Supplement 1

Positive Deviance Study – Hip & Knee Pathway: 'Non participant observation framework'

The purpose of this study is to comprehend the quality and safety aspects of health care that demonstrate positive deviance within the day to day delivery of processes and practices; this includes context and behaviour.

The aim of the study is to:

- identify, describe and explain the activities, events and interactions which represent positive deviance or situations that generate a move away from the 'normal' response observed elsewhere
- Identify 'hot spot' areas where mistakes are possible such as hand overs, crisis, errors, etc to explore ways barriers are overcome

Achieve this by developing an understanding

- of the organisational and social context within which hip and knee health care is conducted
- of the regularities and irregularities within day to day activity and the social interaction which influences the process
- of activities, interactions or processes we need to explore in more detail
- of patient-based observations, carer and staff member(s) observations

Guidance for non-participant observation of hip and knee pathway:

The purpose of this guidance is to provide some common areas of focus for researchers undertaking studies in different units or across different health care sites. The use of the guidance will facilitate a degree of structure for observational records and enable comparative dialogue between researchers. Data collection will commence with 2 brief visits to the study units and form periods of orientation to facilitate comprehension of the day to day running of the unit, and to 'normalise' the researcher's presence. After these orientation periods, individual researchers will develop field notes and linked memo's which relate to, extend and add to the areas of focus identified below and on the observed record sheet.

Six key areas for non-participant observation:

1. Hip and knee outpatient clinic
2. Pre assessment (4-week pre-op) (Nurses / full health check NICE guidelines)
3. Joint school (Information pre & post op management physio/ OT)
4. Admission Surgery & Post op (Prep, management, recovery, discharge)
5. Handovers (communication/procedures)
6. Primary care team & referral

Observation Guide for these areas

- Develop understanding of dynamics and decision making in the team(s)
- Understand the contextual, social and organisational factors influencing or impacting on preparation for admission / discharge
- Focus on the interactions between the staff member (s) and patient /carer(s)
- Focus on any process or procedures you feel need to be explored in policy
- Recognise the activities, interaction or processes we need to sample more specifically
- Identify and develop topics or questions to explore in semi-structured interviews

Areas to be routinely captured on the observation record:

Record once for each event:

Item	Specify	Comments
Location (type of unit of study/structure system		
Number of beds /patients		
Average length of stay (in days)		
Staff profile: List professional groups (numbers & types)		
Record timing/frequency of activities e.g. MDT meeting / ward round		
Reference to or related to protocol/documents/policy		
Expected outcomes of an activity for unit/staff/patient		

Hip and Knee Non-participant Observation Process: Common Field Notes

Situation	Comments
Date	
Unit number	
Visit number	
Scene identifier	
Duration of observation(s)	
Location for observation(s) & surroundings	Locations for general unit observations will include: • the central work or nurses' station or any area where staff routinely congregate to discuss patient activity or meet with patients and carers • staff meeting rooms (this can include attending multidisciplinary team meetings) • therapy rooms/gymnasiums/occupational therapy kitchens or facilities which allow patients and carers to spend time independence of stroke unit staff in preparation for discharge home • patient dining areas • day rooms or other social communal areas • bed areas • any additional areas where the researcher determines that it would be appropriate and gains consent to engage in non-participant observation
People number/type	
Focus on non-participation	Areas of focus for general unit observations will include: • description of general activities routinely involving interaction between staff, patients and carers • description of what appears to be important and meaningful for staff, patients and caregivers for instance staff concerns, beliefs and preoccupations where these are verbalised • description of specific activities focusing on TRACS training (intervention units) or advice and preparation for discharge

	home (control units) • description of the conditions under which patients, carers and staff members conduct their activities and interactions in the units, including constraints and pressures • description of staff interactions • description of patient to patient, carer with patient and carer with staff interactions • description of informal unplanned activity, which appears to contribute to or reinforce TRACS training (intervention units) or advice and preparation for discharge home (control units) • Summarise records of dialogue between participants may also be recorded when this is considered appropriate. Where verbatim recording of dialogue is considered important then written informed consent will be required from the participants. In the case of recurring dialogue, content which relates broadly to meeting the aims of the study, should not require consent. Additional areas of focus will clearly emerge in each study unit researchers will develop field notes in these areas and should share/discuss these areas, with the other researchers generating data.
Focus on nonparticipant observation / Case based observation	The case based non participant observations will include the above, but here we are seeking more fine-grained and detailed description (and later explanation), which will aid in understanding: Include- • the context of the activity • who is participating in the activity? • the nature and purpose of the activity • how the participants appear to respond to, participate in, feel about, describe, explain and make sense of the activity • the researcher's perceptions of the relationship of the activity to the aims of the study Additional areas of focus will clearly emerge in each study unit researchers will develop field notes in these areas and should share/discuss these areas, with the other researchers generating data.
Document reviewed in relation to the case-based observation	Documentary analysis is designed to capture any textual information which will aid in understanding how TRACS training (intervention units) or more general advice and preparation for discharge is reported upon by stroke unit staff or patients and carers in situations where this is recorded. Documents reviewed may include: • shared patient records (for example, multidisciplinary team notes) • individual patient records (for example, the medical notes, the nursing notes or notes, developed by therapists) • information sheets or posters describing TRACS training or more general advice and preparation for discharge • any other formal or informal documentation, which is considered relevant to illuminate the process of TRACS training or more general advice and preparation for discharge

	• caregiver/family contextual information for example discussions in MDT meetings, records of home visits, social work/OT assessments of preparedness
Open filed note record	Detailed notes and reflections of the researcher completed during the period of non-participant observations or documentary analysis (these will of course be written up in more detail following the period of observation). Researchers may choose to use notebooks in the field, but overall observation records should be completed and saved (securely)electronically using this document
Linked memo number	Researchers will be encouraged to record and develop memos Memos are not simply "ideas." They are involved in the formulation and revision of explanations for the processes observed and later in the development of theory during the research process. Writing theoretical memos is an integral part of doing grounded theory and we are adopting this approach for our data analysis. Since the analyst cannot readily keep track of all the categories, properties, hypotheses, and generative questions that evolve from the analytical processes involved in recording and analysing fieldwork, there must be a system for doing so. The use of memos constitutes such a system (Strauss & Corbin, 1998). We will encourage researchers to share and copies of memos, within the group discussion area of the research institute.
Other relevant information	Record as appropriate

Source: Adapted from Hawkins Version 1.0 – TRACS Process evaluation- non participant observation framework 09/01/2009

Focus Group Questions for: Nurses, Surgical staff, Allied health professions, Support staff

1. ***Pathway****:* Protocol, key parts

    A. Can you talk me through the enhanced recovery hip and knee pathway from admission to discharge?

    B. Can you tell me which part(s) challenge achieving quality and safety?

        a. How do you overcome these?

        b. How does this reflect the pathway protocol?

    Probe: How is this deviant or different?

2. ***Organisation*****:** management, decision making

    C. Describe what underpins your provision of quality in relation to management of pain, infection, and referral?

        a. What drives and defines these approaches?

        b. How are multidisciplinary decisions determined?

    Probe: How is this deviant or different?

3. ***Practice****:* competence, communication, coordination

    D. Describe how your interpersonal practices influence exceptional care

        a. Teamwork within unit (pt - staff; staff –staff)

        b. Teamwork external stakeholders

        c. Support for patient (prior to; during; discharge)

        d. Support for staff (regular staff ‘v’ agency)

    Probe: How is this deviant or different?

4. ***Monitoring***: exceptional practice/behaviour

    E. Describe how excellence is recognised, and mapped
    F. What determines change?
    G. Other factors that have influenced your standards for quality & safety
        a. individuals (e.g. timetable / recruitment)
        b. ward/unit level
        c. organisation systems and support

    Probe: How is this deviant or different?