

# Ontario Hospital Report 2003: Rehabilitation

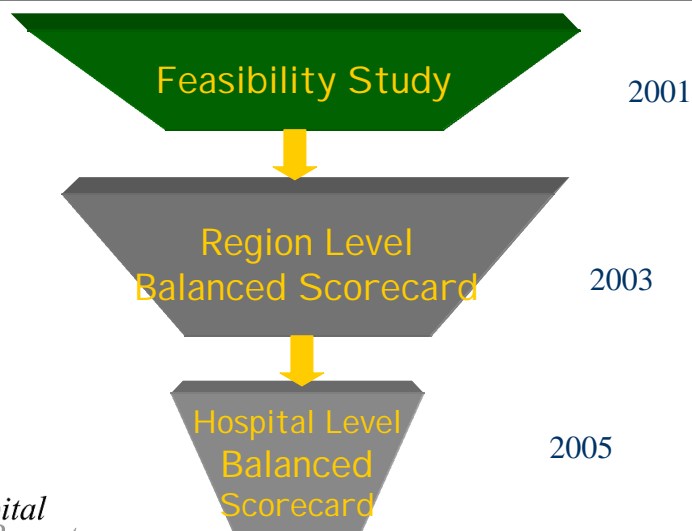
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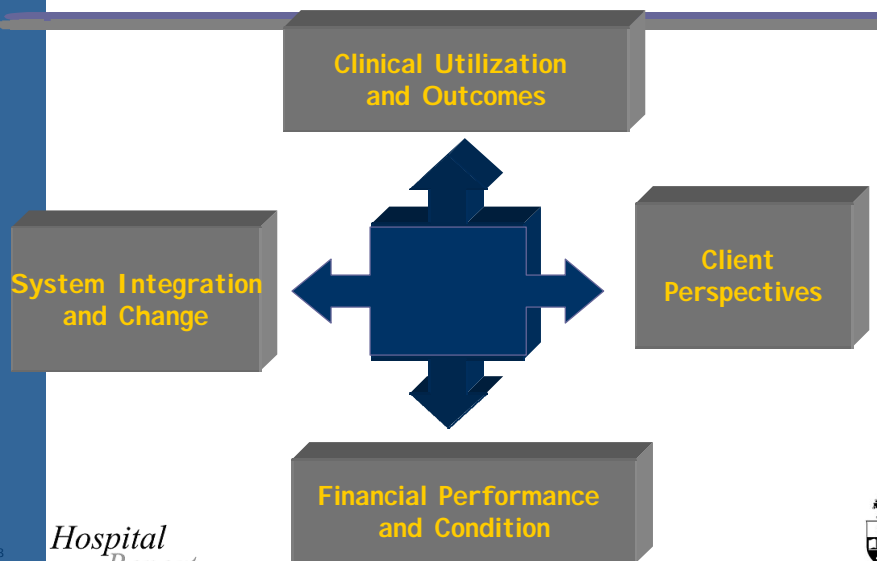
## Phased Evolution of Rehabilitation Balanced Scorecard



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## Balanced Scorecard Approach



3

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## Data Source By Quadrant

<i>Quadrant</i>	<i>Data Source</i>
Clinical Utilization & Outcomes	NRS Data routinely collected by hospitals
Financial Performance & Condition	Data routinely collected by hospitals
Client Perspectives on Rehabilitation	Client surveys
System Integration and Change	Surveys sent to hospitals/administrators

4

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## System Integration and Change

- Changes and investments rehab facilities need to make in the next 3 to 5 years
- Focus is on processes of care, development and quality improvement

5

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## System Integration and Change Indicators

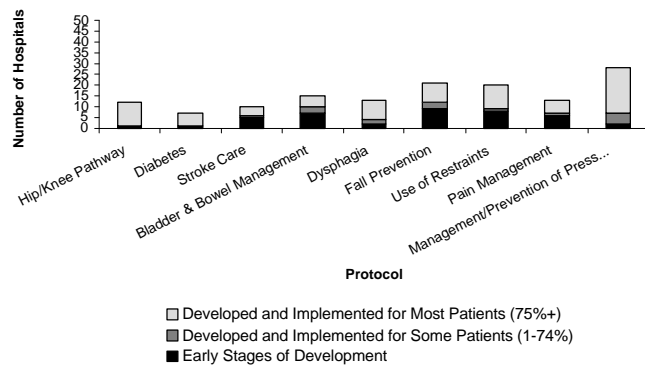
- **Domain 1: Clinical and Research Activity/expertise**
- **Domain 2: Internal Coordination of Care**
- **Domain 3: System Integration**
- **Domain 4: Client Centred Rehabilitation**

6

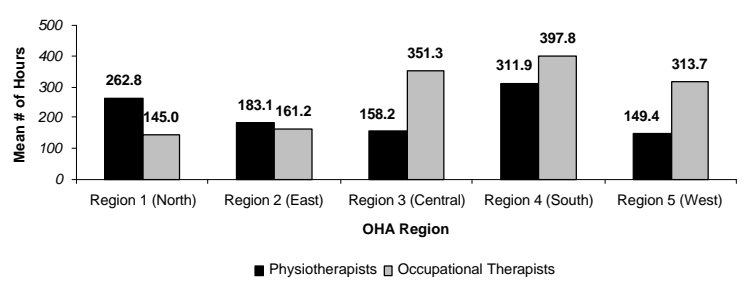
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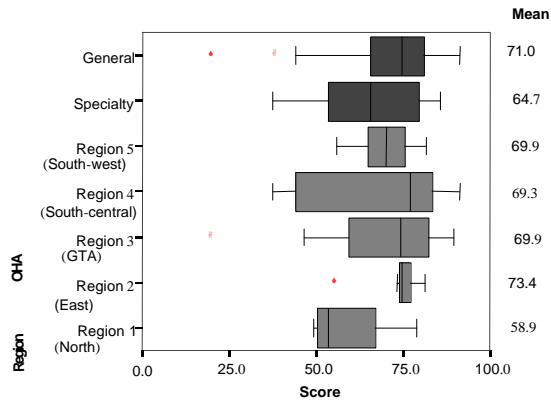
## Most Frequently Reported Practice Protocols/Guidelines In Rehabilitation



## Mean Number of Hours of Clinical Supervision Per Professional FTE



## Organizational Commitment To Staff Development

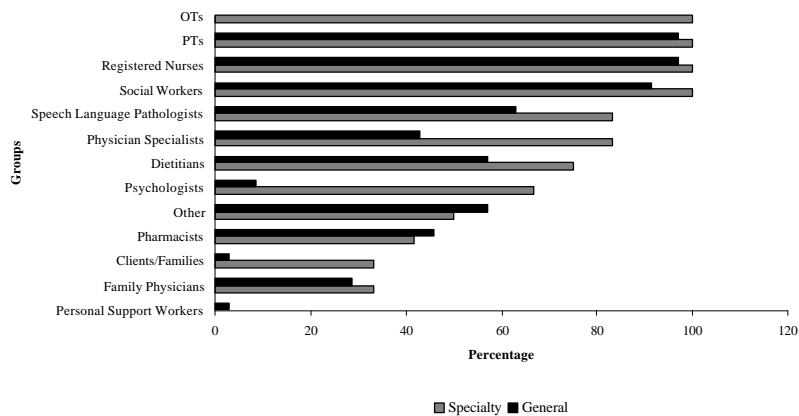


9

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## Professional Groups That Attended at Least 75% of Multidisciplinary Rounds

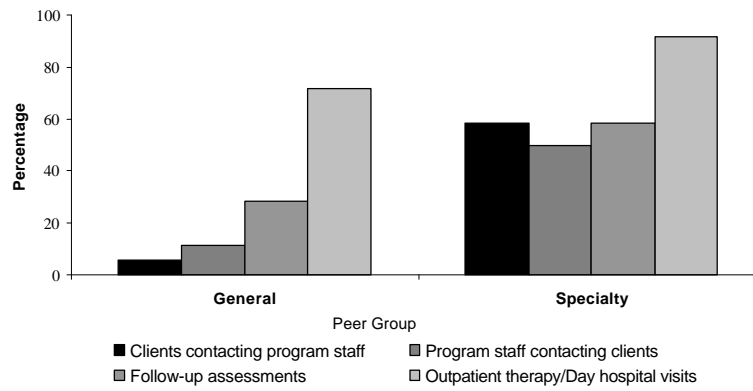


10

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## Percentage of Hospitals With Formal Processes For Follow-up Post-discharge by Peer Group



11

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## Clinical Utilization and Outcomes

NRS pilot data  
October 2000 – September 2002

1  
2

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## Abbreviations

- **FIM – Functional Independence Measure**
  - 18-items, 7 level (18 – 126 total score range)
- **RCG – Rehabilitation Client Groups**
  - Used to classify clients by conditions according to impairments, activity limitations and/or participation restrictions
  - 17 RCGs
    - More detailed RCGs – 1 decimal place after RCG
- **FIM-FRG – Function Related Groups**
  - Case-mix grouping to establish clients expected to require similar lengths of inpatient rehabilitation
  - 67 FRGs

13

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## Rehabilitation Client Groups (RCGs)

- Stroke
- Brain dysfunction
- Neurological Conditions
- Spinal cord dysfunction
- Amputation of limb
- Arthritis
- Pain syndromes
- Orthopaedic conditions
- Cardiac conditions
- Pulmonary conditions
- Burns
- Congenital deformities
- Other disabling impairments
- Major multiple trauma
- Developmental disabilities
- Debility
- Medically complex

14

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## Clinical Utilization and Outcome Indicators

### Access to Rehabilitation

1. Mean/median **days waiting for rehabilitation admission** by RCG

### Efficiency of Resource Utilization

- 2a). Mean/median **days waiting for rehabilitation discharge** by RCG
- 2b). Mean **length of stay** (days) by RCG and FRG
- 2c). Mean **active rehabilitation length of stay** (days) by RCG and FRG
3. **Length of stay efficiency** by RCG and FRG (average total functional score divided by LOS)

15

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## Clinical Utilization and Outcome Indicators

### Outcomes at Discharge

4. Mean **total function score change** by RCG and FRG
5. Mean **function score change by motor and cognitive sub domains** by RCG
6. % clients **achieving service goals**

### Outcomes at Follow-up

7. % clients who had an **unplanned readmission** for a related cause by RCG
8. Mean **function score at follow-up** by RCG
9. % clients achieving a desired level of **community reintegration**

16

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## Study Population

- **6,046 episodes with complete admission and discharge FIM data (~12% of volume)**
  - October to December 2000 ( 3 hospital sites)
  - July to September 2002 (25 hospital sites)
- **59% female**
- **Mean age 72 years**
- **48% orthopaedic conditions (n = 2,917)**
  - 52% joint replacement and 25% hip fracture
- **23% stroke (n = 1,410)**
  - 45% affecting left body and 43% right body

17

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## Access To Rehabilitation

- **Days waiting for rehabilitation admission from acute care or other level of care**
  - Mean = 7 days
  - Median = 2 days
- **Amputation, arthritis, pain syndromes have longest waiting time**
  - Mean = 3 to 6 weeks
  - Median = 10 to 23 days
- **Orthopaedic conditions have shortest**
  - Mean = 3 days
  - Median = 1 day

18

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## Waiting Time in Days for Rehabilitation Admission, Length of Stay and Waiting Time for Rehabilitation Discharge



□ Waiting time for rehabilitation admission □ Length of Stay ■ Waiting time for rehabilitation discharge

19

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## Length of Stay by Selected RCGs

RCG	Mean ± sd (days)	Median (days)
Overall	32 ± 28	24
Spinal Cord Dysfunction (n = 171)	53 ± 38	43
Brain Dysfunction (n = 247)	52 ± 36	43
Stroke (n = 1,410)	43 ± 29	36
Orthopaedic Conditions	25 ± 22	17
Knee replacement	(13 days)	
Hip replacement	(22 days)	
Hip fracture	(31 days)	

20

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## Length Of Stay Efficiency by RCG

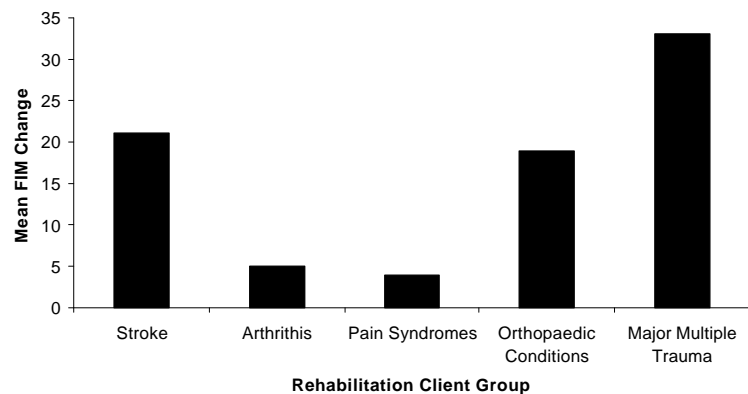
RCG		N	Mean	SD	Median
0	Total	6,046	0.9	1.1	0.7
1	Stroke	1,410	0.7	0.7	0.5
8	Orthopaedic Conditions	2,917	1.2	1.2	1.0
8.1	Post Hip Fracture	729	0.9	0.9	0.7
8.2	Post Femur (Shaft) Fracture	72	0.7	0.8	0.6
8.3	Post Pelvic Fracture	87	1.1	1.1	0.9
8.4	Post Major Multiple Fractures	44	1.1	1.0	0.8
8.5	Post Hip Replacement	702	1.3	1.1	1.1
8.6	Post Knee Replacement	814	1.7	1.4	1.4
14	Major Multiple Trauma	84	1.0	0.7	0.8

21

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## Mean Total Function Score Change by Selected RCG

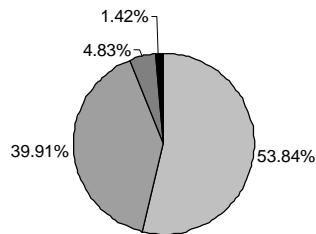


22

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## Percentage of Clients Achieving Service Goals



- Service goals met and discharged to community(permanent)
- ▒ Service goals met and referral/transfer to other unit/facility
- Service goals not met and referral/transfer to other unit/facility
- Other

23

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## Next Steps/NRS

- Potential to use the data to improve admission and discharge planning
- More complete data will allow fairer comparisons between hospitals
- Need to engage hospitals in a dialogue about how these indicators could better meet their needs for planning and program management
- Need follow-up data to be completed because main goals of rehabilitation are to restore function and reintegrate into the community
- Need FIM-FRG weights to be developed or else cannot calculate more meaningful indicators for financial data

24

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## Client Perspectives Quadrant

2  
5

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## Client Perspectives Quadrant

Survey consists of:

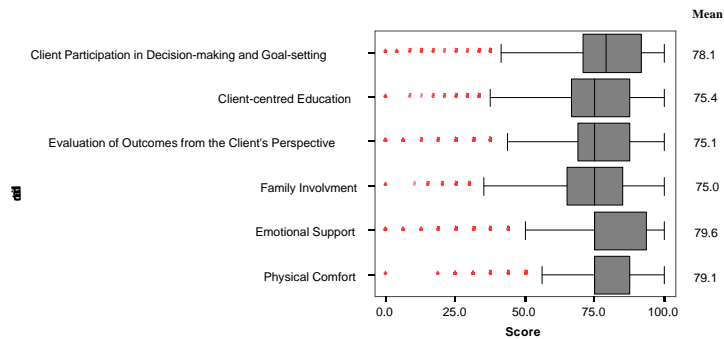
- > CCRQ
  - Tool developed by ACREU in partnership with Toronto Rehabilitation Institute, St. John's Rehabilitation Hospital and The Arthritis Society: CARS
- > Items from Patient Judgements of Hospital Quality
- > Survey administered by Smaller Worlds

26

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## Overall Scores for Client-Centredness Indicators

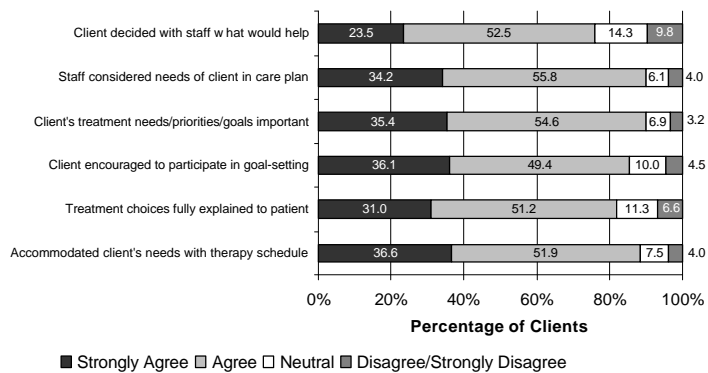


27

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## Client Participation In Decision-making And Goal-setting: Specific Items

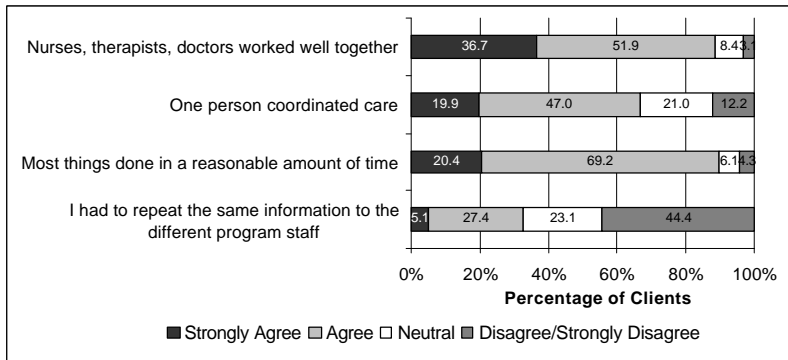


28

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## Coordination Of Care

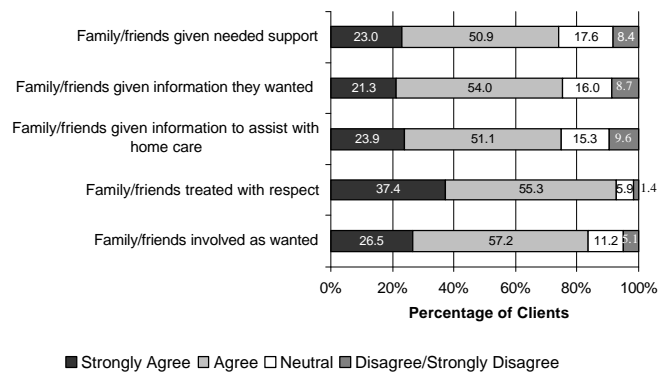


29

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## Family Involvement: Specific Items

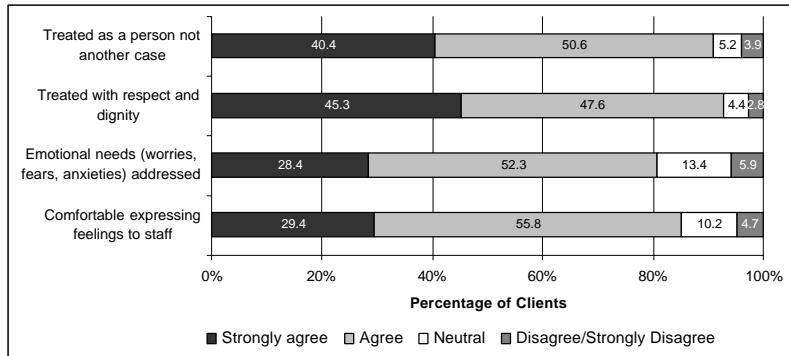


30

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## Emotional Support: Specific Items

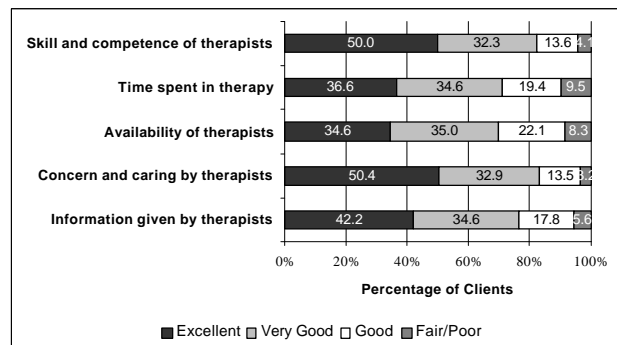


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## Judgments of The Quality Of Therapists

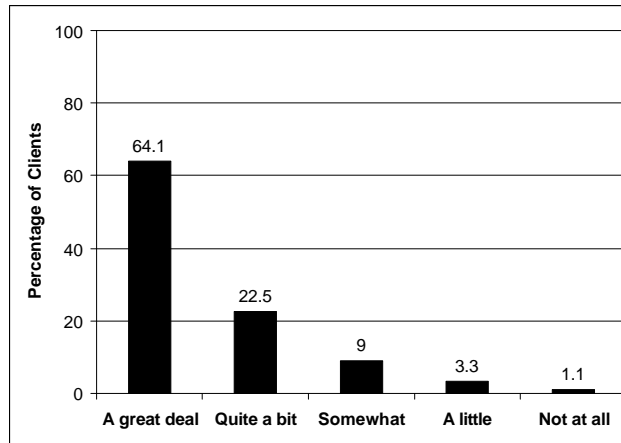


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## Extent To Which Clients Felt They Were Helped By Inpatient Rehabilitation



33

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## Summary and Conclusions

- Rehab hospitals performing well on most indicators
- Need to consider improvements with respect to:
  - Transitions between Hospital and Community
  - Client and Family involvement in decision-making
- [www.hospitalreport.ca](http://www.hospitalreport.ca)

34

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