



**MUSCULOSKELETAL
PARTNERS NETWORK.**
RAISING STANDARDS, IMPROVING QUALITY

ESTABLISHING A MUSCULOSKELETAL QUALITY STANDARD

RECOMMENDATIONS FOR DATA COLLECTION AND ANALYSIS

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REVIEW: MSKPN Quality Committee
VERSION: 0.2 March 2021



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BACKGROUND

Musculoskeletal Partners Network (MSKPN) exists to raise standards and improve quality in Musculoskeletal healthcare in both the private and public sectors. This paper is informed by a compendium developed from a multidisciplinary working group of MSK industry stakeholders which outlined agreed quality standards for MSK healthcare.

This publication presents these standards and provides guidance for their consistent collection and analysis. MSKPN's vision is for our members to have a strong collective voice, to sit at the heart of the MSK healthcare industry and use these quality standards to educate commissioners and system leaders of the benefits of investing in quality MSK services.

Contributors to compendium:



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SCOPE AND DEFINITIONS

The scope of MSKPN is to champion high quality healthcare provision for all MSK healthcare services. The quality standards presented are intended for use across all MSK healthcare professionals, including but not limited to:

- Physiotherapists
- Osteopaths
- Chiropractors
- Sports and Exercise Therapists
- Sports Medicine Practitioners
- Musculoskeletal Podiatrists
- Orthopaedic surgeons

Various terms are used by our members to recognise service users, including but not limited to:

- Patients
- Customers
- Clients
- Services Users

'Practitioner/s' will be used throughout this publication to recognise all MSK healthcare professionals. **'Patient/s'** will be used throughout this publication to recognise all MSK service users.

The quality standards presented are intended to generate outcome data on distinct episodes of MSK care. MSKPN support professional understanding that MSK conditions are not always completed within distinct start and finish points of care. However, to achieve our vision of consistent and meaningful quality standards in MSK healthcare we must establish professional agreement to a start and finish point of data collection. MSKPN propose the following definition for member use:

START OF CARE EPISODE / START OF DATA COLLECTION

A patient's initial presentation to a MSK healthcare provider where treatment is provided for a new clinical presentation.

END OF CARE EPISODE / END OF DATA COLLECTION

A point in time during treatment for a single MSK presentation where both the practitioner and patient agree further treatment will create no further benefit for the patient's presenting condition.

Example:

A patient presents to a practitioner on 1st January 2021 for management of a new exacerbation of low back pain. Treatment is provided at this appointment – START OF CARE EPISODE / DATA COLLECTION. At a sixth treatment sessions on 1st March 2021, the practitioner and patient agree further treatment will create no further benefit for the patient's low back pain – END OF CARE EPISODE / DATA COLLECTION.

Should the same patient return to the practitioner one month later on 1st April 2021 for subsequent treatment for an exacerbation of low back pain, further treatment would be provided for this but no new data would be collected for this subsequent treatment (for further details see p10).

QUALITY INDICATORS SELECTION

The following criteria were applied in the review process to identify agreed quality indicators:

- **Ease** – to have processes that are intuitive, patient and clinician-friendly, and are not time-consuming
- **Cost** – to minimise implementation costs and avoid costly licence fees for use of selected outcome measures
- **Value / insight** – to adopt measures which meaningfully differentiate between poor and good quality

Quality indicators were agreed to provide data on the following factors central to high-quality outcomes from MSK healthcare services:

- **Pain** – a measure to consistently identify changes in patient’s pain levels
- **Function** – a measure to consistently identify changes in patient’s functional abilities
- **Rating of change** – a measure to identify patient’s perceived overall change in clinical presentation
- **Experience** – a measure to consistently identify patient’s satisfaction with their care

MSKPN acknowledge from the outset of this work the subjective nature of defining quality in MSK healthcare and individual stakeholder preferences for various measures and approaches. The intention of this work is to produce an initial level of consistency which will produce meaningful and comparable outcomes for all. From this foundation, the expectation is for members to collectively refine and improve the initial approach to meet the evolving needs of their clinical practice and patients.

SELECTED QUALITY INDICATORS

OUTCOME	QUALITY INDICATOR	USE	TIMING OF COLLECTION																						
Changes in <i>pain</i>	Numerical Pain Rating Scale (NPRS)	<p><i>We would like you to indicate on this scale how good or bad your own pain has been over the past week, in your opinion.'</i></p> <table border="1"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td colspan="6">No pain</td> <td colspan="5">Worst pain imaginable</td> </tr> </table>	0	1	2	3	4	5	6	7	8	9	10	No pain						Worst pain imaginable					START OF CARE EPISODE AND END OF CARE EPISODE
0	1	2	3	4	5	6	7	8	9	10															
No pain						Worst pain imaginable																			
Changes in <i>function</i>	Patient Specific Functional Scale (PSFS) <i>*See appendix a</i>	<p><i>Please identify up to 3 activities that you are unable to do or are having difficulty with as a result of your _____</i></p> <table border="1"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td colspan="6">Unable to perform</td> <td colspan="5">Fully able to perform</td> </tr> </table>	0	1	2	3	4	5	6	7	8	9	10	Unable to perform						Fully able to perform					START OF CARE EPISODE AND END OF CARE EPISODE
0	1	2	3	4	5	6	7	8	9	10															
Unable to perform						Fully able to perform																			
Overall patient <i>rating of change</i>	Global Rating of Change (GRoC)	<p><i>How would you describe your condition now, compared to your first visit to this clinic?</i></p> <table border="1"> <tr> <td>-5</td><td>-4</td><td>-3</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td> </tr> <tr> <td colspan="6">Very much worse</td> <td colspan="5">Very much better</td> </tr> </table>	-5	-4	-3	-2	-1	0	1	2	3	4	5	Very much worse						Very much better					END OF CARE EPISODE ONLY
-5	-4	-3	-2	-1	0	1	2	3	4	5															
Very much worse						Very much better																			
Patient <i>experience</i>	Net Promoter Score (NetPS)	<p><i>How likely is it that you would recommend (insert organisation name) to a friend or colleague?</i></p> <table border="1"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td colspan="6">Not at all likely</td> <td colspan="5">Extremely likely</td> </tr> </table> <p><i>What is the primary reason for your score?</i></p>	0	1	2	3	4	5	6	7	8	9	10	Not at all likely						Extremely likely					Following END OF CARE EPISODE ONLY (timing may vary based on local processes for data collection)
0	1	2	3	4	5	6	7	8	9	10															
Not at all likely						Extremely likely																			

PHASING OF DATA COLLECTION ACTIVITIES

PRIMARY INTENTION

MSKPN have produced this publication to provide members guidance on recommended quality indicators and the additional data required to inform consistent industry quality standards. A members data collection and analysis template is included within this publication for members use (**appendix b**). This template ensures data can be collected by all members in the simplest form; a pre-set spreadsheet. This approach will ensure members can collect consistent data locally for individual organisation use.

SECONDARY INTENTION

MSKPN will work on behalf of members to automate this agreed approach to data collection with providers of MSK patient software. The selection of software providers will be informed by our understanding of member's use. This approach is intended to improve ease of data collection for our providers and ensure analysis is consistent and automated wherever possible.

TERTIARY INTENTION

MSKPN will pursue options available for establishing a central independent repository of all member data. All appropriate data sharing agreements will be established prior to this. MSKPN members who opt in to supplying their data to this repository will receive regular reports on how their organisational data compares to the repository average. Collating this level of data will enable MSKPN to engage with academic and commercial sectors to use this collective data for industry research and development.

ADDITIONAL DATA REQUIREMENTS

Additional data to the selected quality indicators will be required to support meaningful analysis. The table below outlines this additional data and the recommended format for collection

Data		Rationale	Recommended Format (local collection)	Recommended Format (via patient software)
Unique Provider ID		To differentiate data to specific organisations	Organisation name	Client ID used by software provider
Unique Patient ID / Case number		To ensure data can be attributed to a single episode of care	Patient full name	Case number used by software provider
Date of Birth		To assist data analysis (age related variations) & to ensure data can be attributed to a single episode of care	xx/xx/xxxx	xx/xx/xxxx
Gender		To assist data analysis (gender related variations)	Male Female Other	Male Female Other
Selected comorbidities	Alcohol misuse	To assist data analysis (recognised as top seven comorbidities to impact MSK health)	Y/N	Y/N
	Anxiety disorders		Y/N	Y/N
	Current smoker		Y/N	Y/N
	Depressive disorders		Y/N	Y/N
	Diabetes mellitus		Y/N	Y/N
	Ischemic heart disease		Y/N	Y/N
	Rheumatoid arthritis		Y/N	Y/N
Lead clinician ID		To assist data analysis (clinician related variations)	Clinician's full name	Clinician's full name
Profession		To assist data analysis (profession related variations)	<ul style="list-style-type: none"> - Physio - Chiro - Osteo - SETherapist (Sports & Exercise Therapist) - Other 	
Initial Treatment Date		To ensure data can be attributed to a single episode of care	xx/xx/xxxx	xx/xx/xxxx



Body Part	To assist data analysis (body part related variations)	Local record: primary site of pain	Local record: primary site of pain
Condition code	To assist data analysis (condition related variations)	OSIICS code* or ICD 10 code**	OSIICS code* or ICD 10 code**
Final Treatment date	To ensure data can be attributed to a single episode of care	xx/xx/xxxx	xx/xx/xxxx
Number of treatment sessions	To assist data analysis (impact of treatment sessions to outcomes)	Whole number	Whole number
Outcome status	To ensure data can be attributed to a single episode of care & to support data analysis (variation in practice)	- Discharge - Refer to ortho - Refer to GP - Other	

*Orchard Sports Injury and Illness Classification System (OSIICS), previously Orchard Sports Injury Classification System (OSICS)

<https://www.johnorchard.com/about-osiics.html>

**World Health Organisation classification of musculoskeletal disorders:

<https://icd.who.int/browse10/2019/en#/XIII>

TIMING OF DATA COLLECTION

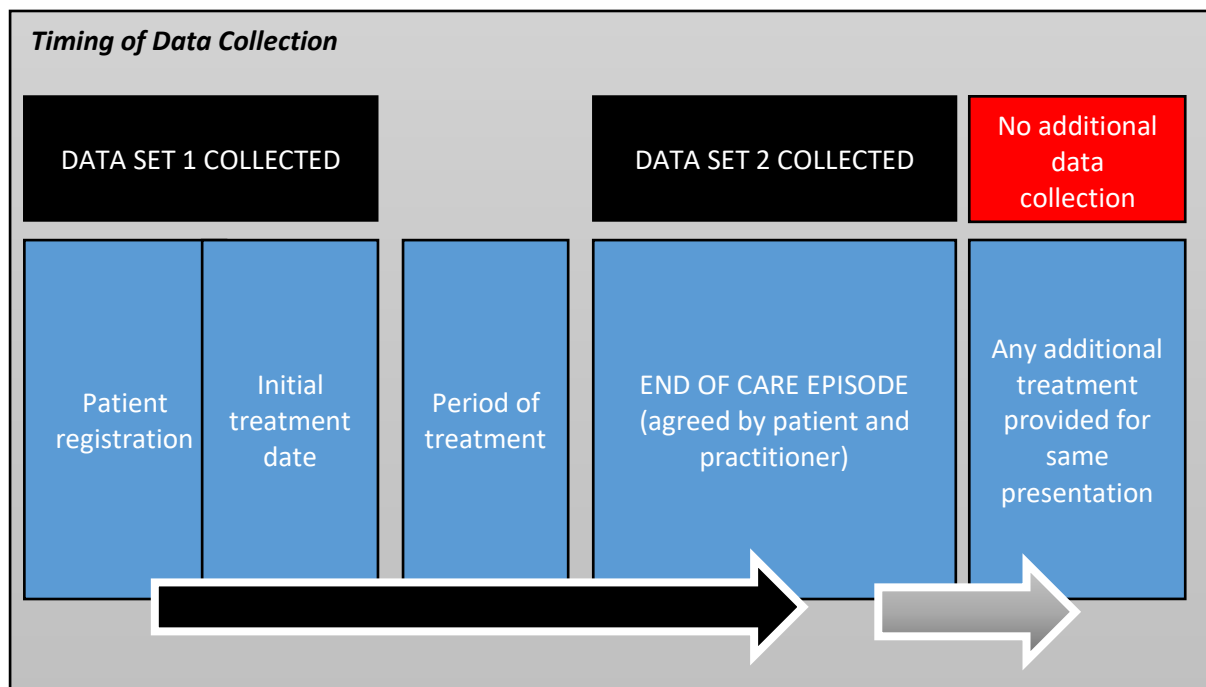
Two separate data sets are required for each patient episode of care.

DATA SET 1 - START OF CARE EPISODE

This data set includes all data required up to and including the initial treatment date for the episode of care being reported on. Components of this data can be collected prior to the initial treatment date (i.e. via a patient registrations questionnaire). Other components will only be able to be completed at the time of the initial treatment session. Collection of quality indicator scores is recommended away from the influence of the treating practitioner to strengthen data validity. However, it is recognised this may not always be feasible.

DATA SET 2 - END OF CARE EPISODE

This data set includes all data required at the point in time agreed by the patient and practitioner as the *End of Care Episode* (see previous guidance). Collection of this data set is recommended at the point in time this decision is reached by the patient and practitioner (i.e. the final treatment session). Collection of quality indicator scores is recommended away from the influence of the treating practitioner to strengthen data validity. However, it is recognised this may not always be feasible.



DATA SET 1

The full requirements of **DATA SET ONE** are presented below with example of data entries required to illustrate the required formatting.

DATA SET 1 – START OF CARE EPISODE											
	Unique Provider ID	Unique Patient ID	Date of Birth	Gender	Comorbidities						
					Alcohol misuse	Anxiety disorders	Current smoker	Depressive disorders	Diabetes mellitus	Ischemic heart disease	Rheumatoid arthritis
Example Entry	ABC Physio Ltd	John Smith	01/01/1980	Male	N	N	Y	N	Y	N	N

DATA SET 1 Continued									
	Numerical Pain Rating Scale (0-10)	PSFS Activity 1 (0-10)	PSFS Activity 2 (0-10)	PSFS Activity 3 (0-10)	Lead Clinician ID	Profession	Initial Treatment Date (**/**/****)	Body Part	Condition Code
Example Entry	9	1	2	1	Alison Ryan	Physio	01/01/2021	Ankle	AUXX* or 72600**

*OSICS code for presenting condition

**ICD 10 code for presenting condition

DATA SET 2

The full requirements of **DATA SET TWO** are presented below with example of data entries required to illustrate the required formatting.

DATA SET 2 - END OF CARE EPISODE										
	Final Treatment Date (**/**/****)	No. of Treatment Sessions	Outcome Status	Numerical Pain Rating Scale (0-10)	PSFS Activity 1 (0-10)	PSFS Activity 2 (0-10)	PSFS Activity 3 (0-10)	Global Rating of Change (-5 to 5)	Net Promoter Score (0-10)	Net Promoter Score narrative
Example Entry	01/04/2021	8	Discharge	0	10	10	9	4	10	Fantastic service, couldn't fault anything

PREPARING DATA FOR ANALYSIS

A **COMPLETE DATA SET** including both **DATA SET ONE** and **DATA SET TWO** is required for each episode of care to enable effective analysis. To achieve a **COMPLETE DATA SET** a local process is required to identify when a **DATA SET TWO** has been created for each episode of care and to match this to the associated **DATA SET ONE**.

If using local paper or basic IT systems, this may be achieved by identifying all **DATA SET TWO** records completed in a specified timeframe and collating these with their corresponding **DATA SET ONE** records.

If using a patient documentation software system for data recording, this may be achieved by running a report to collate both **DATA SET ONE** and **DATA SET TWO** for a specified time period in which **DATA SET TWO** records were completed.

An example of a **COMPLETE DATA SET** is presented on the following page.

Example a -

Clinic ABC collects their data locally on an excel spreadsheet. It is the first of February and they want to analyse their January data.

- *All **DATA SET TWO** records created between 1st and 31st are identified from clinic ABC's data collection spreadsheet.*
- *These records are extracted to a new '**JANUARY ANALYSIS SPREADSHEET**'.*
- *All **DATA SET ONE** records linked to these specific **DATA SET TWO** records are identified from clinic ABC's data collection spreadsheet.*
- *These **DATA SET ONE** records are added to the '**JANUARY ANALYSIS SPREADSHEET**', ensuring each line of data entry presents both **DATA SET ONE** and **DATA SET TWO** for each specific episode of care.*

Example b -

Clinic XYZ collects their data through a patient documentation software system. It is the first of February and they want to analyse their January data.

- *A report is run through the patient documentation software system to identify all patient records where a **DATA SET TWO** was completed between 1st and 31st January.*
- *For each of these records, the associated **DATA SET ONE** will also be extracted from the patient documentation software system.*
- ***DATA SET ONE** and **DATA SET TWO** for each record identified will be combined to create a '**JANUARY ANALYSIS DATASET**', ensuring each line of data entry presents both **DATA SET ONE** and **DATA SET TWO** for each specific episode of care.*
- *The ability to perform these automated functions will require appropriate system configuration.*



COMPLETE DATA SET EXAMPLE

Data Set 1 - At Patient Registration / at initial appointment														Data Set 2 - END OF TREATMENT SUMMARY															
Unique Provider ID	Unique Case ID	Gender	Age (from DOB)	Comorbidities							Num Pain Scale (0-10)	PSFS Activity 1 (0-10)	PSFS Activity 2 (0-10)	PSFS Activity 3 (0-10)	Lead Clinician ID	Profession	Initial Treatment Date (**/**/****)	Body Part	Condition Code	Final Treatment Date (**/**/****)	No. of Treatment Sessions	Outcome Status	Pain Scale (0-10)	PSFS Activity 1 (0-10)	PSFS Activity 2 (0-10)	PSFS Activity 3 (0-10)	Global Rating of Change (-5 to 5)	Net Promoter Score (0-10)	Net Promoter Score narrative
				Alcohol abuse	Anxiety disorders	Current smoker	Depressive disorders	Diabetes mellitus	Ischemic heart disease	Rheum arthritis																			
ABC Clinic	279	Male	25	No	Yes	Yes	No	No	No	No	8	1	2		Amy	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72600	01/05/2021	4	Discharge	0	9	10		3	9	
ABC Clinic	280	Female	67	Yes	No	No	Yes	No	Yes	No	7	3	3	3	Todd	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72601	01/05/2021	5	Discharge	1	8	9	10	5	10	
ABC Clinic	281	Female	45	No	No	No	No	Yes	No	No	5	1	3		Nic	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72602	01/05/2021	3	Discharge	0	9	9		4	10	
ABC Clinic	282	Male	23	No	Yes	Yes	No	No	No	No	6	4	4	5	Nic	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72603	01/05/2021	8	Discharge	0	10	10	10	5	10	
ABC Clinic	283	Female	66	Yes	No	No	Yes	No	No	No	8	2	3		Amy	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72604	01/05/2021	7	Discharge	2	9	10		5	9	
ABC Clinic	284	Female	56	No	No	No	No	Yes	No	No	9	3			Todd	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72605	01/05/2021	6	Discharge	0	10			5	8	
ABC Clinic	285	Male	77	No	Yes	Yes	No	No	No	Yes	10	3	4	4	Todd	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72606	01/05/2021	10	Discharge	1	9	10	10	3	7	
ABC Clinic	286	Male	81	Yes	No	No	No	No	No	No	9	2	2		Todd	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72607	01/05/2021	6	Discharge	1	8	10		3	7	
ABC Clinic	287	Male	72	No	Yes	No	Yes	No	Yes	No	10	1	1		Todd	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72608	01/05/2021	4	Discharge	1	9	10		4	9	
ABC Clinic	288	Female	34	Yes	No	Yes	No	No	No	No	8	2	3	3	Todd	Physio	01/02/2021	Ankle	Chronic ankle instability OSICS: AUXX ICD9: 72609	01/05/2021	8	Discharge	0	8	9	9	4	10	

DATA ANALYSIS AND OUTCOMES

The following section describes the recommended approach to analysis for each quality indicator. Analysis should be completed for all episodes of care within a specified **COMPLETE DATA SET**. It is recommended that each **COMPLETE DATA SET** analysed should represent all episodes of care with completed **DATA SET TWO** entries from a given calendar month. Adopting this approach will enable an industry monthly average outcome to be calculated to represent all organisations involved and future comparison of organisational monthly outcomes to this industry average.

The examples provided below demonstrate the analysis approach taken for a **COMPLETE DATA SET** comprising of 10 episodes of care.

NUMERICAL PAIN RATING SCALE (NPRS)

A **COMPLETE DATA SET** includes a **DATA SET ONE** and **DATA SET TWO** NPRS entry for each episode of care. The analysis approach recommended for NPRS is to calculate two outcomes:

1. The average change in NPRS score

This is calculated by identifying the change in pain score for each episode of care within a specified **COMPLETE DATA SET** and dividing this by the total episodes of care included within the specified **COMPLETE DATA SET**.

Example Analysis

DATA SET 1			DATA SET 2	Actual change in NPRS score	Average change in NPRS score
Unique Provider ID	Unique Case ID	Numerical Pain Rating Scale (0-10)	Numerical Pain Rating Scale (0-10)		
ABC Clinic	279	8	0	8	7.4
ABC Clinic	280	7	1	6	
ABC Clinic	281	5	0	5	
ABC Clinic	282	6	0	6	
ABC Clinic	283	8	2	6	
ABC Clinic	284	9	0	9	
ABC Clinic	285	10	1	9	
ABC Clinic	286	9	1	8	
ABC Clinic	287	10	1	9	
ABC Clinic	288	8	0	8	



2. The average percentage change in NPRS scores

This is calculated by dividing the actual change in NPRS score achieved for each episode of care by the maximum change score possible for each episode of care. These scores are then collated and then divided by the total episodes of care included within the specified **COMPLETE DATA SET**.

Example Analysis

DATA SET 1			DATA SET 2	% change of maximum change score possible (for total resolution of pain)	Average % change in NPRS scores
Unique Provider ID	Unique Case ID	Numerical Pain Rating Scale (0-10)	Numerical Pain Rating Scale (0-10)		
ABC Clinic	279	8	0	100%	93%
ABC Clinic	280	7	1	86%	
ABC Clinic	281	5	0	100%	
ABC Clinic	282	6	0	100%	
ABC Clinic	283	8	2	75%	
ABC Clinic	284	9	0	100%	
ABC Clinic	285	10	1	90%	
ABC Clinic	286	9	1	89%	
ABC Clinic	287	10	1	90%	
ABC Clinic	288	8	0	100%	

PATIENT SPECIFIC FUNCTIONAL SCALE (PSFS)

A **COMPLETE DATA SET** will include PSFS scores for one or several activities in **DATA SET ONE** and secondary scores for these same activities in **DATA SET TWO**. The analysis approach recommended for PSFS scores is to calculate one outcome:

1. The average percentage change in PSFS scores ¹

This is calculated by dividing the actual change in PSFS score achieved for each activity in each episode of care within a **COMPLETE DATA SET** by the maximum change score possible for each activity. These scores are then collated and then divided by the total volume of activities included within the specified **COMPLETE DATA SET**.

Example Analysis

DATA SET 1					DATA SET 2			Total change possible in Activity 1	Change achieved in Activity 1	% change in Activity 1	Total change possible in Activity 2	Change achieved in Activity 2	% change in Activity 2	Total change possible in Activity 3	Change achieved in Activity 3	% change in Activity 3	Average % change in PSFS scores for all activities
Unique Provider ID	Unique Case ID	PSFS Activity 1 (0-10)	PSFS Activity 2 (0-10)	PSFS Activity 3 (0-10)	PSFS Activity 1 (0-10)	PSFS Activity 2 (0-10)	PSFS Activity 3 (0-10)										
ABC Clinic	282	4	4	5	10	10	10	6	6	100%	6	6	100%	5	5	100%	90%
ABC Clinic	285	3	4	4	9	10	10	7	6	86%	6	6	100%	6	6	100%	
ABC Clinic	280	3	3	3	8	9	10	7	5	71%	7	6	86%	7	7	100%	
ABC Clinic	288	2	3	3	8	8	8	8	6	75%	7	5	71%	7	5	71%	
ABC Clinic	279	1	2	-	9	10	-	9	8	89%	8	8	100%				
ABC Clinic	283	2	3	-	9	10	-	8	7	88%	7	7	100%				
ABC Clinic	286	2	2	-	8	10	-	8	6	75%	8	8	100%				
ABC Clinic	287	1	1	-	9	10	-	9	8	89%	9	9	100%				
ABC Clinic	281	1	3	-	9	9	-	9	8	89%	7	6	86%				
ABC Clinic	284	3	-	-	10	-	-	7	7	100%							

¹ Note - if only 1 activity is recorded a minimal detectable change score of 3 is required, if 2 or more activities are recorded a minimal detectable change score of 2 is required for averaged activity scores



GLOBAL RATING OF CHANGE (GRoC)

A **COMPLETE DATA SET** includes a single GRoC data entry within **DATA SET 2** for each episode of care. The analysis approach recommended for GRoC is to calculate one outcome:

1. The average percentage GRoC (compared to an outcome of no change)

This is calculated by assigning each GRoC score an associated % change from an outcome of no change as described below. Then collating these scores and dividing by the total episodes of care included within the specified **COMPLETE DATA SET**.

Assigning % change to GRoC Scores

Question	How would you describe your condition now, compared to how your first visit to this clinic?										
Possible answer	-5	-4	-3	-2	-1	0	1	2	3	4	5
Corresponding % change from 'no change'	-100%	-80%	-60%	-40%	-20%	0%	20%	40%	60%	80%	100%

Example Analysis

DATA SET 1		DATA SET 2	% change	Average % GRoC for all episodes of care within a COMPLETE DATA SET (compared to an outcome of no change)
Unique Provider ID	Unique Case ID	Global Rating of Change (-5 to 5)		
ABC Clinic	279	3	60%	82%
ABC Clinic	280	5	100%	
ABC Clinic	281	4	80%	
ABC Clinic	282	5	100%	
ABC Clinic	283	5	100%	
ABC Clinic	284	5	100%	
ABC Clinic	285	3	60%	
ABC Clinic	286	3	60%	
ABC Clinic	287	4	80%	
ABC Clinic	288	4	80%	

NET PROMOTER SCORE (NetPS)

A **COMPLETE DATA SET** includes a single NetPS data entry within **DATA SET 2** for each episode of care. The analysis approach recommended for NetPS is to calculate one outcome:

1. Net Promoter Score (percentage of patients who would promote their experience - adjusted analysis)

The analysis methodology for the NetPS takes the proportion of scores equal to 9 & 10 ('promoters'), excludes all scores equal to 7 & 8 ('passives') and subtracts the proportion of all scores 0-6 ('detractors') to derive a total score from all scored episodes of care within the specified **COMPLETE DATA SET**. For example, if 70% score 9 or 10, 20% score 7 or 8, and 10% score 0-6 then the resultant score is 60%.

Assigning Outcome Status to NetPS

Question	How likely is it that you would recommend (insert organisation name) to a friend or colleague?										
Possible answer	0	1	2	3	4	5	6	7	8	9	10
	Not at all									Extremely likely	
Corresponding Outcome Status	DETRACTOR						PASSIVE		PROMOTER		

Example Analysis

DATA SET 1		DATA SET 2	% of Promoters (scores of 9 or 10)	% of Passives (scores of 7 or 8)	% of Detractors (scores of 0 - 6)	% Promoters - % Detractors	% of patients who would promote their experience (adjusted analysis)
Unique Provider ID	Unique Case ID	Net Promoter Score (0-10)					
ABC Clinic	279	9	70%	20%	10%	60%	60%
ABC Clinic	280	10					
ABC Clinic	281	10					
ABC Clinic	282	10					
ABC Clinic	283	9					
ABC Clinic	284	8					
ABC Clinic	285	7					
ABC Clinic	286	6					
ABC Clinic	287	9					
ABC Clinic	288	10					

SUMMARY

This publication is intended to support all MSK healthcare providers to collect consistent quality indicators and enable consistent analysis of these. Providing these recommendations provides a starting point for our industry to strengthen our collective voice to highlight the value we bring to the patients and communities we serve.

MSKPN's vision is for MSK healthcare providers to widely adopt this approach and engage in collaborative review of the analysis outcomes and further development of the approach itself.

MSKPN will continue to champion this work on behalf of our members and commit to ensuring the results of this approach are widely communicated across the MSK healthcare industry and to all our members.



APPENDICES

APPENDIX A – PSFS

The Patient-Specific Functional Scale

This useful questionnaire can be used to quantify activity limitation and measure functional outcome for patients with any orthopaedic condition.

Clinician to read and fill in below: Complete at the end of the history and prior to physical examination.

Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your _____ problem. Today, are there any activities that you are unable to do or having difficulty with because of your _____ problem? (Clinician: show scale to patient and have the patient rate each activity).

Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with: (read and have patient score each item in the list)?

Patient-specific activity scoring scheme (Point to one number):

0	1	2	3	4	5	6	7	8	9	10
Unable to perform activity					Able to perform activity at the same level as before injury or problem					

(Date and score)

Activity	Initial					
1.						
2.						
3.						
4.						
5.						
Additional						
Additional						

Total score = sum of the activity scores/number of activities

Minimum detectable change (90%CI) for average score = 2 points Minimum detectable change

(90%CI) for single activity score = 3 points

PSFS developed by: Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263. Reproduced with the permission of the authors.

APPENDIX B - DATA COLLECTION
TEMPLATE

Available to MSKPN members by request.

