Medication and frail older people – issues and possible solutions

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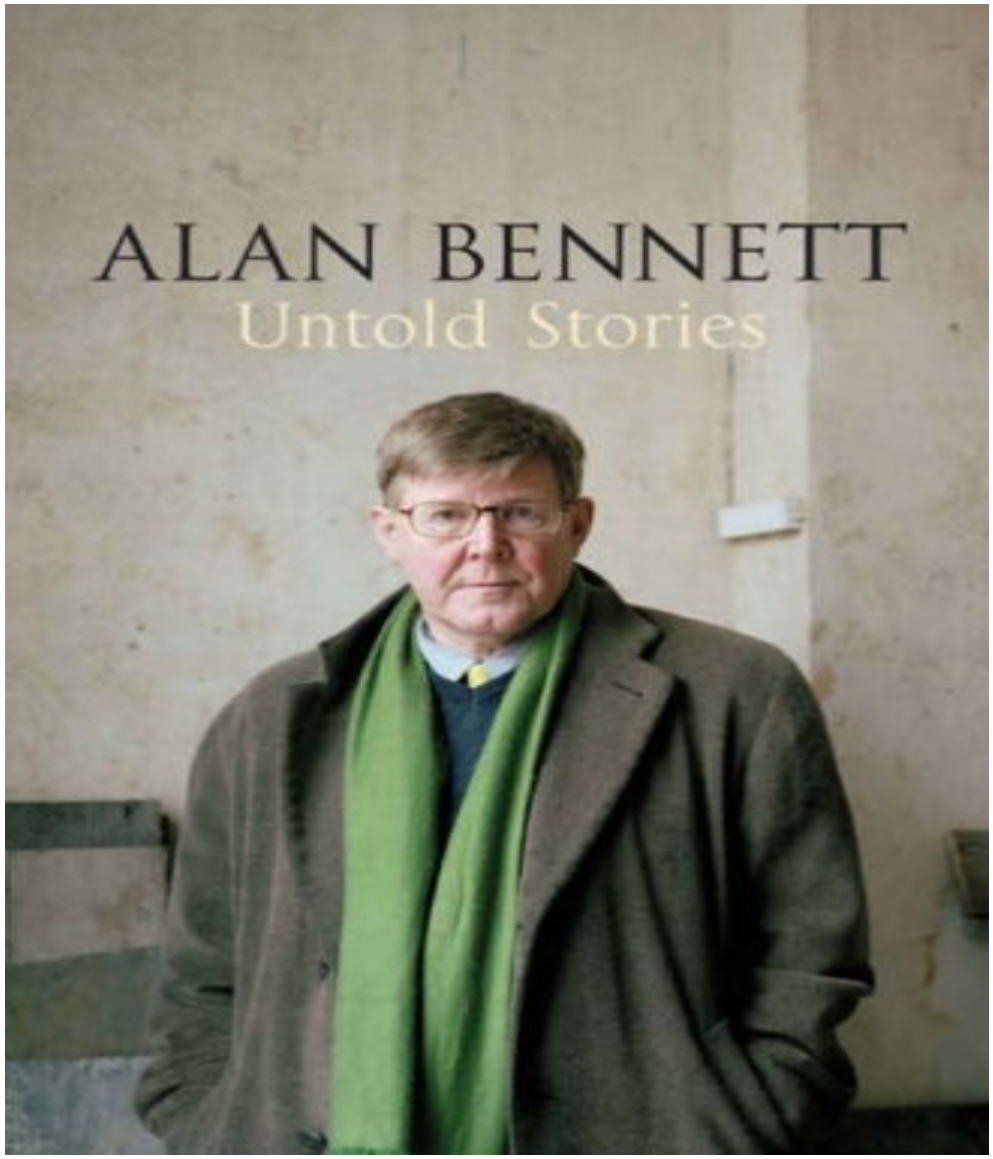

ALAN BENNETT
Untold Stories

Care hones-A legacy of poor care

- Evolved from workhouses and poorhouses
- The waiting room for heaven
- “Dumping ground for the elderly”
- Vulnerable population
  - Average age is 80
  - Over 70% are women
  - Tend to be more physically and mentally impaired than those living in their own homes
  - Receive more medication than age-matched patients who live in the community

What influences prescribing in care homes?

- Control
  - *Regulation*
- Culture
  - *The way we do things around here*
- Collaboration
  - *Working together*

Scandal and shame-out of control

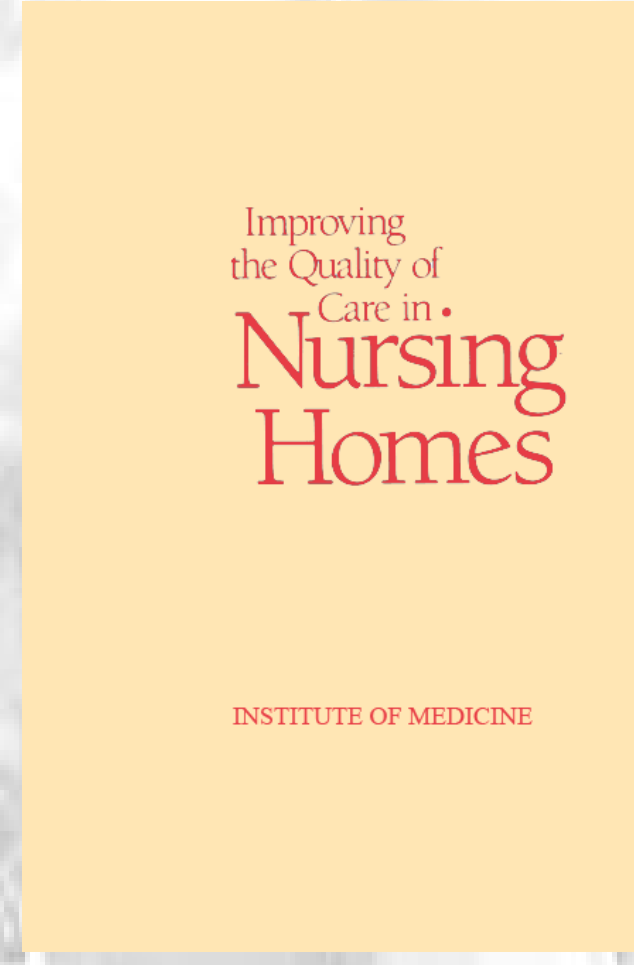
- US nursing home scandals throughout the 1970s and 1980s
- Extensively documented by the media and scientific literature
- Older residents were dying as a result of the care they received in US nursing homes

A problem of care

- ***Nursing home care in the United States-Failure of Public Policy***
- ***Unloving care-the nursing home tragedy***
- ***Tender loving greed; how the incredibly lucrative nursing home 'industry' is exploiting America's older people and defrauding us all***

A problem for politics

- US Congress directed Institute of Medicine to investigate what was happening in US nursing homes



Improving the quality of care in nursing homes

- Unsafe and unsanitary conditions
- Abuse
- Neglect
- Malnutrition
- Medication errors
- Failure to provide prescribed drugs
- Excessive use of physical restraints
- Excessive use of **chemical restraints**
  - i.e. anti-psychotics, hypnotics, anxiolytics

External control-OBRA 87

- Omnibus Budgetary Reconciliation Act 1987 (OBRA 87)
  - Fully implemented in 1991
- Sought to improve the quality of care in US nursing homes via legislative control
  - Regulations and standards
  - Detailed inspections
  - Enforcement procedures

Controlling prescribing through legislation

"The resident has the right to be free from any psychoactive drug administered for purposes of discipline or convenience and not required to treat the resident's medical symptoms."

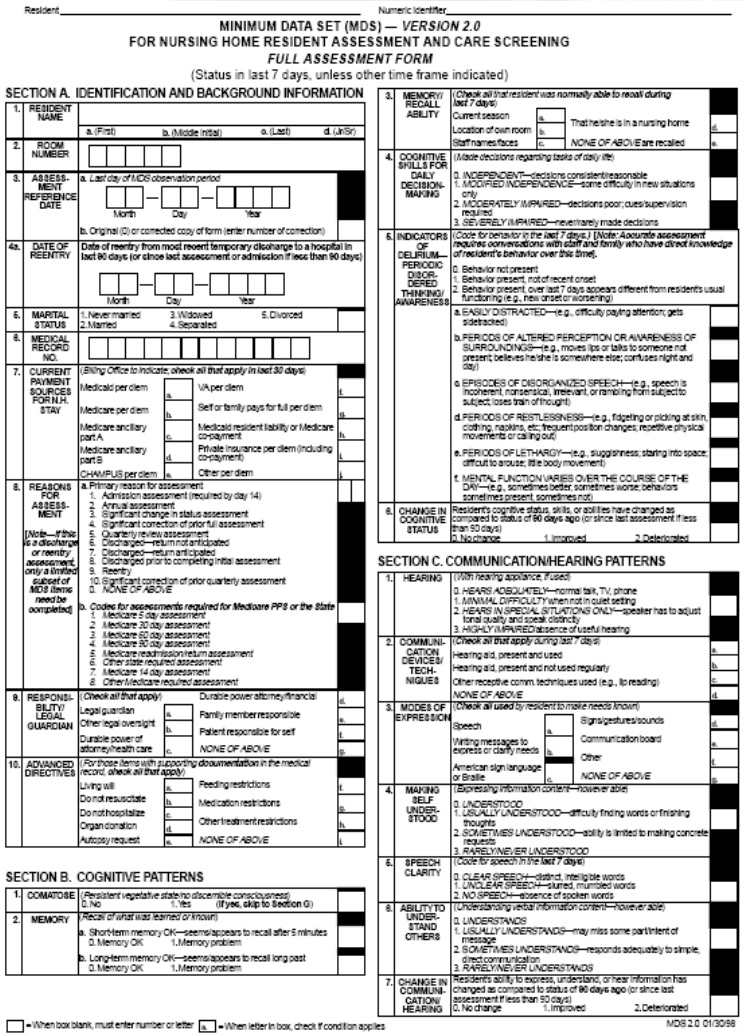
Under this law, pharmacists are required to monitor the use of these drugs and challenge their **unjustified** usage.

The Harkness experience

THE COMMONWEALTH FUND

Brown University, Providence, Rhode Island

The Minimum Data Set (MDS)



Resident _____ Numeric Identifier _____

MINIMUM DATA SET (MDS) — *VERSION 2.0*
FOR NURSING HOME RESIDENT ASSESSMENT AND CARE SCREENING
FULL ASSESSMENT FORM
(Status in last 7 days, unless other time frame indicated)

SECTION A. IDENTIFICATION AND BACKGROUND INFORMATION

1. RESIDENT NAME — a. (First) b. (Middle Initial) c. (Last) d. (Jr/Sr)
2. ROOM NUMBER
3. ASSESSMENT REFERENCE DATE — a. *Last day of MDS observation period* Month Day Year; b. Original (0) or corrected copy of form (enter number of correction)
4a. DATE OF REENTRY — Date of reentry from most recent temporary discharge to a hospital in last 90 days (or since last assessment or admission if less than 90 days) Month Day Year
5. MARITAL STATUS — 1. Never married 2. Married 3. Widowed 4. Separated 5. Divorced
6. MEDICAL RECORD NO.
7. CURRENT PAYMENT SOURCES FOR N.H. STAY — *(Billing Office to indicate; check all that apply in last 30 days)*: Medicaid per diem; Medicare per diem; Medicare ancillary part A; Medicare ancillary part B; CHAMPUS per diem; VA per diem; Self or family pays for full per diem; Medicaid resident liability or Medicare co-payment; Private insurance per diem (including co-payment); Other per diem
8. REASONS FOR ASSESSMENT — *[Note—If this is a discharge or reentry assessment, only a limited subset of MDS items need be completed]*
a. Primary reason for assessment: 1. Admission assessment (required by day 14) 2. Annual assessment 3. Significant change in status assessment 4. Significant correction of prior full assessment 5. Quarterly review assessment 6. Discharged—return not anticipated 7. Discharged—return anticipated 8. Discharged prior to completing initial assessment 9. Reentry 10. Significant correction of prior quarterly assessment 0. NONE OF ABOVE
b. *Codes for assessments required for Medicare PPS or the State*: 1. Medicare 5 day assessment 2. Medicare 30 day assessment 3. Medicare 60 day assessment 4. Medicare 90 day assessment 5. Medicare readmission/return assessment 6. Other state required assessment 7. Medicare 14 day assessment 8. Other Medicare required assessment
9. RESPONSIBILITY/ LEGAL GUARDIAN — *(Check all that apply)*: Legal guardian; Other legal oversight; Durable power of attorney/health care; Durable power attorney/financial; Family member responsible; Patient responsible for self; NONE OF ABOVE
10. ADVANCED DIRECTIVES — *(For those items with supporting documentation in the medical record, check all that apply)*: Living will; Do not resuscitate; Do not hospitalize; Organ donation; Autopsy request; Feeding restrictions; Medication restrictions; Other treatment restrictions; NONE OF ABOVE

SECTION B. COGNITIVE PATTERNS

1. COMATOSE — *(Persistent vegetative state/no discernible consciousness)* 0. No 1. Yes *(If yes, skip to Section G)*
2. MEMORY — *Recall of what was learned or known*
a. Short-term memory OK—seems/appears to recall after 5 minutes: 0. Memory OK 1. Memory problem
b. Long-term memory OK—seems/appears to recall long past: 0. Memory OK 1. Memory problem
3. MEMORY/ RECALL ABILITY — *(Check all that resident was normally able to recall during last 7 days)*: Current season; Location of own room; Staff names/faces; That he/she is in a nursing home; NONE OF ABOVE are recalled
4. COGNITIVE SKILLS FOR DAILY DECISION-MAKING — *(Made decisions regarding tasks of daily life)*: 0. INDEPENDENT—decisions consistent/reasonable 1. MODIFIED INDEPENDENCE—some difficulty in new situations only 2. MODERATELY IMPAIRED—decisions poor; cues/supervision required 3. SEVERELY IMPAIRED—never/rarely made decisions
5. INDICATORS OF DELIRIUM—PERIODIC DISORDERED THINKING/ AWARENESS — *(Code for behavior in the last 7 days.) [Note: Accurate assessment requires conversations with staff and family who have direct knowledge of resident's behavior over this time].* 0. Behavior not present 1. Behavior present, not of recent onset 2. Behavior present, over last 7 days, appears different from resident's usual functioning (e.g., new onset or worsening)
a. EASILY DISTRACTED—(e.g., difficulty paying attention; gets sidetracked)
b. PERIODS OF ALTERED PERCEPTION OR AWARENESS OF SURROUNDINGS—(e.g., moves lips or talks to someone not present; believes he/she is somewhere else; confuses night and day)
c. EPISODES OF DISORGANIZED SPEECH—(e.g., speech is incoherent, nonsensical, irrelevant, or rambling from subject to subject; loses train of thought)
d. PERIODS OF RESTLESSNESS—(e.g., fidgeting or picking at skin, clothing, napkins, etc; frequent position changes; repetitive physical movements or calling out)
e. PERIODS OF LETHARGY—(e.g., sluggishness; staring into space; difficult to arouse; little body movement)
f. MENTAL FUNCTION VARIES OVER THE COURSE OF THE DAY—(e.g., sometimes better, sometimes worse; behaviors sometimes present, sometimes not)
8. CHANGE IN COGNITIVE STATUS — Resident's cognitive status, skills, or abilities have changed as compared to status of 90 days ago (or since last assessment if less than 90 days) 0. No change 1. Improved 2. Deteriorated

SECTION C. COMMUNICATION/HEARING PATTERNS

1. HEARING — *(With hearing appliance, if used)*: 0. HEARS ADEQUATELY—normal talk, TV, phone 1. MINIMAL DIFFICULTY when not in quiet setting 2. HEARS IN SPECIAL SITUATIONS ONLY—speaker has to adjust tonal quality and speak distinctly 3. HIGHLY IMPAIRED/absence of useful hearing
2. COMMUNICATION DEVICES/ TECHNIQUES — *(Check all that apply during last 7 days)*: Hearing aid, present and used; Hearing aid, present and not used regularly; Other receptive comm. techniques used (e.g., lip reading); NONE OF ABOVE
3. MODES OF EXPRESSION — *(Check all used by resident to make needs known)*: Speech; Writing messages to express or clarify needs; American sign language; Braille; Signs/gestures/sounds; Communication board; Other; NONE OF ABOVE
4. MAKING SELF UNDERSTOOD — *(Expressing information content—however able)*: 0. UNDERSTOOD 1. USUALLY UNDERSTOOD—difficulty finding words or finishing thoughts 2. SOMETIMES UNDERSTOOD—ability is limited to making concrete requests 3. RARELY/NEVER UNDERSTOOD
5. SPEECH CLARITY — *(Code for speech in the last 7 days)*: 0. CLEAR SPEECH—distinct, intelligible words 1. UNCLEAR SPEECH—slurred, mumbled words 2. NO SPEECH—absence of spoken words
6. ABILITY TO UNDERSTAND OTHERS — *(Understanding verbal information content—however able)*: 0. UNDERSTANDS 1. USUALLY UNDERSTANDS—may miss some part/intent of message 2. SOMETIMES UNDERSTANDS—responds adequately to simple, direct communication 3. RARELY/NEVER UNDERSTANDS
7. CHANGE IN COMMUNICATION/ HEARING — Resident's ability to express, understand, or hear information has changed as compared to status of 90 days ago (or since last assessment if less than 90 days) 0. No change 1. Improved 2. Deteriorated

☐ = When box blank, must enter number or letter a. = When letter in box, check if condition applies

MDS 2.0 01/3098

- Used to collect information on all nursing home residents
- 350 separate pieces of information
- Section U-drugs which resident is receiving
- MDS data stored on database

Control or no control-a cross-national comparison

- Compared prescribing in the USA to places where OBRA had no standing
  - MDS used to collect clinical data in:
    - Denmark, Iceland, Italy, Japan, Sweden
    - Total number of residents~500,000

Anti-anxiety/hypnotic drugs

Country	% of residents using anti-anxiety/hypnotic drugs	Adjusted Odds ratio (95% CI)
Denmark	34.1	3.24 (2.99-3.51)
Iceland	61.8	8.80 (7.80-9.93)
Italy	34.2	2.18 (1.89-2.52)
Japan	24.8	2.11 (1.83-2.42)
Sweden	35.5	2.92 (2.49-3.42)
USA	14.2	1.0 (referent)

Anti-psychotic drugs

Country	% of residents using anti-psychotic drugs	Adjusted Odds ratio (95% CI)
Denmark	16.9	1.07 (0.97-1.19)
Iceland	24.5	1.86 (1.61-2.14)
Italy	22.1	1.47 (1.25-1.72)
Japan	7.5	0.45 (0.36-0.56)
Sweden	26.5	1.74 (1.47-2.07)
USA	14.4	1.0 (referent)

Beyond control

- **USA study has shown highest level of antipsychotic use in nursing homes in 10 years (28%)**
  - **Usually prescribed outside of prescribing guidelines for dementia**
- **Canadian study reported a point prevalence for antipsychotic use of 32.4%**
  - **Marked variation between homes**
  - **"*….some environments being more permissive about antipsychotic use*"**

What is it about this place?

- Why are some nursing homes more **permissive** than others?
- "*Nursing home culture appears to influence prescribing*"
- Organisational culture and the quality of health care performance

The total institution

- Daily life is organised and regulated according to a predetermined schedule and all aspects of an occupant's existence are provided for by that institution

Organisational culture

- The way things are understood, judged and valued
- Shared beliefs, attitudes, values and norms of behaviour within an organisation
- *The way we do things around here*
  - Does organisational culture influence prescribing of psychoactive medication in care homes?

Organisational culture and care homes

- Resident-centred culture
  - Focussed on the resident, multidisciplinary collaboration, avoidance of physical and chemical restraints
- Traditional-centred culture
  - Custodial care, behavioural control, use of restraints, little multidisciplinary collaboration
- Ambiguous culture

What do these cultures look like and how might they influence prescribing?

Understanding culture

- Interviewed staff from six nursing homes
  - Associated GPs
- Views on prescribing of psychoactive drugs
  - Understanding of culture
  - Perceived influence of culture on prescribing
  - Mapped to culture categorisation of home

Culture and prescribing

- **Characteristics of the setting**
  - ***'There should be a routine'***
- **Characteristics of the individual**
  - ***'They (*antispsychotics*) are really beneficial for all of them'***
- **Relationships**
  - ***'..other problems with people not getting along'***
- **Decision-making**
  - ***'Would really have to follow what the doctor orders'***

Culture and prescribing

- **Characteristics of the setting**
  - ***'Everybody doesn't have to be up at 9.00am'***
- **Characteristics of the individual**
  - ***'Families, patients staff….they know each other'***
- **Relationships**
  - ***'..everybody interacts.. with the patient as the main focus'***
- **Decision-making**
  - ***'Would discuss it with the GP and say' look this is not really appropriate''***

Collaboration

- **Pharmacists working with doctors and home staff to improve the quality of prescribing**
  - Reduction in the use of inappropriate medication
  - Tackles undertreatment of medical conditions
  - Seeks to reduce adverse drug events
  - Promotion of evidence-based practice
- **Trial undertaken in N. Carolina and N. Ireland**

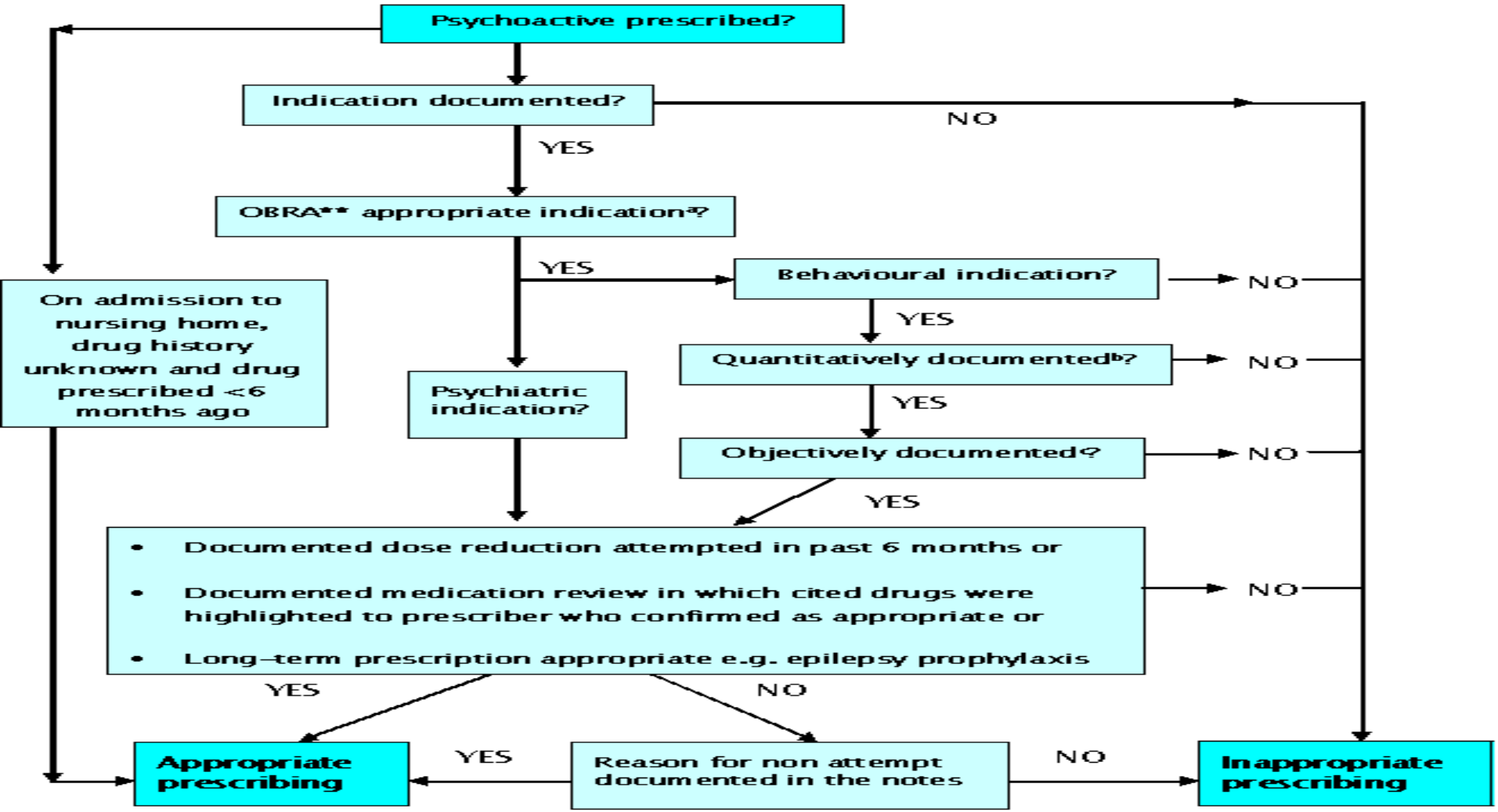
Fleetwood N.I. Project- Design

- Cluster randomised controlled trial
  - 12 months' duration
- Focus on psychoactive drugs
  - Anxiolytics, hypnotics, antipsychotics
- Primary outcomes
  - Change in proportion of residents receiving inappropriate psychoactive drugs

Fleetwood N.I. Project - Intervention

- Monthly visits by prescribing support pharmacists to homes
- Algorithm to assess appropriateness of psychoactive drug prescriptions
- Liaison with GPs, nurses and other healthcare professionals
- Documentation on pharmaceutical care plan
- Outcomes assessed at 3, 6 and 12 months

Fleetwood NI: Algorithm to assess the appropriateness of psychoactive* drug prescriptions



*** Antipsychotic, hypnotic, anxiolytic**

****Omnibus Budgetary Reconciliation Act (Nursing Home Reform Act) 1987, USA**

a. Appropriate indications according to OBRA regulations: psychotic disorders, organic mental syndromes with behaviour presenting danger to others or interfering with provision of care, hiccough, nausea vomiting (short-term only). **Inappropriate indications:** unspecified aggression, wandering, restlessness, agitation that is not a danger, anxiety, uncooperative.

b. Number /frequency of episodes

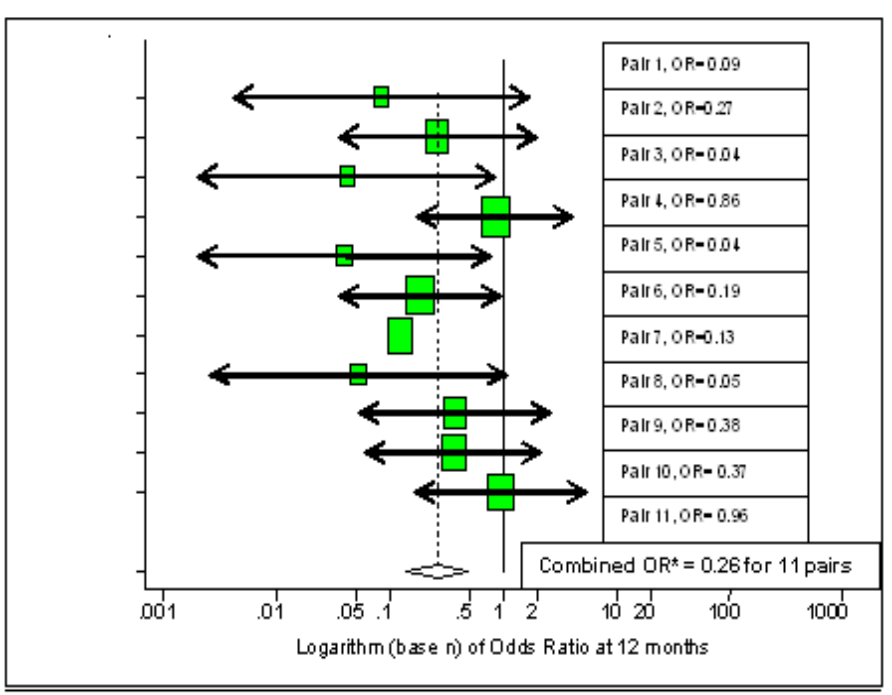
c. For example, biting, kicking, or screaming

Northern Ireland 12 months' findings

Drug category	Intervention	Control
Inappropriate psychoactive	28/128 (22%)	72/125 (58%)
Inappropriate hypnotic/anxiolytic	20/128 (16%)	52/125 (42%)
Inappropriate antipsychotic	8/128 (6%)	20/125 (16%)

Impact of the intervention

- After one year the odds ratio of a resident receiving an inappropriate psychoactive drug in an intervention home = **0.26 (95% CI: 0.14, 0.49)** compared to a resident in the control group of homes

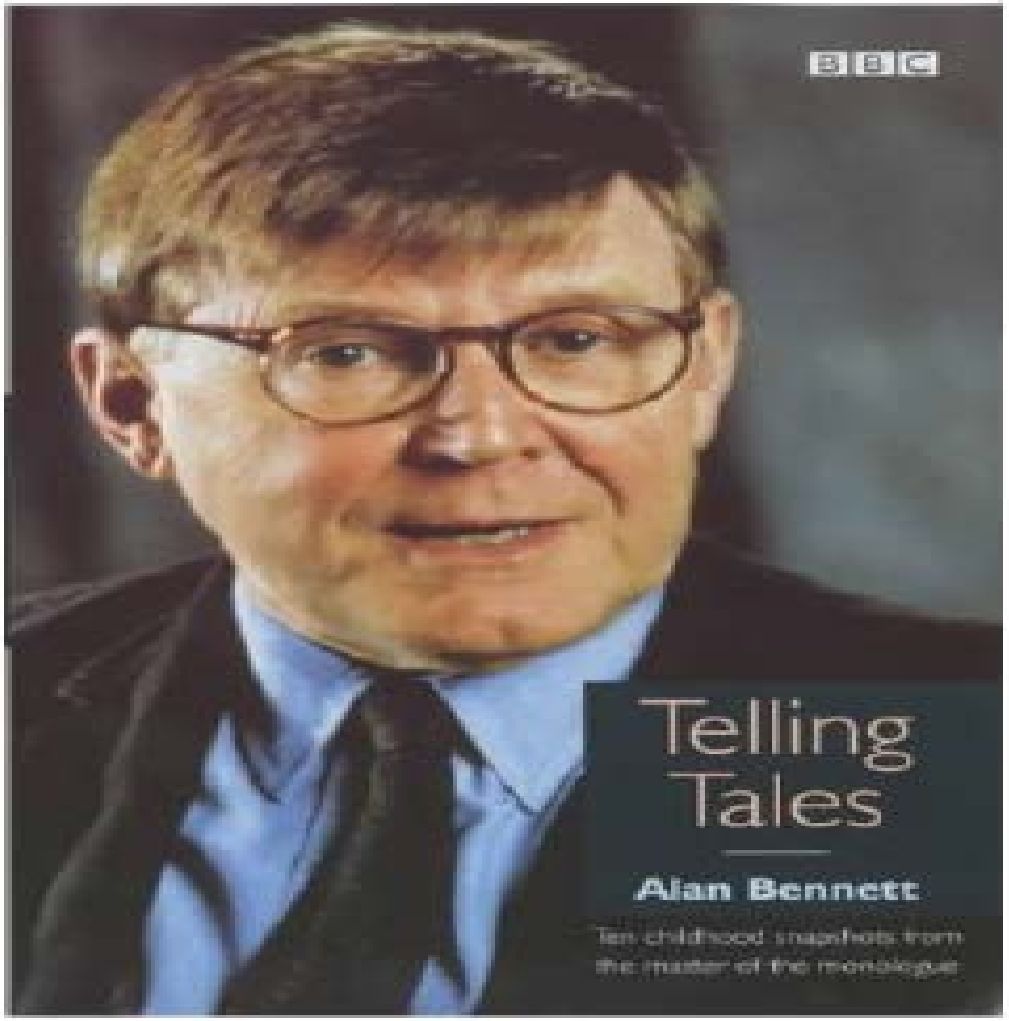


What do we need to think about?

- Control
  - Not the complete answer
- Culture
  - How to change
- Collaboration
  - How to promote

What do we value?

- *"Schools are hot politics, old folks' homes aren't"* Polly Toynbee, Guardian, Jan 12th 2007
- Increasing prevalence of dementia in UK
  - By 2025, >1 million will have dementia
  - By 2050, 1.7 million will have dementia
- Number of people who require long-term residential care is likely to double over the next 25 years


BBC
Telling Tales
Alan Bennett
Ten childhood snapshots from the master of the monologue


Be Nice To Your Kids
They'll Choose Your
Nursing Home