large number of studies evaluating product performance were reviewed. Outcomes of clinical studies included objective (eg reduction in leakage) and subjective (eg comfort and discretion to user) measurements of performance. Laboratory studies of containment products were also reviewed. One of the main methodological constraints excluding most studies was the invalid comparison of dissimilar products. The small size of many of the studies also led to their exclusion.

A number of factors may influence choice of product including patient preference, level of disability, gender, skin integrity, history of allergy, incidence of infection, availability of carers and history of failure with previous products.

D **All patients should undergo a continence assessment before product issue. Issue of products should not take the place of therapeutic interventions.**

☑ Professionals should be vigilant to the proper use of products with regard to application, fitting and tissue viability. Where products appear not to have been effective, the patient should be reassessed for product suitability.

6.1.1 DISPOSABLE PADS

A wide range of different pad designs is available and there is no clear evidence suggesting superior efficacy of any particular design.

6.1.2 BED PADS (PROCEDURE PADS)

There is a paucity of published clinical studies on bed pads. One study provided clinical evaluation of six products and found that laboratory tests are able to predict clinical performance.[108] 1+

6.1.3 SHEATHS

Evidence from one study suggests that, when using sheaths, male patients prefer one piece systems with internal adhesive rather than a two piece system or separate adhesive. Applicators were not popular with patients taking part in the study. Dislodgement and leaking are common criticisms of sheath devices and limit their use in the elderly.[109] 1+

6.1.4 FEMALE URINALS

Female urinals are available as a toilet alternative for individuals with reduced mobility. Their successful use depends on the patient's choice of positioning and level of disability.[110] 3

6.1.5 CATHETERS

Expert opinion suggests that where appropriate as a first line option intermittent self catheterisation should be considered. Intermittent self catheterisation can be used when a bladder has the ability to store urine adequately between catheterisations. Catheter size and material type are important for efficacy. Intermittent self catheterisation may be used as a technique to manage urethral strictures by acting as a dilating mechanism to prevent recurrence. If a long term indwelling catheter is required suprapubic catheterisation is considered a more appropriate option than urethral catheterisation. Indwelling urethral catheters should not be used where there is urethral or bladder neck erosion. Sterile techniques are advocated in the change of catheters.[111-114] 4

6.1.6 CATHETER VALVES

Catheter valves are widely used as a means of draining the bladder intermittently and can increase patients' comfort and independence.[115] Catheter valves may not be suitable for patients with overactive bladder, patients with lack of bladder sensation or confused patients.[114] One multicentre evaluation of catheter valves concluded that there were substantial differences between valve types in terms of ease of manipulation, susceptibility to leakage, comfort and how conspicuous they were beneath clothing.[116] 4

6.1.7 URINE DRAINAGE BAGS

Urine drainage bags are used in conjunction with sheaths and indwelling catheters/suprapubic catheters. Comparative evaluations of drainage bags indicate that the popularity of many of the design features is a matter of personal preference, with the main features of concern to users being design of taps and straps and minimisation of leakage.[117,118] 4

7 Referral

7.1 MODELS OF SERVICE PROVISION

Several studies have demonstrated effective models of care in community and outpatient settings using outcomes such as reduction in number of incontinent episodes, reduction in amount of leakage, reduction in pad usage and improved quality of life.[20,119-121] Few studies compared one model of care with another. One underpowered RCT compared nurse-led treatment with physician-led treatment and concluded that patient outcomes (measured at 12 weeks and two years) were similar but there were lower costs with the nurse-led model.[122] 2+ 1-

☑ Primary care provision for patients with urinary incontinence should be based around implementation of structured models or protocols. These may be led by nurses, physiotherapists or general practitioners.

7.2 REFERRAL TO SECONDARY CARE

7.2.1 ALL PATIENTS

Existing evidence based guidelines on the management of urinary incontinence make recommendations on referral to secondary care based on cohort studies and expert opinion.[51,123] 4

A suggested care pathway indicating points of referral is presented in Annex 4.

D **Patients should be referred to secondary care if previous surgical or non-surgical treatments for urinary incontinence have failed or if surgical treatments are being considered.**

7.2.2 FEMALE PATIENTS

Most female patients with stress, urge or mixed urinary incontinence are suitable for initial conservative management in primary care. Urodynamic assessment is not necessary prior to conservative treatment as it does not improve or predict outcome of conservative treatments.[124 ,125]

Voiding dysfunction is uncommon in females with urinary incontinence. A high proportion of women with voiding dysfunction have underlying conditions including neuropathy, bladder tumours or a pelvic mass.[126,127] 4

Female patients with urinary incontinence and symptomatic pelvic organ prolapse should be referred to secondary care.[51,123]

Women with urinary incontinence requiring assessment in secondary care should be referred to a specialist with an interest and expertise in this area. This will be either a gynaecologist (urogynaecologist) or a urologist depending on local service provision.

D **Female patients with suspected voiding dysfunction should be referred to secondary care.**

D **Female patients with symptomatic pelvic organ prolapse should be referred to secondary care.**

7.2.3 MALE PATIENTS

Male patients with urinary incontinence have an increased likelihood of an underlying pathology causing bladder outflow obstruction. Elevated bladder pressures may lead to upper renal tract damage. Recommendations around onward referral of male patients are based on previous guidelines.[51,123] 4

D **Male patients with reduced urinary flow rates or elevated post void residual volumes should be referred to secondary care.**

☑
- Measurement of post void residual volume and urinary flow rate should be part of the initial investigation of men with urinary incontinence. Depending on where facilities exist these may be carried out in primary or secondary care.
- Residual volumes greater than 100 ml should be considered significant.
- Flow rates less than 15 ml/second should be considered to be problematic, assuming a minimum total voided volume of 150 ml of urine.

8 Information for discussion with patients and carers

8.1 INTRODUCTION

Urinary incontinence is not an illness or a disease. It is a symptom that something is wrong with the ability of the bladder to store urine. Urinary incontinence can affect every aspect of life and must be taken very seriously. Those affected often report feeling anxious, ashamed, inadequate, embarrassed or dirty. It is essential that when people with urinary incontinence seek help, there is a pathway for them to receive immediate support, followed by the necessary steps to receive further consultations and investigations appropriate for their individual needs.

Depression, relationship and sexual difficulties, low self esteem and lack of confidence affect many of the people living with continence issues. These problems need to be assessed and treated. Professionals must be able to provide patient-friendly information leaflets. Back up information for patients must also be available to enable them to make contact with others experiencing similar problems, if they wish. In general it is very difficult for patients to ask for help, especially on their first visit to the GP. Many people who are living with continence issues will visit their GP with a different complaint and just happen to mention continence as if it were not really a huge problem for them. It is important that they are taken very seriously, treated with dignity and empathy and given positive feedback that their problem can, in a very high percentage of patients, be cured or at least managed more effectively enabling them to have a better quality of life.

8.2 PATIENT INFORMATION

The following points were drawn up by the guideline development group to reflect the issues likely to be of most concern to patients and carers following a diagnosis of urinary incontinence. These points are provided for use by health professionals when discussing urinary incontinence with patients and could form a basis for locally produced patient information materials.

SYMPTOMS

Symptoms people with urinary incontinence experience include:

- leaking urine on coughing, sneezing, exercise, rising from sitting and lifting
- not reaching the toilet in time
- frequent urination during the day/night
- dribbling urine after leaving the toilet
- loss of bladder control
- bladder spasms
- feeling of incomplete bladder emptying
- pain on passing urine
- burning sensation on passing urine.

GETTING APPROPRIATE HELP

Contact GP, Continence Adviser/Nurse Specialist, Community Nurse or Specialist Continence Physiotherapist.

Self referral can normally be made to a Community Continence Adviser – contact your local health centre or NHS 24.

Other professionals you may be referred to:

Urologist - A specialist in the field of bladder problems, prostate problems and male sexual organs.

Urogynaecologist - A specialist who works in the field of women's bladder and reproductive organ problems.

Neurologist - A specialist who deals with the nervous system throughout the body.

Elderly care physician/Geriatrician – A specialist in the field of medicine for older people.

WHAT SHOULD I EXPECT FROM A CONTINENCE ASSESSMENT?

On your first visit for a continence assessment you can expect to discuss your medical history and have a urine test. You may receive a pelvic floor examination at this assessment or during a subsequent consultation. Prior to a pelvic floor examination the procedure will be explained to you and consent sought. You will be asked if you wish a chaperone. Questions you can expect to be asked during your assessment may include:

- how often do you go to the toilet?
- how often do you leak or have accidents?
- when you have leaked how bad is it? Are your pants damp, wet through to your clothes or soaked to the floor?
- when do you leak or have accidents?
- what medicines do you take?
- what do you normally eat and drink?
- is it painful or uncomfortable when you pass urine?
- how often do you get up at night to pass urine?

FREQUENTLY ASKED QUESTIONS

Questions that you may like to ask during a continence assessment include:

- why do I leak?
- why do I have to go to the toilet so often?
- why am I sometimes unaware that I need to go the toilet? Often I am wet when I get there
- why do I leak when coughing, sneezing, or doing exercise?
- on visiting the toilet I only pass small amounts of urine and feel as though my bladder is not completely empty. Why is this?
- I have pain when passing urine, why is this?
- sometimes I have blood in my urine - what should I do?
- why do I leak urine when I am having sexual intercourse?

TESTS AND INVESTIGATIONS TO DIAGNOSE CAUSES OF URINARY INCONTINENCE

- testing of a urine sample to rule out infection or other conditions (urinalysis)
- voiding diaries (frequency and volume charts) to assess and diagnose some bladder problems. Using these involves filling in a diary-type form noting everything you drink, the amount of urine you pass and when you are wet, damp or soaking. Some diaries also record if the leakage is associated with coughing, sneezing or moving. This is done over a period of at least three days. An example of this type of chart is shown in Annex 2.
- pelvic floor muscle examination - The pelvic floor muscles are checked by vaginal examination (women) or by examination of the back passage (men)
- bladder scan - This is to find out if there is any urine left in your bladder after you have passed urine. It is a simple procedure where gel is put on to your abdomen and then your bladder is scanned
- urodynamics - This test can help to find out the cause of bladder problems. It involves putting one catheter into the bladder through the urethra, (the tube that carries urine out of the bladder) and another into the back passage. This can be a little uncomfortable but can be a very useful test to find out what is going wrong with your bladder
- cystoscopy - This procedure is normally carried out in a urology department by a physician. It can be done under local or general anaesthetic. An instrument similar to a catheter with a camera is inserted into the urethra going up into the bladder and allows the doctor to detect abnormalities.

TREATMENT

PHYSIOTHERAPY

There are many different forms of physiotherapy available to help with bladder problems. These include pelvic floor muscle exercises, biofeedback, electrical stimulation and use of vaginal cones.

Pelvic floor muscle exercises can help strengthen the muscles in the pelvic floor, giving more control over your bladder. They are very helpful for stress incontinence problems. Your continence adviser and/or specialist continence physiotherapist can advise you how to do these properly. Leaflets and booklets to support ongoing therapy are available (*see section 8.3*).

Biofeedback uses simple devices and techniques to enable the patient to improve pelvic muscle function through increasing muscle awareness.

Electrical stimulation therapy usually involves using a vaginal or rectal probe to assist in rehabilitation of pelvic floor muscles by strengthening them and increasing awareness of their use. Sometimes machines can be borrowed or purchased to allow treatment to continue at home. Electrical stimulation can be used where people have very weak pelvic floor muscles.

Vaginal cones are small cone-like devices that are inserted into the vagina to help strengthen the pelvic floor. Patients have their own individual set (usually two to three with different weights). After insertion you will be encouraged to keep them in place, using your pelvic floor muscles for an increasing period of time until you can hold on to them for 10 to 15 minutes. Cones are unsuitable for anyone with more than a moderate degree of prolapse and must be correctly positioned.

Bladder retraining programmes can help improve an overactive bladder by helping the bladder become more compliant to holding urine. Bladder retraining takes time and determination but can be very successful. Keep a diary or record of how often you pass urine for at least three days (use a chart). Gradually increase the time between visits to the toilet. For example, if you normally go to the toilet every hour, try to hold on a little bit longer eg 1hour 15 minutes. This slowly increases bladder compliance. As it becomes more used to holding more urine, the problems of an overactive bladder and urgency are reduced. Some people find retraining easy and can do it quickly. Others find it harder and it can take longer. Often it gets easier to overcome the urge to pass water. Never rush to the toilet mid-urge; relax in sitting or standing position and wait a minute until the urge disappears before walking calmly to the toilet or resuming one's activities. It is important to drink enough but not excessive fluid for the bladder retraining to work (approximately 1.5 – 2 litres per day). Antimuscarinic drugs can be prescribed by a GP to help reduce the urge to go when you are doing bladder retraining.

LIFESTYLE

It is important to drink sufficient fluid each day. Try to drink six to eight cups or glasses of fluid each day. It is best to avoid drinking too much caffeine, fizzy drinks or alcohol. Drink plain water, fruit juice or herbal tea and decaffeinated coffee, tea and drinks.

People who are overweight may find that adopting a healthy eating plan could help them lose weight and reduce their continence problem. Dietary advice may be available from your health professional or local health centre.

MEDICATION

There are a variety of medications available for bladder conditions. Your GP, continence adviser or consultant will discuss which medication is appropriate for you.

Some medications which are being taken for other conditions can increase/precipitate incontinence episodes.

EMOTIONAL/MENTAL HEALTH ISSUES

At present helping patients cope with the emotional side of incontinence is largely managed by voluntary and charitable organisations *(see section 8.3).*

CONTAINMENT PRODUCTS

Containment products can be obtained via prescription from your GP or a community nurse.

Catheters - A catheter is a hollow tube normally inserted into the bladder to drain urine.

- a **urethral catheter** is inserted into the bladder via the urethra and left in place with either a valve to allow drainage or connected to a drainage bag
- a **suprapubic catheter** is one that is inserted into the bladder just above the pubic bone
- an **intermittent catheter** is inserted into the bladder via the urethra and is generally used by the patient or a carer up to six times each day.

There are many different types of catheters available and patients should be encouraged to try different types to find out which is the most suitable.

Drainage Bags - There are a variety of different types of drainage bags available for drainage of urine when using an indwelling catheter. They are attached to the end of the catheter tube and can be secured on to the leg, abdomen or, in some cases, a catheter bag holder.

Catheter Valves - These are used to enable the catheter to be emptied directly into the toilet or suitable container eliminating the need for a drainage bag. There are a variety of valves available from your GP or community nurse.

Sheaths - A sheath fits over the penis and urine passes through a tube into a bag that is usually strapped to the leg or a urine bag holder. There are a variety of sheaths available and it is important that the correct size of sheath is used. Your health professional can advise on finding the most suitable product.

Pads - There are many types of pads on the market although most Health Boards limit the type that can be provided within their area. It is important to have the correct pad for your needs. These products are usually allocated free of charge.

Accessories

Bag straps are available to secure the drainage bag to your leg. There are also sleeve type holders for the drainage bag that you put on your leg to keep the bag in place. These are available on prescription.

Overnight stands for catheter bags come in either plastic (excellent for using away from home) or metal and are useful in ensuring good overnight drainage. They are not available on prescription but can be ordered from a district nurse.

Washable bed and chair protection, including mattress covers, can be purchased. You can obtain information about products by contacting support organisations such as PromoCon or Incontact (*see section 8.3*).

QUESTIONS TO ASK IF SURGERY IS REQUIRED

Occasionally, managing urinary incontinence may require some form of surgical treatment. If this is suggested to you then you may wish to consider asking the following questions:

- what are the options available to me?
- can you explain the operation in detail to me?
- do you have any leaflets about this operation?
- where can I find more information?
- are there any side effects?
- how often have you performed this operation?
- what is the success rate?
- what happens if it does not work?
- how long shall I have to wait for this procedure?
- will there be back up care when I get home?

8.3 SOURCES OF FURTHER INFORMATION FOR PATIENTS AND CARERS

Bladder Pain Syndrome Association (BPSA)
54 Sutherland Road, Belvedere, Kent, DA17 6JR
Tel: 0208 310 8729
Email: info@b-p-s-a.org.uk
Website: www.b-p-s-a.org.uk

Provides information and support to sufferers of bladder pain syndromes (including interstitial cystitis and other often related disorders/syndromes).

Cancer BACUP Scotland
Suite 2, 3rd Floor, Cranston House
104-114 Argyll Street
Glasgow, G2 8BH
Tel: 0141 223 7676 • Freephone: 0808 800 1234
Website: www.cancerbacup.org.uk

Offers a free cancer information and support service staffed by qualified and experienced cancer nurses.

Chartered Society of Physiotherapy
14 Bedford Row
London, WC1R 4ED
Tel: 0207 306 6666
Website: www.csp.org.uk

Continence Foundation
307 Hatton Square, 16 Baldwins Gardens
London, EC1N 7RJ
Tel: 0845 345 0165 (helpline Monday – Friday, 9.30am –1pm)
Tel: 0207 404 6875 (office)
Website: www.continence-foundation.org.uk
Email: continence-help@dial.pipex.com

Cystitis and Overactive Bladder Foundation
76 High Street, Stony, Stafford
Buckinghamshire, MK11 1AH
Tel: 01908 569 169
Email: info@cobfoundation.org
Website: www.cobfoundation.org

Provides information, leaflets and support to people with all forms of cystitis and overactive bladders.

Depression Alliance Scotland
3 Grosvenor Gardens
Edinburgh, EH12 5JU
Tel: 0131 467 3050
Email: information@depressionalliance.org
Website: www.depressionalliance.org

Provides information, support and understanding, including a wide range of written materials, self help groups and newsletters.

ERIC
34 Old School House, Britannia Road, Kingswood
Bristol, BS15 8DP
Tel: 0117 960 3060
Website: www.eric.org.uk

Provides information on bladder and bowel problems for children, young people and their parents.

Incontact
United House, North Road
London, N7 9DP
Tel: 0870 770 3246
Email: info@incontact.org
Website: www.incontact.org

Provides information and support to people affected by bladder and bowel problems. Has support groups throughout the UK and online.

Incontact Scotland
PO Box 2796
Glasgow, G61 4YT
Tel: 0870 770 3248
Email: cathy@incontact.org

Multiple Sclerosis Trust
Spirella Building, Letchworth Garden City
Herts, SG6 4ET
Tel: 01462 476700
Email: info@mstrust.org.uk
Website: www.mstrust.org.uk

MS Society Scotland
Ratho Park, 88 Glasgow Road, Ratho Station
Newbridge, EH28 8PD
Tel: 0131 335 4050
Email: enquries@mssocietyscotland.org.uk
Website: www.mssocietyscotland.org.uk

NHS 24
Tel: 0845 424 2424
Website: www.nhs24.com

Promocon
Redbank House, St Chad's Street, Cheetham
Manchester, M8 8QA
Tel: 0161 834 2001 (helpline Monday – Friday, 10am – 3pm)
Email: promocon@disabledliving.co.uk
Website: www.promocon.co.uk

Provides advice and information on products and services to help manage bladder and bowel problems.

RADAR
12 City Forum, 250 City Road
London, EC1V 8AF
Tel: 0207 250 3222
Email: radar@radar.org.uk
Website: www.radar.org.uk

Provides keys for disabled toilets.

Samaritans
Chris, PO Box 90 90, Stirling, FK8 2SA
Tel: 08457 90 90 90 (24 hour service)
Email: jo@samaritans.org
Website: www.samaritans.org.uk

Offer support to those in distress/despair/suicidal who need someone to talk to.

Scottish Association for Mental Health (SAMH)
Cumbrae House, 15 Carlton Court
Glasgow, G5 9JP
Tel: 0141 568 7000
Email: enquire@samh.org.uk
Website: www.samh.org.uk

Operates a range of services across Scotland for people with mental health problems. It strives to influence public policy as it affects people with mental health.

Scottish Continence Resource Centre
Southern General Hospital, Govan Road
Glasgow, G51 4OF
Tel: 0141 201 1861
Email: mary.ballentyne@sgh.scot.nhs.uk

Provides professional help and advice. Consumers can self refer for consultations.

Spinal Injuries Scotland
Festival Business Centre, 150 Brand Street
Glasgow, G51 1DH
Tel: 0141 314 0057 (support line)
Email: info@sisonline.org
Website: www.sisonline.org

Uorostomy Association
Mrs H Pixley, National Secretary, Uorostomy Association, Central Office
18 Foxglove Avenue
Uttoxeter, Staffordshire, ST14 8UN
Tel: 0870 770 7931
Fax: 0870 770 7932
Email: infor.u.a@classmail.co.uk
Website: www.uagbi.org

9 Implementation, audit and further research

9.1 LOCAL IMPLEMENTATION

Implementation of national clinical guidelines is the responsibility of local NHS organisations and is an essential part of clinical governance. It is acknowledged that not every guideline can be implemented immediately on publication, but mechanisms should be in place to ensure that the care provided is reviewed against the guideline recommendations and the reasons for any differences assessed and, where appropriate, addressed. These discussions should involve both clinical staff and management. Local arrangements may then be made to implement the national guideline in individual hospitals, units and practices, and to monitor compliance. This may be done by a variety of means including patient-specific reminders, continuing education and training, and clinical audit.

The NHS Quality Improvement Scotland Best Practice Statement on continence may assist with implementation. It has relevance for nursing practice in assessment of urinary dysfunction and continence care planning.[128]

The resource implications of implementing the guideline recommendations are discussed in Annex 5.

9.1.1 IMPLEMENTATION IN PRIMARY CARE

The Scottish Programme for Improving Clinical Effectiveness in Primary Care (SPICE-PC) will develop a criteria set based on this guideline to assist with its implementation in primary care. The criteria set will be incorporated into a GPASS care management screen, combining computer based management prompts with appropriate, automated data collection. SPICE-PC criteria sets are available from **www.spice.scot.nhs.uk/pdf/Management%20of%20Urinary%20Incontinence.pdf**

9.2 KEY POINTS FOR AUDIT

Key areas for audit include

- the availability of appropriate, up to date patient information
- appropriate prescribing and pharmaceutical care practices
- referral patterns within the multidisciplinary team
- national comparison of local policies on product availability
- access to specialist physiotherapy
- physiotherapy practice.

9.3 RECOMMENDATIONS FOR RESEARCH

- determination of the accuracy of ultrasound scanning in assessing pelvic floor muscle function
- studies to measure the effect of treating bacteriuria on continence status
- study of benefits of measuring post void residual volume as part of continence assessment
- implications of different referral patterns for the patient
- comparison of the effectiveness of intermittent catheterisation and the use of indwelling catheters as first choice treatment
- evaluation of patient/public and health professionals' views around urinary incontinence
- population studies to define the prevalence of the three types of urinary incontinence in different age groups
- identification of techniques for management of childbirth that would reduce the incidence

- assessment of the value of frequency volume charts compared with static and ambulatory cystometry
- determination of patient preferences in the management of intractable urinary incontinence
- evaluation of the role of assessing pelvic floor muscle function at postnatal check up to allow appropriate targeting of services for pelvic floor re-education
- evaluation of effectiveness of bladder retraining protocols
- evaluation of the role of management approaches such as prompted voiding and regular toileting
- determination of the comparative cost effectiveness of drugs to treat urinary incontinence in the elderly
- cost benefit comparison of antimuscarinic medication and inpatient bladder retraining
- cost of urinary incontinence to individual and to NHS
- effectiveness of specialist continence clinics in the community
- determination of the effectiveness of preprostatectomy pelvic floor exercises
- assessment of the effectiveness of supplementing pelvic floor exercises with electromyographic or manometric biofeedback
- assessment of the effectiveness of pelvic floor exercises for urge urinary incontinence.

10 Development of the guideline

10.1 INTRODUCTION

SIGN is a collaborative network of clinicians, other healthcare professionals, and patient organisations, funded by NHS Quality Improvement Scotland. SIGN guidelines are developed by multidisciplinary groups of practising clinicians and lay representatives using a standard methodology based on a systematic review of the evidence. Further details about SIGN and the guideline development methodology are contained in "SIGN 50: A Guideline Developer's Handbook", available at **www.sign.ac.uk**

10.2 THE GUIDELINE DEVELOPMENT GROUP

Mrs Linda Morrow	*Professional Adviser Continence,*
(Chair)	*The Care Commission, Musselburgh*
Mrs Joyce Wilkinson	*Registered Health Visitor,*
(Secretary)	*Doctoral Candidate, University of St Andrews*
Mrs Mary Ballentyne	*Senior Clinical Nurse Specialist,*
	Southern General Hospital, Glasgow
Mrs Mary Brown	*Continence Nursing Team Manager,*
	Lothian Primary Care Trust, Edinburgh
Ms Jane Camp	*Clinical Governance Practice Development Nurse,*
	Gartnavel Royal Hospital, Glasgow
Dr Paul Dewart	*Consultant Obstetrician/Gynaecologist,*
	St John's Hospital, Livingston
Mrs Ann Gilchrist	*Superintendent Physiotherapist/Clinical Lead,*
	Falkirk Royal Infirmary
Sister Chris Harris	*Urology Nurse Specialist,*
	Western General Hospital,Edinburgh
Mrs Linda Haworth	*Superintendent Physiotherapist/Clinical Specialist,*
	Carnegie Clinic, Dunfermline
Ms Fiona Lamont	*Patient Representative, Glasgow*
Mr David Lyth	*Consultant Urologist, Queen Margaret Hospital, Dunfermline*
Mrs Jan MacCallum	*Continence Adviser, Broxburn, West Lothian*
Dr David Marshall	*Professional Adviser- Pharmacy,*
	The Care Commission, Hamilton
Ms Cathy McKerrell	*INCONTACT Project Manager (Scotland)*
Dr Simon Nicholson	*Consultant Gynaecologist, St John's Hospital, Livingston*
Mr Duncan Service	*Senior Information Officer, SIGN*
Dr Lorna Thompson	*Programme Manager, SIGN*

The membership of the guideline development group was confirmed following consultation with the member organisations of SIGN. Declarations of interests were made by all members of the guideline development group. Further details are available from the SIGN Executive.

10.3 SYSTEMATIC LITERATURE REVIEW

The evidence base for this guideline was synthesised in accordance with SIGN methodology. A systematic review of the literature was carried out using an explicit search strategy devised by the SIGN Information Officer in collaboration with members of the guideline development group.

Literature searches were initially conducted in Medline, Embase, Cinahl, and the Cochrane Library using the year range 1995-2003. The literature search was updated to cover the period up to May 2004. Key websites on the Internet were also used, such as the National Guidelines Clearinghouse. These searches were supplemented by the reference lists of relevant papers and group members' own files. The Medline version of the main search strategies can be found on the SIGN website.

10.4 CONSULTATION AND PEER REVIEW

10.4.1 NATIONAL OPEN MEETING

A national open meeting is the main consultative phase of SIGN guideline development, at which the guideline development group presents its draft recommendations for the first time. The national open meeting for this guideline was held on 24th November 2003 and was attended by 168 representatives of all the key specialties relevant to the guideline. The draft guideline was also available on the SIGN website for a limited period at this stage to allow those unable to attend the meeting to contribute to the development of the guideline.

10.4.2 SPECIALIST REVIEW

The guideline was also reviewed in draft form by a panel of independent expert referees, who were asked to comment primarily on the comprehensiveness and accuracy of interpretation of the evidence base supporting the recommendations in the guideline. SIGN is very grateful to all of these experts for their contribution to this guideline.

Dr Rhoda Abel	*General Practitioner, Stirling*
Professor Paul Abrams	*Consultant in Urology, Southmead Hospital, Bristol*
Dr James Beattie	*Director of Guideline Development, RCGP Scottish Council, Edinburgh*
Dr Steingrimur Bjornsson	*Consultant Gynaecologist, Victoria Infirmary, Glasgow*
Professor Andrew Calder	*Chair, Academy of Royal Colleges and Faculties in Scotland*
Ms Linda Cartmell	*District Nursing Sister, Whinpark Medical Centre, Edinburgh*
Ms Elizabeth Crothers	*Superintendent Physiotherapist, City Hospital, Aberdeen*
Professor Grace Dorey	*Consultant Physiotherapist for Continence/Visiting Senior Research Fellow, University of West of England, Bristol*
Ms Chris Duthie	*Nurse Practitioner, Downfield Surgery, Dundee*
Dr Donald Farquhar	*Clinical Director, Medical Services, St John's Hospital, Livingston*
Ms Margaret Fernie	*Senior Pharmacist, Ayrshire and Arran Health Trust*
Ms Jeanette Haslam	*Clinical Specialist, Womens Health (Physiotherapy), Alston, Cumbria*
Ms Karen Harkness	*Surgical Lead Clinical Pharmacist,Ninewells Hospital, Dundee*
Ms Senga Hunter	*Clinical Nurse Specialist, Joint Hospital, Dumbarton*
Dr Charles Jardine	*General Practitioner, Doune, Perthshire*
Dr Elizabeth Kennedy	*Lead Clinician, Family Planning/Well Woman Services, Ryehill Health Centre, Dundee*
Dr Jo Laycock	*Chartered Physiotherapist, The Colgath Clinic, Cumbria*
Mr Craig Lockwood	*Assistant Director, Centre for Evidence Based Nursing, South Australia*
Dr John Martin	*Senior Assistant Editor, British National Formulary, London*
Dr Dorothy Moir	*Director of Public Health, NHS Lanarkshire*
Ms Lesley Morrison	*Chair, Bladder Pain Syndrome Association, Kent*
Ms Cathy Peacock	*Continence Nurse Specialist, Pollock Health Centre, Glasgow*
Dr David Richmond	*Medical Director/Consultant Gynaecologist, Liverpool Women's Hospital*
Ms Jean Slimon	*District Nurse, Summerside Medical Centre, Edinburgh*
Ms Susan Watt	*Education and Clinical Effectiveness Advisor, Royal College of Nursing, Edinburgh*
Dr Bernice West	*Director, Centre for Nurse Practice Research and Development, Aberdeen*
Professor Jean Wyman	*Director, Centre for Gerontological Nursing, University of Minnesota*
Ms Hilary Wright	*Clinical Nurse Specialist (Continence), Liberton Hospital, Edinburgh*
Ms Liz Young	*Continence Advisor, Strathbrock Partnership Centre, Broxburn*

10.4.3 SIGN EDITORIAL GROUP

As a final quality control check, the guideline is reviewed by an Editorial Group to ensure that the specialist reviewers' comments have been addressed adequately and that any risk of bias in the guideline development process as a whole has been minimised. The Editorial Group for this guideline was as follows:

Dr David Alexander	*General Practitioner, Dunfermline*
Professor Gordon Lowe	*Chairman of SIGN*
Dr Lesley Holdsworth	*Clinical Effectiveness Co-ordinator, NHS Forth Valley*
Dr Safia Qureshi	*Programme Director, SIGN*
Dr Sara Twaddle	*Director of SIGN*
Dr Peter Wimpenny	*Lecturer, School of Nursing and Midwifery, The Robert Gordon University, Aberdeen*

Each member of the guideline development group then approved the final guideline for publication.

10.5 ACKNOWLEDGEMENTS

SIGN is grateful to the following former members of the guideline development group who have contributed to the development of this guideline:

Dr Tony Smith	*General Practitioner, Inverness*
Mrs Pauline Millar	*Continence Adviser, Lochore, Fife*

Annex 1

International consultation on incontinence questionnaire - SF

☐☐ ☐☐ ☐☐ ☐☐☐ Initial number

ICIQ-UI SF

CONFIDENTIAL

☐☐ ☐☐ ☐☐ DAY MONTH YEAR
Today's date

Many people leak urine some of the time. We are trying to find out how many people leak urine, and how much this bothers them. We would be grateful if you could answer the following questions, thinking about how you have been, on average, over the PAST FOUR WEEKS.

1 Please write in your date of birth: ☐☐ ☐☐ ☐☐
DAY MONTH YEAR

2 Are you *(tick one)*: Female ☐ Male ☐

3 How often do you leak urine? *(Tick one box)*

never ☐	0
about once a week or less often ☐	1
two or three times a week ☐	2
about once a day ☐	3
several times a day ☐	4
all the time ☐	5

4 We would like to know how much urine <u>you think</u> leaks.
How much urine do you <u>usually</u> leak (whether you wear protection or not)?
(Tick one box)

none ☐	0
a small amount ☐	2
a moderate amount ☐	4
a large amount ☐	6

5 Overall, how much does leaking urine interfere with your everyday life?
Please ring a number between 0 (not at all) and 10 (a great deal)

0 1 2 3 4 5 6 7 8 9 **10**
not at all a great deal

ICIQ score: sum scores 3+4+5 ☐☐

6 When does urine leak? *(Please tick all that apply to you)*

never – urine does not leak	☐
leaks before you can get to the toilet	☐
leaks when you cough or sneeze	☐
leaks when you are asleep	☐
leaks when you are physically active/exercising	☐
leaks when you have finished urinating and are dressed	☐
leaks for no obvious reason	☐
leaks all the time	☐

Thank you very much for answering these questions.

Annex 2

Sample frequency volume chart/voiding diary

Name .....

Address.....

Date of Birth.....

This chart will provide information which is important in identifying the cause of your problem. Please complete it as accurately as possible. Complete one page for each of the next 3 days.

Date Commenced .....

Time	Intake	Urine passed	Leakage	Comments
06...				
07...				
08...				
09...				
10...				
11...				
12...				
13...				
14...				
15...				
16...				
17...				
18...				
19...				
20...				
21...				
22...				
23...				
00...				
01...				
02...				
03...				
04...				
05...				

Annex 2 (contd.)

Examples of completion instructions for frequency volume chart/voiding diary

Example 1: Descriptive approach				
Time	Intake Cup/mug/glass	Urine passed Small/med/large	Leakage Damp/wet/soaked	Comments
06...				
07.10	Cup coffee	Large amount		
08...				
09.05			Damp	Underclothes wet
10.05	Small glass cola			
11...				
12...				
13...				
Example 2: Quantitative approach				
Time	Intake (ml)	Urine passed (ml)	Leakage +, + +, + + +	Comments
14...				
15.20	150 ml coffee			
16.15		350 ml		
17.20			+++	Bladder spasm
18.00	150 ml tea			
19...				
20...				
21...				

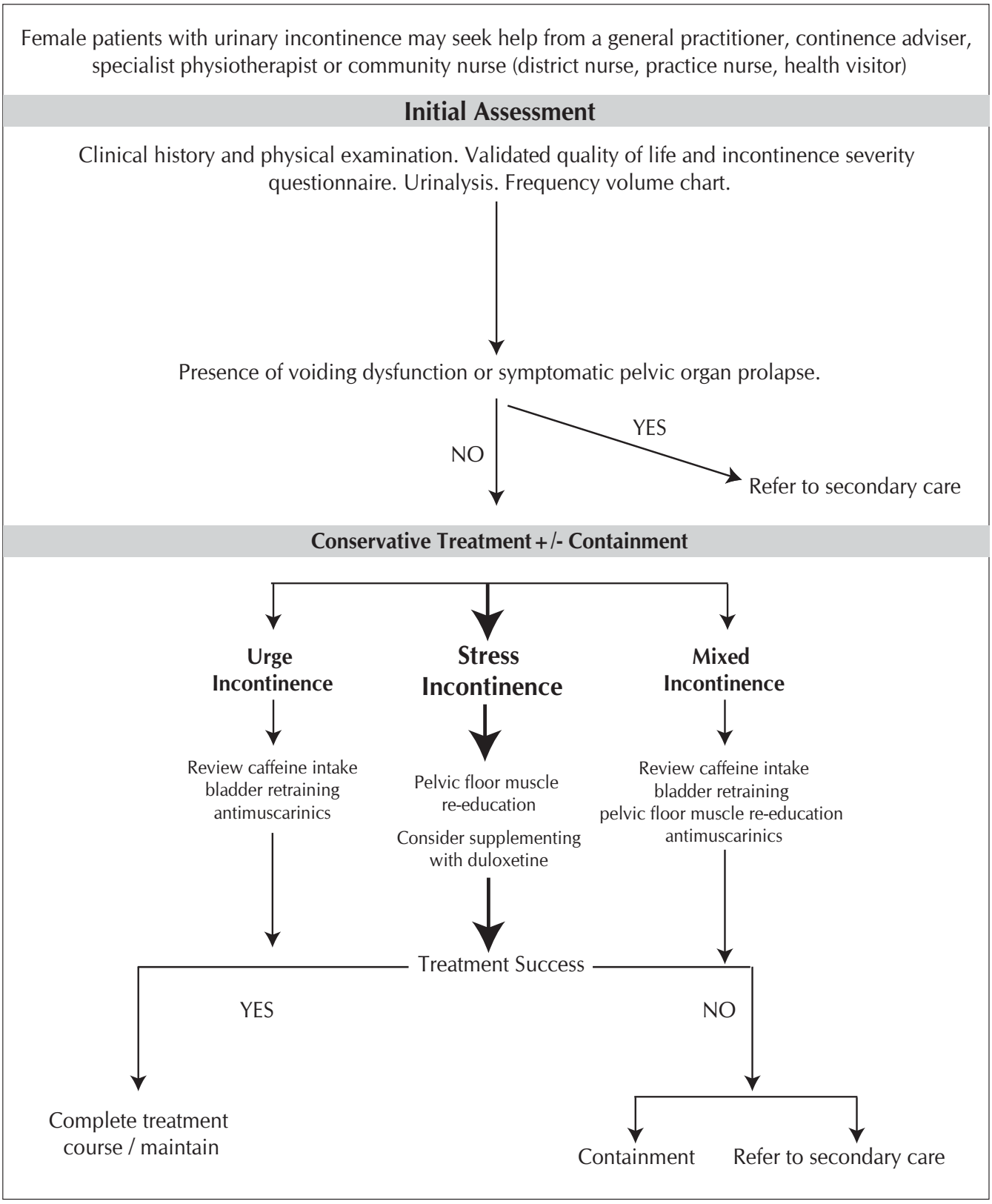
Annex 3

Criteria for developing pelvic floor muscle exercise programmes[68]

- a programme of pelvic floor muscle exercises is tailored to individual patients and includes exercises for both fast and slow twitch muscle fibres
- pelvic floor muscle exercises are performed until the muscle fatigues, several times a day
- pelvic floor muscle exercises are practised for 15–20 weeks
- patients are initially seen weekly, but account may need to be taken of their circumstances and/or the available resources
- pelvic floor muscle exercises are continued on a maintenance programme.

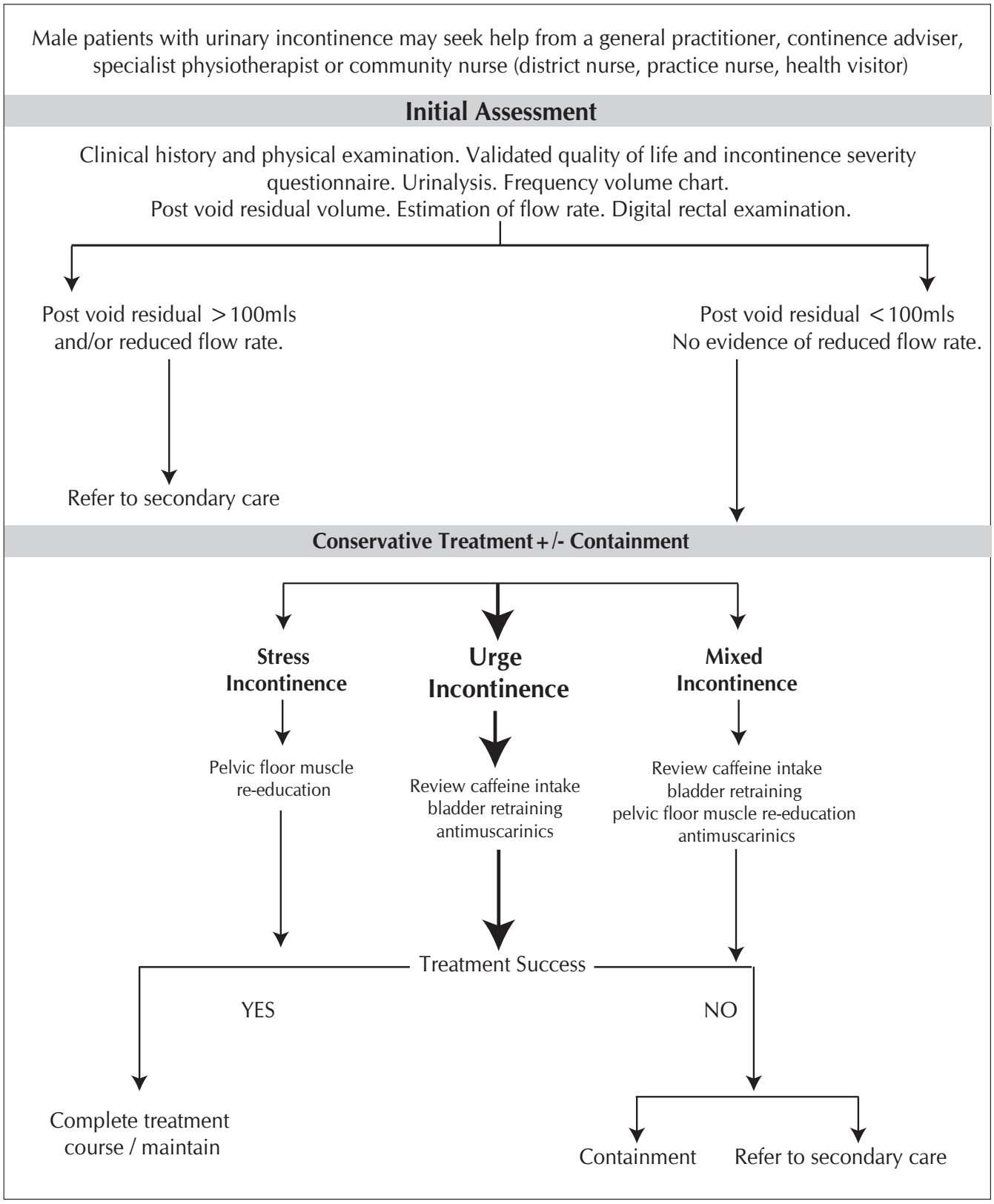
Annex 4

Sample care pathway - female patients with urinary incontinence



Annex 4 (contd.)

Sample care pathway - male patients with urinary incontinence



Annex 5

Resource implications of recommendations

This section is based on discussions with the guideline development group regarding current resource use in Scotland and the likely impact of implementation of the recommendations of the guideline. Where current practice will not change as a result of the recommendations, it is unlikely that there will be resource implications.

The resource implications associated with good practice points have not been considered.

Guideline section		Recommendation	Likely resource implication
2.1.1	B	**Healthcare practitioners should consider using a validated quality of life and incontinence severity questionnaire to evaluate the impact of urinary symptoms and to audit the effectiveness of any management strategy.**	Need for: • awareness raising among GPs and community nurses • additional time to distribute questionnaire, analyse results and discuss results with patients • supply of questionnaires
2.2	D	**Patients with urinary incontinence should be offered information and advice on the treatment options available to them in both primary and secondary care.**	Leaflets available within primary care setting – unlikely to be additional requirement
	D	**Patients with urinary incontinence should have access to trained healthcare professionals who have the relevant knowledge and skills to offer appropriate advice and information.**	There will be a need for dedicated time and funding for training of primary care staff to ensure they develop relevant knowledge and skills
	D	**Patients with urinary incontinence should be made aware that they are able to access specially trained staff in primary care without GP referral.**	Need for: • process for direct referral to specially trained staff in primary care • capacity to deal with self referrals • advertising of direct referral However, this recommendation may lead to fewer patients with continence problems visiting GPs
2.3	C	**Strategies using a number of different approaches and delivery media should be employed to raise awareness of urinary continence and promote incontinence services to a range of target audiences.**	Need for: • shift from local to a variety of national campaigns raising awareness of incontinence
3.1.3	B	**Health professionals should be vigilant and adopt a proactive approach in consultations with patients who are at greatest risk of developing urinary incontinence through factors including age, the menopause, pregnancy and childbirth, high BMI and experience of continence problems in childhood.**	Need for: • increased consultation time • identification of opportunities for raising continence issues (such as six week postnatal check) • awareness raising and training of primary care staff However, there may be longer term savings in staff time, treatments and referrals after successful treatment
3.2	C	**Health professionals should recognise the difficulty that some patients have in raising concerns about continence and should be proactive in questioning patients about continence during consultations.**	
	C	**Health professionals should have a positive attitude to continence problems.**	
	B	**Assessment, treatment and referral, as appropriate, should be offered to all patients with urinary continence problems.**	Need for: • increased capacity within specialist services to deal with additional referrals • increased treatment costs However, there may be savings in containment product use across NHSScotland

3.3.8	D	**Initial assessment of a male patient with urinary incontinence should include completion of a voiding diary, urinalysis, estimation of post void residual volume and digital rectal examination.**	Need for: • additional PVRV equipment (either bladder scans or in/out catheters) • training to undertake PVRV assessments • additional use of voiding diaries However, urinalysis and DRE (in men) are already routine practice
	D	**Initial assessment of a female patient with urinary incontinence should include completion of a voiding diary, urinalysis and, where symptoms of voiding dysfunction or repeated UTIs are present, estimation of post void residual volume.**	
4.1	A	**Pelvic floor muscle exercises should be the first choice of treatment offered to patients suffering from stress or mixed incontinence. Exercise programmes should be tailored to be achievable by the individual patient.**	Need for: • additional physiotherapy capacity to undertake assessment and exercise training programmes • awareness raising among practice staff However, there may be savings in containment product use and secondary care referrals across NHSScotland
	D	**Pelvic floor muscle exercises should be considered as part of a treatment plan for patients with urge urinary incontinence.**	
	D	**Digital assessment of pelvic floor muscle function should be undertaken prior to initiating any pelvic floor muscle exercise treatment.**	
	A	**Where group physiotherapy is available patients should be offered the choice of attending or being seen individually.**	Small effect as little group physiotherapy for this condition takes place
4.2	B	**Pelvic floor muscle exercise treatment should be considered for patients following radical prostate surgery.**	Small effect as very small numbers of patients in this group
4.6	C	**Bladder retraining should be offered to patients with urge urinary incontinence.**	Need for: • primary care staff trained in techniques for bladder retraining • availability of frequency volume charting
5.2.4	A	**Duloxetine should be used only as part of an overall management strategy in addition to pelvic floor muscle exercises and not in isolation. A 4 week trial of duloxetine is recommended for female patients with moderate to severe stress incontinence. Patients should be reviewed again after 12 weeks of therapy to assess progress and determine whether it is appropriate to continue treatment.**	Potential increase in number of patients seeking treatment. Prescription cost of medication. Likely reduction in long term use of containment products.
5.3.1	A	**A trial of oxybutynin, propiverine, tolterodine, or trospium should be given to patients with significant urgency with or without urge incontinence. The dose should be titrated to combat adverse effects, especially for immediate release oxybutynin. See British National Formulary for dose ranges.**	Prescription numbers may increase as more patients become aware of treatments available. However as pharmacological treatments should be trialled sequentially prior to referral. This may lead to reduction in secondary care referral.
6.1	D	**All patients should undergo a continence assessment before product issue. Issue of products should not take the place of therapeutic interventions.**	Long term containment product use should be reduced as a result of this recommendation – likely to have significant savings to NHSScotland
7.2.1	D	**Patients should be referred to secondary care if previous surgical or non-surgical treatments for urinary incontinence have failed or if surgical treatments are being considered.**	Current practice
7.2.2	D	**Female patients with suspected voiding dysfunction should be referred to secondary care.**	
	D	**Female patients with symptomatic pelvic organ prolapse should be referred to secondary care.**	
7.2.3	D	**Male patients with reduced urinary flow rates or elevated post void residual volumes should be referred to secondary care.**	

Abbreviations

BMI	Body Mass Index
CNS	Central Nervous System
DRE	Digital Rectal Examination
FVC	Frequency Volume Chart
GP	General Practitioner
IR	Immediate Release
NHSQIS	NHS Quality Improvement Scotland
PFME	Pelvic Floor Muscle Exercises
PVRV	Post Void Residual Volume
RCT	Randomised Controlled Trial
SIGN	Scottish Intercollegiate Guidelines Network
SR	Slow Release
UDI	Urogenital Distress Inventory
UI	Urinary Incontinence
UTI	Urinary Tract Infection
WHO	World Health Organisation

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Update to printed guideline

27 Sep 2005

Section 5.3.1 paragraph 6 changed from –

Two studies from the United States show that transdermal oxybutynin is safe and effective.[102, 103] Sustained release transdermal preparations are not currently available within primary care.

to

Two studies from the United States show that transdermal oxybutynin is safe and effective.[102,103] Sustained release transdermal preparations are currently available.

12 Jan 2005

Section 8.3

Website address added for Continence Foundation

www.continence-foundation.org.uk

Email address for Continence Foundation change from

continence.help@dial.pipex.com

to

continence-help@dial.pipex.com

QUALITY OF LIFE

☑ Clinicians should be aware of and take into consideration the potentially serious adverse effects that even mild urinary incontinence has on a patient's quality of life.

B **Healthcare practitioners should consider using a validated quality of life and incontinence severity questionnaire to evaluate the impact of urinary symptoms and to audit the effectiveness of any management strategy.**

INFORMATION AND HEALTH PROMOTION

D **Patients with urinary incontinence should be offered information and advice on the treatment options available to them in both primary and secondary care.**

D **Patients with urinary incontinence should have access to trained healthcare professionals who have the relevant knowledge and skills to offer appropriate advice and information.**

D **Patients with urinary incontinence should be made aware that they are able to access specially trained staff in primary care without GP referral.**

C **Strategies using a number of different approaches and delivery media should be employed to raise awareness of urinary continence and promote incontinence services to a range of target audiences.**

RISK FACTORS AND ASSESSMENT

B **Health professionals should be vigilant and adopt a proactive approach in consultations with patients who are at greatest risk of developing urinary incontinence through factors including age, the menopause, pregnancy and childbirth, high BMI and experience of continence problems in childhood.**

D **Initial assessment of a male patient with urinary incontinence should include completion of a voiding diary, urinalysis, estimation of post void residual volume and digital rectal examination.**

D **Initial assessment of a female patient with urinary incontinence should include completion of a voiding diary, urinalysis and, where symptoms of voiding dysfunction or repeated UTIs are present, estimation of post void residual volume.**

C **Health professionals should recognise the difficulty that some patients have in raising concerns about continence and should be proactive in questioning patients about continence during consultations.**

C **Health professionals should have a positive attitude to continence problems.**

B **Assessment, treatment and referral, as appropriate, should be offered to all patients with urinary continence problems.**

PHYSICAL THERAPIES

A **Pelvic floor muscle exercises should be the first choice of treatment offered to patients suffering from stress or mixed incontinence. Exercise programmes should be tailored to be achievable by the individual patient.**

D **Digital assessment of pelvic floor muscle function should be undertaken prior to initiating any pelvic floor muscle exercise treatment.**

☑ Digital assessment of pelvic floor muscle function should only be carried out by an appropriately trained clinician.

B **Pelvic floor muscle exercise treatment should be considered for patients following radical prostate surgery.**

C **Bladder retraining should be offered to patients with urge urinary incontinence.**

PHARMACOTHERAPY

A **Duloxetine should be used only as part of an overall management strategy in addition to pelvic floor muscle exercises and not in isolation. A 4 week trial of duloxetine is recommended for female patients with moderate to severe stress incontinence. Patients should be reviewed again after 12 weeks of therapy to assess progress and determine whether it is appropriate to continue treatment.**

A **A trial of oxybutynin, propiverine, tolterodine, or trospium should be given to patients with significant urgency with or without urge incontinence. The dose should be titrated to combat adverse effects** *(see British National Formulary for dose ranges).*

☑ Antimuscarinic therapy should be tried for a period of six weeks to enable an assessment of the benefits and side effects. Treatment should be reviewed after six months to ascertain continuing need.

CONTAINMENT

D **All patients should undergo a continence assessment before product issue. Issue of products should not take the place of therapeutic interventions.**

REFERRAL

D **Patients should be referred to secondary care if previous surgical or non-surgical treatments for urinary incontinence have failed or if surgical treatments are being considered.**

D **Female patients with symptomatic pelvic organ prolapse or suspected voiding dysfunction should be referred to secondary care.**

D **Male patients with reduced urinary flow rates or elevated post void residual volumes should be referred to secondary care.**

SOURCES OF INFORMATION

Continence Foundation
Tel: 0845 345 0165 (helpline Monday - Friday, 9.30am - 1pm)

Incontact Scotland
PO Box 2796, Glasgow G61 4YT
Tel: 0870 770 3248
Email: cathy@incontact.org

Scottish Continence Resource Centre
Southern General Hospital, Govan Road, Glasgow G51 4OF
Tel: 0141 201 1861
Email: mary.ballentyne@sgh.scot.nhs.uk

♂ Sample care pathway - male patients with urinary incontinence

Male patients with urinary incontinence may seek help from a general practitioner, continence adviser, specialist physiotherapist or community nurse (district nurse, practice nurse, health visitor)

Initial Assessment

Clinical history and physical examination. Validated quality of life and incontinence severity questionnaire. Urinalysis. Frequency volume chart.
Post void residual volume. Estimation of flow rate. Digital rectal examination.

- Post void residual >100mls and/or reduced flow rate. → Refer to secondary care
- Post void residual <100mls No evidence of reduced flow rate.

Conservative Treatment +/- Containment

- **Stress Incontinence** → Pelvic floor muscle re-education
- **Urge Incontinence** → Review caffeine intake bladder retraining antimuscarinics
- **Mixed Incontinence** → Review caffeine intake bladder retraining pelvic floor muscle re-education antimuscarinics

Treatment Success

- YES → Complete treatment course / maintain
- NO → Containment / Refer to secondary care

♀ Sample care pathway - female patients with urinary incontinence

Female patients with urinary incontinence may seek help from a general practitioner, continence adviser, specialist physiotherapist or community nurse (district nurse, practice nurse, health visitor)

Initial Assessment

Clinical history and physical examination. Validated quality of life and incontinence severity questionnaire. Urinalysis. Frequency volume chart.

Presence of voiding dysfunction or symptomatic pelvic organ prolapse.

- YES → Refer to secondary care
- NO

Conservative Treatment +/- Containment

- **Urge Incontinence** → Review caffeine intake bladder retraining antimuscarinics
- **Stress Incontinence** → Pelvic floor muscle re-education; Consider supplementing with duloxetine
- **Mixed Incontinence** → Review caffeine intake bladder retraining pelvic floor muscle re-education antimuscarinics

Treatment Success

- YES → Complete treatment course / maintain
- NO → Containment / Refer to secondary care