

W10: Promoting an Evidence-Based Approach to Quality Continence Care for Frail Older Adults

Workshop Chair: Joan Ostaszkiwicz, Australia
06 October 2015 14:00 - 15:30

Start	End	Topic	Speakers
14:00	14:05	Introduction	Joan Ostaszkiwicz
14:05	14:15	Promoting continence in long-term care: How far have we come?	Joan Ostaszkiwicz
14:15	14:30	Evidence-based continence care for frail older adults: A right or privilege?	Mary H Palmer
14:30	14:45	Systematic review of systematic reviews: Evidence synthesis of managing urinary incontinence in older people in care homes	Brenda Roe
14:45	15:00	Successes and challenges with designing continence programs for community-dwelling frail older women	Kristine Talley
15:00	15:15	Frailty in the primary and community setting: Can integrated care support us growing old?	Sharon Eustice
15:15	15:30	Questions	All

Aims of course/workshop

The aim of this workshop is to provide an overview of contemporary research about the assessment and management of lower urinary tract symptoms in frail older adults in different health care settings, and to describe the implications of this research for policy, research and practice.

Learning Objectives

1. Describe contemporary research about the assessment and management of lower urinary tract symptoms in frail older adults in different health care settings.
2. Debate the concept of quality continence care and quality of life for frail older adults with incontinence.
3. Evaluate the implications for policy, research, and practice.

Promoting an evidence-based approach to 'quality continence care' for frail older adults

Dr Joan Ostaszkiwicz, PhD, RN, MN
Professor Mary H. Palmer, PhD, RNC, FAAN, AGSF
Professor Brenda Roe, PhD, RN, RHN, FRSPH
Dr Kristine Talley, PhD, RN, GNP-BC
Ms Sharon Eustice, MSc, BPhil, RGN, DNCert, Dip(NP)

The aim of the workshop

- ▶ To provide an overview of contemporary research about the assessment and management of lower urinary tract symptoms in frail older adults across the continuum of health care services
- ▶ To describe the implications of this research for policy, research and practice

Workshop speakers

- ▶ Dr Joan Ostaszkiwicz, PhD, RN, MN
 - Postdoctoral Research Fellow
 - Centre for Quality and Patient Safety Research, School of Nursing & Midwifery
 - Deakin University (Aust)
- ▶ Professor Mary H. Palmer, PhD, RNC, FAAN, AGSF
 - Helen W. & Thomas L. Umphlet Distinguished Professor in Aging
 - School of Nursing
 - The University of North Carolina at Chapel Hill (USA)
- ▶ Professor Brenda Roe, PhD, RN, RHN, FRSPH
 - Professor of Health Research
 - Evidence-based Practice Research Centre, Faculty of Health & Social Care
 - Edge Hill University (UK)
- ▶ Dr Kristine Talley, PhD, RN, GNP-BC
 - Assistant Professor
 - School of Nursing
 - University of Minnesota (USA)
- ▶ Ms Sharon Eustice, MSc, BPhil, RGN, DNCert, Dip(NP)
 - Nurse Consultant for Continence
 - Bladder and Bowel Specialist Service
 - Peninsula Community Health, Cornwall and Isles of Scilly, (UK)

Long-term care

- ▶ 2/3 people in the USA who reach age 65 will need LTC during their life (Harris-Kojetin et al. 2013)
- ▶ Long-term care services include a broad range of health, personal care, and supportive services that meet the needs of frail older people and other adults whose capacity for self-care is limited because of a chronic illness; injury; physical, cognitive, or mental disability; or other health-related conditions (HHS, 2013)

Long-term care services are provided by paid, regulated providers (Harris-Kojetin et al., 2013)

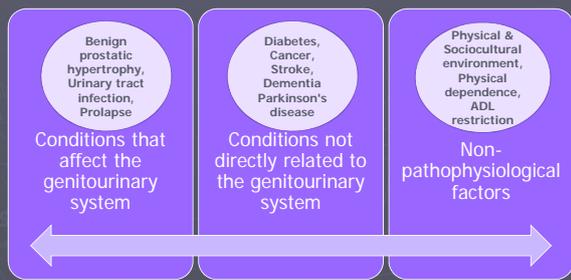
Limited assessment and inconsistent toileting assistance

- No toileting programmes for residents with incontinence
 - USA (22.8%)
 - Italy (12.3%)
 - Denmark (6.6%)
 - France (5.3%)
 - Japan (4.3%)
 - Sweden (2.7%)
 - Iceland (2.6%) (Sgadari et al, 1997)



A conceptual framework for understanding causes of urinary incontinence

Physical dependence: UI increases by 300-400% with impaired ADL and 700% if wheelchair or bed bound (Shamliyan et al., 2007)



Guidelines and evidence-based interventions (Wagg et al, 2013, 2014)

<p>Guidelines</p> <ul style="list-style-type: none"> ▶ Conduct a comprehensive and individualised assessment to identify potential modifiable or reversible causes ▶ Conduct a basic assessment then a specialised assessment ▶ Consider the multifactorial nature of incontinence in older people ▶ Adopt a minimally invasive approach, consider life expectancy, quality of life, and realistic outcome possibilities ▶ Ensure equitable access to the full range of options 	<p>Interventions</p> <ul style="list-style-type: none"> ▶ Staff education ▶ Toileting assistance programmes ▶ Strength/endurance/mobility programmes ▶ Evidence-based and multidisciplinary continence assessments
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Working in a highly regulated environment

- *Difficulty operationalising funding requirements*
- *Difficulty complying with care standards*
 - *A focus on documentation & funding*
 - *Confusion, uncertainty and mistrust*
 - *A culture of risk adversity*
 - *Highly protective responses*

Ostaszkiwicz J, O'Connell B, Dunning T. Fear and overprotection in Australian residential aged care facilities: The inadvertent impact of regulation on quality continence care. (Accepted for publication AJA)



A devalued role

- Personal care work has the symbolic distinction of being 'dirty work'
- Frontline staff:
 - Heavy workload/lack of time for "extra" care.
 - Poorly remuneration
 - Feel public do not understand, appreciate, value
 - Feel undervalued, disempowered, subordinate, marginalised
 - Feel limited to:
 - *'Just doing dirty work'*
 - *'Just doing the wees and poos'*
 - *'Just helping residents get ready for lifestyle staff'*



Responses to a devalued role

- No choice but to 'grapple' with devaluation, stigma, aesthetically unpleasant and 'dirty' work
- Buckle under
- Strive for the best
- Adopt self-protective distancing behaviours and concealment strategies
 - Claim to rise above disgust
 - Engage in emotional labour
 - Create physical distance - practical & symbolic significance
- Seek roles with higher occupational status
- Espouse dignity and the greater good
- Reframe care
 - Positively assert the value of 'dirty work'
 - Reframe personal care work/continence care as 'dignity work'



Highly dependent residents

- Limited life expectancy
- ↕
- Multiple comorbidities
- ↕
- High levels of functional impairment
- ↕
- High levels of cognitive impairment

They [cognitively impaired residents] don't do the normal job anymore. They are sitting and sleeping most of the time. They are not active. They are sitting in the room and you try to get them up for activities and exercise and they say, 'why, why do I have to do this' (Int-01).

- Accepting negative broader cultural beliefs about older people
- Being disheartened
- Attributing symptoms to ageing rather than to pathological and potentially treatable conditions



Ethically challenging carework

- Multiple competing demands
- ↕
- Workforce constraints
- ↕
- Values about cleanliness
- ↕
- Unpredictable events
- ↕
- Lack of information to guide care

Give residents independence and control over their care. If they don't want to get out of bed, don't get them out of bed - it's their choice still.

But, it is constrained. If they don't want to get up but its 2.30 in the afternoon and you are about to leave and you have to get your residents up and do the care before you leave. And they don't really have a choice then (Int-06)

You might be assisting one resident to shower and you know that another resident is dying to go to the toilet but you can't leave that resident (Int-10)

- Prioritised
- Compromised
- Variable communication strategies to attain residents' acceptance
- Routinized care
- Relied on teamwork
- Draw on information from a range of sources

Ostaszkiewicz, J., O'Connell, B. & Dunning, T. (2014). Ethical challenges associated with providing continence care in residential aged care facilities: Findings from a Grounded theory study. *Australian and New Zealand Continence Journal*, 20(4):179-186

Recommendations to address the multiple interrelated complex factors influence the delivery of continence care in LTC

- ▶ Redress the longstanding problem of lack of skilled nursing staff and understaffing
- ▶ Ensure policy makers are aware of the front-line realities of performing carework
- ▶ Tackle longstanding problems of ageism, under resourcing and overregulation of LTC, and the stigma associated with carework
- ▶ Involve ethicists in developing guidance to assist staff respond to the day-to-day complex ethical issues that arise when providing continence care
- ▶ Ensure assessments for funding are disentangled from assessments for clinical care
- ▶ Ensure regulation does not have unintended negative effects
- ▶ Ensure standards of care are contextually appropriate, achievable, understandable, evidence-based and underpinned by a suite of quality indicators that enable us to measure the quality of care

Ostaszkievicz J. Providing continence care in residential aged care facilities: A Grounded theory study. Deakin University, 2013.



Early findings from a qualitative study to explore perspectives about 'quality continence care in LTC

Dignified continence care: being cared for by staff who:

- ▶ Conveyed compassion / empathy
- ▶ Offered choice
- ▶ Spoke in a calm manner
- ▶ Covered them during personal/continence care
- ▶ Checked, changed and discarded wet/soiled items discreetly
- ▶ Helped conceal their reliance on continence products
- ▶ Made them feel dry and comfortable
- ▶ Did not embarrass them
- ▶ Recognised and responded in a timely and sensitive manner to their need for assistance

Undignified continence care

- ▶ Having one's body exposed
- ▶ Feeling objectified
- ▶ Being in a wet or soiled state
- ▶ Being woken against one's will for continence care
- ▶ Being encouraged to use pads instead of the toilet
- ▶ Being cared for by staff whose focus was on completing a task

Ostaszkievicz et al., in press



▶ 1948 Universal Declaration of Human Rights

- The right to health
 - ▶ Access to timely, acceptable, and affordable healthcare of appropriate quality

▶ 'Access'

- Gaining entry into the health care system.
- Getting access to sites of care where patients can receive needed services.
- Finding providers who meet the needs of individual patients and with whom patients can develop a relationship based on mutual communication and trust (AHRO)

<http://www.un.org/en/documents/udhr/>

Implications for policy, research and practice

1. UI/FI are prevalent symptoms in LTC that are caused by pathophysiological and/or non pathophysiological factors
 - Need to address both in policy, research and practice
2. Multiple inter-related factors influence how LTC staff determine and deliver continence care i.e. regulation, low role status, residents' highly dependent status, ethically challenging care environment – can hinder or promote quality continence care
 - Interventions to enhance continence care in LTC need to accommodate this complexity
3. Providing 'evidence based continence care' in LTC requires a multifaceted approach that guarantees residents' rights are upheld and ensures they feel respected, safe, and dignified

References

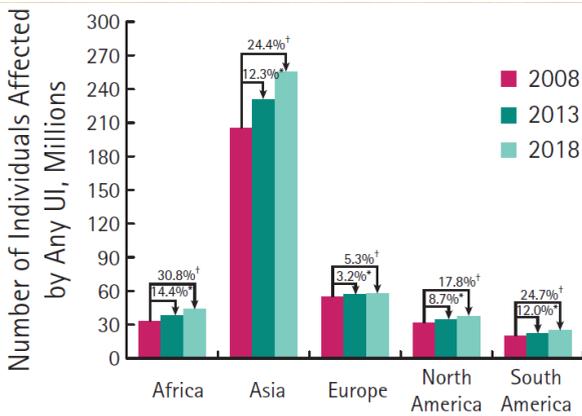
- ▶ British Medical Society. Behind closed doors. <http://www.bgs.org.uk/campaigns/dignity.htm>
- ▶ Harris-Kojetin L, Sengupta M, Park-Lee E, Valverde R. Long-term care services in the United States: 2013 overview. National health care statistics reports: no 1. Hyattsville, MD: National Center for Health Statistics.
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- ▶ Ostaszkievicz J, O'Connell B, & Dunning T. (2014). Ethical challenges associated with providing continence care in residential aged care facilities: Findings from a Grounded theory study. Australian and New Zealand Continence Journal. 20(4):179-186
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Evidence-based continence care for frail older adults: A right or a privilege?

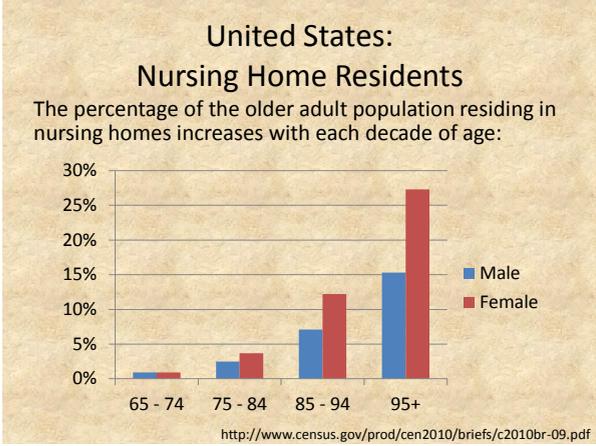
Mary H. Palmer, PhD, RNC, FAAN, AGSF
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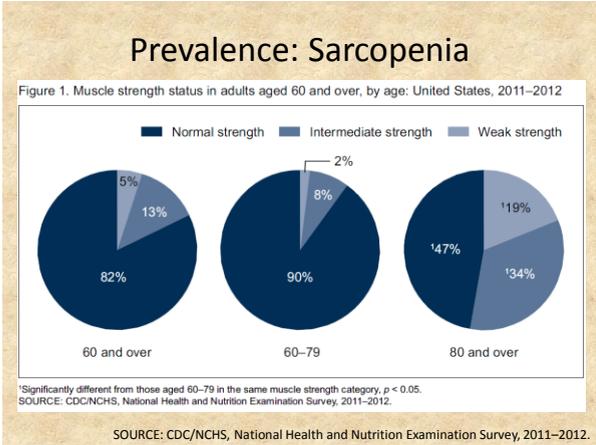
Objectives

- Explore continence care as a legal, regulatory, and ethical issue.
- Propose value proposition for provision of evidence-based continence care for ALL frail older persons.



Source: Irwin, DE., et al. (2011). BJU Int . 108:1132-1139.





Frailty

- By age 80 years, 40% of older adults have functional impairments
- 6% to 11% are considered frail
United States estimate: 6.1% Source: DuBeau et al., 2009
- Psychological effect of transition from robust (independent) to frailty – evolving identity, “looking glass self” Source: Fillitt & Butler, 2009



Which comes first?

Definitions

Right: *noun*
 "That which is just, moral, or proper."

Source: <http://www.thefreedictionary.com/right>

Privilege: *noun*
 "A special advantage, immunity, permission, right, or benefit granted to or enjoyed by an individual, class, or caste."

Source: <http://www.thefreedictionary.com/privilege>

Continance Care: Regulatory and Legal Perspectives

In the United States:

"Federal law contains four key standards for nursing home care:

- The nursing home must provide services to help each resident attain or maintain the **highest practicable** physical, mental, and psychosocial well-being.
- A resident's ability to bathe, dress, groom, transfer, walk, toilet, eat and communicate **must not decline** unless it is medically unavoidable.
- If a resident is unable to carry out activities of daily living, he or she **must receive help** to maintain good nutrition, grooming, and personal and oral hygiene.
- Each resident has the **right to make choices** about his or her care."

Source: <http://www.atlantalegalaid.org/fact11.htm>

UNITED STATES DEPARTMENT OF LABOR **OSHA QuickTakes**

Interpretation of 29 CFR 1910.141(c)(1)(i): Toilet Facilities

The language and structure of the general industry sanitation standard reflect the Agency's intent that employees be able to use toilet facilities promptly. The standard requires that toilet facilities be "provided" in every workplace. The most basic meaning of "provide" is "make available." ...

Toilets that employees are not allowed to use for extended periods cannot be said to be "available" to those employees. Similarly, a clear intent of the requirement in Table J-1 that adequate numbers of toilets be provided for the size of the workforce is to assure that employees will not have to wait in long lines to use those facilities. Timely access is the goal of the standard. ...

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=22932

Regulatory Implications: Long-term Care

REGULATION: F315 §483.25(d) Urinary Incontinence

Based on the resident's comprehensive assessment, the facility must ensure that:

- §483.25(d) (1) A resident who enters the facility without an indwelling catheter is not catheterized unless the resident's clinical condition demonstrates that catheterization was necessary; and
- §483.25(d) (2) A resident who is incontinent of bladder receives appropriate treatment and services to prevent

Legal Implications

Nursing home resident waits 45 minutes on toilet for help, breaks pelvis, \$4 million suit says

David E. Pattison's suit claims that the actions against him by staff at Avamere Health Services' nursing homes in Southwest Portland and Beaverton were "outrageous."

Source: Aimee Green | The Oregonian/OregonLive By Aimee Green: February 27, 2015 at 11:00 AM, updated February 27, 2015 at 11:49 AM

Impact of fecal incontinence: Nursing Homes

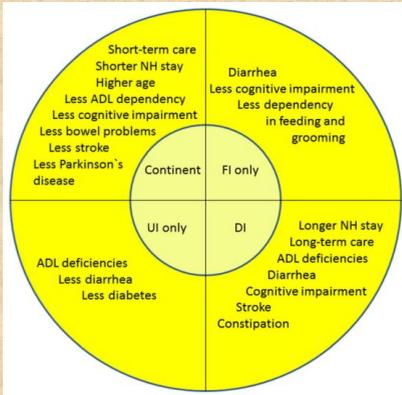
- Little privacy while defecating for 77%
- Immediate assistance after defecating was unavailable for 90%
- 100% could not clean themselves after defecating
- Few (13%) were provided information about causes and treatment of FI



Source: Akpan, Gosney & Barrett (2006). Wound, Ostomy and Continence Nursing.

A Glass Half Full

Characteristics
of continent
residents and
residents with
FI only, UI only,
and DI in
Nursing Homes



Saga et al, in Neurourology and Urodynamics 34:362-367 (2015)

Hospitals: Patient Safety Initiative

Aim: Eliminate *preventable* patient harm

QUESTION: Is *iatrogenic incontinence* an unintended consequence of falls reduction programs or other well-meaning patient safety initiatives?

Risk factors for Incident (new) Urinary Incontinence in Hospitalized Elders

Risk Factor	OR(95% CI)	p-Value
Continence aids (reference: self-toileting)		
• Urinary catheter	4.26 (1.53–11.83)	.005
• Adult diaper [sic]	2.62 (1.17–5.87)	.02
Activities of daily living at admission (reference: independent)		
• Partially dependent	2.96 (1.01–8.71)	.049
• Dependent	3.27 (1.49–7.15)	.003

** Adjusted for age, cognitive status, physical activity

Source: Zisberg et al., JAGS, 2011.

Ethical Issues

Biomedical Ethical Principles:

- Right to autonomy
- Beneficence and non-maleficence
- Justice

and newly proposed:

Dignity-enhancing Care:

- Lived experience of older person and carer
- Integrity, humility, privacy, historicity, singularity, and relationships

Source: Improving continence care for people with dementia living at home, Alzheimer Europe, 2014

United Nations: The Universal Declaration of Human Rights

PREAMBLE

Whereas recognition of the inherent **dignity** and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,
(continued)

Article 1.

All human beings are born free and equal in **dignity** and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

Source: <http://www.un.org/en/documents/udhr/>

Attorney General
Eric T. Schneiderman

NEW YORK STATE ATTORNEY GENERAL

A.G. Schneiderman Announces Arrest And Guilty Plea Of Erie County Nurse Aide For Taking And Exchanging Compromising Photograph Of Incontinent Patient Via Snapchat

Defendant Admits To Surreptitiously Photographing Patient In State Of Undress

NEW YORK – Attorney General Eric T. Schneiderman today announced the arrest of Edward J. Melock, a nurse aide in Erie County, for taking and exchanging a compromising photograph of an incontinent patient via the smartphone app Snapchat. Melock, who was employed at Greenfield Health and Rehabilitation Center in Lancaster, was accused of taking the photograph of an elderly patient in a state of undress on or about March 1, 2013, and sharing it via Snapchat.

<http://www.ag.ny.gov/press-release/ag-schneiderman-announces-arrest-and-guilty-plea-erie-county-nurse-aide-taking-and>

What Will Success Look Like?

- Preservation and promotion of function
- Preservation and promotion of quality of life
- Preservation and promotion of continence through:
 - Assessment
 - Treatment consistent with evidence and patient preferences
- Increase in knowledge, skills, and using evidence-based practices
- Increase in patient involvement in care planning

Need for Action for Continence Promotion

- Current and future needs of frail older persons will overwhelm the workforce and healthcare systems.
- Consumer **preference** and **patient-centered care** will create *new* demand for change in how care is provided to meet elimination needs.
- Continence is increasingly viewed as a *public* health issue with ethical implications.
- On-going carer education, clinical competency development, and supervision **MUST** be part of process.
- Essential elements for success: implementing successful change processes, partnerships, consumer engagement, development of evidence for interventions with patient participation.
- Patient safety and quality improvement complements continence promotion.

Value Proposition

Create your value proposition for evidence-based continence care for all frail older persons.

Systematic review of systematic reviews: Evidence synthesis of managing urinary incontinence in older people in care homes

Brenda Roe

Professor of Health Research, Evidence based Practice Research Centre, Faculty of Health & Social Care, Edge Hill University; Honorary Fellow, Personal Social Services Research Unit, University of Manchester, UK



Edge Hill
University

Introduction

- Urinary incontinence is highly prevalent in older people in long term care settings; including nursing, residential or care homes and aged care facilities in the community
- The costs of managing incontinence in terms of staff time, resources, aids and appliances are high yet economic evaluations remain few
- There is limited but emerging evidence of effectiveness from systematic reviews of conservative / behavioural approaches for the management of urinary incontinence which form the main focus of nursing care.

Aim and methods

- To synthesise evidence from systematic reviews on the management of urinary incontinence and promotion of continence using conservative/behavioural approaches in older people in care homes to inform clinical practice, future guidelines and research
- A narrative synthesis was undertaken
- For the Review methods the PRISMA statement was followed, as were established methods for systematic review of systematic reviews

Results

- 5 systematic reviews of high quality were included.
- 3 specific to intervention studies and 2 reviewed descriptive/observational studies.
- Urinary incontinence was the primary outcome in 3 reviews with factors associated with the management of urinary incontinence the primary outcome for the other 2 reviews.

Review & year	Aim (participants)
Fink et al 2008	To determine efficacy and safety of treatments for NH residents with UI
Roe et al 2011	To review published descriptive empirical (qualitative or quantitative) studies of care practices associated with management of UI, promotion or maintenance of continence in older people 65 years and above in CH with UI as the primary focus. Narrative synthesis. Parallel SR.
Flanagan et al 2012	To review published intervention studies for the management of UI, promotion or maintenance of continence in older people 65 years and above in CH with IU as primary focus. Narrative synthesis. Parallel SR.
Roe et al 2013	To review published descriptive empirical (qualitative or quantitative) studies of care practices & associated factors with management of UI, promotion or maintenance of continence in older people 65 years and above in CH with associated factors the primary focus. Narrative synthesis. Parallel SR.
Flanagan et al 2014	To review published intervention studies of associated factors with the management of UI, promotion or maintenance of continence in older people 65 years and above in CH. Narrative synthesis. Parallel SR.

Review & year	Number of studies included
Fink et al 2008	10; 8 behavioural interventions relevant to this review; 6 pharmacological interventions with 2 relevant to this review combined with behavioural interventions. Countries not specified. Total 10 relevant studies
Roe et al 2011	10 (1980-2005; 3 in 1980s, 4 in 1990s, 3 in 2000s) 7 USA; 1 England; 1 England, 1 (England, Wales & Northern Ireland); 1 international involving 7 countries
Flanagan et al 2012	33 (1980-2009; 5 in 1980s, 17 in 1990s, 11 in 2000s) 26 USA, 2 England, 1 each Netherlands, Turkey, Australia, Israel & Japan
Roe et al 2013	16 (1985-2008; 1 in 1980s, 6 in 1990s, 9 in 2000s). 12 USA, 3 England, 1 Canada
Flanagan et al 2014	9 (1984-2004; 3 in each decade 1980s, 1990s, 2000s). 7 USA, 2 UK (1 each for Scotland & Wales)
Totals	78 relevant studies in 5 reviews (of which 52 undertaken in the USA)
Adjusted Totals *	72 relevant studies with 52 (76%) in the USA

Review & year	Total number of care homes & participants
Fink et al 2008	Total number of homes not specified; 979 residents recruited/ 781 completed (872/697 behavioural studies; 107/84 behavioural plus pharmacological intervention)
Roe et al 2011	552 CH (range 3 – 378 per study; 2 studies not specified but comprised 7 national samples; 1study CH from 5 states in USA). 444,769 residents recruited/444,429 completed.
Flanagan et al 2012	196 CH (166 NH & 30 RH; range 1 - 30). 4333 residents recruited/2971 completed.
Roe et al 2013	1203 CH from 14 studies (range 2-841). 87,171 residents sampled/ 86,840 completed (range 6- 77,337); 367 managers/staff (4 studies: range 33-166), 171 family members (1 study)
Flanagan et al 2014	33 CH (33 NH & 4 aged care). 708 residents recruited/701 completed.
Totals	1984 CH; 537,960 residents recruited/ 535,722 completed/data available plus 367 managers/care staff & 171 family members
Adjusted Totals *	1930 CH; 537,237 residents recruited/ 535,178 completed/ data available plus 367 managers/care staff & 171 family members

Review & year	Residents completed	Range of mean age in years	Gender
Fink et al 2008	781	73.9 to 88.6 – mean age reported in 9 studies	635 (59%) women; 444 (41%) men, reported in 9 studies (7 behavioural & 2 relevant combined behavioural and pharmacological)
Roe et al 2011	444,429	77 to 88.7 – mean age reported in 7 studies	321,073 (72%) women; 122, 021 (28%) men, reported in 7 studies
Flanagan et al 2012	2971	78 to 91.3 – mean age reported 31 studies	2019 (77%) women; 615 (23%) men, reported in 26 studies
Roe et al 2013	86,840	81.5 to 86.5 – mean age reported by 6 studies	56,992 (66%) women; 29,848 (34%) men, reported in 8 studies
Flanagan et al 2014	701	81.5 to 85.6 – mean age reported by 6 studies	250 (72%) women; 99 (28%) men, reported in 4 studies
Total	535,722	73.9 to 88.7	380,969 (71%) women; 153,027 (29%) men, reported in 54 studies
Adjusted Totals*	535,178	73.9 to 88.7	380,684 (71%) women; 152,956 (29%) men reported in 47 studies

Results and discussion

- Toileting programmes, in particular prompted voiding, with use of incontinence pads are the main conservative behavioural approach for the management of incontinence and promotion of continence in this population with evidence of effectiveness in the short term.
- More intervention studies, predominantly trials, are available than descriptive observational studies.
- More recent studies are of higher methodological quality.

Results and discussion

- Few studies available on economic evaluations
- Studies maintaining continence in older people in care homes are lacking
- Evidence from associated factors; exercise, mobility, comorbidities, hydration, skin care, staff perspectives, policies and older people's experiences and preference are limited.

Results and discussion

- The majority of evidence of effectiveness are from studies from one country which may or may not be transferable to other care home populations
- Future studies that combine complex interventions using standardised outcomes and mixed methods with qualitative studies embedded including both implementation and economic evaluations are warranted. Studies should adhere to established international methodological and publication standards

Conclusion

- Nursing practice and values should reaffirm a focus on ‘embodied’ care, that is, meeting essential basic needs of older people in terms of mobility, elimination, nutrition, hydration and hygiene while preserving dignity. Involving older people as partners in compassionate care is paramount.
- Such approaches are essential for assuring quality of care when managing urinary incontinence and promoting continence in older people in care homes.

Thank you

Contact details:

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Email: roeb@edgehill.ac.uk

Roe B, Flanagan L, Maden M (2015) Systematic review of systematic reviews for the management of urinary incontinence and promotion of continence using conservative behavioural approaches in older people in care homes. JAN. Article first published online: 23 JAN 2015 | DOI: [10.1111/jan.12613](https://doi.org/10.1111/jan.12613)

UNIVERSITY OF MINNESOTA
SCHOOL OF
NURSING

Treating Urinary Incontinence in Frail Community-dwelling Older Adults

Kristine Talley, PhD, GNP-BC, RN
Assistant Professor

ICS 2015 Workshop Promoting an evidence-based approach to 'quality
continence care for frail older adults

5/28/2015 1

Objectives

At the end of this presentation, the learner should be able to:

- Identify risk factors for developing urinary incontinence (UI) in community dwelling frail older adults
- Evaluate the evidence on treating UI in community dwelling frail older adults
- Create a model for studying incontinence
- Identify future research needs on UI in community dwelling frail older adults

Definitions

- Urinary Incontinence
 - *"Involuntary loss of urine that is a social or hygienic problem"* (Abrams et al., 2010, p. 213).
- Frail elderly
 - *"People over the age of 65 with a clinical presentation or phenotype combining impairments in physical activity, mobility, balance, muscle strength, motor processing, cognition, nutrition, and endurance including feelings of fatigue and exhaustion"* (Wagg et al., 2014, p. 1)
- Functional Urinary Incontinence
 - *"The complaint of involuntary loss of urine that results from an inability to reach the toilet due to cognitive, functional, or mobility impairments in the presence of an intact lower urinary tract system"* (Abrams et al., 2013, p. 364).

Prevalence of Urinary Incontinence in Adults Age 65+ by Setting during 2007-2010

Setting	Overall	Women	Men
Community dwelling	44%	55%	25%
Residential care facility		40%	30%
Home health & hospice	32%	40%	20%
Nursing home short-stay	70%	74%	31%
Nursing home long-stay	37%	37%	37%

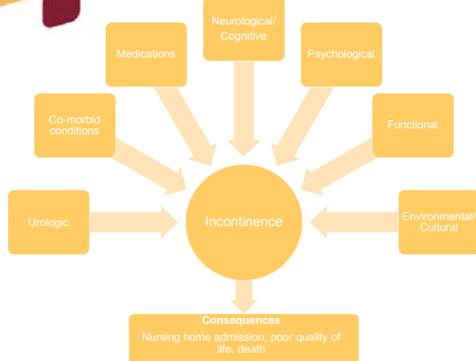
Gorina Y, Schappert S, Bercovitz A, et al. Prevalence of incontinence among older Americans. National Center for Health Statistics. Vital Health Stat 3(36). 2014.

Consequences of Urinary Incontinence

Burden	Cost
Emotional <ul style="list-style-type: none"> Anxiety Depression Shame/embarrassment Social <ul style="list-style-type: none"> Activity avoidance Social exclusion Quality of Life	<ul style="list-style-type: none"> \$14 billion for community \$5 billion for nursing home Containment products Treatments (<10% of costs) Caregiving (formal & informal) Complications of UI (skin infection, pressure ulcers, UTIs, sleep deprivation, falls) Nursing home admission

Landefeld et al. (2008). National Institutes of health state-of-the science conference statement: Prevention of fecal and urinary incontinence in adults. *Annals of Internal Medicine* 148: 449-458

Syndromic Model for Urinary Incontinence in Frail Older Adults



Urologic Contributors

Lower Urinary Tract Symptoms

- Urgency
- Frequency
- Weak pelvic floor muscles

Age Related Changes in Urinary System

- Urine output shifted later in the day
- Benign prostatic hypertrophy
- Atrophic vaginitis, urethritis, decreased urethral length, decreased maximal closure pressure
- Detrusor overactivity
- Decreased detrusor contractility
- (Modest) increase post void residual (PVR)
- Decreased total bladder capacity
- Decreased ability to postpone voiding

Factors Contributing to or Causing UI in Older Adults

Comorbid conditions

- Diabetes
- Congestive heart failure
- COPD
- Degenerative joint disease
- Sleep apnea
- Severe constipation
- Prostate cancer
- Benign prostatic hypertrophy
- Pelvic floor prolapse

Neurological

- Stroke
- Parkinson's disease
- Multiple Sclerosis
- Normal pressure hydrocephalus

Cognitive

- Dementia
- Impaired cognition

Psychological

- Depression

Function

- Impaired mobility

Environment/Cultural

- Inaccessible toilets
- Lack of caregivers
- Belief that UI is an inevitable part of aging

Prevalence of BADL Disability in Community Dwelling Older Adults



Disability Definition	Women	Men
Any BADL disability	8.1-14.0	6.5-10.3
Moderate BADL disability	21.7	19.1
Severe BADL disability	6	6
Walking	27.3	18.6
Transferring	27.6	19.2
Dressing/hygiene	17.1	13.2
Toileting	?	?

Kane, R.L., Talley, K.M.C., Shamliyan, T., and Pacala, J.T. (2011). Common Syndromes in Older Adults Related to Primary and Secondary Prevention. Evidence Report/Technology Assessment No. 87. AHRQ Publication No. 11-05157-EF-1. Rockville, MD. Agency for Healthcare Research and Quality. July 2011.

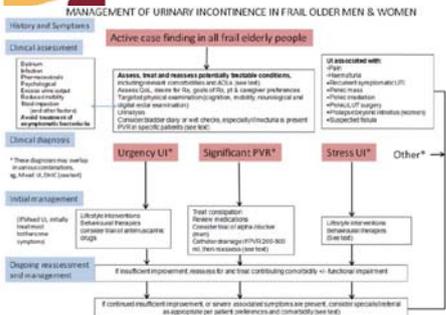
Medications that Can Cause or Worsen UI

- Alcohol
- α-Adrenergic agonists
- α-Adrenergic blockers
- ACE inhibitors
- Anticholinergics
- Antipsychotics
- Calcium-channel blockers
- Cholinesterase inhibitors
- Estrogen
- Gabapentin
- Loop diuretics
- Narcotic analgesics
- Non-steroidal anti-inflammatory drugs
- Sedative hypnotics
- Thiazolidinediones
- Tricyclic antidepressants

Tailoring UI Treatments for Diverse Frail Populations

- Treatments must accommodate resident characteristics & abilities
- Treatments should be multi-component, interdisciplinary, and person-centered
- Frail older adults without dementia have the potential to implement prevention programs targeting behavioral change, such as increasing physical activity and conservative treatments for urinary incontinence that do not require caregiver assistance

5th INTERNATIONAL CONSULTATION ON INCONTINENCE GUIDELINES FOR MANAGING URINARY INCONTINENCE IN FRAIL OLDER ADULTS



Wagg et al. (2014). Urinary incontinence in frail elderly persons: Report from the 5th International Consultation on Incontinence. *Neurology & Urodynamics*, doi:10.1002/nau

Behavioral Interventions to Treat UI in Frail Populations

Caregiver Dependent Interventions

- Prompted voiding
- Habit training
- Timed voiding
- Combined toileting and exercise therapy

What do we know about self-managed interventions?

Incontinence Treatments for Frail Older Adults

Intervention by Population	Urinary Incontinence	Level of Evidence
HOMEBOUND		
Biofeedback assisted pelvic floor muscle exercises for 8 weeks (McDowell 1999)	75% improvement in daily episodes per diary	Level I
Home health care agency program of pelvic floor muscle exercise, habit training, biofeedback, relaxation exercises, diet modification, and bowel regimens for 4 weeks (Rose 1990)	78-79% improvement in weekly episodes per diary	Level II-3
Individualized bladder retraining, pelvic floor muscle exercises, education on adequate hydration and caffeine reduction for 3 months (Karon 2005)	79-80% improvement in daily episodes per diary	Level II-3
Comprehensive Geriatric Assessment, pelvic floor muscle exercises, bladder retraining, caffeine reduction, fluid consumption, prompted voiding, chronic disease management for 6 weeks (Harari 2009)	46% reported improvement	Level III
ADULT DAY CARE		
Toilet skills training for 8 weeks (Van houten 2007)	8-35% improvement in 24 hour pad test*	
COMMUNITY DWELLING FRAIL		
Oxybutynin 2.5 mg twice daily plus bladder retraining for 6 weeks (Szonyi 1995)	No improvement	Level I
ASSISTED LIVING & SENIOR APARTMENTS		
1-hour group education with optional individualized treatment (Schim 2004)	30-33% reported improvement	Level II-3
COMMUNITY DWELLING ELIGIBLE FOR NURSING HOME PLACEMENT		
Comprehensive Geriatric Assessment done in PACE** (Mukamel 2006)	Those treated by teams with high self rated effectiveness were 23% less likely to deteriorate in urinary incontinence	Level III

Talley, K.M.C., Wyman, J.F., & Shaukayan, T. (2011). State of the science: Conservative interventions for urinary incontinence in frail community-dwelling older adults. *Nursing Outlook*, 59, 215-220. doi:10.1016/j.outlook.2011.05.010

UNIVERSITY OF MINNESOTA
SCHOOL OF
NURSING

Design & Feasibility of a Randomized Controlled Trial to Treat UI in Frail Community Dwelling Older Women

5/29/2016 16

Defeating Urinary Incontinence with Exercise Training (DUET) Design & Setting

- 2 arm randomized controlled trial with treatment and no-treatment control group
- Individuals randomized to groups
- Blinded data collector
- 5 Senior housing facilities with independent & assisted living apartments (3 low income & 2 normal income)

Target Population

- Frail older women
- No Alzheimer's disease or dementia
- Able to engage in exercise
- Potential to benefit from self-managed behavioral strategies for improving urinary incontinence
- Not have urinary incontinence caused by a neurological disorder



Intervention

- 12 week program, delivered by registered nurses and exercise instructor at the senior housing facility
- Primary goal are to
 - Improving mobility, transferring, and disrobing skills needed for toileting
 - Reduce frequency & severity of urinary incontinence
- Components
 - Individualized risk assessments & treatment recommendations for incontinence and toileting barriers (everyone learned pelvic floor muscle exercises)
 - Twice weekly group exercise
 - Daily walking for exercise

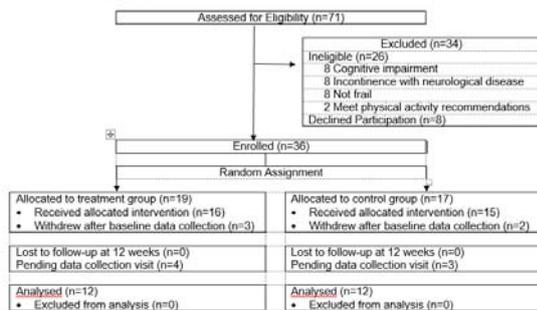
Recruitment Success

Building	Number of Women Residents	Days Recruiting	Number of Recruitment Events	Number Screened	Number Enrolled
1 Low Income	59	23	2	12	8
2 Low Income	95	20	3	20	5
3 Low Income	233	92	8	24	5
4 Normal Income	112	44	4	11	6
5 Normal Income	59	56	4	4	2
Total	558	235	21	71	36
Mean per building	112	47	4	14	7

Characteristics of Screened Participants

Characteristic	Mean ± SD or N (Percent)
Age	82.2 ± 8.6
Independent living resident	60 (84.5)
Assisted living resident	6 (8.5)
Receiving home care services	5 (7.0)
Urinary incontinence: ICIQ score	9.0 ± 4.7
Range: (no burden) 0-21 (highest burden)	
Frailty: Vulnerable Elders Survey Score	4.0 ± 2.6
Range: (no frailty) 0-10 (most frail)	
Days per week engaged in:	
Aerobic exercise for ≥ 30 minutes	1.3 ± 2.2
Strengthening exercise	1.3 ± 1.9
Do 150+ minutes of aerobic exercise per week	8 (11.3)
Do strengthening exercises at least twice weekly	19 (26.8)
Safe to exercise per EASY screen	65 (91.6)
Passed cognitive impairment screening: Mini-cog	63 (88.8)

Study Flow Diagram



Sample Characteristics N = 36

Characteristic	Mean ± SD or N (Percent)
Age	84.2 ± 6.9
Independent living resident	32 (88.9)
Assisted living resident	2 (5.6)
Receiving home care services	2 (5.6)
Live in low income building	22 (61.1)
Urinary incontinence: ICIQ score	8.4 ± 3.5
Range: (no burden) 0-21 (highest burden)	
Frailty: Vulnerable Elders Survey Score	4.0 ± 2.5
Range: (no frailty) 0-10 (most frail)	

Treatment Group Adherence (N = 17)

Component	N = 15 Subjects
4 Nurse home visits	94%
Average number of times participants did pelvic floor muscle exercises weekly (5 prescribed)	4.8 ± 1.6
Attend 24 exercise classes	61%
150 minutes of weekly walking	Hard for women to track

Percentage of Classes Attended	N	%
0-24%	3	20
25-50%	4	27
50-74%	0	0
75-100%	8	53

Study Challenges

Percentage of Participants Who Had Difficulty Using a Daily Diary to Track Program Participation

Component	All Participants N=15	Normal Income Buildings N=7	Low Income Buildings N=8
Tracking pelvic floor muscle exercise sessions	4/15 (24%)	0/7 (0%)	4/8 (50%)
Tracking Minutes Walked for Exercise	9/15 (60%)	2/7 (29%)	7/8 (88%)
Tracking number of steps walked for exercise	6/15 (40%)	1/7 (14%)	5/8 (63%)

* 4 participants withdrew from low income buildings and 1 participant withdrew from normal income buildings

Pilot Study Outcomes Mean ± SD (N=36)

Characteristics	Treatment Group			Control Group			***	p
	Baseline N=19	12 week follow-up N=14*	Difference Score N=12	Baseline N=17	12 week follow-up N=12**	Difference Score N=11*		
Urinary incontinence severity (ICIQ) [†]	7.8 ± 3.3	6.1 ± 4.6	2.0 ± 4.4*	9.0 ± 3.7	8.4 ± 4.1	-1.3 ± 3.4*	0.7	0.535
Urinary frequency via bladder diary	7.8 ± 2.8 (n=15)	6.0 ± 3.4 (n=10)	-0.9 ± 1.4* (N=10)	8.8 ± 2.8 (N=12)	7.7 ± 1.5 (n=9)	-0.3 ± 1.5* (N=9)	1.0	0.349
Urinary leakage via bladder diary	1.6 ± 2.2 (n=14)	0.8 ± 1.1 (N=9)	-0.7 ± 1.9* (N=9)	1.9 ± 2.0 (N=12)	1.9 ± 1.9 (N=9)	0.3 ± 0.8* (N=9)	1.5	0.166
Incontinence impact Questionnaire	48.7 ± 53.3	42.1 ± 74.8	-12.0 ± 24.3*	53.8 ± 62.4	57.4 ± 66.7	-1.2 ± 18.5*	1.2	0.249
Urinary Distress Inventory	57.9 ± 52.4	25.0 ± 32.8	-94.9 ± 42.8*	70.9 ± 40.9	33.4 ± 36.9	-37.5 ± 32.8*	0.2	0.857
Self-efficacy for Urinary incontinence	66.2 ± 27.8	74.1 ± 36.6	9.6 ± 26.8*	59.2 ± 32.9	62.5 ± 22.1	2.4 ± 10.8*	-0.8	0.414
Performance Oriented Timed Toileting Instrument	26.5 ± 20.0	31.1 ± 13.6	0.4 ± 8.3*	32.3 ± 12.4	34.5 ± 14.4	.6 ± 5.8*	-0.7	0.942
Self-reported difficulty with toileting skills	3.0 ± 3.0	2.6 ± 2.7	-0.6 ± 1.2*	2.5 ± 2.1	3.3 ± 3.2	0.5 ± 2.3*	1.5	0.152

*There were 2 withdrawals from the treatment group and 3 participants are pending 12 week data collection.

**There were 3 withdrawals from the control group and 2 participants are pending 12 week data collection.

***Two sample t-test of difference score between treatment and control group.

†A negative difference score indicates improvement over 12 weeks.

‡A positive difference score indicates improvement over 12 weeks.

§ICIQ = International Consultation on Incontinence Questionnaire.

Conclusions

- Frail older women are willing to participate in urinary incontinence studies focused on behavioral treatments if provided in a convenient manner
- Adherence to pelvic floor muscle exercise prescription was very high
- Adherence to group exercise was higher than adherence for walking exercise
- Logging was challenging for many low income women, alternative strategies for tracking program adherence and urinary incontinence are needed
- Recruitment is challenging and requires multiple strategies and facilities

Future Research

- There is a lack of high quality evidence to prepare clinical guidelines for this population
- Multi-component interventions which include pelvic floor muscle exercises, bladder training, and other lifestyle changes show promise for improving urinary incontinence in frail older adults
- Future research should use a standardized definition of frailty, include consistent measures of continence, condition specific quality of life outcomes, and examine the effect of improved physical function on continence status



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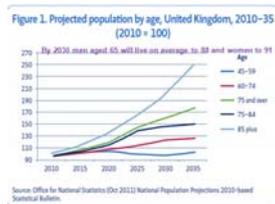
Frailty in the primary and community setting: can integrated care support us growing old?

Sharon Eustice
Nurse Consultant
UK



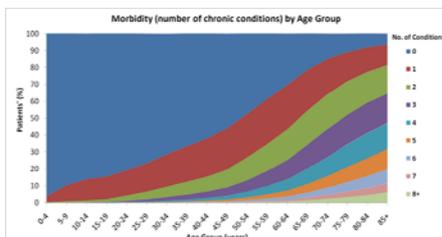
'Death is no longer an event, it is a long, drawn out process'

- Each day between 2011 and 2030, an average of 10,000 people will turn 65
- On average, death is now preceded by 10 years of chronic ill health and figure is rising
- Those aged over 100 years will grow from 10,000 now to 1 million by 2030



Quote accessed from <http://www.guybrown.eu/livingend/livingend.htm> in April 2015

Multimorbidity is the norm.....



The majority of over-65s have 2 or more conditions, and the majority of over-75s have 3 or more conditions
More people have 2 or more conditions than only have 1

Barnett et al (2012) Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study The Lancet, Volume 380, Issue 9836, Pages 37 - 43, 7 July 2012
doi:10.1016/S0140-6736(12)60240-2

Frailty is currently recognised.....



Mrs Greenaway was found on the floor ("FLOF") with new confusion by the home care staff and taken to hospital where she was found to be poorly mobile.

Lonely older adults have a 14% increased risk of dying early than their peers who have strong social ties.

Cacioppo et al 2014

The 4m walking speed test detects frailty

15 seconds for 4m predicts:

- ✓ Disability
- ✓ Long term care
- ✓ Falls
- ✓ Mortality

Yau-Kee et al. BMJ 2009; 13:881
Systematic Review of 22 cohorts

A view of Mrs Greenaway.....



- 85 years
- Lives alone
- Recently in hospital following a fall
- Broken hip 2011
- Chronic heart failure = REVIEW ONE
- Diabetes = REVIEW TWO
- Chronic Kidney Disease = REVIEW THREE
- Taking 10 medications = REVIEW FOUR

System designed to fragment care into packages

..... And the incontinence???

A global issue.....<http://www.frailty.net>

The "FRAILTY.NET" website was launched in March 2014. It is an international educational resource that aims to help geriatricians, primary care physicians and other health care professionals involved in the care of older persons implement frailty into clinical practice.

Recommendations for international policy

- Early identification of frail people through the use of a screener instrument
- Appropriate training in primary care (frailty & dementia)
- High quality assessment supporting the coordination of the health care professionals, to ensure continuity of care, for policy and research finalities.

FOD Volksgezondheid, Frailty Conference 18 June 2014, Brussels
http://ec.europa.eu/health/ageing/events/ev_20140618_en.htm

Is there good evidence on integration?

- The literature search on integrated care 1997 to 2010 - nine articles met quality measures
- Two types of models of integrated care delivery for the frail elderly:
 - Smaller, community-based model that relied on cooperation across care providers, focused on home and community care, and played an active role in health and social care coordination.
 - Large-scale model that could be applied at a national/provincial/state, or large regional health authority, level, had a single administrative authority and a single budget, and included both home/community and residential services.



Beland & Hollander 2011

Why doesn't it work so far....?

Three broad areas that need unblocking:

- Money
- Systems, structures and cultures
- Expectations and choice



Health Service Journal; 20 March 2015 (pages 23-27)

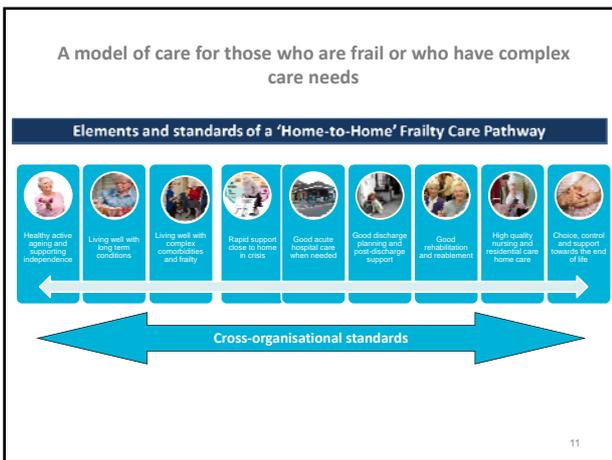
So what interventions work?

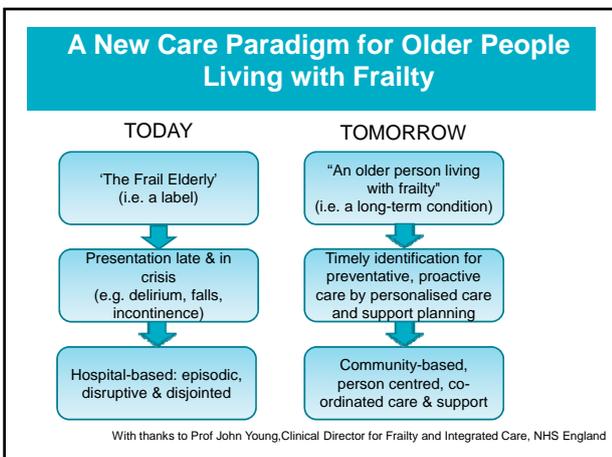


.....ensure the right workforce with the right skills in the right part of the system to help deliver more co-ordinated care closer to home and to care for an increasingly older group of service users with complex needs.

It may also require creative ways of working, more use of the voluntary sector, and staff who are able to work flexibly to fulfil a number of roles'.

Oliver D, Foot C, Humphries R (2014)
 Accessed at: <http://www.kingsfund.org.uk/publications/making-our-health-and-care-systems-fit-ageing-population>





What advice can we offer



- Look after your feet
- Look after your eyes
- Make your home safe
- Keep active
- Medication review
- Hearing tests
- Preventing falls
- Vaccinations
- Keeping warm
- Get ready for winter
- Check out bladder problems
- Mental wellbeing

Key take home messages

- There are recognised indicators of frailty that can be detected in clinical practice
- Screening tools can be used to detect frail older people
- There are simple interventions which can be used to slow further deterioration in frail older people
- Frailty can be managed in primary and community care with effective specialist support and integrated care

'Old age ain't no place for sissies'

Bette Davis



Notes