

Goal Attainment Scales (GAS) in person-centred pharmacy consultations

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Aims

- Overview of goal setting in Rehabilitation
- Goal Attainment Scaling
 - What it is
 - How to use it
- A coaching approach to Pharmacy consultations
 - Use of goals in pharmacy practice

Rehabilitation

- **Aims of rehabilitation**
 - Optimising independence
- **Setting goals with patients and carers**
 - Identified as a core and widely practiced activity in rehabilitation practice (Playford et al. 2009; Wade 2009)
 - Describe a future state to be achieved by a patient with disability
- **Goals set:**
 - At different levels - Global v's focal interventions
 - For different outcomes - Functional v's impairment

Challenges in goal setting

- Cognitive impairment
- Communicative deficits
- People in crisis
- Resources
- Writing of goals
- Can unrealistic goals be demotivating?

Goal Attainment Scaling (GAS)

- Originally developed to:
 - Measure outcome of mental health clinical trials
 - Apply measurement to individualised goals
 - Reflecting the actual problems of patients
 - Potential to compare across patients

Brown BW, in Goal Attainment Scaling:
applications, theory & measurement.

Kiresuk, Smith & Cardillo (Eds) 1994

Benefits of GAS goal setting

- Criterion-referenced
- Suits all levels of functional disability
- Measures individual goals
- Evaluates functional goals
- Promotes collaborative goal setting
- Reflects a client-centred service delivery
- Numeric score for analysing group performance

GAS

- A method of scoring
 - Extent to which goals are achieved
 - In a standardised way
 - Goals combined to a single GAS T-score
 - Reflecting achievement of expected goals
- GAS Transformation “T” score
 - Provides basis for comparison
 - That allows for individual differences

GAS

- Successful evaluation of goal outcome is dependent on:
 - Rigorous goal setting process
 - Robust setting of goals
 - Robust evaluation of goals set
 - Ability to predict outcome
 - Realistic ability of patient to achieve goal
 - Motivation of patient and team

Goal Attainment Scaling

Easy stages

- Stage 1
 - Goal setting
- Stage 2
 - Rating goal achievement

- Stage 3
 - Weighting for importance
- Stage 4
 - The GAS formula
- Stage 5
 - Follow-up guides



**Clinical application
GAS “light”**



Optional

Stage 1: Goal setting

Goal setting: A critical step

- Discuss and agree
 - With patient / family
 - With multidisciplinary Team
- Expected outcomes for treatment
 - If expectations unrealistic
 - Negotiate what can reasonably be achieved
 - Is the expected outcome worthwhile?
- Describe and document expected outcome
 - Ensure that this is understood and agreed

Defining the goals

- Rehab goals must be SMART
 - Specific
 - Measurable
 - Achievable
 - Relevant
 - Timed

Patient says: “I want to be able to get dressed more easily”
Rehab team: Must develop a SMART equivalent

Example

- Jane
 - “I want to be able to get dressed more easily”
- SMART
 - To reduce the spasticity in Jane’s arm
 - So she can put her arm into the sleeve of her jacket
 - Without help from another person
 - By [specified date]

How many goals?

- There is no set number of goals
 - Can vary from patient to patient
- BUT - goal definition / negotiation
 - Can be time-consuming
- For practical purpose
 - Set no more than 3 - 5 goals
 - (3 is plenty in most cases)**
 - 1 primary goal
 - 2 secondary goals

Stage 2: Rating goal attainment GAS “light”

Rating Scale

- Baseline usually rated as -1
- Unless patient is as bad as they could be: -2

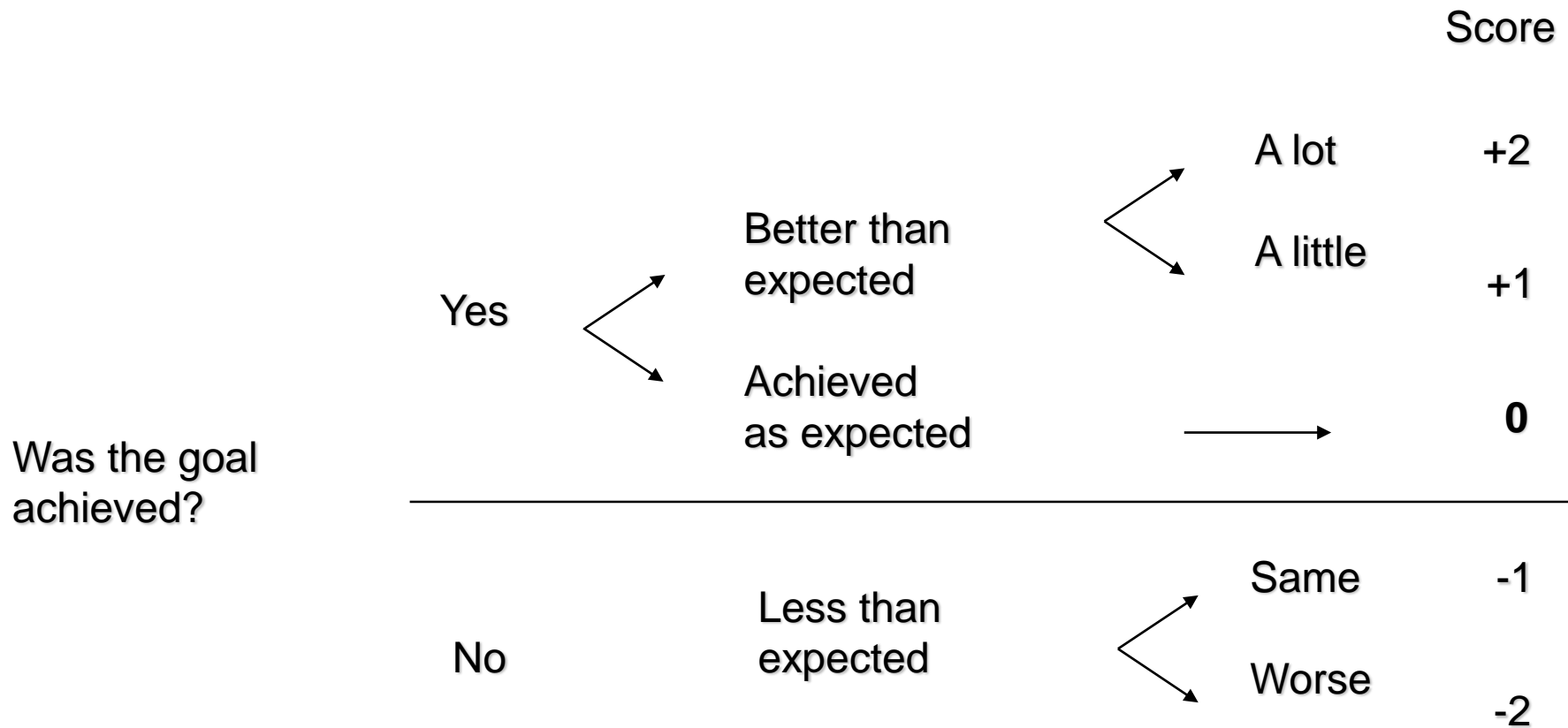
-2	-1	0	+1	+2
Nil by mouth	1 x pot of yoghurt, daily	To manage full portions of puree diet	To manage full portions of fork-mashed diet	To manage full portions of normal diet

Can accommodate higher expectations as +1 or +2 levels

Baseline scores

- Baseline rating
 - Usually -1
 - To allow for possibility of deterioration
 - Unless no worse condition is clinically plausible – for example
 - pain 10/10 - or as bad as it could be
 - Unable to do task at all (if active function)
 - Always relates back to the goal
 - If could not be worse
 - score -2 at baseline

Rating goal attainment



Stage 3: Goal weighting (optional)

Goal weighting

- Some goals
 - Matter more to the patient than others
 - Present more of a challenge than others
- To take these factors into account
 - Goals can be weighted for
 - Importance
 - to the patient/family
 - Difficulty
 - rated by the team

Weighting scale

Importance (for Patient / family)		Difficulty (rated by Team)	
Not important	0	Not difficult	0
Important	1	Difficult	1
Very important	2	Very difficult	2
Extremely imp ^t	3	Extremely difficult	3

Weight = Importance x Difficulty

Example

- A 54-year-old lady
 - With post-stroke global aphasia
 - Is treated by SLT for her acquired language disorder
- Goals for treatment
 - To increase her naming ability
 - From an object naming score of 5/10 (currently) to 8/10
 - To be able to use a communication aid to express everyday needs on the ward
 - To independently use a picture chart to indicate her needs to nursing staff once per day.
 - For family to be able to consistently demonstrate communication strategies when talking to her
 - Family to consistently use gesture, drawing , and/or written words in a conversation with her.

Taking this example

Applying weighting, baseline and outcome scores:

Goals	Importance	Difficulty	Baseline Score	Outcome Score
Increase naming ability to 8/10	3	3	-1	0
Independently use a picture chart to indicate her needs to nursing staff once per day	2	3	-1	-1
Family to use gesture, drawing , and written words in a conversation	2	2	-1	+1

Baseline GAS = 36.6

Achieved GAS T score = 48.6

Stage 4: Applying the formula (optional)

What does the formula do?

- Calculates a GAS T-Score:
 - The composite GAS score
 - (i.e. the sum of attainment levels x relative weights for each goal)
 - Is transformed to a standardised measure
 - Mean 50 and Std Dev ± 10
- How?
 - UK ROC calculator / Look up in tables / Spreadsheet calculator

$$= 50 + \frac{10 \sum(w_i x_i)}{[(1-\rho) \sum w_i^2 + \rho (\sum w_i)^2]}$$

Formula Calculation

Patient name 0 = not at all
1 = fairly
2 = very
3 = extremely

Goals	Goal description	Importance	Difficulty	Weight	WSq	SCORES			
						Baseline	W x base	Acheived	W x Ach
Goal 1	Reduce pain	3	2	6	36	-1	-6	2	12
Goal 2	Improve gait	2	2	4	16	-1	-4	-1	-4
Goal 3	Easier dressing	3	2	6	36	-1	-6	0	0
Goal 4				0	0		0		0
Goal 5				0	0		0		0
Goal 6				0	0		0		0
SumW				16	256		-16		8
Sum (Wsq)					88				
Factor				138.4					
Sqrfactor				11.8					

	Baseline	Achieved	Change
GAS calculation	36.4	56.8	20.4

Interpreting GAS T scores

- If all goals achieved as expected
 - GAS T-score will be 50

If the patient does:	Expected range for GAS T scores
Much less than expected	<40
Less well than expected	40-50
Better than expected	50-60
Much better than expected	>60

Stage 5: Follow-up guides (Optional)

Problems with GAS

- Critics claim
 - GAS is too subjective
- To make it more robust
 - Originators recommend
 - Using follow-up guide
 - Pre-define levels for each possible level of attainment
 - Set at the same time as original goal

Example of follow-up guide

	-2	-1	0	+1	+2
Naming ability (Scored out of 10)	<5/10	5-7/10	8/10	9/10	10/10
Use of a picture chart to indicate basic needs	Unable to use a picture chart	Requires moderate help throughout task from a staff member	Verbal prompting required to use chart	Independently uses chart once or twice a day	Independently uses chart many times throughout the day
Use of total communication skills	No use of total communication strategies	Inconsistent use of one total communication strategy in a single conversation	Consistent use of one total communication strategy within a conversation	Consistent use of multiple TC strategies within a conversation	Consistent use of a range of TC strategies across multiple conversations

Summary

- GAS
 - Patient-centred goal setting measurement
 - Flexible and responsive to patient change
 - Provides both qualitative and quantitative information
 - Useful comparison method
 - With other standardised measures
 - Easy stages
 - For clinicians
 - For research purposes

Why patient-centred care?

- Patient or person centred?
- Which term is preferred and why?

“Person-centred care incorporates use of clinician skills, evidence-based knowledge and patient perspective to provide personalised, co-ordinated care which enables people to make the most of their lives”

How does coaching fit in to person-centred care?

- Coaching: originally from sport, developed through industry, performance and in the last 10 years, health.
- GROW model (1980's) popularised improving performance in organisations and processes.
- Relevant to health in that it supports behavioural change

<http://www.betterconversation.co.uk/health-coaching.html>

Health Coaching

Utilises current skills in Health education and clinician expertise

– Develops skills in Behavioural change

Evidence: emerging

UK – East of England 2014

https://eoeleadership.hee.nhs.uk/sites/default/files/Does%20health%20coaching%20work%20-%20a%20review%20of%20empirical%20evidence_0.pdf

Evidence for efficacy in diabetes (2016)

[http://www.canadianjournalofdiabetes.com/article/S1499-2671\(15\)00847-3/fulltext](http://www.canadianjournalofdiabetes.com/article/S1499-2671(15)00847-3/fulltext)

Developing medication adherence interventions (2016)

<http://www.jabfm.org/content/28/1/38.long>

The GROW model



TGROW and AGROW

- Topic (you/they choose) vs AGENDA (negotiated)
- Goal to Shared GOALS
 - HOW DOES GAS FIT IN?
- Reality to History taking (patient perspective)
- Options to Shared discovery
- Will/Wrap up to ACTION PLAN, monitoring, follow up
 - HOW DOES GAS FIT IN?

TOPIC - antihypertensives

Goal:

What do you want to achieve from this conversation?

Reality:

What is happening now about these medicines?

Options:

What could you do ?

What else could you do?

What else?

Will/wrap up:

What will you do?

What Goals could you set around that?

CREATE GAS GOALS

-2	-1	0	+1	+2
Never taking any prescribed medications 150/100	Taking anti-hypertensives to achieve a blood pressure of 140/90	Taking anti-hypertensives to achieve a blood pressure of 135/85	Taking anti-hypertensives to achieve a blood pressure of 130/80	Taking anti-hypertensives to achieve a blood pressure of 120/80

How convinced are you that you can do this? (importance, difficulty)

What will you do next, how, when, who will help you?

Medication adherence

TGROW and GAS

T: Your patient wants to take their medicines regularly.

G: To take medicine as prescribed

R: They take medicines about 3 times a week.

O: full adherence, partial adherence, stop the meds

W: partial adherence, better than now.

Set GAS GOALS

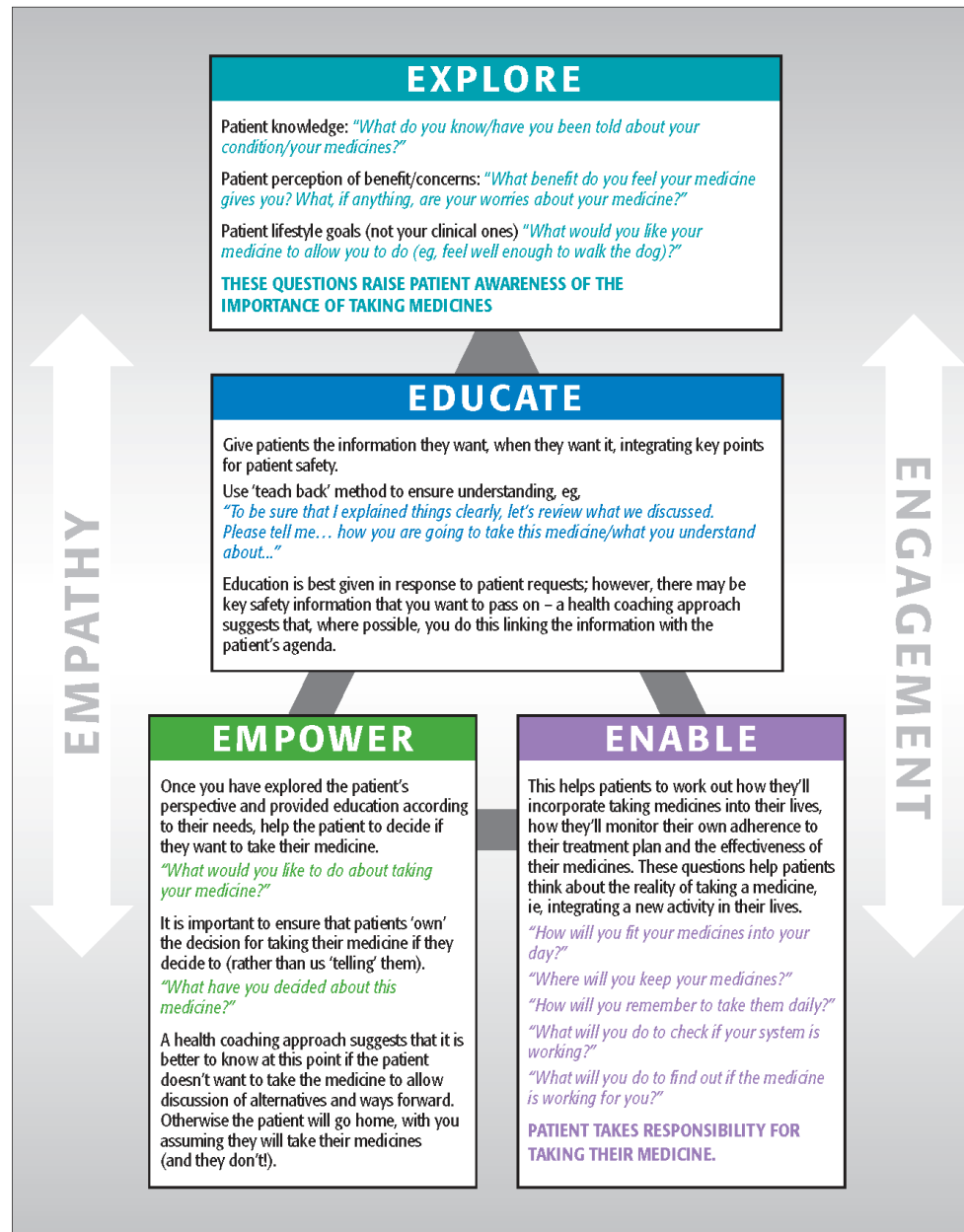
-2	-1	0	+1	+2
Never taking any prescribed medications	Taking all medication up to 3 times per week	Taking all medication 5 times per week	Taking all medication daily	Taking all medication at the same time daily

Questions you can ask in a consultation:



The Four E's: pharmacy use of TGROW

- **Explore** what the patient wants to know and follow their agenda (**T**opic, **G**oal, **R**eality)
- **Educate** them on what they want to know
- **Empower** patients to take responsibility for medicines taking (**O**ptions)
- **Enable** behavioural change in order for patients achieve their aims (**W**ill/wrap up)



CPPE 2014
<http://www.consultationskillsforpharmacy.com/docs/docb.pdf>

Example: hospital pharmacy activity

- Focus on
 - Drug chart
 - Nurse requirements
 - Medication supply
 - Patient consultation for
 - Drug history
 - Information exchange
 - Discharge instruction

Putting GAS into practice

- Medicine reconciliation
- High risk medicines consultation
- Discharge consultation
- Medication review

THERE IS A PROCESS TO DO THIS

Barnett NL, Sivam R, Easthall C Pilot study to evaluate knowledge of person-centred care, before and after a skill development programme, in a cohort of preregistration pharmacists within a large London hospital *Eur J Hosp Pharm* Published Online First: 09 January 2019. doi: 10.1136/ejhpharm-2018-001704 <https://ejhp.bmj.com/content/early/2019/01/09/ejhpharm-2018-001704>

Barnett NL Guide to undertaking person-centred inpatient (ward) outpatient (clinic) and dispensary-based pharmacy consultations *Eur J Hosp Pharm* Published Online First: 09 January 2019. doi:10.1136/ejhpharm-2018-001708 <https://ejhp.bmj.com/content/early/2019/01/09/ejhpharm-2018-001708.info>

The start:

build rapport before discussing goals

After introduce yourself “hello my name is...”

- state the reason for visit
- ask if it’s convenient to speak
 - if yes, place a chair next to patient, sit down and offer to draw curtain
 - **If no**, ask when its convenient, **GO AWAY AND COME BACK LATER**

Person-centred questions:

- “before I ask you about your medicines, **what** would you like to ask me about your medicines?”
 - Answer their questions first
- “What would be a good outcome from taking this medicine?”
 - If they don’t know and need a suggestion from you and if so, give them a few examples
 - “Please tell me more about that”
- Jointly set GAS goals, timelines for review
- “**Is there something else** you would like to ask about this?”

Pre-framing and GAS goals:

“ I’ve come to tell you about x, but before I do, what would you like to know about your medicines?”

(focus on their agenda)

I’d like to talk to you about what you want to achieve by taking this medicine, that is, your goals, is that OK?

- What do you think is an achievable goal for you in the next time period *(getting from -1 to 0)*?
- What would be even better *(+1 and +2)*?
- What would be less good *(-2, starting at -1)*?

When shall we meet again to discuss this?

(or state next appointment time)

TIPS:

- Patient may not be familiar with this type of consultation so it is important to **explain yourself in stages**
- When you are asking about what a patient wants to know, **start with an open question**
 - “What would you like to know about this medicine?”
- If they don’t suggest anything, give a number of examples as options
 - “Some people might want to achieve x, y or z, what would work for you?”

Summary

- GAS goals are a person-centred measurable way of achieving outcomes
- GAS principles are transferable across disciplines
- Pharmacy consultations can use GAS goals
- Person-centred, goal orientated interventions will support medicines optimisation



Putting **patients**
at the **HEART**
of everything we do



London North West
University Healthcare
NHS Trust

THE END