Multisystemic Therapy (MST) Derby

Monitoring Report (February-September 2013)

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1. INTRODUCTION

This report describes the performance data of the Multisystemic Therapy (MST) team in Derby City since February 2013. Case examples are provided to illustrate cases where the MST intervention was successful and others where treatment was not completed.

MULTISYSTEMIC THERAPY

MST is an intensive family- and community-based intervention which targets the multiple causes of serious anti-social behaviour in young people. MST intervenes with the individual, family and all the systems involved in young people's lives such as peers, school, community, among other agencies. MST therapists are available to families 24 hours a day, seven days a week, over the phone. Weekly sessions range from 3-5 and focus on providing the family with the skills necessary to decrease young people's behavioural problems and to prevent out of home placements.

SETUP OF MST

The implementation of a standard MST team in Derby was the result of a second round of evidence based programmes. This was funded through Department for Education (DFE) with support from Department of Health (DOH) now NHS England. Derby was successful with a bid in 2011. This provided £250,000 of funding towards the service over 4 years to 2015/16. 50,000 was also provided to support the needs assessment work during 2011/12. The first MST team in the Midlands was established in Birmingham followed by Leicester, Coventry, Derby, and Derbyshire. Nottingham will start a team in November 2013.

The MST Derby team is delivered by Action for Children and commissioned by Derby City Council (DCC). Funding has been secured for 4 years to August 2016, subject to the successful delivery of the contract.

The process of creating a standard MST team in Derby started with the submission by DCC of a bid for DfE grant funding in the summer of 2011, and a Needs Assessment in January 2012. The Needs Assessment examined the demand for an evidence-based programme that would target young people, between the ages of 11-17 years, at the edge of entering into care or custody due to serious anti-social behaviour. The Needs Assessment demonstrated that, during the year 2010/2011, 232 young people entered the Youth Offending Service for the first time. That same year, approximately 79 young people were remanded into custody or given custodial sentences. A total number of 2,932 days was the time spent in custody or

remand with a cost of £436,217, and of £574,165 for the young people remanded to secure children's homes and secure training centres.

Young people, aged 11 or older, who went into care and likely to be targeted by the MST programme, cost approximately £3,674,752 to the Local Authority (LA), during 2010/2011. All costs included, DCC spent more than £4 million pounds, in 2010/2011, on placement costs for children and young people.

The MST programme is expected to cost approximately 350,000 pounds per year. The team with full capacity (i.e., full staffed with four therapists, each with a caseload of 5 families, and delivering interventions between 3-5 months), estimates to serve 40-50 families a year.

As part of the setup of the team, a steering group was created to deliver the project plan, to manage and to support improving the performance of the service against the baseline data within the needs assessment and within the MST Institute targets. The members of the steering group include representatives from the following services: Clinical Psychology within the Acute Trust, CAMHS within the Derbyshire NHS Foundation Trust, Youth Offending Services, Police, Education Kingsmead School Action for Children), Priority Families Coordinator and Performance and Improvement Team.

Similarly, a Multi Agency Resource Panel (MARP) was piloted to support referrals to MST and to other services for children at the edge of care or custody. A recent review of this panel took place in July 2013, where it was concluded that merging the multi agency approach with the placement panel would more effectively target children and young people on the edge of care

While the MARP was operational, 34 referrals were made of which 24 were found suitable for MST intervention and the remainder were not. Of the cases that were found suitable, 2 are currently under MST assessment for suitability and in the other two cases the parent did not want the involvement of MST. In one instance, the problem behaviours were no longer present and in the other case the parent was content with the support received from another service.

Reasons for cases not being accepted were: problem behaviours presented did not meet the criteria for referral to MST; parents thinking that MST was not appropriate as they did not agree with issues reported by other agencies; referral behaviours were not present at the time of MST suitability assessment; and young person presenting exclusionary criteria, such as suicidal ideation.

Two cases attended the panel to seek support other than MST.

The cases referred came from the following agencies: MAT (includes FIP; 26.5%), YOS (23.5%), Education (20.6%), Social Care (17.6%), CAMHS (8.8%), and Health (2.9%).

DELIVERY OF MST

In 2010, Action for Children submitted tendered to deliver MST in Derby city and were awarded the contract. Action for Children (AFC) is a charity that supports vulnerable and neglected young people and is committed to implementing evidenced-based models that reinforce the power of the family unit and enables parents to promote the well-being of their families. AFC also delivers two other standard MST programmes in Essex through the Social Impact Bond.

The MST recruitment process provided guidelines to select candidates that are a good fit to MST. In September 2012, the MST supervisor was recruited, and in January 2013 all MST therapists were confirmed in post. Finally, in February 2013, a business support officer was successful recruited.

MST is an evidenced-based programme where quality improvement and assurance is fundamental in holding the fidelity of the model, data on the ultimate and instrumental outcomes of the MST intervention is recorded at discharge (see benchmark data below). In addition, DCC requested the collection of follow-up data at 6, 12 and 18 months after the end of the MST intervention. The follow up data consists of gathering information on the three ultimate outcomes and assess family functioning through a questionnaire that was also filled out by the family at the beginning and at the end of treatment. A client satisfaction questionnaire is also gathered from the parent at the end of treatment. Feedback from some of the families receiving MST is provided in this report.

2. ANNUAL DATA SUMMARY - PERFORMANCE BENCHMARK

The national data was provided by the UK Network Partnership and is based on 411 cases discharged; of those 386 families received a full course of treatment. The data were collected between the 1st of April, 2012 and the 31st of March, 2013. The MST Derby scores report on a total of 11 young people served between February and August 2013.

Item	Performance Indicator	Green Target Range	Team Scores	National Average	National Range
A.	**ULTIMATE OUTCOMES DATA**				
1	Percent of youth living at home	>88%	81.8%	89%	60%-100%
2	Percent of youth in school/working	>85%	54.6%	71%	33%-100%
3	Percent of youth with no new arrests	>85%	72.7%	82%	53%-100%
B.	**CASE CLOSURE DATA**				
4	Average Length of Stay in days for youth receiving MST	100 to 140	133	137	101-167
5	Percent of cases completing treatment	>=84%	72.7%	86%	53%-100%
6	Percent of cases discharged due to lack of engagement	0-6%	9.1%	2.65%	0%-10%
7	Percent of youth placed	<=11%	18.2%	8.47%	0%-33%
C.	**ADHERENCE DATA**				
8	Overall Average Adherence Score	>=0.61	0.68	.70	.48-.81
9	Percent clients reporting adherence above threshold (> 0.61)	>=75%	47.4%	70%	41%-100%
10	Percent of youth with at least one TAM-R interview	>=90%	90.9%	90%	50%-100%
11	Percent TAM-R due that are completed	>=65%	71.4%	79%	43%-100%
D.	**CLINICAL OPERATIONS INDICATORS**				
12	Number of active FTE therapists	2.0 to 4.0	3.0	2.90	2.0-4.0
13	Average number of cases per therapist	4.0 to 6.0	3.49	3.36	1.20 to 5.57

Table 1. Performance benchmark data demonstrating the performance of MST Derby team and the average performance of teams nationally in contrast with target scores set by the MST Institute.

The Ultimate Outcomes, on Table 1, report on the results of MST treatment at the point of discharge. According to the data, approximately 82% (N=9) of the young people treated were still at home at the end of treatment, whilst 18% were placed out of home (N=2, one young person was placed in care and another one in custody). It is the goal of the team to increase the rate of young people living at home to match the targets set by MST Institute and, therefore, decreasing the number of children placed out of home. An analysis of one of the cases will be provided later on this report, from which conclusions can be drawn for future cases and to improve the team's scores.

Regarding the data on school attendance/occupation at the end of treatment, the team presented a rate of approximately 55%, indicating that, at the end of treatment, 6 young people were attending 21 hours or more of education. Of the 11 young people, 4 were attending Kingsmead education and 1 was not attending any school provision. The remaining young people were attending mainstream education (e.g., Derby College, Derby Moor School; Heanor Gate School; Lees Brook; and Murray Park School).

Data on school attendance has been a challenge experienced by other MST teams across the UK (71% young people in school versus >85% target set by MST Institute) as well. These values might represent, amongst various factors, differences in the school systems of the US and UK, with the latter having school provision offering less than 21 hours of education a week. Nonetheless, the MST Derby team aims at increasing the school outcome data for young people served by MST.

Finally, during the MST intervention, approximately 73% of the young people were not arrested (and charged) for new offences. Although a really positive score, which falls within the national rate, the target set by MST Institute is that > 85% of the young people are not rearrested and charged during the MST intervention. It is also important to add that in two cases, the offences occurred during the first weeks of MST intervention when assessment was being undertaken still.

The data on case closure demonstrate that the time of discharge of cases is of 133 days showing that the team has closed the cases in average at 4.5 months, as it is expected. The rate of young people completing the MST treatment was of approximately 73% as 18% were placed out of home and 9% (N=1) were discharged because the parent did not got fully involved with the MST treatment, despite persistent attempts from the therapist. The rate of young people completing treatment is expected to increase as the team develops more

experience with the model, as the buy-in from other agencies increases and the more the referrals are suitable, amongst other factors.

The team is reporting an adherence score of 0.68 which is above the threshold set by MST Institute and very close to the national average. It should also be noted that some teams in the UK report an adherence score of 0.48. Given the age of the MST team, the adherence score is good and indicates that the team is following the MST model namely following the MST principles and the analytical process. According to research in MST, adherence to the MST model predicts positive outcomes for the young people in the treatment. Moreover, the higher the adherence score the better the outcomes so the team will continue to focus on maintaining adherence and striving to increase this score further.

In terms of the clinical operations indicators, the team has three MST therapists and recruitment is undergoing for a fourth therapist. Each therapist has currently an average number of cases of 3. 5, which is below the MST target (i.e., 4 - 6 cases); but higher than the national average. It is usual for referrals into the team to take time for a new service and this is endorsed nationally starts. However, for the MST service to be cost effective staff need to be seeing clients at full capacity (5 cases per therapist) consistently. So far, eleven cases have been discharged and 9 cases are currently open. This places MST at the expected point of 30 cases in year 1.

3. SUMMARY and CONCLUSION

MST has been running in Derby since February 2013. Areas of note include –

1. As an evidence based programme outcomes will only be delivered if fidelity to the model is achieved. The MST adherence measure is high for a new service which is an indicator of long term outcomes being achieved. However, professionals also need to understand the cases which will deliver the best outcomes as well as the conditions of the model delivery. Further work is required with key stakeholders using case examples to refine this understanding and use the service most appropriately in the context of other services supporting families on the edge of care. The engagement with Social Care is fundamental to ensure that referrals on the edge of care are identified and referred in as well as being clear on pathways when safeguarding issues are highlighted.

2. Cost effectiveness relates to the team being used to maximum capacity. At this point the team appears to be meeting expectation for a new service overall. However, a low flux of referrals has occurred in the past months and attention needs to be given to the devising of a multi level action plan targeting frontline staff as well as more senior stakeholders within the Local Authority. The revision of the referral panel, Multi Agency Resource Panel (MARP), is undergoing without scheduled dates for accepting referrals. This calls for an alternative panel to be constituted while the MARP is potentially merged in another panel as achieving long term full capacity is related to the flow and turnover of referrals.

3. Education is one of the key MST outcomes. It is acknowledged the national target for this is difficult to attain, given young people may be excluded at the point of referral or on a limited timetable through the Pupil Referral Unit. For this reason it is important to baseline education measures both pre and post MST to evidence what impact the service has made.

4. Long term sustainability is linked to avoiding costs of care and custody. Over the next 3 months further work, informed by cost avoidance development work in Derbyshire is needed to evidence savings on services. This needs to align with similar work through Priority Families.

Appendix 1: CASE EXAMPLES

Following are three case examples to illustrate two cases where MST intervention was completed with success and another case where treatment was not completed because the children were placed out of home.

Case Example 1 – Cindy, age 14 years

Referring agency: Child and Adolescent Mental Health Services (CAMHS)

Background information:

- Single parenthood household composed of mum and Cindy;
- The child had been seen in CAMHS several times before with no progress. Cindy was thought to fit the criteria for ADHD and for Autism Spectrum Disorder; however, these were not formally diagnosed;
- Previous para suicide behaviours (i.e., took overdose of Paracetamol and in another instance tried to jump out of window at home);
- Was placed at the PRU (Pupil Referral Unit) in her school due to disruptive behaviour in the classroom.

Young person referral behaviours:

- Serious verbal and physical aggression towards mum (i.e., punching; slapping; name calling; and threatening)
- Refusing to attend school and exclusion from mainstream classroom
- Non compliance with mother's requests (i.e., refusing to go to sleep on time)

Overarching goals:

- Cindy to go to school every day until the summer holidays (for more than 6 consecutive weeks)
- Cindy to refrain from using any kind of physical aggression towards her Mum, for six consecutive weeks.
- Cindy to refrain from using any kind of verbal aggression towards her Mum, for six consecutive weeks.
- Cindy to go to bed every night by 10pm and get up in the morning when instructed to by her Mum.

Progress achieved towards overarching goals:

- Due to safety concerns around aggression in the home, the therapist and the mother devised a safety plan that would give mum the necessary skills to de-escalate conflict

in the house. Mum found that the best strategy was for both Cindy and mum to walk away when things got heated and, if appropriate, leave the house. This gave them both time to cool down and when they were reunited they would do a positive activity together, such as watching a DVD to maintain the warmth in their relationship.

- An assessment was conducted to measure Cindy's risk of self-harm and it was found that she was not at risk of serious self-harm. Nonetheless, a safety plan was introduced by mum to minimize the risk. The safety plan consisted on mum placing kitchen knifes out of reach of Cindy and keeping all household medication with her including taking it to work;
- Fit circles were completed with the parent on the referral behaviours and it was identified that there were no clear boundaries and expectations about acceptable behaviour neither were there consistent rewards for desirable behaviour or consequences for negative behaviour. Thus, a behaviour management plan with clear rules, and rewards and consequences was created. The rules were:
  1. Cindy must attend school every week day during term time, unless agreed by mum due to sickness or family commitments.
  2. Cindy must be respectful to her mum by not shouting at her, swearing at her or arguing back.
  3. Cindy will not be physically aggressive towards her mum. This includes not hitting her, pinching her, throwing things at her, pushing her, or any other action that could cause physical harm.
  4. Cindy will be in her bedroom every night by 8.30 pm and lights out and laptop off by 9.30pm on a school day, every night.

- Rewards were attached to each of these rules. These were mainly based on collecting points that could be traded in for a variety of material goods or activities with her Mum. Emma also introduced game nights every Friday evening and this allowed her to increase control and warmth at the same time. Cindy responded very well to the behaviour management plan and took pride in achieving her rewards.
- Towards the end of treatment, it was found that Cindy was following all the rules on the behaviour management plan except that there was an incident where her school attendance dropped three weeks before the expected termination of MST treatment. This was thought to be in relation to the fact that they were moving to another town. Nonetheless, in response to this mum removed all items of entertainment from the house until Cindy resumed her daily school routine.

- At the end of treatment, a sustainability plan was created between the therapist and mum to address future issues, how she could access support in the new town and generalize from the new skills she had developed.

Outcomes at the end of treatment:

- The family moved to another town a few weeks after the termination of MST. By that time, Cindy had started attending school again; there was no serious verbal and physical aggression towards mum, and Cindy was complying with mother's requests (i.e., going to bed on time, attending school, amongst other).

Total length of treatment: 16 weeks

Case Example 2 – Justin, age 16 years

Referring agency: YOS

Background information:

- Justin lived with this younger sister and her baby son;
- Justin had been in custody for approximately two months;
- At the time of referral, Justin was on a Youth Rehabilitation Order (YRO) with Intensive Surveillance and Supervision (ISS);
- Family history of involvement with criminal activities and incarceration;
- Education provision: Kingsmead School.

Young person referral behaviours:

- Seven convictions since September 2010 (i.e., conviction for criminal damage, twice for burglary, breach of peace, assault, and public order offence)
- Non compliance with YRO (i.e., breaching his order for not attending appointments)
- Verbal aggression at home (i.e., swearing, threats, name calling, shouting)
- Substance abuse problems (i.e., drinking alcohol and using cannabis)
- Not attending education

Overarching goals:

1. Justin will reduce all verbal aggression at home (i.e., no shouting, swearing, name calling or threats) for 6 consecutive weeks;

2. Justin will demonstrate school attendance and success (i.e., no unexcused absences, no removals due to disruptive behaviour and completion of school work and homework, and attendance record being above 85%) until the end of term in June;
3. Justin will follow house rules everyday (i.e., coming in on curfew time, getting out of bed on time, completing chores);
4. Justin will meet all requirements of his YRO and ISS (i.e., attending appointments, adhering to curfew and school attendance);
5. Justin will decrease association with negative peers and increase involvement with positive peers and activities (i.e., involvement with at least one pro-social activity or peer by the end of MST);
6. Justin to stop using cannabis and alcohol as evidenced by no behaviour or signs that he is under the influence of substances;

Progress achieved towards overarching goals:

- Being that safety is top clinical concern, MST intervention started by identifying causes of aggression and implementing a safety plan that would give sister the necessary skills to de-escalate conflict in the home. Sister asking Justin to take a time out to calm down, before proceeding to discuss the matter, was a strategy that worked well for the family;
- Since the de-escalation skills and safety plan were introduced into the home, Justin's aggression at school also decreased. In addition, other strategies that improved school attendance were: Sister increasing communication with school, reviewing Justin's timetable weekly with him, and following through with rewards/consequences for attending/not attending school;
- In regards to substance misuse, the main drivers identified to be causing the behaviour were: negative peers influence, unclear expectations, low parental monitoring and staying out late at night. Setting a curfew time permitted addressing all the above concerns with accessing drugs and having contact with negative peers. The family developed a retrieval plan to support Justin to achieve his curfew, which consisted of clarifying the steps the family would take to make sure he would be home on time.

  Not having an occupation was also driving the substance misuse; thus, once Justin started at college his time with negative peers reduced, he met new friends, and started a positive relationship with a girlfriend.
- An assessment of Justin's offending behaviour and non compliance with his YRO and at home showed to be driven by unclear expectations, ineffective consequences or

rewards at home, negative peer influence and low parental monitoring. A behaviour management plan (BMP) with clear rules, and rewards and consequences was implemented.

- Towards the end of treatment, it was identified that a barrier to the success of the BMP was that sister did not have the support of extended family. A family meeting was arranged during which the family decided that it would be best for Justin to move to his older sister's house as he would be closer to college, away from negative peers, and would have his own room.
- MST supported the family making the transition to the older sister's home by meeting with the family and facilitating communication between sisters of the positive progress and techniques learned.
- Sustainability plans were developed with Justin's older sister with the support of the younger sister. To support the family with these plans the YOS worker, who had been closely involved from the beginning, continued weekly contacts with Justin as part of his Youth Rehabilitation Order. These contacts will continue to be at Justin's home address and the YOS worker will remind the family to follow the sustainability plans, when necessary.

Outcome at the end of intervention (August 2013):

- Eight consecutive weeks of no verbal or physical aggression;
- Ten weeks of no reports of disruptive behaviour at school, or leaving without permission or unexplained absences, with an attendance above 85%.
- Three consecutive weeks following the new BMP implemented which included following household rules, attending school, being home on time, and no aggressive behaviour.
- No reports of Justin getting home under the influence for drugs for 4 consecutive weeks.
- No contact with negative peers for 6 consecutive weeks.
- For 7 consecutive weeks, Justin followed the requirements of his YRO.
- Justin had enrolled on the painting and decorating course at college to commence in September.

Total length of treatment: 23 weeks (includes supporting Justin moving to his older sister's house).

Case Example 3 – Heather, age 16

Referring agency: Youth Offending Services (YOS)

Background information:

- Single parenthood household composed of dad, Heather, and three siblings
- Heather had been placed in care a few times before involvement of MST including approximately 2 months before a referral to MST. The week MST was due to start, Heather was accommodated at Crash Pads for two weeks.
- Approximately 58 calls had been done to the police by the parent 8 months prior to the involvement of MST;
- Long history of involvement with social care since Heather was little;
- Attending 7 hours of education at Derby College.

Young person referral behaviours:

- Verbal and physical aggression in the home (i.e., kicking doors; breaking other family belongings; threatening family; yelling; refusing to comply with father's requests; name calling);
- Refusing to attend College
- Risk of going into custody due to convictions for criminal damage (in the home) and assault to family members; and risk of family breakdown.

Overarching goals:

1. Heather to be in her class by 9a.m. Monday, Wednesday, Thursday and Friday for a consecutive period of 4 weeks;
2. Claire will eliminate all physical aggression at home for a consecutive period of 4 weeks
3. Claire will eliminate all verbal aggression at home for a consecutive period of 4 weeks

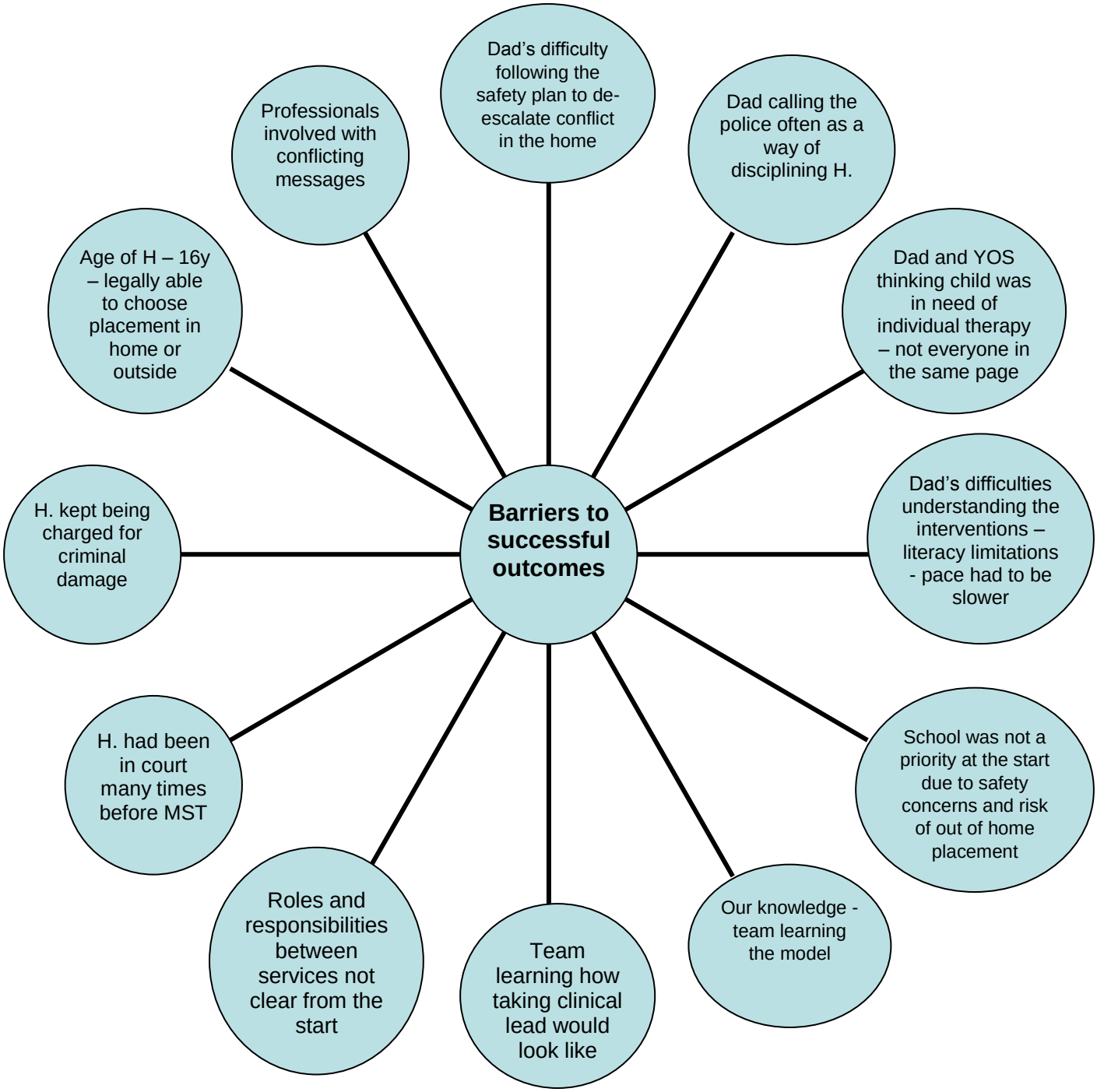
Progress achieved towards overarching goals:

- Interventions aimed at reducing safety, due to high conflict in the house, and reducing risk of out of home placement. A great deal of work was done to have dad follow the safety plan and de-escalate conflict in the home.
- Work around increasing school attendance and improving relationship school-parent, lead to Heather increasing attendance during some weeks.

Total length of treatment: 14 weeks (Heather was remanded into local authority's care at week 15 of treatment)

Barriers to successful outcomes in this case:

(See below)



Case analysis:

Amongst the various barriers demonstrated above, the following were highlighted as the main barriers to the success of this case:

- Dad's difficulty to understand and implement interventions namely de-escalation plan and contacting on-call for support. This made progress slower as therapist had to use visual aids and slower pace to support dad.

- Dad believing that Heather needed individual therapy as she was the one who need to change her behaviour not him. This belief caused dad to not be consistent in implementing the safety plan. Instead he would call the police as a strategy to calm Heather down and discipline her, although he was encourage by the therapist to call the on-call as soon as conflict started.

  The view that Heather needed individual interventions was shared by other professionals to whom dad would off-load, becoming more challenging to motivate dad to follow through with the interventions suggested by the team.

- The age of the child played a role in this case in the sense that the referral behaviours had been presented for a long time. This example sheds light on the importance of identifying and referring children sooner in their lives;

- Previous history of being in care several times, including for a short while right before the MST intervention started, shows that parents struggle more to assert their parental role when children had been in care. It is important to have realistic expectations regarding treatment outcomes when children have been in care before.

- Roles and responsibilities between professionals were not clear from the start causing conflicting messages to be provided to the parent and vice-versa. The team was still learning how to assert the clinical lead and make sure of consistency in the interventions and to get the parent's buy in. To define the roles and responsibilities between services at the start of the treatment is fundamental to manage realistic expectations about MST, what it means to take the clinical lead, and how services will collaborate and communicate during the MST intervention;

- There were limited interventions with the school system as priority was given to decreasing family conflict and risk of out of home placement.

Appendix 2 CLIENT SATISFACTION FEEDBACK

Below are comments from some of the families who received MST intervention.

1. How did your MST therapist help you and your family?

- *My therapist was very open and helpful with parenting skills and with myself.*
- *My therapist helped with communication, dealing with the behaviours of all members of the family, and also my (son's) education and safety.*
- *My therapist has helped our family by making us all understand my son and taught us new ways of handling and dealing with most of the problems in our family.*
- *I am so glad that we had (therapist's name) to help us! My mum and I don't fight anymore.*
- *[Therapist] helped to control anger and walk away before the situation escalates.*
- *She [the therapist] helped because we are closer and we don't fight anymore (young person's perspective).*
- *I was able to gain my confidence in my ability to take control of bad situations and calm aggression down.*
-

2. Which strategies you learn that you will keep using in your family?

- Everything that my therapist and my family talked about.

- The 1 to 5 (de-escalation tool).

- Rules and rewards and the de-escalation, and keeping calm

~ To walk away/go for a drive to separate us both so we can calm down

~ All of them!

~ More patience, be firm in retaining control, at the same time keeping calm.

3. How was MST different from other services you received in the past?

- Excellent.

- I did not have from other services.

- It was more helpful to me as a parent rather than working with the children.

~ IT was constant and personal.

~ [Therapist's name] has been very helpful, very supportive and has always been there for us both. Excellent therapist.

~ They came to our house, there was an every week visit and she gained my trust which made me want to talk (young person's perspective).

~ My problems had been going on for some years before MST became involved. They were my lifesaver! Had an excellent, understanding therapist. I was no longer alone dealing with all the problems my son and I were having. Thank you to MST and my therapist for helping me to cope and to learn new strategies to deal with wider problems.