BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA: A PRACTICAL APPROACH

Andrea Moser

Sid Feldman

Disclosure

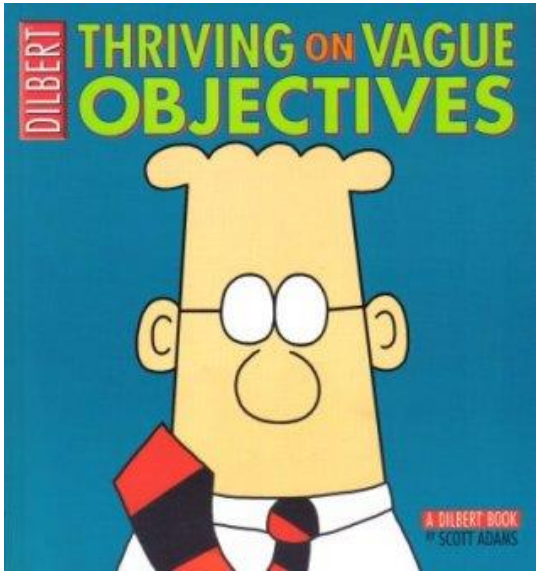
- Dr. Sid Feldman
  - No conflicts of interest to report

Disclosure

- Dr. Andrea Moser
  - No conflicts of interest to report

By the end of this session, for patients with BPSD, you will be able to:

- Assess patients using the PIECES framework
- Utilize tools to assist in assessment and measure intervention success
- Develop behavioural approaches to management
- Be able to prescribe and de-prescribe antipsychotic medications appropriately



Challenges

What are the challenges you face with patients who have BPSD that you are hoping we can work on together today?

Prevalence of Responsive Behaviours/ BPSD

- 90% of patients affected by dementia will experience Behavioral and Psychological Symptoms of Dementia (BPSD) severe enough to be labeled as a problem during the course of their illness.

- These labeled as ‘responsive behaviours’

- Often associated with increased level of care such as LTC home

Case 1

- Case 1 focus on behavioural strategies

Overall Approach to BPSD/Responsive Behaviours

1. Evaluate & understand meaning

1. Manage
    a. Initiate non-drug therapy
    b. Consider drug therapy, when indicated (may include an antipsychotic trial as well as other options)

BPSD/Responsive Behaviour Symptoms Clusters

1, 2

Psychosis	Aggression	Agitation	Depression	Apathy	Mania
					
Delusions Hallucinations Misidentification Suspicious	Defensive Resistance to care Verbal Physical	Dressing/undressing Pacing Repetitive actions Restless/anxious	Anxious Guilty Hopeless Irritable/screaming Sad, tearful Suicidal	Amotivation Lacking interest Withdrawn	Euphoria Irritable Pressured speech

Top Ten Behaviours not (usually) responsive to medication

- **Aimless wandering**
- **Inappropriate urination /defecation**
- **Inappropriate dressing /undressing**
- **Annoying perseverative activities**
- **Vocally repetitious behaviour**
- **Hiding/hoarding**
- **Pushing wheelchair bound co-patient**
- **Eating in-edibles**
- **Inappropriate isolation**
- **Tugging at/ removal of restraints**

Evaluating BPSD/Responsive Behaviours

Remember: Engage the family at every step

1. Assess & Document – behaviours or symptom clusters
   - Designate responsible care team member(s)
   - Use standardized clinical assessment tool

2. Identify Risks
   - Consider P.I.E.C.E.S. RISKS
     - Roaming
     - Imminent
     - Suicide
     - Kin
     - Self Neglect

Evaluating BPSD/Responsive Behaviours

3. Identify BPSD/Responsive Behaviour Causes
   - Consider P.I.E.C.E.S
     - 3-Questions Template:
       - What has changed?
       - What are the RISKS and possible causes?
       - What is the action?

     - Physical
     - Intellectual
     - Emotional
     - Capabilities
     - Environment
     - Social

Evaluating BPSD/Responsive Behaviours

4. Conduct a clinical evaluation[10]
   - Check vitals
   - Conduct physical assessment
   - Consider common sources of pain
   - Optimize sensory functioning
   - Conduct mental health/status evaluation
   - Delirium workup with appropriate investigations
   - Identify recent changes (drugs, environment, routine, etc…)
   - Conduct imaging (if appropriate)

Initiating Non-Drug Therapy for BPSD/Responsive Behaviours

Remember: Individualize approach

- Identify behaviour and possible solution(s)
  - Consider using the Dementia Observation System (DOS)
- Manage with individualized non-drug therapy
  - Unless imminent risk of harm to resident, staff, or others
- Treat underlying causes with non-drug/drug therapy
  - (e.g. pain, constipation, delirium)

Remember: Leverage available system supports

Initiating Non-Drug Therapy for BPSD/Responsive Behaviours

- Environmental Considerations
  - Eliminate misleading stimuli
  - Reduce environmental stress
  - Adjust stimulation
  - Enhance function
  - Adapt physical setting to individual preference
- Safety considerations
  - Ensure your safety, the resident's safety and other residents' safety
  - Remove potentially dangerous objects, individuals and ongoing triggers

Initiating Non-Drug Therapy for BPSD/Responsive Behaviours

- Caregiver approach considerations:
  - Personal approach
    - Be calm and compassionate
    - Engage in individualized activities
    - Focus on resident's wishes, interests, concerns
    - Approach slowly; look for signs of increased agitation and ask permission before entering
  - Daily routines
    - Maintain routines and reduce uncertainty
    - Use long-standing history and preferences as guidance
    - Individualize social and leisure activities
  - Communication style
    - Use positive non-verbal cues
    - Make eye contact (unless perceived as aggressive)
    - Use short simple words and phrases
    - Speak clearly and use a positive tone
    - Be patient

System approach

“Culture eats strategy for breakfast”

Critical to have a system approach to be successful.

Next session will focus on quality approaches that can help achieve success

Case 1: table discussion

Using Section A and B of the discussion guide:

- Suggest reasons for the behaviours seen under each category of the PIECES framework
- Develop a non-drug therapy approach to manage the behaviours seen based on these reasons
- Discuss how to support the interdisciplinary team in LTC

Case 1: Mrs R

- 85 year old female
- Retired secretary, loves music, art, cats
- Estranged from her 2 children
- Mixed dementia
- **PMHx:** Traumatic Brain Injury, long standing depression, psoriasis, osteoarthritis
- **Behaviours**
- Physical and Verbal aggressive behaviours particularly during care
- Admitted to Behavioural Unit from community due to LTC refusals
- Medications: SSRI, trazodone

PIECES

PHYSICAL

INTELLECTUAL

EMOTIONAL

CAPACITY

ENVIRONMENTAL

SOCIAL/SPIRITUAL

DICE Approach: Develop a Plan

- DESCRIBE
- INVESTIGATE
- CREATE
- EVALUATE

Review case 1

- General discussion

Case 1:Mrs R

- In LTC
- Physical aggression during care
- PIECES assessment to identify possible triggers
  - Pain – irritated rashes
  - Constipation
  - Marked hearing impairment
- Management
  - Consistent approach to care, slow, engage her in care
  - Trial of ‘pocket talker’ – able to hear, recognize staff, provide input on recent events, participate in activities , painting
  - Marked reduction in aggressive behaviours

Principles

- As per guidelines: Detailed interdisciplinary assessment for antecedents/causes
- Non pharmacologic strategies prior to pharmacologic intervention
- Sometimes a simple intervention can have a marked impact on behavioural symptoms and quality of life

Case 2

- Focus on pharmacologic approaches

Trends in use of antipsychotics

- CIHI Your Health System
- www.yourhealthsystem.ca
- Use of antipsychotics without a diagnosis of psychosis (MDS 2.0) in LTC
- Trending downwards in LTC
- 2010 – 34%
- 2014 – 27%
  - BC 31%, ONT 27%, ALTA 21%

Canadian National Guidelines

- Canadian Coalition for Seniors Mental Health: Assessment and treatment of mental health issues in long term care homes
  - Evaluate for medical conditions and diagnostic tests as indicated
  - Detailed interdisciplinary assessment for antecedents/causes
  - If BPSD does NOT pose imminent risk to patient or others – non-pharmacologic Rx
- Canadian Consensus Conference on Diagnosis and Treatment of Dementia (CCCDTD4), 2012
  - ‘for severe agitation, atypical antipsychotics are recommended but risks of therapy must carefully weighed against potential benefits

Managing BPSD/Responsive Behaviours

1. Initiate individualized non-drug therapy[11, 12, 13]
2. Consider targeted drug therapy
   - Dependent on the behaviour
3. Monitor and document
   - Therapeutic goal for target symptom
   - Effectiveness and adverse effects
   - Consider dose reduction or discontinuation
4. Conduct follow-up
   - If antipsychotic used, reassess need every 3 months[16]
   - Consider deprescribing when appropriate
5. Continue non-drug approaches to prevent further behaviours

BPSD/Responsive Behaviour Symptoms Clusters

1, 2

Psychosis	Aggression	Agitation	Depression	Apathy	Mania
					
Delusions Hallucinations Misidentification Suspicious	Defensive Resistance to care Verbal Physical	Dressing/undressing Pacing Repetitive actions Restless/anxious	Anxious Guilty Hopeless Irritable/screaming Sad, tearful Suicidal	Amotivation Lacking interest Withdrawn	Euphoria Irritable Pressured speech

Top Ten Behaviors responsive (perhaps!) to medication

- **Physical aggression**
- **Verbal aggression**
- **Anxious, restless**
- **Sadness, crying, anorexia**
- **Withdrawn, apathetic**
- **Sleep disturbance**
- **Wandering with agitation/aggression**
- **Vocally repetitious behavior due to depression or pain**
- **Delusions and hallucinations**
- **Sexually inappropriate behavior with agitation**

Decision framework for the use of medication in BPSD

- **Is this medication indicated?**
- **Is it necessary and how will it be helpful to the patient?**
- **What are the risks?**
- **Will the benefits likely outweigh the risks?**
- **Who decides whether the benefits are worth taking the risks?**
- **When is it appropriate to consider stopping the medication and what will we use to monitor response?**

Pharmacological treatment: Choosing best drug

- Correct underlying cause, deficiency:
  - Optimize treatment of dementia, CEIs, memantine
- Target appropriate symptom cluster:
  - Depression: Antidepressant
  - Anxiety (longer term): antidepressant
  - Difficulty falling asleep: Trazodone
  - Psychosis: antipsychotic
  - Aggression: antipsychotic
- Choose least likely to worsen dementia and medical problems
  - E.g. Least anticholinergic
- Choose drugs without problematic interaction
- Reduce overall drug burden as much as possible

Considerations for an Antipsychotic Trial for BPSD/Responsive Behaviours

- Consider whether an antipsychotic trial is needed – is there:
  - Imminent risk of harm?
  - Disturbing, distressing or dangerous symptoms?
  - Symptoms more likely to respond to antipsychotics?

Considerations for an Antipsychotic Trial for BPSD/Responsive Behaviours

- Initiate and conduct ongoing review
  - Weigh potential benefits and harms
  - Obtain and document informed consent
  - Select an antipsychotic; start low and go slow
  - Monitor behaviour change and side effects
  - Assess and document benefits/harms over 1-3 weeks (adjust therapy as needed)
  - Monitor and reassess on an ongoing basis for effectiveness and tolerability
  - Review for possible deprescribing after 3 months of behavioural stability
- Consider referral to a specialist if trial is unsuccessful

Considerations for an Antipsychotic Trial for BPSD/Responsive Behaviours

- Reassessing antipsychotics for possible deprescribing:
  - Stopping or tapering antipsychotics may decrease “all cause mortality” [27]
  - Deprescribing may not be indicated for all residents
    - (e.g. residents whose symptoms are due to psychosis, or whose behaviour is especially dangerous/disruptive)
  - Evaluate reason for use and recent changes in targeted behaviour
  - Ensure suitable non-pharmacological measures are optimized
  - Antipsychotics can often be successfully tapered and/or discontinued[28]
  - Taper gradually, often by 25-50% every 2-4+ weeks and look for any resulting behaviour changes
    - Once stabilized on lowest dose, may discontinue in 2-4+ weeks
  - Continue to reassess for emergence of behaviours

Comparing antipsychotics:

	Drug **Generic** (Brand)	Efficacy or evidence in BPSD therapy	↓ BP[32]	Ach	Sedation	EPS	TD[33]	Diabetes	Weight Gain[27]	Usual Dose	$/Month
Atypicals	Risperidone* (Risperdal)[25, 26, 34]	✔Indicated for severe dementia of the Alzheimer type(Health Canada) • Evidence for efficacy in agitation, aggression & psychosis	++	++	++	++	+	++	↑↑↑ (0.7lb/ month)	0.125mg – 2.0mg/d QHS (or divided BID)	$10-27
	Olanzapine* (Zyprexa)[25, 26, 34]	• Off-label use in BPSD • Evidence for efficacy in agitation & aggression	+	+++	+++	++	+	+++	↑↑↑ (1.0lb/ month)	1.25mg – 7.5mg/d	$17-38
	Aripiprazole* (Abilify)[34]	• Off-label use in agitation or aggression[18] • Evidence for efficacy in agitation & aggression • Not eligible in ODB for dementia or BPSD in the elderly • Not for psychosis(same as placebo)	+	+	++	+	+	–	↑	2.0mg – 12.5mg QHS	$112-260
	Quetiapine (Seroquel)[25, 26, 34]	• Off-label use in BPSD • Lacks evidence for efficacy in BPSD agitation, aggression, or psychosis • Consider in Lewy Body dementia, Parkinson's (low EPS) • Note: although used, not indicated and lacking evidence for insomnia	++	+++	+++	+	+	+++	↑↑ (0.4lb/ month)	12.5mg – 200mg/d (divided QHS-TID)	$10-59
Typicals	Haloperidol (Haldol)	• Useful short term in acute BPSD or delirium	+	+	+	+++	+++	++	↑↑	0.25mg – 2mg/d	$14-25
	Loxapine (Loxapac, Xylac)[2]	• Consider if other agents have failed and severe persistent dangerous behaviour continues • Severe, acute BPSD • Not to be used long-term due to adverse effects	++	++	+++	+++	+++	+	–	5mg – 10mg BID	$18-27

Case 2: table discussion

- Use Section C and D to decide if pharmacotherapy is indicated, and if so what agent would you choose?
- How would you obtain consent?
- How would you document?

- Comment on non pharmacologic approaches and whether they are relevant for this case?

Case 2 Mrs. S

- Former teacher, husband had died 2 years prior
- Alzheimer's Disease x 5 years, significant dysphasia
- PMHx: GERD, HTN, OA
- Behaviours: Stayed in room, refused to come out, minimal food intake, screamed when anyone entered her room or came close to her, very resistive to care (3-4 staff), crying, asking "Is this the cemetery? Why are we here? I am dead?". Seemed to be visualizing cemetery.

Review Case 2

- Consider DICE framework
- DESCRIBE
- INVESTIGATE
- CREATE
- EVALUATE

Mrs. S

- Non-pharmacologic strategies:
  - Staff would come in, sit down far from her and read a magazine- screaming would subside after a few minutes.
  - Enjoyed “Royal Family” –staff showed her pictures of Royalty and comment on their clothes. This would sometimes calm her enough to allow care (~15-25% of the time)
  - “Favourite foods” to start meals (only from familiar staff)
- Pharmacotherapy: No benefit from analgesics, SSRI x 2, SNRI x 1
- Antipsychotic: Risperidone 0.5 mg qAM and 0.75 mg qhs

->excellent response. After 6 weeks, no calling out about cemeteries or death. Much happier, weight gain, “chatty”.

Principles

- Sometimes pychosis needs an antipsychotic.
- Taper to lowest effective dose
- Eventually, as dementia progresses, likely will be able to discontinue completely

Case 2

- Case 2 summary to be available while groups discussing

Questions and cases

- What cases or questions do you want to discuss with colleagues today?

Review of challenges

What are the challenges you face with patients who have BPSD that you are hoping we can work on together today?

Additional cases

Mr. V

- Former TTC (maintenance)
- Alzheimer's Disease x 7 years
- PMHx: osteoarthritis (knees), hypertension, headaches (migraine?)
- Behaviours:
  - Pushing co-residents, grabbing, pushing tables/chairs into others, agitated pacing, hitting himself in the head, resistive to care
  - Frequent "code whites" (IM haloperidol at times)

Mr. V

- Non-pharm approaches helped somewhat with frequency and intensity of symptoms: Enjoyed washing tables-put out salt or sugar for him to clean up, bolts to tighten, straightening magazines, objects to sand, family photo book
- Meds: Analgesics (including hydromorphone, steroid knee injections), cold pack for headaches
- … still very distressed and putting others at risk
- Risperidone titrated up to 1 mg daily and had excellent response
- Developed slowing and tremor
- Slow taper over 18 months down to zero

Principles

- Non-pharm before pharm (except in emergencies may need prn)
- Non-antipsychotics especially pain management
- Tapering cautiously can be successful even in highly agitated patients

Mrs. S

- Former teacher, husband had died 2 years prior
- Alzheimer's Disease x 5 years, significant dysphasia
- PMHx: GERD, HTN, OA
- Behaviours: Stayed in room, refused to come out, minimal food intake, screamed when anyone entered her room or came close to her, very resistive to care (3-4 staff), crying, asking "Is this the cemetery? Why are we here? I am dead?". Seemed to be visualizing cemetery.

Mrs. S

- Non-pharmacologic strategies:
  - Staff would come in, sit down far from her and read a magazine- screaming would subside after a few minutes.
  - Enjoyed “Royal Family” –staff showed her pictures of Royalty and comment on their clothes. This would sometimes calm her enough to allow care (~15-25% of the time)
  - “Favourite foods” to start meals (only from familiar staff)
- Pharmacotherapy: No benefit from analgesics, SSRI x 2, SNRI x 1
- Antipsychotic: Risperidone 0.5 mg qAM and 0.75 mg qhs

->excellent response. After 6 weeks, no calling out about cemeteries or death. Much happier, weight gain, “chatty”.

Principles

- Sometimes pychosis needs an antipsychotic.
- Taper to lowest effective dose
- Eventually, as dementia progresses, likely will be able to discontinue completely

Mr C

- 79 year old construction worker
- Mixed dementia
- **PMHx:** peripheral vascular disease, vascular leg ulcer, alcohol use
- **Behaviours:** Resistive behaviours at home
- Fall at home, admitted to acute care
- Delirium in acute care with physical aggression, sleep disruption
- Risperidone 1mg bid with good effect

- Transferred to LTC in crisis after discharge home

Mr C

- In LTC
- Lethargic
- Gait instability and multiple falls, essentially bed bound
- Decreased oral intake and weight loss

- Decision to trial gradual dose reduction
- Decrease by 0.25mg every 1-2 weeks monitoring for recurrence of behaviours

- Successful taper, no aggression, no psychosis
- Gait remains unsteady more alert and able to express basie needs

Principles

- Antipsychotic may be required for short duration with delirium
- Try to taper dose of antipsychotic once delirium clears
- Usually able to discontinue successfully

Mrs R

- 85 year old female
- Retired secretary, loves music, art, cats
- Estranged from her 2 children
- Mixed dementia
- **PMHx:** Traumatic Brain Injury, long standing depression
- **Behaviours**
- Physical and Verbal aggressive behaviours particularly during care
- Admitted to Behavioural Unit from community due to LTC refusals
- Medications: SSRI, trazodone

Mrs R

- In LTC
- Physical aggression during care
- PIECES assessment to identify possible triggers
  - Pain – irritated rashes
  - Constipation
  - Marked hearing impairment
- Management
  - Consistent approach to care, slow, engage her in care
  - Trial of ‘pocket talker’ – able to hear, recognize staff, provide input on recent events, participate in activities , painting
  - Marked reduction in aggressive behaviours

Principles

- As per guidelines: Detailed interdisciplinary assessment for antecedents/causes
- Non pharmacologic strategies prior to pharmacologic intervention
- Sometimes a simple intervention can have a marked impact on behavioural symptoms and quality of life

Mrs L

- 80 year old female with advanced dementia
- Housewife of Italian descent, prided herself on family and cooking
- PMHx: Osteoarthritis, hypertension
- Behaviours: Unprovoked physical aggression to staff and co-residents, episodes of psychosis, resistive to care
- Form 1 to ED on 3 occasions in past 2 years
- Admitted to psychiatry inpatient unit once

- Meds: loxapine, trazodone, citalopram, galantamine
- Previous trials: risperidone, olanzepine, quetiapine, haloperidol, multiple antidepressant agents, BDZ

Mrs L

- Admission to Behavioural Unit
- Family concerned she is over-medicated
- Lethargic, Gait unstable, Parkinsonism/EPS, Rigidity, Tremor, shuffling gait
- Postural hypotension and Falls
- Consultation with psychiatry: attempt dose reduction
- Loxapine 25 mg daily divided dose, decreased to 20mg x 2 weeks, then 15mg
- Physical aggressive recurs towards co-residents, staff
- Increase to 20mg – behaviours improve
- Family pleased as less lethargy and more interactive on visits

Principles

- If on complex psychotropic medication regime obtain past medical records prior to attempting dose reduction
- Consider dose reduction with close monitoring
- Involve geriatric psychiatry for complex cases
- Sometimes dose reduction or change to medication with safer side effect profile not possible

Resources

- Centre for Effective Practice
  - effectivepractice.org
- Canadian Coalition of Seniors Mental Health
  - www.ccsmh.ca
  - Delirium, depression, suicide, BPSD
- Geriatric interorganizational interprofessional Collaboration (GiiC)
  - http://giic.rgps.on.ca/toolkit-libraries
- Behavioural Supports Ontario (BSO)
  - http://www.akeresourcecentre.org/BSOAbout
- 4th Canadian Consensus Guideline on the Diagnosis and Treatment of Dementia
  - http://www.alzheimer.ca/~/media/Files/national/For-HCP/for_hcp_recos_CCCDTD4_en.ashx

Questions

Andrea Moser (amoser@baycrest.org)

Sid Feldman (sfeldman@baycrest.org)

Dementia Observation System (DOS)

ADDRESSOGRAPH

Use corresponding numbers to record in 1 hour intervals

1. Sleeping
2. Awake/Calm
3. Vocalizations
4. Restless, Pacing
5. Aggressive – verbal
6. Aggressive - verbal (with care)
7. Aggressive – physical
8. Aggressive – physical (with care)

Location: H. Hallway, B. Bedroom, T. TV room, Q: Quiet room, S: Shower room, D: Dining room, W: Washroom, O: Off unit

Month/Year: _____

Dates: _____

TIME/ DAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
0700							
0800							
0900							
1000							
1100							
1200							
1300							
1400							
1500							
1600							
1700							
1800							
1900							
2000							
2100							
2200							
2300							
2400							
0100							
0200							
0300							
0400							
0500							
0600							

Comments:

ABC Behaviour Observation Table

Name of Client: _____ **Room No.:** _____ **Date:** _____

Date/Time **Observer**	**Antecedent**	**Behaviour**	**Consequence**	**Notes**
Date/Time of Day Signature	***Before*** the behaviour *Where was it? Who was there? What was going on in the environment? Noise? People? Smell?*	The ***specific*** behaviour observed *What did you observe? Be as specific as possible.*	***After*** the behaviour *What happened as a result of the behaviour?*	Any thoughts on the possible function of the behaviour? *Avoidance, attention, tangible (i.e. food), sensory, medical*

Date/Time **Observer**	**Antecedent**	**Behaviour**	**Consequence**	**Notes**

Pain Assessment IN Advanced Dementia- PAINAD (Warden, Hurley, Volicer, 2003)

ITEMS	0	1	2	SCORE
Breathing Independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation	Noisy labored breathing. Long period of hyperventilation. Cheyne-stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low- level of speech with a negative or disapproving quality	Repeated troubled calling out. Loud moaning or groaning. Crying	
Facial expression	Smiling or inexpressive	Sad, frightened, frown	Facial grimacing	
Body language	Relaxed	Tense. Distressed pacing. Fidgeting	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away. Striking out	
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract or reassure	
TOTAL*				

*Total scores range from 0 to 10 (based on a scale of 0 to 2 for five items

Kingston Standardized Behavioural Assessment

COMMUNITY FORM* - KSBA(comm)

Patient Name _____ [Case # _____]
Sex M___ F___ Age_____ Education_____ Years of Illness_____
Date _____ Your Relationship to Patient _____
Lives in Community__ **or** Lives in Care Facility __

Please check all of the following behaviours that have occurred in the last month or are presently occurring, and that are a change from your spouse/relative/client's earlier behaviour (prior to illness). Indicate whether they apply by marking the box beside the appropriate statement. The Total Score equals number of boxes checked.

1 Daily Activities

☐	1	No longer takes part in favourite pastimes (or greatly reduced).
☐	2	Reduced personal hygiene . (e.g. Would not take a bath unless told to do so, or wears the same clothes for days unless made to change).
☐	3	If left on his/her own, doesn't eat properly.
☐	4	Unsafe in daily activities, if left unsupervised.
☐	5	No longer uses some common objects properly (e.g. telephone).
☐	6	Unable to handle personal finances.
☐	7	Is unable to perform usual household tasks.
☐	8	Gets confused in places other than home.
☐	9	Overly dependent, wants more guidance than usual.
☐	10	Trouble appreciating subtleties in conversations (e.g. recognizing humor).
☐	11	Difficulty judging the passing of time.
☐	12	Wanders aimlessly.
☐	13	Hides things.
☐	14	Hoards objects.
☐	15	Fails to recognize family or friends.
☐	16	Incontinence of urine/faeces in clothes in daytime.
☐	17	Voids in non-toilet areas.
☐	<	***Total Daily Activities***

2 Attention/Concentration/Memory

☐	18	Can't concentrate, pay attention for long.
☐	19	Misplaces things more than usual.
☐	20	Has difficulty organizing his/her time or daily activities.
☐	21	Forgets activities, conversations of only a short time before.
☐	22	Forgets important everyday information.
☐	<	***Total Attention/Concentration/Memory***

3 Emotional Behaviour

☐	23	Shows little or no emotion.
☐	24	Mood changes for no apparent reason.
☐	25	Expresses inappropriate emotions, either type or intensity.
☐	26	Makes uncharacteristically pessimistic statements.
☐	<	***Total Emotional Behaviour***

4 Aggressive Behaviour

☐	27	Verbally abusive at times.
☐	28	Uncharacteristically excitable, easy to upset; reacts catastrophically.
☐	29	Attempts to hit/strike out at others.
☐	<	***Total Aggressive Behaviour***

5 Misperceptions/Misidentifications

☐	30	Claims an object/possession looks similar to, but is not the real one.
☐	31	Claims a family member looks similar but is not the true one.
☐	32	Thinks present dwelling is not their place of living.
☐	33	Thinks people are present who aren't.
☐	<	***Total Misperception Behaviour***

Name:_____ Date:_____ Case Num:_____

6 Paranoid Behaviour

	34	Suspicious of family and friends.
	35	Suspicious about money issues.
	36	Accuses others of stealing his or her things.
	37	Accuses spouse of infidelity.
	38	Expresses suspicion around taking medication.
	<	***Total Paranoid Behaviour***

7 Judgement/Insight

	39	Shows poor judgement in social situations.
	40	Shows poor judgement about driving.
	41	Shows uncharacteristic change in his or her concern about money.
	42	Poor choices in dressing. (e.g. wears clothes that are inappropriate for season or temperature, wears the same clothes for days).
	43	Makes inappropriate sexual advances.
	44	Shows less self control than usual.
	45	Unable to identify personal safety risks.
	<	***Total Judgement/Insight***

8 Perseveration

	46	Repeats same actions over and over.
	47	Repeats same words or phrases.
	48	Repeatedly shouts or calls out.
	<	***Total Perseveration***

9 Motor Restlessness

	49	Desire to pace or walk almost constantly.
	50	Can't sit still, restless, fidgety.
	51	Tries doors, windows.
	<	***Total Motor Restlessness***

10 Sleep/Activity/Sundowning

	52	Falls asleep at uncharacteristic times.
	53	Gets up and wanders or awakens frequently at night, more than usual.
	54	Sleeps more.
	55	Behaviour more agitated or impaired in late afternoon.
	<	***Total Sleep/Activity/Sundowning***

11 Motor/Spatial Problems

	56	Poor coordination seen in limb/finger movements.
	57	Slowness of movement.
	58	Unsteadiness when walking.
	59	Has trouble dressing, especially with buttons or shoelaces.
	60	Difficulty judging object sizes or how near an object is from themselves.
	<	***Total Motor Spatial Problems***

12 Language Difficulties

	61	Reads far less frequently than previously.
	62	Substitutes some words for others.
	63	Does not watch or follow television.
	64	Does not speak unless spoken to. (e.g. Does not participate in conversations.)
	65	Often cannot find the right word.
	66	Trouble pronouncing words.
	67	Does not understand simple commands, explanations.
	68	Does not produce meaningful speech.
	<	***Total Language Difficulties***

	NPL Total (1,2, 10 - 12)**
	NPT Total (3 - 9)**

	TOTAL SCORE (1 - 12)

** see Manual page 8

Name:_____ Date:_____ Case Num:_____

KSBA(comm) - ANALYSIS FORM

BEHAVIOURAL PROFILE

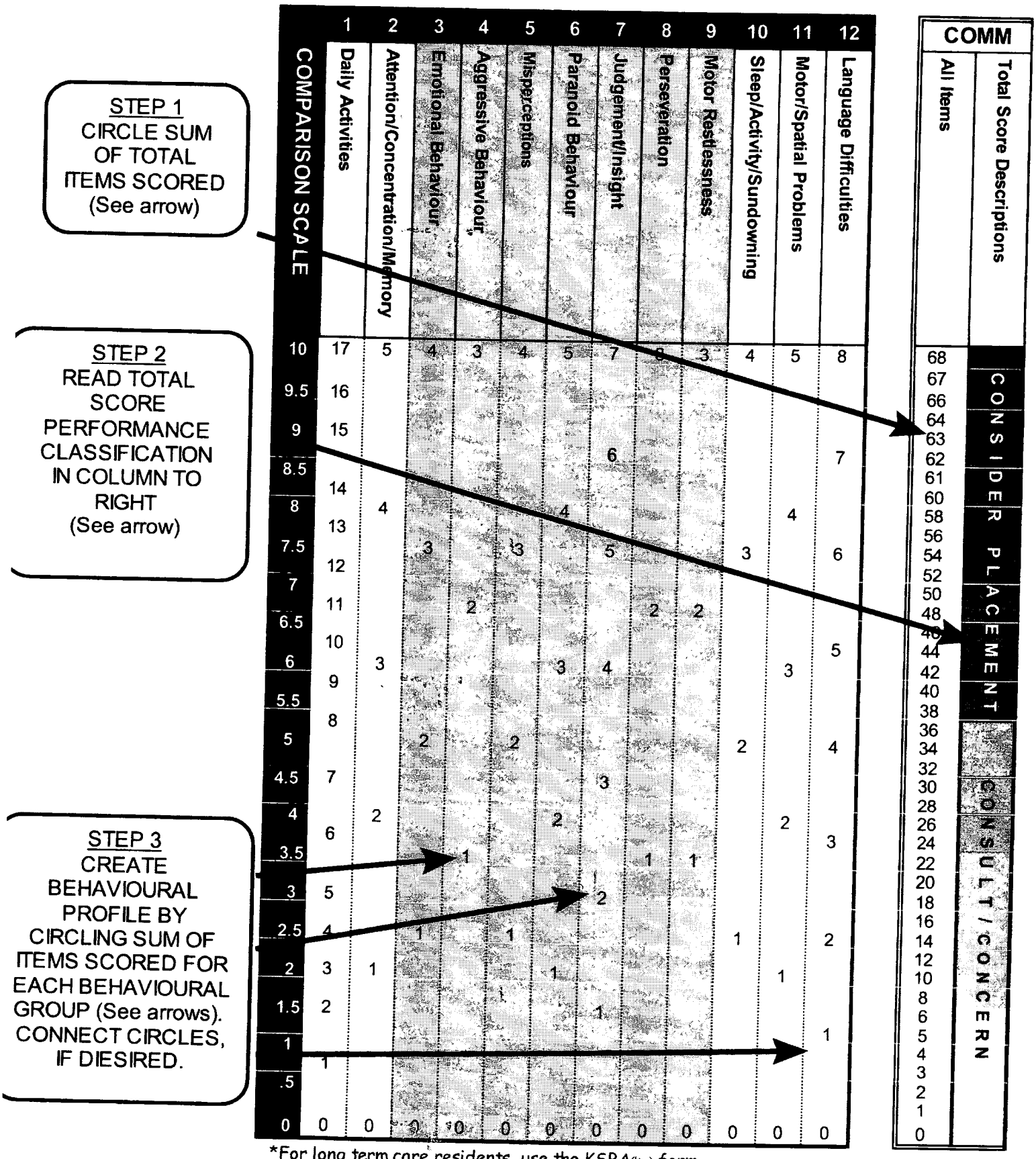
COMPARISON SCALE	1 Daily Activities	2 Attention/Concentration/Memory	3 Emotional Behaviour	4 Aggressive Behaviour	5 Misperceptions	6 Paranoid Behaviour	7 Judgement/Insight	8 Perseveration	9 Motor Restlessness	10 Sleep/Activity/Sundowning	11 Motor/Spatial Problems	12 Language Difficulties
10	17	5	4	3	4	5	7	3	3	4	5	8
9.5	16											
9	15						6					7
8.5	14											
8	13	4				4					4	
7.5	12		3		3		5			3		6
7	11			2				2	2			
6.5	10											5
6	9	3				3	4				3	
5.5	8									2		4
5	7		2		2		3					
4.5	6	2				2					2	3
4	5			1			2	1	1			
3.5	4		1		1					1		2
3	3	1				1	1				1	
2.5	2											1
2	1											
1.5	0	0	0	0	0	0	0	0	0	0	0	0
1												
.5												
0												

TOTAL SCORE ANALYSIS

COMM Total Score	COMM Total Score Descriptions	INST Total Score	INST Total Score Descriptions
68		67	
67		66	CRISIS
66	CONSIDER	65	
64		64	
63		63	
62		62	
61		61	
60		60	
58		58	
56	PLACEMENT	56	
54		54	
52		52	
50		50	
48		48	
46		46	
44		44	
42		42	CONSULT/CONCERN
40		40	
38		38	
36		36	
34		34	
32		32	
30		30	
28		28	
26	CONSULT/CONCERN	26	
24		24	
22		22	
20		20	
19		18	
17		16	
16		14	
14		12	
11		10	
9		8	
6		6	
5		5	
4		4	
3		3	
2		2	
1		1	
0		0	

To produce a behaviour profile, count the number of items checked for each behavioural group and circle that number on the above chart in the appropriate column. To the right of the profile chart are columns for total score analysis. Select the appropriate column ar circle the number matching the total score. (COM = community living; INST = institutional living).

KSBA(comm) Behavioural Analysis Procedures



*For long term care residents, use the KSBA(ltc) form.

** For explanations and samples as to how to use this form see KSBA Administration and Interpretation Manual, which can be downloaded free of charge from **www.kingstonscales.ca** or e mail: **kscales@queensu.ca**

Kingston Standardized Behavioural Assessment

LONG TERM CARE FORM - KSBA(LTC)

Patient Name _____ Case:_____
Sex: M___ F___ Age_____ Education_____ Years of Illness_____
Date:_____ Rater/Informant:_____
Lives in: Facility Type_____

KINGSTON SCALES

Please check all of the following behaviours that have occurred in the last month or are presently occurring, and that are a change from your client/patient's earlier behaviour (prior to illness). Indicate whether they apply by marking the box beside the appropriate statement. The Total Score equals number of boxes checked.

1 Daily Activities

- [ ] 1 No longer takes part in favourite pastimes (or greatly reduced).
- [ ] 2 Resistant to bathing.
- [ ] 3 Refuses to leave own room.
- [ ] 4 No longer uses some common objects properly (e.g. silverware).
- [ ] 5 Does not like being touched.
- [ ] 6 Combines foods not usually eaten together.
- [ ] 7 Refuses to eat.
- [ ] 8 Drools on self, clothing.
- [ ] 9 Overly dependent, wants more guidance than usual.
- [ ] 10 Eats other's food at meal time.
- [ ] 11 Difficulty judging the passing of time.
- [ ] 12 Wanders aimlessly.
- [ ] 13 Hides things.
- [ ] 14 Hoards objects.
- [ ] 15 Fails to recognize family or friends.
- [ ] 16 Incontinence of urine/faeces in clothes in daytime.
- [ ] 17 Voids in non-toilet areas.
- [ ] 18 Smears faeces.
- [ ] < ***Total Daily Activities***

2 Attention/Concentration/Memory

- [ ] 19 Can't concentrate, pay attention for long.
- [ ] 20 Misplaces things more than usual.
- [ ] 21 Easily distracted by surrounding noises.
- [ ] 22 Places things in inappropriate places.
- [ ] < ***Total Attention/Concentration/Memory***

3 Emotional Behaviour

- [ ] 23 Shows little or no emotion.
- [ ] 24 Mood changes for no apparent reason.
- [ ] 25 Expresses inappropriate emotions, either type or intensity.
- [ ] 26 Makes uncharacteristically pessimistic statements.
- [ ] 27 Expresses suicidal feelings, threatens to hurt him/herself.
- [ ] < ***Total Emotional Behaviour***

4 Aggressive Behaviour

- [ ] 28 Verbally abusive at times.
- [ ] 29 Uncharacteristically excitable, easy to upset; reacts catastrophically.
- [ ] 30 Throws things at, or pinches others.
- [ ] 31 Attempts to hit/strike out at others.
- [ ] < ***Total Aggressive Behaviour***

5 Misperceptions/Misidentifications

- [ ] 32 Claims an object/possession looks similar to, but is not the real one.
- [ ] 33 Claims a family member looks similar but is not the true one.
- [ ] 34 Thinks present dwelling is not their place of living.
- [ ] 35 Thinks people are present who aren't.
- [ ] 36 Sees or hears things that are not there.
- [ ] 37 Talks to pictures or mirrors.
- [ ] < ***Total Misperception Behaviour***

6 Paranoid Behaviour

	38	Suspicious of family and staff.
	39	Suspicious about money issues.
	40	Accuses others of stealing his or her things.
	41	Accuses spouse of infidelity.
	42	Expresses suspicion around taking medication.
	<	***Total Paranoid Behaviour***

7 Judgement/Insight

	43	Seeks constant attention.
	44	Eats non-food items.
	45	Grabs others nearby.
	46	Shows increased sexual drive, interest.
	47	Makes inappropriate sexual advances.
	48	Accident prone, gets hurt a lot.
	49	Unconcerned about personal safety.
	50	Invades personal space.
	<	***Total Judgement/Insight***

8 Perseveration

	51	Repeats same actions over and over.
	52	Repeats same words or phrases.
	53	Talks about same topic over and over again.
	54	Repeatedly shouts or calls out.
	55	Clapping/noise making.
	<	***Total Perseveration***

9 Motor Restlessness

	56	Desire to pace or walk almost constantly.
	57	Can't sit still, restless, fidgety.
	58	Tries doors, windows.
	59	Repeatedly rearranges furniture.
	60	Bangs head deliberately.
	<	***Total Motor Restlessness***

10 Sleep/Activity/Sundowning

	61	Falls asleep at uncharacteristic times.
	62	Gets up and wanders or awakens frequently at night, more than usual.
	63	Sleeps more.
	64	Behaviour more agitated or impaired in late afternoon.
	<	***Total Sleep/Activity/Sundowning***

11 Motor/Spatial Problems

	65	Poor coordination seen in limb/finger movements.
	66	Slowness of movement.
	67	Unsteadiness when walking.
	68	Difficulty judging object sizes or how near an object is from themselves.
	<	***Total Motor Spatial Problems***

12 Language Difficulties

	69	Substitutes some words for others.
	70	Does not speak unless spoken to. (e.g. Does not participate in conversations.)
	71	Often cannot find the right word.
	72	Trouble pronouncing words.
	73	Does not understand simple commands, explanations.
	74	Speaks in meaningless phrases, or unintelligible language.
	<	***Total Language Difficulties***

	NPL Total (1,2,10-12) *
	NPT Total (3-9) *

	TOTAL SCORE

* see Manual page 8

Name:_____ Date:_____ Case Num:_____

KSBA$_{(LTC)}$ - ANALYSIS FORM BEHAVIOUR PROFILE

TOTAL Score ANALYSIS

COMPARISON SCALE	1 Daily Activities	2 Attention/Concentration/Memory	3 Emotional Behaviour	4 Aggressive Behaviour	5 Misperceptions/Misidentifications	6 Paranoid Behaviour	7 Judgement/Insight	8 Perseveration	9 Motor Restlessness	10 Sleep/Activity/Sundowning	11 Motor/Spatial Problems	12 Language Difficulties
10	18	4	5	4	6	5	8	5	5	4	4	6
9.5	17											
9	16											
8.5	15				5		7					5
8	14		4			4		4	4			
7.5	13	3		3			6			3	3	
7	12				4							4
6.5	11						5					
6	10		3			3		3	3			
5.5	9											
5	8	2		2	3		4			2	2	3
4.5	7											
4	6		2			2		2	2			
3.5	5				2		3					2
3	4											
2.5	3	1		1			2			1	1	
2			1			1		1	1			
1.5	2				1							1
1	1						1					
.5												
0	0	0	0	0	0	0	0	0	0	0	0	0

All Items	Total Score Descriptions
74	
72	CONSULT
70	
68	
66	
64	
62	
60	
58	
56	
54	
52	
50	CONCERN
48	
46	
44	
42	
40	
38	
36	
34	
32	
30	
28	
26	
24	
22	FREQUENTLY REPORTED
20	
18	
16	
14	
12	
10	
8	
6	
5	
4	
3	
2	
1	
0	

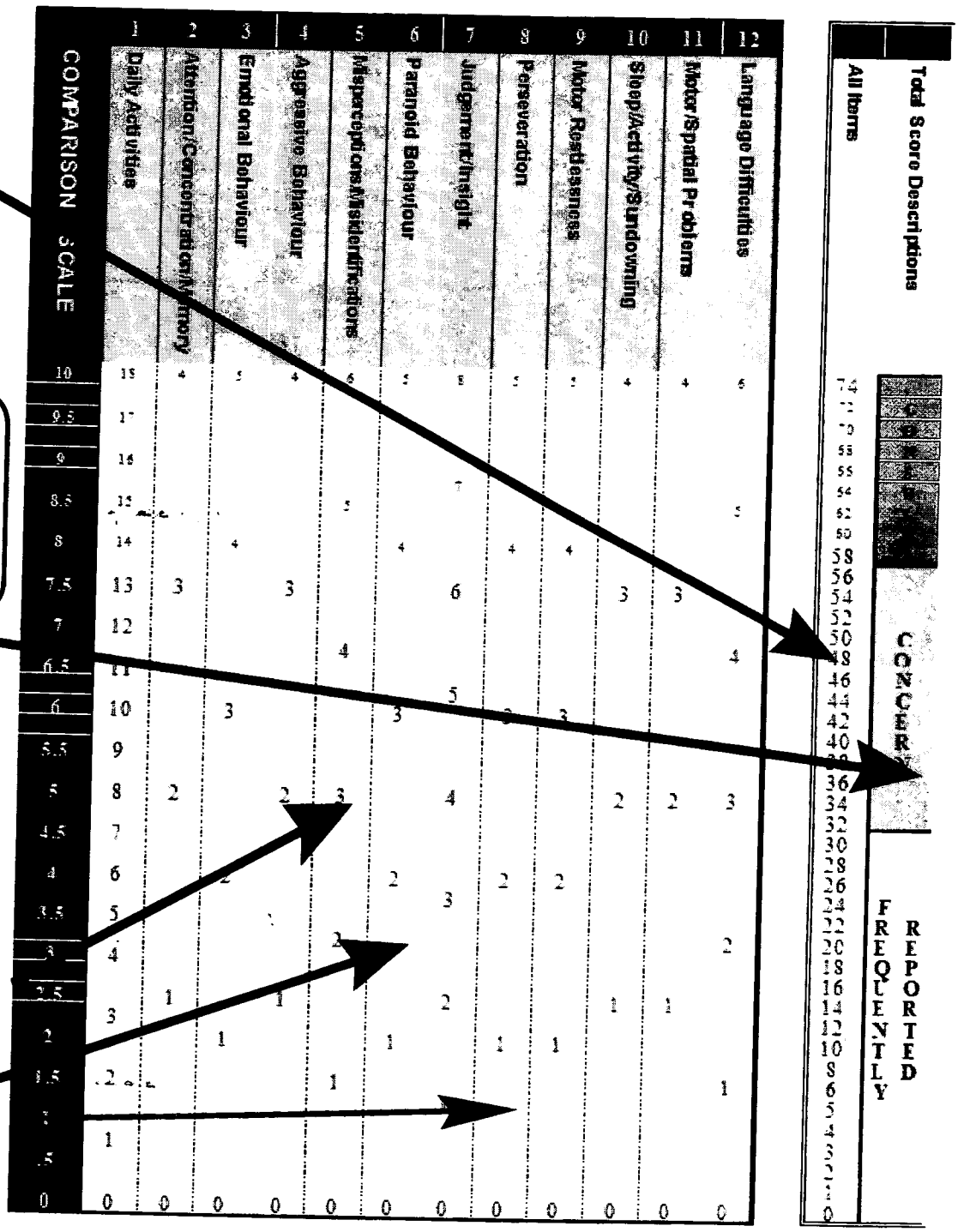
To produce a behaviour profile, count the number of items checked for each behavioural group and circle that number on the above chart in the appropriate column. To the right of the profile chart are columns for total score analysis. Select the appropriate column and circle the number matching the total score.

KSBA$_{(LTC)}$ Behavioural Analysis
PROCEDURES

STEP 1
CIRCLE SUM OF TOTAL ITEMS SCORED (See arrow).

STEP 2
READ TOTAL SCORE PERFORMANCE CLASSIFICATION IN COLUMN TO RIGHT (See arrow).

STEP 3
CREATE BEHAVIOURAL PROFILE BY CIRCLING SUM OF ITEMS SCORED FOR EACH BEHAVIOURAL GROUP (See arrows). CONNECT CIRCLES, IF DESIRED



For explanations and samples as to how to use this form see

KSBA Administration and Interpretation Manual, which can be freely downloaded from: www.kingstonscales.org

or email: kscales@queensu.ca

Practical Quality Improvement Tools for Long Term Care

Julie Auger, MD, CCFP, FCFP,COE

Assistant Professor, Division of Clinical Sciences, Northern Ontario School of Medicine, Timmins

Evelyn Williams, MD, CCFP, FCFP, CMD

Assistant Professor, DFCM, University of Toronto

Speaker Disclosures

Dr. Auger has disclosed that she has no relevant financial relationship(s).

Dr. Williams has disclosed that she has no relevant financial relationship(s).

Slide deck developed by Dr. Williams and Dr. Andrea Moser

WELCOME AND INTRODUCTION

Learning Objectives

By the end of the session, participants will be able to:

- Understand and apply Quality Improvement tools to improve practice in Long Term Care
- Engage in exchange of ideas with colleagues on possible Quality Improvement initiatives in Long Term Care

What is Quality Improvement?

A formal process that:

- looks at the way we do things and helps us identify new ways, that will be even more effective
- focuses on systems, not people
- helps to create reliable processes to improve your work

Why Quality Improvement?

“Keep doing what you've always done and you'll keep getting what you've always got.”

Buckminster Fuller

"If you're not part of the solution, you're part of the problem.“

Charles Rosner

Using Quality Improvement in LTC

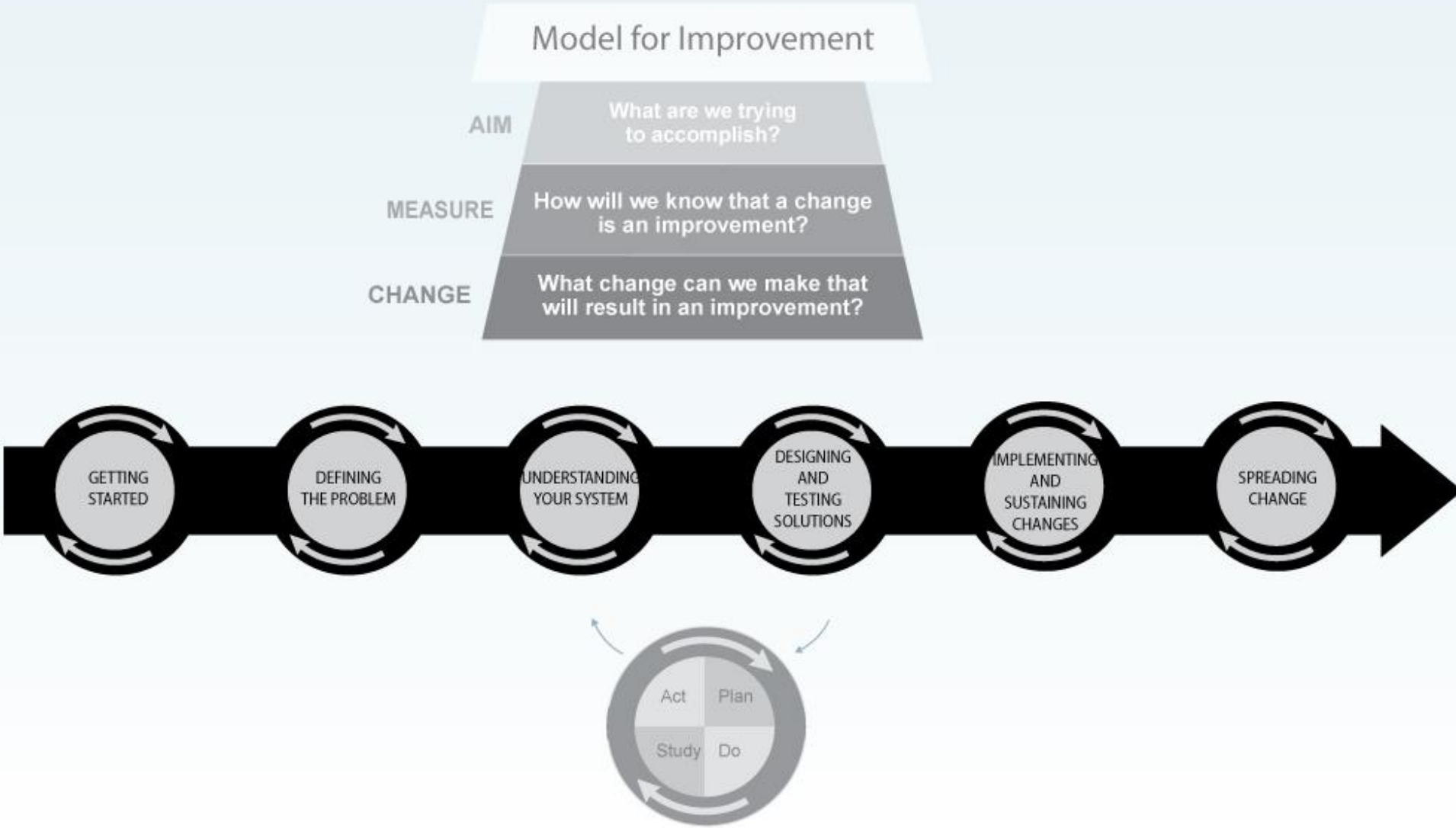
- Address quality measures reported the CIHI national reporting system (antipsychotics, pressure ulcers, falls)
- Increase efficiencies to deliver quality outcomes with shrinking resources
- Reduce polypharmacy
- Decrease non-value added work

Quality Improvement Framework

In Quality Improvement work, we use many QI tools. The QI framework provides a structure for the path forward

Resources:
Institute for Healthcare Improvement
www.ihi.org

The Quality Improvement Framework



The Iterative Process

The Iterative Process

Problem Statement

In order for us to better understand the current situation of our system it is helpful to involve staff in determining what is the problem.

Problem Statement Examples

- Aggressive behaviours are being reported by staff but supporting documentation is difficult to locate.
- There has been a recent increase in workplace injuries from resident on staff violence
- Psychotropic drug use in our facility is above the average for the province
- MDS report shows increase in worsening resident pain scores

Problem Statement

- What is the problem?
- Who does this affect?
- When is it a problem?
- Why should I care?
- How does it affect the resident?
- How does this problem make you feel?
- Look for the problem, not the solution

EFFECT / PROBLEM

Small Group Activity

What is the problem you would like to work on?

Write a problem statement

<u>Topic ideas</u>

Emerg transfers

Antipsychotic use

Pain mgt

Falls

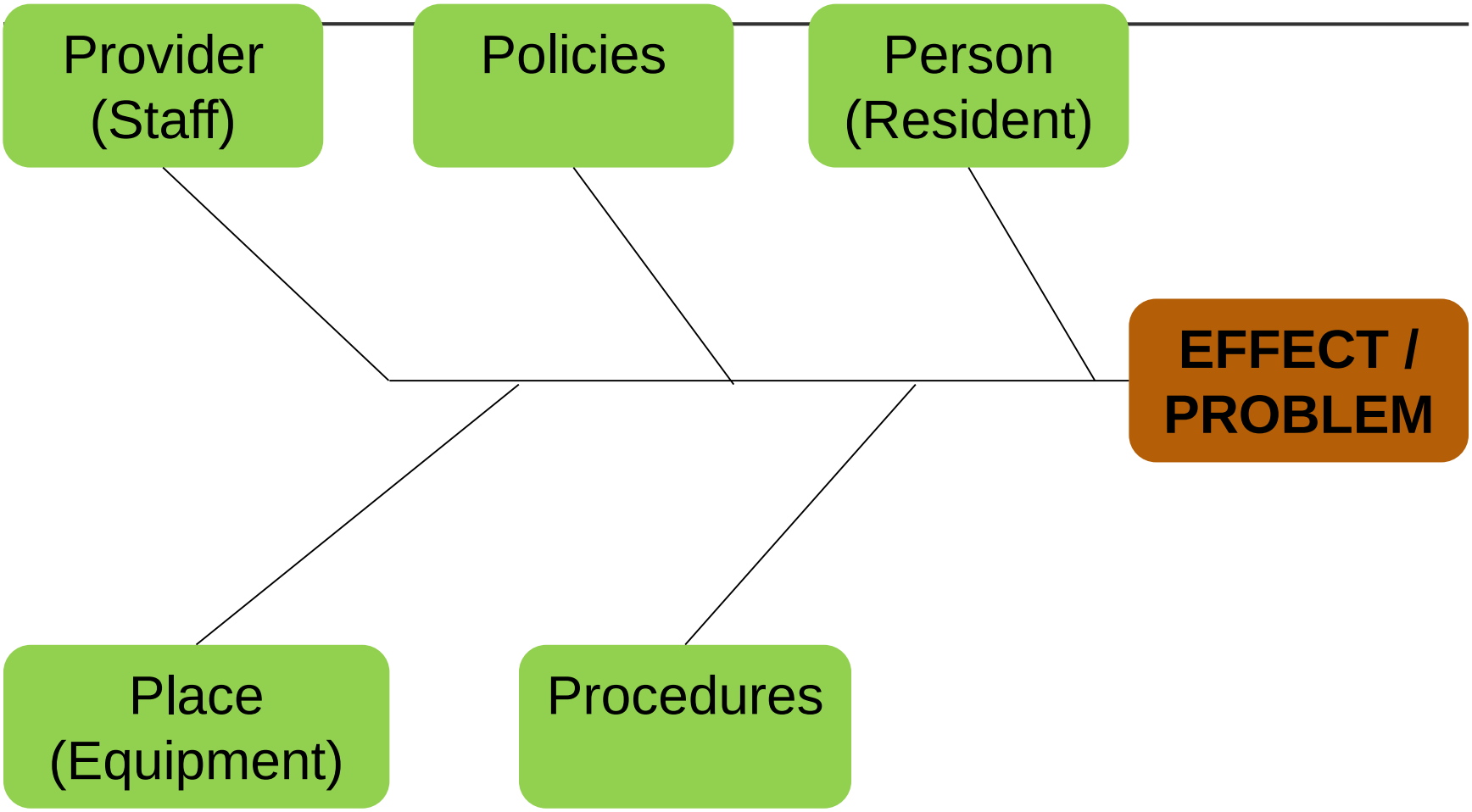
FISHBONE (ISHIKAWA) DIAGRAM

Why Learn about Fishbone Diagrams?

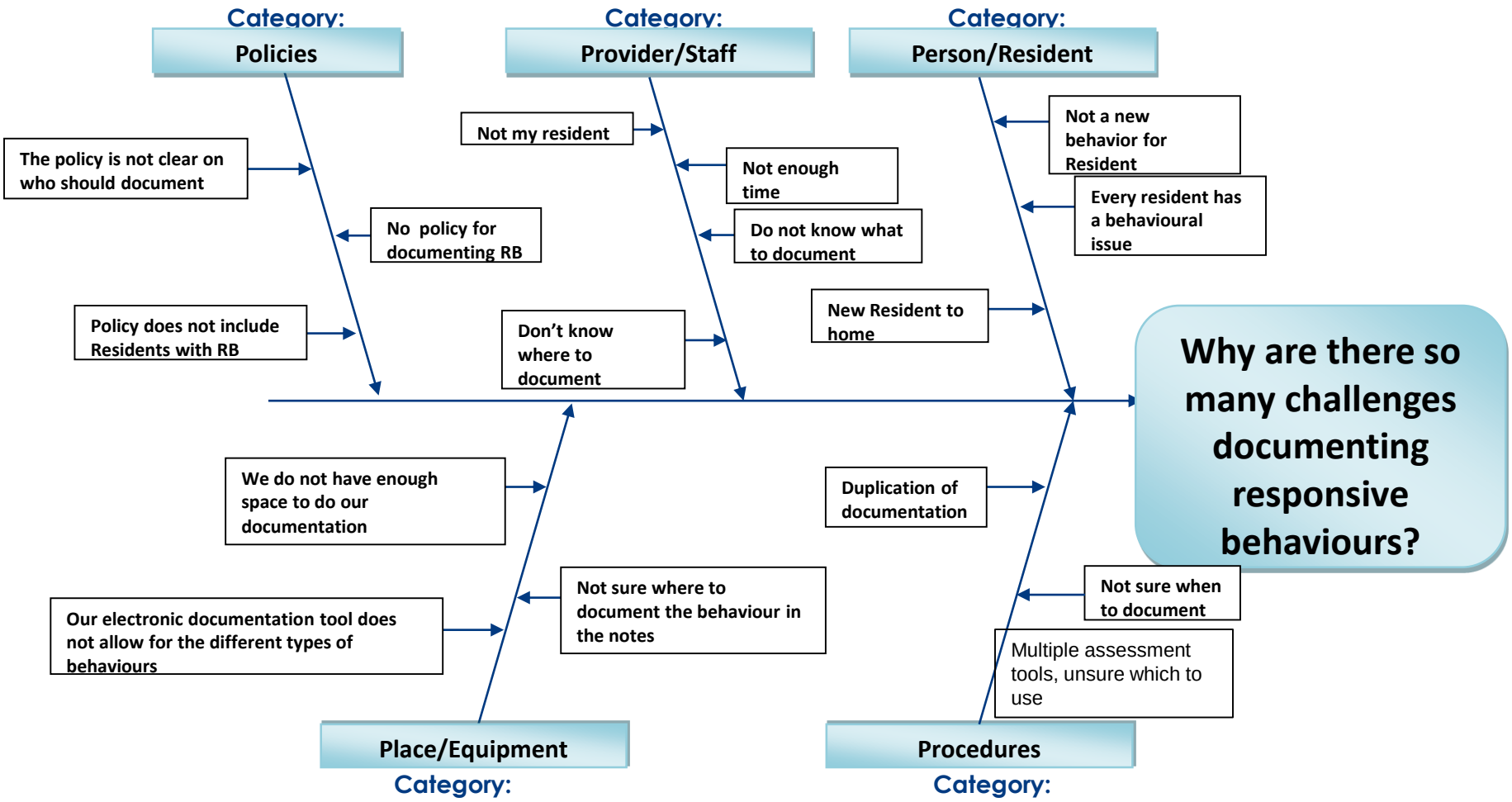
Fishbone Diagrams:

- *gather many perspectives around causes of a specific problem*
- *get us out of tunnel thinking*
- *involve all staff in problem solving*
- *help us understand systems issues*

Fishbone/Ishikawa/Cause and Effect Diagram



Fishbone Diagram Example



Small Group Activity

Creating a Fishbone Diagram

Emerg transfers

Antipsychotics

Falls or ?

Fishbone Activity Instructions

1. Brainstorm causes as to why your identified problem exists.
2. Write each possible cause on a sticky note. One idea for each sticky note.
3. Each team member should contribute at least 5 sticky notes.
4. Delegate one member of your team to share their experience and reflect on the process.

DESIGNING AND TESTING SOLUTIONS

Why Learn about PDSA Cycles?

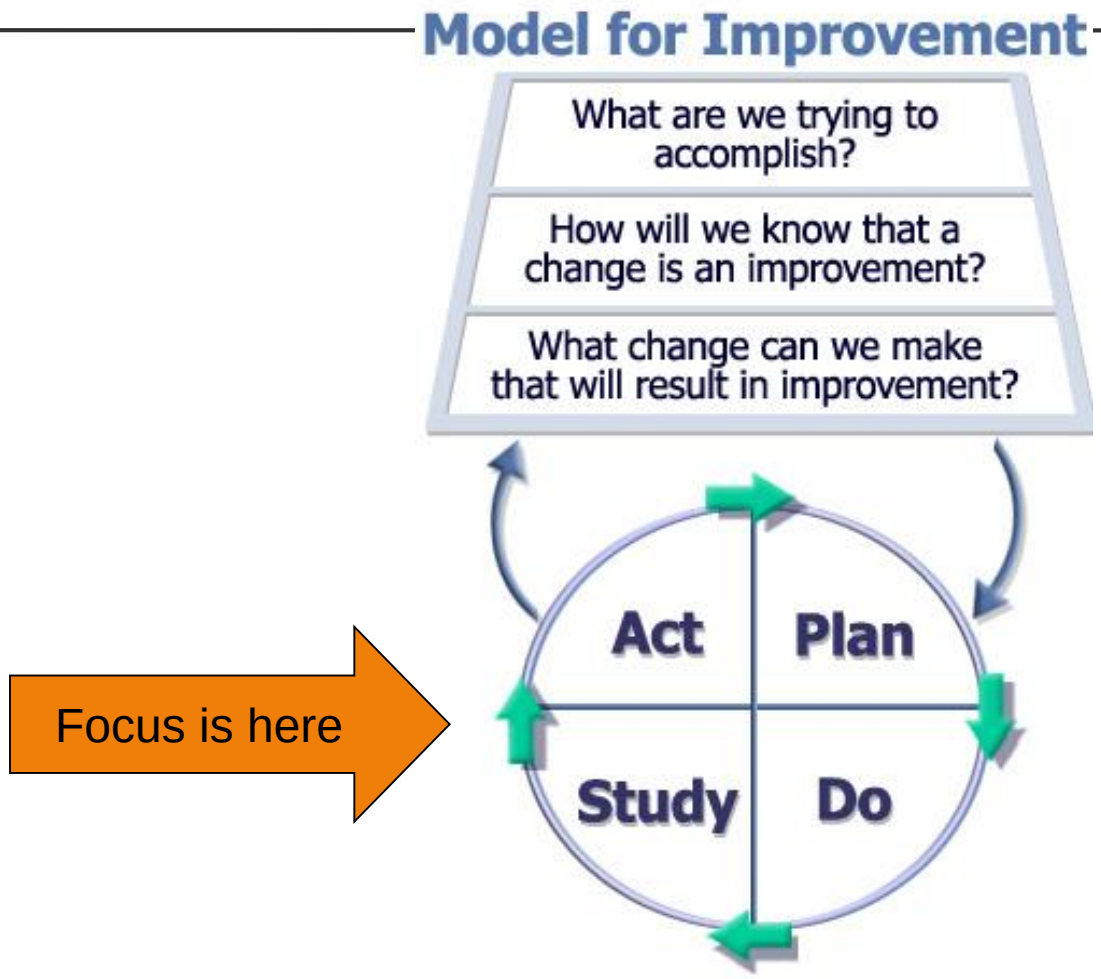
PDSA cycles are an effective way to develop, test and refine changes to your system based on the wisdom and experience of those doing the work.

Also known as "rapid cycle improvement"

PDSA Cycles
Can be used to:

- **Develop a change:**
  - don't have an idea (theory) to test yet
  - learning about the system, looking for ideas to test
- **Test a change:**
  - trying and adapting existing knowledge on small scale
  - learning what works in your system
- **Implement an improvement:**
  - making this change a part of the day-to-day operation of the system in your pilot population
- **Spread an improvement:**
  - adapting the change to areas or populations other than your pilot populations

PDSA


Model for Improvement
What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement?
Act
Plan
Study
Do
Focus is here

Aim Statement

What are we trying to accomplish?

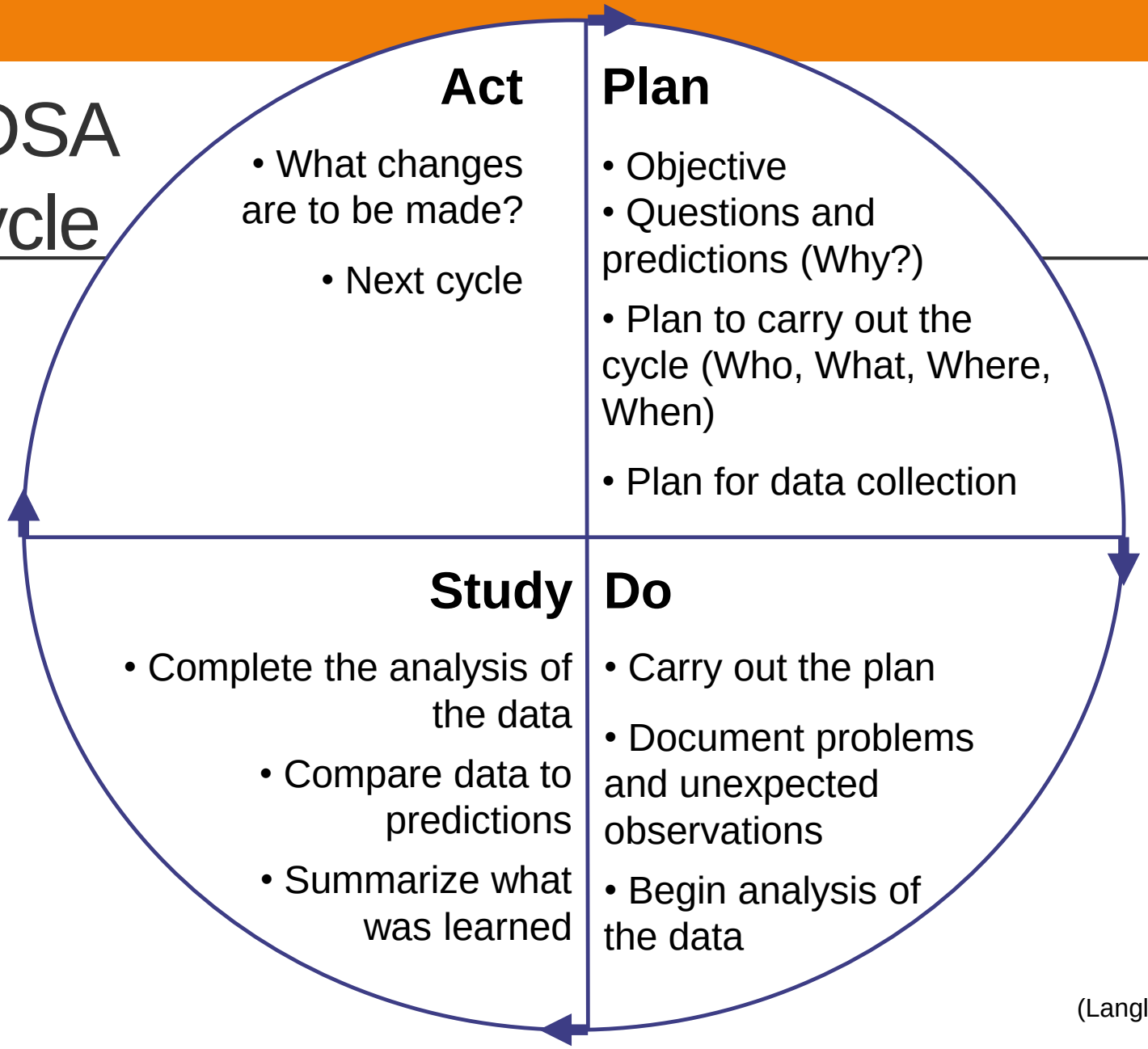
i.e. if the problem was solved, what would be achieved?

"Reduce the number of physically aggressive responsive behaviors by 50% from 36 to 18 per month in the Maple unit at Spring Woods Manor by May 31, 2017."

AIM Statement

- Clear
  - What
  - By How Much - measurable
- Time Specific
  - By When
- Stretchable
- Provides Real Value

PDSA Cycle



(Langley et al., 2009)

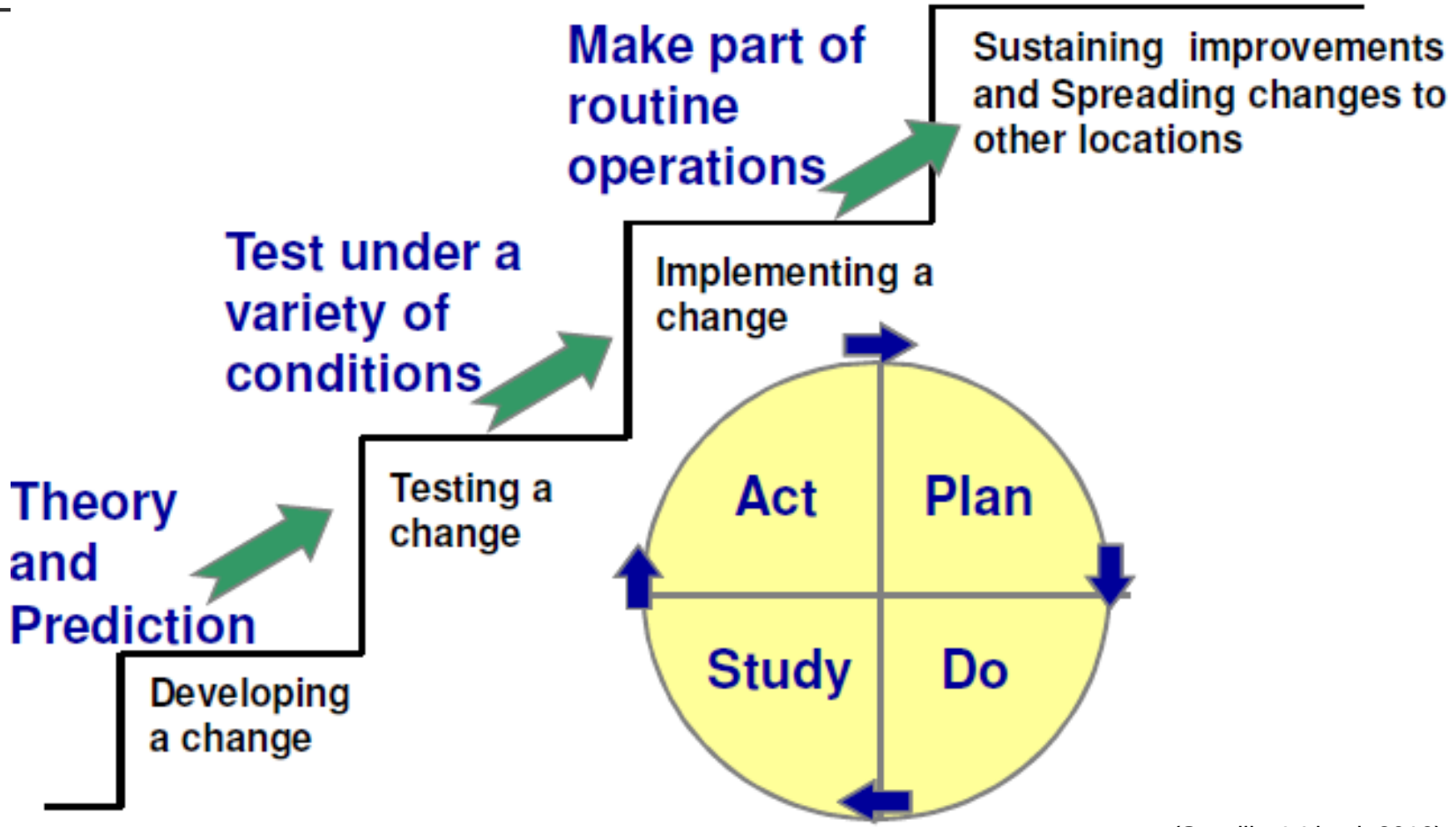
PDSA: Guidance for Testing a Change

- Answer a **specific** question
- Make a **prediction**
- Collect **data over time**
- **Test in a wide range of conditions**
- Build knowledge **sequentially** using multiple PDSA cycles

PDSA Measures

- Collect useful data, not perfect data
- Consider qualitative data as well as quantitative data
- Need enough data to make decisions
- Use paper and pencil data
- Use sampling
- Record what went wrong during the test

Sequence of Improvement



(Scoville & Lloyd, 2010)

All Washed Up!

All Washed Up!

Small Group Activity

Creating a PDSA Cycle.

First PDSA Cycle Activity Instructions

1. Craft an AIM statement
2. Develop change idea
   - Test a hypoglycemia rapid response kit for residents, or
   - Your own improvement idea that you would like to test
3. Clarify objective and what is going to be measured
4. Fill out the Plan part of your first PDSA Cycle.

Craft your aim statement

- The aim of the _____ quality improvement team is to increase/reduce _____ by ___%, from _____ (baseline number) to _____ (target number) persons/percent by _____ by _____ (date/timeline)”

Questions?