Data specification for compatibility with the RCSLT Online Outcome Tool (ROOT)

1.0 RCSLT Online Outcome Tool

The Royal College of Speech and Language Therapists (RCSLT) has developed a stand-alone online tool that has been developed to collect, collate and report on outcomes data.

Users of the online tool can either input Therapy Outcome Measures (TOMs) (Enderby and John, 2015) data for service users directly into the ROOT, or alternatively, data that has been extracted from databases within existing electronic systems can be uploaded into the ROOT. Both methods will enable the SLTs to access the reporting functions of the tool. Reports can be generated for individual or groups of service users and the ROOT can also aggregate data across an SLT service, enabling teams and services to evaluate the outcomes delivered, to support SLTs with monitoring outcomes for specific clinical groups and examining the impact of their service.

This document has been developed to support those opting to use the upload method and sets out the requirements for local databases to be compatible with the ROOT. This document should be read in conjunction with the following:

- ROOT Briefing Pack
- ROOT Information Governance Resource Pack

For further information, please contact ROOT@rcslt.org

2.0 Data definitions related to Therapy Outcome Measures (TOMs)

The RCSLT has developed the following definitions in collaboration with the authors of TOMs for the purposes of ensuring the consistent use of terms related to the outcome measure.

Score

In the context of TOMs, a **score** is a single measurement in a domain of the TOMs (i.e. 'impairment', 'activity', participation, 'well-being', 'carer well-being'). It takes the form of a numerical value between 0 and 5.

Rating

In the context of TOMs, a **rating** is a set of scores collected across the domains of TOMs at a single point in time.

Episode of care

In the context of TOMs, an **episode of care** is the period over which a service user receives intervention(s) associated with a set of the therapy goals. The episode of care ends when the client is when an individual has completed treatment and/or discharged, put on review, transferred from inpatient to outpatient service or if the goals of therapy change.

During the **episode of care,** any number of TOMs **ratings** can be made, as required, for a service user. A baseline measurement is taken using TOMs at the beginning of the **episode of care** ("*start*" or "*admission*" rating), followed by measurement at the end of the **episode of care** ("*final*" or "*discharge*" rating), with any number of **ratings** in between ("*interims/intermediate*" ratings). Each rating comprises **scores** for each of the domains of TOMs (i.e. 'impairment', 'activity', participation, 'well-being', 'carer well-being'),

as applicable. A diagram has been developed to illustrate the use of these terms (annex 1) and more information about TOMs is provided in the third edition of the manual (Enderby and John, 2015).

3.0 File structures accepted by the RCSLT Online Outcome Tool

The ROOT has been developed to enable file structures of three main types to be uploaded:

- Episode per row
- Rating per row
- Score per row

This section of the document sets out a description of each file structure. For each of the file structures, there are a number of fields that are required in order to be compatible with the ROOT. There are also additional fields that are desirable to maximise the reporting functions offered by the ROOT. Annexes 2-4 provide detailed summary tables of the required, desirable and optional fields for each file structure.

3.1 Episode per row:

A file that has an episode per row will contain the TOMs scores for a complete episode of care for a service user in a single row in the spreadsheet. Typically, this will include a rating made at the start of an episode of care and one that is made at the end. It may be the case that interim/intermediate ratings are also included if this is standard practice for your service. (In many cases, this structure is rather inflexible and does not allow for longitudinal cases where there may be an indeterminate number of interim/intermediate scores).

Local Patient Identifier	Year Of Birth	Gender	Primary Communication Swallowing Disorder Descriptor	Primary Communication Swallowing Disorder Code	Additional Communication Swallowing Disorder Descriptor	Additional Communication Swallowing Disorder Code ICD10/11	Primary Medical Diagnosis Descriptor	Primary Medical Diagnosis Code ICD10/11	Additional Medical Diagnosis	Additional Medical Diagnosis Code	Primary TOMs Scale	Primary TOMs Scale ID	Secondary TOMs Scale	Secondary TOMs Scale ID	Rating Date Start	Impairment Rating Primary	Impairment Rating Secondary	Activity Rating Primary Start	Activity Rating Secondary Start	Participation Rating Start	Wellbeing Rating Start	Carer Wellbeing Rating Start	Rating Date Final	Impairment Rating Primary	Impairment Rating Secondary	Activity Rating Primary Final	Activity Rating Secondary Final	Participation Rating Final	Wellbeing Rating Final	Carer Wellbeing Rating Final	Discharge Code
KLM86735	2008	Male	Stammering	F98.5							Dysfluency	23			13/04/2016	3		2		2	2	2	15/12/2017	3		3		3	3	3	
BHY69473	2012	Female	Apraxia/dyspraxia	R48.2							Core	0			25/05/2016	3		3		3	3	3	12/01/2018	3		3		3	3	3	
BHH97545	2101	Female	Dysphonia	R49.0	Hypernasalit	r49.21					Dysphonia	26			13/05/2016	3		3		3	3	3	18/04/2017	4		3		3	3	3	
HTY80832	2011	Male	Expressive language disorder	F80.1	Receptive language disorder	F80.2					Child language impairment	6			15/08/2016	2		2		2.5	2	2.4	17/09/2017	3	3		3	3	3	3	
BHY69473	2012	Female	Apraxia/dyspraxia	R48.2							Core	0			25/05/2016	3		3		3	3	3	12/01/2018	3		3		3	3	3	
PLM86735	2008	Male	Stammering	F98.5							Dysfluency	23			13/04/2016	3		2		2	2	2									
HJL893728	2012	Male	Social (pragmatic) communication disorder	F80.82	Speech disorder	F80.0	Autism	F84.0			Autism	2	Phonological disorder	40	21/10/2017	3	3	3	3	3	3		20/10/2018	3.5	3.5	3.5	3	3.5	3	3	

A row represents a complete set of TOMs scores for an episode of care

Please refer to annex 2 for a description of the required fields for this file structure.

3.2 Rating per row:

A file that has a rating per row will contain the TOMs scores (for ‘impairment’, ‘activity’, participation, ‘well-being’, ‘carer well-being’) for a single point in time for a service user on a single row of the spreadsheet. An episode of care will therefore be represented across multiple rows in the spreadsheet (i.e. the rating made at the start of the episode will be on a separate row from the rating at the end of the episode, as will any interim ratings).

Local Patient Identifier	Year Of Birth	Gender	Episode Identifier	Primary Communication Swallowing Disorder Descriptor	Primary Communication Swallowing Disorder Code ICD10/11	Additional Communication Swallowing Disorder Descriptor	Additional Communication Swallowing Disorder Code ICD10/11	Primary Medical Diagnosis Descriptor	Primary Medical Diagnosis Code ICD10/11	Additional Medical Diagnosis Descriptor	Additional Medical Diagnosis Code ICD10/11	Primary TOMs Scale	Primary TOMs Scale ID	Secondary TOMs Scale	Secondary TOMs Scale ID	Rating Type	Rating Date	Impairment Rating Primary	Impairment Rating Secondary	Activity Rating Primary	Activity Rating Secondary	Participation Rating	Wellbeing Rating	Carer Wellbeing Rating	Discharge Code
BHY69471	2012	Female	1	Apraxia/dyspra	R48.2	Receptive	F80.2					Core	0			Start	25/05/2016	2.5		2		2.5	2.5	2.5	
BHY69471	2012	Female	1	Apraxia/dyspra	R48.2	Receptive	F80.2					Core	0			Interim	25/05/2016	2		2		2	2	2	
BHY69471	2012	Female	1	Apraxia/dyspra	R48.2	Receptive	F80.2					Core	0			Final	25/05/2016	3		2		3	3	3	Therapy complete
kBHH97545	2012	Female	1	Dysphonia	R49.0							Dysphonia	26			Start	13/05/2016	3		2		3	3		
kBHH97545	2012	Female	1	Dysphonia	R49.0							Dysphonia	26			Interim	13/05/2016	2		2		2	2	2	
kBHH97545	2012	Female	1	Dysphonia	R49.0							Dysphonia	26			Final	13/05/2016	1		2		1	1	1	Therapy complete
KJL893728	2012	Male	1	Social (pragmatic)	F80.82			Autism	F84.0			Autism	2	Phonological disorder	40	Start	21/10/2017	2	2	2		2	2	2	

The Episode ID links together the ratings belonging to the same episode of care that span several rows of the spreadsheet

Each row contains a set of TOMs scores for a single point in time (a rating). Taken together, these rows comprose the scores across an episode of care.

In this case, it is essential that the file contains an “episode identifier”. This is a data item that ties together all the TOMs ratings made during an episode of care for an individual, which will include TOMs ratings at admission/start, at final/discharge and may or may not include some interim ratings. In some electronic systems, the “episode identifier” is called a “referral ID”. Please refer to annex 3 for a full description of the required fields for this file structure.

3.3 Score per row:

In this file structure, the scores for each domain of TOMs appear on separate rows of the spreadsheet. Thus, scores for impairment, activity, participation, wellbeing and carer wellbeing at a single point in time (including at the start of the episode, the end of the episode and any interim points) will occupy separate rows. This is classically how a database would export the data.

For this file structure, it is essential that the file contains an “episode identifier”. This is a data item that ties together all the TOMs scores made for an episode of care, which will include TOMs scores at admission/start, at final/discharge and may or may not include some interim scores. In some electronic systems, the “episode identifier” is referred to as a “referral ID”. It is also desirable for files of this structure to contain a “rating identifier”. This is a data item that links scores belonging to a single rating. Failing this, the date that the rating was made may serve the purpose. Please refer to annex 4 for a full description of the required fields for this file structure.

Local Patient Identifier	Year Of Birth	Gender	Episode Identifier	Primary Communication Swallowing Disorder Descriptor	Primary Communication Swallowing Disorder Code ICD10|11	Additional Communication Swallowing Disorder Descriptor	Additional Communication Swallowing Disorder Code ICD10|11	Primary Medical Diagnosis Descriptor	Primary Medical Diagnosis Code ICD10|11	Additional Medical Diagnosis Descriptor	Additional Medical Diagnosis Code ICD10|11	TOMs Scale Primary Secondary	TOMs Scale	TOMs Scale ID	Rating ID	Rating Type	Rating date	TOMs Domain	TOMs Score	Discharge Code
BHY69471	2008	Female	1	Apraxia/dyspraxia	R48.2	Receptive language disorder	F80.2					P	Core	0	1	Start	23.02.16	I	2	
BHY69472	2008	Female	1	Apraxia/dyspraxia	R48.3	Receptive language disorder	F80.3					P	Core	0	1	Start	23.02.16	A	3	
BHY69473	2008	Female	1	Apraxia/dyspraxia	R48.4	Receptive language disorder	F80.4					P	Core	0	1	Start	23.02.16	P	2	
BHY69474	2008	Female	1	Apraxia/dyspraxia	R48.5	Receptive language disorder	F80.5					P	Core	0	1	Start	23.02.16	W	2	
BHY69475	2008	Female	1	Apraxia/dyspraxia	R48.6	Receptive language disorder	F80.6					P	Core	0	1	Start	23.02.16	CWB	2	
BHY69476	2008	Female	1	Apraxia/dyspraxia	R48.7	Receptive language disorder	F80.7					P	Core	0	2	Interim	7.09.17	I	2	
BHY69477	2008	Female	1	Apraxia/dyspraxia	R48.8	Receptive language disorder	F80.8					P	Core	0	2	Interim	7.09.17	A	2.5	
BHY69478	2008	Female	1	Apraxia/dyspraxia	R48.9	Receptive language disorder	F80.9					P	Core	0	2	Interim	7.09.17	P	3	
BHY69479	2008	Female	1	Apraxia/dyspraxia	R48.10	Receptive language disorder	F80.10					P	Core	0	2	Interim	7.09.17	W	2.5	
BHY69480	2008	Female	1	Apraxia/dyspraxia	R48.11	Receptive language disorder	F80.11					P	Core	0	2	Interim	7.09.17	CWB	2	
BHY69476	2008	Female	1	Apraxia/dyspraxia	R48.7	Receptive language disorder	F80.7					P	Core	0	3	Interim	7.09.17	I	2	
BHY69477	2008	Female	1	Apraxia/dyspraxia	R48.8	Receptive language disorder	F80.8					P	Core	0	3	Interim	7.09.17	A	2	
BHY69478	2008	Female	1	Apraxia/dyspraxia	R48.9	Receptive language disorder	F80.9					P	Core	0	3	Interim	7.09.17	P	3	
BHY69479	2008	Female	1	Apraxia/dyspraxia	R48.10	Receptive language disorder	F80.10					P	Core	0	3	Interim	7.09.17	W	2.5	
BHY69480	2008	Female	1	Apraxia/dyspraxia	R48.11	Receptive language disorder	F80.11					P	Core	0	3	Interim	7.09.17	CWB	2	
BHY69481	2008	Female	1	Apraxia/dyspraxia	R48.12	Receptive language disorder	F80.12					P	Core	0	4	Final	20.01.18	I	2	
BHY69482	2008	Female	1	Apraxia/dyspraxia	R48.13	Receptive language disorder	F80.13					P	Core	0	4	Final	20.01.18	A	2	
BHY69483	2008	Female	1	Apraxia/dyspraxia	R48.14	Receptive language disorder	F80.14					P	Core	0	4	Final	20.01.18	P	2	
BHY69484	2008	Female	1	Apraxia/dyspraxia	R48.15	Receptive language disorder	F80.15					P	Core	0	4	Final	20.01.18	W	2.5	
BHY69485	2008	Female	1	Apraxia/dyspraxia	R48.16	Receptive language disorder	F80.16					P	Core	0	4	Final	20.01.18	CWB	2.5	
BHY69486	2008	Female	1	Apraxia/dyspraxia	R48.17	Receptive language disorder	F80.17					S	Child languag	6	1	Start	23.02.16	I	3	
BHY69487	2008	Female	1	Apraxia/dyspraxia	R48.18	Receptive language disorder	F80.18					S	Child languag	6	1	Start	23.02.16	A	2.5	

Domains (impairment, activity, participation, well-being and carer well-being) are shown in a column

This is one episode of care, as indicated by the episode ID

This episode of care contains TOMs scores using two adapted scales - the primary scale (P) and a secondary scale (S)

This episode of care has four ratings (one 'start', two 'interim' and one 'final'). Each rating has a different rating ID.

4.0 Uploading files to the RCSLT Online Outcome Tool

Files of data in .xlsx format containing **completed** episodes of care for service users (i.e. containing both start and final ratings) can be uploaded to the ROOT. This means that the file will contain all TOMs data across the episode of care for each individual.

To ensure that there are no gaps or duplicates in the data uploaded to the ROOT across consecutive files, it is recommended that, when uploading files of data, these contain all TOMs data for the episodes of care that end within a given date range. Depending on how frequently you wish to upload data, these files might cover a period of episodes that end in a given month, across a six month period or a year, for instance. There are no restrictions on how frequently data is uploaded to the ROOT, this is likely to depend on local reporting requirements, and may change over time.

To illustrate this with an example, the first file uploaded to the ROOT may contain all TOMs data for completed episodes of care that end between 1 January and 31 March. The next file to be uploaded would contain all TOMs data for completed episodes of care that end between 1 April and 30 June.

Uploading files of data to the ROOT is a manual process, which involves the speech and language therapist uploading the data file to a securely hosted web system (for more information about system security, please refer to the ROOT Information Governance Resource Pack). The RCSLT has developed resources to support with this process.

5.0 Frequently asked questions

How long does it take to upload a file of data to the ROOT?

This will depend on a number of factors, including the size of the dataset, the quality of the data, the type of file structure and the users' familiarity with using the process. When completing the first submission, it will be necessary to complete a mapping of the fields in your data file on to the core fields accepted by the ROOT. The ROOT identifies any values in the dataset that are outside the expected range or required format and produces a report on any anomalies. The user is given the opportunity to correct the erroneous values, where possible, or reject the affected data, meaning that it will not be imported. It is advised that you set aside an hour to complete the first submission. Providing that the structure of the data file does not change, subsequent uploads should take less time.

How often should we upload files of data to the ROOT?

Data can be uploaded as often as required by the service. Typically, services tend to do this on a quarterly to six-monthly basis, or as required for reporting purposes.

Can more than one therapist in our team upload data to the ROOT?

Yes, it is possible to set up access to the ROOT for several colleagues to be able to upload the data should you wish to share this role. For example, it may be more practical for data to be uploaded separately for each team and for a member of each team to take responsibility for doing so. In these circumstances, it is advisable to have one member of staff to take the lead in co-ordinating this, including agreeing the frequency of uploads and being a point of contact with the RCSLT.

Are reports on the data available immediately after uploading a file?

Providing the data is successfully imported, reports on the data can be generated the day after submission.

Does the ROOT use a clinical classification standard?

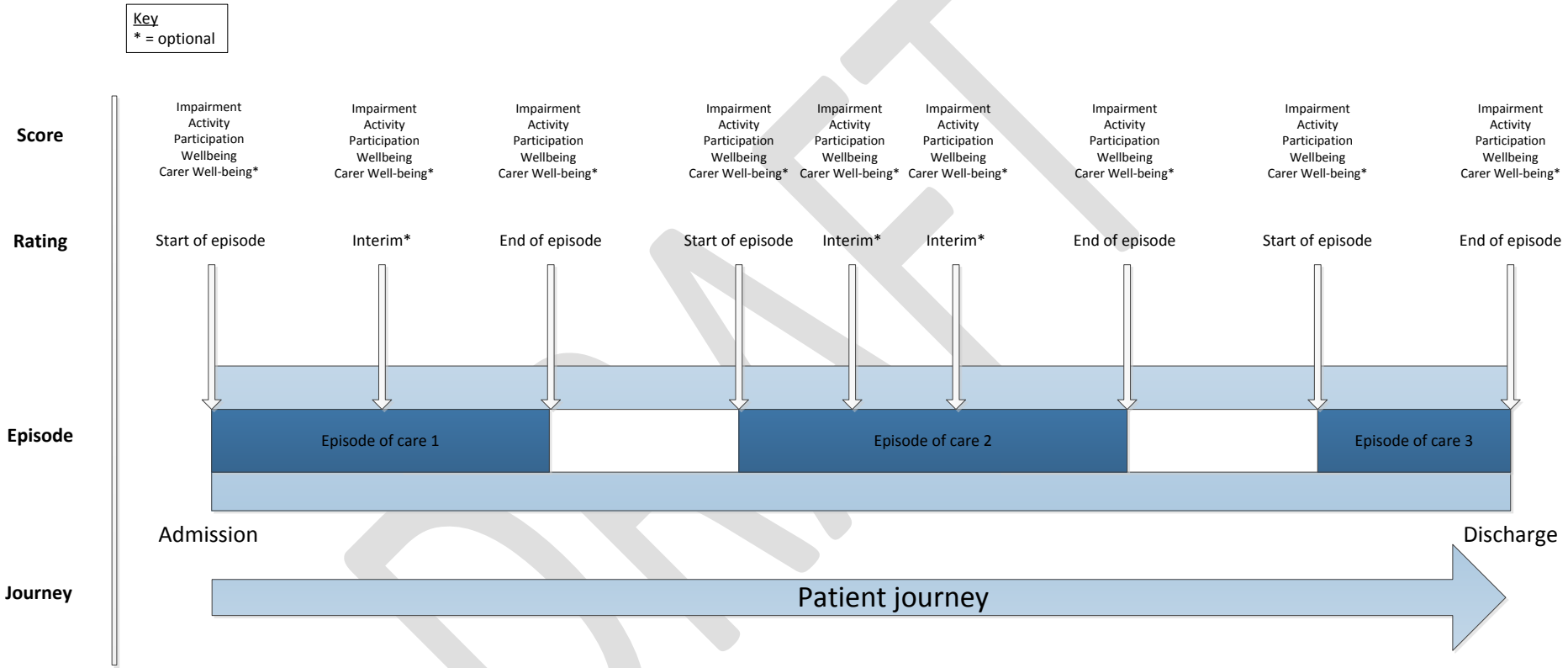
The RCSLT Online Outcome Tool uses the International Classification of Diseases, Tenth Edition (ICD-10), developed by the World Health Organization. More information about this coding and classification system is available at http://www.who.int/classifications/icd/en/.

If the file of data being uploaded does not contain ICD-10 code, these can be 'mapped' when the file is uploaded.

References

Enderby, P. and John, A. (2015) *Therapy outcome measures for rehabilitation professionals*, Third Edition, Guildford: J&R Press Ltd

Annex 1: Definitions related to Therapy Outcome Measures



Annex 2: Required data fields for "episode per row" file structure

Field	Description	Required/Desirable/Optional
Local Patient Identifier	This is a local patient identifier and can take any alpha numeric form.	**Required** The ROOT uses this to tie together records for a particular patient across episodes of care.
Year Of Birth	The year of the patient's birth	**Desirable** - to enable outcomes data to be filtered by age for the purposes of analysis
Gender	The patient's gender	**Desirable** - to enable outcomes data to be filtered by gender for the purposes of analysis
Primary Communication and Swallowing Disorder Descriptor/Code	The descriptor and/or ICD-10/11 code for the patient's primary communication/swallowing disorder	**Desirable -** to enable outcomes data to be filtered by the services users' primary communication/swallowing disorder (e.g. dysphagia) for the purposes of analysis
Additional Communication and Swallowing Disorder Descriptor(s)/Code(s)	The descriptor(s) and/or ICD-10/11 code(s) for any additional communication/swallowing disorder(s)	**Optional -** to enable outcomes data to be analysed with reference to co-morbid conditions and complexity
Primary Medical Diagnosis Descriptor/Code	The descriptor and ICD-10/11 code for the primary medical diagnosis , where relevant	**Optional -** to enable outcomes data to be analysed with reference to multiple co-morbidities
Additional Medical Diagnosis Descriptor(s)/Code(s)	The descriptor(s) and ICD-10/11 code(s) for any additional medical diagnoses, where relevant	**Optional -** to enable outcomes data to be analysed with reference to multiple co-morbidities
Primary TOMs Scale	The name of the TOMs scale (adapted and core) that was used to rate the patient from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 - 0**	**Required** - to identify the TOMs scale used to rate the patient
Primary TOMs Scale ID	The identifying number of the TOMS scale used from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 – 0** (The Core Scale is coded as 0 (zero))	

Field	Description	Required/Desirable/Optional
Secondary TOMs Scale	The name of the primary TOMs scale (adapted and core) that was used to rate the patient from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 - 0**	**Optional** - to identify the secondary TOMs scale used to rate the patient, where applicable
Secondary TOMs Scale ID	The identifying number of the TOMS scale used from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 – 0** (The Core Scale is coded as 0 (zero))	
Rating Date – start of episode	The date the first TOMS rating was made	**Required** – to enable outcomes over time to be tracked
Rating Date – end of episode	The date the final TOMS rating was made	**Required** – to enable outcomes over time to be tracked
Impairment Score (Primary) – start of episode[1]	Numerical value for the TOMs score for the impairment domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Impairment Score (Primary) – end of episode		
Impairment Score (Secondary) – start of episode	Numerical value for the TOMs score for the impairment domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Optional** – to enable data to be recorded where two TOMs scales are used concurrently
Impairment Score (Secondary) – end of episode		
Activity Score (Primary) – start of episode	Numerical value for the TOMs score for the activity domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale)	**Required**
Activity Score (Primary)		

[1] For SLT services using the AAC adapted scale, the TOMs domains are: Impairment (physical), Impairment (cognitive), Impairment (sensory), Impairment (speech and language output) Impairment (comprehension), Activity, Participation, Wellbeing, Carer-wellbeing (optional).

Field	Description	Required/Desirable/Optional
– end of episode	Any TOMs domains where a TOMs score is not applicable should be left blank (null).	
Activity Score (Secondary) – start of episode	Numerical value for the TOMs score for the activity domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Optional** – to enable data to be recorded where two TOMs scales are used concurrently
Activity Score (Secondary) – end of episode		
Participation Score – start of episode	Numerical value for the TOMs score for the participation domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Participation Score – end of episode		
Wellbeing Score – start of episode	Numerical value for the TOMs score for the wellbeing domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Wellbeing Score – end of episode		
Carer Wellbeing Score – start of episode	Numerical value for the TOMs score for the carer wellbeing domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Optional** – to enable data to be recorded where the carer wellbeing is recorded
Carer Wellbeing Score – end of episode		
End-of-episode/Discharge Code/Description	Free text description of the reason for the end of the episode/discharge (e.g. therapy complete, did not attend)	**Optional**
User Defined Fields	These are data items that are deemed useful, and created by participating services. They are only available to the service that created them. They may be used to increase the value of the data to the local service by	**Optional**

Field	Description	Required/Desirable/Optional
	ensuring the data better matches local structures, practices and reporting requirements. As these fields are under the control of the local service, their own organisation's information governance frameworks must be adhered to.	

Annex 3: Required data fields for "rating per row" file structure

Field	Description	Required/Desirable/Optional
Local Patient Identifier	This is a local patient identifier and can take any alpha numeric form.	**Required** The ROOT uses this to tie together records for a particular patient across episodes of care.
Year Of Birth	The year of the patient's birth	**Desirable** - to enable outcomes data to be filtered by age for the purposes of analysis
Gender	The patient's gender	**Desirable** - to enable outcomes data to be filtered by gender for the purposes of analysis
Episode of care Identifier	An episode of care identifier can take any alpha numeric form and delineates an episode of care. For the purposes of TOMs, an episode of care is a package of intervention(s) and will contain: Start of Episode ratings (S) Interim(s) ratings (I) (Optional) End of Episode ratings (E)	**Required** - to link ratings for a given episode of care
Primary Communication and Swallowing Disorder Descriptor/Code	The descriptor and/or ICD-10/11 code for the patient's primary communication/swallowing disorder	**Desirable -** to enable outcomes data to be filtered by the services users' primary communication/swallowing disorder (e.g. dysphagia) for the purposes of analysis
Additional Communication and Swallowing Disorder Descriptor(s)/Code(s)	The descriptor(s) and/or ICD-10/11 code(s) for any additional communication/swallowing disorder(s)	**Optional -** to enable outcomes data to be analysed with reference to co-morbid conditions
Primary Medical Diagnosis Descriptor/Code	The descriptor and ICD-10/11 code for the primary medical diagnosis, where relevant	**Optional -** to enable outcomes data to be analysed with reference to multiple co-morbidities
Medical Diagnosis Descriptor(s)/Code(s)	The descriptor(s) and ICD-10/11 code(s) for any additional medical diagnoses, were	**Optional -** to enable outcomes data to be analysed with reference to multiple co-morbidities
Primary TOMs Scale	The name of the primary TOMs scale (adapted and core) that was used to rate the patient from the 3rd edition of the book:- 'Therapy Outcome	**Desirable** - to identify the TOMs scale used to rate the patient

Field	Description	Required/Desirable/Optional
	Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 - 0**	
Primary TOMs Scale ID	The identifying number of the TOMS scale used from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 – 0** (The Core Scale is coded as 0 (zero))	
Secondary TOMs Scale	The name of the primary TOMs scale (adapted and core) that was used to rate the patient from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 - 0**	**Optional** - to identify the secondary TOMs scale used to rate the patient, where applicable
Secondary TOMs Scale ID	The identifying number of the TOMS scale used from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 – 0** (The Core Scale is coded as 0 (zero))	
Rating Type	S = Admission/Initial Assessment/First Rating/Start of Episode I = Interim/On-Going (optional) F= End of Episode/Final Rating/Discharge	**Required** – to determine the sequence of ratings across an episode of care
Rating Date	The date the TOMs rating was made	**Required** – to enable outcomes over time to be tracked
Impairment Score (Primary)[2]	Numerical value for the TOMs score for the impairment domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Impairment Score (Secondary)	Numerical value for the TOMs score for the impairment domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the	**Optional** – to enable data to be recorded where two TOMs scales are used concurrently

[2] For SLT services using the AAC adapted scale, the TOMs domains are: Impairment (physical), Impairment (cognitive), Impairment (sensory), Impairment (speech and language output) Impairment (comprehension), Activity, Participation, Wellbeing, Carer-wellbeing (optional).

Field	Description	Required/Desirable/Optional
	scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	
Activity Score (Primary)	Numerical value for the TOMs score for the activity domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Activity Score (Secondary)	Numerical value for the TOMs score for the activity domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Optional** – to enable data to be recorded where two TOMs scales are used concurrently
Participation Score	Numerical value for the TOMs score for the participation domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Wellbeing Score	Numerical value for the TOMs score for the wellbeing domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
Carer Rating Score	Numerical value for the TOMs score for the carer wellbeing domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left	**Optional** – to enable data to be recorded where the carer wellbeing is recorded

Field	Description	Required/Desirable/Optional
	blank (null).	
End-of-episode/Discharge Code/Description	Free text description of the reason for the end of the episode/discharge (e.g. therapy complete, did not attend)	**Optional**
User Defined Fields	These are data items that are deemed useful, and created by participating services. They are only available to the service that created them. They may be used to increase the value of the data to the local service by ensuring the data better matches local structures, practices and reporting requirements. As these fields are under the control of the local service, their own organisation's information governance frameworks must be adhered to.	**Optional**

Annex 4: Required data fields for "score per row" file structure

Field	Description	Required/Desirable/Optional
Local Patient Identifier	This is a local patient identifier and can take any alpha numeric form.	**Required** The ROOT uses this to tie together records for a particular patient across episodes of care.
Year Of Birth	The year of the patient's birth	**Desirable** - to enable outcomes data to be filtered by age for the purposes of analysis
Gender	The patient's gender	**Desirable** - to enable outcomes data to be filtered by gender for the purposes of analysis
Episode of care Identifier	An episode of care identifier can take any alpha numeric form and delineates an episode of care. For the purposes of TOMs, an episode of care is a package of intervention(s) and will contain: Start of Episode ratings (S) Interim(s) ratings (I) (Optional) End of Episode ratings (E)	**Required** - to link ratings for a given episode of care
Primary Communication and Swallowing Disorder Descriptor/Code	The descriptor and/or ICD-10/11 code for the patient's primary communication/swallowing disorder	**Desirable -** to enable outcomes data to be filtered by the services users' primary communication/swallowing disorder (e.g. dysphagia) for the purposes of analysis
Additional Communication and Swallowing Disorder Descriptor(s)/Code(s)	The descriptor(s) and/or ICD-10/11 code(s) for any additional communication/swallowing disorder(s)	**Optional -** to enable outcomes data to be analysed with reference to co-morbid conditions
Primary Medical Diagnosis Descriptor/Code	The descriptor(s) and ICD-10/11 code(s) for any primary medical diagnosis, where relevant	**Optional -** to enable outcomes data to be analysed with reference to multiple co-morbidities
Additional Medical Diagnosis Descriptor(s)/Code(s)	The descriptor(s) and ICD-10/11 code(s) for any additional medical diagnoses, where relevant	**Optional -** to enable outcomes data to be analysed with reference to multiple co-morbidities
TOMs Scale Primary/Secondary	This indicates whether the TOMs scale is 'primary' or 'secondary'	**Required** where more than one TOMs scale in use
TOMs Scale	The name of the TOMs scale (adapted and core) that was used to rate	**Desirable** - to identify the TOMs scale used to rate

Field	Description	Required/Desirable/Optional
	the patient from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 – 0**	the patient
TOMs Scale ID	The identifying number of the TOMS scale used from the 3rd edition of the book:- 'Therapy Outcome Measures for Rehabilitation Professionals' Pam Enderby and Alexandra John, 2015 – **ISBN 978 – 907826 – 29 – 0** (The Core Scale is coded as 0 (zero))	
Rating ID	A rating identifier can take any alpha numeric form. For the purposes of TOMs, a rating is a single set of scores collected across the domains of TOMs at a single point in time and will contain scores for: Impairment (primary/secondary) Activity (primary/secondary) Participation Wellbeing Carer Wellbeing – optional	**Desirable** – to tie together scores into a rating (if this is not available, the date that the rating was made may serve the purpose)
Rating Type	S = Admission/Initial Assessment/First Rating/Start of Episode I = Interim/On-Going (optional) F= End of Episode/Final Rating/Discharge	**Required** – to determine the sequence of ratings in an episode of care
Rating Date	The date the TOMs ratings was made	**Required** – to enable outcomes over time to be tracked
TOMs Domain[3]	The domain of the TOMs being scored: Impairment (Primary) Impairment (Secondary) – optional Activity (Primary) Activity (Secondary) – optional Participation Wellbeing Carer Wellbeing – optional	**Required** – to link scores with domains of the TOMs

[3] For SLT services using the AAC adapted scale, the TOMs domains are: Impairment (physical), Impairment (cognitive), Impairment (sensory), Impairment (speech and language output) Impairment (comprehension), Activity, Participation, Wellbeing, Carer-wellbeing (optional).

Field	Description	Required/Desirable/Optional
TOMs score	Numerical value for the TOMs score for the domain: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 (Zero is the severe / profound end of the scale, five is the normal end of the scale) Any TOMs domains where a TOMs score is not applicable should be left blank (null).	**Required**
End-of-episode/Discharge Code/Description	Free text description of the reason for the end of the episode/discharge (e.g. therapy complete, did not attend)	**Optional**
User Defined Fields	These are data items that are deemed useful, and created by participating services. They are only available to the service that created them. They may be used to increase the value of the data to the local service by ensuring the data better matches local structures, practices and reporting requirements. As these fields are under the control of the local service, their own organisation's information governance frameworks must be adhered to.	**Optional**