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Community Rehabilitation: 'Home vs Centre', guidelines for determining the optimal treatment location

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Health Independence Programs

Angliss Hospital

Eastern Health

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Eastern Health



- Melbourne's Eastern Region
- 2800km²
- 800,000 population

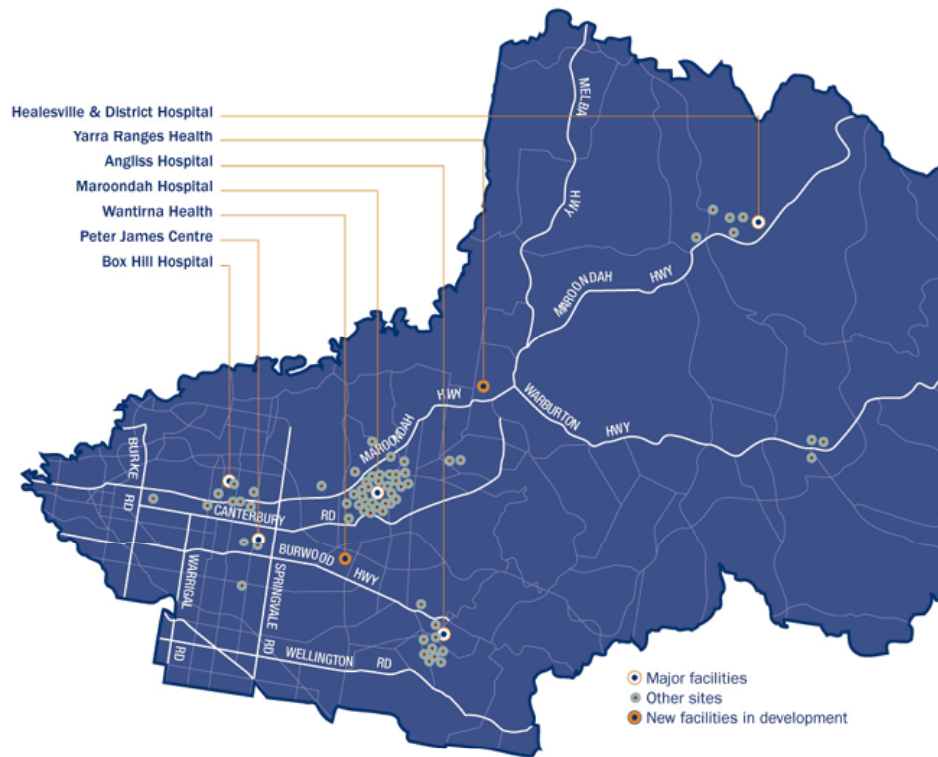


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Eastern Health

Eastern Health Region and Facilities



7 major facilities

Over 40 community
located facilities



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Angliss Hospital

- Community Hospital
- Range of Services
 - Emergency
 - Women's and Children's
 - Medical/Surgical
 - Subacute, and
 - Ambulatory





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Angliss Health Independence Programs

- Angliss Home Based Rehabilitation program
- Opening of Community Rehab Centre in September 2006





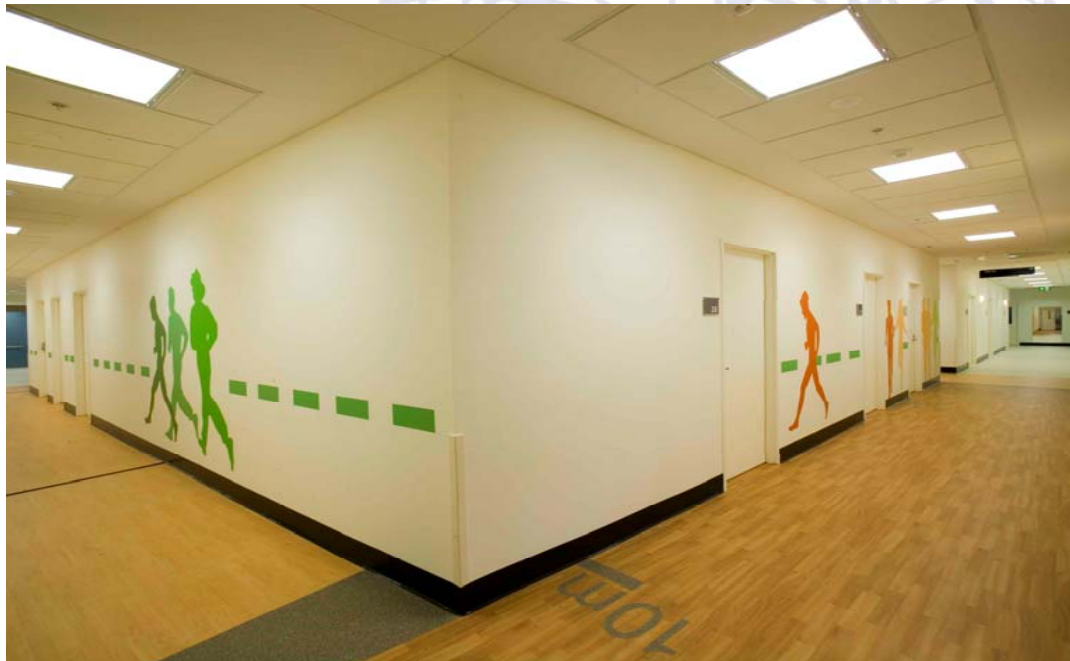
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easternhealth





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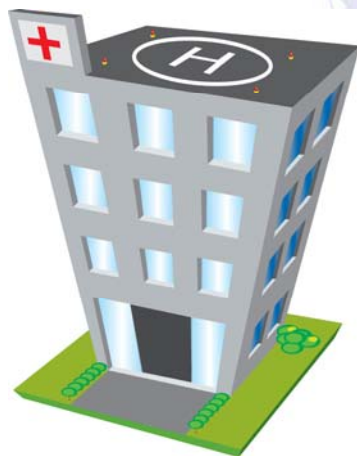


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Where should therapy be provided?

Centre or Home





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Systematic Review - Method

- Databases searched
 - AMED, AMI, CINAHL, Cochrane, EMBASE, MEDLINE, ProQuest Health, PsychInfo, PUBMED
- Search Strategy Concept Grid:

Population	Intervention	Research Design
Community rehabilitation	Models of care	Controlled Trials
Community-based rehabilitation	Flexible service delivery	Randomised Controlled Trials
Ambulatory	Home rehabilitation	
Outpatients	Home-based rehabilitation	
	Centre-based rehabilitation	
	Home Care Services	
	Rehabilitation in the home	



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Systematic Review – Results

- Final Library of 7 articles
 - **Baskett, et al (1999)**. Shared Responsibility for ongoing rehabilitation: a new approach to home-based therapy after stroke. *Clin Rhab*, (1), 23-33
 - **Bjorkdahl, et al (2007)**. Can rehabilitation in the home setting reduce the burden of care for the next-of-kin of stroke victims? *JRehabMed*, 39(1), 27-32
 - **Crotty, et al (2008)**. Home versus day rehabilitation: a randomised controlled trial. *Age and Ageing* 37(6), 628-633
 - **Roderick, et al (2001)**. Stroke rehabilitation after hospital discharge: a randomized trial comparing domiciliary and day hospital care. *Age and Ageing*, (4), 303-310
 - **Gladman, et al (1993)**. A randomised controlled trial of domiciliary and hospital based rehabilitation for stroke patients after discharge from hospital. *Journal of Neurology, Neurosurgery & Psychiatry*, 56(9), 960 -966
 - **J Gladman, Whynes & Lincoln (1994)**. Cost comparison of domiciliary and hospital-based stroke rehabilitation. DOMINO study group. *Age and Ageing* (3) 241 - 245
 - **JR Gladman & Lincoln (1994)**. Follow-up of a controlled trial of domiciliary stroke rehabilitation (DOMINO study). *Age and Ageing*, 23(1), 9 -13
- Quality range from 3-8 PEDro Scores
- Relatively large number of participants (N = 855)
- Average age of participants (>50years)
- All trials examined stroke clients, only one included musculoskeletal and functional decline
- Differences in Intervention



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Systematic Review – Results

- Outcome Measures
 - Physical Impairment
 - Psychological Impairment
 - Activity
 - Service Outcomes
 - Quality of Life
 - Carers Outcomes
- Grouped
 - Short Term
 - Long Term



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Systematic Review - Results

- Strong Evidence
 - No difference in Physical Impairment Outcomes
- Moderate Evidence
 - No difference in Psychological Impairment and QOL Outcomes
 - HB Intervention = longer episode
 - CB Intervention = greater risk of readmission
- Limited Evidence
 - CB costs < HB costs
 - CB carer burden > HB intervention
- Conflicting Evidence
 - Effects of intervention on Activity Outcomes



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Systematic Review - Conclusion

- Little difference between HB and CB in client outcomes
- Model of care should be based on:
 - Burden on Carers
 - Cost
 - Individual Preferences
 - Specific Rehabilitation Requirements



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The Vision

- A new model of care
 - Flexible model of service delivery
- Location for individual treatment sessions to vary according to client/ therapist factors
- Question: What factors need to be considered in determining the most appropriate location for a treatment session?





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Method

- Concept Mapping technique
 - Tochrin W, Kane M. Concept Mapping: An introduction to conceptualization in health care. *J Healthcare Qual* 17.3, 187-191
- Key Stakeholders
 - Health Professionals
 - Consumers (Client and/or Carers)



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Participants

Health Professionals Group

- N = 12
- Range of disciplines
 - PT, SP, OT, SW, Rehab Consultant, NP, DT, Nursing
- Range of experience levels
 - minimum 3 years
- Worked in Community Rehabilitation
 - centre-based,
 - home-based or
 - combination





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Participants

Consumers Group

- N = 7
- Range of diagnostic Groups
 - Ortho, CVA, other
- Active admission in EH CR
- Demonstrates
 - Receptive and Expressive english language skills
 - Ability to read and write short statements in English
 - Absence of severe cognitive impairment



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Forum Procedure

Tochrim and Kane (2005) describe 6 steps in the concept mapping process

1. Brainstorming
2. Grouping or Sorting
3. Concept Mapping
4. Cluster Naming
5. Statement Reassignment
6. Rating of Statements
 1. Tends to home- or centre-based rehabilitation
 2. Importance of statement in determining location

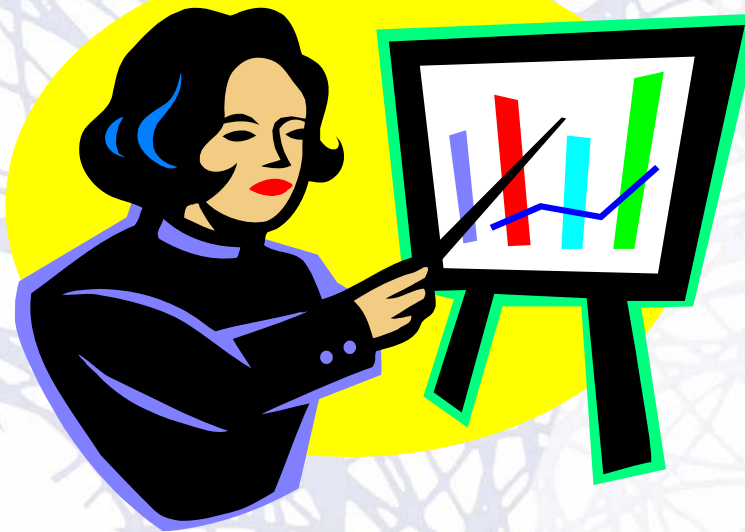


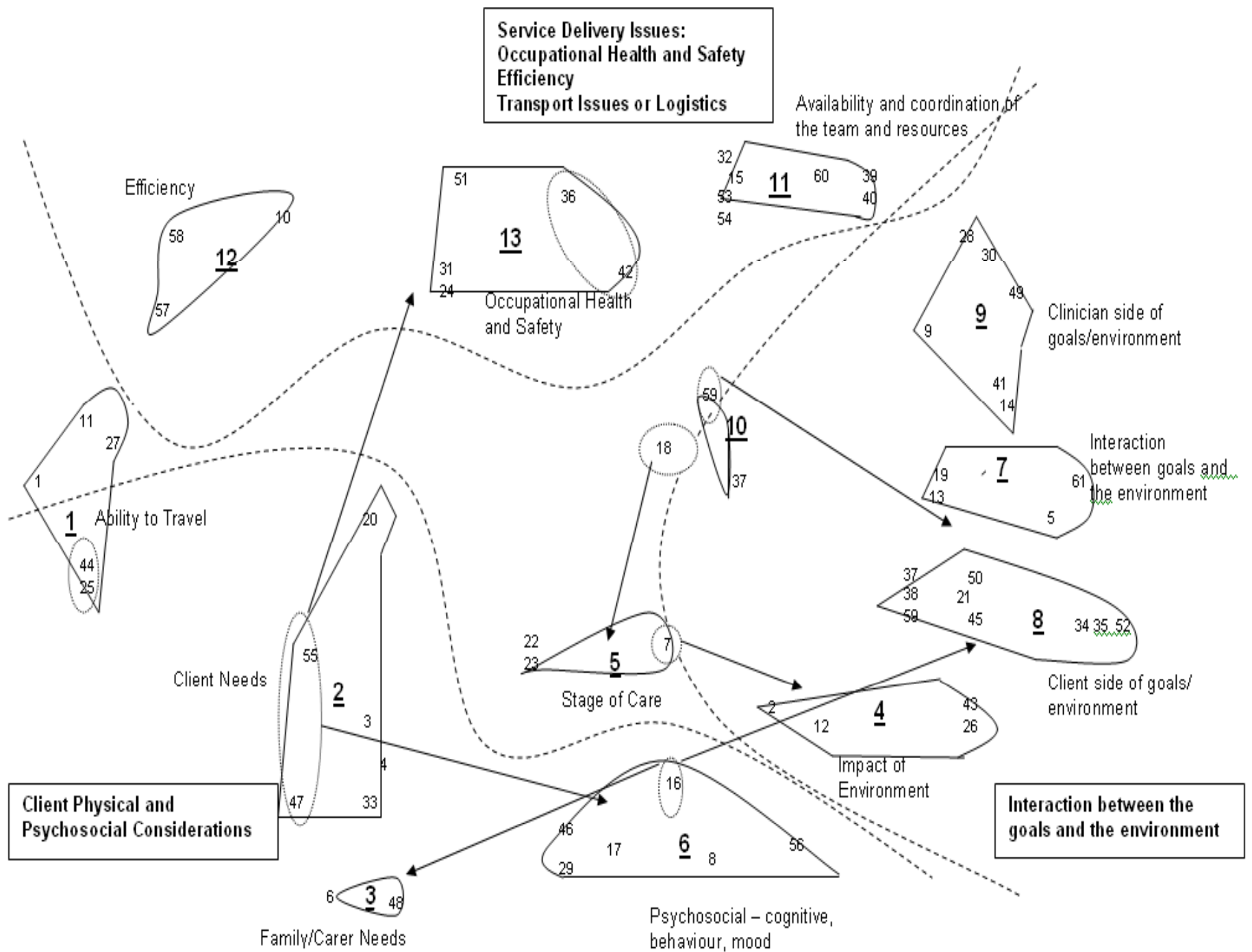


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Health Prof. Results







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Indication of HB or CB rehabilitation – HP group

Cluster no.	Cluster Name	Mean CB/HB	Mean Imp
3	Family/carer needs	1.75	3.75
1	Ability to travel, transport logistics	1.93	4.03
2a	Client factors - physical needs	2.00	3.83
6	Psychosocial - cognitive, behaviour, mood	2.18	3.74
7	Inter action between goals and enviro	2.69	4.02
8	Client side of goals/enviro	2.86	3.79
12	Efficiency	2.92	2.97
4	Impact of environment	3.30	3.67
5	Stage of care	3.33	2.78
2b	Client factors - motivational issues	3.75	3.64
9	Clinician side of goals/enviro	3.81	4.36
11	Availability and coordination of the team and resources	4.23	3.86
13	Occupational health and safety	4.33	3.82

Favours HBCR

Depends on specifics

Favours CBCR



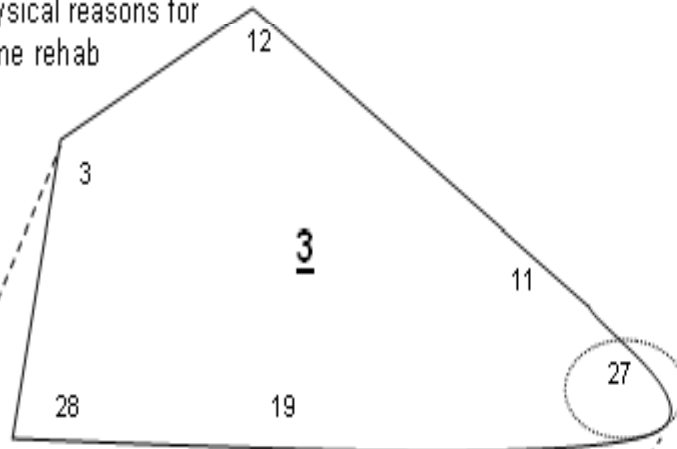
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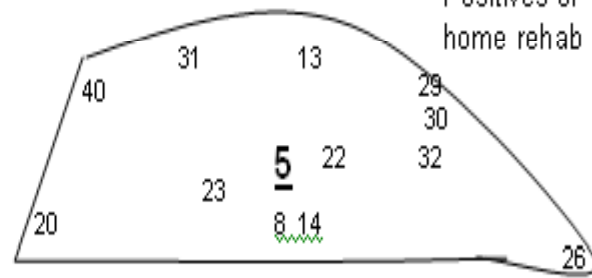
Consumer Results



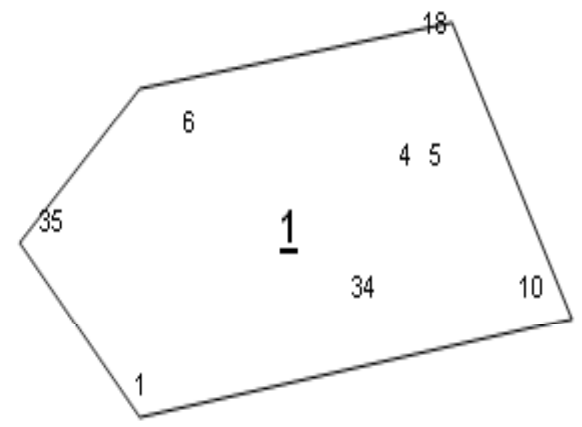
Physical reasons for home rehab



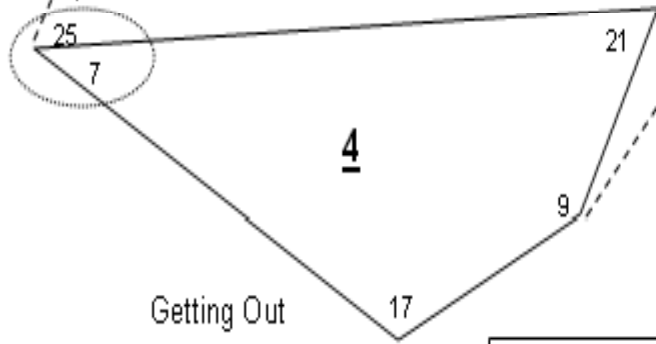
Positives of home rehab



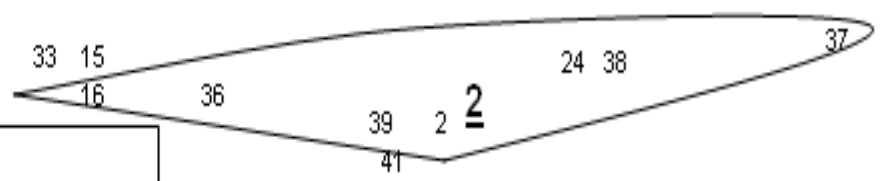
Psychological reasons (includes emotions, confidence, motivation)



Transport



Getting Out



Pros (and cons) of Centre rehab

*Missing
Dangers of inappropriate pools
Knowledge that you have a choice
What happens after they finish their course of rehab (organising for ongoing needs)*



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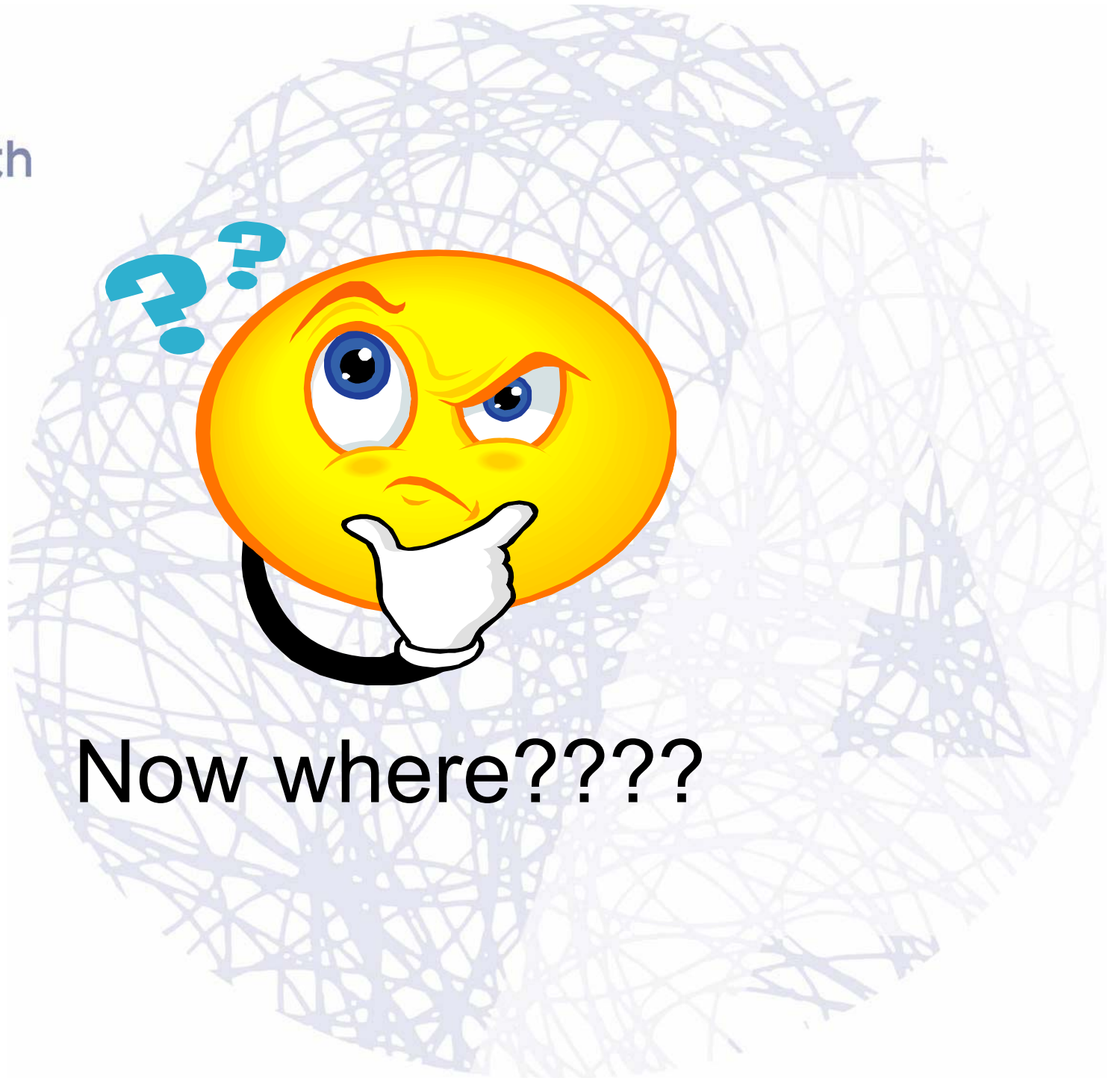


Indication of HB or CB rehabilitation – C group

Cluster no	Cluster Name	Mean CB/HB	Mean imp	
5	Positives of home rehab - build confidence	1.64	3.75	↑ Favours HBCR
4b	Transport	1.88	3.13	
3	Physical reasons for home rehab	2.25	3.04	
4a	Getting out	2.33	3.63	
1	Psychological reasons (emotions, motivation, confidence)	2.55	3.36	
<hr/>				↓ Depends on specifics
2	Pros (and cons) of centre based rehab	4.14	3.90	↓ Favours CBCR



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Now where????



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Analysis

Themes

1. Service Delivery Issues: OH&S
2. Interaction between goals & environment
3. Physical & psychosocial considerations
4. Service Delivery Issues: Efficiency
5. Service Delivery Issues: Transport issues/logistics



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Indicators and Guidelines

	Home	Centre
1. Is the home environment safe for staff to visit (refer to home visit safety checklist)?	Yes	No Yes
2. Does the client have contraindications to travel?	Yes No	No

Guidelines:

1. If home environment not safe for staff to visit, client ALWAYS seen in centre. If home environment safe, client may be seen at home or centre.
2. If the client has contraindications to travel, and the home environment is safe for staff, client ALWAYS seen at home. If no contraindications to travel, and home environment safe client may be seen at home or centre.



Indicators and Guidelines



<p>3. Does the therapy session require equipment, resources and /or conditions that are available only in the centre to meet the goals of the session?</p> <p>Examples:</p> <ul style="list-style-type: none"> a. Non transportable specialist equipment (high low couch, treadmill etc) b. Distraction free environment, c. Multiple therapist treatment session (interpreters) d. Confidentiality from family e. Skill transfer into unfamiliar environment f. Group work 	No	Yes
<p>4. Does the therapy session require a familiar environment, equipment or conditions to meet the goals of the session?</p> <p>Examples:</p> <ul style="list-style-type: none"> a. Unable to skill transfer and thus require familiar b. Specific home set up or equipment required, eg kitchen, bathroom, stairs c. Community integration d. Viewing of interactions with family supports e. Training of family as carers f. Confidence with program independence - empowerment 	Yes	No
<p>5. Are there client-specific or psychosocial reasons to bring the client into the centre?</p> <p>Examples:</p> <ul style="list-style-type: none"> a. Very low level of disability b. Behavioural issues (client and carers) in familiar environment c. To facilitate Peer Support and socialisation d. To facilitate motivation and competition with peers e. Needs of Carer (incidental respite) 	No	Yes
<p>6. Are there client-specific or psychosocial reasons for home-based rehabilitation?</p> <p>Examples:</p> <ul style="list-style-type: none"> a. Fatigue b. Lack of confidence in unfamiliar or social environment c. Body Image issues d. Behaviour in unfamiliar environment (client and carers) e. Cognition effected in unfamiliar f. Anxiety in unfamiliar g. Other commitments or social responsibilities of carer and/or client 	Yes	No



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Indicators and Guidelines

3. If the answer to indicators 3 through 6 is NO, then to further decide on the optimal treatment location consider the *efficiency* for client and staff/service
 - i. Examples
 1. Client with appointment already on same day, where is this appointment planned (home or centre)
 2. Overall staff caseload requirements
4. If indicators 1 through 6 indicate the need for CBCR then all *transport* options and their cost to clients should be considered. (Transport options include self, family/friends, volunteer transport and taxi vouchers (see team leader for approval).). If there is no transport available then client should be seen at home.



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**Subacute Ambulatory Care Services
Optimal Treatment Location Indicators and Guidelines**

Optimal Treatment Location Indicators	Home	Centre
1. Is the home environment safe for staff to visit (refer to home visit safety checklist)?	Yes	No Yes
2. Does the client have contraindications to travel?	Yes No	No
3. Does the therapy session require equipment, resources and/or conditions that are available only in the centre to meet the goals of the session? Examples: <ul style="list-style-type: none"> ▪ Non transportable specialist equipment (high low couch, treadmill etc) ▪ Distraction free environment, ▪ Multiple therapist treatment session (interpreters) ▪ Confidentiality from family ▪ Skill transfer into unfamiliar environment ▪ Group work 	No	Yes
4. Does the therapy session require a familiar environment, equipment or conditions to meet the goals of the session? Examples: <ul style="list-style-type: none"> ▪ Unable to skill transfer and thus require familiar ▪ Specific home set up or equipment required, eg kitchen, bathroom, stairs ▪ Community integration ▪ Viewing of interactions with family supports ▪ Training of family as carers ▪ Confidence with program independence - empowerment 	Yes	No
5. Are there client-specific or psychosocial reasons to bring the client into the centre? Examples: <ul style="list-style-type: none"> ▪ Very low level of disability ▪ Behavioural issues (client and carers) in familiar environment ▪ To facilitate Peer Support and socialisation ▪ To facilitate motivation and competition with peers ▪ Needs of Carer (incidental respite) 	No	Yes
6. Are there client-specific or psychosocial reasons for home-based rehabilitation? Examples: <ul style="list-style-type: none"> ▪ Fatigue ▪ Lack of confidence in unfamiliar or social environment ▪ Body Image issues ▪ Behaviour in unfamiliar environment (client and carers) ▪ Cognition effected in unfamiliar ▪ Anxiety in unfamiliar ▪ Other commitments or social responsibilities of carer and/or client 	Yes	No
Optimal Treatment Location Guidelines: <ol style="list-style-type: none"> 1. If home environment not safe for staff to visit, client ALWAYS seen in centre. If home environment safe, client may be seen at home or centre. 2. If the client has contraindications to travel, and the home environment is safe for staff, client ALWAYS seen at home. If no contraindications to travel, and home environment safe client may be seen at home or centre. 3. If the answer to indicators 3 through 6 is NO, then to further decide on the optimal treatment location consider the <i>efficiency</i> for client and staff/service <ol style="list-style-type: none"> i. Examples <ol style="list-style-type: none"> 1. Client with appointment already on same day, where is this appointment planned (home or centre) 2. Overall staff caseload requirements 4. If indicators 1 through 6 indicate the need for CBCR then all <i>transport</i> options and their cost to clients should be considered. (Transport options include self, family/friends, volunteer transport and taxi vouchers (see team leader for approval)). If there is no transport available then client should be seen at home. 		



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Impact of Research

- Indicators and Guidelines
 - Access Unit at INI
 - Clinicians within flexible service delivery model
- Clients receiving therapy in optimal location
- Emphasis on staff & client safety issues
- Increase in centre-based activity
- Increased efficiencies



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Clients Outcomes???



Reference:

Von Koch L, Wottrich AW, Holmqvist LW (1998). Rehabilitation in the home versus the hospital: the importance of context. *Disabil Rehabil* 20(10), 367-72



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Thankyou



Pending Publication
International Journal of Rehabilitation Research