POSTURE & MOBILITY GROUP

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Editorial Team

Editor: Phil Swann
Delichon Ltd.
Kings Yard, Martin,
Fordingbridge
Hampshire, SP6 3LB
tel: 01923 673052
fax: 01923 673052
email: philswannptmy@aol.com

Articles Editor: Julia Cunningham
Physiotherapist, Whizz Kidz

E&T, R&D and Literature Review Editor: Elizabeth White
Group Head Research & Development,
College of Occupational Therapists

Web Site Editor: Dave Calder
Senior Rehabilitation Engineering Manager
Rehabilitation Engineering Division
King's College Hospital NHS Trust

Cover Page: Thanks to Bendrigg Trust for these pictures, see article on page 12 from Patsy Aldersea.

Guess the Product

Guess the Product: The product featured on page 2 of volume 16 was **an Actiflex shoulder strap.** - I really would like someone, anyone to email me with an answer, email as always: philswannptmy@aol.com

Mitchells Marvel's

Gary Williams Rehab. Eng., Wirral Wheelchair Centre

Start with a cage containing five monkeys. Inside the cage, hang a banana on a string and place a set of stairs under it. Before long, a monkey will go to the stairs and start to climb towards the banana. As soon as he touches the stairs, spray all of the other monkeys with cold water. After a while, another monkey makes an attempt with the same result - all the other monkeys are sprayed with cold water. Pretty soon, when another monkey tries to climb the stairs, the other monkeys will try to prevent it.

Now, put away the cold water. Remove one monkey from the cage and replace it with a new one. The new monkey sees the banana and wants to climb the stairs. To his surprise and horror, all of the other monkeys attack him. After another attempt and attack, he knows that if he tries to climb the stairs, he will be assaulted. Next, remove another of the original five monkeys and replace it with a new one. The newcomer goes to the stairs and is attacked. The previous newcomer takes part in the punishment with enthusiasm! Likewise, replace a third original monkey with a new one, then a fourth, then the fifth. Every time the newest monkey takes to the stairs, he is attacked. Most of the monkeys that are beating him have no idea why they were not permitted to climb the stairs or why they are participating in the beating of the newest monkey.

After replacing all the original monkeys, none of the remaining monkeys has ever been sprayed with cold water. Nevertheless, no monkey ever again approaches the stairs to try for the banana. Why not? Because as far as they know that's the way it's always been done around here.

And that, my friends, is how company policy begins.

The next issue of Posture & Mobility will be in **Autum 2003** The deadline for this issue is the **18th of Aug.** The aim of Posture & Mobility is to keep members in touch with current events in the world of posture and mobility and to provide the opportunity to share ideas and learn of new initiatives. Articles should be between 500 and 2000 words. Photos and/or cartoons are welcome as are jokes and mindbenders etc. Please send contributions, preferably by **email,** to **Phil Swann** at **philswannptmy@aol.com (send all pictures in their original format, not as part of a word document)**. Otherwise post a floppy disk, or printed in Times New Roman 12pt .

Posture & Mobility is published by the Posture and Mobility Group. The views expressed are those of individuals and do not necessarily reflect those of the Group as a whole.

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Editorial

Here I am at 11:37pm (23:37hrs. for the Engineers), My wife, Kay has just demanded that I come to bed as I will be setting the alarm for 5:30am (Kay needs to awake at about 7:00am) so that I can travel 134 miles to review one of our latest recruits (he has been with us for approx 12 months - straight from university). Phil is sending me polite e-mails asking where my editorial and other magazine inputs are! The chair of the PMG is asking when the web site will be truly up and running! My boss is politely asking me to attend numerous meetings! So why am I still awake? And why am I still responsive? My guess is that I enjoy my work so much that it has become a hobby!

Every week, I receive an e-mail to say that there is another standard that we should be incorporating within our management system! We have been ISO 9001 approved for some years now and are trying to develop our systems to incorporate En ISO 46000 - Why? Simply because we (all of our staff) our dedicated to the cause, the rehabilitation of our clients. As such we have to play by the rules, which means that if we are providing designs to meet the needs of our clients those designs must meet the Medical Devices Directive so should be controlled regarding form fit and function. As a group are we different to all of those around us? The answer is no. In my experience we are all trying to achieve the same result, the successful rehabilitation of our clients.

Why do our rehabilitation services having to move so quickly and so often to keep up with the rest of the world of medicine? The truth is we don't. What has happened is we have been left behind (my own thoughts). Take the medical device directive (I can hear Alan Lynch's dulcet tones) and the way in which they are directing us to control the equipment that we loan to our clients. We must now ensure that our prescription is correct; that we have carried out our risk analysis reducing potential injury to our client; that we describe the

equipment that we wish to issue using the NSV code or manufacturer's model number rather than providing a general description (8L); We must evaluate the client's requirements and establish the review frequency for client and equipment (Planned Preventative Maintenance). In short we must take control of the way in which we provide equipment to others.

So where is this editorial heading, Are there any answers or just more questions? Well, it has been a few months since our last conference. A conference that asked many questions and allowed many, many answers, including the all important networking between sessions. The conference was one of the best that we have ever had (you can always tell by the number of attendees that were still there at the closing speeches). The plenary and free paper sessions were second to none and David Thornbury's Aldersea Lecture was superb. I felt that the direction was one of improvement and having proof read this issue of the Posture and Mobility Magazine feel that we are still moving in the right direction. I was going to speak about the 'where do we go from here' but it is all in this issue! On a closing note, It is hard work providing rehabilitation services and long may it continue, the feel good factor is second to none!!

Dave Calder

Letters from the Chairmen

I hope that all those who made the journey, enjoyed the 2003 annual conference as much as I did. Those present at the 11th annual meeting were a part of history, it was the biggest PMG conference to date and has set a new standard in meetings of this type in the UK. We did our best to organise speakers and subjects that were thought-provoking and relevant. However it is vitally important that what you learned during the conference is not put to one side, but carried forward into every day practice. I know how difficult this is because I have done it!

You return to work with lots of ideas and ways in which you can improve things. But as soon as you are back you're playing catch up for the few days you have been away and any ideas or momentum gained at the conference are soon lost.

There are always day-to-day pressures, but it is important that lessons learned are not lost. Try to take time out to reflect on what you have heard during the conference, even if it is just writing down some ideas for change on a piece of paper and pinning it on the wall near your desk. It is only through this process that we as a profession are going to be able to drive this discipline forward.

As indicated at the conference, I am stepping down as chair as I am due to spend an extended amount of time away in Japan. I would like to wish Dave Long, the new chairman, and the new committee members the best of luck in the future and am sure that they will play a big part in taking the PMG forwards.

Russ Jewell *Chairman PMG 2002-2003*

It is around a couple of months since many of us assembled at York for the Posture and Mobility Group national conference 2003. I hope that those of you who were able to attend found it an enjoyable and beneficial experience. With just over five hundred delegates it was the largest national conference in the history of the group. The committee are now planning the 2004 conference which I hope will be equally successful.

To introduce myself: I am employed by King's College Hospital NHS Trust as a Rehabilitation Engineering Manager, contracted to the Special Seating Service within the North West London Hospitals NHS Trust, where I have been working for the past five years. It is a regional service based in Stanmore, Middlesex, which serves wheelchair users with complex postural requirements in North West London and Hertfordshire. I am married and have two children, both boys, currently aged 2.5 years and 12 months.

It is a great privilege to be elected chair of the Posture and Mobility Group. I am keen to take forward the hard work the committee has put in over the last eleven years and to strengthen the group further in its role in the field of posture and mobility. My thanks to Russ Jewell for his commitment and hard work over the past year.

I look forward to meeting you at the next conference, if not before. With best wishes

Dave Long

Chairman PMG 2003 -

Theoretical Aspects of Postural Management

Terry Pountney, Alice Goldwyn
Chailey Heritage Clinical Services, North Chailey, East Sussex, UK

The term postural management will be used to describe the 24 hour management of an individual's postural control which includes positioning equipment, orthotics, active exercise, hands on therapy and education for users. Knowledge from the fields of neurology, musculoskeletal adaptation and biomechanics can inform the design and potential in the provision of positioning equipment and help.

Theoretical Models of Motor Control

Theoretical models of motor control and development offer explanations of how postural management can be used to direct motor development and improve motor activity. Three models will be described. The neuromaturational model of motor development is used as a basis for many neurodevelopmental treatment techniques. It proposes that the changes in motor skills result solely from the maturation of the central nervous system proceed in a cephalocaudal and proximal distal direction and move from primitive mass movement and reflexes to voluntary controlled movements (Piper et al. 1994). The effect of the environment is presumed to have little impact on the child's progress and therefore would only support the use of postural management interventions to reduce reflex activity and alter muscle tone.

The dynamic systems theory (DST) moves the focus away from the neurological basis of motor development and broadens its perspective to include all areas of development (Turvey et al. 1982). The DST recognises the central nervous system as an important component in achieving motor performance, but suggests that other factors may also be highly influential. Such factors will include cognitive ability, motivation, muscle strength, biomechanics, the task and the competency of other sensory systems. Changes in any aspect of the system can have an impact on the motor outcome. Appropriately prescribed postural management programmes can affect both body functions and structures and improve dramatically the levels of activity and participation (WHO ICF-10).

The Neuronal Group Selection Theory considers how movement repertoires are selected and suggests that the structure and function of the nervous system are dependent on early movement patterns (Hadders-Algra 2000; Sporns et al. 1993) . This process is divided into three phases. During the initial phase the nervous system explores all possible variations of movement, in the second phase the most effective patterns are selected and finally motor repertoires are created which offer multiple solutions and adaptations to tasks. Early postural management intervention could offer an opportunity to affect early movement selection by directing movement patterns towards more normal and symmetrical patterns of movement. By altering movement selection the course of development for children with neurological impairment may be improved. Secondary variability may be affected by later provision of postural management.

Neural and musculoskeletal plasticity

Postural management provision should be designed to complement and reinforce therapy treatment to increase opportunity for changing motor patterns. Changes to a motor pattern within the nervous system requires 100,000 repetitions for a consistent competent movement pattern to be laid down (Kottke 1980). Physiotherapy is not sufficient to make significant changes if abnormal patterns are experienced through the rest of the day. Functional activities are required to achieve neuroplasticity and will be maintained, but non-functional movements will be disconnected and movements which are used frequently have a larger representation in the cortex (Kidd et al. 1992).

Freezing degrees of freedom offers a theory of skill acquisition which works by freezing out unwanted movements and allows concentration on the movements to be learnt. Postural management equipment can act in this way to improve functional ability (Turvey et al. 1982; Vereijken et al. 1992). Higher levels of function are possible within equipment which provides stability with movement as the number of motor tasks requiring attention at any one time is reduced and concentration can be focused on specific motor or cognitive tasks.

Postural control and movement are a complex interaction of central and peripheral nervous system mechanisms and adaptations occurring in the musculoskeletal system. It is a circular mechanism whereby changes in one area result in adaptations in another. Individuals with impaired motor systems will not exhibit normal movement patterns and consequently the stresses placed upon the bone and muscle will differ from the normal situation and are reflected in the development of the musculoskeletal system.

Changes occurring in the musculoskeletal system can have a more

profound effect on functional ability than the original neurological damage. The nervous system, muscle and bone are extremely plastic tissues which are constantly changing to meet the functional and mechanical demands placed upon them. Postural management interventions offer the potential to direct these changes in a beneficial way. Plasticity occurs in young children in response to a variety of influences including maturation, growth, myelination and activity.

Muscle length changes occur frequently in individuals with neurological impairment as a result of growth, immobility, disuse and persistent asymmetry. The mechanism of these changes is not fully understood: however muscle imbalance between opposing muscle groups can lead to a vicious cycle of increasing shortening and lengthening. Recent work suggests that rather than muscle fibre length it is the fibre diameter that is reduced as a result of weakness. This leads to shortening of the muscle aponeuroses (Shortland et al. 2002). Options for changing muscle include surgical interventions, orthotics, positioning equipment and strengthening. Strategies which involve immobilisation may conflict with theory of muscle weakness and need strong justification. Periods of gentle stretch are recommended as a method of changing muscle length. Sleep is an ideal time for this as muscle activity, which is often constant during the day is reduced at night and is recommended as the time for length changes to be achieved without resistance (Lespargot et al. 1994).

Appropriately designed positioning equipment should be viewed as a starting position for movement and not a static support.

Muscle tone has long been the focus of physiotherapeutic interventions. However, there is no evidence that reducing muscle tone has an impact on motor dysfunction, the prime causes of which are attributable to weakness, fatigue and lack of co-ordination (Carr et al. 1995; Dietz et al. 1983). Several factors contribute to changes in muscle tone and can be divided into non-neural and neural mechanisms. Non-neural factors include the intrinsic stiffness of the muscle, tendon and connective tissues, muscle inertia, muscle viscosity, length and fibre type. Neural mechanisms include spasticity, co-contraction of muscle groups and associated movements due to body imbalance (Carr et al. 1995; Chapman et al. 1982; Dietz et al. 1983). Interventions to address muscle tone need to address the underlying causes. Maintenance of muscle, tendon and connective tissue length, provision of a stable position and opportunities for movement can all be addressed by postural management equipment in a variety of positions.

Julius Wolff in 1892 stated: "Nothing else is necessary to achieve normal or almost normal shape than to make normal or almost normal the stressing of deformed bones...the normal shape must be regenerated by the remodelling force when the stressing becomes normal" (Wolff 1986)

Stresses on bone are produced intrinsically by muscle activity and extrinsically by gravity and positioning. Bone responds to a variety of stresses including compression, shear, torsion, bending and tension. The type and duration of load will, in the early stages of growth, be a determining factor in the differentiation of tissue types.

Growth plates in the bone provide little resistance to forces acting upon them and children are therefore vulnerable to the effects of abnormal forces. The imbalance of muscle pull around a joint can result in asymmetrical loading of the epiphysis. Increased loading on one side of the epiphysis may slow growth on that side and cause a change in the direction of growth (LeVeau et al. 1984) Perpendicular forces produced by muscle pull or gravity acting across the epiphyseal plates, can cause bone growth to spiral away from the epiphyseal plate (Arkin et al. 1956) e.g. scoliosed spines and femora of subluxed hips. Lack of compression due to limited weightbearing will limit bone growth and cause reduced bone density (Stuberg 1992).

In postural management equipment the direction of forces applied to the body needs careful consideration and should offer symmetrical and where possible intermittent loading of the bone and growth plates.

Biomechanics

Early motor development in lying, sitting and standing are related to changes in loadbearing and accompanied by changes in the position of the head, shoulder girdle, trunk, pelvis and limbs. These biomechanical changes occur concomitantly throughout the body. There is no directional element to developing motor ability it is directly related to functional activity (Green et al. 1995). The impact of correct biomechanical alignment on muscle activation and firing has been demonstrated. Children without cerebral palsy placed in a crouch gait posture exhibited similar muscle activity to children with cerebral palsy ((Woollacott et al. 1996)). This work suggests that positioning equipment should aim to replicate normal positions and movement to

enhance activity and function and prevent consequent deformity.

Abnormal movements are a contributing factor to the development of deformity. Habitual patterns of movement, which happen in a limited range of movement, prevent the regular full range of muscle stretch required to prevent deformity occurring. Abnormal patterns of movement may develop because a child's initial starting position for the movement is unstable and leads to compensatory mechanisms to maintain a stable position. Windswept deformity at the hip progressing to scoliosis is a prime example of a deformity which may arise from such abnormal compensatory movements.

The mechanism for maintaining stability is altered in children with cerebral palsy and support to aid stability has been shown to decrease these differences (Brogen et al. 1996). Equipment provided at the correct level of ability can enable a child to move freely within and out of a stable base without fear of falling.

Conclusion

There is a wealth of knowledge from the fields of neurology, musculoskeletal and biomechanics which provide support for postural management interventions as a method of improving motor and functional ability. This knowledge can guide prescription of postural management programmes to ensure treatment aims are being successfully addressed.

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Are you being served?

Jason Tully & Kyaw Nyein, *Stanmore Special Seating Service, Middlesex*

Introduction

Contrary to some suggestions, this is not an article espousing the use of 1970s British light comedy as a rehab tool. Rather, the title is used to highlight a dilemma that we suspect many of us in the equipment services face of how we manage review of equipment supplied to the disabled people.

The 1998 European Union Directive clearly stipulates the need for regular review of equipment supplied, in our case to disabled people, as recommended by the manufacturer and this is usually on an annual basis.

Stanmore Special Seating Service (for the North West Thames Region previously and the same geographical area thereof) since its inception in 1989 has never been funded for reviews. However, day to day clinical work repeatedly highlighted the need for regular review of the disabled person as well as their equipment to ensure that the provision continues to meet the clinical needs of the person.

Regular reviews of special seating and wheelchair bases allow us not only to identify potential problems and address these pro-actively, but also ensure that the seating systems are kept in good order to facilitate this vulnerable group's postural needs, mobility and other functional needs. Over the past few years, our service started ad hoc reviews at schools and day centres to ensure more efficient service delivery and this has been gradually changed to more structured reviews at regular six monthly intervals.

The introduction of regular reviews has been favourably perceived by disabled people, their families and the professional staff involved in their care. Though the present system enables us to review the majority of the disabled people accessing our service, we estimated that there is still a substantial minority of this vulnerable group of people who are not reviewed regularly. This could be due to a variety of reasons e.g. they have left school, are not attending the day centres, etc.

The main aim of this audit was to determine the extent of the follow up reviews that we are currently able to manage within the present system. We could then try and identify ways of improving the service so that more disabled people with special seating systems could be reviewed on a regular basis.

Materials and methods

All disabled people, whose specialist seating systems were delivered over a period of six months, from 01.04.01 to 30.09.01, were included in the audit. Demographic data including age - divided into two groups: 18 years and under and all those above, as well as the types of systems delivered to the disabled people were collected. The special seating systems were broadly divided into either orthogonal or bespoke contoured seating systems.

The follow up reviews for each disabled person in this group, over a 12-month period from the time of delivery, were assessed. The types of reviews were categorised as follows:

- Joint reviews where the disabled person was assessed by the clinician (doctor, therapist) and an engineer
- Technical reviews where the seating system delivered to the disabled person was reviewed by the engineer
- Repairs and adjustments

Results

A total of 84 disabled people (45 males - 54% and 39 females - 46%) had their special seating systems delivered by the Stanmore Service between April and September 2001. Two thirds of this group (56) were 18 years and under, and one-third (28) were 19 years and over. Thirty-one disabled people (55%) in the younger age group were provided with orthogonal seating systems, but only one person (4%) in the older age group received such a system. In contrast, 23 persons (82%) in the older age group were provided with bespoke contoured seating systems.

Forty three disabled people, which is just over 50%, had joint reviews over a 12 month period from the time of delivery of the seating systems and a further 12 disabled people (14%) had technical reviews. In addition, 11 disabled people (13%) had their seating systems either repaired or adjusted within 12 months from delivery of their seating systems.

Discussion

The profile of the disabled people accessing our service is not too dissimilar from other disabled groups accessing similar services. As expected a higher proportion (55%) of disabled in the younger age group were provided with orthogonal seating systems, which help maintain and improve their postural control. However, in the older age group with more established postural deformities, a large majority (82%), were provided with bespoke systems to accommodate their postural requirements.

It was generally agreed that 50% joint reviews over a 12-month period is acceptable taking into account the constraints of the service, i.e. a service with no formal funding for reviews. However, we are clearly far short of 100% technical reviews as stipulated by the EU directive. Though we would ideally like to have 100% reviews, this would not be possible unless additional funding is made available to employ the necessary staffing as well as hardware costs.

It must also be pointed out that more than three-quarters of the disabled people had had some contact with the service (joint or technical reviews or repair and maintenance visits), and this in our view is encouraging though far from satisfactory. We accept that not all of them are formal reviews, but it could be argued that problems would have been identified when repairs and adjustments were made to the seating systems.

We then tried to see how we could address this problem and came up with a system of flagging up disabled people who have not been formally reviewed after eight months from the time of delivery. This would enable the service to identify the persons who would require reviews and make necessary arrangements for planned intervention.

We aim to have reviews for 75% of the disabled people within 12 months from delivery in the first instance. We plan to start a prospective audit for all the seating systems delivered over a six-month period from April 2003, followed by joint and technical reviews over a 12-month period. It would also be important to record the outcome of the reviews in terms of actions and advice to establish the necessity and effectiveness of the reviews and we intend to incorporate these aspects in our prospective audit. The results and findings would be available for general discussion and dissemination by September 2004.

Summary and conclusions

An audit was conducted on the follow-up reviews of the disabled people (all persons who had their seating systems delivered over a six-month period from April to September 2001) accessing the Stanmore Special Seating Service. Two-thirds (55) had formal follow up reviews out of a total of 84 disabled people accessing our service. This is far from ideal but for a service with no formal funding for reviews, we felt that it is not an inconsiderable achievement.

We plan to introduce a system to identify the disabled people who have been provided with special seating but not been formally reviewed by the service. A prospective audit to test the effectiveness of the new scheme will be conducted from April 2003.

Acknowledgments

This audit would not have been possible without the invaluable help and advice from Dr Linda Marks, Head of the Special Seating Service and Dave Mitchell our technical whiz kid who has made this audit not only possible, but also positively enjoyable.

Please send in photo's of old wheelchairs and seating systems.

Any one out there know the model and year?

The Single Assessment Process for Older People ~ A Personal Perspective

Simon Fielden

I can imagine your brow is already furrowed …….. Why is this article appearing in the PMG newsletter? What relevance does it have to PMG services and the people who work in those services? But don't stop, read on, as I will attempt to shed some light on these questions. Firstly, what on earth is the Single Assessment Process (hereafter SAP)?

To answer this I need to take a step back and revisit the NHS Plan published in July 2000. The plan sets out a 10-year programme of investment and reform to improve the NHS. No one in health or social care services should be under any illusions - we are going through the most important change in these services since the NHS was formed. If you have not read the NHS Plan I urge you to get a copy, read it and then read it again. It states: -

- **The NHS will shape its services around the needs and preferences of individual patients, their families and their carers.**
- **The NHS will work together with others to ensure a seamless service for patients.**

I know these sound like the usual management speak we are all so tired of, but rest assured this Government has staked its reputation of achieving modernisation of public services. This means that resources and energy are focussed on achieving modernisation and there are some real opportunities to get involved in this process and improve our services (the recently established Wheelchair Services Collaborative is an example of this).

What is the Single Assessment Process?

Chapter 15 of the NHS Plan is devoted to dignity, security and independence in old age. The ideas and plans of this chapter have been developed and expanded to form the National Service Framework for Older People, published in March 2001. This NSF defines 8 standards designed to radically improve services for Older People.

> 'In youth we learn;
> in age we understand.'
> Marie von Ebner-Eschenbach
> (1830-1916)

Standard 2: Person-centred care aims to ensure that older people are treated as individuals and they receive appropriate and timely packages of care which meet their needs as individuals, regardless of health and social services boundaries. One of the key drivers for achieving this is the SAP, which will work across health and social care (more accurately the unified assessment process).

The NSF for Older People and Department of Health guidance on SAP defines what the process must deliver, rather than the process itself (which is a matter for local determination). Thus, SAP must deliver:

- A process, which ensures that older people receive appropriate, effective and timely responses to their health and social care needs,
- That the scale and depth of assessment is kept in proportion to older peoples needs; agencies do not duplicate each other's assessments; and professionals contribute to assessments in the most effective way.

Sounds like motherhood and apple pie (had to get that one in somewhere!), but pause for a minute and think what needs to change to deliver an effective SAP. For example, all involved agencies need to agree shared values, purpose and outcome of the process. Service users, carers and other stakeholder need to be intimately involved in the planning and implementation of SAP. Care processes need to be mapped and improved. The stages of assessment and care management need to be agreed between all agencies. Assessment approaches, tools and scales all need to be agreed between agencies. Joint working arrangements need to be agreed between the agencies and a joint staff development strategy needs to be agreed. Of course many health and social care economies will already have a number of these stages in place anyway, but even so the scale of the project should not be underestimated. The key is to build on existing good practice, of which there is much, and involve all stakeholders.

In essence what is being described is a model of whole systems delivery where the **service user is placed at the centre of service provision**.

What is exciting about the SAP is that it offers a very practical approach to developing a model of whole system delivery. It is far from ideal, there are many flaws in the approach but simply going through the implementation process as defined above will highlight so many areas where we can improve

the interfaces and communication between services. After all, many of our service users really do not care whether you are a Therapist, Engineer, or Nurse. Whether you work for a wheelchair service, social services, or the approved repairer, users simply want their needs assessed appropriately and care and interventions provided to allow them to meet their goals. Of course there are resource issues here, particularly in terms of funding assistive technology: but I will come back to that point a little later.

Why am I involved?

The Modernisation Agenda in the NHS has opened up tremendous opportunities for all staff. The NHS particularly needs leaders and there is a great deal of support for staff who wish to develop their leadership skills and experience (for example the NHS Leadership Centre).

An example of this is that given that the timescale for implementation of the SAP is very ambitious (it must be implemented across England by April 2004), the Birmingham Health and Social Care Community decided that the best way of achieving effective implementation was to appoint a project director and develop a project team.

I have always been frustrated by the lack of whole systems working in rehabilitation services and decided that no-one else was going to sort this, so I needed to equip myself with the skills and experience to tackle this need in Birmingham. So, I am now on secondment and leading the implementation of the SAP in Birmingham for the next 15 months!

This was not an easy decision for me as I am very proud of the posture and mobility services I manage, but I believe I will be able to bring back new ideas and experience, which can only benefit these services.

What does this mean for Posture and Mobility Services?

If you think SAP has no relevance to your own service, then think again. I would suggest that the key challenges facing posture and mobility services are

1 Implementing 24 hour postural management programmes

2 Vehicle transportation of wheelchairs and seating systems

3 Fragmentation of wheelchair and special seating services

4 Lack of data and information for wheelchair and seating services

5 Lack of a national strategy for these services and a consequent lack of resources

Even I would admit that a SAP could not solve the final challenge listed above! However, a SAP could certainly contribute to meeting the other challenges particularly as they all require inter-agency collaboration and joint working. The fourth item above is worth considering in more detail. The SAP will only be effective if it is implemented as an IT based system. Such a system will deliver very powerful information about services, which will facilitate intra and inter service audit and performance information. This has direct connections with the Dr Robin Luff initiative to develop a national wheelchair service database.

Conclusions

In explaining the background to the Single Assessment Process (for older people) I have attempted to illustrate the relevance of this approach to posture and mobility services. However, a key question remains - **can posture and mobility services develop to meet the key challenges they face**, many of which have been articulated recently not once, but twice, by the Audit Commission, **without a government backed plan?** I very much doubt that services for older people would have the attention they now have, without the NSF for older people. I recall Dr David Thornberry's recent Aldersea lecture at the York PMG conference. David called for a national rehabilitation strategy, for without it our services do not get the recognition or resources they desperately need. I endorse David's view. However there is possibly one glimmer of hope. Work has recently begun on a National Service Framework for Long Term Conditions and I believe that this document may provide the national strategy we need. It is imperative that this NSF considers the issues that relate to our services and I am aware of a number of people in the field of posture and mobility and assistive technology who are members of the NSF working groups. I urge all PMG members to be ready to contribute to the consultation process for this NSF, as it may be our best chance of securing the long-term investment our services require. You never know, the NSF may recommend the implementation of a single assessment process for people with complex disabilities.

Office Wisdom
www.bbc.co.uk/comedy

Lack of planning on your part does not consitutue and emergency on my part.

Never do today that which will become someone elses responsibility tomorrow.

CHALLENGING OPPPORTUNITIES

Patsy Aldersea

Need a change from routine humdrum? Need a challenge and an opportunity to try something new? Many wheelchair users and other disadvantaged people of all ages are seeking similar opportunities and as a recently appointed assistant gardener (amazing what opportunities there are for retired OTs) I can highly recommend **Bendrigg Lodge**.

This is a residential centre situated in open countryside between the Lake District and the Yorkshire Dales. The centre, run by the Bendrigg Trust, offers a range of high quality adventurous activities to disadvantaged and disabled people of all age groups. Experience on the high wire, climbing a rock face in or out of a wheelchair and a woodland adventure course, are some of the on site activities. Excellent locations within easy reach provide wider opportunities to experience sailing, kayaking, or caving to name but a few. For the less adventurous, there are opportunities to visit Lakeland market towns, farms, forests, waterfalls, as well as the finest system of natural caves situated in the nearby Yorkshire dales. Evening activities can be organized to suit individual or group needs - play games, visit the pub. The accommodation is second to none with hoists, special beds and other equipment available and the food is first class. The centre has a small fleet of fully adapted minibuses, but, more importantly, it has a highly qualified, well motivated and enthusiastic team of activity trainers and centre staff who are prepared to tailor activities to suit individual need and ensure that everyone will enjoy and benefit from their visit.

Practitioners working in the field of mobility are constantly seeking ways to train their users and encourage them to optimize their wheelchair skills. This is an ideal setting for all age groups to gain confidence in wheelchair handling through the experience of a wide range of well organized and supervised activities.

If you want more information for your clients or, if you, or they, are in the area and would like to visit (close to Junction 37 of the M6 motorway), the contact number is tel. **01539 723766**; e-mail: **office@bendrigg.org.uk** or visit the website:
www.bendrigg.org.uk

The aims of the Bendrigg Trust are to promote integration, independence and self-confidence through achievement in a variety of activities. Does this have a familiar ring? Sounds a bit like the PMG conference social evening!

And, what is more, there is an **opportunity for a challenge** for all of you! Bendrigg have reserved 20 places on the Great North Run. This is a half marathon which takes place on 21st September. Bendrigg will pay your entrance fee in return for you raising £130 (or more) sponsorship money for Bendrigg to continue their good work. **How about a PMG team?**

Anyone keen to have a go and enjoy a great day out whilst supporting Bendrigg, should contact **Vanda Lambton** (organizer) on **01229 861089**. Details of the run available on: **www.greatrun.org/charity.**

AN ADDITIONAL BONUS!

I was sorry not to be at the York conference this year, but I am sure you all had a great time. Should you be at Bendrigg Lodge for a visit - short or long, you are welcome to sample local refreshment (liquid or otherwise) with me in the village close by. Telephone: 01539 721438

THE WHEELCHAIR SERVICES COLLABORATIVE

Sally Howard, *Department of Health*

Introduction

Work commissioned by the NHS Purchasing and Supplies Agency estimates that there are 825,000 regular users of NHS wheelchair services in England. This figure excludes those people who need the service for a limited time period.

The Audit Commission Report 'Fully Equipped 2000' noted that services were under pressure and identified a number of associated problems:

- Inequity in criteria for provision and range of wheelchairs provided
- Variation in how/where assessments are done
- Delays (assessment, delivery, repairs/modifications)
- Variation in waiting times for delivery
- Variations in responsiveness to users
- Poor attention to users' needs
- Variation in expenditure per user

Since then, many NHS Trusts and Social Services Authorities have received local reports from their external auditors, or best value reviews about the performance of equipment services. In 2002 the Audit Commission summarised the findings of these local audits as well as reflecting on developments and other research since the publication of the original report . Their conclusion is that Fully Equipped has, thus far, been of limited value to users of equipment services with many of the recommendations still to be implemented.

The Audit Commission report illustrates the range of wait times that users currently experience for both standard and powered chairs. It is known that in some cases there are severely disabled individuals who wait years for the powered chairs that would so radically improve their quality of life.

The Collaborative

The Wheelchair Services Collaborative was launched at the end of November 2002 to bring about significant improvements in services. One of the specific recommendations of the Audit Commission report was the introduction of proposals to deliver incremental quality improvement programmes in order to raise all services to the standards of the best. Developed in partnership with the NHS Modernisation Agency, the Department of Health and the Audit Commission, this programme aims to do just that.

The programme was oversubscribed but teams have been selected from all parts of England and have been joined by a team from Wales. Each is committed to reducing delays in their service, maximising efficiency and introducing sustainable improvements which will ensure that every user gets the right service at the right time. From this work will come a best practice guide. In the interim, others will have the chance to hear first hand about the work as it unfolds from a web site - (this has been live from April 2003), from local network meetings and from a national sharing event planned for October.

The Framework

The framework for this programme was set by a panel of professionals with expertise in every aspect of the service, together with service users and carers. The panel met in September 2002 and described the current journey for users and their carers, from the identification of the need for a service to the point when the chair is supplied, reviewed and maintained. They then identified areas of practice that were working well around the country and others where that was not the case. From there, they were asked to select areas for improvement or 'opportunities' that in combination would bring the greatest improvement in services. Each of these had to be both clear and measurable. Measurement is a fundamental part of this work - without measures no service can be sure that the changes that they are making are really bringing any improvement.

They identified areas where there was potential for significant improvement in service across the country spanning four key strategies:

- Overall experience
- Minimising delay
- Maximising efficiency
- Improving the overall outcome for users and carers

Each of the forty five teams has now selected six areas to work on over the coming year, with at least one chosen from each strategy heading. There are no standards as such - each service will have a different starting point, but the challenge is to achieve significant improvement on current performance. Each has committed to work intensively to make a minimum 25% improvement on their current performance.

Collaborative programmes harness

the collective wisdom of the participants. Teams will come together for three learning sessions during the programme, taking away ideas from one, then feed back on their activities, methods and results at the next session. They will also monitor and report monthly on their progress. A Faculty with members drawn from the original reference panel and other representatives from the service is in place to ensure that this programme offers the right breadth and depth to its work and really challenges participants to make significant improvements in service.

Model for Improvement

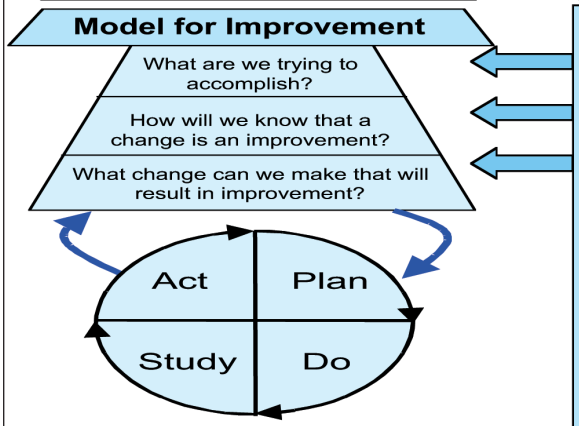
Teams are using the Model for Improvement below to help them with this work. This model is used extensively throughout the work of the NHS Modernisation Agency. It is effective in achieving rapid, sustainable improvement in service. The model is shown bellow, with guidance notes on the right to explain how we are using it within our programme. Further supporting information on the Model for Improvement can be found in the Improvement Leaders Guides on the NHS Modernisation Agency website:

www.modern.nhs.uk

This work will run alongside other key initiatives set in train by the Department of Health to improve existing services including the Wheelchair Services Mapping Project. There is only a minimum of information held, centrally, about Wheelchair Services, much of which is anecdotal. The Department has funded emPOWER to carry out a mapping exercise of all wheelchair services in England - the results will be invaluable

Our thanks to Pamela Marsh, DOH Disability Policy Brach, for continuous encouragement with this work; to the members of the Reference Panel for their initial guidance and to the Faculty of the Wheelchair Services Collaborative for their ongoing support.

The Model for Improvement © IHI



The Model for Improvement

Langley G, Nolan K, Nolan T, Norman C, Provost L (1996) The Improvement Guide: a practical approach to enhancing organisational performance, Jossey Bass Publishers , San Francisco

Guidance notes for teams participating in this programme

To improve you need to set clear aims - each team selects six of the thirteen opportunities and attaches a numerical goal that they will achieve.

They then put arrangements in place to measure their progress each month to see if the changes they are making are actually bringing an improvement.

Each team then completes a map of the current journey for users and carers - from the point that the user identifies that they may need a wheelchair, through decisions about their eligibility to supply, ongoing maintenance and review. From this they will identify current working practices, which, if changed, would bring about improvement. The next step is to try some of these using PDSA cycles. PDSA is shorthand for trying a change with a small number of users and seeing if it works - this could be the next five users, the next clinic or the next set of visits. Teams then study what happens and act on what is learnt. The advantage is that progress is made quickly, and teams only make changes that really do improve the service.

References:

1. Audit Commission. Fully Equipped: The Provision of Equipment to Older or Disabled People by the NHS and Social Services in England and Wales. London: Audit Commission, 2000
2. Audit Commission 'Fully Equipped' 2002

Update on the BSRM/RCP Specialised Seating Guidelines

Linda Marks

Those of you who were at last year's PMG meeting in Nottingham, may remember my brief presentation (and flyer in your conference packs) regarding these guidelines. Since then we've been quite busy. The guidelines are now going through Draft 5b! This has involved the first round of the expert group, a round of the consensus group (and a big thank you to all of you who responded with very diverse and thought provoking comments - the vast majority of which have been incorporated, and my apologies for no personal replies, but there just aren't enough hours in the day. Please accept a corporate , but very sincere "thank you") and a second round of the expert group. Draft 5 has just gone out to the expert group for a third round.

Additionally the literature search has been completed, and cross-referenced to the text, but it won't surprise you to hear that there isn't a great deal of evidence, and what there is is mainly level 3 or 4 (SIGN criteria) which doesn't generate a very strong level of evidence. So all the more reason for your contributions, as we are largely going to have to rely on the consensus. I will endeavor to keep you posted on progress through the newsletter and PMG website.

EQUAL Research Network

Liz White

The EQUAL Research Network was launched in 2001. It is open to all those who are interested in the contribution which user-focused, inter-disciplinary research with an engineering, design or physical science perspective can make to the lives of older people, people having disabilities and society in general.

The EQUAL Network holds regular research-based events throughout the UK, particularly related to aspects of assistive technologies, enabling people to access such technologies, and fostering links between researchers from a wide variety of disciplines. Attendance at EQUAL events is free to interested people.

The Research Network is keen to welcome people who have an interest in improving the quality of life of individuals of all ages and abilities. For further information and to find details of forthcoming events, log onto **www.equal.ac.uk.**

Office Wisdom: www.bbc.co.uk/comedy

Avoid employing unlucky people - throw half of the pile of CV's in the bin without reading them.

What does a squirrel do in the summer? It buries nuts. Why? Cos then in winter he's got something to eat and he won't die. So, collecting nuts in the summer is worthwhile work. Every task you do at work think, would a squirrel do that? Think squirrels. Think nuts.

Guess why this wheelchair is alleged to be unstable?

Keith De Silva

Above is a picture of one of our clients who had fallen out of his wheelchair - I suspect a good many times. I rushed out to see him - a few years ago I hasten to add - because apparently, the wheelchair we supplied (a 9LJ) was alleged to be very unstable - "I wonder why???". As you can see this is probably a case where little assessment was made in respect of potential wheelchair instability due to client's difficult behavioural problems.

Client now has a Uni 9 EWB, anti-tipping levers, outrigged castors, high armrests with fully covered metal armrest panels, etc., in an attempt to minimise the risk of him managing to tip the chair in every possible direction.

Summary of the Equal Research Network Workshop

Pam Harper

Building to Enhance the Quality of Life of all People

About 60 delegates were welcomed in glorious sunshine to the beautiful house of Englemere by Professor Peter Lansley, the Director of the Equal Research Network. The aim of the Network is to improve the quality of life for older people by providing a forum where leading edge researchers, practitioners and older people themselves can meet.

The web site is **www.equal.ac.uk** and the aim of the workshops is to appeal to a wide range of people, including policy makers so that a better platform can be provided for the dissemination and application of current research. Meetings in 2003 were in February in Reading on the Design of Accessible Interfaces and will be in Preston in the summer on Assistive Technology.

The first speaker was Professor **Julienne Hanson**, from University College, London, on **'A Life Time in the Home - How People use their Homes'**. The design of homes is traditionally thought to be easy, but is in fact one of the most difficult tasks in architecture. Her study involved 400 questionnaires, study of 300 examples of housing, 100 interviews and 60 detailed diary records of house and room usage. There are many things a home must be:-

- affordable,
- comfortable,
- pleasurable,
- safe,
- secure and able to support both past and future activities.

Decisions about housing are very complex. With increased affluence in older life, older people want to continue the life style they had, and do not simply wish 'not to be a burden'.

Society is generally orientated to youth and 'the elderly' have become the largest 'special needs' group. This is a stigmatising approach.

Design of houses previously met the needs of young fit single males.

This must be changed to inclusive design which meets the needs of, and can be used by, all. It is important to involve elderly people in the housing choices. The ethic aspect needs to be remembered - so there is housing to meet the needs of extended families. Older people are still sociable and do not want to live in isolation. In a detailed study of how 60 elderly people used their living rooms, the results showed a big knowledge gap between the preconceived idea and reality. It was not one simple area, but zoned for different activities with a more social area near the door and at least one more private area further inside the room. Even the bed-sitting rooms in sheltered housing had the bed area separate. There were on average 17 articles of furniture in the room.

Older people want in live in main stream housing, but many live in older and poorer houses. Poor house design is disabling, leading to loss of independence and putting people at increased risk. At some time in their lives 90% of the population will suffer from architectural disability, though much of this is temporary. The thresholds for the general housing stock to comply with regulations are set too low.

The Welcome Label Scheme accesses the suitability of housing for older people and costs any work which has to be done. New houses should be futureproof so that there is room for wheelchair access, and provision of showers and rails. The standard design of sheltered housing provides a space smaller than a student's room in a Hall of residence. There is no room for furniture and is designed for living alone.

It is assumed that the elderly in sheltered housing need less, whereas they want choice and the space to continue to live their lives and pursue their interests. The comment from one person was that the architect should come and live in what he had designed!

The next speaker was **Caitriona Carroll** from the Joseph Rowntree Foundation [www.jrf.org.uk] on **'Life-time homes: Putting Research into Practice'**. Houses are designed for the 18% of the population who are male, single, of average height with good sight and hearing and aged between 18 and 40. Since 1989 the Foundation has been developing the concept of barrier free and multi-generational housing. In 1992 the 16 Lifetime Home Standards were produced to make homes more flexible, convenient, safe and accessible.

These standards include:

- a car parking space which can be enlarged to

3.3 m wide,

- car parking as close to the door as possible and as level access to the house as possible.
- Entrances with level access over the threshold and a covered entrance.
- wheelchair accessible lifts.
- doors and hallways conforming to particular specifications.
- space to turn a wheelchair in the main living room and dining area.
- living room at entrance level and space at the entrance level of a two storey house for a bed.
- wheelchair accessible toilet at entrance level and plumbing provision for a shower to be added.
- Walls in bathrooms and toilets capable of taking hand rails.
- design allowing for a future stair lift and a future through the floor lift between storeys
- design allowing for future construction of a hoist between bedroom and bathroom. Windows of the living room low and easy to operate.
- Sockets and switches at a height usable by all.

Since October 1999 all new homes have had to comply with the Accessibilty Provisions of Part M of the Building Regulations. However the government sees these Regulations as minimum standards and encourages developers to go further and use the Lifetime Home Standards to make homes even more adaptable for long term needs. All social housing in Wales and Northern Ireland is being built to Lifetime Homes Standards and many local authorities now require all or a proportion of their new social housing to be built to these Standards.

The Next Talk was on '**Building for Dementia: Towards Evidence Based Design for Care Environments'** by **Judith Torrington** and **Kevin Morgan.**

Residential Care is still the person's home although it provides specialised facilities. The design of the building can influence the quality of life and the quality of care within that environment. There is a very poor evidence base to guide designers and generally what is good to live in is what the architects say is good to live in! A cross section of over 100 small, medium and large care homes was studied, and the study involved over 450 residents and over 650 staff members. The questions to be answered were:-

- Can people live there and have a good quality of life?
- Can the staff work there and maintain good morale?

If the residents had access to a feature, such as a day space or a garden, it scored highly regardless of whether they made use of it or not. The necessary Health and Safety restrictions had more impact on the quality of life of the low dependency residents whereas the presence of these regulations had no impact on those with more severe dementia and higher dependency. Both groups benefited from the community facilities, the physical support and the comfort of the surroundings.

There is a wealth of legislation with which these homes have to comply.

The rooms are small, so the residents cannot put their furniture in. This may be an initial cost saving but it may lead to later expensive up-grading. Most of the buildings were introverted, looking in on themselves with internal courtyards, whereas most buildings in the community are extroverted. The biggest challenge were the health and safety issues, especially when the issue of safety for all comprised the quality of life of the less dependent, by, for example, stopping them from going out to the garden. There is always a balance between safety and allowing the elderly person to take some risk to enhance their quality of life and this is a dilemma common to many aspects of elderly care.

The next presentation **'A View from the Sharp End of Practice and Policy'** was given by **Peter Barker**, an engineer who had recently become visually impaired. There are 8.7 million people in the UK with a permanent disability and millions more with a temporary disability. These people want to live their lives like everyone else and benefit from inclusive design and be involved, not excluded.

He has not adapted his house since losing his sight as he can cope in a familiar environment providing that it is well managed and things are put in the right place. The elderly spend a lot of time in their homes, the visually impaired elderly go out less than once a week.

Once outside it is a hostile and intimidating environment.

When walking from his house he got overhanging branches in his face despite there being a law that vegetation must not overhang the pavement at the height of less than 2.1m. He then encountered parked cars on

the pavement - parking on the pavement is not an offence, but obstructing the footway is. Local authorities have the power to fine. There was then a drop kerb with no tactile paving on the down side and the tactile paving in the wrong place on the up side. There are specific documents regarding the positioning of tactile paving. Also, despite the specific guidelines regarding the positioning of crossings, a completely inappropriate one has been built near his house.

This all happens because most of the legislation and regulations are arrived at in a democratic way - through compromise - so the standards are minimal and are not always the ones which users need. Those who are supposed to implement the regulations are too busy to do it.

There is not one school of architecture which teaches inclusive design as a core subject at present, though this may change with the need for CPD. The lessons learned in research must be incorporated into design e.g. the contrasting colours on trains and buses. Research has to meet the needs of elderly people. Research can be implemented to improve the environment. Research must involve the beneficiaries e.g. when testing tactile paving do not use blindfolded medical students. It is possible to employ the elderly and disabled as researchers and there is a group of elderly people in Birmingham who act as consultants, test products as suitable for the elderly and put an owl mark on them.

There is a lack of direction as to where we are going on housing, so there needs to be a national debate. There is a great divide between the person's own home and a care home so there must be transitional arrangements to bridge this and meet the different housing needs. To build a new home that is adaptable for future needs adds 0.7-1.0% to the cost.

Keith Bright's talk was on **'Introducing Assistive Technology into the Homes of Older People'** There are a vast number of functional problems which affect the ability of older people to stay in their own homes and assistive technology, often in simple forms, can help. Limited mobility can be helped by grab rails, hand rails, ramps and lifts. Thresholds, if possible, can be ramped. Limited dexterity can be helped by easier locks and handles and better lighting and colour contrasts can help the visually impaired.

An Occupational Therapist may recommend adaptation of the building, but how adaptable is the average house?

- Level 1 are the standard fittings which everyone can use e.g. window fastenings, door handles and switches. There should also be safe taps: the UK loves 2 taps and mixer systems which do not work. Other countries have single lever mixer taps with temperature controls.
- Level 2 involves minor structural alteration e.g. stair lifts, bath lifts, moving of partitions to accommodate a wheelchair. There must be room at the top and bottom of the stairs to take a stair lift.
- Level 3 involves major construction. The removal of load bearing walls, building an extension, or putting in a downstairs toilet or shower.

There needs to be assessment of what the user needs and how easily the house can be adapted to take these alterations.

Alison Pearce's presentation **'Home Improvement for Independent Living'** gave the results of her research project where she asked elderly people living in their own homes what they saw as problems in the kitchen and bathroom. She often noticed dangerous practices, but could only get the particular person to change by saying that someone else had a problem and telling them the solution. She found that there was a denial of ageing and that they did not want the hassle of workmen and alterations.

Once again the answer is in sensible design for all e.g. kitchen cupboards with sliding drawers to avoid awkward stretching to the back, baths with built on seats on the edge which all can use and a slight raise of level at one end of the bath which helps all get in and out.

Further details are on the equal web-site.

Wheelchair Service Mapping Project

Aisling Devlin, *Limbless Association*

There is only a minimum of information held centrally about our vital NHS wheelchair services - much of which is anecdotal. A two-year Limbless Association with emPOWER Wheelchair Service Mapping Project to survey all 150 NHS Wheelchair Services in England was launched in July.

The Wheelchair Service Mapping Project, commissioned by the Department of Health will picture eligibility criteria, referral, assessment and service user involvement throughout England. A Steering Group composed of professionals and wheelchair users, from

various areas involved with the NHS Wheelchair Service, is monitoring the project.

Health Minister Jacqui Smith said: "In the 'old' NHS Wheelchair Services were dispersed. There was a lack of real opportunities for staff, with users, to tell us what their best practices were, and to help spread them more widely. Our new Wheelchair Service Mapping Project, with its 'bottom-up' rather than 'top-down' communications, will help to change all that. The findings will help us to identify good practices, so that these can be built upon to improve the service provided to those who rely on this vital Service."

Sam Gallop, Chair of emPOWER, says: "As a double amputee with spinal and hand injuries, I know how vital having the right wheelchair at the right time is to achieving and sustaining one's independence and lifestyle." Sam went on to explain: 'Because of the wonderful efforts of caring and skilled staff, there have been significant individual improvements and developments - and frustrations - since devolvement of the Wheelchair Service. The Minister's welcome new initiative will give all concerned the opportunity to say what are the best practices of which they are justifiably proud, and how the Service can help to spread them more widely.'

A Questionnaire was mailed to all NHS Wheelchair Services in England at the end of February. Wheelchair Service Managers are the focal point for the provision of the required information. The questionnaire is intended to paint as clear a picture as possible of the current service, identify good practice and areas that need improvement as well as any work that is needed to clarify existing policy. The information gathered will also feed into and enhance the work of The Wheelchair Services Collaborative.

Stroke Management: meeting the challenge.

Pam Harper

The Opening address, **A New Era in Stroke Management**, was given by **Professor Charles Warlow** from Edinburgh. He stated that when he qualified in 1968 there were no organised stroke services, hardly any coronary care units, stroke patients were not admitted to a London teaching hospital, there was no acute treatment for stroke, there were no CT scans, secondary prevention was hardly discussed and rehabilitation was done elsewhere by someone else.

The management of acute stroke in March 2003 is rather different. The condition should be regarded as a brain attack, and the patient should go at once to an A&E Department and go under the care of a stroke team. A CT scan should be done to exclude haemorrhage and aspirin 300mg given, then 75mg daily thereafter. The patient should be admitted to a stroke unit to sort out the cause, monitor the patient physiologically and neurologically and prevent complications.

Rehabilitation should start early, as should secondary prevention. Both admission to a stroke unit and thrombolysis if appropriate have been shown to decrease death and dependency after a stroke. After an ischaemic stroke or a transient ischaemic attack the risk of a recurrent stroke is increased 10 times over the general population.

In March 2003 the main principles of secondary stroke prevention are:

- Use of aspirin 150-300mg at once, with 75-150mg daily thereafter.
- Early carotid artery surgery for those who require it.
- Use of simvastatin 40mg to lower cholesterol.
- Blood pressure should be lowered with a diuretic i.e. indapamide 2.5mg daily and then an ACE inhibitor such as perindopril 2mg then 4mg daily.
- If the patient is in atrial fibrillation and is suitable warfarin should be considered.
- A healthy lifestyle - no smoking, healthy diet and exercise encouraged.

A comprehensive stroke service comprises:-

- an acute stroke unit, an in patient rehabilitation facility,
- daily neurovascular outpatient clinics, neuroimaging 24 hours daily,
- a multidisciplinary team including medical, nursing, and therapy staff who all have interest and expertise in stroke care,
- education, research, audit, information for patients and carers and it needs a leader.

Stroke units have been proven to be effective in systematic reviews and meta-analyses with 18% reduction in mortality and no increase in the length of hospital stay.

There are 6 ways to audit stroke care in a hospital.

- 70% of patients should be discharged from a stroke unit.

- 90% of admitted strokes should have a CT scan within 48 hours.
- 80% of stroke patients should be discharged by a consultant with a special interest in stroke.
- 95% of patients referred to a neurovascular outpatient clinic should be seen within 7 days.
- Appropriate patients should have carotid surgery within 4 weeks of first assessment.
- All patients with ischaemic stroke or TIA should be prescribed a suitable antithrombotic drug.

Stroke Research is poorly funded by major bodies. The Medical Research Council funds 3 ongoing trials for stroke as against 65 for cancer. Whereas the British Heart Foundation funds 28 Professorial chairs and 309 studentships and fellowships, the Stroke Association can only fund 1 professorial chair and 3 fellowships.

Dr Keith Muir, Consultant Neurologist from Glasgow then discussed **Acute Treatment of Stroke**. He stressed the importance of patients with symptoms of a transient ischaemic attack [TIA] being assessed and investigated quickly as these patients are a high priority for secondary preventative treatment. If a carotid endarterectomy is to be effective it must be done in the first few weeks after the TIA. He outlined the results of the Progress study which showed a 29% reduction in stroke as a result of reducing blood pressure. There was the same benefit whatever the initial level of blood pressure, even at levels previously regarded as normal.

He pointed out that a stroke evolves over hours, and that correct early treatment can limit the damage. He also reviewed the benefits of stroke units, and the greatest benefit is in the first few days after a stroke. One advantage of stroke units at this early stage is that the physiological variables of the patient are closely monitored. It is known that a low blood pressure, a high blood glucose and a high body temperature are bad in the first few hours after a stroke.

For certain stroke patients, after appropriate investigations, early treatment with a thrombolytic drug to dissolve the blood clot, can have a dramatic effect on the outcome.

Treatment must be done early and that is dependent on the patient reaching hospital early.

The next speaker was **Dr R McWalter** from Dundee. The prevalence of stroke increases dramatically after the age of 75. 30% die, mostly in the first month. 50% of the survivors are significantly disabled, recovery after one year is unlikely, but not impossible and after one year 12% of the survivors will be in institutional care. There has been great advances in the care of stroke patients in the last 10 years. In the past they were often neglected on general medical wards, were under investigated, had a poor outcome and there was little secondary prevention. Now diagnosis is much more accurate, and acute treatment possible, preferably in acute stroke units.

The primary risk factors for stroke are age, male sex, family history and low socio-economic status. Lifestyle factors include smoking, excess alcohol, obesity, the Pill, and lack of exercise. Other risk factors are high blood pressure, a previous stroke, ischaemic heart disease, diabetes, atrial fibrillation and high cholesterol.

There was then a workshop run by **Dr Paul Syme** from the Scottish Borders to discuss an **outline discharge document for stroke patients**. There was extensive discussion about the value of the flimsy, often illegible and incomplete initial document, which the patient thought contained every detail of their hospital stay and the often severely delayed, lengthy discharge summary, which in reality was often written under duress by a junior doctor who may not even have seen the patient. The inadequacy of the hospital notes, after the initial clerking, was stressed and the frequent reliance on the nursing notes for more complete information.

It was felt that the preparation of the discharge document must be given much higher priority and should be regarded as the end of the clerking process. It should be issued quickly after discharge with a follow up document if results of investigations were awaited.

With regard to stroke patients it was important to have a guide for further management i.e. a target for blood pressure reduction. With regard to medication, if drugs were stopped, an explanation should be given.

It is important that Primary Care is informed quickly when patients die in hospital, as although that event may be regarded as the end of the work in hospital, it can be the start of a lot of supportive work in the community.

The ideal discharge document would be transferred electronically to Primary Care, and eventually there might be sophisticated enough electronic linkage for there to be common notes and instantaneous communication between primary and secondary care.

PMG NEWS

Bellow are details of the current committee, listing position and stand down dates. Welcome to the new members: Ros Ham and Jacqui Rome: we'll have photos and a little bit about them in the next edition. As you can see, there will be elections to the committee in 2004.

Name	Profession	Sector	Position	Date on	Date off	Extension
David Long	REM	NHS	Chairman	2001	2004	2008
Barend ter Haar	Director	Private	Treasurer	2001	2004	2007
Roy Nelham	CE	Retired NHS	Vice Chair	1999	2002	2005
Elizabeth Green	Consultant	NHS		2001	2004	
Phil Swann	CE	Private	P&M Editor	2001	2004	
Martin Moore	RE	NHS		2001	2004	
Henry Lumley	Manager	NHS		2001	2004	
Gordon McQuilton	Director	Private		2001	2004	
Russ Jewell	BioEng	Private		2001	2004	
Gillian Wigham	OT	Charity		2002	2005	
Dave Calder	REM	NHS	Web Editor	2002	2005	
Penny Martin	PT/Manager	NHS		2002	2005	
Natalie Dean	OT	NHS		2002	2005	
Ros Ham	PT/Director	Charity		2003	2006	
Jacqui Romer	PT	NHS		2003	2006	
Pam Harper	Consultant	NHS	SSWG Representative			

2002 Conference Feedback

Sorry this appears following the 2003 conference but I ran out of space in the last issue. Feedback form the 2003 conference will be in the next issue.

Thanks to 117 delegates who filled out their meeting evaluation forms from Nottingham 2002. We're not publishing all the comments, but I can asure you the committee studied them used them in the planning 2003 conference. To remind readers of the sessions in 2002 they were as follows:

1. Demands for evidence
2. Free papers
3. Parallel Workshops
4. Parallel Wake-up sessions
5. Posters
6. Aldersea Lecture
7. Consensus
8. Risk
9. Evidence
10. Exhibition

Parallel sessions and wake up sessions were:

PS1 Benchmarking

PS2 Assessment Protocols

PS3 Establishing commissioning and provision system for local and specialist posture and mobility services

PS4 Wheelchair users in vehicles: good practice

PS5 Establishing core competencies for assessment

PS6 Provision for children

PS7 Establishing clinical outcome measures

WS1 EPIOC provision: Managing the risk four years on

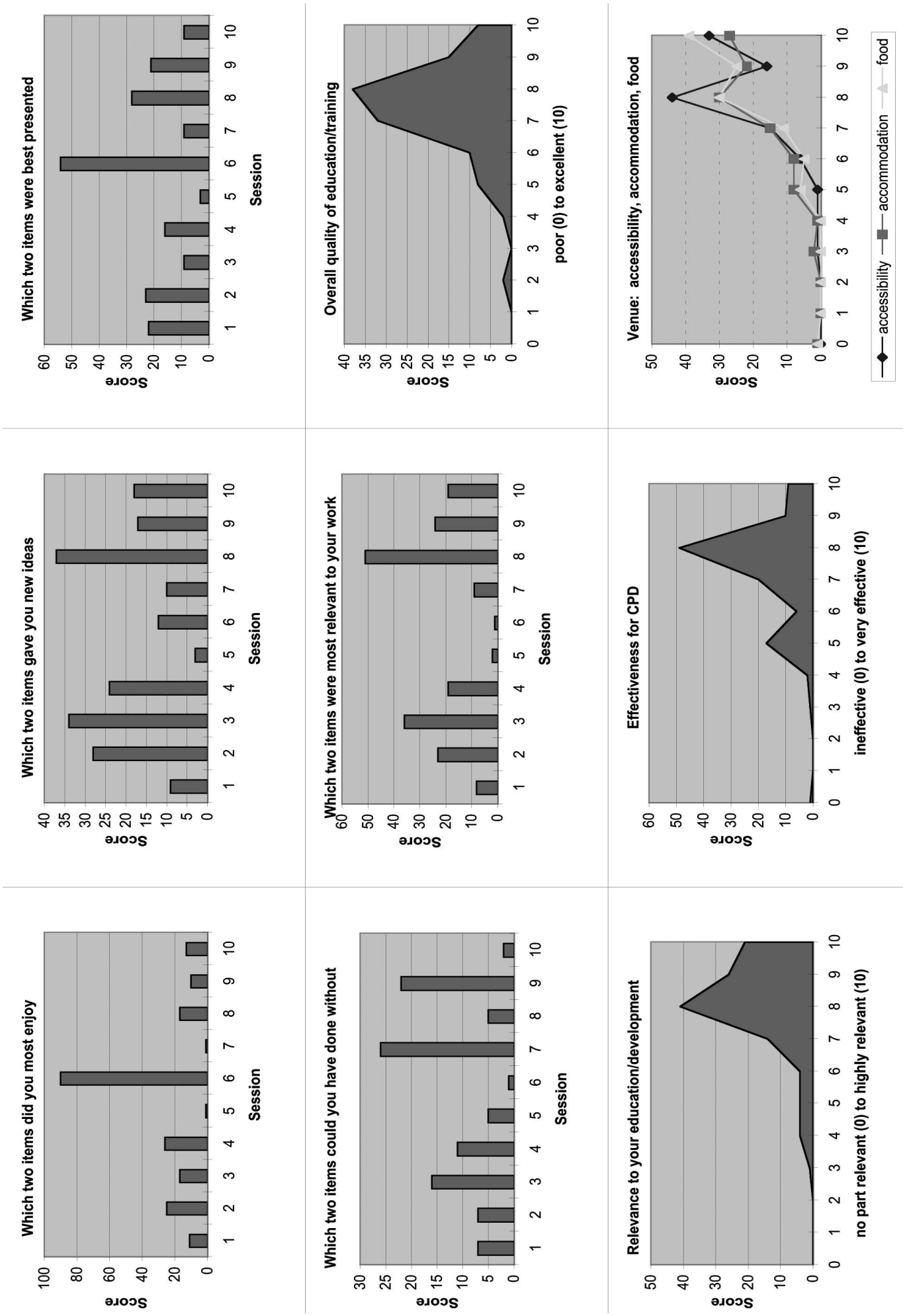
WS2 Evidence based healthcare: How is it going so far?

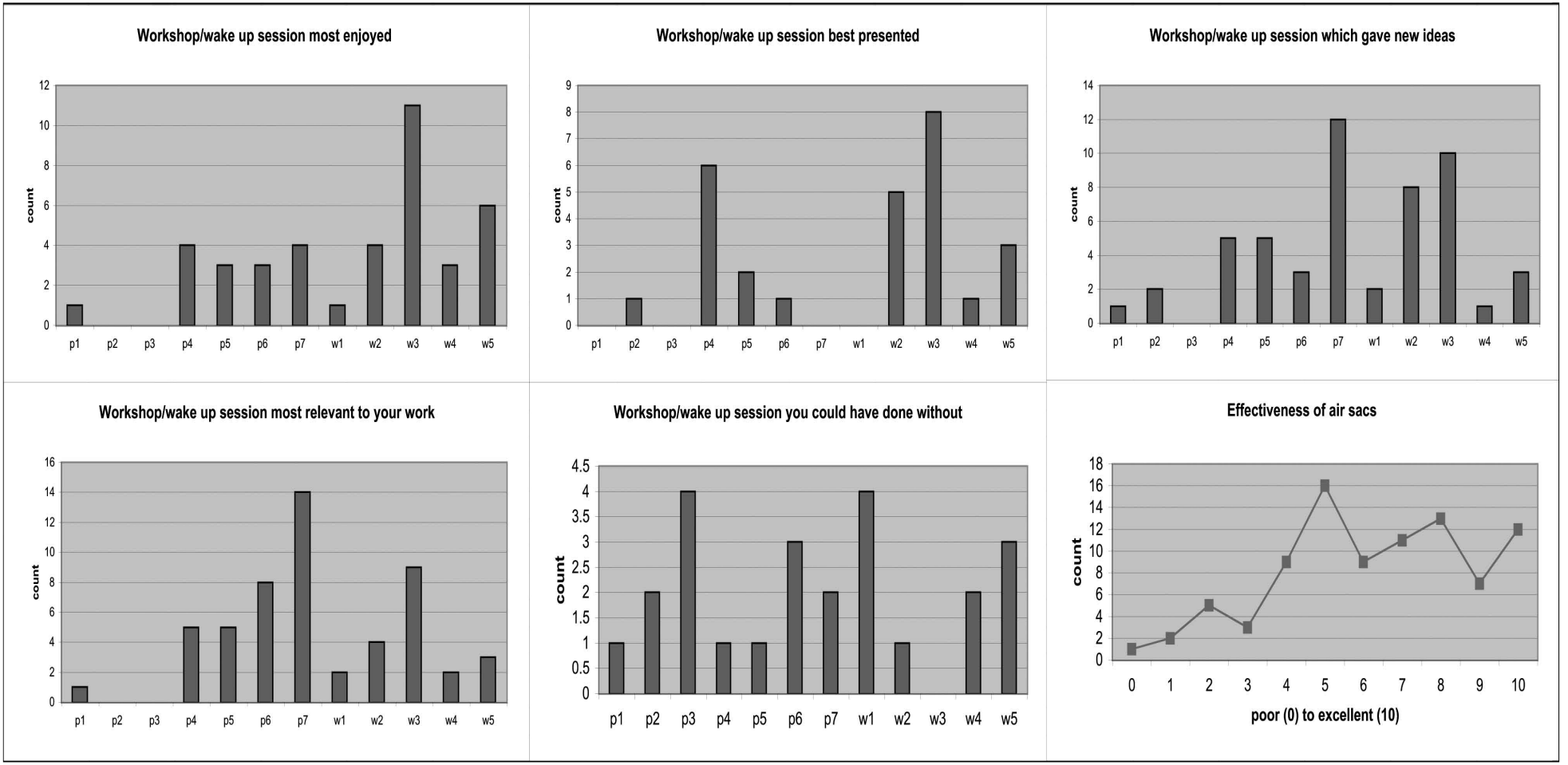
WS3 Clinical value of dynamic seating

WS4 More on drugs

WS5 Understanding and interperting the new 'tissue integrity' wheelchair seating standard

The following graphs on page 22 present the overall picture based on sessions 1 - 10 and a more detailed analysis of the parallel sessions and wake up sessions PS1 - PS7 and WS1 - WS5 respectively can be found on page 23.


Which two items were best presented
Score
Session
Overall quality of education/training
Score
poor (0) to excellent (10)
Venue: accessibility, accommodation, food
Score
accessibility
accommodation
food
Which two items gave you new ideas
Score
Session
Which two items were most relevant to your work
Score
Session
Effectiveness for CPD
Score
ineffective (0) to very effective (10)
Which two items did you most enjoy
Score
Session
Which two items could you have done without
Score
Session
Relevance to your education/development
Score
no part relevant (0) to highly relevant (10)



A pastor, a doctor and an engineer were waiting one morning for a particularly slow group of golfers. The engineer fumed, "What's with these guys? We must have been waiting for 15 minutes!" The doctor chimed in, "I don't know, but I've never seen such ineptitude!" The pastor said, "Hey, here comes the green-keeper. Let's have a word with him." "Hi George. Say, what's with that group ahead of us? They're rather slow, aren't they?" The green-keeper replied, "Oh, yes, that's a group of blind firefighters. They lost their sight saving our clubhouse from a fire last year, so we always let them play for free anytime." The group was silent for a moment. The pastor said, "That's so sad. I think I will say a special prayer for them tonight." The doctor said, "Good idea. And I'm going to contact my ophthalmologist buddy and see if there's anything he can do for them." The engineer said, "Why can't these guys play at night?"

What is the difference between Mechanical Engineers and Civil Engineers?

Mechanical Engineers build weapons, and

Civil Engineers build targets!

Thanks to Mike Hare for forwarding these engineer jokes.

Minutes of Annual General Meeting: Nottingham, 16th April 2002

02 AGM.1 Apologies

None received

02 AGM.2. Minutes of previous meeting (2001)

Minutes were agreed. Proposed by M Hare, Seconded by Dave Calder

02 AGM.3. Matters Arising

None

02 AGM.4. Chairman's report

The complete report was in the delegate pack and was summarised by R Nelham at the meeting. R Nelham was grateful for the support given to him, and it was noted that the PMG was a growing organisation with a committee of 15.

The report was accepted. Proposed by Linda Marks, seconded by Tony Wellings. Full text printed in *Posture & Mobility* vol **16**.

02 AGM.5. Treasurer's report

This had been circulated and a brief explanation was given by the treasurer.

02 AGM.5.1 Membership report

PMG has 650 members which represents further growth.

Both reports were accepted unanimously. Proposed by Rene Parison, seconded by Hugh Crawford.

02 AGM.6. Election to committee

Just sufficient nominations to committee had been received to fill vacant places, therefore no election was required.

02 AGM.7. Changes to the constitution.

Changes required to the wording of the constitution, in relation to charitable status for PMG and the requirements of the charities commission.

Minor changes to the wording were agreed. Motion accepted, Proposed by Mike Hare, seconded by Henry Lumley.

02 AGM.8. PMG working groups

Details of these are to be published in the newsletter

02 AGM.9. ISO representation

An update on standards was given by Barend ter Haar. Points from a previously attended standards meeting had been taken back to the committee for comment.

02 AGM.10. Future Meetings

York 18/19 March 2003

Nottingham 1/2 April 2004

International Conference April 2005 Dates to be arranged

SSWG meeting for 1st May 2002 is cancelled. Barend ter Haar asked whether there was interest in a ISO meeting with SSWG in the north of England, 12 people expressed an interest.

02 AGM.11. AOB.

Funding for PMG members and committee members.

An explanation was given into funding available

Thanks to Roy Nelham were expressed by Rene Parison on behalf of PMG for his work as chairman.

No other business, meeting was closed.

Time for a photo as the committee members take a peek at the Harlequin grounds. Special thanks to the **Harlequins** for the loan of their meeting rooms to the PMG as a committee meeting venue.

Members news. please share membership news from your area; it can be humourous, informative, detail promotions, moves, anything.
Thanks to: **www.wheelchairmanagers.nhs.uk for the UK map.**

Office Wisdom: www.bbc.co.uk/comedy

If at first you don't succeed, remove all evidence you ever tried.

Simon Fielden

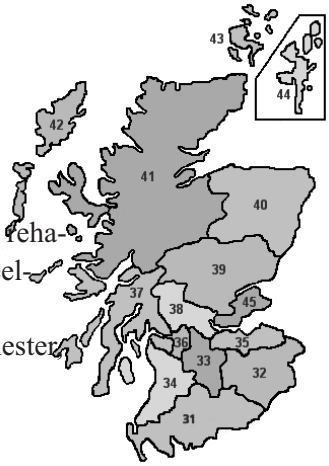
Manager of Posture and Mobility services at Birmingham is on secondment to Single Assessment Process (SAP) for the next 15 months.

Simon says 'I have always been frustrated by the lack of whole systems working in rehabilitation services, I hopes this experiance will help equip me with the skills and experience to tackle this need in Birmingham.' He goes on to say 'It was not an easy decision to make. I am very proud of the posture and mobility services I manage, but I believe I will be able to bring back new ideas and experience, which can only benefit these services.

Read all about this on page 10

Office Wisdom
www.bbc.co.uk/comedy

When confronted by a difficult problem, you can solve it more easily be reducing ti to the question, 'How would the lone ranger handle this?'



Penny Martin, has moved back into rehabilitaion from managing Salford wheelchair service. Her new post is at Wythenshawe hospital, South Manchester, heading a rehabilitation team within Physiotherapy.

Natalie Dean and **Jane Harding** completed this years London Marathon in aide of the Wooden Spoon Society. Current projects include; a library of communication aides, a w/c accessible adventure playground and a new children's hospice. If you would like to help contact Natalie e-mail Dean_N@southmead.swest.nhs.uk

Russ and Caroline Jewell, married on the 19th April in Penryth, Cardiff. Congratulations to them both and all the best in the comming year working in Japan on a JET scheme. Russ will be keeping in touch with the PMG committee through e-mail.

Terry Pountney and Alice Goldwyn from Chailey Heritage went to Orlando in Febuary of this year to present two instructional courses at the ISS (international seating symposium). See page 5 for the details on the Theoretical Aspects of Postural Management Provision.

Peter Gage, clinical services manager at Mid Essex was seen leading from the front and fixing a flouresscent light. It's good to see managers are not afraid to get stuck in with day to day operations even if it means getting their hands dirty!

Office Wisdom: www.bbc.co.uk/comedy

If your gonna be late, then be late and not just 2 minutes - make it an hour and enjoy your breakfast.

Phil Swann Derick Hill and **Chris Hart** cycled London to Birmingham (120 miles) in aid of the National Heart Foundation on the 29th April. Still looking for sponsorhship, so please send **cheques** to 90 Maytree Crescent, North Watford, Herts, WD24 5NW.

POST BAG

Dear Editor

Gillian Wigham in her Postbag letter (P&M **Vol 16**) raises an important point. The question of users becoming PMG members has been discussed on previous occasions. There is wide recognition of the benefits of working in partnership with users (and carers). Most members already support the sharing of information and the incorporation of users' views and expertise into service policy and practice. However, opening membership to users is quite a different issue and is linked to the philosophy and aims of PMG. What advantages and benefits would accrue from user membership? PMG holds a unique position as a multi-disciplinary group of practitioners. The aim of the group is to enable practitioners to share their skills whilst extending their knowledge and expertise, both clinical and technical, in order to provide an equitable and quality service to all users. One way by which this is achieved is to invite experts, which include users, to speak at the annual conference. There are wider opportunities to share information with users and raise awareness of PMG's influence at both local and national meetings and through publications. Non-members, including users, are also welcome at the conference.

By way of comparison, in the sphere of education parents join their local Parents Teachers Association (PTA) with the objective of influencing the standard of activities in a school. It is unlikely they would derive any benefit from joining a professional teachers' association and it is unlikely that they would wish to do so.

Time moves on and customs change, but changes should not be countenanced merely for the sake of change, but should be based on sound reasoning. There can be no argument for a change which benefits no-one. With this in mind, members may wish to review the aims and objectives of the PMG, to consider whether there is a need to extend membership to users and to contemplate what positive achievements would result from any such change.

Yours faithfully

Patsy Aldersea *Occupational Therapist*

Dear Editor

Re: **Wheelchair users in vehicles - Good practice**

We would endorse the recommendation of the IPEM Group in developing a proforma approach to risk assessment for this group of wheelchair users (1). In support of your request for information to add to a knowledge base, we recently reported the preliminary findings of a survey of EPIOC users which was undertaken in 2000 (2). All 284 EPIOC users on the departmental database at that time were sent a purpose-designed questionnaire. Replies to 2 mailings were received from 207 of which 203 were usable, a response rate of 71%.

Thirty seven (18%) users did not use any form of transport; 167 (82%) reported using the following modes of transport: Dial-a-ride (51%), taxis (44%), ambulances (41%), cars (34%), local authority transport (37%), and other (17%). One hundred and forty three (77%) reported that they knew how their wheelchair should be clamped; many using more than 1 form. Alarmingly, 62% were still using metal ratchet clamps (62%) at least on some occasions, and only 53% 4-point tie down webbing restraints.

Twenty of the 170 using transport (12%) reported having experienced a 'mishap' or an 'accident' during transportation: - wheelchair or user coming adrift through poor clamping or strapping (n=10) , falling out of their wheelchair as a result of its toppling over (n=7) and minor road traffic accidents (n=3).

Of the 182 users who expressed a view about 'feeling safe' 148 (81%) felt safe whilst 34 (19%) did not always feel safe.

This evidence suggests that transportation is an important issue for our users. We have a long way to go before we can be confident that all our users are being safely transported!

We will happily send our data to the IPEM Working Group, if requested, as soon as it has been accepted for publication.

Mike Belcher and Andrew Frank
Stanmore Specialist Wheelchair Services

1.Seabrook M. Wheelchair users in vehicles - good practice (IPEM Working Group). Posture & Mobility 2002; **16**: 8-10

2.Belcher MJH and Frank AO. Pre-audit survey of wheelchair users experiences of vehicular transportation (abstract). Proceedings of the 13th European Congress of Physical and Rehabilitation Medicine, Brighton, **May 2002** pp 214-5

Notice Board

Date	Location	Title	Contact
2003			
September			
31/08 - 03/09	Dublin	7th Conf. for Advancement of AT in Europe	tel. +353 1 8057523 /20 email: info@atireland.ie
October			
15 - 18	Dussledorf	Reha-Care	tel. (312) 781-5180 email: info@mdna.com
2004			
April			
1 - 2	**Nottingham**	**PMG 12th Annual Conference**	**tel. 01223 882705** **web:www.pmguk.co.uk**
September			
7 - 10	Bournemouth	International Functional Electrical Stimulation Society	tel. 01722 429 065 email. ifess2004@salisburyfes.com

New Website for Wheelchair Services

Henry Lumley

The National Wheelchair Manager's Forum is pleased to announce the completion of its new website. For some time the forum has been seeking ways to promote the work that it does and also to make details of wheelchair services more readily available. The new website, which can be found at

www.wheelchairmanagers.nhs.uk

has been developed with sponsorship from a number of companies who provide equipment to the NHS. The site provides details of the work of the managers forum and this will be developed further over the next 12 months. Perhaps of more importance, this website provides access to up-to-date details of wheelchair services throughout the country. People can either search through a simple alphabetical list, select a Strategic Health Authority, which will show all wheelchair services in that area, or click on a map to show the same information. What is more helpful is that wheelchair services can update and amend the information stored on the website. This should ensure that this remains an up-to-date and easily accessible source of information. All wheelchair services are urged to check the details stored and amend any inaccuracies or inconsistencies. Details of any services which need to be added to the website should be forwarded by e-mail to **henry.lumley@north-bristol.swest.nhs.uk**. Further information or comments should also be directed to Henry Lumley.

www.wheelchairmanagers.nhs.uk

Whizz Kidz

Standard for the provision of mobility equipment for children

Whizz kidz has established a group of paediatric and service provision professionals to develop new standards for the provision of mobility equipment (specifically wheelchairs) for children and young people. The standards aim to address the existing disparity in quality and equality of statutory mobility equipment provision across the UK.

The group includes representatives from: the national wheelchair managers forum; BHTA; NAPOT; APCP; IPEM; PASA; PMG; and whizz kidz.

Contact Ros Ham; r.ham@whizz-kidz.org.uk or tel. 020 7233 6600 for more info.

Office Wisdom: www.bbc.co.uk/comedy

If work was so good, the rich would have kept more of it for themselves.

Eductaion and Training

NATIONAL WHEELCHAIR MANAGERS FORUM

GUIDELINES FOR ACCREDITED WHEELCHAIR PRESCRIBERS COURSE

Introduction

The National Wheelchair Manager's Forum has for some time been discussing the benefits of supporting a transferable accreditation of wheelchair prescribers, which would highlight an appropriate skill level examined to a national standard.

The proposals detailed below highlight the minimum element to be covered as part of an accredited prescriber course. It is intended that these elements would be standard on any accreditation course run throughout the country, but would be supplemented with local additions to support local practice.

This would lead to a transferable certificate of accreditation, which would then enable healthcare professionals moving around the country to register with other local wheelchair centres and demonstrate that they had already been trained to an agreed standard. They would then almost certainly need to undertake local induction training to supplement their existing knowledge.

The course content is aimed at healthcare professionals to support the referral of the prescription process. It has been arrived at by building on information provided by wheelchair services throughout the country prior to the meeting.

The following guidelines have been approved by the National Wheelchair Manager's Forum, but are open for further comment and amendments may be made later this year. They are also available on the Wheelchair Managers' Forum website:

www.wheelchairmanagers.nhs.uk

Comments should be forwarded to Henry Lumley:
e-mail: **henry.lumley@north-bristol.swest.nhs.uk**

Other contacts:

Harriet Beynon	harriet.beynon@brentpct.nhs.uk
Sam Brinn	sam.brinn@doh.gsi.gov.uk
Alan Lynch	alan.lynch@doh.gsi.gov.uk
Krys Jarvis	krys.jarvis@shropcomm.wmids.nhs.uk

Minimum Elements to be Covered

1. Basic principles of good seating and posture.
2. How to correctly seat a patient and how to measure for a wheelchair.
3. Basic principles of pressure care/redistribution.
4. External considerations impacting on wheelchair assessment e.g. carer needs, transportability, environment effects and function.
5. Knowledge and understanding of compromises arising from the assessment process, including risk management and controls assurance standards.
6. Knowledge on how different types of wheelchairs and seating benefit users and carers.

On passing the course, attendants will receive a certificate and accreditation, which will be transferable across wheelchair services. Continued accreditation will depend on the results of future assessment audits.

Local Induction Training

1. Overview of local wheelchair and seating service, including prescription responsibilities.
2. Criteria and information on provision within their service, e.g. equipment available.
3. Prioritisation, as applied locally.
4. Information on how to complete referrals and assessments.
5. Usage of the wheelchair voucher scheme, if appropriate.
6. Information on local delivery and maintenance and how to access these services.

Background Information

1. Service should consider appropriate audit techniques to monitor the assessments of the people who have been accredited under these courses.
2. Services should consider when it would be appropriate to offer refresher training for changes in assessment protocols, or when audit checks reveal any shortcomings in individual assessments.
3. Services should maintain records of attendants on courses to assist transferability and update training.
4. Services may be eligible for CPD points on suitably organised courses. Local education and training confederations may provide funding to assist in the running of courses.
5. On completion of the course, attendants must be tested on each of the course core elements, listed 1-6. This may take the form of a specifically structured test or suitable case study designed to demonstrate understanding of each of the points.

PMG Education Requirements Questionnaire

The results so far.

You will have noticed that the committee has been trying to establish what requirements the group has for education and training by way of a two sided questionnaire mailed out to members over the last few months. We have now received over seventy responses which equates to approximately 10% of the membership. Here follows a brief, rough and ready summary of the story so far.

In general training in seating and positioning, wheelchairs, medical aspects, and diagnosis/disability should be set at an advanced level. While some indicated that they would like some introductory and intermediate training in these subjects, the majority would like something more challenging and in depth.

The individual topics within these subjects attracting most attention were as follows:

- Seating and positioning: assessment; measurement and prescription; back/trunk/head support; tissue integrity characteristics; combining posture and function; outcome measures; risk assessment.
- Wheelchairs: outcome measures; risk assessment.
- Medical aspects: effects of posture on spine, pelvis and physiological function; surgical procedures.
- Diagnosis/disability: spasticity management; progressive neurological conditions.

It would seem that the level of knowledge of pressure care is not so high since there have been roughly equal requests for intermediate and advanced training. Responses indicated that training for service management should be biased towards the intermediate level however it is interesting to note that there were also a significant number of requests for introductory training. A similar picture exists for transportation.

If you feel that these results do not reflect the education and training needs of the PMG and have not filled in your questionnaire then please take ten minutes to do so. If you would like to put a particular point across please feel free to e-mail me on davidlong@waitrose.com or write to me at the Wheelchair Centre, RNOHT, Brockley Hill, Stanmore, Middx, HA7 4LP.

University of Greenwich Programme updates

As you may already know, the wheelchair modules have been credit rated by the University of Greenwich at Level 3 (degree level) since 1999 under the title of 'Wheelchair Prescription and Provision for Professional Practice'. These courses we entitled the CORE (30 credits), Pressure (15 credits), Posture (15 credits) and Equipment (15 credits). The CORE module has now run three times.

Modules are being developed to make an award for health care professionals at Level 3, entitled the BSc (Hons) Professional Practice in Health & Social Care (Enabling Function and Mobility). This is a specific route within the programme that will enable practitioners to develop knowledge and skills in the named professional area. These modules and the award are also run alongside work from the Department for Transport - Mobility Forums and the DLCCs.

The new degree will be a practice focused programme that will offer high quality professional development. The aim is to facilitate the practitioner to develop the skills required to review, evaluate and extend their practice applying knowledge and understanding to initiate change where appropriate. Over time, we intend to offer the majority of courses in distance and attendance learning.

The existing wheelchair modules have been re-worked and are currently at the approval stage. The new modules forming the specific route will be entitled;

- 'Wheelchair prescription - CORE' - 15 credits (for practitioners who work in a variety of areas who need to be able to prescribe wheelchairs and associated accessories),
- Specialist Wheelchair Prescription for Complex Disability - 15 credits (for staff working in wheelchair and associated services who have completed the CORE module),
- Pressure and Posture management of complex disability - 30 credits,
- Paediatric Mobility - 15 credits.

Students will need to take 60 credits at this level of these specialist modules for the award.

To be awarded a BSc (Hons) students have to complete 120 credits at Level 3. The four 15 credit core courses must be completed and the remaining 60 credits are made up from a choice of the above options.

The wheelchair M level modules are now being developed. There will be

four generic compulsory core modules (15 credits each) giving the Post-graduate certificate (60 M credits). An additional two professional/specialist wheelchair core modules (15 credits each) and two professional options (15 credits each) will lead to the Postgraduate Diploma (120 M credits). The options will be taken from the University's generic modules and most of these will be available in attendance and distance learning modes. With a work-based project or independent investigation (60 credits) this will lead to the award of MA 'Professional Practice in Health and Social Care (proposed title)' bringing the total 180 credits at level M. It is envisaged that the M level programme will be of interest to senior staff at wheelchair services and managers. It is planned that the M level will be accredited in November 2003.

Students who have already completed the CORE module (30L3) will be able to use these level 3 credits towards the M level programme. We will keep you informed as the work is completed.

For further information please contact email:
rosalind.ham@talk21.com or
m.brunswic@gre.ac.uk

Part time MSc in Clinical Engineering at Cardiff

This summer will see the graduation of the 3rd cohort of successful students from the innovative MSc in Clinical Engineering at Cardiff.

A collaborative venture between Cardiff University and the University of Wales College of Medicine, the qualification has evolved from its origins as an MSc in Rehabilitation Engineering, now broadening out to encompass the complete range of clinical engineering applications. With accreditation from the Institute of Physics and Engineering in Medicine (IPEM), the course has attracted considerable interest from candidates pursuing Chartered Status, individuals on the Grade A training scheme and also healthcare professionals with a genuine interest in CPD who wish to broaden their knowledge of clinical engineering.

The course runs on a part time basis over a period of two years. The scheduling of contact sessions over a total of 8 teaching weekends encourages participation from individuals from a wide range of backgrounds and locations (including a number of international students) and ensures minimum disruption to current employment. Indeed, the potential to interweave theoretical knowledge with practical experience is much appreciated by the highly motivated group. The modular nature of the course facilitates complete flexibility of study - the course can be completed in entirety, taken in part, or individual modules can be selected on a stand-alone basis for CPD purposes.

For those working toward the MSc, the first year of core study encourages an understanding of basic principles of technology in medicine as well as 'hot topics' such as risk assessment applied to medical devices. These areas are built upon in the second year, with options to specialise in certain applications. One such typical elective would be Rehabilitation Engineering, which includes posture and mobility and electronic assistive technology. The final part of the qualification involves an in-depth study of a clinical engineering problem, culminating in the submission of a dissertation. Past topics have included 'Design considerations for a universal head restraint for use by wheelchair seated individuals when being transported in road vehicles' and 'Investigation into task performance and functional seating position'. Full professional and academic support is naturally provided throughout from leaders in the field.

One of the great advantages of the course is the very varied range of participants. Grade A trainees participating benefit from mixing with mature and experienced colleagues, alongside other healthcare practitioners such as medical registrars who are looking to advance their own knowledge. The course is also open to non-graduates over 25 with relevant experience and so enables mature Clinical Engineers to study for the MSc qualification who would otherwise be unable to do so. A limited number of hotly contested EPSRC fully funded places are available, for which early application is recommended.

Colin Gibson
Head of RE Rookwood Hospital

***Further details, including admissions procedures can be found at*:**

www.engin.cf.ac.uk/admis/courses/mscclinical/index.html

The World of the Web
Dave Calder, *web site editor*

www.pmguk.co.uk

Rather than review other web sites I would like to take this opportunity in describing the changes that are taking place on our own web site.

At the time you read this the PMG web site should have started to migrate from the old free site to a managed site. The new site will provide two distinct areas as follows,

Public Area

The public area will be open to all those visiting the site and will include pages covering the conference, bursaries, membership, news, what's on, PMG magazine back issues and links to other sites.

Members Area

The second area will be password protected access being restricted to PMG members only and will cover feedback from working groups, a general notice board and forum, a copy of the PMG guidelines, a committee area and mail bag.

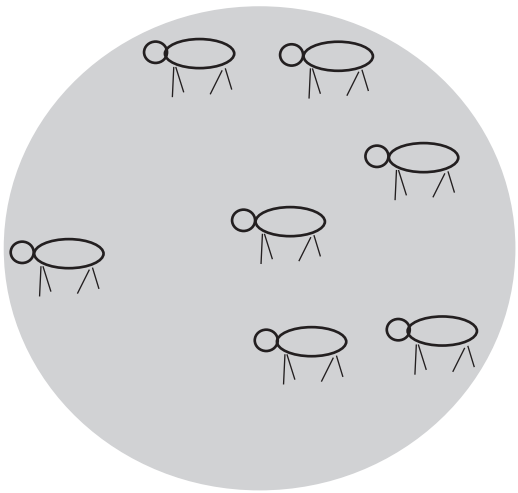
This is a major step up from the previous web site and will continue to be developed in line with any feedback received from you. So please keep logging onto the PMG web site at **www.pmguk.co.uk** to keep abreast of all developments. If you feel that there is something missing from the site please feed back to the committee.

www.pmguk.co.uk

Office Wisdom:
bbc.co.uk/comedy

If you can keep your head when all around you have lost theirs, then you probably haven't understood the seriousness of the situation.

Mind Bender



Place 3 straight fences across the circular field so that each sheep is indvidually segregated.

Check out the new National Wheelchair Managers Forum Website at:

www.wheelchairmanagers.nhs.uk

For those of you wanting some solid bedtime reading, the Department for Transport have published the long awaited report on their project looking at the 'Safety of Wheelchair Occupants in Road Passenger Vehicles':

http://www.mobility-unit.dft.gov.uk/wheelchair-occupants/index.htm

Thanks to Ros Ham for spotting the link to these reports on an interesting local government website:

http://www.info4local.gov.uk

Following a number of comments as to the true origin of the bricklayer's accident report, I appologise for not acknologing the original source: G Hoffman in his address to the Oxford Union about 40 yrs ago.

Phil Swann, *P&M editor*

Otto Bock Cushions available on NHS Contract

Uniquely adjustable - just two sizes provide a total of six width settings. Fits chairs from 15"-20" and will attach to most unmodified NHS backrests including folding backs.

Z – Flo
Offers all the advantages of a fluid based cushion giving medium to high risk pressure relief at £95

Cloud
Offers the greatest degree of positioning and flexibility for clients at the highest risk of pressure sores

Otto Bock working together with our specialist centres are presently scheduling training programmes on seating and positioning. To book a place or for further information call us direct on 01784 744 900.

We look forward to working with you to provide ideal seating solutions for your patients

What is the bottom line? – Summary of results

Ranking	Average Pressure	Immersion Depth	Immersion Area on Rigid Base	Dynamic Friction	Static Friction (surface shear)	IFD
1	Custom	Custom	Roho HP	Primary	Roho High Profile	Cloud
2	Gelform	Infinity	Custom	Stimulite Classic	Cloud	Jay 2 Rave
3	Infinity	Cloud	Cloud	Cloud	Stimulite Classic	High Profile
4	Roho High Profile	Roho High Profile	Infinity	Z-Flo	Gelform	Varilite
5	Cloud	Jay 2	Z-Flo	Custom/Gelform	Primary	Jay 2

• Otto Bock cushions occupy 14 of 30 positions in the ranking of the top 5 cushions in each category, and the Cloud in the top five in all categories

Data presented in the above table represents the results of testing conducted at an independent test laboratory.

Otto Bock HEALTHCARE PLC

Otto Bock Healthcare Plc, 32 Parsonage Road, Englefield Green, Egham, Surrey TW20 0LD
Telephone: 01784 744 926 Telefax: 01784 744 901
email:bockuk@uk.ottobock.de website:www.ottobock.co.uk