# Aggressive & Agitated Reactive Behavior Scales

ABS Scale:

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**ARBS Scale:** 

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### **Background on ABS Scale Development**

- A four-item MDS summary scale that measures the frequency of verbal and physical abuse, socially inappropriate behaviors and resisting care among residents.
- Staff code whether the behavior occurred or not, regardless of the severity of the behavior, based on observations and interviews with those in close contact with the residents (e.g., staff, family and friends) in a 7-day look back period.
- Each of the 4 behavioral symptoms are coded as follows:
  - Not exhibited (0)

  - Behavior occurred 1 to 3 days in the past 7 days (1)
    Behavior occurred 4 to 6 days in the past 7 days (2)
    Behavior occurred daily (3)
- Range of values: 0 12
  - A higher score indicates a greater number of behaviors occurring at a greater frequency.
- The level of severity can also be categorized into four groups
  - None (ABS = 0)

  - Moderate (ABS = 1, 2)
    Severe (ABS = 3 5)
    Very Severe (ABS = 6 12)



#### **Background on ABS Scale Development**

- Summary of Analyses of psychometric properties
  - Internal Consistency: In a study for residents in nursing homes and complex continuing care hospitals (similar to SNFs in the US) in Ontario, Canada, the ABS scale demonstrated internal consistency ( $\alpha$ =0.80).
  - Reliability: It also demonstrated consistency across the different samples ( $\alpha$ =0.79 for residents in nursing homes, and  $\alpha$ =0.95 for residents in complex continuing care hospitals).
  - Criterion validity: The ABS strongly correlated (r=0.72) with the aggressive subscale of the Cohen-Mansfield Agitation Inventory (CMAI).



# **Background on ARBS Scale Development**

- Aggressive Behavior Scale renamed because the label "aggressive" can be stigmatizing
  - Agitated Reactive Behavior Scale measures the same constructs as the Aggressive Behavior Scale but uses items from MDS 3.0.
    - Physical inappropriate behavior toward others
    - Verbal inappropriate behavior toward others
    - Other inappropriate behavior not directed towards others
    - Rejection of care
- Staff code whether the behavior occurred or not, regardless of the severity of the behavior, based on observations and interviews with those in close contact with the residents (e.g., staff, family and friends) in a 7-day look back period.



# **Background on ARBS Scale Development**

- Each of the 4 behavioral symptoms are coded as follows:
  - Not exhibited (0)
  - Behavior occurred 1 to 3 days in the past 7 days (1)
  - Behavior occurred 4 to 6 days in the past 7 days (2)
  - Behavior occurred daily (3)
- Range of values: 0 12
  - A higher score indicates a greater number of behaviors occurring at a greater frequency.



### **Background on ARBS Scale Development**

- Summary of Analyses of psychometric properties
  - Internal Consistency: Cronbach's alpha borderline adequate (0.65 for long-stay residents and 0.71 for new admissions with dementia)
  - Validity: high construct validity against poor cognition, antipsychotic use, psychiatric symptoms



#### **MDS Items**

MDS 2 items (ABS)	MDS 3.0 items (ARBS)	Notes:
Verbally Abusive: MDS2_E4ba Others were threatened, screamed at, cursed at  Physically Abusive: MDS2_E4ca Others were hit, shoved, scratched, sexually abused  Socially Inappropriate/Disruptive: MDS2_E4da Made disruptive sounds, noiseiness, screaming, self-abuse acts, sexual behavior or disrobing in public, smeared/threw food/feces, hoarding, rummaged through others belongings  Resists Care: MDS2_E4ea Resisted taking medications/injections, ADL assistance, or eating	Verbally Abusive: E0200B_Vrbl_Bhvrl_Cd E.g., threatening others, screaming at others, cursing at other  Physically Abusive: E0200A_Phys_Bhvrl_Cd E.g., hitting, kicking, pushing, scratching, grabbing, abusing others sexually  Socially Inappropriate/Disruptive: E0200C_Othr_Bhvrl_Cd E.g., hitting or scratching self, pacing, rummaging, public sexual acts, disrobing in public, throwing or smearing food or bodily wastes, screaming, disruptive sounds  Resists Care: E0800_Rjct_Evaltn_Cd resident reject evaluation or care (eg bloodwork, taking meds, ADL assistance)	Items in MDS 2 and MDS 3.0 share the same look back period of 7 days.  Examples for the items in MDS 3.0 are slightly more elaborated than items in MDS 2 but they are similar.  For MDS 3.0, these items were not collected at discharge (both return anticipated and not anticipated) until Q2 2012.



#### **Technical Notes**

• ABS/ARBS can be calculated for comprehensive and quarterly assessments, among residents who are not comatose.

