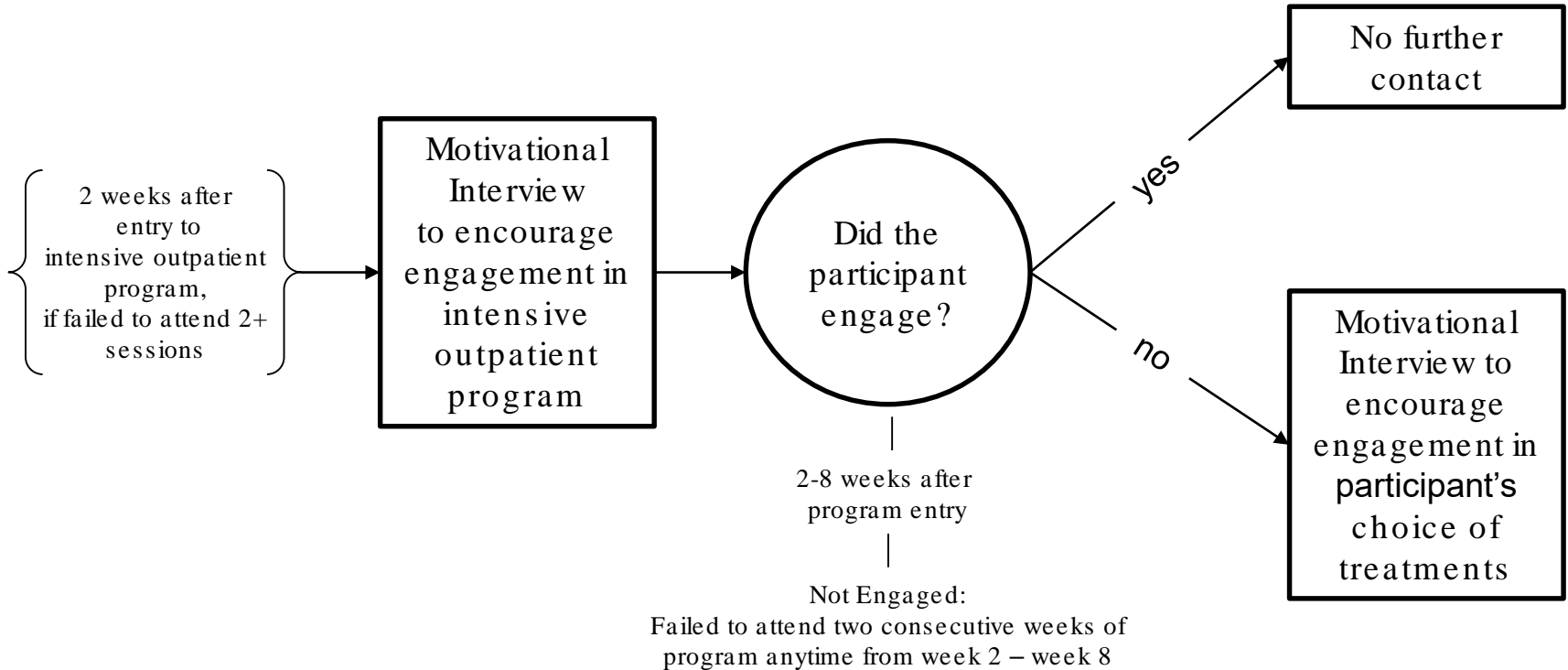


Example AI: Substance Use Treatment

PI: Jim McKay



Decision Point

Tailoring Variable(s)

Decision Rule

Intervention Options

Proximal Outcome(s)

Distal Outcome(s)

2 – 8 weeks

Engagement in treatment

If engaged, no further contact; if not engaged, MI for choice of treatment

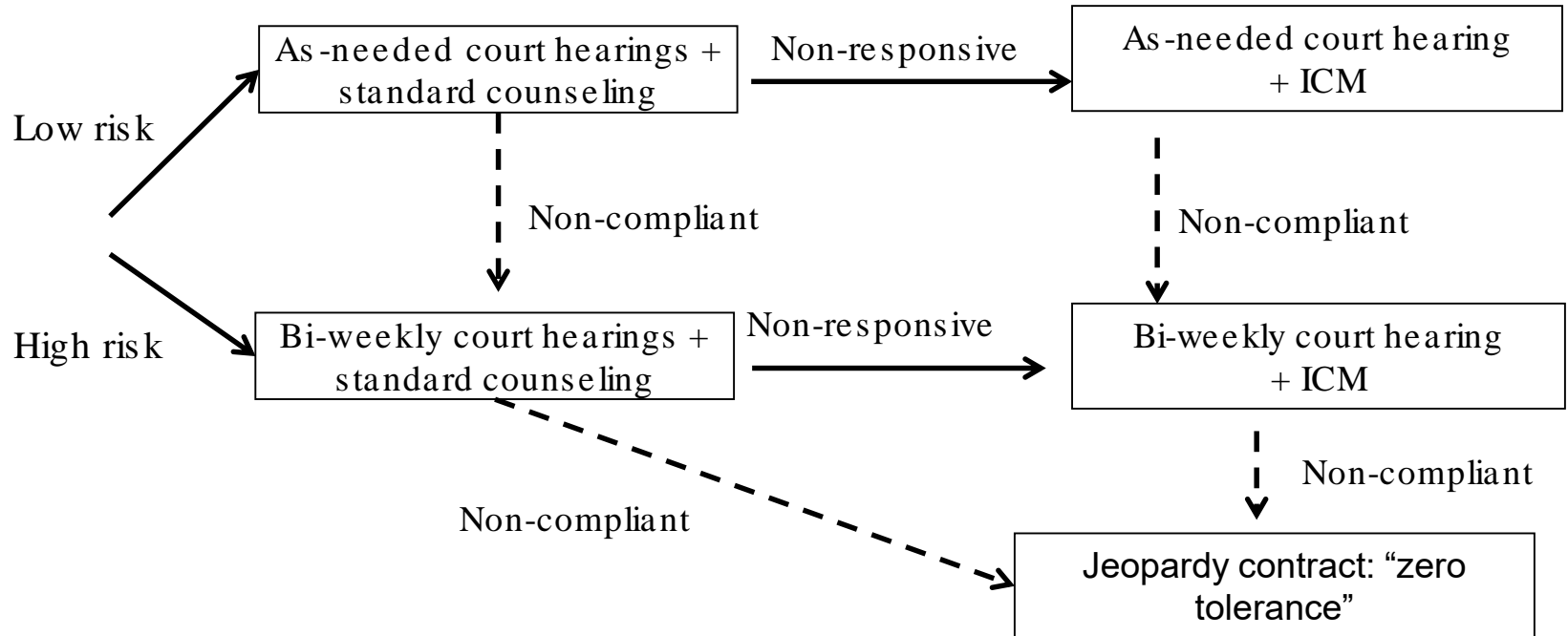
No further contact; Motivational interview to engage in choice of treatment

Engagement in treatment program

Reduced substance use

Example AI: Adaptive Drug Court Program

PI: Douglas Marlowe



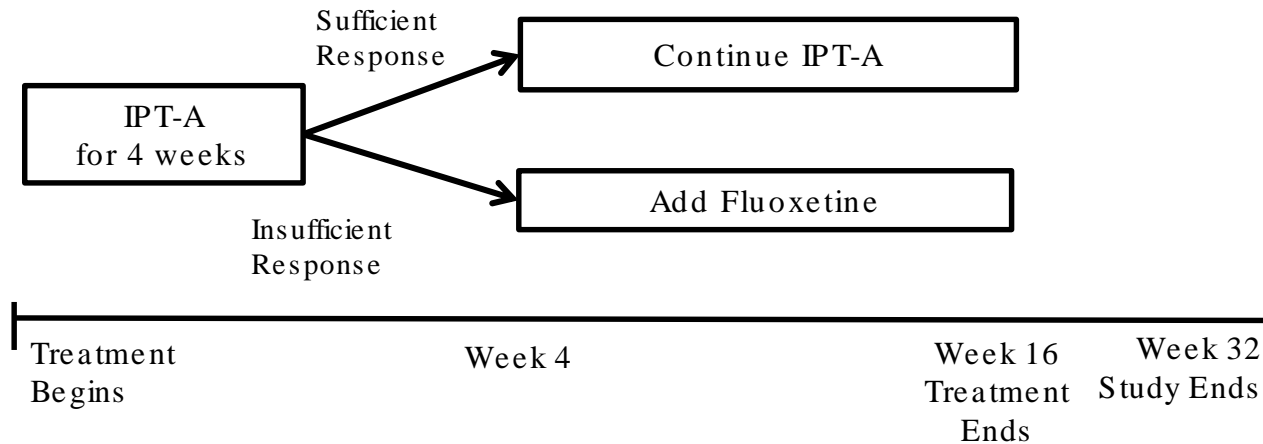
Decision Points
Tailoring Variable(s)
Decision Rule(s)

Intervention Options
Proximal Outcome(s)
Distal Outcome(s)

Entry into drug court program, monthly monitoring
Risk status (baseline), compliance and response to treatment (time-varying)
Low risk participants are offered as-needed hearings + counseling; high risk participants are offered bi-weekly hearings and counseling; non-compliance results in additional hearings or jeopardy contract; non-response results in additional case management
As-needed vs. bi-weekly court hearings; standard counseling; intensive case management
Compliance and treatment response
Completion of drug court program

Example AI: Adolescent Depression

PI: Meredith Gunlicks-Stoessel



IPT-A → Interpersonal Psychotherapy for Depressed Adolescents
Fluoxetine → medication for depression; also known as Prozac

Decision Point

Tailoring Variable(s)

Decision Rule(s)

Intervention Options

Proximal Outcome(s)

Distal Outcome(s)

Week 4

Sufficient Response: >20% reduction in symptoms

Sufficient responders continue on IPT-A; Insufficient responders add Fluoxetine medication

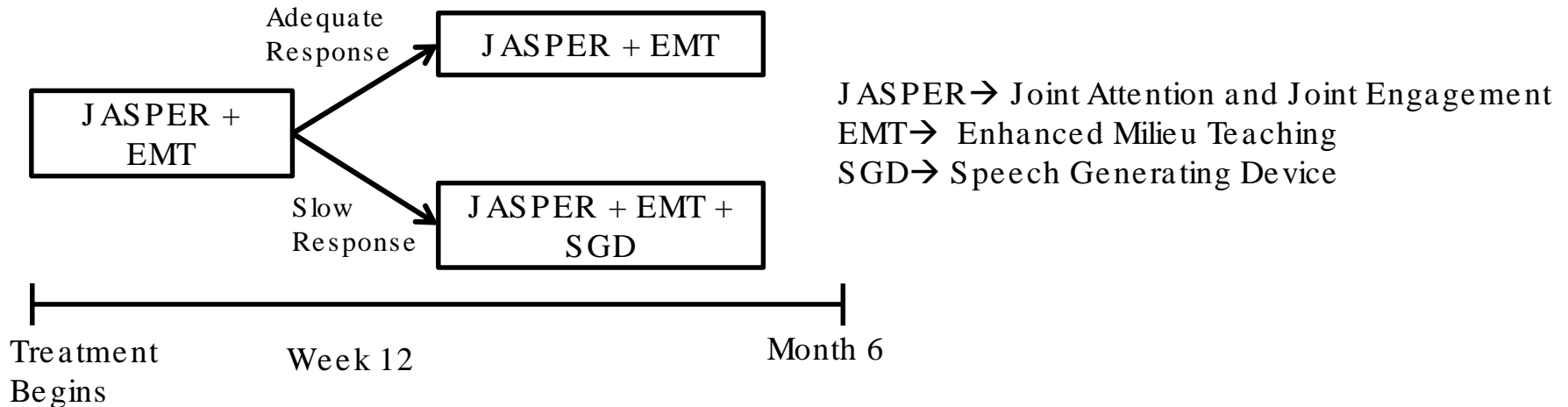
Continue IPT-A; Add Fluoxetine

Short term reduction in depressive symptoms

Long term reduction in depressive symptoms and improved functioning

Example AI: Autism

PI: Connie Kasari



Decision Point

Tailoring Variable(s)

Decision Rule(s)

Intervention Options

Proximal Outcome(s)

Distal Outcome(s)

Week 12

Response to JASPER+EMT: >25% improvement over 12 weeks on 7 measures of communication

Adequate responders continue on JASPER+EMT; Slow responders add SGD

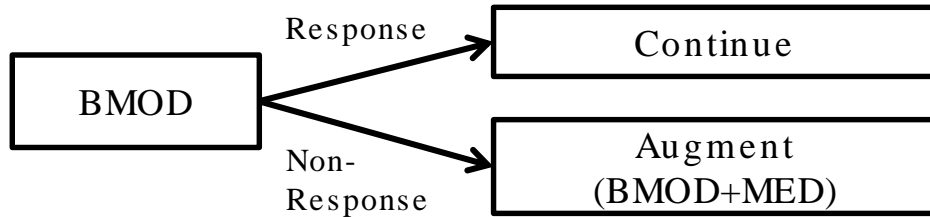
JASPER+EMT, JASPER+EMT+SGD

Improved spontaneous socially communicative utterances

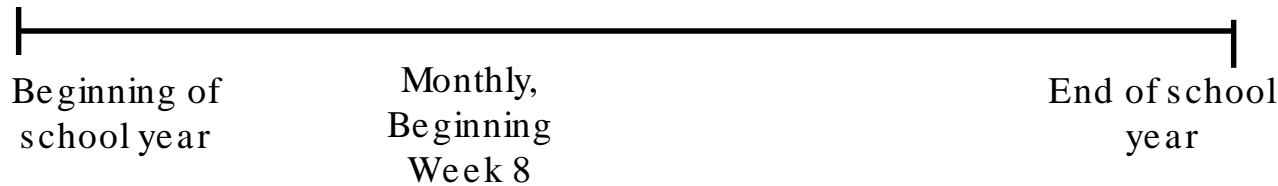
Reduced social impairment, improved academic functioning

Example AI: Child ADHD

PI: William Pelham



BMOD → Behavioral modification
MED → Low dose methylphenidate



Decision Point(s)	Monthly, beginning week 8
Tailoring Variable(s)	Non-response is <75% on behavioral rating and impairment in at least one domain (teacher rating)
Decision Rule(s)	Responders continue with BMOD; non-responders add medication
Intervention Options	Behavioral modification, Medication
Proximal Outcome(s)	Improved behavior and reduced impairment
Distal Outcome(s)	Child behavior and academic outcomes at end of school year