EARLY INTEGRATION OF THE BRIDGES SELF-MANAGEMENT SUPPORT PACKAGE INTO USUAL CARE FOLLOWING TRAUMATIC BRAIN INJURY

a feasibility study

The Health Foundation

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Introduction

Persistent cognitive, psychological and emotional symptoms following traumatic brain injury represent hidden disability and limited support exists. Supported self-management is underpinned by variable assumptions, which may determine and preference which groups are considered likely to benefit by healthcare professionals (Kendall et al, 2011).

Aims

1. To develop self-management support through engaging people who had experienced traumatic brain injury in the co-design of resources.
2. To enhance the skills of healthcare professionals in supporting self-management.
3. To implement self-management support package across a traumatic brain injury pathway.

Method

1. Development phase:
   Focus groups and semi-structured interviews for co-design of patient and family tools.

2. Training and implementation phase:
   A series of 'Plan-Do-Study-Act' cycles, informed by Normalisation Process theory (May and Finch, 2009), sought to generate interest in supporting self-management, facilitate sense-making, engage staff in collective action, and reflect upon the new ways of interacting with patients and families.

3. Evaluation:
   Staff:
   - Change in beliefs, attitudes and skills in supporting self management were assessed through bespoke questionnaires.
   - Experiences of implementation were assessed through semi-structured interviews and written feedback.
   Patients and families:
   - Standardised outcome measures were collected to enable profiling against a matched historical sample from 2014.
   - A bespoke health and social care utlisation tool was developed and piloted to inform future economic evaluation.
   - Feedback on experience of the Bridges package was gathered through semi-structured interviews and questionnaires.

Results

- Self-management support tools specific for the traumatic brain injury context have been co-designed and implemented in the:
  - Acute neurosciences and trauma wards of a Major Trauma Centre.
  - A specialist inpatient rehabilitation Unit.
  - Headway (the brain injury charity) community-based centres.
- These 'Bridges Brain Injury' resources comprise a patient-held interactive book, a family and friends' book, and a multi-disciplinary bespoke training package.
- Seventy multidisciplinary staff and voluntary sector workers participated in 3-stage training (9 hours) (see Figure 1). An additional 40 staff and managers attended abbreviated training (1 hour).
- Questionnaire responses showed a significant difference in levels of staff confidence regarding knowledge and skills to support people with traumatic brain injury and their families to self-manage, following training ($p<0.001$).
- Implementation was achieved with 73 patients across pathway settings, within the initial 3-month implementation period.
- Standardised outcome measures were collected for a subgroup of 18 patients allowing profiling comparison with a matched historical sample (see Figures 2-5).
- Qualitative evaluation revealed the ways in which staff had used the Bridges package to motivate patients to plan and to gain ideas from others who had experienced TBI. Patients reported the value of recording and reflecting on thoughts and goals (see Figure 6 and quotes).

Discussion

- This is the first project to co-design self-management support with people after traumatic brain injury.
- Challenges were encountered due to lack of a cohesive team structure for patients after traumatic brain injury within the acute services of the Major Trauma Centre (Figure 7).
- Individual, team and organisational responses demonstrated a range of engagement and adaptation processes.
- Future work will focus on sustaining the intervention within the project settings, and spreading to other Major Trauma Centres and their Trauma Networks.
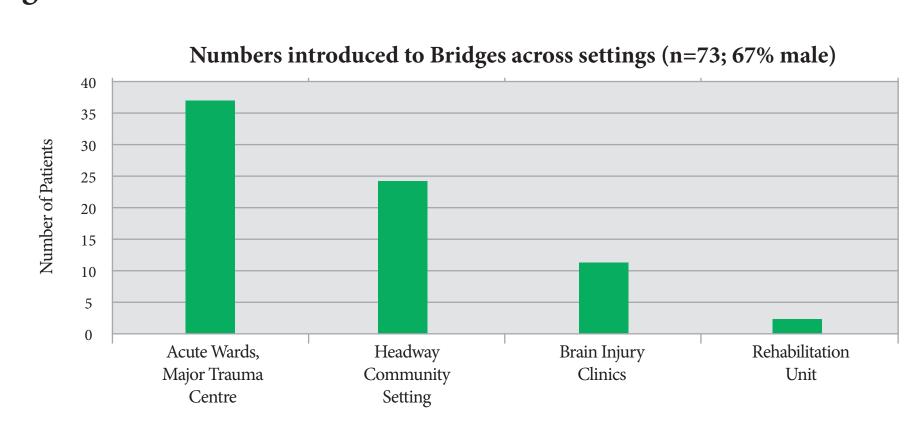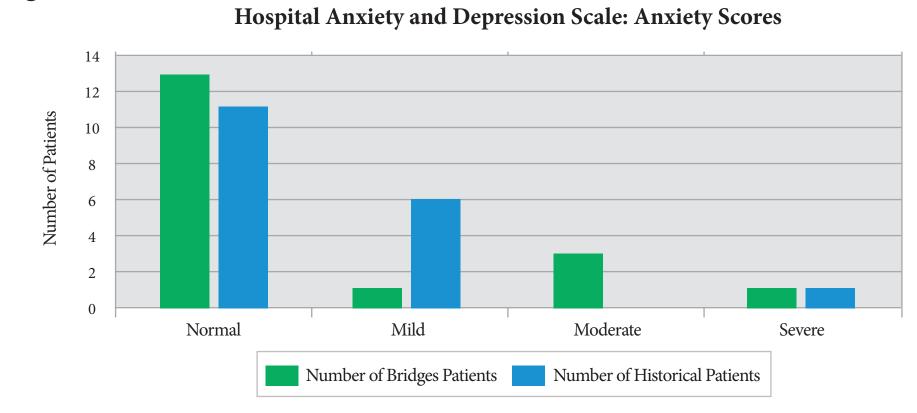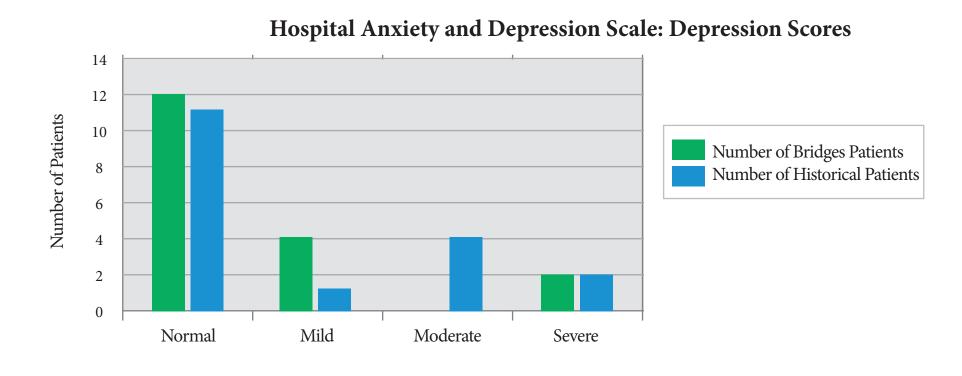
Figure 1. Training workshops

70 multidisciplinary staff attended 3-stage training workshops

Staff from acute, rehabilitation clinic and community third sector settings

Mix of backgrounds and settings faciliated interdisciplinary and cross-organisational awareness

Figure 2.

Numbers introduced to Bridges across settings (n=73; 67% male)

Figure 3.

Hospital Anxiety and Depression Scale: Anxiety Scores

■ Number of Bridges Patients ■ Number of Historical Patients

Figure 4.

Hospital Anxiety and Depression Scale: Depression Scores

■ Number of Bridges Patients ■ Number of Historical Patients

Figure 5.

Short Form Health Survey (SF36) Physical Health Scores

Short Form Health Survey (SF36) Mental Health Scores

■ Number of Bridges Patients ■ Number of Historical Patients

Figure 6. Summary of themes from patient and family feedback

People with TBI, families & friends
- Helping acceptance, understanding ups and downs
- You're not alone - 'picking out someone like you'
- Should give the books to everyone - 'a guide to life'
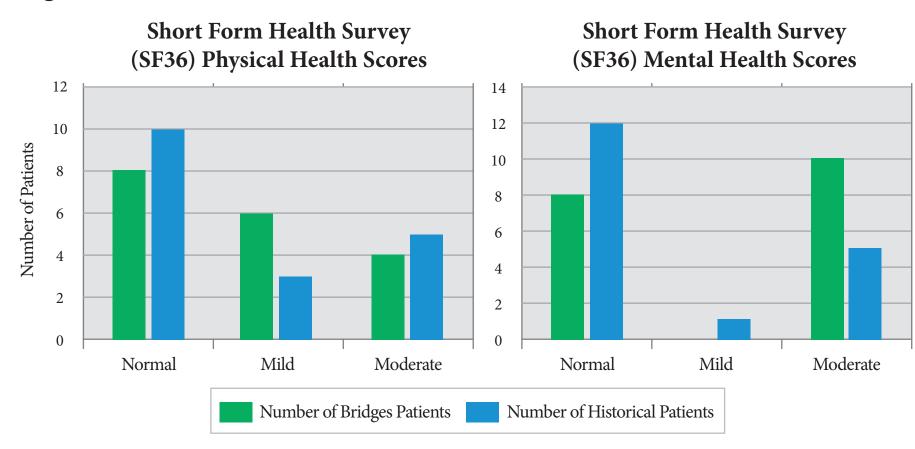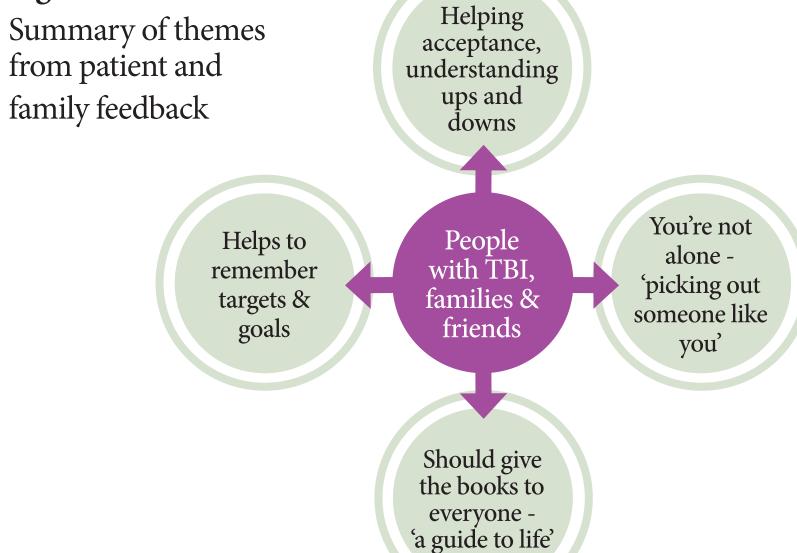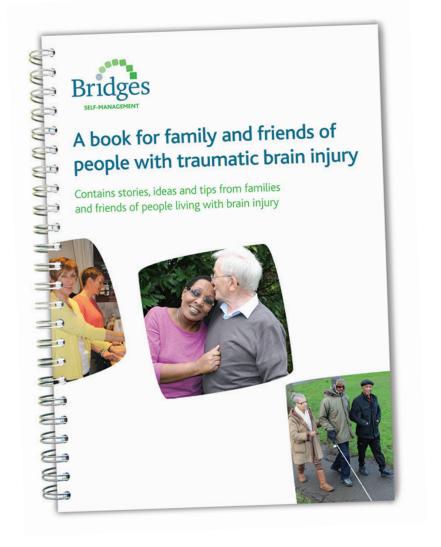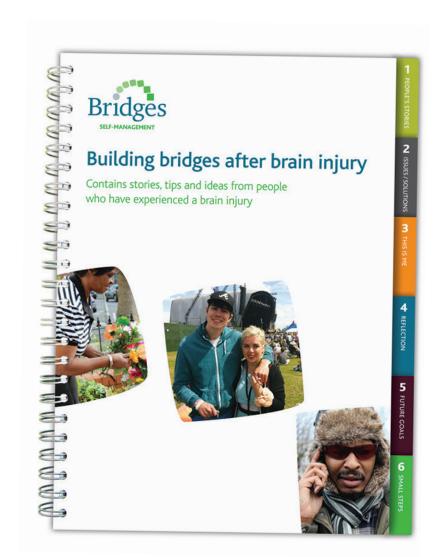- Helps to remember targets & goals

"I think it is great that it is offered to people, and you can actually say, 'Here is what people have gone through' and also for friends and family, because maybe the person would not be ready for it straight away."
—Project contributor following traumatic brain injury

"I think that actually once you start working in this way it becomes self-sustaining, because you get into a pattern of working where you see positive changes and positive results."
—Occupational Therapist

"I introduced the book and talked through with her the part of the book where she could write down her own thoughts and feelings. The next day when I saw her, she said that she had not been able to sleep overnight, and she had decided to write down in the space about what she hoped to do next in her life." —Nurse

Figure 7. Key learning points

Coproduction with people after brain injury	• Willingness of contributors and families • Feasibility of service improvement collaboration • Role of patient stories in iterative 'PDSA' cycles
Supporting self-management in acute setting	• Challenging but achievable in Major Trauma Centre • Lack of cohesive acute team impacts embedding • Need for authentic organisational support
Perservering to enable organic integration and growth	• Regular, planned communication • Adoption and adaptation take time to emerge • Early findings guide ongoing sustaining activities

King's College Hospital
NHS Foundation Trust

Headway
the brain injury association

Bridges
STROKE SELF-MANAGEMENT

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