

Technology Enabled Care

Home and Mobile Health Monitoring

Person-Level Minimum Dataset Specification



Scottish Centre for
Telehealth & Telecare



TEC Technology
Enabled
Care

Comments and Questions

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Introduction

This document sets out an agreed specification for the person-level national minimum dataset for Home and Mobile Health Monitoring (HMHM). The specification includes a description of the data items that comprise the minimum dataset and a technical description of a national standard for recording the information.

The contents, developed by a [Technology Enabled Care \(TEC\) HMHM Patient-Level Minimum Dataset Group](#) are likely to be useful to:

- Staff involved in the planning and delivery of HMHM;
- Commissioners or developers of Information Systems;
- Persons with wider management responsibility for integrated services/care of which HMHM is a part.

Responsibility for the content of this document and hence authority to make future agreed changes as required is held jointly by:

- Information Services Division (ISD), part of NHS National Services Scotland, and
- Scottish Centre for Telehealth and Telecare (SCTT), part of NHS24.

As HMHM is a rapidly changing area of healthcare in Scotland, this document will be reviewed / updated on an annual basis going forward.

Background

The development of this specification began in early 2015 as a component of Scotland's Technology Enabled Care Programme (TEC). The ambition of the initiative was to remedy the gap that existed in regard to an agreed and readily collected common set of information about use of HMHM in Scotland. The existence of such information, intended as a minimum that could locally be augmented if so desired, would provide access to a consistent, universally understood and widely available set of data on HMHM with all its facets.

It was clearly essential that the minimum dataset was capable of being collected systematically across Scotland and over time. This would offer the prospect of information that could be compared between different areas and could be used and developed in the future as information needs change. It was also important to design a product that would, in time, allow data collection to become more straightforward and routine as new information systems are commissioned or developed.

The design of the formal specification of this version of the minimum dataset has primarily been shaped by the results and experience of stakeholders from 3 NHS Boards:

- NHS Ayrshire & Arran,
- NHS Highland, and
- NHS Lanarkshire

who were involved both in content design and in piloting data collection using an early draft of the minimum dataset.

The definitive version, drawing on the learning of the pilots, was agreed in October 2017.

Potential Uses

Local Use of Data

It is anticipated that the initial use of the minimum dataset will be for the collection of data to monitor the breadth and depth of HMHM use at a local level. The exact uses will very much depend on the questions being asked locally but, for example, the data could be used to:

- monitor levels of activity in HMHM services;
- carry out trend analysis over time of take-up of HMHM services;
- compare numbers of referrals to an HMHM service from different GP practices and other services.

Data Linkage

Data linkage is a technique for connecting pieces of information that are thought to relate to the same person and/or event. The potential additional insight and intelligence to understand and improve care that can be gained by bringing different health related data together has been demonstrated widely in Scotland for many years.

It involves using intelligently the different pieces of information that are generated each time a person comes into contact with a healthcare service e.g. when they attend A&E or stay in hospital. The use of this HMHM minimum dataset will also generate new pieces of information for people as they interact with HMHM services.

If these different bits of information can be connected to a person, in a systematic way that nevertheless protect their privacy, it can all be used to produce evidence for improvements in the delivery of healthcare.

In Scotland, we have some of the best linkable health service datasets in the world, due in part to the adoption in the 1970s of a centrally maintained unique identifier allocated to all GP registered patients. This numbering system, the Community Health Index (CHI), puts Scotland in the unique position of affording researchers the opportunity to link an array of principal health care datasets - e.g. inpatient, outpatient, prescribing etc. - for around 95% of the general population.

It is therefore possible to envisage future opportunities to answer questions about the value of HMHM by linking data collected conforming to this minimum dataset with other appropriate datasets on an individual person basis using their CHI number. For example, linking to datasets such as A&E or admissions/discharges from hospital would allow more direct assessment of service impact and patient outcomes, and inform decisions about who might gain more/less from HMHM to ensure best use of scarce resources.

Permission is required to carry out a data linkage:

- An NHS Board employee requesting to link data extracts of patients resident in their NHS Board area or patients treated within their NHS Board area requires permission from the NHS Board's local Caldicott Guardian.
- Studies requiring access to data held by NHS Scotland, ISD or National Records Scotland (NRS) either at individual level or to link to other datasets may require an application to the Public Benefit and Privacy Panel. Further information can be sought from the electronic Data Research and Innovation Service (eDRIS)¹ which provides a single point of contact to assist in the completion of applications to the Public Benefit and Privacy Panel and assists researchers in study design, approvals and data access in a secure environment.

¹ <http://www.isdscotland.org/Products-and-Services/eDRIS/>

Section 1: Demographics

1.1 CHI Number

Specification		
Definition	The Community Health Index (CHI) is a population register, which is used in Scotland for health care purposes. The CHI number uniquely identifies a person on the index.	
Points to Note	None	
Recording Rules	None	
Further Information	<p>The Community Health Index is a register of people treated by NHS Scotland and exists to ensure that people can be correctly identified, and that relevant information pertaining to a person's health is available to providers of care.</p> <p>The CHI number is a unique 10-character numeric identifier, allocated to each person on first registration with the system.</p> <p>The CHI number should always be used to identify a person. However, Health record identifiers, such as hospital numbers in Patient Administration Systems (PAS), may be used locally, in conjunction with the CHI number or in the absence of the CHI number, to track people and their records.</p> <p>Although there may be no number when a person presents for treatment, there must be an allocation at some point in the episode of care as CHI is mandatory on all clinical communications.</p> <p>People temporarily resident in Scotland can have a CHI number allocated, if required.</p> <p>Should it be required, a person can contact their GP Surgery in the first instance for their individual CHI Number.</p>	
Cross Checks	None	
Main Source of Standard	Scottish Government	
Format	Characters	
Field Length	10	
Priority	Mandatory (where available)	
Codes and Values		
Code	Value	Explanatory Notes
None		

1.2 Surname

Specification

Definition	<p>The surname of a person represents that part of the name of a person which indicates the family group of which the person is part.</p> <p>It should be noted that in Western culture this is normally the latter part of the name of a person. However, this is not necessarily true of all cultures. This will, of course, give rise to some problems in the representation of the name. This is resolved by including with the name a preferred name format indicating amongst other things the order of various parts of the name.</p>																																																																																
Points to Note	<ol style="list-style-type: none"> 1. A surname must have at least one alphabetic character. 2. Space for up to 20 characters is provided; it is recommended that the full 20 characters be allowed in use for future systems development. 3. Where a patient requires to remain anonymous, a pseudo-name, such as A N Other, should be used. 																																																																																
Recording Rules	<ol style="list-style-type: none"> 1. Surname should be entered in the character spaces provided. CAPITAL LETTERS should be used and the item left justified. 2. Hyphens or apostrophes occurring within a name should be entered as a separate character (but not as a first character). 3. Double-barreled surnames should be entered with a hyphen between the two parts of the surname, whether or not the patient normally uses a hyphen. 4. In the very rare circumstances when the surname is not known, the first two character spaces should be filled with "X". <p>Examples:</p> <table border="1" data-bbox="443 1070 1356 1243"> <tr> <td>S</td><td>M</td><td>I</td><td>T</td><td>H</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>D</td><td>U</td><td>R</td><td>H</td><td>A</td><td>M</td><td>-</td><td>J</td><td>O</td><td>N</td><td>E</td><td>S</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>O</td><td>'</td><td>H</td><td>A</td><td>R</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>	S	M	I	T	H																D	U	R	H	A	M	-	J	O	N	E	S									O	'	H	A	R	A															X	X																		
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D	U	R	H	A	M	-	J	O	N	E	S																																																																						
O	'	H	A	R	A																																																																												
X	X																																																																																
Further Information	None																																																																																
Cross Checks	None																																																																																
Main Source of Standard	Based on UK Government Data Standards Catalogue: BSEN 7372:1993																																																																																
Format	Characters																																																																																
Field Length	20																																																																																
Priority	Mandatory																																																																																

Codes and Values

Code	Value	Explanatory Notes
None		

1.3 First Forename

Specification		
Definition	The first forename of a person represents that part of the name of a person which after the surname, is the principal identifier of a person	
Points to Note	None	
Recording Rules	<ol style="list-style-type: none">1. Where only the initial letter of the first forename is available this should be entered in the first character space.2. In the very rare circumstances where the first forename is not known "X" should be entered in the first character space.3. Where the full forename is available the remainder of the forename should be entered in the character spaces provided, using CAPITAL LETTERS.4. Hyphens occurring within a forename should be given a separate character space.	
Further Information	None	
Cross Checks	None	
Main Source of Standard	Based on UK Government Data Standards Catalogue: BSEN 7372:1993	
Format	Characters	
Field Length	20	
Priority	Mandatory	
Codes and Values		
Code	Value	Explanatory Notes
None		

1.4 Sex

Specification		
Definition	The state of being male or female.	
Points to Note	<ol style="list-style-type: none"> 1. 0 - Sex not known - The sex of the person cannot be determined for physical reasons, e.g. a new born baby. 2. 9 - Sex not specified - The sex of the person is not provided in the personal details, i.e. the data has not been supplied and sex cannot be ascertained from the data provided. 3. 'Intersex' should be recorded under code 0 - Not Known. 	
Recording Rules	None	
Further Information	None	
Cross Checks	None	
Main Source of Standard	None	
Format	Numeric	
Field Length	1	
Priority	Mandatory	
Codes and Values		
Code	Value	Explanatory Notes
0	Not Known	The gender of the person cannot be determined for physical reasons, e.g. a new born or unborn baby, indeterminate gender or intersex
1	Male	
2	Female	
9	Not Specified	The gender of the person is not provided in the personal detail i.e. the data has not been supplied and sex cannot be ascertained from the data provided.

1.5 Date of Birth

Specification																										
Definition	The date on which a person was born or is officially deemed to have been born as recorded on their birth certificate.																									
Points to Note	1. The Date of Birth is allocated 8 digits to record the full year of birth.																									
Recording Rules	<p>Date of birth should be entered thus:</p> <p>9th February 1942</p> <table border="1"> <tr> <td>0</td><td>9</td><td>0</td><td>2</td><td>1</td><td>9</td><td>4</td><td>2</td> </tr> </table> <p>All dates must consist of eight digits by entering preceding zeros for single digits in day, month or year:</p> <ul style="list-style-type: none"> If only the person's age is known, the person's year of birth should be calculated and day and month in-filled with zeros, thus: <p>Age 25 (in 2017); year of birth = (2017 - 25) = 1992</p> <table border="1"> <tr> <td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>9</td><td>9</td><td>2</td> </tr> </table> <ul style="list-style-type: none"> If the person's age is not known then the clinician's or nursing staff's estimate of age should be used to calculate year of birth. If this is not possible, refer to your Medical Records Manager. <p>Estimated age 35 (in 2017); estimated year of birth = (2017 - 35) = 1982</p> <table border="1"> <tr> <td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>9</td><td>8</td><td>2</td> </tr> </table>		0	9	0	2	1	9	4	2	0	0	0	0	1	9	9	2	0	0	0	0	1	9	8	2
0	9	0	2	1	9	4	2																			
0	0	0	0	1	9	9	2																			
0	0	0	0	1	9	8	2																			
Further Information	None																									
Cross Checks	<ol style="list-style-type: none"> Date of Birth should be on or before 3.1 Start Date of Home and Mobile Health Monitoring Service. Age calculated as greater than or equal to 100 at 3.1 Start Date of Home and Mobile Health Monitoring Service or 3.7 End Date of Home and Mobile Health Monitoring Service should be queried. 																									
Main Source of Standard	None																									
Format	Date (DDMMCCYY)																									
Field Length	8																									
Priority	Mandatory (where available)																									
Codes and Values																										
Code	Value	Explanatory Notes																								
None																										

1.6 Postcode

Specification

Definition	Designates a geographical area with a number of addresses or a single major delivery point in the UK or UK Overseas Territories.																			
Points to Note	<ol style="list-style-type: none"> 1. The postcode of the person's usual address should be entered wherever possible. 2. For people who are with the armed forces and based in the United Kingdom, use the postcode of their base. 3. For people whose address is not known, they are not of "no fixed abode", and all reasonable means of attempting to trace the address have been exhausted, the dummy postcode "NK01 0AA" should be used. 																			
Recording Rules	<p><u>Validation</u></p> <p>The format is as follows, where A signifies a letter and 9 a digit:</p> <table border="1" data-bbox="443 701 1489 1160"> <thead> <tr> <th>Format</th> <th>Coverage</th> <th>Example</th> </tr> </thead> <tbody> <tr> <td>AA9A 9AA</td> <td>WC postcode area; EC1–EC4, NW1W, SE1P, SW1</td> <td>EC1A 1BB</td> </tr> <tr> <td>A9A 9AA</td> <td>E1W, N1C, N1P</td> <td>W1A 0AX</td> </tr> <tr> <td>A9 9AA</td> <td rowspan="2">B, E, G, L, M, N, S, W</td> <td>M1 1AE</td> </tr> <tr> <td>A99 9AA</td> <td>B33 8TH</td> </tr> <tr> <td>AA9 9AA</td> <td rowspan="2">All other postcodes</td> <td>CR2 6XH</td> </tr> <tr> <td>AA99 9AA</td> <td>DN55 1PT</td> </tr> </tbody> </table> <p>Postcodes can be validated using the following regular expression²:</p> <pre>^([Gg][Ii][Rr] 0[Aa]{2}) ((([A-Za-z][0-9]{1,2}) ((([A-Za-z][A-Ha-hJ-Yj-y][0-9]{1,2}) ((([A-Za-z][0-9][A-Za-z]) ([A-Za-z][A-Ha-hJ-Yj-y][0-9]?[A-Za-z]))) [0-9][A-Za-z]{2})\$</pre>	Format	Coverage	Example	AA9A 9AA	WC postcode area; EC1–EC4, NW1W, SE1P, SW1	EC1A 1BB	A9A 9AA	E1W, N1C, N1P	W1A 0AX	A9 9AA	B, E, G, L, M, N, S, W	M1 1AE	A99 9AA	B33 8TH	AA9 9AA	All other postcodes	CR2 6XH	AA99 9AA	DN55 1PT
Format	Coverage	Example																		
AA9A 9AA	WC postcode area; EC1–EC4, NW1W, SE1P, SW1	EC1A 1BB																		
A9A 9AA	E1W, N1C, N1P	W1A 0AX																		
A9 9AA	B, E, G, L, M, N, S, W	M1 1AE																		
A99 9AA		B33 8TH																		
AA9 9AA	All other postcodes	CR2 6XH																		
AA99 9AA		DN55 1PT																		
Further Information	<p>Postcodes are alphanumeric, and are variable in length: ranging from six to eight characters (including a space) long. Each postcode is divided into two parts separated by a single space: the <i>outward</i> code and the <i>inward</i> code respectively. The <i>outward</i> code includes the <i>postcode area</i> and the <i>postcode district</i>, respectively. The <i>inward</i> code includes the <i>postcode sector</i> and the <i>postcode unit</i> respectively.</p> <table border="1" data-bbox="443 1630 1201 1809"> <thead> <tr> <th colspan="4">Postcode</th> </tr> <tr> <th colspan="2">Outward</th> <th colspan="2">Inward</th> </tr> <tr> <th>Area</th> <th>District</th> <th>Sector</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>EH</td> <td>12</td> <td>9</td> <td>EB</td> </tr> </tbody> </table> <p><u>Outward Code</u></p> <p>The outward code is the part of the postcode before the single space in the middle. It is between two and four characters long.</p>	Postcode				Outward		Inward		Area	District	Sector	Unit	EH	12	9	EB			
Postcode																				
Outward		Inward																		
Area	District	Sector	Unit																	
EH	12	9	EB																	

² A regular expression is a sequence of characters that define a search pattern. See https://en.wikipedia.org/wiki/Regular_expression

	<p><u>Inward Code</u></p> <p>The inward code is the part of the postcode after the single space in the middle. It is three characters long and specifies a geographical area within a <i>postcode district</i>.</p> <p><u>Postcode Area</u></p> <p>The postcode area is part of the outward code. The postcode area is either one or two characters long and is all letters. An example postcode area is "EH" covering Edinburgh and the Lothians.</p> <p><u>Postcode District</u></p> <p>The postcode district is the outward code. It is constructed from the postcode area plus one or two digits (and sometimes a final letter) making a total length of between two and four characters. An example postcode district is "EH12" covering areas to the West of Edinburgh, including Ingliston, Gogar and South Gyle.</p> <p><u>Postcode Sector</u></p> <p>The postcode sector is made up of the postcode district, the single space, and the first character of the inward code. It is between four and six characters long (including the single space).</p> <p><u>Postcode Unit</u></p> <p>The postcode unit is two characters added to the end of the postcode sector. Each postcode unit generally represents a street, part of a street, a single address, a group of properties, a single property, a sub-section of the property, an individual organisation or a subsection of the organisation.</p>	
Cross Checks	None	
Main Source of Standard	None	
Format	Characters	
Field Length	8	
Priority	Mandatory	
Codes and Values		
Code	Value	Explanatory Notes
None		

Section 2: Health

2.1 Main Reason

Specification	
Definition	The main reason for monitoring, or general health condition being monitored.
Points to Note	None
Recording Rules	The code should be entered in the character spaces provided and left justified.
Further Information	None
Cross Checks	None
Main Source of Standard	None
Format	Characters
Field Length	6
Priority	Mandatory

Codes and Values

Code	Value	Explanatory Notes
XX0000	Addictions	
XX0001	Audiology	
XX0002	Cancer/Oncology	
XX0003	Chronic Pain	
XX0004	Continence	
XX0005	COPD	
XX0006	Dementia	
XX0007	Diabetes	
XX0008	Frailty	
XX0009	Gastroenterological Conditions	
XX000A	General Health Improvement	
XX000B	Heart Failure	
XX000C	Hypertension	
XX000D	Maternity/Obstetrics	
XX000E	Mental Health	
XX0010	Muscular Skeletal	
XX0011	Neurological Conditions	

XX0012	Other Cardiac	
XX0013	Other Respiratory	
XX0014	Renal	
XX0015	Rheumatology	
XX0016	Speech and Language	
XX0017	Stroke	
XX0018	Surgery	
XX0019	Vascular	
XX0020	Weight Management	
XXXXXX	Other	For use only when the main reason for monitoring, or general health condition being monitored, is not listed above.

2.2 Objective of Monitoring 1

Specification	
Definition	What is actually being monitored.
Points to Note	May include clinical readings and monitoring/ management of symptoms/ lifestyle etc.
Recording Rules	The code should be entered in the character spaces provided and left justified.
Further Information	None
Cross Checks	None
Main Source of Standard	None
Format	Characters
Field Length	2
Priority	Mandatory

Codes and Values

Code	Value	Explanatory Notes
00	Anxiety & Depression Support	
01	Blood Glucose	
02	Blood Pressure	
03	Breastfeeding Support	
04	Breathlessness	
05	Compliance/Adherence	
06	Continence - Bowel	
07	Continence - Urinary	
08	Cough	
09	Drug Misuse Support	
0A	Exercise/Activity	
0B	Falls Management	
0C	Fatigue	
0D	Insulin	
0E	Ketones	
10	Lifestyle Changes	
11	Medication	
12	Mood	

13	Nutrition, Diet and Fluids	
14	Other	
15	Oxygen Saturation	
16	Pain Management	
17	Physiotherapy	
18	Pulse	
19	Renal Dialysis	
1A	Self Management	
1B	Smoking Cessation - CO2	
1C	Smoking Cessation Support	
1D	Sputum	
1E	Steps	
20	Stress Control Support	
21	Symptom Information	
22	Symptom Triggers	
23	Weight - Clinical Reading	
24	Weight Management	
25	Wound Management	

2.3 Objective of Monitoring 2

As per 2.2 Objective of Monitoring 1

2.4 Objective of Monitoring 3

As per 2.2 Objective of Monitoring 1

2.5 Objective of Monitoring 4

As per 2.2 Objective of Monitoring 1

2.6 Objective of Monitoring 5

As per 2.2 Objective of Monitoring 1

2.7 Objective of Monitoring 6

As per 2.2 Objective of Monitoring 1

Please note that fields 2.3 → 2.7 are optional.

2.8 Level of Health Need

Specification	
Definition	The level of health need of the person.
Points to Note	None
Recording Rules	None
Further Information	Citizens are grouped into tiers according to the intensity of their healthcare needs. The tiers also reflect the relative citizen population, health resource utilisation and the per capita costs at each tier.
Cross Checks	None
Main Source of Standard	A National Service Model for Home and Mobile Health Monitoring (Release 1.1, 5th May 2017) - Scottish Centre For Telehealth & Telecare ³
Format	Numeric
Field Length	1
Priority	Optional

Codes and Values

Code	Value	Explanatory Notes
1	Tier 1	<i>Not used.</i>
2	Tier 2	People are supported mainly in Primary Care and other community based services with occasional specialist involvement
3	Tier 3	Care is managed (at least in part) by hospital based specialists
4	Tier 4	People with complex needs supported to maintain health and wellbeing outside of hospital care

³ <https://sctt.org.uk/wp-content/uploads/2017/05/A-National-Service-Model-for-HMHM-v1.1.pdf>

Section 3: Home and Mobile Health Monitoring Service

3.1 Start Date of Home and Mobile Health Monitoring Service

Specification																										
Definition	<p>The date on which</p> <ul style="list-style-type: none"> • a person is entered onto the Home and Mobile Health Monitoring system, or • the person is supplied with the Home and Mobile Health Monitoring equipment/software, or • the Home and Mobile Health Monitoring equipment is installed in the person's usual place of residence <p>for the purposes of monitoring as part of the TEC programme.</p>																									
Points to Note	<p>1. The field is allocated 8 digits to record the full date.</p>																									
Recording Rules	<p>The date should be entered thus:</p> <p>1st August 2017</p> <table border="1" style="margin-left: 20px;"> <tr> <td>0</td><td>1</td><td>0</td><td>8</td><td>2</td><td>0</td><td>1</td><td>7</td> </tr> </table> <p>All dates must consist of eight digits by entering preceding zeros for single digits in day, month or year.</p> <ul style="list-style-type: none"> • If only the month and year are known, the day should be in-filled with zeros, thus: <p>August 2017</p> <table border="1" style="margin-left: 20px;"> <tr> <td>0</td><td>0</td><td>0</td><td>8</td><td>2</td><td>0</td><td>1</td><td>7</td> </tr> </table> <ul style="list-style-type: none"> • If only the year is known, both the day and month should be in-filled with zeros, thus: <p>2017</p> <table border="1" style="margin-left: 20px;"> <tr> <td>0</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td><td>1</td><td>7</td> </tr> </table>		0	1	0	8	2	0	1	7	0	0	0	8	2	0	1	7	0	0	0	0	2	0	1	7
0	1	0	8	2	0	1	7																			
0	0	0	8	2	0	1	7																			
0	0	0	0	2	0	1	7																			
Further Information	None																									
Cross Checks	<p>1. The date should be on or after 1.5 Date of Birth.</p> <p>2. The date should be on or before 3.4 End Date of Home and Mobile Health Monitoring Service.</p>																									
Main Source of Standard	None																									
Format	Date (DDMMCCYY)																									
Field Length	8																									
Priority	Mandatory																									
Codes and Values																										
Code	Value	Explanatory Notes																								
None																										

3.2 Home and Mobile Health Monitoring Service Initiated By

Specification		
Definition	The service that took the decision to offer Home and Mobile Health Monitoring.	
Points to Note	The above definition allows for differentiation for NHS Boards where Home and Mobile Health Monitoring is being carried out by a Home and Mobile Health Monitoring Hub.	
Recording Rules	None	
Further Information	None	
Cross Checks	None	
Main Source of Standard	None	
Format	Character	
Field Length	1	
Priority	Mandatory	
Codes and Values		
Code	Value	Explanatory Notes
0	Open/Self/Carer	Referral requested directly or through an open access route by the service user, or a carer, family member or other non-professional representative of the service user.
1	General Practice	Referred directly from a GP or Practice Nurse.
2	Specialist Clinical Service Pathway	Combines former Inpatient and Outpatient pathways - acute and community based wards, hospital based discharge services, other hospital based services - includes any secondary care outpatient pathway or ambulatory service.
3	Community Health	Referred from a Primary Care service including district nurses, health visitors, community rehab etc.
4	Public Health	Referred from health improvement type services e.g. Smoking cessation, Weight management programmes, Physical activity, sexual health etc.
9	Other	Referral source known but does not fit above categories (e.g. social care and third sector organisations etc.)
X	Not Known	The source of HMHM initiation is not known.

3.3 Type of Home and Mobile Health Monitoring Service

Specification		
Definition	The type of Home and Mobile Health Monitoring service that the person is receiving.	
Points to Note	None	
Recording Rules	None	
Further Information	None	
Cross Checks	None	
Main Source of Standard	None	
Format	Character	
Field Length	1	
Priority	Mandatory	
Codes and Values		
Code	Value	Explanatory Notes
0	Person led self-monitoring (using simple technology or web based platforms) with exception reporting	Patient led but only contacting clinician when required and not regularly being monitored by clinician e.g. "light touch".
1	Person self-monitoring - clinician led using basic technology	e.g. text messaging system being monitored by a clinician/service.
2	Person self-monitoring - clinician led using enhanced technology	e.g. tablet with Bluetooth® equipment.
9	Other	The type of Home and Mobile Health Monitoring service that the person is receiving is known but does not fit the above categories.
X	Not Known	The type of Home and Mobile Health Monitoring service that the person is receiving is not known.

3.4 End Date of Home and Mobile Health Monitoring Service

Specification																										
Definition	The date on which the patient was discharged from the Home and Mobile Health Monitoring Service.																									
Points to Note	<ol style="list-style-type: none"> The field is allocated 8 digits to record the full End Date. The date may be different from the last date that the person interacted with the Home and Mobile Health Monitoring Service. 																									
Recording Rules	<p>The date should be entered thus:</p> <p>1st August 2017</p> <table border="1"> <tr> <td>0</td><td>1</td><td>0</td><td>8</td><td>2</td><td>0</td><td>1</td><td>7</td> </tr> </table> <p>All dates must consist of eight digits by entering preceding zeros for single digits in day, month or year.</p> <ul style="list-style-type: none"> If only the month and year are known, the day should be in-filled with zeros, thus: <p>August 2017</p> <table border="1"> <tr> <td>0</td><td>0</td><td>0</td><td>8</td><td>2</td><td>0</td><td>1</td><td>7</td> </tr> </table> <ul style="list-style-type: none"> If only the year is known, both the day and month should be in-filled with zeros, thus: <p>2017</p> <table border="1"> <tr> <td>0</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td><td>1</td><td>7</td> </tr> </table>		0	1	0	8	2	0	1	7	0	0	0	8	2	0	1	7	0	0	0	0	2	0	1	7
0	1	0	8	2	0	1	7																			
0	0	0	8	2	0	1	7																			
0	0	0	0	2	0	1	7																			
Further Information	None																									
Cross Checks	<ol style="list-style-type: none"> The date should be on or after 3.1 Start Date of Home and Mobile Health Monitoring Service. 																									
Main Source of Standard	None																									
Format	Date (DDMMCCYY)																									
Field Length	8																									
Priority	Mandatory (if patient has been discharged from the Home and Mobile Health Monitoring Service)																									
Codes and Values																										
Code	Value	Explanatory Notes																								
None																										

3.5 Main Reason for Home and Mobile Health Monitoring Service End

Specification	
Definition	The main reason for which the person's Home and Mobile Health Monitoring Service was ended.
Points to Note	None
Recording Rules	None
Further Information	None
Cross Checks	None
Main Source of Standard	None
Format	Character
Field Length	1
Priority	Mandatory (if patient has been discharged from the Home and Mobile Health Monitoring Service)

Codes and Values

Code	Value	Explanatory Notes
0	No longer required – clinical intervention complete and/or self-managing	
1	No longer required - service not delivering intended benefits	
2	Technical Issues	
3	Alternative Home and Mobile Health Monitoring Service provided instead	
4	Person moved outwith NHS Board area	
5	Person Deceased	
9	Other	The main reason for which the person's Home and Mobile Health Monitoring Service was ended is known but does not fit the above categories.
X	Not Known	The main reason for which the person's Home and Mobile Health Monitoring Service was ended is not known.

Appendices

Membership of the Technology Enabled Care Home and Mobile Health Monitoring Patient-Level Minimum Dataset Group

Active Members

- Michelle Brogan, TEC Lead / Service Development Manager, NHS24/SCTT
- Peter Knight, NHS National Services Scotland (ISD)
- Terry McLaughlin, NHS National Services Scotland (ISD)
- Helen Storkey, NHS National Services Scotland (ISD)
- Morag Hearty, TEC Programme Manager, NHS Lanarkshire
- Nicola Robinson, Data Information Analyst, NHS Ayrshire & Arran
- Kathleen McGuire, Strategic Lead, NHS Ayrshire & Arran
- Joanna Gilliatt, Project Officer, NHS Highland

Past Members

- Margaret Robertson, NHS Highland
- Judy Allison, NHS Lanarkshire
- Lesley Middlemiss, NHS Forth Valley (previously Scottish Government)

Consultation with:

- Iain Trayner, NHS Western Isles