



# IMPLEMENTING AND EVALUATING MST IN NORWAY

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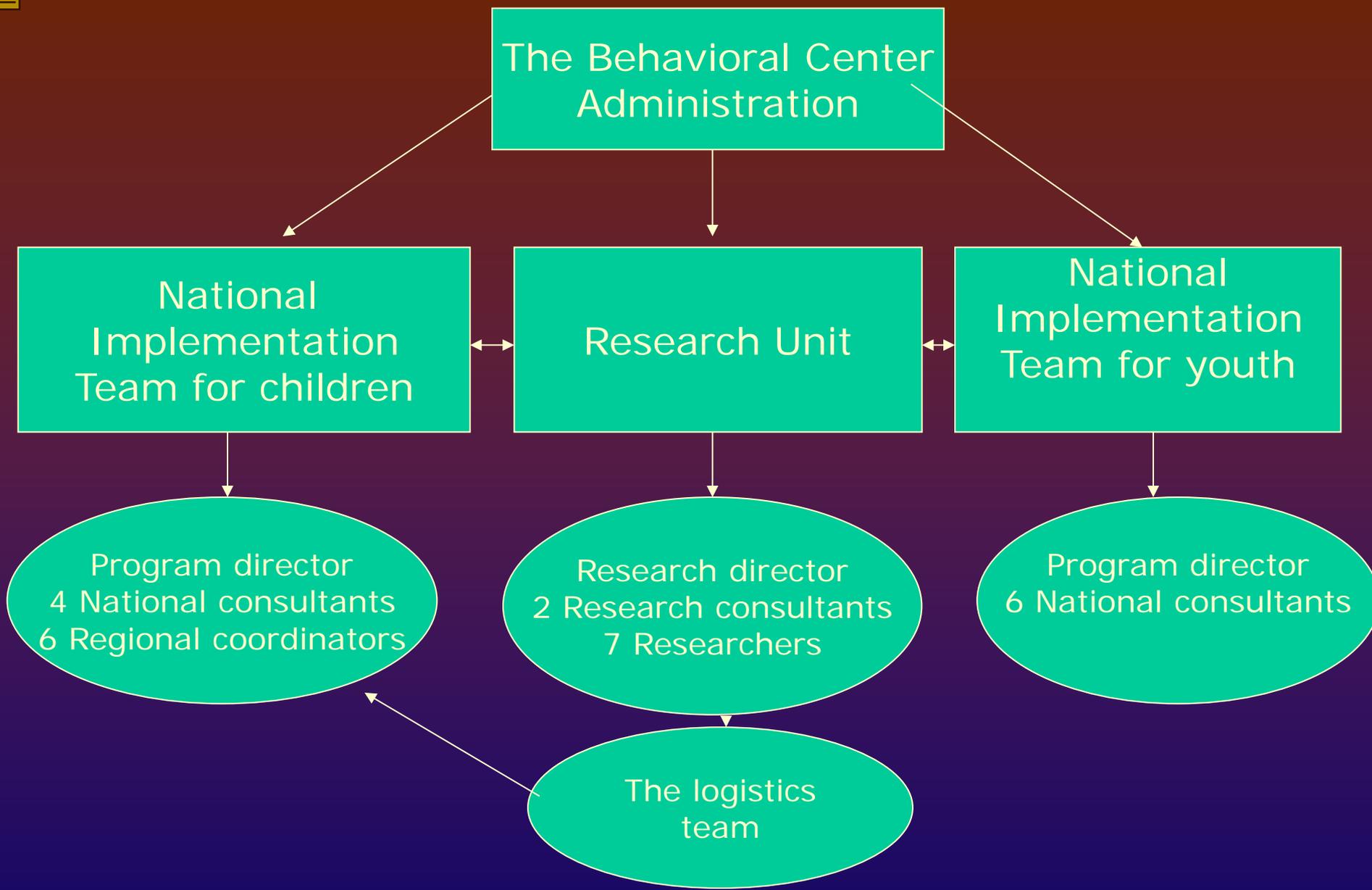
# Background

- ❖ 1997: Lack of services and competence: An international expert conference hosted by the Norwegian Research Council
- ❖ 1998: "The program kitchen": An expert panel report recommending the implementation and controlled evaluation of selected evidence based programs
- ❖ 1999: Towards "evidence based practice": the 'Behavior Project' with nationwide implementation of PMTO and MST
- ❖ 2000: PMTO/MST clinical outcome studies – new standards for clinical outcome research
- ❖ 2003: 'Norwegian Center for Studies of Conduct Problems and Innovative Practice' (Atferdssenteret – Unirand)



# Overall strategy

- ❖ Establishing a national implementation and research center
  - ❖ National implementation teams for children and youth
  - ❖ Research group
- ❖ Plans for regional and local implementation at the county and municipal level
- ❖ Therapist recruitment strategy – in-service recruitment
- ❖ Establishing comprehensive therapist, training and maintenance programs
- ❖ Creating professional networks for collaboration, supervision and quality control
- ❖ Conducting research on clinical outcomes, the implementation process and on the development of serious behavior problems in children and youth

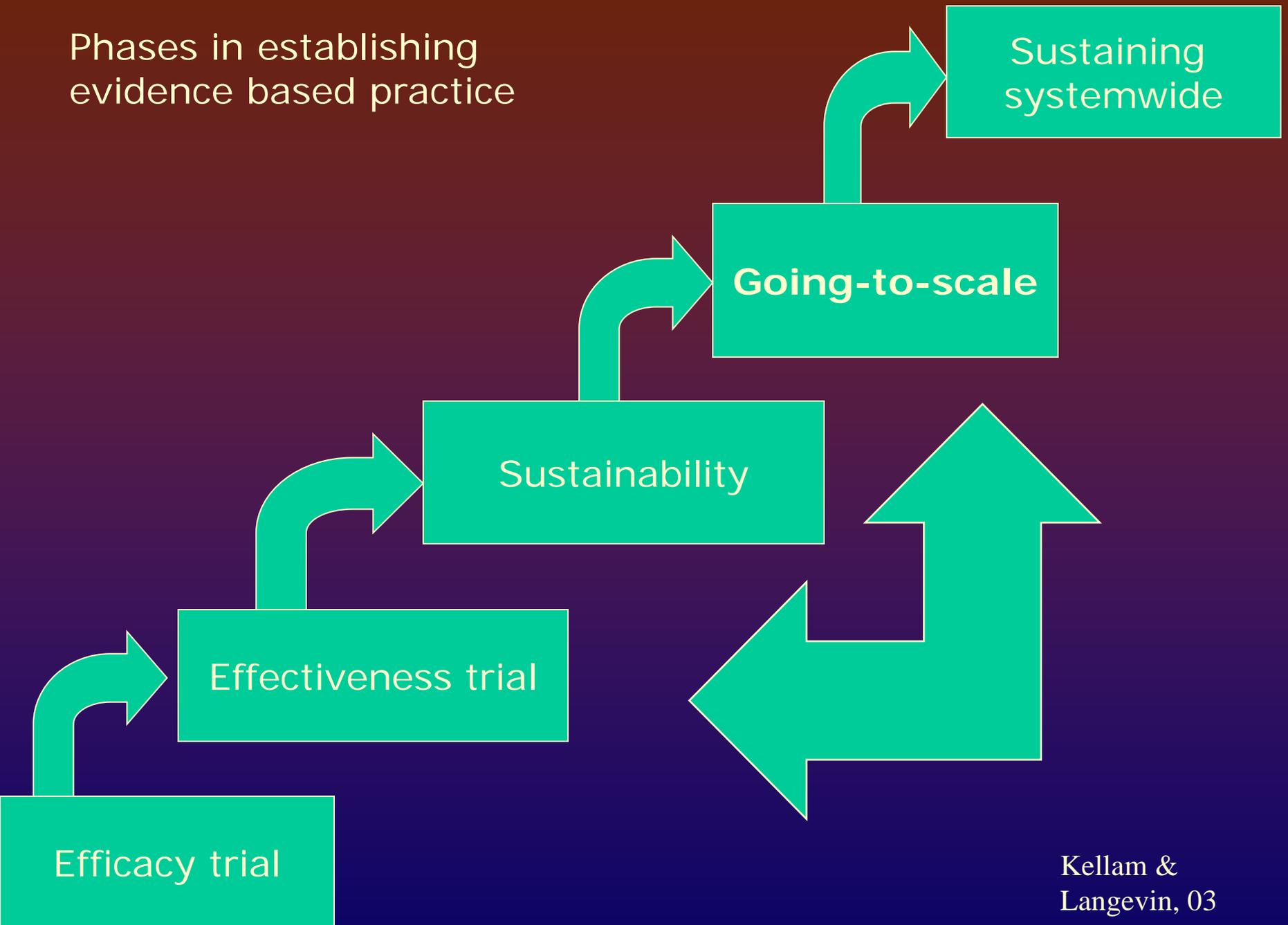




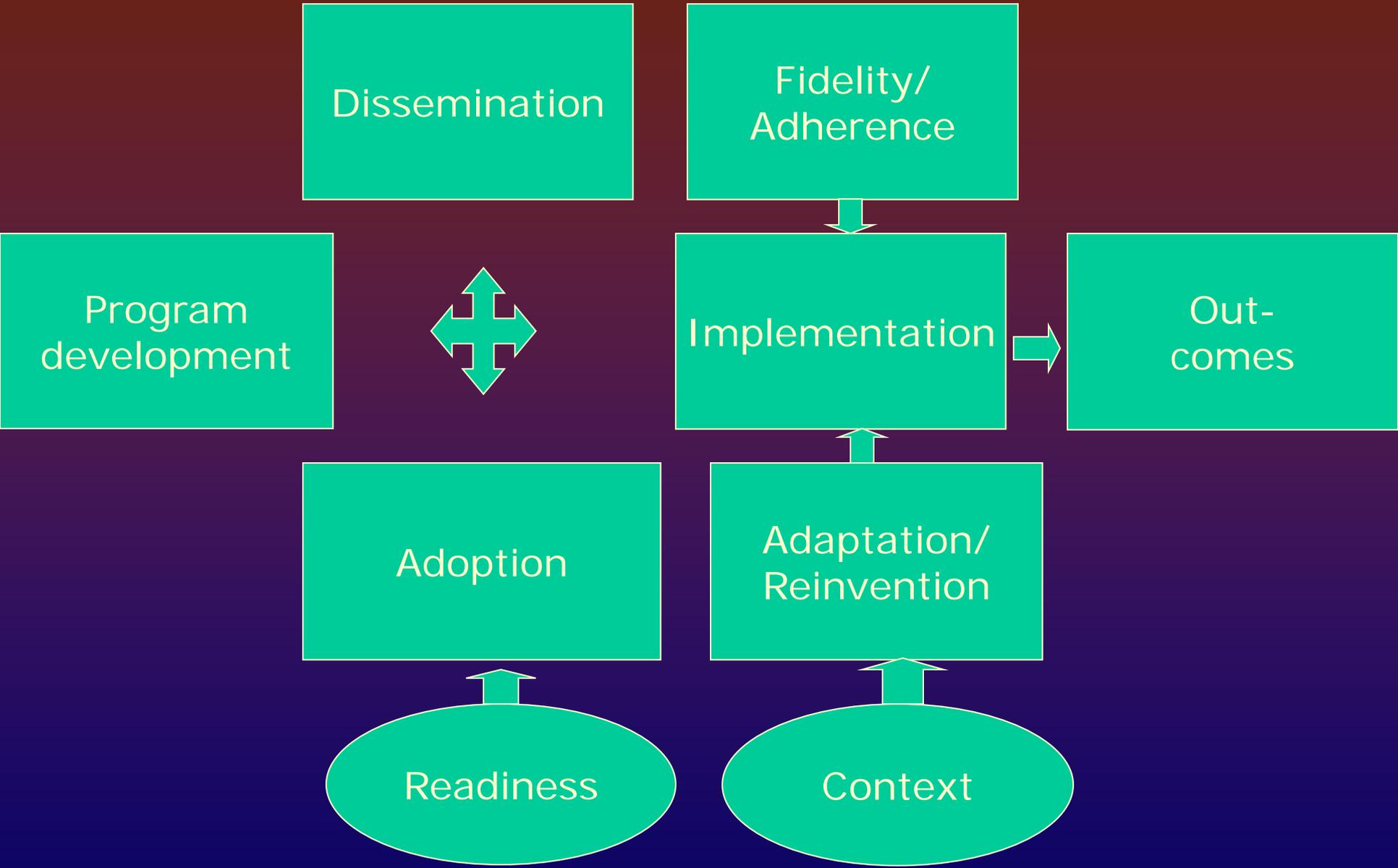
# Support from the national center

- ❖ Site assessments
- ❖ Introductory training programs
  - ❖ 5 days introductory training (MST)
  - ❖ 1.5 years initial training and certification (PMTO)
- ❖ Training manuals, treatment protocols
  - ❖ MST organizational manual and practitioner manual
  - ❖ PMTO handbook
  - ❖ Online support
- ❖ Ongoing supervision and quality control
  - ❖ MST therapist and supervisor adherence (TAM, SAM)
  - ❖ MST weekly telephone consultations
  - ❖ FIMP – Fidelity of Implementation Code (PMTO)
  - ❖ FPPC – Family Peer Process Code & Coders Impression (PMTO)
  - ❖ Regional supervision groups (PMTO)

Phases in establishing evidence based practice



# Stages of program implementation





# MST – as implemented in Norway

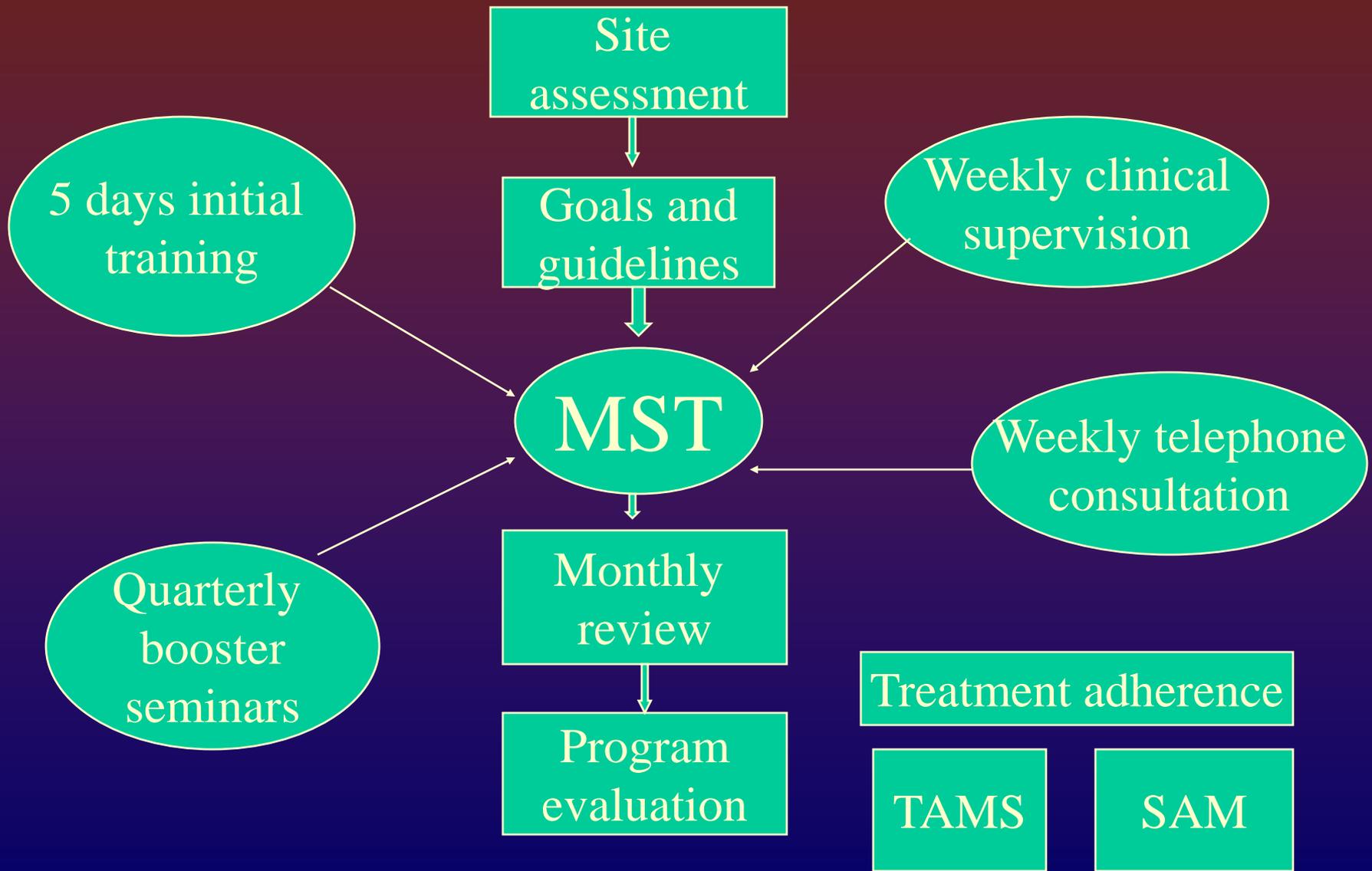
- ❖ Treatment site: Home, school, neighbourhood and community
- ❖ Duration: 3-5 months or earlier if goals are reached
- ❖ Provider: 25 MST-teams with 3-4 therapists, a team leader (clinical supervisor) and project manager (optional)
- ❖ Caseload: minimum 3 and maximum 6 families for each therapist
- ❖ Team availability: 24 hours – 7 days a week
- ❖ Total care: Intensive, individualized and comprehensive services
- ❖ Treatment adherence measured on a regular basis
- ❖ Accountability: Progress and productivity reported on a regular basis: monthly reviews, local program evaluation



# MST in Norway

- ❖ By 2003, 25 MST-teams are established in all regions of Norway on a regular basis and as part of the national Child Welfare Services
- ❖ Training and consultation of the teams by the National Implementation Team for youth (NIT) in collaboration with MST-services, Charleston
- ❖ In 2003, 520 cases was initiated and 500 cases were completed
- ❖ The national drop out rate is 5% and 10% of the cases are terminated because of placement out of home or lack of therapeutic change

# MST MODEL

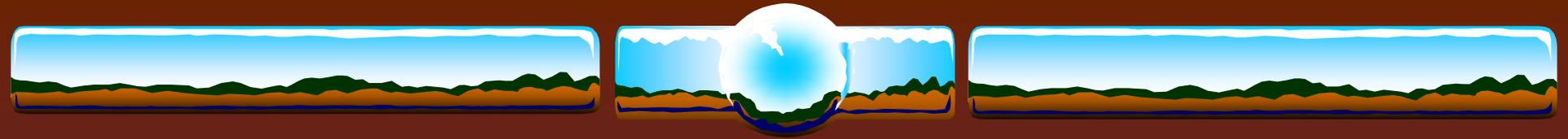


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## MST clinical outcome study

Ogden, T. & Halliday-Boykins, C.A. (2004). Multisystemic Treatment of Antisocial Adolescents in Norway. Replication of Clinical Outcomes Outside of the U.S. *Child and Adolescent Mental Health*, 9, 77-83.

Ogden, T. & Hagen, K.A. (2005). Multisystemic Therapy of Serious Behaviour Problems in Youth: Sustainability of Treatment Effectiveness Two Years After Intake. *Child and Adolescent Mental Health*, in print.



## The aims of the study

- ❖ To determine the degree to which favourable outcomes obtained in the U.S. would be replicated in Norway for youths with serious behaviour problems
- ❖ To examine the extent to which MST can produce long term outcomes that are superior to the comprehensive and treatment-oriented services already provided to youthful offenders in Norway



## Reasons for referral

- ❖ Serious behaviour problems (64%),
- ❖ Status offences (53%),
- ❖ Substance abuse (50%),
  
- ❖ Criminal offences (37%),
- ❖ Threat of harm to self or others (36%),
- ❖ Involvement as victim or perpetrator in domestic violence (29%),
  
- ❖ School expulsions (6%),
- ❖ After care from a residential treatment centre or incarceration (6%),
- ❖ Abuse or neglect (4%)
- ❖ Other reasons (28%).



## Place of living at time of referral

- ❖ With both of their parents (25%),
- ❖ With one of their parents and another adult (21%)
  
- ❖ With their mother only (29%),
- ❖ With their father only (9%),
  
- ❖ In hospitals or other institutions (9%),
- ❖ In foster homes (6%).



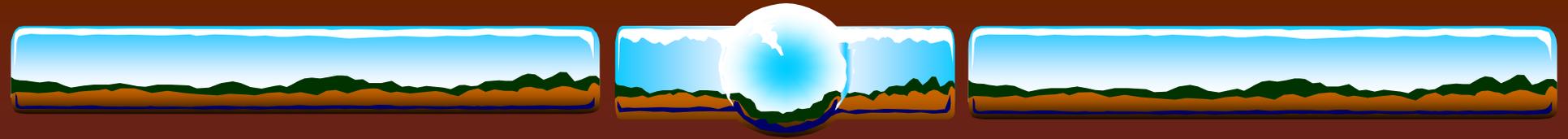
# Interventions

- ❖ Multisystemic Therapy was implemented as detailed in the treatment manual (Henggeler et al., 1998) with no major modifications to the original intervention model
- ❖ MST treatment was delivered by 6 MST teams, each with 3-4 therapists and a clinical supervisor.
- ❖ MST-treatment was terminated when the goals were accomplished in each case, with an average treatment time of 25 weeks (range: 7 to 38 weeks)
- ❖ Regular child welfare services (RS): long-term institutional placement, placement in a crisis institution for assessment and in-home follow-up, supervised by a social worker in their homes or other home-based treatment. App. 5% refused the services offered.



# Participants

- ❖ The original sample consisted of 100 participants with a post assessment retention rate of 96%
- ❖ In the earlier pre-post evaluation of these families, one site was unable to establish the procedure for collecting treatment adherence information from their participants (Ogden & Halliday-Boykins, 2004)
- ❖ It was therefore questionable whether MST was being implemented at this site at all, leading us to concentrate the follow up analyses on 3 of the 4 sites
- ❖ This narrows down the number of participants to 75; 48 boys and 27 girls with a retention rate of 92%.



## Out of home placement

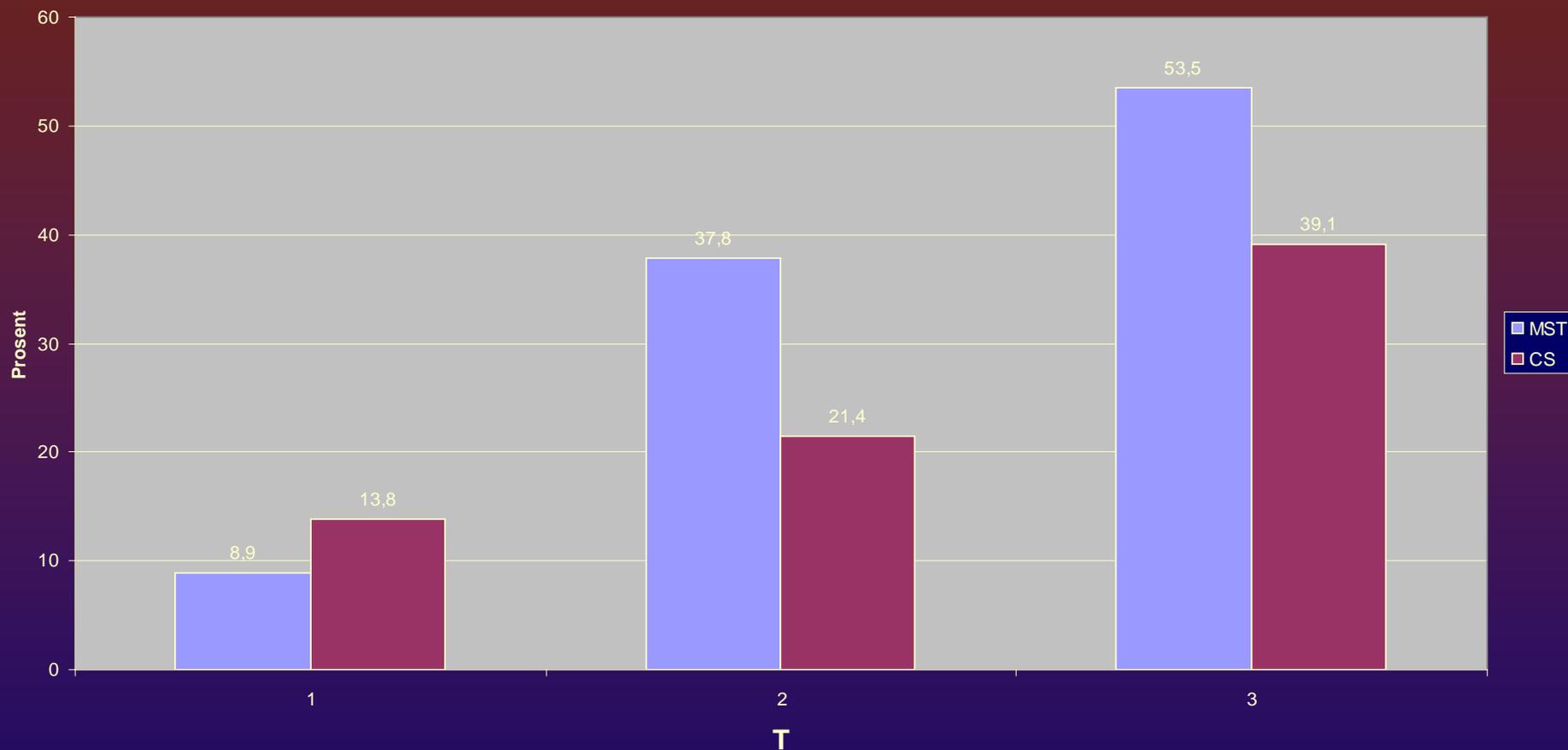
- ❖ MST youths were maintained in the home significantly more often than RS youths
- ❖ At follow up, 80% of the MST youths and 55% of the RS youths living at home at intake, had been living at home the past 6 months
- ❖ 79% of the MST boys were living at home compared to 37% of the RS boys, but there were no significant difference between MST and RS girls.



# Multi-informant assessment of problem behavior

- ❖ Adolescents receiving MST scored significantly lower on the Self Report Delinquency Scale (SRD) than did adolescents receiving regular services, after controlling for their scores at intake
  - ❖ Self Report Delinquency Scale (SRD) Effect size: 0.26
- ❖ Adolescents in both the MST and RS conditions scored significantly lower at follow-up than they did at pre-assessment on the Youth Self Report (YSR) – no treatment effect was detected
- ❖ The MST youths were rated significantly more positive by parents and by teachers at follow up
  - ❖ Child Behavior Checklist (CBCL) Effect size: 0.50
  - ❖ Teacher Report Form (TRF) Effect size: 0.68

# Percentage of youths scoring lower than the 90<sup>th</sup> percentile on CBCL in a normal sample





# Conclusions

- ❖ The Norwegian findings support the effectiveness of MST relative to the services usually available for youths with serious behaviour problems at three out of four sites
- ❖ MST prevented placement out of home to a greater extent than regular services
- ❖ MST was associated with decreased internalising and externalising problem behavior in youths
- ❖ A marginally greater caregiver satisfaction with treatment relative to RS was reported by the MST families at post assessment
- ❖ Differential MST treatment effects across sites at post treatment and at follow up, may be due to variability in the quality of treatment implementation.



# Characteristics of the Norwegian MST clinical outcome study

- ❖ The first controlled evaluation study (RCT) of MST outside North America and in a non-english speaking country
- ❖ One of the first trials not involving the developers of MST
- ❖ The trial was conducted by independent investigators who did not participate in the training and supervision of MST therapists nor in the actual treatment of families
- ❖ One of the first MST studies examining site differences in treatment effects
- ❖ Implemented as 'real world' treatment in a country without a juvenile court system (Child Welfare Services only).



# Setting new standards for intervention research

- ❖ Implementing empirically or evidence based programs with pre-defined intervention components
- ❖ Quantitative, controlled group designs
- ❖ Multimethod, multi-informant measurement
- ❖ The measurement of implementation quality and treatment fidelity
- ❖ Studies that might be included in international meta-analyses and Campbell Collaboration (C2) reviews.



# Controversies

- ❖ Characteristics of the treatment program:
  - ❖ Short term intervention with predefined core components,
  - ❖ Measuring behavioral change and monitoring treatment fidelity
  - ❖ Working through parents rather than directly with the youth
- ❖ Program myths:
  - ❖ Works only in family with resources
  - ❖ Too little flexibility
  - ❖ Superficial behavior change
  - ❖ Not taking the cultural or social context into consideration
- ❖ The post-modernistic critique: A positivistic, reductionistic and fragmented view on reality and knowledge.



## Facilitators at the national level

- ❖ Increased professional demand for empirically based methods to treat and prevent behavior problems
- ❖ 'Champion advocates' at the national, regional and local level
- ❖ A genuine interest and commitment at the political and administrative level - consistent funding
- ❖ Establishing a national implementation and research center and a national training program
- ❖ The ability of the program developers and stakeholders to motivate and inspire Norwegian practitioners
- ❖ Positive feedback from families and from the media.