



University of
Salford
MANCHESTER

**The RNCM Medical
Notes Project at the
Royal Manchester
Children's Hospital
Outcomes for
children, families,
musicians and
hospital staff**

**FINAL REPORT
July 2012**

This research was commissioned by
the Royal Northern College of Music
and funded by Youth Music



Foreword

This research report provides compelling evidence of the benefits of employing skilled Music for Health practitioners within healthcare settings. The research team recommend that this work should be financially supported by the NHS.

Plans are now in place to embed the Music for Health programme within Central Manchester University Hospitals, supported by the Chairman and Director of Corporate Services, and underpinned by the continuing advocacy of all those involved in the Medical Notes Project.

Holly Marland, Music for Health Programme Lead

Making music offers a shared experience. The ripples of this shared experience can continue for a long time as a joyful, creative experience.

Lilli Brodner-Francis, Medical Notes Project Manager

Contents

Page

Acknowledgements 3

The Research Team 3

RNCM Medical Notes Team 4

Background to the Study 5

Research Design 10

Findings 15

Children, young people and their families 13

Play staff perspectives 20

Medical Notes team perspectives 24

Discussion of Findings 31

Conclusion 33

Key Messages 34

References 35

Appendix 1: Interview prompts 38

Appendix 2: Information sheet 39

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- Thomas Sherman, Cecily Smith and Ruth Spargo, Medical Notes Trainees
- Holly Marland, Knowledge Exchange Manager, Royal Northern College of Music
- Lilli Brodner-Francis: Music for Health Project Manager, Royal Northern College of Music
- Frances Binns, Consultant Play Specialist, Royal Manchester Children's Hospital
- Susan Fairclough, Manager, Therapeutic Play Services, Royal Manchester Children's Hospital
- All the Play Specialists & Therapeutic Play Leaders at Royal Manchester Children's Hospital

The Research Team

Alison Cavanagh is a Lecturer in Children and Young People's Nursing and a member of **CYP@Salford** research team. A Registered Children's Nurse, she has a particular interest and experience in working with children with long term conditions and in collaborative working. She has personal experience of using music within children's clinical settings. She has clinical links within community services in the local area.

Dr Joan Livesley is a Senior Lecturer in Children's and Young People's Nursing and is published in the field of children in hospital, multi-agency working for children's services and evidence-based practice. A Registered Children's Nurse, she undertakes research in partnership with children and young people and leads on this in **CYP@Salford**. She has a clinical background in services for children in hospital and the community.

Dr Tony Long is Professor of Child and Family Health. He leads **CYP@Salford**, a multi-professional research group focused on research with children, young people and families. A Registered Children's Nurse, his personal research programmes are in impact of early intervention in health and social care services for children and families, parental coping, and quality of life outcomes for children and families after treatment for acquired brain injury.

Dr Robin Dewhurst is Senior Lecturer in Music and Head of Performance (Jazz/Popular Music). He has developed an international reputation for his work as a composer/arranger, musical director, performer and educator. Robin has been a key player within the Music Division since 1988. He has been professionally active in film, television, radio, theatre and concert music and has worked with some of the finest professional soloists and ensembles in their specialist areas of expertise.

Maria Grant is a librarian/researcher with an academic background in information science and over 25 years experience working in health information. She has undertaken a wide range of systematic reviews in the health and social care sector and recently published a typology of review types and associated methodologies. She is the Editor of the ISI listed *Health Information and Libraries Journal*.

THE RNCM MEDICAL NOTES TEAM

Ros Hawley, clarinettist, is Music for Health Training Officer at RNCM, playing a significant role in developing its innovative Music for Health programme. Classically trained, Ros studied workshop skills at the Guildhall School of Music and Drama. Interest in Klezmer music and improvisation was followed by study of the music of the Middle East and North Africa as part of a performance Masters degree in the University of London. Keen to explore the interactive opportunities of music-making, Ros uses her skills in a range of contexts, including working with children with complex communication needs as Musician in Residence at the Seashell Trust, as lead artist for Jessie's Fund, and as tutor for the University of Manchester Klezmer Ensemble.

Mark Fisher, guitarist, bassist, bouzouki player & composer, works as musician in educational, residential and healthcare settings. He is, alongside Ros Hawley, Music for Health Training Officer at the RNCM and Musician in Residence at the Seashell Trust. A keen improviser and composer, he specialises in composing music to create a sympathetic environment for participants, whether hospital patients, service users, trained professional staff or musicians, to relax, interact together and develop their creative skills. Mark's work has resulted in a number of commissions for compositions and installations regionally and nationally, using a participatory, inclusive approach with service users and participants, many within the mental health sector.

Thomas Sherman, a professional musician, works in health and social care settings throughout the UK, including prisons, hospitals, secure units, children's homes, hospices, day centres and special schools. With specialist training and broad experience in using music in these settings to animate, engage and enable participants to interact with music and musicians in order to improve their wellbeing, he believes passionately in the power of co-creative music-making.

Cecily Smith studied cello at RNCM. During this she completed a module in Music and Health as part of the undergraduate course, and since then has had an active interest in the field. Cecily is classically trained, and has enjoyed exploring other areas of music through the project. In her work outside healthcare settings Cecily teaches, performs solo and in chamber music and ensembles and works with orchestras around the UK.

Ruth Spargo is a freelance cellist currently based in Gothenburg, where she is a member of the Swedish National Orchestral Academy. She graduated from the Royal Northern College of Music in 2008, and completed her Masters there directly. Her work covers a broad spectrum of performing; chamber and orchestral, teaching and outreach work. It was during her studies at the RNCM that she first trained with Music for Health musicians and she plans to continue training and working in this field throughout her future career.

Holly Marland is a professional musician, recently-qualified music therapist, and the RNCM Knowledge Exchange Manager, connecting its research activity with the outside world. She established the RNCM Music for Health programme in 2005 in response to a burgeoning global interest in the relationship between music, health and wellbeing. In 2009, she was awarded a Winston Churchill Fellowship to explore different uses of music with older people in New York & Paris. Holly performs weekly with Radio 4's Daily Service Singers, is a member of the Accordes early music trio as a singer, recorder-player and lutenist, and is learning the Kora (West African Harp), having been awarded a prestigious Finzi Scholarship to study in The Gambia in 2012.

Lilli Brodner-Francis joined the RNCM Music for Health team as Project Manager in 2010. She graduated from the University of Vienna with an MPhil in Languages and Literature (German & Spanish), and holds a postgraduate diploma in Curating & Learning in Museums and Galleries. She brings to the role of RNCM Music for Health Project Manager her experience in teaching languages along with an expertise in creating and delivering learning and outreach programmes, and developing, managing and delivering participatory arts projects in galleries and museums, including Yorkshire Sculpture Park & Manchester Art Gallery.

SECTION 1: Background to the Study

In the UK, children and young people¹ account for 19% of the total population. Each year, 20% of children attend accident and emergency departments, 700,000 have at least one overnight stay, and 300,000 attend for day surgery. Many children admitted to hospital have complex healthcare needs with a significant proportion requiring highly technical interventions (NHS UK 2012, Office National Statistics 2003). Some children have many repeated admissions to hospital while others live in hospital for extensive periods (Social Services and Public Safety 2007).

Impact of hospitalisation on children

Even short periods of hospitalisation are known to have adverse effects on children and young people, their siblings and their families (Wright et al 2007). Specific factors that heighten these risks include age (with younger children far more likely to suffer adverse effects of hospitalisation), the duration of stay in hospital and spending time alone. Some researchers have estimated that as many as 60% of children suffer from negative impacts such as nightmares, separation anxiety, aggression towards authority, and an increased fear of hospitals and doctors (Roberts 2010). Whilst these negative effects are thought to diminish over time and to have largely disappeared by 2 weeks, some researchers have noted much longer impacts for some children. Children discharged from intensive care units may exhibit signs of post traumatic stress and some show diminished intellectual and social functioning and possible immunological incompetence (Kain et al 1999). Children in hospital are particularly vulnerable because of their illness, their stage of physical, intellectual and emotional development, and because they have so little control over what is happening to them (Coyne & Livesley 2010).

There is good evidence to support the use of music with hospitalised children to mitigate the impact of hospitalisation and

illness and the associated physical and emotional stress, distress and pain. In addition, giving children access to the opportunity for play and self expression is an established right (European Association of Children in Hospital 2001) and the use of music is an effective means of enabling non-discriminatory participation (Hendon et al 2008, Lefevre 2004). Music can alleviate anxiety and isolation through the creation of positive, shared experiences. In addition, musical interventions with children in hospital are reported to benefit children's clinical outcomes (Staricoff and Clift 2011).

Music for Health – Medical Notes Project

The Royal Northern College of Music has delivered Music for Health activity for over five years in a number of children's settings including Booth Hall Children's Hospital, Royal Manchester Children's Hospital (Pendlebury)² and the Seashell Trust. The core Music for Health programme is funded by the Esmée Fairbairn Foundation and the Royal Northern College of Music (RNCM). The Medical Notes Project was funded by Youth Music and brought 77 additional music-making sessions to the Royal Manchester Children's Hospital (RMCH) in Central Manchester University Hospitals NHS Foundation Trust (CMFT) between April 2011 and January 2012.

The RNCM Music for Health Medical Notes project's overall aim was to improve children's and young people's psychological and social wellbeing during their time in the RMCH by providing opportunities to engage in co-creative live music sessions with Music for Health practitioners. The numerous benefits that children, their families and hospital staff gain from engaging in live music-making have been widely recognised, yet the current provision at one the largest children's hospital in the UK is very limited. The Medical Notes project addressed this by providing more children with regular opportunities to participate in music-making.

¹ Hereafter, the term children is used for children and young people

² The two former children's hospitals were replaced by the Royal Manchester Children's Hospital (Central Manchester University Hospitals NHS Foundation Trust - CMFT)

The project was designed to deliver specific outcomes:

- Improve participants' psycho-social wellbeing through collaborative music-making
- Create a musical community at the RMCH bringing together children, their families and staff
- Initiate, support and develop participants' long-term engagement with music
Contribute to the evidence base demonstrating the impact of music in children's hospital settings
- Strengthen the emerging Music for Health workforce through new training and CPD opportunities.

The project had five musicians (two lead musicians and three trainees) and was co-ordinated by the RNCM Music for Health Project Manager, supported by the RNCM Knowledge Exchange Manager.

The project was tailored so that the trainee musicians would benefit initially from skills development workshops, observations and close mentoring from the lead musicians, allowing them to move towards a more independent level of practice as the project progressed. The lead musicians also had the opportunity to develop their own artistic practice and were allocated time to develop new and existing relationships at the hospital. The two lead musicians undertook a total of 360 hours of activity between them and the three trainees undertook a total of 438 hours of activity. Approximately 154 hours out of this total of 798 hours was spent actively making music within the hospital, allowing time for planning, preparation, workshops, relationship building, debriefing and reflection.

All the musicians benefited from continuing professional development (CPD) in the form of two four-day artistic exchanges with invited guests Kevin O'Shanahan from Music Alive in Ireland and Andrew Hodson from Seed Studios, Trafford. They also showcased the project at a number of public events organised by the hospital including Autism Awareness Day, the 50th Anniversary of Action for Sick Children, and the Patient Experience Marketplace.

The musicians were encouraged to reflect on their work both independently through written texts and collectively during debriefing sessions. Trainees kept reflective diaries throughout the project and the lead musicians compiled a series of reflective texts including case studies of sessions, evaluations of the artistic exchanges and their role as trainers, tips for trainees and a summary reflection on the project as a whole.

Each session at the hospital typically lasted for two hours in a ward or communal area depending on the response from participants and the specific demands and dynamics of each environment. Most of the sessions were delivered by at least two, often three musicians playing together. At the beginning of the project, Ward 76, an Elective Treatment Centre (ETC), day case and short stay admissions for treatment and surgery unit, was chosen as a new area within which to develop musical activity. Wards 77 (renal, urology, plastic surgery, cleft lip and palate, ENT, dental), 78 (spinal, orthopaedic and neurosciences), 83 (neurological rehabilitation working with children with problems of brain function following birth, accident or operation), and the High Dependency Unit and Intensive Care Unit were areas where the RNCM had already established or initiated music sessions before the project, and where music activity would be further developed through the project. As the project progressed, the music-making activity was rolled out to other areas, including Ward 85 (tertiary medical: children with respiratory and heart conditions) and other day case areas, as well as long and short-term areas. In addition, the musicians performed short, lunch-time concerts in the main hospital foyer and ran making music workshops for hospital staff and young people.

The aim of the musicians' work was essentially to take a child-centred approach to making music. The musicians wanted to place children's wishes, needs and musicality at the centre of music-making, whether in one-to-one or small group sessions. They took into account each person's abilities, circumstances and capacity to consent. They were aware that children might not want to engage in music or might be unable to articulate verbally

their consent, and they always respected this. Above all else, the intention was to work in a sensitive and responsive manner, considering at all times the needs of all participants, whether active or passive.

Musical Toolkit

Interactions would take place in ward/bay areas and by bedsides as appropriate. Musicians would move around the ward during their session and work with a number of patients and families individually, or sometimes involving several patients and families within a bay area. Workshop sessions would be delivered in specific areas and patients invited to attend, in a drop-in arrangement. Sessions involving musical play would occur by the bedside or in playroom areas where groups of children could interact together and percussion instruments could be used more freely, or in sensory rooms as part of relaxation activities.

Musicians would take a flexible and responsive approach, using a variety of strategies:

- Self-composed neutral instrumental music reflecting a range of styles, moods, emotions, riffs and rhythmic patterns, played for patients and families in ward and bay areas and by bedside
- Sourced songs, including traditional African songs, folk songs, lullabies and rounds (collected by the musician team), complementary to the hospital environment – calming, gentle, using simple repetition of phrases and melody by bedside
- Well-known children's songs and nursery rhymes; action songs providing opportunity for family interaction and participation
- Child-centred musical play using carefully selected percussion instruments appropriate to the hospital setting (care taken with quality of sound, volume, portability and infection control)
- Children-led activities using percussion with musicians responding on their own instruments to child's direction using percussion instruments or physical gesture: fast, slow, start, stop, etc.
- Rhythm-based work using words as a

starting point to create musical pieces: favourite colours, foods, etc

- Creative and compositional work: musicians facilitating the development of creative choice and ideas of patients leading to the creation of short pieces of music; recordings made for patients to keep
- Sound recording workshops in specific areas of the hospital (such as Teen Zone) to create recordings and instant CDs

Evidence from the Literature

A review of recent literature was undertaken to ascertain what, if anything, was already known about similar musical interventions to those used in this project with children, young people and their families in hospital, in the UK and other countries. Staff at the CMFT library undertook searches on the British Nursing Index, CINAHL, Cochrane Library, EMBASE, MEDLINE and PsycINFO databases for English language papers published between 2000 and 2011. Using a combination of free text and indexed search terms, evidence was sought on the impact of music or music therapy on children's mental health within a hospital setting. The evidence from the literature generally is reported here, with more specific details of those studies that included children in music-making and musical interventions.

Creative activities and therapies such as art, music and play therapies have been shown to exert beneficial impact on children's experience of hospitalisation as well as positively contributing to clinical outcomes and the overall ward environment (Staricoff and Clift 2011). The value of play and enabling children to express themselves during their hospital admission is well-established. A three-year Swedish study of 22 children explored the opportunity of 6-9 year olds to express them-selves through play during their hospital stay (Wikstrom 2005). Each child visited the play room between the hours of 8am and 12midday. Play therapists made written notes of the children's words and actions after each visit. The study discovered feelings of fear, longing and powerlessness, and it demonstrated the possibility of using expressive arts as a communication medium.

n particular, musical interventions have been shown to impact positively and directly on hospitalised individuals' experiences of care. A study of the effects of playing music intermittently to a group of 57 patients aged 15-69 scheduled for elective functional endoscopic sinus surgery (FESS) or turbinectomy was undertaken in Hong Kong in 2005 (Tse et al 2005). Using the Pain Verbal Rating Scale (VRS), measurements of pain intensity decreased significantly over time when compared with a control group. The experimental group took fewer oral analgesics and had a lower systolic blood pressure and heart rate than the control group. Tse et al suggest that music therapy can be an effective non-pharmacologic intervention in the management of postoperative pain.

Similarly, a prospective, crossover randomized controlled trial of 29 inpatients (aged between 8 and 94 years) in a burns unit in Ohio, United States of America reported that patients' subjective ratings of pain decreased significantly when they practiced music-based imagery (MBI) before and after dressing changes, and music alternate engagement (MAE) during dressing changes (Tan et al 2010).

Whilst both of these latter studies recruited children, it is not possible to disentangle the findings that relate specifically to them from the overall study. However, Colwell et al (2005) engaged a music therapist to assist hospitalised young people between the ages of 7 and 18 years in music composition using the computer program Making More Music. Using the Piers-Harris Children's Self-Concept Scale, they reported no significant difference between the total scores pre and post-test. However, significant differences were noted on the children's Intellectual and School Status (INT) and Physical Appearance (PRY) scores (Colwell et al 2005). Still, evidence of the beneficial effects of music has been more apparent in studies of premature and full term neonates.

Perani et al (2010) reported that the processing of pitch, melody and harmony of music required specific neural systems with right-hemispheric brain activity. In their study of 1-3 day old newborn infants, excerpts of western tonal music and altered

versions of this music were played. Functional MRI measurements recorded predominantly right-hemispheric activations in the primary and higher order auditory cortex, indicating that newborn infants are sensitive to tonal key changes and differences in consonance and dissonance in the first few postnatal hours and days.

Willingness to incorporate music into the hospital environment was the subject of a cross-sectional questionnaire survey of attitudes and expectations of clinical staff caring for premature infants in the paediatric intensive care unit (PICU) at Wake Forest Medical Centre, USA (Kemper et al 2004). Kemper et al found that attitudes were significantly associated with prior musical training (70%), and with experience and profession (nurses or physicians), and they reported a 2:1 preference for recorded rather than live music. This stated preference for recorded music runs counter to evidence indicating that live music can have a more significant and sustained impact on patient outcomes.

In 2006, Arnon et al hypothesised that live music would be more beneficial to preterm infants in the Meir Medical Centre neonatal intensive care unit, Israel, when compared with recorded music. Over three consecutive days, 31 stable infants (post-conception age of ≥ 32 weeks and weighing $\geq 1,500$ grams, were randomly played 30 minutes of live music, recorded music or no music in groups. Whilst the recorded and no music groups showed no significant effect, at 30 minutes post live music, neonates had a significantly reduced heart rate and improved behavioural scores. Elsewhere, Kemper et al (2008) reported that in a study of eight infants (average age 36.4 weeks), exposed to 45 minutes of live harp music at the same time for three consecutive days had enhanced weight gain compared with usual care or 45 minutes in a quiet room.

Live harp music was also provided to a convenient sample of 31 unplanned or emergency admissions (18-86 years, mean age 48 years) in an acute care medical-surgical unit in the West Virginia University Hospital, United States of America (Sand-Jenkin et al 2010). Musical interventions lasted approximately 20 minutes with a second musical intervention offered to those

who remained in hospital for between 24 and 48 hours after the initial session (n=20). Although pulse and diastolic blood pressure showed no change following exposure to the live music, significant differences were noted in terms of respiration and systolic blood pressure. Muscle tension ratings were significantly reduced and participants reported that the music significantly lessened their levels of pain and anxiety. Although two of the participants made specific requests for a familiar hymn to be played, Sand-Jecklin et al conclude that the benefits of live harp music related to the slow relaxing tempo and rhythm of the music played rather than the availability of choice or familiarity. In considering whether this finding is transferable across a wider age span, Walworth compared the effects of live music with preferred recorded music for teenagers (from 15 years) and adults when undergoing a magnetic resonance imaging (MRI) scan. There was a statistically

significant difference ($p < 0.05$) in the respondents' perception of the MRI procedure from those exposed to live music. Scans were completed in a more timely fashion with a smaller number of repeat scans required due to accidental movement and fewer requests for breaks during the scans.

In summary, current evidence reported here pointed to beneficial outcomes for children and their families. This includes reduced pain, reduced anxiety, increased relaxation indicated through physiological measurement and concordance during investigative procedures. There remains some uncertainty regarding hospital staff preference for live or recorded music and the factors implicated in this. That said, it should be noted that the research reported here is limited by small populations, single-centre studies and conflation of results by groups.

RESEARCH DESIGN

Research Aim

The aim of the research team was to establish the immediate and enduring effects of the RNCM Music for Health Medical Notes project on the experiences of children and young people in the Royal Manchester Children's Hospital.

The Research Objectives were:

- to establish a steering group with key stakeholders including musicians, project leaders and hospital staff to develop a schedule for the research which met the requirements of all parties;
- to elicit the immediate and enduring effects of the project through consultation with children, young people, parents and staff;
- to use a raft of engagement strategies to ensure inclusiveness of children, regardless of their age or ability;
- to adhere to high ethical and professional standards throughout the research process;
- to observe a minimum of eight Medical Notes sessions at the hospital.

Research Design

It was agreed that the research design would need to accommodate complex responses to music while retaining an essential simplicity such that the findings would be accessible to all participants. The study was undertaken using qualitative methods which incorporated field-work, observations and interviews. This enabled an imaginative, flexible and collaborative approach.

Children and those who work with them in hospital are members of a therapeutic community and it is important to create sufficient space in any impact-evaluation to include all views while privileging the voices of children. For the purpose of this study key principles from the UNCRC (United Nations Convention on the Rights of the Child) (1989), the World Health Organisation (2010) and the European Association for Children in Hospital Charter (2001) provided a robust framework of guiding principles for

the research. In particular we upheld children's best interests, their development and protection, engaged carefully in non-discriminatory practice, and sought to mitigate physical and emotional stress.

Data Collection

Data was collected from October 2011 through to February 2012. This included field-work observations, conversations with children, their families and members of staff, and individual and focus group interviews with project staff, play specialists, musicians and trainee musicians. In addition, an evening musical workshop was undertaken in the Teen Zone to elicit the views and opinions of young people and to garner their views on whether or not the musical interventions could or should be rolled out to other areas of the hospital. Three young members of the hospital Youth Forum (all currently transitioning to adult services) and two young in-patients attended the workshop.

Fieldwork Observations

Fieldwork observations were undertaken by three members of the research team (AC, JL, RD) in six ward areas including the high dependency unit from October to December 2011. Independent field-work observations were recorded during and on completion of the visits. Most often the researchers observed from a distance, taking no part in the music-making activity. However, when invited to do so by the children, they joined in. This enabled global observations of the impact that the music had on the children and others in the environment as well as more in-depth and intimate observations of the impact that the music had on the targeted children and their families.

It was also important to incorporate the views of children in this study and this required an approach that would be responsive to their needs. In addition to the field-work observations, the children, their adult visitors and members of staff that were present were engaged in conversations that focused on their experiences of the musical interventions to determine what had worked well or less well for them. Children were engaged using an adapted mosaic

technique (Clarke 2004) and a raft of strategies including the use of finger puppets, post-card evaluations and drawing activities. In combination, these strategies were successful in enabling the development of social relationships with the children and their families while maintaining a notable difference between the researchers, musicians and the other adult workers that were present. Although this approach quickly engaged some children, there were occasions when others declined to work with the research team when invited to do so. This was sometimes indicated by them simply turning or walking away, or avoiding eye contact and continuing with other activities. Although rare, their wish to decline was always respected.

This approach was an important element of the study as it provided a framework to help the research team navigate the delicate balance between inclusivity and unintended coercion. The overall result was that the views and opinions of a diverse group of children were elicited.

Focus Groups

Three focus groups were undertaken with the healthcare play practitioners and hospital play specialists, including the manager of the therapeutic play services and Consultant Play Specialist, and the musicians and musician trainees to establish their perspectives on what worked well and what worked less well (see appendix 1 for example interview).

* **Play Specialists:** As the play staff were instrumental in guiding the musicians in the ward areas they were invited to attend a focus group. The manager of the service, consultant play specialist and three ward-based play staff accepted the invitation to take part.

* **Musicians:** The lead musicians and trainee musicians requested separate group interviews. In keeping with their requests a further two group interviews were undertaken. The first was attended by two experienced Music for Health musicians who were employed by the RNCM to provide training and support for trainee musicians within health care environments. All three Music for Health trainees attended the second focus group.

* **Managers:** In addition to the group interviews, an individual interview was undertaken with the Project Manager to establish her views and opinions on the intended outcomes for the Medical Notes project and to establish her aspirations for future development and implementation. An informal interview was also undertaken with the Knowledge Exchange Manager at the RNCM, who had a strategic overview of the Medical Notes project.

A similar series of open ended questions were used by the evaluators for all interviews with some slight adjustment.³ This meant that the experiences of each group could be determined and that any similarities or differences between the groups could be compared. All recorded conversations were uploaded to a secure password-protected on-line repository.

Documentary Analysis

* **Reflective Diaries:** Throughout the project, the musicians had kept written reflective accounts of their experiences. Their reflections were uploaded to a shared password protected repository (Drop Box). These reflective accounts were analysed as part of the study.

* **Feedback:** In addition, feedback post-cards created by a graphic designer to appeal to children were distributed in ward areas and the children and their families were asked to complete these by writing their thoughts or drawing pictures to give an indication of their thoughts and opinions. Collated qualitative comments from children and families collected by one of the Play Specialists were also made available to the research team.

Data Analysis

Content analysis was first applied to each element of the data (Elo et al 2008). Two members of the research team (AC, JL) analysed the interview data and field notes independently, before meeting to agree on the core categories. A third member of the research team (RD) undertook an independent content analysis of the reflective dairies.

³ See Appendix 1

Synthesis of all data was then undertaken to ensure that the outputs were meaningful. As children and young people often have unique insights that differ from those of adults who share similar experiences, the findings are presented from the unique perspective of the children, their families, hospital staff and musicians to ensure they are useable by the RNCM, RMCH, the musicians and the play staff. We anticipate that this will, at least in part, ensure that the children's views are given prominence and remain central to the recommendations and any subsequent actions taken by the musicians and hospital authorities.

Bespoke Music Workshop: Consultation with young people

We wanted to establish young people's views on the accessibility, the responsiveness and the potential of Music for Health, and explore with them ways in which they would, if at all, roll out the project to other areas of the Trust for children, young people, and adults. Once the initial analysis of data was completed, we arranged a bespoke music workshop in collaboration with members of the steering group, which was exclusively aimed at young people and in which the young people participated and then were invited to

write and draw their views on paper table cloths around the room.

The workshop enabled us to test out the findings from their perspective. Too often, if sought at all, the views of young people are limited to those services that are offered to them. Yet, young people have unique perspectives on matters that impact on the lives of other children and adults. In addition, we sought their views on the possibility for any future evaluation or research work such as this to be led and undertaken by young people. This work will inform future research bids to undertake longitudinal studies in partnership with young people and other key stakeholders.

Ethical Issues

Ethical approval was secured from the University of Salford Research Ethics Panel. Permission to undertake the research was granted by CMFT. An information leaflet was produced and available on all clinical visits outlining the purpose of the study. All children and young people who agreed to participate in activities received a small, appropriate gift as a token of appreciation for their involvement. Pseudonyms have been used throughout this report to protect the identities of participants.

FINDINGS

Children, Young People, Young Adult and Family Perspectives

In this section we present our findings from the observations and conversations with children, young people and members of their families during and after the music-making sessions.

Rules of Engagement

As discussed later in the findings of this study, both trainee and experienced Music for Health musicians exercised a great deal of skill in their approach to engaging the children. However, it was not only the musicians who were skilled in using engagement strategies. The children also exhibited skilled engagement strategies to indicate their willingness to accept or decline the invitation to be involved in the music-making sessions. There was a discernible interplay, often based on non-verbal communication strategies, between the musicians, the children and their families. Of note was that many of the children, regardless of the extent of their communication capability, exhibited considerable communication skills that went beyond the more usual medical notion of seeking and giving consent through verbal and written means.

Direct Approaches

Many of the children made direct approaches to the musicians. They would jump off chairs and beds to approach them. Others would follow the musicians down ward corridors or ask them directly to play in their cubicle or the play room. These direct approaches were easy to interpret and such requests were often easily met. Regardless of activity and ambient noise levels, the sound of the live music somehow transcended other more usual hospital sounds. Children in other areas of the ward would hear the music and, if able, they would arrive at the doorway of the cubicle in which the music was being played, usually holding the hand of their adult visitors, eager to find out what was going on. Some of these children would enter the cubicle and become involved while others preferred to listen from a distance. It was notable that the children making direct approaches were often mobile or accompanied by an adult.

However, it is important to remember that as many of 30% of hospitalised children will be without an accompanying adult at any time (Roberts 2010). Those who are alone and those who are not mobile are more susceptible to feeling isolated, bored and sad (Livesley 2011). The young people that attended the music workshop had explained this:

'Coming in, sitting here and doing nothing makes us feel sad - It's not very big here either. There's only a shop downstairs to go to. [It] does your head in...' Aisha, 16

'I'm always by a crying baby in hospital [or] a baby being sick next to me for two hours. I feel shut out...' Esther, 17

An important part of the music-making offer was the notion of taking the music to children cared for in hospital wards. Evaluators observed that the musicians 'walked the wards,' glancing into cubicles and making on the spot assessments about whether or not to enter. On the face of it, this tentative approach could be construed as overly cautious, yet it was these mechanisms which enabled the musicians to reach in to those children who were bed-bound, confined to their chairs or those without supportive adults. Still, children that had previously experienced the music-making sessions would often voice their delight, by shouting 'yeah,' or demonstrate their glee when the musicians entered, by smiling, jumping for joy or clapping their hands. Some children became very excited while others, perhaps those with no previous experience of making music in hospital, would simply watch before deciding whether or not to become more actively involved.

Hesitant Approaches

Some of the children would watch, seemingly intrigued by the instruments, the music and the musicians. As they became more trusting of the musicians they would simply point at the instrument they wanted to hear or the hand-held instrument they wanted to hold or play. Other children would

make cautious, hesitant movements. These were read by the musicians, who responded by mirroring the children's body language. The children's skill in indicating their wish to be involved was matched by the skills of the musicians who seemed expert in reading these signals. Sometimes they were careful to move slowly, attentively gauging the children's responses as they played. If the children turned away they would retreat. If the children seemed unsure, sometimes indicated by them 'peeping' from the comfort of their parent's knee, the musicians would approach slowly, and offer a hand held instrument.

On one occasion a young boy was playing in the playroom. The musicians were playing for the other children. One of the musicians came slowly towards him and placed a small shaker inside the garage with which he was playing. Without looking at the musician, he picked up the shaker and placed it outside the garage; a clear indication that he did not want to become involved. His decision was accepted and there were no further attempts to persuade or cajole him to become involved.

Some of the children were at times reticent to become involved; but there appeared to be a difference between those who were shy or unsure, and those who did not want to join in at all. On another occasion a young boy sitting in a multi-bedded cubicle watched the musicians carefully. When he was approached he hid his head on the table, then he turned towards his mother, clinging to her in what seemed like an attempt to completely hide himself. The musicians were sensitive to his reticence and moved away. As they did so, he turned back and continued to watch them, listening intently.

Other parents respected the musicians' cautious approach.

'I think he first felt uncomfortable because they were all focusing on him, but he became more comfortable...and they engaged him...they fed from him...'
(Mother of Azam, 12 months old)

'It's nice to play a tune first, not to get them involved straight away, but getting them involved is brilliant...' (Father of Anthony, 7)

On a different occasion a young boy of 8 or 9 years was sitting in his wheelchair. He had a gastrostomy (tube into his stomach) and was being fed via an electronic feeding pump. He smiled widely when the play worker arrived with the musicians. As usual, the musicians took out their instruments and began playing a simple riff together. The boy looked relaxed and was smiling. However, when one of the musicians took a small bag with hand percussion instruments and laid them out in front of him his smile quickly faded and his shoulders tensed. Still, he tentatively took an instrument and began to join in the rhythm. Although he continued to look anxious (indicated by a grimace and tense body posture) he soon relaxed and seemed to enjoy the experience. As on other occasions, the musicians followed his pace and rhythm. As he became aware of this he directed the music and appeared to relax still further.

During another observed session, a young girl put her hand out to touch the clarinet. The musician instinctively moved forward so that she could reach. This type of interplay between the children and musicians was witnessed on many occasions. In part, it seemed that the children were clearly engaged by the instruments, some of which, it became clear, they had never seen before.

Another young girl, Emily, joined in the singing, when the song finished the musician told her that her singing was 'beautiful' before asking her if she would like to start the next piece of music. She agreed and started to play a hand held instrument. When this piece of music finished, she turned her hand held instrument over and stated 'I can make a different sound'. Again, the musicians intuitively followed her rhythm, allowing her to lead them. She moved from being in the audience, listening to the music to becoming the director, the conductor and eventually the composer. When she had had enough, she simply said 'finish now', and they did. The musician put her clarinet down and the young girl passed her instrument back before turning to watch the television. This type of musical interaction was repeated several times with Emily during her hospitalisation and a musical relationship developed, the legacy

of which became apparent when she was admitted later, to the intensive care unit.

Another child that had been excitedly involved shook his head to indicate that he wanted the music-making to stop. Again his signal was interpreted and his wish respected.

Calming Children

It seemed that for many children the music was a conduit between their normal, everyday world outside the hospital and the strange, sometimes hostile and noisy environment of the hospital ward. The observations revealed that the music had a notable, calming effect on some children, particularly babies. Many of them were observed to go into a 'trance-like' state while the music was being played.

Gavin was 6 months old. He had been admitted for a second round of extensive surgery. He was post-operative and his movement very restricted. He had to lie on his back and had both hips externally fixated with wires. His parents were not allowed to pick him up or move his position in the cot. The musicians entered his room and sang and played 'Hello Gavin, nice to see you today'. The effect was almost immediate; Gavin smiled, then became very still and seemed dazed by the music. His parents were clear about his response.

'It hypnotises him, and it sends me to sleep as well...' (Gavin's mother)

'He goes into his zone, he's hypnotised by it...' (Gavin's father)

The music had a similar effect on other children. One young boy of about 3 years was sitting at a table placed in the middle of a 6 bedded cubicle. As the music started, he stopped colouring and turned to watch. He became very still. His visitor pointed this out to the other people in the cubicle, 'Look, he's gone into a trance,' she said. This 'trance-like' state response from younger children and some infants was witnessed repeatedly, but has not been reported elsewhere.

Providing Emotional Release

Gavin and his family had been through a very traumatic experience. His mother had

received bad news regarding his condition and was extremely upset and it had been necessary to call his father back to the hospital from a business trip to Europe. The family described themselves as *exhausted* and *emotional*. They explained that music played a very important part of their lives. They were a musical family, and, although just 6 months old, Gavin had a busy social life as his mother explained.

'He's outside all the time...the house is always full of singing...He goes to a singing group with his sister and he loves it when the instruments come out...' (Gavin's Mother)

She went on to explain why she thought music in hospital was important:

'For a case like Gavin's, he's been lying there like that for over a month now, so anything that gives him a little bit of variety is excellent...' (Gavin's mother)

However, the impact of the music went beyond entertainment:

'It's nice for us to know that there is extra care [when we're not here]. You feel he's being cared for a little bit more...' (Gavin's father)

It is well-established that parents worry about leaving their children alone in hospital (Livesley 2011). These worries are often based on seeing other children who are without visitors struggle for attention. This is a particular concern for the parents of children that are in hospital for longer periods of time, those who have frequent admissions, and those whose parents have other caring responsibilities that impact on their ability to visit. For Gavin's parents, the music not only relaxed him, but they also reported that it was 'quite calming for him...'

While this has been reported elsewhere (Nilsson 2009), no study has reported a link between music-making and parents feeling that their child is being cared for properly, and that they matter to the staff. Yet in this study this was an important aspect of the parents' perceived quality care for their children in hospital. For Gavin's parents it also provided a welcome change. At the end of the music session they were laughing with Gavin. The musicians had read and responded to the mood when they entered his cubicle and they had changed

Parent

When our little one was very sick, she wasn't aware of the music, but we could hear it in the background. It had a very calming influence on us as a family.

From a family point of view it's nerve-racking when you have a young one in hospital. It's very frightening. The music has such a calming influence, it was just beautiful.

I would like to see more of it. It was absolutely beautiful and incredibly calming. I think it's a very positive experience.

It created a whole sense of peace and tranquillity in the madness of a health care environment.

the mood for the better. They had provided Gavin's parents with an outlet for their emotions. Not only this, the music-making also appeared to reduce tension and lighten the overall mood. The beneficial impact of making music and its potential to humanise an otherwise strange environment has been reported previously (Staricoff and Cliff 2011).

The music-making sessions also provided an emotional outlet for parents. On a number of occasions, parents listening to the music would cry. They expressed their surprise at this but they all agreed that their crying was a good thing. The music had provided a platform from which they could express their emotions. Many of them requested more music. One mother felt so strongly about the benefit of the music she asked if she could fund-raise to keep the initiative going.

Occupying Children

The music also helped to occupy the children and their parents which helped them to cope with the long days in hospital. Two young people commented that:

'When you feel like [you] want to go home [and you] can't stand hospital any longer; music can help you feel calmer (9 year old Sarah)

'It can help people feel calmer...' (10 year old Rachael)

Parents agreed.

'I think it's absolutely beautiful... When our little one was so very ill, we could hear it in the background and it was so calming, incredibly calming, a very positive experience. It created a whole sense of tranquillity and peace within the madness of the health care environment.' (Mother of 2 year old Florence)

'From a family point of view, when you have a young one in hospital, it's very frightening. The music has such a calming influence. I would like to see more of it: there should be music in a waiting area or in-patient facility because it has a positive effect on everyone.' (Mother of 7 year old Betty)

Other parents and grandparents agreed that the children benefitted from the music for health initiative. Arthur, aged 4 years, was a

regular ward attendee. His mother was at work but his grandmother had come to spend the day in hospital with him. She was telling the musicians that he was often very bored and difficult to occupy. His behaviour became challenging and there was very little available to keep him occupied. The tiny playroom was insufficient and he spent many hours in his single cubicle. One of the musicians, working alone, entered his cubicle and asked if he would like some music. He nodded, she sat on the floor, and they began to make music together.

'Me have a go,' he said, pointing at the clarinet.

She offered him the yoyo shaker and they began to play together. He held the shaker in his right hand, this had a cannula inserted, kept in place by a bandage and splint. After the session his grandmother was amazed. She explained that he hated needles, and that he constantly guarded his right hand. He would not use it for anything; yet, as soon as the music started he seemed to forget about the cannula as he joined in.

'He's never moved that arm, that arm has just been like that [guarded] he's so protective of that.'

The session went on for some time, the musician following Arthur as he led the tempo. Throughout the session Arthur was immersed in the music. He looked through the bag of hand held instruments, taking each one out in turn, making as many different sounds with each as possible. He tried to blow the percussion instrument and laughed out loud at the sounds he made. Arthur also asked for a drum and when he was told that the musician did not have one he improvised and made his own. He started to conduct the musician, tapping slowly, and then speeding up, and the musician expertly followed his lead. Arthur appeared to be fascinated by the sound of the notes, notes with rests in between, and the melody. The music finished when a doctor comes to examine Arthur, and Arthur spontaneously turned to the musician and said *'You're my friend'*.

This was a clear indication that she had gained his trust, and gaining the trust of hospitalised children is essential, but difficult

to achieve (Coyne et al 2010). His grandmother explained her surprise and delight that he had been involved.

'...I would never have thought he would have taken to that... she was so nice with him, she was doing it with him, interacting. They should have it more often. When you're stuck in a room 24/7 you become completely bored. All you're doing is shouting at him all the time...' (Arthur's grandmother).

As already noted, the parents and children concurred that taking children's minds off what was to come and managing their boredom was an important aspect of improving the experience of children in hospital.

'It [the music] makes hospital better; it makes you less bored.' (Rupert aged 7 years)

'It [the music] breaks a very long day in hospital up...' (Mother of 12 months old Olivia)

'It [the music] takes their mind off what they're waiting for, the operation this afternoon 'cause he's in and out all the time.' (Father of Peter aged 7)

While the children that were directly involved in music-making with the musicians seemed to benefit the most, the reach of the music was such that other children, seemingly in the distance, also benefitted. One such occasion was witnessed in the ETC. This area had been described by the musicians as particularly difficult to work in due to the high turnover of children, the short time that some were there, and the general high levels of activity in the area. During one session, a young boy sitting in the corner of the ETC (some distance from the musicians) was having his intravenous cannula removed from his hand. He had not been directly engaged by the musicians as they were playing for another child. As he left the cubicle with his mother she said, *'That really helped him have his cannula out.'*

Easing Discomfort

On one ward, staff were working with an infant with multiple congenital abnormalities. He had a cleft lip, tracheostomy, and gastrostomy feeding tube. His respiratory effort was compromised when he was in an

upright position but he was suffering from repeated chest infections and the ward staff were trying to get him used to sitting in a recliner chair. Each time he was placed in the chair he became very distressed and began coughing. The play lead, staff nurse and student nurse were having a conversation and looking for a mobile to place over his cot in an attempt to distract him. When the musicians arrived the physiotherapist asked if they would play for him. The play leader joined in with the music-making and selected hand-held percussion instruments for him to play with. As the music began he became transfixed, reaching out for the hand-held instruments. The staff were surprised as he had not reached out for an object before.

The physiotherapist commented on the change in his mood.

'He was quite grumpy to start with but he has settled quite nicely: he's comfortable now.'

The student nurse who was feeding him via a tube commented that:

'He feels different: he is cheerful. He has a lot of secretions and is quite grumpy, but the feed went down really smoothly. If you hadn't come in he would be crying...'

The staff were amazed when they realised that he had managed 20 minutes in his chair without becoming distressed: longer than ever before.

Another parent expressed his joy when the musicians played a range of music for his baby son. Like Gavin, Charlie, 3 months old, had external fixators on his hips so his movement was severely limited. His father explained that his other children enjoyed music and that his wife was an accomplished musician. Music was an important part of their everyday family life. Charlie had really enjoyed the music, laughing and becoming excited. When the musicians left his father said:

'Thank you so much. Are you coming back again? My wife would love to hear that, she'd love to see it. It does make a difference [live music] rather than being off the telly. It [telly] messes with your senses doesn't it?'

Other children and parents explained that the music would inspire them to re-connect with their instruments. One mother said:

'You've inspired me to get my clarinet out. I achieved a grade 8...'

Yet another young person explained that the music felt *'fresh'*. For other children, the music had tangible benefits. One older boy was playing Monopoly with his father and appeared to pay little attention to the music. However, once the musicians had left the cubicle he said:

'Yeah, it was kind of; what do you call the thing? It made me concentrate...because it was soft.' (Michael 14 years)

It seemed that the music offered an alternative to the more usual harsh noises that dominated the ward environments.

During one observed session, the musicians received a request to work with John, an older boy in a high dependency area. John had a degenerative neurological disorder. He had some movement in his arms and hands but little else, and he was unable to talk but could smile and was known to thump his chest to communicate enjoyment. His vision was distorted, but he had learned that if he lifted his left eyelid with his hand he could see more clearly. He was visibly pleased to see the musicians and indicated this by thumping his chest.

The musicians offered John a range of hand-held instruments; he took each one in turn when offered, examined them and proceeded to throw them on the floor until he was given the one he wanted. He joined in the music-making shaking the hand held instruments. He also used the beat of his hand on his chest to conduct and lead the musicians. As he beat faster, the music quickened, when he slowed, the music slowed.

John seemed fascinated by the clarinet and repeatedly tried to reach out to touch it. The musician moved closer to him so that he could. In time he pushed the clarinet away and started to thump his chest again, leading the music. It meant that he had a means of communication and for a short period he had more control over what he could do. During the session his parents had telephoned and were pleased to learn that the musicians were spending time with

him. It seemed that, as with Gavin's parents, they felt that this indicated he was being looked after and cared for in their absence.

A similar event was reported by the grandmother and staff working with Emily, a young girl aged 7 years. The musicians had worked with Emily on a number of occasions. This admission had been arranged as she needed to have extensive surgery on her jaw. This involved inserting wires. She was admitted to the intensive care unit for close observation. Her grandmother described her as stoic and explained that Emily never complained. Even when in significant pain she would simply state that she was *'OK'*. However, during times of stress (including pain) she tended to become very quiet and withdrawn. The musicians had played music for Emily and this had given her the opportunity to dance and sing. She had enjoyed this so much that she had asked the musician for a hug. Her grandmother explained that she *'loved to dance'* and that she had come to life while dancing.

Following surgery, Emily had been admitted to the intensive care unit and become quite withdrawn. The musicians had responded to a request to visit her and this seemed to transform her experience. She had become far more responsive, and, with help, had been able to hold a shaker and join in. Her grandmother explained that it was during the music-making session that she had smiled for the first time and that this had been a great relief for her family as it signalled that she was recovering.

Emily went on to compose songs for her mother and grandmother. She would dance during subsequent music-making sessions on the ward. She seemed to find a great deal of solace during the music-making sessions. In a similar way to that described for Gavin and Charlie, the music brought Emily's outside world into the hospital environment, and for short moments in time she was able to use the music to become more normal. In particular, Emily's response to the music demonstrated the potential that music has to help children cope with adverse aspects of their hospital experience.

Distraction

It was also notable that the children and their parents thought that music-making was an important and effective means of distraction. This became apparent when the musicians worked with Paul. Paul, aged 7 years, had been admitted to the ETC as a day case patient. He was listed to go to theatre to have an investigation under anaesthetic. However, he had resolutely refused to have a cannula inserted. Without this he could not be anaesthetised and it was thought that he would miss his slot and have to be re-listed at a future date. His father, who had taken the day off work to be with him, explained that Paul had a fear of needles. He explained that he, too, was terrified of needles. On learning that Paul may have to be re-listed at a future date he was furious and frustrated. He could not understand why the hospital staff would not simply hold him down while they inserted the cannula; but they refused to do so knowing the harm that such action could cause. (Royal College of Nursing 2011).

The anaesthetist had responded by contacting the play staff to see if they could help to distract him. In turn, the play staff asked the musicians to play for Paul in the treatment room while he had his cannula inserted. The musicians agreed but started to work with Paul while he waited for the doctor to arrive. They quickly established a rapport with him by asking what type of music he liked. He asked for the theme tune for Star Wars. He was quickly engaged in the music-making. They went into the treatment room together, and Paul returned, smiling and relaxed with a cannula in situ. The staff reported that the music had been such an effective distraction strategy that the cannula had been inserted with little effort. For Paul it was a tremendous success. He was transferred to theatre,

underwent the necessary investigation, and was discharged home later that day. However, it is important to note that the intervention had benefitted Paul's father and the organisation as he no longer needed to be re-listed for a further, costly visit to theatre and a further day of leave for his father. The financial benefits derived from helping children, such that they cope and comply with treatment, have yet to be fully investigated.

The success of the music for the children seemed to rest on a number of factors: the careful, almost cautious approach of the musicians, their skill at reading the children's responses, the selection of music, the musicians' skill at improvisation, changing the music in concert with the children's needs and abilities, the children's and parents' moods, and their willingness to let the children lead the pace and duration of the music sessions. Key to this was that the musicians played live rather than recorded music. This is discussed further in the next section.

What remains less certain is the extent to which music can reach in to different cultural groups. Although there were a small number of non-English speaking parents present during some of the music-making session, there was no interpreter available to assist with the interviews. However, one father who had travelled with his son from Libya for treatment in Manchester said:

'I think the music gives you a nice feeling.' (Father of baby Danny).

The impact on music-making with children from non-English speaking families and other diverse cultural groups is worthy of further investigation.

Play Staff Perspectives

In this section we present the play staff perspectives regarding the benefit of making music for the children, their families and hospital staff.

Professional Relationships

The play staff described the musicians as part of the team working to normalise the

hospital environment. They described effective working relationships with the musicians, founded on mutual respect and a desire to ease children's discomfort and aid their coping while in hospital.

'We work well together; it has to be a team effort.' (Play Staff 2)

Play Worker

The music travels. When the musicians come on the ward and play it just fills the whole ward.

I'm not musically inclined at all, but one day there was Jack was lying on his bed with intravenous drips in. He was in a room by himself. The musicians started playing the saxophone for him and I felt I could join in. I was singing nursery rhymes and Christmas songs, and Jack was playing with the instruments. Near the end of the session he was joining in with the songs.

We've bought some instruments and we had them about six weeks, and yesterday was the first day I felt confident enough to sit and sing and use instruments with him. It's not something I would usually be able to do because I'm quite introverted, but, because it was quite intimate, and there was no else in the room, I felt I could just let go and have fun with him. I would never have thought of using music before.

This meant that the play staff benefitted as the music-making sessions helped their intention to help children, while the musicians benefitted as they were accepted into ward communities. In turn, this meant that both the trainer and trainee musicians had access to a successful learning environment. A carefully planned induction was implicated in this.

The play staff had developed and delivered a bespoke induction programme that involved them helping the musicians through mandatory health and safety checks, medicals, and fire and cross-infection policies. Once cleared through Criminal Record Bureau checks, the musicians would be given identity and swipe cards to allow them to access the Hospital Therapeutic Play Centre. The play specialists also worked with the musicians to help them understand what might be expected of them:

'I do a teaching session before they start. I find out their expectations of the hospital, and I tell them what we expect of them.' (Play staff 2)

In this, the musicians were treated in the same way as any other worker, and, as with other new members of any team, it could take some time for the ward staff to fully accept the musicians. In part this was signalled by the musicians being allowed to engage with children. In all, the process of acceptance could take up to 6 weeks, though sometimes it was reported to be much faster. The play staff and musicians held each other in high regard; both pointed out the others' commitment and dedication to getting it right for individual children, regardless of their age or capability:

'I think they're wonderful' (Play Staff 3)

'I think it's fantastic, they go and learn it to play it for the children' (Play Staff 1)

'They feed off the responses from the children... When they give the children musical instruments and get the children involved they really feel part of the music...' (Play Staff 2)

The play staff had witnessed the musicians doing 'homework' such as learning tunes that the children had especially requested. Ultimate regard was shown by allowing the

musicians free access to children on the wards.

'I don't walk around with them: they're professionals. I saw how good and how quickly they interacted with the children, and how they got the children straight away. That's a skill, that's a real skill.' (Play Staff 2)

Facilitating Music-Making

Whilst for some of the play staff making music with children and working with accomplished musicians was new, others had worked previously with musicians during earlier residencies. Some of the play staff had been involved in music-making since the 1990s. While those with previous experience did not consider it to be something new, they were certain that it had tremendous potential. Still, it was understood and described as a soft but therapeutic subject that fitted well with the remit of their work.

'It's about providing therapeutic work...' (Play Specialist)

They had a collective understanding that their work was to relax, stimulate, and benefit children. Given this, it was unremarkable to them that they should work closely with the musicians, and they were committed to the music-making initiative. Even those relatively new to the experience of making music with hospitalised children were fully committed to the project. Largely, this was driven by the benefits they had witnessed.

Access to Music-Making

Clearly, the time that the musicians had was limited, and it had been agreed that during this project they would target specific wards. However, children in hospital are frequently moved between wards depending on their needs; for instance they may be admitted to the high dependency unit or intensive care unit following surgery.

The play staff would point the musicians in the direction of specific children and make special requests for them to visit children in different areas. This meant that some children were thought to have benefitted a great deal from the musicians being prepared to work with them regardless of the area to which they had been admitted.

'When she came back to the unit [ICU] it was the musicians who put the smile back on her face. They gave her the motivation to get out of bed and dance...' (Play Staff 1)

The play staff explained that this young girl had later visited the ward to say 'hello' to staff during a visit to the out-patient department. When she saw the musicians on the ward she had wanted to start playing immediately, and did not want to go home. Knowing that she wanted to come into the ward had been gratifying for the play staff and the musicians.

Another member of play staff told how a mother had said: *'Look, he's gone all floppy'* (Play Staff 3).

This was particularly significant as the baby had been having medication to relax his muscles. The play specialists also drew on objective, physiological evidence to assert that the music-making was of benefit to children.

'There are differences on the monitors – the staff say 'they're enjoying that, look at the monitor'. You can actually see it, long-term.' (Play Staff 1)

A key outcome was that some children benefitted from the music-making sessions during the most difficult times of their hospital admission.

However, the play staff were sure that it was not only the children that benefit from the music: so too did their families and the ward staff. A member of play staff recalled an event that she witnessed during a concert given by the musicians in the main foyer of the hospital.

'She stopped and listened to the music for 20 minutes. Then she said, "You know, I haven't thought about it (her baby's impending operation) it's the only thing that's relaxed me."' (Play staff)

Others concurred:

'The nurses have said how much they like it, it's calming for them as well.' (Play Staff 3)

'If they see their child relax then they relax as well. It relieves their anxiety.' (Play Staff 2)

'It just works...' (Play Staff 1)

It is important to note that the play staff were less certain about the benefits for children diagnosed on the autistic spectrum. Whilst they understood that some children enjoyed music, they had concerns that strange or sudden noises may upset others. Still, on reflection, it had seemed to help one young girl described as 'severely autistic' to relax. Her mother had reported that it had calmed her repetitive behaviour:

'You don't know how they're going to react, but that may be my lack of knowledge about music and autism. Lots of people have said that it's beneficial. There was a little girl this week who had no verbal communication. I'd said to the musicians to go and try, and her mum said after that she does seem more relaxed even though she couldn't tell her. She'd stopped turning her hand over and over for a long time.' (Play Staff 3)

While there is some empirical evidence that music therapy 'may have positive effects on the communicative skills of children diagnosed on the autistic spectrum' (Gold et al 2006 p9), far less is known about the potential benefit of music-making in for children on the autistic spectrum within hospitals. This is worthy of further exploration.

A Resource and Assessment Tool

It was evident that the play staff used the musicians and the music-making sessions as a resource and that they valued the fact that the music was live.

'When you have live music you have the vibration; it covers all the sense, even taste. If you play the theme from the Cadbury's advert you think of chocolate.' (Play Staff 2)

Most notably they used the sessions as an assessment tool.

'I use them as a resource, as an assessment tool. I might ask them to go to a child but not tell them what the matter is, and then I ask for feedback. So there could be a child with no movement at all, but from the music-making session I can assess what part of the body they can move and feed that back to the

occupational therapists and to the physiotherapists. (Play Staff 2)

Another member of play staff concurred. She had come to understand that when the music failed to calm or soothe a baby that something serious must be wrong. During an observed session, the musicians had been asked to play for a baby that had previously responded with delight to the music. It transpired that a failed attempt to pass a urinary catheter had left him very upset, and despite the music being played he remained inconsolable. The play staff took this as an indication that he was in pain, and that the music was not helping.

She asked a nurse to assess him. Subsequently he was given an analgesic and a member of staff stayed with him until he was calmer. There is a dearth of evidence regarding the potential for music-making to be used as a tool to enable children to communicate distress, pain and discomfort. That said, Lefevre (2004 pg 334) suggested that music-making with children had potential as a symbolic and non-verbal form of communication when assessing children. The findings reported here support this contention and are worthy of further consideration for practice.

It transpired that the musicians had also started to feedback to the play staff, seeking out explanations if they felt the music had little impact on individual children.

'They ask for an explanation when it does not work...' (Play Staff 2)

The Medical Notes Team Perspective

In this section we present the findings from our observations, conversations and interviews with the trainer and trainee musicians, the Medical Notes project manager and the RNCM Knowledge Exchange Manager.

Medical Notes: a vocation

The trainee musicians were drawn to the Medical Notes project as they perceived it to be an interesting opportunity to use their mastery of music to give pleasure to others. They explained that this was different to the

The play staff also agreed that they had a lot to learn from the musicians, and that they would benefit from further work and support to develop their confidence to use musical instruments with the children.

'When (T) came on the ward I did not know he was here. Then you hear it. It fills the whole ward. I'm not musically-minded but he'd gone to a 4 year old boy and started playing saxophone. I felt as though I could join in. It was quite intimate. I felt I could let go and have fun.' (Play Staff 3)

'I've bought some musical instruments. I've had them 6 weeks, but yesterday was the first time I felt like taking them out and playing with them.' (Play Staff 3)

Although reluctant, one member of the play staff had explained that she had, for the first time, sung to one of the children while the musician played his saxophone. Still, they were emphatic that they could never be trained to achieve the same results achieved by the musicians.

'It's another string to my bow, but it's a resource I could never offer. I can put a CD on, but they take it so much further. It's their profession...' (Play Staff 2)

When asked what would be on their wish list for the music-making sessions, the play staff agreed that they would like the music-making to be embedded as regular resource with daily sessions, every day of the week, targeted especially at children with lengthy admissions.

underlying reasons for their more usual work in practicing and performing which they described as a largely introspective process.

'Musicians can be very self-focused; look at themselves. This project gave me the chance to look at others.' (Trainee)

The musicians were involved in a delicate balance, negotiating their way between helping and enhancing the experience of children while avoiding harm. One parent

had underlined the absolute importance of them getting it right.

'...There have been times when I have been in hospital with my child when I have been very tense, when we have received news as a family that has been hard to hear. At such times if a musician had been on the ward I would have wanted to take their instrument and just throw it out of the window.' (Mother of Ella, 15)

As indicated by this, any children's ward is subject to a continuum of emotions ranging from extreme boredom to deep sadness, despair or disbelief. Children and parents may have received life-changing news related to the child's presenting symptoms at any time of day or night. The musicians had to develop and fine tune their reading of these emotions. To do this they drew on experience, intuition, body language and behaviour.

It was clear from the interviews with the trainee musicians that they had a great faith in and support from the lead musicians in developing their role within the acute environment in this context. This supportive leadership was essential to the trainees developing their confidence. As noted in the previous findings sections, they practiced in the ward environments in a manner that was consistently sensitive to the response of the children and their families.

For the trainees, involvement in the project had broadened their approach and advanced their understanding of musical creativity. They had also developed new insights, not only of the benefits of making and playing music with children in acute hospital settings but also the importance of bringing themselves, along with the sound, to the interaction.

'It's not about what we are playing. Sometimes it's not about the music. In some ways that doesn't matter at all. Sometimes the music starts with talking about music or creating a rhythm with a shaker. We look to the child, to what they understand...' (Trainee)

Their developing mastery of facilitating other people's music to derive a therapeutic benefit was implicated in this.

The Context of the Work:

Given the complex context of an acute clinical care environment there were many factors to be considered regarding the place in which the music was being made. The lead musicians had extensive experience, developed over many years, of engaging with people facing health challenges. They were a valued source of support for the trainees and offered encouragement through effective mentoring. They had helped the trainees to appreciate the complex rules of engagement in the clinical care setting. This was important as many of these rules were tacit and often difficult to articulate.

It seemed the trainees' mastery of music was further developed through this project, particularly in their ability to improvise without sheet music and to work as facilitators rather than performers. All of this took time and involved a considerable challenge to their personal approaches to making music.

'At first I felt uncomfortable – should I be moving on to the next thing there was an anxiety there that nothing was happening. In time I realised that space was needed to allow the musical space to grow organically.' (Trainee)

'It's a completely different skill set- an opportunity to interact rather than perform. To use music as an opportunity for interaction is key to the process.' (Trainee)

In preparing for the project, the lead and trainee musicians had created a range of unique and simple riffs, designed to be flexible and allow for improvisation. This was done to suit the unpredictable nature of the environment and the choice of music was seen as being integral to maximising its potential benefits in the clinical areas.

The musicians had chosen purposefully not to play well-known songs routinely. The reason for this was that particular songs could have an individual frame of reference and could also limit the musicians' flexibility in adapting the music to the potential raft of circumstances. Essentially, the uniqueness and simplicity of the riffs provided a musical platform from which the musicians could exercise flexibility. This also allowed them to

Musicians: “We’ve played to a daughter, and her mother cried”

It may be that someone is attracted by the shape of the cello, the shininess of the saxophone, the strings on the guitar or the pattern of notes you are playing. There are lots of different ways you can be drawn into live music.

Emotions are quite raw in the hospital and on the surface a lot of the time. You can read them; making a connection by picking up on the mood and energy of the child. A musician is always responsive. You can create a space for music and you can feel it. You can create a sensory experience, but you can feel it emotionally as well.

There’s a tactile aspect: the child can strum a chord or feel a percussion instrument, feel the end of the clarinet, feel the air coming out. Feeling the different vibrations has an impact on people, we see it every day. It heightens your senses and your awareness of your senses, it makes you think about music-making in a very different way. It’s a very personal experience. It can draw out strong emotions from people. Whatever you do, your music is not going to solve everything. It’s not magic medicine and it’s not there for that reason.

When you walk into a bay you’re kind of assessing practical things. Is it busy? Is there much going on? You pick up visual cues: if someone’s distressed, sleeping or engaged in a conversation with their family. It’s a sense of how a space feels. Some days there is nothing you can do to make something better. That’s part of the job.

work effectively in unpredictable situations. As noted by Forinash (1993 p71) is not about the music itself but *'the process of a musical meeting in the moment which allows the child to experience being met, accepted and understood.'*

One of the lead musicians used the analogy of a musical blanket to articulate the importance of this approach. She explained that the approach taken allowed for flexibility and the sharing of music, and, that it offered the opportunity for those with whom they sought to engage to contribute. This was achieved through the addition of melodies, layered rhythms, percussion, simply listening and being a part of a unifying experience. The flexibility brought practical benefits to the engagement of children and their families. For example, when working in pairs, if a child became tearful one musician could provide comfort and support whilst the others could continue to work with other children or move elsewhere as appropriate.

An added benefit was that the flexibility of the music-making meant that children could lead, directing the pace, rhythm or layers in the music, and that they could strip it right down to suit their own mood and taste. Lefevre (2004) contends that mirroring, reflecting and supporting children through music-making helps children to be met, feel accepted and be understood.

Again, live music was key to this, but professional and personal development was also implicated. The trainees were facing a novel context and different working relationships than they had previously experienced with more usual musical performances. It seemed that there was a marked difference between the trainee musicians and the lead musicians in this. The lead musicians had extensive experience in using music in a variety of healthcare settings whereas the trainee musicians were developing their skills on the job.

'At first you have to subvert your natural inclinations as a musician. You think, I am playing this riff over and over. People will be bored. I am not being interesting. You have to whack those feelings away. You can't start playing virtuosic pieces. It wouldn't fit, it's not applicable (Trainee)

'You would become another person in the healthcare space wanting you to pay attention to them. You are not there to impress people with your skills. It would be rude...' (Trainee)

This served to underline the shift in perspective from self to others.

Irrespective of the type of music selected it was fundamental to the musicians that they exercised caution in creating a musical space in the context of hospital wards. The musicians' approach to the initial engagement of children emerged as an integral part of their overall assessment of the whole place. This was described by the musicians as *'intuitive'* but in reality was informed by their assessment and interpretation of complex human and environmental factors. It involved sensing the mood, unspoken tensions, and the busyness and level of energy within the ward or cubicle. It involved being able to read emotions and look for subtle visual clues and cues about the immediate environment and individual responses. This process has not been described elsewhere and for the trainee musicians this had been challenging initially, at times it had generated anxiety.

The accurate assessment of the potential in any environment for the creation of a musical space is a skilled process. Working in partnership with staff on the ward was seen as being extremely useful in this process and this was always done with the play staff. This meant that the music-making became embedded within the ward environment rather than an adjunct to it. Although not always the case, a key finding derived from observation in the field was the clear release of tension when the musicians first entered a ward and were warmly greeted. Most often the staff on the wards indeed welcomed the musicians and engaged with them, even if this was with general greetings. Musicians visibly relaxed and appeared to greatly welcome the interaction. That said, there were occasional exceptions to this, in particular where wards were obviously extremely busy and occupied.

It was clear that the play staff had a pivotal role in the musicians' initial engagement on

the wards and with individual children. They would guide the musicians to a specific bay or specific children. As the children became more familiar with the musicians, and, as hypothesised by Hendon et al (2008), the children's moods seemed enhanced, their sense of trust grew. It was delightful to see how excited some children became on seeing the musicians; their eagerness to engage with the experience was evident.

Creating the Musical Platform

Most often, the musicians utilised their intuition, skills and experiences to assess the place as a potential area to create a musical space. Having assessed and sensed the appropriateness of the mood within the space the music would commence; often very quietly and tentatively. The musicians would continually assess multiple factors in the environment, waiting and watching for signals from the children and their families indicating that they wanted to engage with the music. Connections could be indicated by curiosity, perhaps eye contact or a change in energy in the room. Naturally, children can be shy but the musicians were skilled at engaging them. This was achieved by sometimes placing a small percussion instrument within easy reach. Children who knew the musicians through prior engagement were often more confident and the relationship clearly brought pleasure and a bolder approach in both parties. The children were thought to derive benefits from this.

'The music provides an experience for children that they can then talk about with their family which is not about the illness or the worries. It brings a creative activity that allows them to express themselves.' (Project Manager)

The ethos of the musicians' approach incorporated a need to create a musical space which would match the needs of individual children and their families. The riffs created allowed the music to change tempo: it could be loud or soft in accordance with the felt mood in the environment. The musicians aimed to create a space for children to engage so that they could take some control; a moot point for children in hospital. Sometimes the musicians would read the response and decide to slow the riff right down; at times it became so slow

and soft that each note seemed to float in the air. Some sounds seemed suspended in time almost as though they were drifting away. At times the music stopped altogether. Silence was described by the musicians as important in the creation of a 'musical space'. It is worth noting here that this model approach could be replicated across other sites and used in training and preparation programmes for musicians and other artists working in hospital and health care environments

Their approach gave the opportunity for absorption of the music; resting time. It also provided an opportunity for connections between those present at a deeply humanistic level.

'A musical interaction can open up a space to be very present with a child without the need for sound at all; to be truly present with another without the need for talk or play.' (Lead musician)

'Silences in music can be more important than the notes themselves.' (Lead musician)

This approach permeated the trainee musicians as a natural process as their confidence grew.

'It's not about what we are playing. It's not about the music at all. It's important, but in other ways it doesn't matter.' (Trainee)

In essence, the cautious, tentative approach seen at times and the use of unique riffs were essential to the accuracy of the assessment process and the creation of a flexible musical space in the context of a children's ward. The musicians became skilled at differentiating between children's quiet enjoyment of the experience and their not wanting to engage with it. Again this was reliant on skilled assessment of atmosphere and mood within the space and emerged naturally as the musicians grew in confidence.

Maintaining the Musical Platform

The musicians had great belief in the power of live music to be individually responsive to children and their families within the acute environment. They understood that live music was a tool that offered unique

benefits. It could be adapted to changing moods and circumstances. For example, the pace, rhythm or tone of the music could be adapted intuitively in response to the felt mood. Paul, referenced earlier, was particularly nervous in anticipation of a procedure. The musicians were able to adapt using the core bass-line of the Star Wars Theme tune as a riff and provide and sustain effective distraction for over half-an-hour. This could not have been achieved using a recorded piece, for example from a CD player or iPod, in the same way. The presence of musicians added a different and unique dimension that enabled the maintenance of the musical platform for as little or as long as the children and families needed. In turn, this offered effective, sustained comfort, emotional release or distraction.

'Using riffs means we can maintain the music in the moment for as little or as long as the child wants it to continue.'
(Trainee musician)

The musicians felt strongly that it was playing live music that was key. They were emphatic that the same benefits could not be achieved from the use of recorded music.

'CDs are 'consumed' by people, but live music is a communication tool in a ward setting.' (Trainee musician)

Recorded music was identified as an inferior form: it could not respond to the listener. In contrast, live music created a unique, spontaneous, moment; and the musicians understood that it was this that generated a unifying connection between people. The musicians and their instruments created a sensory experience. This was described as particularly novel and exciting in the context of a children's ward. The shapes and texture of the instruments, the vibrations and differing patterns of sounds had created an impact which could not be achieved by a recorded piece.

'The instruments themselves bring something to the musical space. Some children may have only seen a saxophone for instance in a cartoon. The cello as an example, is at floor level, children can touch and feel the vibrations and see the different shapes, textures and reflections as well as the sounds they make' (Trainee musician).

Closing the Musical Platform

It emerged from the analysis of the data that closing the musical engagements with children and their families was equal in the skill needed to that of initial engagement. The use of the riffs was a key tool in creating an organic process to allow the connection to evolve and close naturally. The musicians were skilled at bringing closure to the musical space in a way that was empathetic to what the children wanted. This could be achieved through taking cues from the children and their families.

Sometimes children told the musicians when they had had enough of the music. Direct communications were more common in younger children. The music ended when the children indicated that it should. However, when the musicians thought it was time to move on, a short good-bye song could be used. In older children, the ending of music was more often discreetly signalled, for example through the focus on a mobile phone or game device. As with the beginning of the musical connections the endings generally evolved naturally and this was founded on an increased confidence and capability of effective work with children.

Emotional Labour in Music-making with Hospitalised Children

The organic nature of live music was seen to generate emotional responses in the adults and the children in the acute setting.

'The music provides a way of expressing emotions for the child, the parents and the staff. Sometimes the parents cry and thank us for that because the music often allows for emotional expression. A person may have contained anxiety and stress and then they relax, and the tears flow.' (Project Manager)

The musicians had evoked and witnessed emotions in the children such as smiles and relaxed postures that the parents had not seen during their child's hospitalisation.

'For the first time in weeks, when they [the musicians] started to play for him, he relaxed. In those moments my child was transported elsewhere. I cannot put into words how grateful I was.' (Parent of Billy, 4 years old)

Comments such as these served as a poignant reminder of the power and benefits that the music brought to the children's and their family's experience. This impact has been reported elsewhere. As noted by Lefevre (2004), music therapy can provide an outlet for stifled and repressed emotions. What is reported here suggests that similar outcomes may be achieved through music-making.

The musicians were strongly driven to do no harm, but to do good. When they thought that their music had failed to bring relief or comfort they reported feelings of sadness.

'Sometimes music isn't the magic medicine, it's difficult, and it's hard.' (Lead musician)

'In this instance you try to mirror and support people's emotions.' (Lead musician)

The power of the music to open emotive responses in people was witnessed and reported repeatedly. At times, parents in particular became emotional in the context of the sensory experience of the music. The musicians acknowledged that they, too, could be emotionally affected; both elevated in the joy of seeing the positive impact of music but also being very sensitive to the emotional pain it could generate. One parent who became tearful during a session was grateful to the musicians.

'I have needed to cry for two days; listening to the musicians enabled the process of crying and really helped to

release my emotions.' (Parent of hospitalised child)

Its interactive nature often triggered strong responses in those present and party to the experience. According to James (1989 p15), *'emotional labour is the labour involved in dealing with other people's feelings, a core component of which is the regulation of emotions.'* The burden of emotional labour has been identified in nursing work (Smith 1992) and teaching (Isenbarger et al 2006). Yet there is little exploration of the emotional labour inherent in arts and music in healthcare. The musicians themselves were affected at times and felt a strong need to keep a tight rein on their own emotions to keep their focus on the children.

'At times we struggle with our own emotions; there is a need to keep a tight rein on emotions, not to add to the child's situation.' (Lead musician)

The supportive nature of the team around the musicians, the project manager, supervision offered, the peer relationships and professional relationships with the hospital staff provided an essential outlet to allow the musicians to maintain the music platform both in the immediate settings and on moving around different environments as the project progressed. The learning from this approach is worthy of dissemination and transfer to similar projects.

Understanding more about the emotional labour involved in this work is urgently needed.

DISCUSSION OF FINDINGS

The interplay between the children and the musicians seemed to operate on tacit yet a discernible set of rules of engagement. Of particular note here was that the children were witnessed not only to actively negotiate their involvement but the extent of their involvement in the music-making sessions and when the session should end. Some listened attentively and exhibited those attributes consistent with well-behaved audiences. Others moved from being members of the audience to being musical directors, members of the orchestra, musical conductors and even composers. This has not been reported elsewhere yet is in keeping with contemporary practice of engaging children and working towards children centred and children friendly practice (National Children's Bureau 2009, DH 2004).

It appeared that the music had a normalising effect. It seemed to bring aspects of the children's every-day outside lives into the hospital environment, in a positive and beneficial way. Sometimes the music-making distracted the children from tedious boredom. At other times the music-making was used as an effective and deliberate intervention to distract children from distressing or painful procedures. The music-making also provided a much needed effective, child-centred, communication tool that the children used to express their feelings and emotions. It created sufficient space within the context of a children's hospital, if only for a short time, for them to take control and be at the centre of an otherwise adult dominated world.

Children in hospital become hyper-vigilant and can become anxious, if not distressed, when someone approaches their bed-space (Lambert et al 2008, Waters 2005, Livesley 2011). The observations reported here not only underscore the notion that many children experience hospital environments as scary places but that within hospital, those areas, such as playrooms, often thought to be safe places for children, are in fact no place of safety. This adds further support to the musicians' cautious and paced approach with the children. Gaining

the children's trust was key to deriving benefits for the children from the musicians' work. It was a fundamental mechanism for the music-making to work, and, for children like Emily, the music-making provided a safe haven and a means to express herself throughout a difficult, and at times painful hospital experience.

That said, some young people (adolescents, and albeit small numbers) expressed their dislike of the music. For some, this seemed to rest on their perception that classical music was associated with being old or with those from a different generation. Still others enjoyed classical music and those young people that participated in the Teen Zone workshop felt that classical music would be appropriate for many children.

Some parents thought that there could be times any form of music may be inappropriate, though this was never borne out during the observed sessions or reported by the musicians from their previous residencies. That said, for the vast majority of children, the music-making provided worthwhile, beneficial, and at times therapeutic outcomes. It did this by normalising and humanising an otherwise medical and artificial world. It reflected and changed the mood and provided an effective means of distraction during difficult and painful procedures, a finding reported elsewhere (Klessen 2008). In essence, the music-making was a rare but valuable children-centred intervention that enabled the children to communicate during times of distress. As noted elsewhere, it also provided a platform for parents to express their emotions (Lefevre 2004).

A further point worthy of note is that children in hospital are often marginalised if not ignored during communication and decision-making regarding their care (Lambert et al 2006, Coyne 2006, Livesley 2010). The interplay between the musicians and children reported here indicate that the music-making activities were fundamentally child-friendly as they were always led by children. This involved considerable skill and a considerable shift in how the

musicians worked when compared to their performance work. The lead musicians showed a great deal of maturity and sensitivity in their combined roles as musicians interacting with children and trainers. There was a clear sense of purpose and an awareness of a range of situations in which music may be inappropriate to the clinical environment.

The play staff were key in facilitating the musicians' access to the children and they helped them to navigate the hospital wards. This involved helping to prepare the musicians, offering encouragement and providing feedback. They also championed the needs of children by pointing the musicians to children they thought would benefit most. In addition, the play staff had started to use the music-making sessions as a tool to help them assess the children's

capability and potential, their level of pain and in some instances their capacity to move. This served to underline the potential of music-making to provide for symbolic and non-verbal communication for children, and this is especially important for children with developmental delay, communication difficulties and those who are pre-verbal.

Sometimes, the outcomes of the music-making sessions were such that other members of staff, having witnessed them, incorporated music-making sessions into their treatment plans for the children. However, mechanisms to enhance other professionals' understanding of the potential benefits of music-making are needed. In addition, mechanisms to identify and refer those children who have most to benefit from working with the musicians are needed.

CONCLUSION

The evidence from this research points to a raft of tangible benefits for children, their families, staff and musicians. The calming, relaxing and effective distraction derived for the children were remarkable. Parents reported that they also derived benefit, their relationships improved and they were able to express emotions that had been suppressed. Of particular note is the humanising impact of the music-making on an otherwise harsh hospital environment. It is possible that those children who have lengthy stays, those enduring difficult procedures and those with communication impairment may have most to gain.

Positive and fruitful relationships had been created and nurtured by many of those involved in the project. The play staff on the wards were engaged in mutually supportive relationships with the musical team. Effective team working across professional boundaries, takes time, is built on collaboration and trust and is often difficult to sustain (Leathard 1994). Yet, the professionals involved in this project had created and sustained effective working relationships.

Those attending the Teen Zone workshop were particularly emphatic that music-making offered clear benefits for children and that it should be rolled out all areas of the hospital including adult services. Indeed, one member of the CMFT Youth Forum has asked for a copy of the report

and intends to ask for response from the Trust Chief Executive regarding plans to continue the initiative. The constant need to seek funding in order to continue the Music for Health Medical Notes project has fallen to the Project Manager. Yet, the clear benefits for children suggest that this service could be commissioned, and, that doing so would greatly enhance the children's experience as hospital patients.

The musicians were enthusiastic and deeply committed to the project and were frustrated that funding constraints could affect its future. Given the current financial constraints and upheaval being experienced by the health service, the future of the project remains uncertain. For the lead musicians, the threat to the fruitful, flourishing relationships was a frustration. For the trainee musicians, whose development had been described as 'inspiring and amazing' by the lead musicians, thinking that the project may end was incredibly hard and, in their words, devastating.

The musicians demonstrated considerable skill and child-centred approaches from initiating music-making through to the closure of the musical space that had been created. As noted, this involved considerable emotional labour, and, as little is known about this in the context of musicians' work with children in hospitals, it warrants further attention.

KEY MESSAGES

The potential of music-making in hospital

- Music-making contributes to the health and wellbeing of hospitalised children and their families.
- Child-centred music-making in hospital can alleviate boredom, isolation and anxiety, and create positive, shared experiences.
- Live music-making can enable powerful connections between hospitalised children, members of their families, hospital staff and musicians.

Key factors in effective engagement with children in hospital by musicians

- A significant part of the success of the RNCM Music for Health Medical Notes project is that it is a children-centred and children-friendly initiative.
- A reciprocal, trusting, professional relationship between the hospital staff and the musicians is fundamental to the success of music-making for children and their families.
- Making music in a medical place is a highly skilled process involving sensitivity, flexibility and patience underpinned by accurate assessment of mood and energy.
- Simple riffs enable flexibility which in turn enables skilled musicians to adapt music-making to the needs of the individual children and different family circumstances.

Issues worthy of further research:

- Understanding more about the emotional labour of music-making in this context.
- Investigation of the “trance-like” state of younger children when engrossed in music.
- Parental responses of cathartic emotional outlet and feelings of reassurance.
- Cost benefits of increased compliance through music-making.
- Impact of music-making on children and families with limited language competence.
- Potential for music-making impact on children with autism.
- Potential for music-making to ease the transition between children’s and adult services.
- Transfer of principles learned with child patients to other patient groups.

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APPENDIX 1: Interview Prompts

Adult and Children's Prompt Sheet

Introduction, confirm identity, information regarding what we are doing

Hello, is it all right for me to talk to you about the music session?

What do you think about music being used in hospital for children in this way?

Can you tell me how it makes you feel?

What do you think your child/children thought about the music?

What makes you say that?

Is there anything you would change?

Is there anything else you would like to say about the music sessions?

Thank you for time

Play Staff Prompt Sheet

Introduction, confirm identity, information regarding what we are doing

What do you think about music being used in hospital for children in this way – Music – Musicians - Places?

What benefits, if any do you think it brings for the children and or their families?

Are you aware of any negative aspects?

Is there anything you would change?

Is there anything else you would like to say about the music sessions?

Thank you for your time

Project manager, Musicians Prompt Sheet

Introduction, confirm identity, information regarding what we are doing

Overall, what has been your experience in the Medical Notes Project?

What has gone well from your perspective?

With hindsight, what could have been done differently?

What do you feel have been the benefits for the children involved?

What could have been improved to benefit a greater number of children?

If the project was to continue, how do you see it evolving in the future?

Is there anything further that you would like to add in giving your perspective on the project?

Thank you for your time

APPENDIX 2: Information sheet

Who are you?

We are a research team from the University of Salford. We always have our University identity badges on display so that you know who we are.

Who has reviewed this study?

A research ethics committee at the University of Salford has approved this work, and the Central Manchester University Hospitals NHS Foundation Trust (CMFT) has agreed that we can do this work.

What do you hope to find out?

We want to find out what you think about the music sessions that are happening at the children's hospital.

What would our involvement be?

We would like to talk to you about the music that has just been played. We may use games and other fun activities to help children to tell us what they think. Children can choose which activities to join in with. Helping us will take no more than 5 minutes and make take less time. We will not record your names or use any other information that would let other people know who you are, but we would like to write down some of what you say.

Do we have to take part?

No. No pressure will be put on anyone to take part. If you would rather not talk to us, please tell us. Deciding not to take part will not affect your care, treatment or legal rights in the future.

What will you do with the findings?

We will use the findings to write a report to help the Royal Northern College of Music and CMFT to understand more about how the Medical Notes project makes things better for children, young people and their families.

What happens if we become upset?

Although extremely unlikely, should anybody become upset during the study we will stop what we are doing immediately and let the ward staff know. If you wish to complain or have any concerns about any aspect of the way in which you have been approached or treated during the course of this study, then the hospital Patient Advice and Liaison Service will help you.

What happens next?

If you have any questions about anything to do with the study please ask us. If you are willing to take part please let us know, we are happy to take your spoken agreement and do not need you to give us written consent.

Can we become more involved in other research like this?

Yes, of course. If you or your child would like to become involved in other research work or if you would like to talk to us about the music sessions please let us know.

Who do I contact for more information?

You can have a copy of this information sheet to keep. The postal address, telephone, email and contact number for Alison who is leading this study are listed below. Please feel free to contact her, or ask one of the ward staff to leave a message and she will get back to you.

Thank you for taking the time to read this information leaflet

Principle Investigator

Tel:

Email

Address



University of
Salford
MANCHESTER

RNCM
ROYAL NORTHERN
COLLEGE of MUSIC

 **YOUTH
MUSIC**
Music is Power



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