



iBudget

Florida



agency for persons with disabilities
State of Florida

iBudget Algorithm

For today's meeting the PowerPoint and handouts, along with all previous PowerPoint presentations, audio recordings and transcriptions please visit:

<http://apd.myflorida.com/ibudget/rules-regs.htm>

Scroll to the appropriate date and meeting and open documents.

iBudget Algorithm

- Meeting participants on the phone will have an opportunity to ask questions at the end of the presentation and type questions via Lync during the meeting.



iBudget Algorithm

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Current iBudget Algorithm

- Age (under 21, over 21)
- Living setting (family home, supported living/independent living, group home, residential habilitation center)
- QSI Functional and Behavioral Sum of Scores of all questions
- Additional QSI questions
 - Question 18 = transferring
 - Question 20 = maintain hygiene
 - Question 23 = self-protect

Algorithm Tasks

1. Evaluate and Refine Florida APD's current iBudget algorithm
2. Update Statistical Models for Florida APD's iBudget algorithm to identify new algorithm options

R - Square Value

Examine goodness of fit of the selected model

“r-square” is a number that indicates how well the statistical model fits the data.

What makes a good algorithm?

“r-square” value is a measure reflecting the model goodness of fit...the larger the number, the better the fit.

Outliers



- Outliers are generally individuals with extremely high or extremely low expenditures.
- Outliers can sometimes reduce the precision of the model estimation and prediction results.
- Hence in practice, outliers commonly need to be identified.



Outliers

- March 2, 2015, stakeholders agreed to look at approximately 10% outliers for a proposed model.
 - Regression model uses FY 13 – 14 claims.
- Recommendation: Final tentative proposed model would have 9.40% outliers (2,410 consumers)

Proposed Tentative Model

Living Setting

FH = Family Home

Live2ILSL = Independent and Supported living

Live2RH1 = Residential Habilitation (Standard and Live-in)

Proposed Tentative Model

Living Setting

Live2RH2 = Residential Habilitation (Behavior Focus)

Live2RH3 = Residential Habilitation (Intensive Behavior)

Live2RH4 = CTEP and Special Medical Home Care

Proposed Tentative Model

Age

Ages: 3 – 21

Ages: 21 – 30

Ages: 31+

Proposed Tentative Model

BSum = Behavior Sum

FHFSum = Family Home Functional Sum

SLFSum = Supported Living/Independent Living Functional Sum

SLBSum = Supported Living/Independent Living Behavior Sum

Proposed Tentative Model

Q16 = Functional Status, Eating

Q18 = Functional Status, Transfers

Q20 = Functional Status, Hygiene

Q21 = Functional Status, Dressing

Q23 = Functional Status, Self-protection

Proposed Tentative Model

Q28 = Behavior Status, Inappropriate Sexual Behavior

Q33 = Physical Status, Injury to the Person Caused by Aggression toward Others or Property

Proposed Tentative Model

- Q34 = Physical Status, Use of Mechanical Restraints or Protective Equipment for Maladaptive Behavior
- Q36 = Physical Status, Use of Psychotropic Medications
- Q43 = Physical Status, Treatments including Nursing

Proposed Tentative Model

Multiple R – Squared for proposed tentative model after removing 9.40% outliers (2,410 consumers):

“R-square”

0.7998

Tentative Model

March 2, 2015

Difference from previous tentative model from March 2, 2015, Public Meeting:

Q8C4 = Mental Health, Anxiety Disorder

Q8C6 = Mental Health, Post-traumatic stress disorder

These questions would not be significant in the proposed tentative model.

Tentative Model

March 2, 2015

Difference from previous tentative model from March 2, 2015, Public Meeting:

- Q12f = The person can use the community transportation system (if available).
- Q12g = The person can attend and participate in community clubs, organizations and activities.
- Q12b = The person can find a job and manage a career.

These questions would not be significant in the proposed tentative model.

Tentative Model

March 2, 2015

Difference from previous tentative model from
March 2, 2015, Public Meeting:

Q39 = Physical Status, Antiepileptic
Medication Use

This question would not be significant in the
proposed tentative model.

Proposed Tentative Model

Multiple R – Squared for proposed tentative model after removing 9.40% outliers (2,410 consumers):

“R-square”

0.7998

Next Steps

- Contract with actuary to propose reserve or set aside amounts needed
- Run proposed model and provide impact analysis
- Run case studies on model
- Next public meeting will be announced after steps above have been completed

Discussion From Phone Participants



Questions from the audience

Thank You!



Please send any questions and suggestions on the algorithm to:

iBudgetAlgorithm@apdcares.org

