Vocal Beats Evaluation – February 2017 to March 2018

1 Background

Royal Brompton & Harefield NHS Foundation Trust is the UK's largest specialist centre for the treatment of heart and lung disease. Working from two sites, Royal Brompton Hospital in Chelsea, West London, and Harefield Hospital, near Uxbridge, the Trust has an international reputation for the expertise of its staff, high standard of care and research success. Experts at the Trust help patients from all age groups who have heart and lung problems and provide some of the most complex surgery and sophisticated treatments available anywhere in the world.

Rose Ward and Paediatric Intensive Care Unit

The paediatric department, Rose Ward, is a national referral centre for children offering a full range of diagnostic and surgical interventions from prenatal stage to 16-year olds. Hospitalised children face a myriad of complex challenges which can be further affected prolonged and/or recurrent stay in a hospital.

The Trust's Play Service supports patients and their families during their stay. They aim to ensure that every young person has the best possible hospital experience and provide a range of fun and social activities in the Play Room/by the bedside. In addition, the Chelsea Community Hospital School provides the National Curriculum for all young people during their stay.

rb&hArts

rb&hArts is delivered through Royal Brompton & Harefield Hospitals Charity with 3.4 (FTE) staff members. It is charitably funded to bring the benefits of the arts to support in and outpatients and the local communities surrounding each hospital. We aim to increase levels of wellbeing, enhance the patient experience and improve the healthcare estate through the arts. It first began in 2002 and now, in a typical year, runs 250 workshops with over 5,000 people taking part. The core creative programme includes:

- three weekly Singing for Breathing workshops for older people living with COPD
- two musicians in residence playing for adults providing six hours of live music per week
- temporary exhibitions and permanent collection displays across the Trust and
- Crafternoons, which offer participatory arts and crafts workshops eight hours per month in public and clinical settings

Vocal Beats

Access to high quality music-making is a key activity from which hospitalised children are often excluded. Vocal Beats addresses this gap by providing opportunities for inpatients (and their parents) to enjoy group music activities and songs, a service which many other families take for granted/can easily access in the community.

Vocal Beats is an innovative three-year music education project for hospitalised young people aged 0-to-16 year olds. It is devised by rb&hArts and lead music facilitators, and delivered in partnership with the Trust's Play Team who provide day-to-day supervision of the activities, a daily briefing/handover for musicians as well as referrals

for the project. Music activities are organised and delivered by five professional highly skilled musicians with significant experience of working in complex healthcare settings (Heather McClelland, Stac Dowdeswell, Grace Savage, MC Zani and Bellatrix), supported by a Project Assistant, Conni Rosewarne.

In summary, the project has successfully demonstrated that access to high-quality music in hospital:

- increased levels of happiness, relaxation and distraction for participants of all ages and their guardians
- provided opportunities to learn new music skills and increased levels of confidence in young people
- enhanced the patient experience.

2 Delivery – February 2017 to end of March 2018

Vocal Beats provided 48 beatboxing workshops (144 hours) and 108 musicmaking/singing workshops (432 hours), delivering 576 hours of provision for young inpatients throughout the year. The musicians brought a range of expert music skills to the project, facilitating the delivery of high-quality personalised creative music activities for young people in hospital. This included bedside singing, creative-music making, music technology, beatboxing workshops, lyric composition and vocal coaching for young people with Cystic Fibrosis (based on Singing for Breathing). Activities were delivered on a 1-2-1 or small group basis, often with parents actively taking part. Interventions were very diverse, ranging from a few moments to sing one song, to longer planned participatory music activities.

The project used musical instruments, donated by Brompton Fountain and the UK Ukulele Kids Club, the latter of which provided opportunities for young people to continue to learn new music skills beyond the Trust after discharge. We also created several resources for teaching the basics of beatboxing; a "homework" sheet and sign-posting to other music provision, beyond the hospital.

3 Outcomes and Evaluation methodology

Through music, Vocal Beats aimed to support young people and

- 1. Improve levels of wellbeing
- 2. Increase levels of music skills
- 3. Increase levels of confidence
- 4. Enhance the patient experience/community spirit on Rose Ward.

r&hArts used a variety of evaluation methods to capture outcomes including Arts Observation Scales (ArtsObS¹), Youth Music's Musical Assessment & Development Scales, feedback from young people, guardians and clinicians, case studies as well as photography and film. Musicians and the Project Assistant captured data at the end of every session throughout the delivery period. Data was collated and analysed throughout the year.

¹ Fancourt, D. & Poon, M. (2015) Validation of the Arts Observational Scale (ArtsObS) for the evaluation of performing arts activities in healthcare settings

4 Findings

Outcome 1 – Improved levels of wellbeing for young people in hospital

There is existing evidence as to the power of music to transform the hospital experience for young people and music has been used effectively to enhance relaxation, provide distraction and help them to cope with their hospital experiences/pain or stress of medical procedure. To measure this, 383 artsObS were completed over the delivery period. Data analysis showed that the project successfully promoted young people's wellbeing, particularly by increasing levels of distraction and relaxation during their stay:

- 304 instances (80%) of music interventions where young people were observed to be positively distracted by music from their surroundings
- 307 instances (80%) of music interventions where young people were observed to relax during a Vocal Beats session
- 11 music activities (singing and beatboxing) happened directly during a medical procedure/intervention.

Further observational data and case studies showed high levels of engagement and enjoyment after participating in the project:

"We sat in the centre of the ward and the parents gathered with their babies. The babies were very interested in the music - they smiled, moved and swayed in rhythm to the sounds. The parents danced along with the babes in their arms. Parents laughed and danced - and the babies were interested in each other too", Musician observation.

Outcome 2 - increasing music understanding and skills in young people

ArtsObS showed that 73 young people aged 0 -11 years (31% of participants) were observed to move rhythmically in time with the music. Young people were frequently reported to have made eye contact with the musicians, danced, sang, played instruments, performed or made other physical actions/sounds to the music. Activities included active music-making, beatboxing with kinaesthetic movements to emphasise beat, rhythm and pitch as well as the association of sounds to symbols.

Recorded data for 70 young people (6 to 18) showed that 37 young people (53%) had learnt at least one new music skill:

- 25% learned new beatboxing skills typically this included an introduction to BTK sounds, rhythms, sounds, split samba rhythms learning call and response improvisations, speaking and clapping.
- 11% learned new breath management techniques through vocal coaching and singing - vocal warmups, stretching, and diaphragmatic exercises. Vocal coaching and support for young people living with breathlessness and/or wanting to learn new breath management techniques was also delivered, particularly for young people with cystic fibrosis.
- 25% learned new skills in ukulele playing holding the uke, strumming, rhythm, basic chords and chord progression.

Ella's mum said: "Seeing Ella take to the ukulele so enthusiastically has been such a revelation. Seeing her absorbed in practising her new skills really the lifts experience away from "being in hospital". It has opened a whole how positive perspective for us to take home....To be continued"

Outcome 3 – Increasing levels of confidence

Being in hospital or living with a long-term chronic condition can affect a young person's confidence and self-esteem. Data collated showed that learning music has helped young people overcome feelings of shyness, increasing their confidence. Of the 70 young people aged six to 18 who took part in Vocal Beats, analysis showed:

- 27 young people (or 39%) were observed to have overcome feelings of shyness during the project and that they felt more confident afterwards.
- eight Young Musicians Development Scales were completed (6 to 10 yrs) demonstrating that taking part was positively affecting confidence
- 184 of all young participants (80%) were observed to be happier after vocal beats
- 22 young people reported that they felt good about themselves after an intervention.
- six Musical Development Scale completed (11-16 yrs) demonstrated that the project is supporting wellbeing qualitative data shows high levels of enjoyment.

Musician Observations further demonstrated the cumulative positive impact on patients who experience multiple sessions:

"R² led the session with musical beat games. She was very confident with things she had already learnt from Vocal beats. We managed to expand her skills further with another time keeping game. She was making requests for things she'd seen before".

Outcome 4 – increased feelings of community spirit on Rose Ward/PICU

Vocal Beats created a sense of fun on Rose Ward for young people and guardians, contributing to positive feelings of "community spirit". Musicians observed the breaking down of social barriers and the development of peer support through music for participants as well as guardians/parents. Friendships were created through the singing of favourite songs in shared spaces and improved levels of sociability between parents/guardians.

Completed ArtsObS demonstrated:

- 156 (68%) of participants were observed to have increased their levels of happiness
- 182 parents (48%) were observed to have increased their levels of happiness
- 73% of activities showed that music had a positive effect in the ward.

² Name has been changed at the request of parent.

Vocal Beats provided opportunities for families to join in music-making together, facilitating shared moments and bonding between young people and their parents; individually and together. These findings are strengthened further by feedback:

"The music sessions break the monotony of ward life. My daughter stayed for 8 months on her first admission. She found the music and singing very soothing and would really engage in each session. Today she is 18 months old, she participates in actions and recognises her favourite songs. It makes it all the more comforting an environment for her". Tony (Callie's Mum)

Reflecting on what worked

- Musicians approached delivery with flexibility and had the skills/confidence to respond directly "in the moment" to meet the needs of young people and their families. This could be looking up ukulele chords on YouTube and quickly learning new repertoire to play a request, playing familiar songs, or giving a beatboxing demo during a procedure to distract a young person.
- The project was young-person centred and designed to find ways to personally engage them in music activities of interest to them and support their progression in learning. Musicians understood and followed Trust/NHS protocols – and worked collaboratively with clinicians, particularly the Play Team, as part of a multi-disciplinary team to support person-centred musicmaking.
- The Play Service support for the project and the briefing prior to the start of every session alerted the team to referrals as well any issues/concerns. They also "lined up" young people for the team – and supported very vulnerable patients take part in music-making.
- Participants often said "no" to taking part and this was accepted by the team, who would move on to another patient. Some participants felt unwell and/or unable to take part. Some were simply not interested. Going forward the project will try and explore and find out what more can be done to address this.
- Parents actively encouraged their children to take part by willingly taking part themselves. Many young people felt very shy and required encouragement to take part. Parents' enthusiasm for the project was integral to high levels of participation. Clinicians taking part and their encouragement also acted as another route to increase young peoples' levels of involvement.
- Young people, themselves energised by the music/musicians, often acted as a catalyst for others to take part.
- Vocal Beats provided opportunities for families to join in music-making together, facilitating shared moments and bonding between young people and their parents, individually and together.
- Giving "control" to young people to decide what and how they engage was vital in supporting music skill development in a clinical environment. The Team

regularly encountered young people with excellent music skills and responding to their needs was key.

- The musicians are professional performers and often inspired young people by demonstrating their skills. Many beatboxing demos turned into active learning sessions.
- Leaving "homework" and resources/signposting supported young people to find out more at the end of session. Many young people completed their homework

 which was a great way to start the second session.
- Using digital technology facilitated a different engagement with the project. Young people were encouraged to write their own lyrics and compose music, which could then be rehearsed, performed and recorded.
- Creating both formal and informal music learning activities which can be extended if there is time or cut short if needed means activity can flex around participants' other needs.
- Using interactive techniques (like call and responses, games etc) provided an opportunity for young people to slowly build confidence – and it worked with young people of all ages. It also encouraged young people to not just take part, but take control and lead sessions.

Case Study

C is a fun, music-loving and energetic nine-year-old boy. He is also a wheelchair user with cystic fibrosis and requires oxygen through a mask. He was a patient on Rose Ward on two separate occasions in 2017, each of several weeks. During his time at Royal Brompton he participated in weekly beatboxing and ukulele lessons with the Vocal Beats team.

C has a genuine love of music and would show Stac (Music leader) YouTube versions of songs he had heard her singing on the ward, along with other songs he wanted her to sing. He was given a ukulele (from the UK Ukulele Kids Club) for weekly lessons so he could continue to practice throughout the week. Cody is very creative, constantly making things, crafting and painting whilst he was very engaged in the music.

During music sessions C wanted to compose the lyrics to a song about a dog on a train. With encouragement C worked his way through writing a short and catchy piece. He showed an understanding of how to form couplets by choosing to name the dog Mr Pop as the name needed to rhyme with the end of the previous line (speckled spots) and to have three syllables.

With these lyrics Vocal Beats developed a melody with chords for the musical backing. C liked the chords of a nursery rhyme Stac had been singing earlier so a melody was developed over that. He was fully engaged in the session, voicing opinions with confidence and without hesitation. C appeared to have gained

knowledge, new skills, confidence in his writing capabilities and a sense of achievement from the session.

He was enthusiastic about hearing the song again and enjoyed dancing and singing along to it as Stac played. He particularly enjoyed making the dog noises, which were his idea and took his ventilation mask off to be better heard. Zani (music leader) asked him if he would like to record the song the following week so that he could have his own copy. His mum gave us permission and C was very excited. He began clapping his hands and dancing in his bed!

"Vocal Beats are lovely and caring, even when C was sedated they still came in and played a song for him. They even brightened my day up. When Cody was beginning to feel better they wrote a song together and learnt it every week, then asked me if they could record it. Cody was so excited he told everyone. We even gave beatboxing a go, which was fun too.

"Sometimes Cody would request that they would play a certain song for him and if they didn't know it they would go away and learn it for him and sing/play it next time they saw him. They always went above and beyond to make him happy, and I feel a happy child is a healthier child so I feel C recovered quicker with the help of Vocal Beats. So thank you so much"– C's Mum

"I love Vocal Beats coming to see me. We wrote and recorded a song. They even nicknamed me CODESTAR! And they played me and mummy 'Jolene' (Dolly Parton) and changed the name to Cody for me and mummy. I love them and miss them. They are fun!" – C

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