



Patient Focused Assessment

and Service Evaluation – The Value of Goal Attainment Scaling

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Agenda

- Patient Focused Assessment and GAS
- Value of GAS in Service Evaluation
- Innovations in the Use of GAS
- GAS and 'Saving Time to Care'



So what do we know?

We know that

- patient focused care has been a priority in healthcare since 1994
- many levels of engaging patients in their care - operationalization still varies significantly
- younger & better educated more likely to play an active role [Krupa et al., 2000; O'Connor et al., 2003; Robinson & Thomson, 2001](#)
- older people more unwilling or feel they are incapable of making decisions
[more effort needed to ensure patient/family involvement in goal development process](#)

We know that

- goals identified by teams often do not correlate with patient/family goals Evans et al., 1999; Galzier et al., 2004
- general agreement that GAS is useful
engaging patients in the care process & demonstrating efficacy of GDHs
- *the question is* how can we implement GAS in a way that is feasible & overcomes some of the challenges identified
 - ✓ time involved
 - ✓ cost to system of all therapists involved (45 minutes to set goals)
 - ✓ what therapists feel they can achieve vs. what patient actually wants to accomplish (function vs. lifestyle/quality of life)



Patient Focused Assessment and the Value of GAS

Patient Focused Assessment and GAS - 2 Approaches

Discipline-Specific (Building Block) vs. Lifestyle Focus

1. Therapists, in consultation with the patient & family, conduct a comprehensive assessment & decide what can be done to bring the patient to a certain functional level
look at how the patient has improved on discipline-specific scales . . .
hope the amalgamation of the various functional levels of the therapists building blocks aligns with overall patient lifestyle & quality of life goals

Alternatively . . .

Begin with higher levels goals as the first step, then deconstruct

2. At time of intake determine, with patient/family, the quality of life **lifestyle** goals important to the patient, then therapists deconstruct these into specific therapy sub-goals **building blocks**

This alternative provides 2 things:

- a) the ability to do a 'reality check' at the discipline level to see if the building blocks can in fact be achieved
- b) provides a focus to therapist activities so that they don't have to waste time trying to achieve things that are not critical for the patient

Discipline-Specific Focus . . .

allows you to evaluate how many patients improved on the distance they walk, the Berg scale, how well they do in their ADLs, etc.

But . . .

it is difficult to answer the question – is the GDH successfully meeting patients' quality of life needs

EXAMPLE

So the question is . . .

Discipline Specific Assessment/Goals  Team GAS

or

Intake GAS  Deconstructed into Specific Therapy Goals/Assessment

One problem to consider . . .

if goals are set after the assessment, therapists' preconceived ideas/conclusions may influence the goals to be accepted

turn functional goals into lifestyle goals instead of the other way round

GAS allows you to . . .

- identify lifestyle goals important to the patient
- see whether or not lifestyle goals have been achieved
- blend discipline-specific tools with GAS to achieve higher level outcomes not an 'either/or'
- amalgamate goals to see how
 - ✓ the patient is doing
 - ✓ the therapist (discipline) is doing
 - ✓ the program is doing

Value added . . .

Our Experience in the Community

- actively involving residents in goal setting got them involved in the whole process because the goals meant something to them
- collaboratively reviewing progress over time encouraged residents, themselves, to identify obstacles and problem solve

. . . higher level patient/family engagement and a better understanding of the rehabilitation process

GAS Example

Goal Attainment Scaling

GOAL ATTAINMENT LEVELS	Goal Attainment Scaling		
	Goal:	Goal:	Goal:
Much less than expected -2			
Somewhat less than expected -1			
Expected level (Program Goal) 0			
Somewhat better than expected +1			
Much better than expected +2			
Comments			

Goal Status:	Initial: ★ _____	Initial: ★ _____	Initial: ★ _____
	4 Months: ① _____	16 Months: ① _____	28 Months: ① _____
	8 Months: ② _____	20 Months: ② _____	32 Months: ② _____
	12 Months: ③ _____	24 Months: ③ _____	36 Months: ③ _____

GAS Example

"Connecting London Seniors" Project - Health/Mental Health Goals

GOAL ATTAINMENT LEVELS	"CONNECTING LONDON SENIORS" PROJECT - HEALTH/MENTAL HEALTH GOALS		
	Goal: Identify seniors' health and mental health needs in each of the 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway) as they relate to remaining independent and living in the community.	Goal: Identify key stakeholders in the area of health and mental health in order to develop stronger linkages to enable better communication and sharing of resources to address community-identified issues in the 5 neighbourhoods.	Goal: Community action and new service development in response to neighbourhood-identified needs and optimization of resources by sharing among all SCA members to address issues identified.
Much less than expected -2	<i>No seniors' health or mental health needs identified in any of the 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> ★	<i>No stakeholders identified to address community-identified health or mental health issues in any of the 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> ★	<i>No community action or new service development to address community-identified health or mental health issues in any of the 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> ★ 0
Somewhat less than expected -1	<i>Seniors' health or mental health needs identified in some, but not all, 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> 1 2	<i>Stakeholders identified to address community-identified health or mental health issues in some, but not all, 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> 1 2	<i>Community action or new service development to address community-identified health or mental health issues in some, but not all, 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> 2
Expected level (Program Goal) 0	<i>Seniors' health or mental health needs identified in all 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i>	<i>Stakeholders identified to address community-identified health or mental health issues in all 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i>	<i>Community action or new service development to address community-identified health or mental health issues in all 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i>
Somewhat better than expected +1	<i>Both seniors' health and mental health needs identified in some, but not all 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i>	<i>Stakeholders identified to address both community-identified health and mental health issues in some, but not all, 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> 3	<i>Community action or new service development to address both community-identified health and mental health issues in some, but not all, 5 neighbourhoods (Glen Cairn, Central London, Argyle, Westmount, Medway).</i> 3
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Comments			
Goal Status:	Initial (November 2008): ★ 30.00 Year 1 (November 2009): 1 40.00 Year 2 (November 2010): 2 40.00 Project Completion 2011: 3 70.00	Initial (November 2008): ★ 30.00 Year 1 (November 2009): 1 40.00 Year 2 (November 2010): 2 40.00 Project Completion 2011: 3 60.00	Initial (November 2008): ★ 30.00 Year 1 (November 2009): 1 30.00 Year 2 (November 2010): 2 40.00 Project Completion 2011: 3 60.00

GAS 3 ways . . .

1. overall (lifestyle) goals
use discipline-specific scales to deconstruct
2. building blocks
balance, mobility, ADLs/IADLs, social skills, community reintegration, home safety, etc.
3. by discipline
PT, OT, RT, NSG, SW, SL, etc.

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Using discipline-specific scales for patient assessment is problematic if subsequently want to pool data for service evaluation
GDH teams 5-18 different scales (m=9.7); can't combine scales that are scaled differently; GAS overcomes this issue

GAS Strengths

- extremely patient-centred – can fit scale around the patient ‘wrap around’ model – more meaningful
- measures *degree* of goal achievement, over- and under-achievement for individual patients
individualized 5-point scale of potential outcomes
- allows scores to be statistically combined into overall scores that permit comparison among patients, disciplines, programs & multiple GDH sites
service evaluation

GAS Strengths

- can be used with varying degrees of sophistication
unweighted vs. weighted goals, formula for score amalgamation, etc.
- not an either/or blend discipline-specific scales with GAS
- promotes collaboration among team members if done correctly
- enables 'true' patient focused assessment with the highest level of engagement by patients



Value of GAS in Service Evaluation

Value of GAS for Service Evaluation

- service evaluation [pooling data](#) is problematic with individual discipline-specific scales
- GAS overcomes this issue - formula enables evaluation of GDHs at multiple levels [by discipline, by program, across programs, overall GDH, multi-site GDH evaluation](#)
- lack of a standardized approach severely limits the comparison of findings across GDHs
- need a multi-site standardized approach to demonstrate efficacy of GDHs

Cross-Continuum Considerations

- ideal – a standardized continuum that crosses service boundaries acute care, rehabilitation, community services
- recent LHIN initiative exploring
 1. cross-sector tools to evaluate & measure outcomes
 2. sector-specific tools
- GAS can be cross-sector or sector specific
- very difficult to get programs to interlock – currently can set goals for program to point of discharge, beyond that lose control

GAS - Many Strengths for Service Evaluation

- actively engaging patients/family leads to a more responsive service
- GAS quickly helps you identify
 - ✓ successes
 - ✓ shortfalls
 - ✓ target areas for improvement – example – if fall short all the time
Too many patients? Not enough time? Setting goals too high?
- enables continuous quality improvement (CQI)

GAS and 3 Levels of Service Evaluation

Individual Level **Micro**

change in quality of life, knowledge, attitude, function, behaviour, involvement, etc.

Collective Team/Organizational Level **Meso**

collective ability of the team/organization to work together to bring about desired change

Organization-Systems Level **Macro**

ability of the team/organization to work with other formal systems and community agencies to mobilize internal and external resources to bring about desired change

GAS Formula

Amalgamation of GAS Scores for Service Evaluation
Just plug in the scores!!

$$\text{GAS score} = 50 + \frac{10\sum(w_i x_i)}{\sqrt{(.7\sum w_i^2) + .3(\sum w_i)^2}}$$

W_i = the weighting given to the i th goal

x_i = level or numerical score (-2, -1, 0, +1, +2) of the i th goal

IN WORDS, the formula indicates that for each goal the score (-2 to +2) is multiplied by the weighting (use 1 if no weighting is assigned) & then the results for each goal are summed & multiplied by 10. On the bottom line the weightings are squared & then added up & multiplied by .7. This is added to the sum of all the weightings squared, multiplied by .3. The square root of this final number is taken. This is divided into the upper number to obtain the summary GAS score.

50 = achieved expected level (on average are achieving your goals)

Formula or use reference tables provided by GAS authors

GAS Example

CHERRYHILL HEALTH PROMOTION & INFORMATION CENTRE

GOAL ACHIEVEMENT

PLANNED CHANGE							
HEALTH CENTRE GOAL CATEGORIES	INITIAL GOAL STATUS	3 MTHS	6 MTHS	9 MTHS	12 MTHS	FINAL GOAL STATUS	COMMENTS
Health Awareness & Education Programs; Display; Computerized Access; Newsletter	20.98	31.86	31.86				
Volunteer Recruitment, Training, Evaluation, Support & Recognition	20.98	39.12	42.75				
Fund Raising	30.00	40.00	40.00				
Total Health Promotion & Information Centre Goal Achievement	23.99	36.99	38.20				

Goal achievement is collaboratively determined by community members and Cherryhill Healthy Ageing Program partners including health centre volunteers, professional health agency partners, program staff, and the Cherryhill Health Promotion & Information Centre Board of Directors.

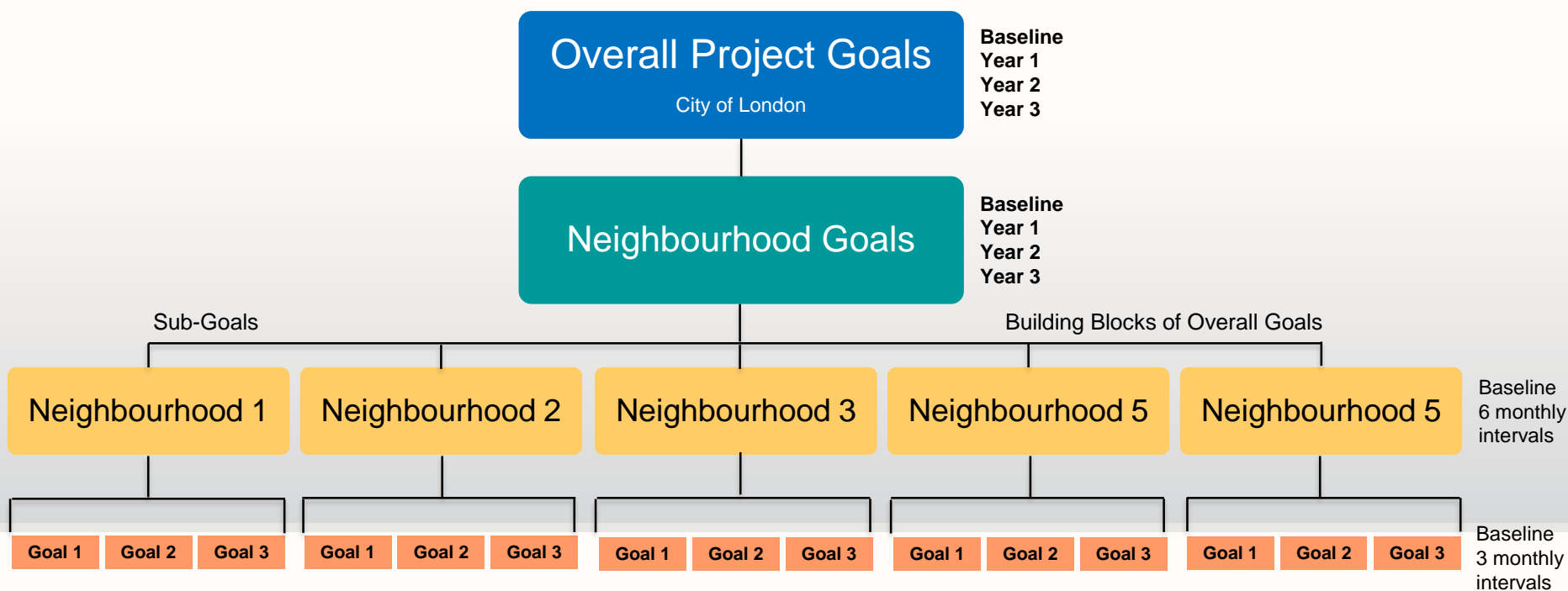


Innovations in the Use of GAS

Innovation in the Use of GAS

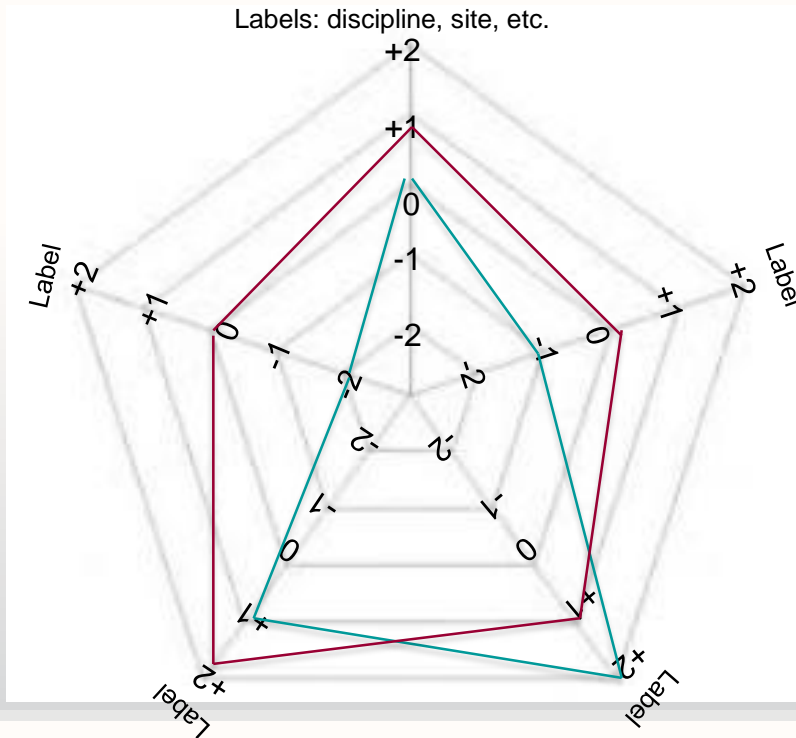
- ‘wrap around’ model of assessment – driven by patient and family
- requires commitment and ‘up front’ investment of time – but significant payback later
- GAS for service evaluation
- GAS for continuous quality improvement (CQI)

GAS and Program Evaluation



- amalgamate goals into summary scores to evaluate overall project success
- GDHs – show individual patient improvement & with amalgamation of individual patient changes (scores) can evaluate disciplines, program, GDH, and multi-site GDH impact & effectiveness

GAS and CQI - Radar Chart



- graphical method of displaying multivariate data - gaps among current & ideal performance areas
- highlights strength & weaknesses
- rate organizational performance
- team self-evaluation using GAS
average performance ratings & range of ratings within the team
- set performance goals

■ 2013-2014
■ 2014-2015

GAS Formula:

1 scored scale = T-scores 30, 40, 50, 60, 70
adjust T-scores for number of scored scales

GAS Used by Patients/Family

Goal Attainment Scaling

GOAL ATTAINMENT LEVELS	Patient Goals		
	Goal:	Goal:	Goal:
Current -2			
-1			
Acceptable 0			
+1			
Ideal +2			
Comments			

Goal Status:
 Initial:

★

①
 ②
 ③

Initial:

★

①
 ②
 ③

Initial:

★

①
 ②
 ③



GAS and 'Saving Time to Care'

GAS and 'Saving Time to Care'

- provides an overall focus to therapy program
clear target
- more efficient use of resources – not all therapists need to be involved with every patient & every goal
- frees up therapist time to work with patients who really need them
- can retrospectively look at goals and classify – patterns of building blocks
mobility, ADL/IADL, social functioning, community reintegration goals etc.

GAS and 'Saving Time to Care'

- with practice – recognize there are common themes even though goals are individualized – will allow you to set goals fairly quickly – improve efficiency
- when reviewing goals in team meetings will see very quickly if goals are being achieved [highly visual](#)
- can adjust your course more quickly if needed



Conclusion

Conclusion

- **GAS** allows the creation of a unique tool for each situation – basis of its versatility
- provides a participatory & empowering way to set goals, monitor/evaluate patient/program outcomes
- is user friendly – readily understood by frail, older adults and others not familiar with program evaluation
- is particularly useful given the heterogeneity of GDH patients who have highly individualized health problems



Small Group Discussion

Small Group Discussion

- Group 1:** How can we integrate professional specific assessment with patient focused goal setting and service evaluation?
- Group 2:** How can we innovate in our use of GAS in order to save time to care?
- Group 3:** How can we use GAS to facilitate continuity of care?
- Group 4:** What are the challenges barriers to implementing GAS at the collective team level, and what are some potential solutions to these challenges?



THANK YOU!

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