NHS
Connecting for Health

NHS CUI Design Guide Workstream

Release 4 Handover Requirements

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RID	Assumptions / Requirements	Status	Plain English	Example	Generic Clinical Management Req	Generic Task/Diary Req	Specific Handover Req	Before Handover	Handover: Negotiation	Handover: Acceptance	After Handover	Dataset per Item	Example Dataset Part	Handshake	Task Management	Time Component	Item Lists	Good Practice	Encouragement/ Discouragement	Updating	Patient Identification	Single Patient Handover	Multiple Patient Handover	Priority	Addressed in Release	Rationale Category	Illustrated in Scenario…	Conflicts with …	Conditional on …	Adoption Date	Source	Source Document/ Event	Source Reference	Entered By
1	Users can view a 'per patient' summary of information held in the patient's record. This summary is appropriate for the purpose of handover.	**Adopted**	Patients have a summary dataset that is appropriate for the purpose of handover. This can be viewed by users. That is to say, handover requires something extra than just easy access to the 'full' patient record.	See Example Handover Datasets in the supporting document *NHS CUI Design Guide Handover Requirements Supporting Document.*			x		x	x	x	x										x	x	**Essential**							Workshop	L45, V1, V4		HD
2	Users can view different 'per item' handover information summaries according to the user's context.	**Adopted**	The summary dataset per item (e.g. a patient) appropriate for handover will vary according to context e.g. role, care setting, purpose of handover, user grade, speciality, etc. Users in each different context see the dataset appropriate to them. Note: This does NOT involve defining what SET of items is available i.e. the inclusion criteria for the patient list. The datasets will not be defined in these requirements.	See the variation in the Example Handover Datasets, e.g. MIST acronym from paramedic handover, WEST acronym from Air Traffic Control.			x	x	x	x	x	x										x	x	**Essential**					RID 4		User research	L45, V1, V4		HD
3	From each item's summary, users can easily access more information about each item e.g. the 'full' patient record.	**Adopted**	If a user is viewing the summary for a handover item (e.g. patient), then they can quickly and easily get to more information about that item e.g. link to the 'full' patient record available in that context.	A link to the 'full' patient record.	x			x	x	x	x	x										x	x	**Essential**							User research	L45, V1, V4		HD
4	User's different contexts are recognised by the system.	**Adopted**	As the information displayed will vary according to user's roles, responsibilities, care setting, speciality and so on, the system will have to be able to recognise these.	Ward manager, staff nurse, district nurse, doctor day shift, doctor on call, paediatrician, surgeon, GP and so on.	x			x	x	x	x											x	x	**Essential**							User research	L45, V1, V4		HD
6	Users can view the information used in handover on a variety of sizes and types of Display.	**Adopted**			x			x	x	x	x							x				x	x	**Recommended**							User research	L2, L3, V1		HD
7	Data is displayed according to the relevant NHS data standards, e.g. format for date display.	**Adopted**	Some data will have NHS standards that apply to how it is displayed e.g. patient name, date of birth and so on. Data displayed for use in handover must conform to these standards.	CUI date display.	x			x	x	x	x							x						**Essential**							Observation	V1		HD
8	Users can view all of the items that they are responsible for.	**Adopted**	Relates to RID 63. Includes: items (e.g. patients), regular tasks, specific tasks.				x	x	x	x	x						x						x	**Essential**							User research	L5		HD
9	All users can update the documentation used in handover, during handover. In addition, these updates should be reflected in the patient record, i.e. in the source data.	**Adopted**	Users giving, receiving and present in handover may need to update the documentation used in handover. The degree to how simultaneous this is must be further defined. As usual, these updates are performed on the 'source data' not just a 'handover copy'.				x		x	x								x		x		x	x	**Recommended**							Meeting	CUI		HD
10	Users can 'discharge' a patient from the system, even if that patient has outstanding tasks. These outstanding tasks are identified and flagged by the system so that they can be handled appropriately by the health professional organising patient's discharge.	**Adopted**	Patients may leave a clinical location with certain tasks intentionally not completed. The system needs to allow for patients to move location (which may be outside of the system). Decision support should operate on these tasks, and incomplete tasks should be handled appropriately e.g. as an outpatient.	Patient is to be discharged from the ward without a social services appointment having been finalised. The staff will arrange this appointment after the patient has left.			x		x	x	x	x				x		x					x		**Essential**							Meeting	CUI		HD
11	Users can clearly and uniquely identify patients using standard NHS patient identifiers. (EXAMPLE DATASET PART)	**Adopted**	There needs to be clear identification of which patient is being handed-over in both the documentation used in handover and any verbal handover. NHS standards on patient identification should be followed here.	Possible set: (full name, dob, NHS number, location)	x			x	x	x	x	x	x						x			x	x	x	**Essential**							Meeting	V1		HD
12	Users are clear about who has responsibility for the items involved in handover, during and after the handover, especially at the point that responsibility is transferred. An item cannot be 'no-ones' responsibility.	**Adopted**	User's care is clear about who is responsible for the items being handed over (e.g. patient's) at all stages. Relates to generic requirement 64.				x		x	x	x	x	x		x				x				x	x	**Essential**							Meeting	CUI		HD
14	Users can view the documentation used in handover from the point of view of other users, e.g. nurses can see a doctor's view of the handover information.	**Adopted**	When there is handover between two roles, agendas and views about the patient may differ, in some cases considerably. Both users will need to be aware of the other's perspective. Related to RID 90. Doctors and nurses often look at, and use each other's handover documents to help them structure their work and communicate.	Handover between two roles. A junior doctor being able to apply their consultant's summary view on the same set of in-patients during a hospital stay, in order to assess whether they have done the necessary tasks.			x		x	x	x	x	x					x	x				x	x	**Recommended**							User research	V2, L45		HD
15	Users can view information that comes from any relevant NHS system, that is, NHS/Social care systems are interoperable.	**Adopted**	Data must be immediately transferable/available to the receiving clinicians once handover has taken place, and in some cases beforehand.		x			x	x	x	x							x				x		**Essential**							Meeting	CUI		HD
18	Users can monitor the documentation used in handover when they are physically away from the place of handover and the items being handed over. Remote users can also be aware of items they have been made responsible for while located elsewhere	**Adopted**	Some users may want to remotely monitor the items that are under the responsibility of their team or that might be/have been their responsibility. This can be done by being able to monitor both the documentation used in handover. Relates to RID 118. They will also need to be able to be aware of items that they have become responsible for e.g. new tasks.	A paediatric SHO working down in A&E wants to be able to monitor the patients on the children's ward and to see if they have been allocated any tasks in their absence from the ward.			x		x	x	x	x				x		x					x	x	**Recommended**							Observation	V3, V4		HD

20	Users must record the handover event and the transfer of responsibility (the 'handshake'). The documentation of this is clear to all users involved in the handover. Users can still record this even if the handover is: 1) asynchronous, or 2) synchronous but not face to face.	**Adopted**	The transfer of responsibility is documented, and the handover event is documented (assuming that these are the same thing). Though handovers in general should be synchronous and face to face, in some situations this is not possible. In these situations a documented transfer of responsibility must still occur.	GP out of hours at night sees a patient and needs to let the regular day time GP know the events in the morning. Currently a fax is used, but it could be an email with read receipt.			x		x	x				x							x	x	**Recommended**							Meeting	CUI		HD
21	Users can record which user marked a task as complete. With the option for more information e.g. who vouched for this.	**Adopted**	Task management. Who marked a task as complete is important, however they may not be the user who actually completed it (or vouched for it to be complete).			x		x	x	x	x				x							x	x	**Recommended**							Meeting	CUI		HD
22	The user receiving the handover is in control of the transfer of responsibility in the handover.	**Adopted**	The transfer of responsibility can only occur once the user receiving the handover is happy to take responsibility.	In some situations in air traffic control, the user giving handover cannot leave until the user receiving handover physically takes responsibility by removing the outgoing user's headphones.			x			x				x							x	x	**Recommended**							Meeting	CUI		HD
23	Users can schedule their own or others' tasks based on the priorities identified during the handover.	**Adopted**		Categorising patients into groups, based on who needs to be seen first on-call.			x		x	x	x				x	x						x	x	**Essential**							Inferred	V4		HD
24	Users can categorise patients into groups based on different variables e.g. location, team, severity.	**Adopted**	This does not necessarily mean 'grouping by'; the groups could be separate lists and so on.	Various scales (e.g. MEWS, Waterlow), responsibilities, geography, resuscitation status, awaiting results, due for admission, due for discharge, others' responsibility and so on.			x		x	x	x		x				x					x	x	**Essential**							Inferred	V4		HD
25	Users can view and record the item's current location. (EXAMPLE DATASET PART)	**Adopted**		Which ward and bed a patient is in.	x				x	x	x	x	x	x								x	x	**Essential**							User research	V4, L45		HD
26	Users are supported in having handovers involving a large group of people from different roles.	**Adopted**	Typically MDT meetings. Relates to RID 1. Necessary to have adaptable summary of patients and handover lists.				x		x	x	x	x							x			x	x	**Recommended**							Observation	V4		HD
27	At the handover events and transfer of responsibility, users must record / confirm: date, time, place, user handing over, user being handed over to, other users present, satisfaction (or otherwise) with the handover.	**Adopted**	It is likely that much of this information would be automatically captured by the system and therefore would not need to be entered by the users, only confirmed.				x			x				x								x	x	**Essential**							Meeting	CUI		HD
28	Users can record information that is uniquely part of the handover process. This is distinct from the information that is being handed over.	**Adopted**	Users may need to record information about the reason for the handover, as well as the information that they are handing over. This information will be unique to the handover event.	If there is a rationale for a handover such as "I have to go away from the ward for a few hours and you'll have to cover for me".			x		x	x	x	x	x						x			x	x	**Recommended**							Meeting	CUI		HD
30	Users are not inhibited in further patient care even if the handover process is incomplete.	**Adopted**	Handover may not happen/be incomplete or late - users must still be able to care for the patient and use the patient's record even if this is the case. (The incomplete process should be documented).	If handover cannot take place and therefore is not documented, users are not locked out of that patient's record until the handover has been accepted.			x		x	x	x			x					x			x	x	**Essential**							Meeting	CUI		HD
31	Where a handover is unsatisfactory (e.g. incorrect/late/incomplete), users can record this, and the details of why it was not satisfactory. This is possible retrospectively, with a clear indicator and a time/date/user stamp.	**Adopted**	Handover may not happen/be brief, incorrect or late - system must not inhibit patient care if this is the case, but must accept a retrospective note to record why. This note could apply to the handover episode as a whole or to a particular patient's handover.				x		x	x	x				x							x	x	**Recommended**							Meeting	CUI		HD
32	For handover documentation data that is not automatically populated, users are clear about what data should be recorded.	**Adopted**	Much of the information in the documentation used in handover may be automatically populated from other electronic sources e.g. EPR. However, where this is not the case and users have to record information themselves, they should be clear about what information they are supposed to be recording.	IF handover documentation is a table of patients, the column headings unambiguously explain what should go in to the content of the table.			x		x	x			x									x	x	**Recommended**							Meeting	CUI		HD
33	Users can easily and quickly make updates to information during handover (including tasks). These updates are reflected in the patient's record.	**Adopted**	Users need to be able to add tasks and change information during the handover without overly disrupting the handover. Any changes made to the information must be part of the 'source' information and not solely made on a 'handover copy' of it. If it is too arduous to add a task at handover it may lead users to resorting to paper notes.	On-call is often the time when the most difficult patients to handover are those that are sick and have just arrived, and may not be on the computer system/list. Therefore key information may be disseminated verbally at handover which is not currently written. It would be useful to capture this.			x		x	x			x			x			x		x		x	x	**Recommended**							Inferred	V4		HD
34	Depending on context, users can view documentation for handover that is continually up to date.	**Adopted**	Though it will be useful if documentation used in handover is as up to date as the situation allows, in some contexts there will be extra importance attached to having a 'real-time' view on the set of information. A continually updated view may of course be useful for things other than handover. Some clinical areas require an ad-hoc handover resource which is up-to-date all the time, current examples include a shared whiteboard or an annotated ward list. These form the basis of handovers.	Ward whiteboards currently fulfil this function in hospitals (A&E and labour wards often have more detail). Communal patient lists such as handover diaries may attempt to provide a similar function.			x		x	x	x	x	x			x	x		x				x	x	**Essential**							User research	V9		HD
36	Users can handover items (e.g. patients or tasks for patients) outside of a designated 'handover' time. Handover initiation and acceptance works as usual.	**Adopted**	Handover will not just occur at shift handovers or main 'handover events'. Smaller ad-hoc handovers such as for one task must be possible, as well as the effective management of this handover.	For jobs that occur during a shift that a nurse needs to let another nurse or a doctor know that they need doing, there needs to be a system for distributing, tracking and completing the task.			x		x	x				x					x			x	x	**Essential**							User research	V11		HD
37	Users can collect, analyse and report on the information relating to the handover event, and the information used in the handover. This may be used to plan and allocate resources.	**Adopted**		Senior staff can tell how long the handovers are taking, what proportion are being carried out unsatisfactorily, how many jobs staff are being required to do, etc.			x				x								x			x	x	**Recommended**							User research	V11, L45		HD
38	Users can handover satisfactorily in exceptional circumstances, such as when no documentation has been completed.	**Adopted**		Ambulance services transferring someone acutely before documentation has been done.			x		x	x	x				x				x			x	x	**Essential**							Meeting	CUI		HD

39	Users can update the information before, during and after handover. These updates are performed on the patient record.	**Adopted**	If a user updates information used in the handover they update the source of the information - not just a 'handover copy'. Appropriate mechanisms should be in place to ensure that any additional information input to the record after the handover, by the giver, is flagged to the receiver.	For example, adding a task to the 'master' task list for the patient			x	x	x	x	x							x		x		x	x	**Essential**							User research	V29		HD
40	Users can view 'snapshots' of the documentation used in handover at certain points of handover from the past. (Time slicing of documentation).	**Adopted**		Currently some handover documentation is in page-by-page diaries that allow the user to look back at past handover summaries at particular times.			x	x	x	x	x					x						x	x	**Recommended**							Workshop	L49		HD
42	If 'non-current' (i.e. past or future) views of information used in handover are possible, users can clearly identify the date and time they refer to. Particularly important when looking at handover 'snapshots' over time.	**Adopted**	Related to RID 40.				x	x	x	x	x					x						x	x	**Essential**							Meeting	CUI		HD
43	Users do not have to view unnecessary information at handover. Therefore the default datasets per item should be the minimum necessary for that context.	**Adopted**	The handover summaries of patients should be minimal, but this requirement applies to information about other issues e.g. ward management. Relates to RID 1.				x		x			x												**Recommended**							User research	V30		HD
44	Users can view all planned tasks for a patient.	**Adopted**		Nursing care plan. Requirement for prep for theatres etc.		x		x	x	x	x	x			x	x						x	x	**Essential**							Document review	A1,23,4,5,7,9,20 ,27,29,51,71		DAS
45	Users can view the documentation used in handover in single or multi-patient views.	**Adopted**		Multi-patient view: Night doctor covering a number of patients. Single patient view: information required to hand a patient over from one area to another, e.g. from theatre to recovery.			x	x	x	x	x						x					x	x	**Essential**							Document review	A53		DAS
46	Where there is the suspicion that information used in handover is incorrect or there are discrepancies between two sources of information, users can easily identify which information is correct or initiate processes to identify this.	**Adopted**	The preparation for handover is often a process of working out what information is correct e.g. has the patient had this particular task done yet? During this, users need to be able to identify which is the correct (e.g. most up to date) information.	The handover documentation says that the patient has not had their medication, but their nurse says that they have.			x	x	x	x	x							x				x	x	**Essential**							Focus groups	CUI		HD
47	All users involved in a handover can read the documentation used in handover simultaneously.	**Adopted**		The handover information may be communally displayed on the wall.			x		x	x								x				x	x	**Recommended**							Workshop	L49		HD
48	Users can view the handover 'snapshots' from previous handover events at either a multi-patient level, or an individual patient level within a patient's record.	**Adopted**	Views of the handover documentation at a handover point (handover snapshots) can be viewed at a multi-patient level. In addition, from within a patient's record, users can view the handover snapshots for that patient.				x	x	x	x	x					x						x	x	**Essential**							Document review	A51		DAS
49	Users can view and record patient demographics and attributes that make up a unique patient identifier. (EXAMPLE DATASET PART)	**Adopted**		Name, dob, location, contact details, next of kin, NHS number, photo, bar coding.	x			x	x	x	x	x	x								x	x	x	**Essential**							Document review	All		HD
50	Users can view and record a patient's current medical problems. (EXAMPLE DATASET PART)	**Adopted**		Nursing care plans, medical plans.	x			x	x	x	x	x	x									x	x	**Essential**							Document review	A2,9,20,27,29,5 1,71		DAS
51	Users can allocate and record tasks to particular sets of individuals (e.g. jobs for the on-call team).	**Adopted**		Role based, speciality based, shift based tasks.		x		x	x	x	x				x							x	x	**Recommended**							Observation	James Fone		HD
52	Users can allocate and record tasks to a particular individual (e.g. task for on call doctor Dr X).	**Adopted**	This could be a specific role or a specific person.				x	x	x	x	x				x							x	x	**Essential**							Observation	James Fone		HD
53	Users are alerted to overdue tasks e.g. overdue medication administration.	**Adopted**				x		x	x	x	x				x							x	x	**Essential**							Observation	James Fone		HD
54	Users can highlight tasks specifically for handover, rather than the job being permanently highlighted.	**Adopted**	Users may need to draw attention to particular tasks but not have those tasks permanently highlighted.	We must do this job….(??)			x	x	x	x	x				x							x	x	**Recommended**							Observation	Henry Dowlen		HD
56	Users are able to log incomplete tasks.	**Adopted**				x		x	x	x	x				x				x			x	x	**Essential**							Observation	James Fone		HD
57	Users can have allocated tasks integrated into their diary management systems.	**Adopted**		A nurse/doctor should be able to pick up tasks from another member of staff and have them directly transferred into their own diary management system.		x		x	x	x	x				x	x						x	x	**Desirable**							Meeting	CUI		DAS
58	Users can view an accurate, up to date list of patients (or items) that they are responsible for.	**Adopted**	There may be patients who need handing over who have left hospital/are under the care of a different team/died/have not come in, but who do not appear on the ward (for example) yet.		x			x	x	x	x						x					x	x	**Essential**							Workshop	L49		HD
59	Users of different roles, and individuals within those roles can use the list of items used in handover as personal 'tick-lists'.	**Adopted**	Once a list of patients has been created, different users may want to use that list to check-mark whether they have completed an action in relation to each of the patients in that list. This may be actions that are in addition to the formal task management.	A pharmacist can tick off patients they have reviewed on the ward, SHOs can tick off patients that have been seen on the ward round, physician assistants can tick off the patients whose records they have checked for blood test requests.	x			x	x	x	x	x						x					x	**Recommended**							Workshop	L49		HD
60	Users can view an item's status with regard to a context-specific checklist reflecting agreed guidelines and procedures (e.g. a patient on a care pathway). This includes functionality around these checklists such as recording additional information and highlighting exceptions.	**Adopted**	Context-specific checklists reflecting agreed guidelines and procedures.	The position of a patient on a care pathway for day surgery; what checks have been done on the patient, what checks are still to be done, are there any exceptions from the expected pathway, etc.	x			x	x	x	x	x			x	x						x	x	**Recommended**							Meeting	CUI	CUI	HD

62	Users are encouraged to use written documentation as well as the verbal channel during handover.	**Adopted**	Currently many handovers are purely verbal. Though verbal handover is useful, supplementing with written documentation (even just that the handover has taken place) is a good idea.	There is a list of patients to be handed over that is communally discussed at the handover.			x		x	x	x	x							x	x			x	x	**Recommended**							User research	LAS		HD
63	User can view all the items they are responsible for as a 'single' list.	**Adopted**	Relates to RID 8.		x				x	x	x	x						x						x	**Recommended**							Observation	James Fone		HD
64	Users are clear, at all times, who has responsibility for an item (such as a patient).	**Adopted**	Generic version of RID 12.				x		x	x	x	x			x				x				x	x	**Essential**							User research	LAS		HD
65	Users can take account of contextually relevant handover information structures when verbal and written information is handed over.	**Adopted**	Some contexts use predefined structures to aid the collation of handover information, the handing over of information and set the expectations of those users being handed over to. The communication of these structures may be made explicit in the written handover information.	Current usage of structure for handover information: MIST for paramedics - (made explicit in handover interface), WEST acronym in air traffic control shift handover, 'system' headings in some nursing shift summary documentation (e.g. breathing, mobility, etc).			x		x	x	x	x	x						x				x	x	**Recommended**							User research	LAS		HD
66	Users are able to prepare a summary of information to be handed over, if necessary, even if such a summary already exists e.g. if automatically generated.	**Adopted**	Preparing a written summary of handover information prior to handover even if one is automatically generated is a loose interpretation of a handover strategy identified by Patterson et al. The idea is that automatically generated summaries do not require users to really think about the handover data. See RID 79.	Prior to handover users giving handover write a short summary of the important issues (with the item's) they are going to handover.			x		x	x			x						x	x			x	x	**Recommended**							User research	LAS		HD
67	Users are encouraged to question the user handing over.	**Adopted**	Interactive questioning is a handover strategy identified by Patterson et al. With comprehensive, automatically generated handover documentation there is a danger that neither side of the handover seeks to question the data or delve deeper beyond what is presented.	User handing over says that the patient has been vomiting quite a lot, the users being handed over to ask whether this is just after eating food or continually.			x			x									x	x			x	x	**Recommended**							User research	NATS		HD
68	Users can easily identify data missing from the expected handover dataset for that context. Especially relevant to users receiving handover.	**Adopted**		The patient's name, date of birth and number are missing from a 'John Doe' patient still to be identified after a major trauma incident.			x		x	x	x	x	x						x				x	x	**Essential**							User research	NATS		HD
69	Users can temporarily alter the 'richness' of the data display in order to bring clarity to salient details.	**Adopted**		Where there is a handover such as in ITU with a lot of information being transferred, it may be useful to increase or decrease the level of detail of that handover, e.g. fading in/out of observations next to summaries.			x		x	x	x	x	x						x				x	x	**Recommended**							User research	NATS		HD
70	Users can initiate or delay the handover if necessary. This is especially relevant for non-scheduled handovers.	**Adopted**		In paramedic handover to A&E the user handing over makes a request for handover, this can be delayed by the user they are trying to handover to.			x			x	x								x				x	x	**Essential**							User research	NATS		HD
71	Users are encouraged to handover items (e.g. patients) in order of priority.	**Adopted**	Relates to RID 23 & 106. Contradicts RID 127.				x			x								x	x				x	**Recommended**							User research	NATS		HD
72	Users can handover according to information governance and privacy considerations. That is to say, is it not easy for other patients to see/overhear handovers about other patients.	**Adopted**	Handovers will usually contain private information and information which other patients should not see or hear. Currently handover often has to be conducted in communal areas due to space limitation or the fixed location of artefacts used in handover e.g. a whiteboard. Future handover should try to minimise the necessity to handover in places where other patients might overhear.	Communal artefacts such as detailed labour ward whiteboards are useful for handover (so should be in private), but also useful to be able to access very easily (so should be in public areas). Linked electronic large-scale displays could allow handover information to be in a private room, and ward information to be on public view.			x			x			x							x				x	x	**Essential**							User research	LAS		HD
73	Users can review the documentation to be used in handover, prior to the handover taking place.	**Adopted**	It is good practice that users receiving handover make themselves aware of the situation before the handover takes place. Therefore the documentation to be used in handover should be available for them to review before the handover. This documentation may include the equivalent of 'activity logs'.	While waiting for the shift handover to take place, the nurse can read the observation charts to get an overall picture of how the patient has been doing. Once the handover takes place they can ask questions about the information they have seen.			x		x										x				x	x	**Recommended**							User research	L15		HD
75	Users can unambiguously interpret the status of a task (e.g. completed, partially completed, incomplete, etc). This status may have further values that are yet to be defined	**Adopted**	Defining an unambiguous status may be very difficult in practice, (e.g. should completed tasks be shown? If so which ones?), but is crucial to good clinical management. Some tasks may have several important more detailed states which may be necessary to reflect e.g., bloods taken, sent, processing, finished but not checked, checked, checked and acted on, checked and 'signed', etc.			x			x	x	x	x				x							x	x	**Essential**							Workshop	L49		HD
76	Users see information displayed using symbols and abbreviations that they can clearly understand. This implies those in standard use in the NHS.	**Adopted**	Symbols and abbreviations must be clearly understood by all users. Symbols and abbreviations may not be NHS data standards but they should conform to those in use in the NHS.	Mg, Mcg, 3/7, TTO, (?)	x				x	x	x	x							x				x	x	**Essential**							Workshop	L45		HD
77	Users in certain contexts can use supplementary patient identifiers in addition to the standard NHS set.	**Adopted**	Not all contexts that clinical handover occurs in may be able to uniquely identify a patient with standard NHS identifiers alone. Supplementary identifiers should be used as appropriate.	Social security number for handover involving social services.	x				x	x	x	x	x								x		x	x	**Essential**							Meeting	CUI		HD
78	All users are encouraged to take ownership of the information in the shared documentation used in handover.	**Adopted**	Where documentation used in handover is used communally e.g. patient records, this should mean that everyone takes responsibility for it's accuracy and for being up to date, rather than nobody. How this might be achieved is unclear.				x		x	x	x	x							x	x			x	x	**Recommended**							User research	NATS		HD
79	Users do not have to duplicate existing information unnecessarily in order to prepare for handover. That is to say, information duplication should be minimised.	**Adopted**	When preparing for handover, the duplication of existing data should be minimised for users. Where possible, information is 'automatically populated' in documentation used in handover. Data duplication MAY be necessary if deemed an appropriate handover strategy (see RID 66).				x		x										x				x	x	**Essential**							Workshop			HD

80	All users can update the documentation used in handover simultaneously before, during and after handover. This does not extend to being able to update the same bit of data simultaneously. The clinical application conventions for update management should be followed.	**Adopted**	Related to RID 9, 33, 39.	The outgoing users may have forgotten to add something and the incoming may want to make notes on the same patient during handover. Currently some wards may have handover documents as shared files on a network, this means that only one person can update the document (for all patients on the ward) at a time.			x		x	x	x	x							x		x		x	x		**Essential**							Workshop			HD
81	Users are encouraged to use standardised handover processes and information (relevant to their context).	**Adopted**	Although it is inevitable that people will adapt the system to their own needs, and furthermore NEED to be able to do this, there should be some attempt and standardisation through good practice across the health sector.	Paramedic handover standards.			x						x						x	x			x	x		**Essential**							Workshop			HD
82	Users can easily determine which items have been handed over and which are left to handover.	**Adopted**		A 'handed over' status icon. Items can be physically referenced such as the paper strips used in Air Traffic Control.			x			x	x		x					x	x				x	x		**Recommended**							Workshop			HD
83	Users can view and record tasks that are not associated with a patient.	**Adopted**	Not all tasks will be to do with patients.	Nursing job to check the resus trolley on the ward.		x			x	x	x	x				x							x	x		**Essential**							Workshop			HD
84	Users can view and record handover information for items that do not conform to the standard physical locations dealt with. For example, patients who are in a corridor instead of in a ward bed, patients on the way to A&E, outpatients.	**Adopted**	Occasionally, items (e.g. patients) will not conform to the standard location categories. If this happens the users should still be able to view and record the normal information about the items using the documentation used in handover. This might include items without a fixed location or items that have not yet arrived at the site of care.	In an emergency all of the usual bed locations are full and patients have to be kept in beds in the corridor.			x		x	x	x	x						x					x	x		**Essential**							Workshop			HD
85	Users can highlight and prioritise patients and non-patient tasks. Tasks can be highlighted and prioritised WITHIN a patient's dataset.	**Adopted**	Patients may need to be highlighted in order to indicate priority. Non-patient tasks are OK to be prioritised. Patent-related task prioritisation could be dangerous, therefore the patients need to be prioritised first, followed by prioritisation of task for each patient.	Patients requiring review, urgent investigations, urgent results awaited, review before discharge.	x	x			x	x	x	x	x			x		x	x				x	x		**Recommended**							Workshop			HD
86	Users are encouraged to have a synchronous handover.	**Adopted**	With accurate, easily accessible, up to date documentation, users might be discouraged from having synchronous handovers. However, they should be encouraged to have synchronous handovers.	Handover protocols seem a likely way to encourage synchronous handover. Monitoring of the handover 'handshake' could be a way to check whether this was happening.			x			x								x	x			x	x		**Recommended**							Workshop			HD
87	Users giving or receiving handover can refuse to transfer / accept transfer of responsibility. This is recorded in the same way as the handover event & 'handshake'	**Adopted**	A user giving handover can refuse to transfer responsibility to another user, and a user receiving handover can refuse to accept responsibility. This must be documented, though a handover has not taken place.	A ward nurse refuses to accept a patient from recovery due to continued bleeding.			x				x				x								x	x		**Essential**							Workshop			HD
88	Users can make personal notes during the handover. These notes are recorded by the system, but not necessarily part of any patient's record. (Governance)	**Adopted**	Some users currently take notes during handover in order to help them manage/remember tasks/information. The act of taking notes may help users remember them, rather than using the notes as a memory aid. Taking personal notes is not intended to be a facility for staff to record				x			x			x						x				x	x		**Recommended**							Workshop			HD
89	Users can identify the clinician 'currently responsible for' a patient as well as the consultant who has overall responsibility for them. (EXAMPLE DATASET PART)	**Adopted**	In hospital, patients are usually marked as under the responsibility of a particular consultant. However, other members of staff may want to contact the member of staff who is actually looking after that patient at a particular time such as the on-call doctor.		x				x	x	x	x	x	x									x		**Recommended**							Workshop			HD
90	Users can filter tasks to show those allocated for a particular: role /speciality/individual staff member /set of staff.	**Adopted**	Assumptions that 'by default' tasks are multidisciplinary, but can be filtered on various parameters. Users in specific roles can see which tasks apply to their role only but also to others' roles/individuals/groups. See also RID 126 and 14.	Role based, speciality based, shift based tasks.		x			x	x	x	x				x							x		**Recommended**							Workshop			HD
91	Users can view patient observations that have been electronically captured and automatically populated in the system. Automatic alerts can be associated with parameters.	**Adopted**	Increasingly, patient observations are being captured electronically and can be fed into patient records and monitored remotely. Documentation used in handover may utilise these is some situations.	There is an existing handover system that has an alert flag associated with automatically captured parameters as part of the handover dataset.	x				x	x	x	x	x				x		x				x	x		**Recommended**							Observation	Henry Dowlen	VitalPAC	HD
92	Users can view documentation used for handover containing trends of observations.	**Adopted**	Important in settings such as Theatre, ITU, HDU.	ITU chart used in one-to-one nursing handover.	x				x	x	x	x	x				x						x	x		**Recommended**							Observation	James Fone		HD
93	Users can include audio or video information as part of the documentation used in handover.	**Adopted**	In some contexts asynchronous handover (or partly asynchronous handover) is carried out using audio recording. This has some disadvantages, but may be useful in some circumstances. Audio and video documentation may also be an important part of the 'normal' patient record, e.g. a video of surgery.	Nurses in intensive care can record short audio summaries for patient handover in situations where there is not time to have a full written documentation-supported handover.			x		x	x	x	x	x						x				x	x		**Recommended**							Observation	Henry Dowlen		HD
94	Users can use machine-readable identification to support patient identification.	**Adopted**		Bar coding, RFID tags.	x				x	x	x	x							x			x	x	x		**Recommended**							Observation	Henry Dowlen		HD
96	Users can print out aspects of the documentation used in handover, such as lists of patients to be handed over. These printouts will be subject to information governance rules. Care must be taken that printouts do not discourage users from using the electronic documentation.	**Adopted**	Currently handover documentation is on paper, often printed patient lists. This is because of their mobility and ease of updating. However, paper lists have considerable disadvantages and therefore great care must be taken with their use - users must not be discouraged from viewing or updating the electronic documentation. In addition, there should be strict information governance rules about the use of the printouts e.g. that leaving them lying around is a disciplinary offence.		x				x	x	x	x							x	x			x	x		**Recommended**							Observation	Henry Dowlen		HD
97	Users can view the information used in handover in a time-based format (e.g. diary format).	**Adopted**	To allow work planning for a shift or community work	Some wards have day-by-day diaries to record patients and jobs.			x		x	x	x	x					x						x	x		**Recommended**							Observation	Henry Dowlen		HD
98	Users can record and view tasks that are interdependent.	**Adopted**		Check bloods before increasing medication dose.		x			x	x	x	x				x							x	x		**Recommended**							User research	L8		HD

99	Users have minimal interruption while handover is going on.	**Adopted**		An 'intelligent' messaging system could defer all non-urgent messages sent to the users involved in handover until after the handover has finished.			x		x	x								x				x	x	**Recommended**							User research	L15		HD
100	Users can easily refer to information about previous handover events and information used in previous handovers.	**Adopted**	Users may want to be able to find out 'old' information about an item such as "what happened with this patient yesterday?" or "have they had any bloods done?". This may include information about the handover itself e.g. was it completed successfully.				x		x	x	x	x					x						x	x	**Recommended**							User research	L15		HD
101	Users are encouraged to establish a leader for the handover.	**Adopted**	It is not clear from the handover literature whether there should be one leader for the handover, or a leader for the receiving and a leader for the giving of handover. A single leader is likely to be the more practical.				x		x	x	x	x							x				x	x	**Recommended**							User research	L15		HD
102	Users can view historical values for information during handover.	**Adopted**	Though the handover documentation will focus on the 'current' values for information (e.g. what ward is this patient on), it will be useful to discover previous values for the same data item (e.g. what ward were they on last week).	If a patient's test values are of interest during a handover, users can access previous test values as opposed to just the most recent ones.			x		x	x	x	x	x				x						x	x	**Essential**							User research	Henry Dowlen		HD
103	Users are not be unduly constrained to have a handover in a fixed place, time and duration. However, they may be encouraged to do so.	**Adopted**	It is good practice to have handovers at a fixed place, fixed time and for a roughly pre-determined duration. However it may be necessary to alter these according to circumstances. Users should still be able to handover as usual in these differing circumstances.	Due to an electrical fault, handover has to be moved to another room. Users involved can be notified ahead of time and can use another large screen Display to display the documentation used in handover.			x		x	x	x	x							x				x	x	**Recommended**							User research	L25		HD
104	Users must 'manually remove' tasks and items from being current in the system. For example, completed tasks are not automatically archived or removed once their due date has past. User intervention is required to remove and sign off tasks.	**Adopted**	If the documentation used in handover represents a view of information that is broadly 'current' then 'old' information must somehow be removed from the current view (into some representation of the past). To ensure that users have acknowledged tasks and items these must be 'manually removed' from the current view, rather than automatically removed. Relates to RID 122.		x	x			x	x	x	x					x		x	x			x	x	**Recommended**							Observation	James Fone		HD
105	Users are prevented from accidentally updating the information used in handover.	**Adopted**	Generic application requirement.		x														x		x		x	x	**Essential**							Observation	James Fone		HD
106	Users can view items to handover - displayed in an appropriate order by default for their context (e.g. bed no, priority, time to be seen etc).	**Adopted**	Relates to RID 23 & 106. Contradicts RID 127.	Ward patient lists are usually ordered by bed number.			x		x	x	x	x							x					x	**Recommended**							Observation	James Fone		HD
107	For certain handover contexts, users are discouraged from initiating certain kinds of actions during the handover as they may distract the users from handover itself.	**Adopted**	During handover, users should be focused on the handover. With the possibility of being able to initiate actions at any time (e.g. computerised order entry), users may be tempted to carry out actions while the handover is ongoing. In some circumstances users should be encouraged to focus on the handover as opposed to immediately carrying out the actions identified in handover. Carrying out these actions MAY distract the users from handover and MAY increase the length of handover.	If users in handover try to order tests electronically during shift handover they receive a warning message reminding them that they should defer this action until after handover. This warning message is communally displayed so that all users in handover can see that the user is potentially not giving their full attention to the handover. During some types of handover it may be advantageous to order tests such as during a handover on a post-take ward round.			x			x	x								x	x			x	x	**Recommended**							User research	L15		HD
108	For certain handover contexts, users are encouraged to 'read back' key information to ensure correctness.	**Adopted**	For critical information, 'read back' helps ensure correctness. Certain handover contexts will require an extra degree of certainty in information handed over.	Where handover is not face-to-face and two patients have very similar names on the same ward, and one patient is not for resuscitation, the user receiving handover should read back the name and DNR status of that patient. This could be encouraged via a reminder prompt.			x			x	x								x	x			x	x	**Recommended**							User research	L15		HD
109	Users are encouraged to clarify ambiguous information used in handover.	**Adopted**	Users RECEIVING handover in particular should be encouraged to clarify ambiguous information with the user handing over.				x			x	x			x					x	x			x	x	**Recommended**							Workshop			HD
110	Users can access documentation to be used in handover that is a single reliable source.	**Adopted**	Currently handover is often done using multiple paper sources of information, therefore it is often laborious or hard to determine what is the most up to date information.		x				x	x	x	x							x				x	x	**Essential**							Workshop			HD
111	Users can access the documentation used in handover at all times and places during their work.	**Adopted**			x				x	x	x	x							x				x	x	**Essential**							Workshop			HD
112	Users can update the documentation used in handover for items they are responsible for, e.g. nurses looking after patients update the documentation for those patients.	**Adopted**	The users who are responsible for particular items update those items in the documentation themselves; rather than the documentation to be used in handover being updated by a third party e.g. a ward manager, or a 'documentation administrator'.				x		x										x		x		x	x	**Recommended**							Observation	James Fone		HD
114	Users have access and update control restricted according to their profile.	**Adopted**			x				x	x	x	x							x		x		x	x	**Essential**							Observation	Henry Dowlen		HD
115	Users can have ad-hoc handovers (where appropriate). Ad-hoc handovers may have extra requirements to scheduled handovers.	**Adopted**	Some contexts have many ad-hoc handovers more often than scheduled handovers. The mechanism for initiation (and awareness of) ad-hoc handover has greater importance than for scheduled handover.	Paramedic handover to A&E staff is ad-hoc. Paramedics need to alert A&E staff that they need to handover a patient.			x		x	x						x							x		**Essential**							User research	NATS		HD
116	Users in handover can view the same handover documentation whether they are co-located or not.	**Adopted**	Handover in some contexts may have to occur over the phone. The same documentation used in handover needs to be available to both users.				x			x	x					x						x	x	**Recommended**							User research	L5		HD
117	Users can view information displayed in a consistent way (e.g. order) per type of item (e.g. a patient). This may vary per type of item and on handover context.	**Adopted**		In the list of summaries for handover, each patient has their data fields displayed in the same order e.g. name, DOB, health issue, tasks, etc.			x		x	x	x	x		x									x	x	**Recommended**							User research	Jfone		HD

118	Users can 'externally' monitor the documentation of the handover event. Users who were not present at the handover can understand what took place (users may not be physically located at the place the handover is taking place, or they could miss it altogether).	**Adopted**	Some users such as senior staff on call may want to monitor the status of their team and the status of the items under the responsibility of their team. This can be done by being able to monitor both the documentation used in handover and the documentation of the handover event (including 'handshake'). Relates to RID 18.	A consultant on call can access the handover summary via the internet.			x		x	x	x	x				x				x				x	x	**Essential**							User research	LAS		HD
119	Users have an indication of items that have recently left the area of responsibility (e.g. patients who have been discharged), and access to information about them.	**Adopted**			x				x	x	x	x						x					x	x	**Recommended**							User research	NATS		HD
120	Users can mark a patient for discharge without that patient actually being 'discharged' on the system.	**Adopted**	Part of a patient's plan may be whether they are going to be discharged from a care setting in the near future. Currently, paper patient lists used in handover are used to mark which patients may be discharged.		x				x	x	x	x	x					x					x	x	**Recommended**							User research	A62		HD
121	Users can view the empty beds within a set of beds e.g. a ward (where appropriate).	**Adopted**		Empty beds per ward is featured on an existing handover system. It is also an implicit feature of paper patient lists and ward whiteboards.	x				x	x	x	x	x					x						x	**Recommended**							User research	Jfone		HD
122	Users can view the summary information used in handover as a 'clean' set of data that allows them to clearly identify the most current information. This is not necessarily the default view of the information.	**Adopted**	It is likely that for handover, users will need to see 'old' information as well as the most current. For example it is important to be able to see what tasks have been done as well as those still to do. However, this 'old' information may clutter the documentation so, for clarity possible solutions are: 1) It may be temporarily hidden, 2) Completed information is removed to an easily accessible place in the documentation, leaving the most current information. Relates to RID 104.	If completed tasks remain on a patient's 'current' task list (either for a preset period of time or until they are manually removed), the completed tasks can be 'hidden' temporarily.			x		x	x	x	x	x			x								x	x	**Essential**							User research	James Fone		HD
123	Users can add tasks with a time dependency e.g. tomorrow, next week, after the operation.	**Adopted**	Users need to be able to see whether tasks are supposed to be done ASAP or at a later time.	Patient needs another scan in 5 days time.		x			x	x	x	x				x																				
124	Users can add (and manage) tasks for items that are not currently in the location dealt with in the handover.	**Adopted**		Patient who is coming in next week will need a blood test before their operation.		x			x	x	x	x				x		x																		
125	Users can reallocate sets of tasks to different users. This should be reflected in the respective task/diary management systems.	**Adopted**		A nurse picks up the tasks from a member for staff who has had to go home unwell, these are transferred into their own diary.		x										x	x																			
126	Users view all an item's tasks by default (e.g. at a multidisciplinary level).	**Adopted**	Related to RID 90.			x			x	x	x	x				x																				
127	Users are encouraged to handover items in a consistent order irrespective of the situation (e.g. bed order).	**Adopted**	Contradicts RID 71. Related to RID 106 and 23.	Ward patients are usually handed over in bed number order.			x			x								x	x	x																
128	Users can view the handover summary and the 'full' information per item unfiltered, that is, not filtered to a particular user's role-based view.	**Adopted**	Assumption is that users will view the information used in handover (whether a summary or full information) from a particular perspective e.g. a nursing view. However it must be possible to be able to see an unfiltered view, that is, everything. Related to the requirement to be able to do this for tasks. As to which should be the default view - it has not been defined.				x		x	x	x	x	x					x																			
129	Users can view and record information outside of a pre-determined dataset (if a dataset applies to their handover information).	**Adopted**		May be free text, or options to add new items to the dataset 'ad hoc'.			x		x	x	x	x	x																								
130	Users can filter the list of items (e.g. patients) displayed so as to show only 'problem' items.	**Adopted**	Though by default a user may see all of the items that they are responsible for, for the sake of clarity it may be necessary to view only those items that are problematic or need attending to e.g. unstable patients.	A doctor working in hospital over the weekend can filter a list of 400 patients that they are responsible for over the whole hospital, to a list of 20 who are unstable and require regular review.			x		x	x	x	x						x																			
131	Users can handover using datasets defined by their lead clinician (or equivalent).	**Adopted**					x		x	x	x	x	x																								
132	Senior users (e.g. ward managers, consultants) can check whether tasks relating to a set of patients or a set of staff have been completed. For example, they can see if any medication administrations are outstanding on a ward.	**Adopted**				x			x	x	x	x				x																				
133	Users can view and record information about patients that are not yet formally 'on the system' since they have only just become relevant.	**Adopted**		A patient is coming in by ambulance but no details are known about them apart from their injury. So they are: 1) Not in the area of responsibility yet 2) Cannot be uniquely identified on the system.	x				x	x	x	x						x																			
134	Users are encouraged to check information for any 'automatic' information population of the documentation used in handover to avoid data duplication.	**Adopted**					x		x	x	x	x	x						x	x																
135	Users can have information used in handover forwarded to them.	**Adopted**		iBleep system.			x		x	x	x	x							x																		

136	Users can clearly differentiate and filter to patients admitted during the previous shift. (Or some other pre-defined time period).	**Adopted**			x				x	x	x	x						x																		
137	Users can view and record a patient's resuscitation status. (EXAMPLE DATASET PART)	**Adopted**			x				x	x	x	x		x	x																					
138	Users can clearly understand the goals for patients. (EXAMPLE DATASET PART)	**Adopted**			x				x	x	x	x		x	x																					
139	Users can flag unsatisfactory handovers as incidents. These are dealt with appropriately.	**Adopted**					x				x					x																				
140	Users can view and record status for non-patient items such as messages.	**Adopted**		Items such as "can someone clean the fish tank" and "beware the fish tank is leaking badly" may need to have status e.g. 'acknowledged' / 'completed'.		x			x	x	x	x					x		x																		
141	Users can view provenance for information such as when it was last updated.	**Adopted**			x				x	x	x	x		x								x														
142	Users can access basic management and organisational information on hospital procedures, line management, access to services, consultant on call, etc.	**Adopted**			x				x	x	x	x								x																
143	Users can access local clinical processes, procedures and protocols	**Adopted**			x				x	x	x	x								x																
144	Users can clearly see the inclusion criteria for the list of items in the documentation used in handover. For example: all surgical patients, all paediatric patients, all ITU patients.	**Adopted**					x		x	x	x	x						x																		
145	Users can view a series of handover 'snapshots' for an individual patient within their record, so that the handover sequence can be reviewed and audited in relation to the management of the individual patient.	**Adopted**					x		x	x	x	x		x			x																			
146	Users can view generic clinical information related to local procedures, protocols and guidelines.	**Adopted**	Needs to have good generic information such as a broad context for the patient group , e.g. all surgical patients in hospital. Access to local protocols and procedures, emergency procedures, e.g. what to do in case of fire, violence, etc.		x					x	x	x		x				x	x																Meeting	Audience review		IL
147	Users can view management information such as name of their line manager or consultant in charge.	**Adopted**			x					x	x			x					x																Meeting	Audience review		IL
148	Users should be able to use historical data in resource and human management systems and for commissioning purposes.	**Adopted**			x							x		x					x																Meeting	Audience review		IL

RID	Assumptions / Requirements	Plain English	Example	Generic Clinical Management Req	Generic Tasks/Diary Req	Specific Handover Req	Before Handover	Handover: Negotiation	Handover: Acceptance	After Handover	Dataset per Item	Example Dataset Part	Handshake	Task Management	Time Component	Item Lists	Good Practice	Encouragement/Discouragement	Updating	Patient Identification	Conflicts with …	Conditional on …	Adoption Date	Source	Source Document/Event	Source Reference	Entered By
DATASETS PER ITEM																											
1	Users can view a 'per patient' summary of information held in the patient's record. This summary is appropriate for the purpose of handover.	Patients have a summary dataset that is appropriate for the purpose of handover. This can be viewed by users. That is to say, handover requires something extra than just easy access to the 'full' patient record.	See Example Handover Datasets in the supporting document *NHS CUI Design Guide Handover Requirements Supporting Document.*			x			x	x	x		x												Workshop	L45, V1, V4		HD
2	Users can view different 'per item' handover information summaries according to the user's context.	The summary dataset per item (e.g. a patient) appropriate for handover will vary according to context e.g. role, care setting, purpose of handover, user grade, speciality, etc. Users in each different context see the dataset appropriate to them. Note: This does NOT involve defining what SET of items is available i.e. the inclusion criteria for the patient list. The datasets will not be defined in these requirements.	See the variation in the Example Handover Datasets, e.g. MIST acronym from paramedic handover, WEST acronym from Air Traffic Control.			x		x	x	x	x		x										RID 4		User research	L45, V1, V4		HD
3	From each item's summary, users can easily access more information about each item e.g. the 'full' patient record.	If a user is viewing the summary for a handover item (e.g. patient), then they can quickly and easily get to more information about that item e.g. link to the 'full' patient record available in that context.	A link to the 'full' patient record.	x				x	x	x	x		x												User research	L45, V1, V4		HD
11	Users can clearly and uniquely identify patients using standard NHS patient identifiers. (EXAMPLE DATASET PART)	There needs to be clear identification of which patient is being handed-over in both the documentation used in handover and any verbal handover. NHS standards on patient identification should be followed here.	Possible set: (full name, dob, NHS number, location)	x				x	x	x	x		x	x					x						Meeting	V1		HD
12	Users are clear about who has responsibility for the items involved in handover, during and after the handover, especially at the point that responsibility is transferred. An item cannot be 'no-ones' responsibility.	User's care is clear about who is responsible for the items being handed over (e.g. patient's) at all stages. Relates to generic requirement 64.				x		x	x	x	x		x												Meeting	CUI		HD
14	Users can view the documentation used in handover from the point of view of other users, e.g. nurses can see a doctor's view of the handover information.	When there is handover between two roles, agendas and views about the patient may differ, in some cases considerably. Both users will need to be aware of the other's perspective. Related to RID 90. Doctors and nurses often look at, and use each other's handover documents to help them structure their work and communicate.	Handover between two roles. A junior doctor being able to apply their consultant's summary view on the same set of in-patients during a hospital stay, in order to assess whether they have done the necessary tasks.			x		x	x	x	x		x				x	x							User research	V2, L45		HD
24	Users can categorise patients into groups based on different variables e.g. location, team, severity.	This does not necessarily mean 'grouping by'; the groups could be separate lists and so on.	Various scales (e.g. MEWS, Waterlow), responsibilities, geography, resuscitation status, awaiting results, due for admission, due for discharge, others' responsibility and so on.			x		x	x	x	x		x				x								Inferred	V4		HD
25	Users can view and record the item's current location. (EXAMPLE DATASET PART)		Which ward and bed a patient is in.	x				x	x	x	x		x	x												User research	V4, L45		HD
28	Users can record information that is uniquely part of the handover process. This is distinct from the information that is being handed over.	Users may need to record information about the reason for the handover, as well as the information that they are handing over. This information will be unique to the handover event.	If there is a rationale for a handover such as "please clean fridge" or "please check bloods for patient x".			x		x	x	x	x		x					x							Meeting	CUI		HD
32	For handover documentation data that is not automatically populated, users are clear about what data should be recorded.	Much of the information in the documentation used in handover may be automatically populated from other electronic sources e.g. EPR. However, where this is not the case and users have to record information themselves, they should be clear about what information they are supposed to be recording.	IF handover documentation is a table of patients, the column headings unambiguously explain what should go in to the content of the table.			x		x	x				x												Meeting	CUI		HD
33	Users can easily and quickly make updates to information during handover (including tasks). These updates are reflected in the patient's record.	Users need to be able to add tasks and change information during the handover without overly disrupting the handover. Any changes made to the information must be part of the 'source' information and not solely made on a 'handover copy' of it. If it is too arduous to add a task at handover it may lead users to resorting to paper notes.	On-call is often the time when the most difficult patients to handover are those that are sick and have just arrived, and may not be on the computer system/list. Therefore key information may be disseminated verbally at handover which is not currently written. It would be useful to capture this.			x		x	x		x			x			x		x						Inferred	V4		HD
34	Depending on context, users can view documentation for handover that is continually up to date.	Though it will be useful if documentation used in handover is as up to date as the situation allows, in some contexts there will be extra importance attached to having a 'real-time' view on the set of information. A continually updated view may of course be useful for things other than handover. Some clinical areas require an ad-hoc handover resource which is up-to-date all the time, current examples include a shared whiteboard or an annotated ward list. These form the basis of handovers.	Ward whiteboards currently fulfil this function in hospitals (A&E and labour wards often have more detail). Communal patient lists such as handover diaries may attempt to provide a similar function.			x		x	x	x	x		x			x	x		x						User research	V9		HD

43	Users do not have to view unnecessary information at handover. Therefore the default datasets per item should be the minimum necessary for that context.	The handover summaries of patients should be minimal, but this requirement applies to information about other issues e.g. ward management. Relates to RID 1.				x			x				x													User research	V30		HD
44	Users can view all planned tasks for a patient.		Nursing care plan. Requirement for prep for theatres etc.		x			x	x	x	x		x			x	x									Document review	A1,23,4,5,7,9,20,27,29,51,71		DAS
49	Users can view and record patient demographics and attributes that make up a unique patient identifier. (EXAMPLE DATASET PART)		Name, dob, location, contact details, next of kin, NHS number, photo, bar coding.	x				x	x	x	x		x	x								x				Document review	All		HD
50	Users can view and record a patient's current medical problems. (EXAMPLE DATASET PART)		Nursing care plans, medical plans.	x				x	x	x	x		x	x												Document review	A2,9,20,27,29,51,71		DAS
59	Users of different roles, and individuals within those roles can use the list of items used in handover as personal 'tick-lists'.	Once a list of patients has been created, different users may want to use that list to check-mark whether they have completed an action in relation to each of the patients in that list. This may be actions that are in addition to the formal task management.	A pharmacist can tick off patients they have reviewed on the ward, SHOs can tick off patients that have been seen on the ward round, physician assistants can tick off the patients whose records they have checked for blood test requests.	x				x	x	x	x		x						x							Workshop	L49		HD
60	Users can view an item's status with regard to a context-specific checklist reflecting agreed guidelines and procedures (e.g. a patient on a care pathway). This includes functionality around these checklists such as recording additional information and highlighting exceptions.	Context-specific checklists reflecting agreed guidelines and procedures.	The position of a patient on a care pathway for day surgery; what checks have been done on the patient, what checks are still to be done, are there any exceptions from the expected pathway, etc.	x				x	x	x	x		x			x	x									Meeting	CUI	CUI	HD
65	Users can take account of contextually relevant handover information structures when verbal and written information is handed over.	Some contexts use predefined structures to aid the collation of handover information, the handing over of information and set the expectations of those users being handed over to. The communication of these structures may be made explicit in the written handover information.	Current usage of structure for handover information: MIST for paramedics - (made explicit in handover interface), WEST acronym in air traffic control shift handover, 'system' headings in some nursing shift summary documentation (e.g. breathing, mobility, etc).			x		x	x	x	x		x						x							User research	LAS		HD
66	Users are able to prepare a summary of information to be handed over, if necessary, even if such a summary already exists e.g. if automatically generated.	Preparing a written summary of handover information prior to handover even if one is automatically generated is a loose interpretation of a handover strategy identified by Patterson et al. The idea is that automatically generated summaries do not require users to really think about the handover data. See RID 79.	Prior to handover users giving handover write a short summary of the important issues (with the item's) they are going to handover.			x		x	x				x						x	x						User research	LAS		HD
68	Users can easily identify data missing from the expected handover dataset for that context. Especially relevant to users receiving handover.		The patient's name, date of birth and number are missing from a 'John Doe' patient still to be identified after a major trauma incident.			x		x	x	x	x		x						x							User research	NATS		HD
69	Users can temporarily alter the 'richness' of the data display in order to bring clarity to salient details.		Where there is a handover such as in ITU with a lot of information being transferred, it may be useful to increase or decrease the level of detail of that handover, e.g. fading in/out of observations next to summaries.			x		x	x	x	x		x						x							User research	NATS		HD
72	Users can handover according to information governance and privacy considerations. That is to say, is it not easy for other patients to see/overhear handovers about other patients.	Handovers will usually contain private information and information which other patients should not see or hear. Currently handover often has to be conducted in communal areas due to space limitation or the fixed location of artefacts used in handover e.g. a whiteboard. Future handover should try to minimise the necessity to handover in places where other patients might overhear.	Communal artefacts such as detailed labour ward whiteboards are useful for handover (so should be in private), but also useful to be able to access very easily (so should be in public areas). Linked electronic large-scale displays could allow handover information to be in a private room, and ward information to be on public view.			x			x				x						x							User research	LAS		HD
77	Users in certain contexts can use supplementary patient identifiers in addition to the standard NHS set.	Not all contexts that clinical handover occurs in may be able to uniquely identify a patient with standard NHS identifiers alone. Supplementary identifiers should be used as appropriate.	Social security number for handover involving social services.	x				x	x	x	x		x									x				Meeting	CUI		HD
81	Users are encouraged to use standardised handover processes and information (relevant to their context).	Although it is inevitable that people will adapt the system to their own needs, and furthermore NEED to be able to do this, there should be some attempt and standardisation through good practice across the health sector.	Paramedic handover standards.			x							x						x	x						Workshop			HD
82	Users can easily determine which items have been handed over and which are left to handover.		A 'handed over' status icon. Items can be physically referenced such as the paper strips used in Air Traffic Control.			x			x	x			x					x	x							Workshop			HD
85	Users can highlight and prioritise patients and non-patient tasks. Tasks can be highlighted and prioritised WITHIN a patient's dataset.	Patients may need to be highlighted in order to indicate priority. Non-patient tasks are OK to be prioritised. Patent-related task prioritisation could be dangerous, therefore the patients need to be prioritised first, followed by prioritisation of task for each patient.	Patients requiring review, urgent investigations, urgent results awaited, review before discharge.	x	x			x	x	x	x		x			x		x	x							Workshop			HD

88	Users can make personal notes during the handover. These notes are recorded by the system, but not necessarily part of any patient's record. (Governance)	Some users currently take notes during handover in order to help them manage/remember tasks/information. The act of taking notes may help users remember them, rather than using the notes as a memory aid. Taking personal notes is not intended to be a facility for staff to record information that they want to transfer informally (e.g. 'this patient is a nightmare'). Because personal notes might be used in this way, this requirement may need to be reconsidered.				x			x				x						x							Workshop			HD
89	Users can identify the clinician 'currently responsible for' a patient as well as the consultant who has overall responsibility for them. (EXAMPLE DATASET PART)	In hospital, patients are usually marked as under the responsibility of a particular consultant. However, other members of staff may want to contact the member of staff who is actually looking after that patient at a particular time such as the on-call doctor.		x				x	x	x	x		x	x												Workshop			HD
91	Users can view patient observations that have been electronically captured and automatically populated in the system. Automatic alerts can be associated with parameters.	Increasingly, patient observations are being captured electronically and can be fed into patient records and monitored remotely. Documentation used in handover may utilise these is some situations.	There is an existing handover system that has an alert flag associated with automatically captured parameters as part of the handover dataset.	x				x	x	x	x		x				x		x							Observation	Henry Dowlen	VitalPAC	HD
92	Users can view documentation used for handover containing trends of observations.	Important in settings such as Theatre, ITU, HDU.	ITU chart used in one-to-one nursing handover.	x				x	x	x	x		x				x									Observation	James Fone		HD
93	Users can include audio or video information as part of the documentation used in handover.	In some contexts asynchronous handover (or partly asynchronous handover) is carried out using audio recording. This has some disadvantages, but may be useful in some circumstances. Audio and video documentation may also be an important part of the 'normal' patient record, e.g. a video of surgery.	Nurses in intensive care can record short audio summaries for patient handover in situations where there is not time to have a full written documentation-supported handover.			x		x	x	x	x		x						x							Observation	Henry Dowlen		HD
102	Users can view historical values for information during handover.	Though the handover documentation will focus on the 'current' values for information (e.g. what ward is this patient on), it will be useful to discover previous values for the same data item (e.g. what ward were they on last week).	If a patient's test values are of interest during a handover, users can access previous test values as opposed to just the most recent ones.			x		x	x	x	x		x				x									User research	Henry Dowlen		HD
109	Users are encouraged to clarify ambiguous information used in handover.	Users RECEIVING handover in particular should be encouraged to clarify ambiguous information with the user handing over.				x			x	x			x						x	x						Workshop			HD
117	Users can view information displayed in a consistent way (e.g. order) per type of item (e.g. a patient). This may vary per type of item and on handover context.		In the list of summaries for handover, each patient has their data fields displayed in the same order e.g. name, DOB, health issue, tasks, etc.			x		x	x	x	x		x													User research	Jfone		HD
120	Users can mark a patient for discharge without that patient actually being 'discharged' on the system.	Part of a patient's plan may be whether they are going to be discharged from a care setting in the near future. Currently, paper patient lists used in handover are used to mark which patients may be discharged.		x				x	x	x	x		x					x								User research	A62		HD
121	Users can view the empty beds within a set of beds e.g. a ward (where appropriate).		Empty beds per ward is featured on an existing handover system. It is also an implicit feature of paper patient lists and ward whiteboards.	x				x	x	x	x		x					x								User research	Jfone		HD
122	Users can view the summary information used in handover as a 'clean' set of data that allows them to clearly identify the most current information. This is not necessarily the default view of the information.	It is likely that for handover, users will need to see 'old' information as well as the most current. For example it is important to be able to see what tasks have been done as well as those still to do. However, this 'old' information may clutter the documentation so, for clarity possible solutions are: 1) It may be temporarily hidden, 2) Completed information is removed to an easily accessible place in the documentation, leaving the most current information. Relates to RID 104.	If completed tasks remain on a patient's 'current' task list (either for a preset period of time or until they are manually removed), the completed tasks can be 'hidden' temporarily.			x		x	x	x	x		x			x										User research	James Fone		HD
128	Users can view the handover summary and the 'full' information per item unfiltered, that is, not filtered to a particular user's role-based view.	Assumption is that users will view the information used in handover (whether a summary or full information) from a particular perspective e.g. a nursing view. However it must be possible to be able to see an unfiltered view, that is, everything. Related to the requirement to be able to do this for tasks. As to which should be the default view - it has not been defined.				x		x	x	x	x		x					x											
129	Users can view and record information outside of a pre-determined dataset (if a dataset applies to their handover information).		May be free text, or options to add new items to the dataset 'ad hoc'.			x		x	x	x	x		x																
131	Users can handover using datasets defined by their lead clinician (or equivalent).					x		x	x	x	x		x																
134	Users are encouraged to check information for any 'automatic' information population of the documentation used in handover to avoid data duplication.					x		x	x	x	x		x						x	x									
137	Users can view and record a patient's resuscitation status. (EXAMPLE DATASET PART)			x				x	x	x	x		x	x															
138	Users can clearly understand the goals for patients. (EXAMPLE DATASET PART)			x				x	x	x	x		x	x															

141	Users can view provenance for information such as when it was last updated.			x				x	x	x	x		x								x							
145	Users can view a series of handover 'snapshots' for an individual patient within their record, so that the handover sequence can be reviewed and audited in relation to the management of the individual patient.					x		x	x	x	x		x				x											
146	Users can view generic clinical information related to local procedures, protocols and guidelines	Needs to have good generic information such as a broad context for the patient group , e.g.. All surgical patients in hospital Access to local protocols and procedures Emergency procedures, e.g. what to do in case of fire, violence, etc.		x					x	x	x		x					x	x							Meeting	dience review		IL
EXAMPLE DATASET PART																												
11	Users can clearly and uniquely identify patients using standard NHS patient identifiers. (EXAMPLE DATASET PART)	There needs to be clear identification of which patient is being handed-over in both the documentation used in handover and any verbal handover. NHS standards on patient identification should be followed here.	Possible set: (full name, dob, NHS number, location)	x				x	x	x	x		x	x					x			x				Meeting	V1		HD
25	Users can view and record the item's current location. (EXAMPLE DATASET PART)		Which ward and bed a patient is in.	x				x	x	x	x		x	x												User research	V4, L45		HD
49	Users can view and record patient demographics and attributes that make up a unique patient identifier. (EXAMPLE DATASET PART)		Name, dob, location, contact details, next of kin, NHS number, photo, bar coding.	x				x	x	x	x		x	x							x					Document review	All		HD
50	Users can view and record a patient's current medical problems. (EXAMPLE DATASET PART)		Nursing care plans, medical plans.	x				x	x	x	x		x	x												Document review	A2,9,20,27,29,51,71		DAS
89	Users can identify the clinician 'currently responsible for' a patient as well as the consultant who has overall responsibility for them. (EXAMPLE DATASET PART)	In hospital, patients are usually marked as under the responsibility of a particular consultant. However, other members of staff may want to contact the member of staff who is actually looking after that patient at a particular time such as the on-call doctor.		x				x	x	x	x		x	x												Workshop			HD
137	Users can view and record a patient's resuscitation status. (EXAMPLE DATASET PART)			x				x	x	x	x		x	x															
138	Users can clearly understand the goals for patients. (EXAMPLE DATASET PART)			x				x	x	x	x		x	x															
HANDSHAKE																												
12	Users are clear about who has responsibility for the items involved in handover, during and after the handover, especially at the point that responsibility is transferred. An item cannot be 'no-ones' responsibility.	User's care is clear about who is responsible for the items being handed over (e.g. patient's) at all stages. Relates to generic requirement 64.				x		x	x	x	x		x		x				x							Meeting	CUI		HD
20	Users must record the handover event and the transfer of responsibility (the 'handshake'). The documentation of this is clear to all users involved in the handover. Users can still record this even if the handover is: 1) asynchronous, or 2) synchronous but not face to face.	The transfer of responsibility is documented, and the handover event is documented (assuming that these are the same thing). Though handovers in general should be synchronous and face to face, in some situations this is not possible. In these situations a documented transfer of responsibility must still occur.	GP out of hours at night sees a patient and needs to let the regular day time GP know the events in the morning. Currently a fax is used, but it could be an email with read receipt.			x			x	x					x											Meeting	CUI		HD
22	The user receiving the handover is in control of the transfer of responsibility in the handover.	The transfer of responsibility can only occur once the user receiving the handover is happy to take responsibility.	In some situations in air traffic control, the user giving handover cannot leave until the user receiving handover physically takes responsibility by removing the outgoing user's headphones.			x				x						x										Meeting	CUI		HD
27	At the handover events and transfer of responsibility, users must record / confirm: date, time, place, user handing over, user being handed over to, other users present, satisfaction (or otherwise) with the handover.	It is likely that much of this information would be automatically captured by the system and therefore would not need to be entered by the users, only confirmed.				x				x						x										Meeting	CUI		HD
30	Users are not inhibited in further patient care even if the handover process is incomplete.	Handover may not happen/be incomplete or late - users must still be able to care for the patient and use the patient's record even if this is the case. (The incomplete process should be documented).	If handover cannot take place and therefore is not documented, users are not locked out of that patient's record until the handover has been accepted.			x			x	x	x				x				x							Meeting	CUI		HD
31	Where a handover is unsatisfactory (e.g. incorrect/late/incomplete), users can record this, and the details of why it was not satisfactory. This is possible retrospectively, with a clear indicator and a time/date/user stamp.	Handover may not happen/be brief, incorrect or late - system must not inhibit patient care if this is the case, but must accept a retrospective note to record why. This note could apply to the handover episode as a whole or to a particular patient's handover.				x			x	x	x				x											Meeting	CUI		HD
36	Users can handover items (e.g. patients or tasks for patients) outside of a designated 'handover' time. Handover initiation and acceptance works as usual.	Handover will not just occur at shift handovers or main 'handover events'. Smaller ad-hoc handovers such as for one task must be possible, as well as the effective management of this handover.	For jobs that occur during a shift that a nurse needs to let another nurse or a doctor know that they need doing, there needs to be a system for distributing, tracking and completing the task.			x			x	x					x				x							User research	V11		HD
38	Users can handover satisfactorily in exceptional circumstances, such as when no documentation has been completed.		Ambulance services transferring someone acutely before documentation has been done.			x		x	x	x	x				x				x							Meeting	CUI		HD

64	Users are clear, at all times, who has responsibility for an item (such as a patient).	Generic version of RID 12.				x		x	x	x	x				x				x							User research	LAS		HD
87	Users giving or receiving handover can refuse to transfer / accept transfer of responsibility. This is recorded in the same way as the handover event & 'handshake'	A user giving handover can refuse to transfer responsibility to another user, and a user receiving handover can refuse to accept responsibility. This must be documented, though a handover has not taken place.	A ward nurse refuses to accept a patient from recovery due to continued bleeding.			x				x					x											Workshop			HD
115	Users can have ad-hoc handovers (where appropriate). Ad-hoc handovers may have extra requirements to scheduled handovers.	Some contexts have many ad-hoc handovers more often than scheduled handovers. The mechanism for initiation (and awareness of) ad-hoc handover has greater importance than for scheduled handover.	Paramedic handover to A&E staff is ad-hoc. Paramedics need to alert A&E staff that they need to handover a patient.			x		x	x						x											User research	NATS		HD
116	Users in handover can view the same handover documentation whether they are co-located or not.	Handover in some contexts may have to occur over the phone. The same documentation used in handover needs to be available to both users.				x			x	x					x				x							User research	L5		HD
118	Users can 'externally' monitor the documentation of the handover event. Users who were not present at the handover can understand what took place (users may not be physically located at the place the handover is taking place, or they could miss it altogether).	Some users such as senior staff on call may want to monitor the status of their team and the status of the items under the responsibility of their team. This can be done by being able to monitor both the documentation used in handover and the documentation of the handover event (including 'handshake'). Relates to RID 18.	A consultant on call can access the handover summary via the internet.			x		x	x	x	x				x				x							User research	LAS		HD
139	Users can flag unsatisfactory handovers as incidents. These are dealt with appropriately.					x				x					x														
TASK MANAGEMENT																													
10	Users can 'discharge' a patient from the system, even if that patient has outstanding tasks. These outstanding tasks are identified and flagged by the system so that they can be handled appropriately by the health professional organising patient's discharge.	Patients may leave a clinical location with certain tasks intentionally not completed. The system needs to allow for patients to move location (which may be outside of the system). Decision support should operate on these tasks, and incomplete tasks should be handled appropriately e.g. as an outpatient.	Patient is to be discharged from the ward without a social services appointment having been finalised. The staff will arrange this appointment after the patient has left.			x		x	x	x	x					x		x								Meeting	CUI		HD
18	Users can monitor the documentation used in handover when they are physically away from the place of handover and the items being handed over. Remote users can also be aware of items they have been made responsible for while located elsewhere	Some users may want to remotely monitor the items that are under the responsibility of their team or that might be/have been their responsibility. This can be done by being able to monitor both the documentation used in handover. Relates to RID 118. They will also need to be able to be aware of items that they have become responsible for e.g. new tasks.	A paediatric SHO working down in A&E wants to be able to monitor the patients on the children's ward and to see if they have been allocated any tasks in their absence from the ward.			x		x	x	x	x					x			x							Observation	V3, V4		HD
21	Users can record which user marked a task as complete. With the option for more information e.g. who vouched for this.	Task management. Who marked a task as complete is important, however they may not be the user who actually completed it (or vouched for it to be complete).			x			x	x	x	x					x										Meeting	CUI		HD
23	Users can schedule their own or others' tasks based on the priorities identified during the handover.		Categorising patients into groups, based on who needs to be seen first on-call.			x			x	x	x					x	x									Inferred	V4		HD
33	Users can easily and quickly make updates to information during handover (including tasks). These updates are reflected in the patient's record.	Users need to be able to add tasks and change information during the handover without overly disrupting the handover. Any changes made to the information must be part of the 'source' information and not solely made on a 'handover copy' of it. If it is too arduous to add a task at handover it may lead users to resorting to paper notes.	On-call is often the time when the most difficult patients to handover are those that are sick and have just arrived, and may not be on the computer system/list. Therefore key information may be disseminated verbally at handover which is not currently written. It would be useful to capture this.			x			x	x			x			x				x		x					Inferred	V4		HD
34	Depending on context, users can view documentation for handover that is continually up to date.	Though it will be useful if documentation used in handover is as up to date as the situation allows, in some contexts there will be extra importance attached to having a 'real-time' view on the set of information. A continually updated view may of course be useful for things other than handover. Some clinical areas require an ad-hoc handover resource which is up-to-date all the time, current examples include a shared whiteboard or an annotated ward list. These form the basis of handovers.	Ward whiteboards currently fulfil this function in hospitals (A&E and labour wards often have more detail). Communal patient lists such as handover diaries may attempt to provide a similar function.			x		x	x	x	x		x			x	x			x							User research	V9		HD
44	Users can view all planned tasks for a patient.		Nursing care plan. Requirement for prep for theatres etc.		x			x	x	x	x		x			x	x										Document review	A1,23,4,5, 7,9,20,27, 29,51,71		DAS
51	Users can allocate and record tasks to particular sets of individuals (e.g. jobs for the on-call team).		Role based, speciality based, shift based tasks.		x			x	x	x	x					x										Observation	James Fone		HD
52	Users can allocate and record tasks to a particular individual (e.g. task for on call doctor Dr X).	This could be a specific role or a specific person.				x		x	x	x	x					x										Observation	James Fone		HD
53	Users are alerted to overdue tasks e.g. overdue medication administration.				x			x	x	x	x					x										Observation	James Fone		HD
54	Users can highlight tasks specifically for handover, rather than the job being permanently highlighted.	Users may need to draw attention to particular tasks but not have those tasks permanently highlighted.	We must do this job….(??)			x		x	x	x	x					x										Observation	Henry Dowlen		HD

56	Users are able to log incomplete tasks.				x			x	x	x	x					x				x						Observation	James Fone		HD
57	Users can have allocated tasks integrated into their diary management systems.		A nurse/doctor should be able to pick up tasks from another member of staff and have them directly transferred into their own diary management system.		x			x	x	x	x					x	x									Meeting	CUI		DAS
60	Users can view an item's status with regard to a context-specific checklist reflecting agreed guidelines and procedures (e.g. a patient on a care pathway). This includes functionality around these checklists such as recording additional information and highlighting exceptions.	Context-specific checklists reflecting agreed guidelines and procedures.	The position of a patient on a care pathway for day surgery; what checks have been done on the patient, what checks are still to be done, are there any exceptions from the expected pathway, etc.	x				x	x	x	x		x			x	x									Meeting	CUI	CUI	HD
75	Users can unambiguously interpret the status of a task (e.g. completed, partially completed, incomplete, etc). This status may have further values that are yet to be defined	Defining an unambiguous status may be very difficult in practice, (e.g. should completed tasks be shown? If so which ones?), but is crucial to good clinical management. Some tasks may have several important more detailed states which may be necessary to reflect e.g., bloods taken, sent, processing, finished but not checked, checked, checked and acted on, checked and 'signed', etc.			x			x	x	x	x					x										Workshop	L49		HD
83	Users can view and record tasks that are not associated with a patient.	Not all tasks will be to do with patients.	Nursing job to check the resus trolley on the ward.		x			x	x	x	x					x										Workshop			HD
85	Users can highlight and prioritise patients and non-patient tasks. Tasks can be highlighted and prioritised WITHIN a patient's dataset.	Patients may need to be highlighted in order to indicate priority. Non-patient tasks are OK to be prioritised. Patent-related task prioritisation could be dangerous, therefore the patients need to be prioritised first, followed by prioritisation of task for each patient.	Patients requiring review, urgent investigations, urgent results awaited, review before discharge.	x	x			x	x	x	x		x			x		x	x							Workshop			HD
90	Users can filter tasks to show those allocated for a particular: role /speciality/individual staff member /set of staff.	Assumptions that 'by default' tasks are multidisciplinary, but can be filtered on various parameters. Users in specific roles can see which tasks apply to their role only but also to others' roles/individuals/groups. See also RID 126 and 14.	Role based, speciality based, shift based tasks.		x			x	x	x	x					x										Workshop			HD
98	Users can record and view tasks that are interdependent.		Check bloods before increasing medication dose.		x			x	x	x	x					x										User research	L8		HD
104	Users must 'manually remove' tasks and items from being current in the system. For example, completed tasks are not automatically archived or removed once their due date has past. User intervention is required to remove and sign off tasks.	If the documentation used in handover represents a view of information that is broadly 'current' then 'old' information must somehow be removed from the current view (into some representation of the past). To ensure that users have acknowledged tasks and items these must be 'manually removed' from the current view, rather than automatically removed. Relates to RID 122.		x	x			x	x	x	x					x		x	x							Observation	James Fone		HD
122	Users can view the summary information used in handover as a 'clean' set of data that allows them to clearly identify the most current information. This is not necessarily the default view of the information.	It is likely that for handover, users will need to see 'old' information as well as the most current. For example it is important to be able to see what tasks have been done as well as those still to do. However, this 'old' information may clutter the documentation so, for clarity possible solutions are: 1) It may be temporarily hidden, 2) Completed information is removed to an easily accessible place in the documentation, leaving the most current information. Relates to RID 104.	If completed tasks remain on a patient's 'current' task list (either for a preset period of time or until they are manually removed), the completed tasks can be 'hidden' temporarily.			x		x	x	x	x		x			x										User research	James Fone		HD
123	Users can add tasks with a time dependency e.g. tomorrow, next week, after the operation.	Users need to be able to see whether tasks are supposed to be done ASAP or at a later time.	Patient needs another scan in 5 days time.		x			x	x	x	x					x													
124	Users can add (and manage) tasks for items that are not currently in the location dealt with in the handover.		Patient who is coming in next week will need a blood test before their operation.		x			x	x	x	x					x		x											
125	Users can reallocate sets of tasks to different users. This should be reflected in the respective task/diary management systems.		A nurse picks up the tasks from a member for staff who has had to go home unwell, these are transferred into their own diary.		x											x	x												
126	Users view all an item's tasks by default (e.g. at a multidisciplinary level).	Related to RID 90.			x			x	x	x	x					x													
132	Senior users (e.g. ward managers, consultants) can check whether tasks relating to a set of patients or a set of staff have been completed. For example, they can see if any medication administrations are outstanding on a ward.				x			x	x	x	x					x													
140	Users can view and record status for non-patient items such as messages.		Items such as "can someone clean the fish tank" and "beware the fish tank is leaking badly" may need to have status e.g. 'acknowledged' / 'completed'.		x			x	x	x	x					x		x											
TIME COMPONENT																												
23	Users can schedule their own or others' tasks based on the priorities identified during the handover.		Categorising patients into groups, based on who needs to be seen first on-call.			x			x	x	x					x	x									Inferred	V4		HD

34	Depending on context, users can view documentation for handover that is continually up to date.	Though it will be useful if documentation used in handover is as up to date as the situation allows, in some contexts there will be extra importance attached to having a 'real-time' view on the set of information. A continually updated view may of course be useful for things other than handover. Some clinical areas require an ad-hoc handover resource which is up-to-date all the time, current examples include a shared whiteboard or an annotated ward list. These form the basis of handovers.	Ward whiteboards currently fulfil this function in hospitals (A&E and labour wards often have more detail). Communal patient lists such as handover diaries may attempt to provide a similar function.			x		x	x	x	x		x			x	x		x							User research	V9		HD
40	Users can view 'snapshots' of the documentation used in handover at certain points of handover from the past. (Time slicing of documentation).		Currently some handover documentation is in page-by-page diaries that allow the user to look back at past handover summaries at particular times.			x		x	x	x	x						x									Workshop	L49		HD
42	If 'non-current' (i.e. past or future) views of information used in handover are possible, users can clearly identify the date and time they refer to. Particularly important when looking at handover 'snapshots' over time.	Related to RID 40.				x		x	x	x	x						x									Meeting	CUI		HD
44	Users can view all planned tasks for a patient.		Nursing care plan. Requirement for prep for theatres etc.		x			x	x	x	x		x			x	x									Document review	A1,23,4,5, 7,9,20,27, 29,51,71		DAS
48	Users can view the handover 'snapshots' from previous handover events at either a multi-patient level, or an individual patient level within a patient's record.	Views of the handover documentation at a handover point (handover snapshots) can be viewed at a multi-patient level. In addition, from within a patient's record, users can view the handover snapshots for that patient.				x		x	x	x	x						x									Document review	A51		DAS
57	Users can have allocated tasks integrated into their diary management systems.		A nurse/doctor should be able to pick up tasks from another member of staff and have them directly transferred into their own diary management system.		x			x	x	x	x					x	x									Meeting	CUI		DAS
60	Users can view an item's status with regard to a context-specific checklist reflecting agreed guidelines and procedures (e.g. a patient on a care pathway). This includes functionality around these checklists such as recording additional information and highlighting exceptions.	Context-specific checklists reflecting agreed guidelines and procedures.	The position of a patient on a care pathway for day surgery; what checks have been done on the patient, what checks are still to be done, are there any exceptions from the expected pathway, etc.	x				x	x	x	x		x			x	x									Meeting	CUI	CUI	HD
91	Users can view patient observations that have been electronically captured and automatically populated in the system. Automatic alerts can be associated with parameters.	Increasingly, patient observations are being captured electronically and can be fed into patient records and monitored remotely. Documentation used in handover may utilise these is some situations.	There is an existing handover system that has an alert flag associated with automatically captured parameters as part of the handover dataset.	x				x	x	x	x		x				x		x							Observation	Henry Dowlen	VitalPAC	HD
92	Users can view documentation used for handover containing trends of observations.	Important in settings such as Theatre, ITU, HDU.	ITU chart used in one-to-one nursing handover.	x				x	x	x	x		x				x									Observation	James Fone		HD
97	Users can view the information used in handover in a time-based format (e.g. diary format).	To allow work planning for a shift or community work	Some wards have day-by-day diaries to record patients and jobs.			x		x	x	x	x						x									Observation	Henry Dowlen		HD
100	Users can easily refer to information about previous handover events and information used in previous handovers.	Users may want to be able to find out 'old' information about an item such as "what happened with this patient yesterday?" or "have they had any bloods done?". This may include information about the handover itself e.g. was it completed successfully.				x		x	x	x	x						x									User research	L15		HD
102	Users can view historical values for information during handover.	Though the handover documentation will focus on the 'current' values for information (e.g. what ward is this patient on), it will be useful to discover previous values for the same data item (e.g. what ward were they on last week).	If a patient's test values are of interest during a handover, users can access previous test values as opposed to just the most recent ones.			x		x	x	x	x		x				x									User research	Henry Dowlen		HD
125	Users can reallocate sets of tasks to different users. This should be reflected in the respective task/diary management systems.		A nurse picks up the tasks from a member for staff who has had to go home unwell, these are transferred into their own diary.		x											x	x												
145	Users can view a series of handover 'snapshots' for an individual patient within their record, so that the handover sequence can be reviewed and audited in relation to the management of the individual patient.					x		x	x	x	x		x				x												
ITEM LISTS																													
8	Users can view all of the items that they are responsible for.	Relates to RID 63. Includes: items (e.g. patients), regular tasks, specific tasks.				x		x	x	x	x							x								User research	L5		HD
10	Users can 'discharge' a patient from the system, even if that patient has outstanding tasks. These outstanding tasks are identified and flagged by the system so that they can be handled appropriately by the health professional organising patient's discharge.	Patients may leave a clinical location with certain tasks intentionally not completed. The system needs to allow for patients to move location (which may be outside of the system). This is to prevent users from falsely marking the tasks as completed in order to discharge them. Decision support should operate on these tasks, and incomplete tasks should be handled appropriately e.g. as an outpatient.	Patient is to be discharged from the ward without a social services appointment having been finalised. The staff will arrange this appointment after the patient has left.			x		x	x	x	x					x		x								Meeting	CUI		HD

14	Users can view the documentation used in handover from the point of view of other users, e.g. nurses can see a doctor's view of the handover information.	When there is handover between two roles, agendas and views about the patient may differ, in some cases considerably. Both users will need to be aware of the other's perspective. Related to RID 90. Doctors and nurses often look at, and use each other's handover documents to help them structure their work and communicate.	Handover between two roles. A junior doctor being able to apply their consultant's summary view on the same set of in-patients during a hospital stay, in order to assess whether they have done the necessary tasks.			x		x	x	x	x		x					x	x							User research	V2, L45		HD
24	Users can categorise patients into groups based on different variables e.g. location, team, severity.	This does not necessarily mean 'grouping by'; the groups could be separate lists and so on.	Various scales (e.g. MEWS, Waterlow), responsibilities, geography, resuscitation status, awaiting results, due for admission, due for discharge, others' responsibility and so on.			x		x	x	x	x		x					x								Inferred	V4		HD
45	Users can view the documentation used in handover in single or multi-patient views.		Multi-patient view: Night doctor covering a number of patients. Single patient view: information required to hand a patient over from one area to another, e.g. from theatre to recovery.			x		x	x	x	x							x								Document review	A53		DAS
58	Users can view an accurate, up to date list of patients (or items) that they are responsible for.	There may be patients who need handing over who have left hospital/are under the care of a different team/died/have not come in, but who do not appear on the ward (for example) yet.		x				x	x	x	x							x								Workshop	L49		HD
63	User can view all the items they are responsible for as a 'single' list.	Relates to RID 8.		x				x	x	x	x							x								Observation	James Fone		HD
71	Users are encouraged to handover items (e.g. patients) in order of priority.	Relates to RID 23 & 106. Contradicts RID 127.				x			x									x	x							User research	NATS		HD
82	Users can easily determine which items have been handed over and which are left to handover.		A 'handed over' status icon. Items can be physically referenced such as the paper strips used in Air Traffic Control.			x			x	x			x					x	x							Workshop			HD
84	Users can view and record handover information for items that do not conform to the standard physical locations dealt with. For example, patients who are in a corridor instead of in a ward bed, patients on the way to A&E, outpatients.	Occasionally, items (e.g. patients) will not conform to the standard location categories. If this happens the users should still be able to view and record the normal information about the items using the documentation used in handover. This might include items without a fixed location or items that have not yet arrived at the site of care.	In an emergency all of the usual bed locations are full and patients have to be kept in beds in the corridor.			x		x	x	x	x							x								Workshop			HD
85	Users can highlight and prioritise patients and non-patient tasks. Tasks can be highlighted and prioritised WITHIN a patient's dataset.	Patients may need to be highlighted in order to indicate priority. Non-patient tasks are OK to be prioritised. Patent-related task prioritisation could be dangerous, therefore the patients need to be prioritised first, followed by prioritisation of task for each patient.	Patients requiring review, urgent investigations, urgent results awaited, review before discharge.	x	x			x	x	x	x		x			x		x	x							Workshop			HD
104	Users must 'manually remove' tasks and items from being current in the system. For example, completed tasks are not automatically archived or removed once their due date has past. User intervention is required to remove and sign off tasks.	If the documentation used in handover represents a view of information that is broadly 'current' then 'old' information must somehow be removed from the current view (into some representation of the past). To ensure that users have acknowledged tasks and items these must be 'manually removed' from the current view, rather than automatically removed. Relates to RID 122.		x	x			x	x	x	x					x		x	x							Observation	James Fone		HD
106	Users can view items to handover - displayed in an appropriate order by default for their context (e.g. bed no, priority, time to be seen etc).	Relates to RID 23 & 106. Contradicts RID 127.	Ward patient lists are usually ordered by bed number.			x		x	x	x	x							x								Observation	James Fone		HD
119	Users have an indication of items that have recently left the area of responsibility (e.g. patients who have been discharged), and access to information about them.			x				x	x	x	x							x								User research	NATS		HD
120	Users can mark a patient for discharge without that patient actually being 'discharged' on the system.	Part of a patient's plan may be whether they are going to be discharged from a care setting in the near future. Currently, paper patient lists used in handover are used to mark which patients may be discharged.		x				x	x	x	x		x					x								User research	A62		HD
121	Users can view the empty beds within a set of beds e.g. a ward (where appropriate).		Empty beds per ward is featured on an existing handover system. It is also an implicit feature of paper patient lists and ward whiteboards.	x				x	x	x	x		x					x								User research	Jfone		HD
124	Users can add (and manage) tasks for items that are not currently in the location dealt with in the handover.		Patient who is coming in next week will need a blood test before their operation.		x			x	x	x	x					x		x											
127	Users are encouraged to handover items in a consistent order irrespective of the situation (e.g. bed order).	Contradicts RID 71. Related to RID 106 and 23.	Ward patients are usually handed over in bed number order.			x			x									x	x	x									
128	Users can view the handover summary and the 'full' information per item unfiltered, that is, not filtered to a particular user's role-based view.	Assumption is that users will view the information used in handover (whether a summary or full information) from a particular perspective e.g. a nursing view. However it must be possible to be able to see an unfiltered view, that is, everything. Related to the requirement to be able to do this for tasks. As to which should be the default view - it has not been defined.				x		x	x	x	x		x					x											

130	Users can filter the list of items (e.g. patients) displayed so as to show only 'problem' items.	Though by default a user may see all of the items that they are responsible for, for the sake of clarity it may be necessary to view only those items that are problematic or need attending to e.g. unstable patients.	A doctor working in hospital over the weekend can filter a list of 400 patients that they are responsible for over the whole hospital, to a list of 20 who are unstable and require regular review.			x		x	x	x	x							x												
133	Users can view and record information about patients that are not yet formally 'on the system' since they have only just become relevant.		A patient is coming in by ambulance but no details are known about them apart from their injury. So they are: 1) Not in the area of responsibility yet 2) Cannot be uniquely identified on the system.	x				x	x	x	x							x												
136	Users can clearly differentiate and filter to patients admitted during the previous shift. (Or some other pre-defined time period).			x				x	x	x	x							x												
140	Users can view and record status for non-patient items such as messages.		Items such as "can someone clean the fish tank" and "beware the fish tank is leaking badly" may need to have status e.g. 'acknowledged' / 'completed'.		x			x	x	x	x					x		x												
144	Users can clearly see the inclusion criteria for the list of items in the documentation used in handover. For example: all surgical patients, all paediatric patients, all ITU patients.					x		x	x	x	x							x												
146	Users can view generic clinical information related to local procedures, protocols and guidelines	Needs to have good generic information such as a broad context for the patient group , e.g.. All surgical patients in hospital Access to local protocols and procedures Emergency procedures, e.g. what to do in case of fire, violence, etc.		x					x	x	x		x						x	x							Meeting	dience review			IL
GOOD PRACTICE																															
6	Users can view the information used in handover on a variety of sizes and types of Display.			x				x	x	x	x								x							User research	L2, L3, V1		HD	
7	Data is displayed according to the relevant NHS data standards, e.g. format for date display.	Some data will have NHS standards that apply to how it is displayed e.g. patient name, date of birth and so on. Data displayed for use in handover must conform to these standards.	CUI date display.	x				x	x	x	x								x							Observation	V1		HD	
9	All users can update the documentation used in handover, during handover. In addition, these updates should be reflected in the patient record, i.e. in the source data.	Users giving, receiving and present in handover may need to update the documentation used in handover. The degree to how simultaneous this is must be further defined. As usual, these updates are performed on the 'source data' not just a 'handover copy'.				x			x	x									x		x					Meeting	CUI		HD	
11	Users can clearly and uniquely identify patients using standard NHS patient identifiers. (EXAMPLE DATASET PART)	There needs to be clear identification of which patient is being handed-over in both the documentation used in handover and any verbal handover. NHS standards on patient identification should be followed here.	Possible set: (full name, dob, NHS number, location)	x				x	x	x	x		x	x					x			x				Meeting	V1		HD	
12	Users are clear about who has responsibility for the items involved in handover, during and after the handover, especially at the point that responsibility is transferred. An item cannot be 'no-ones' responsibility.	User's care is clear about who is responsible for the items being handed over (e.g. patient's) at all stages. Relates to generic requirement 64.				x		x	x	x	x		x		x				x							Meeting	CUI		HD	
14	Users can view the documentation used in handover from the point of view of other users, e.g. nurses can see a doctor's view of the handover information.	When there is handover between two roles, agendas and views about the patient may differ, in some cases considerably. Both users will need to be aware of the other's perspective. Related to RID 90. Doctors and nurses often look at, and use each other's handover documents to help them structure their work and communicate.	Handover between two roles. A junior doctor being able to apply their consultant's summary view on the same set of in-patients during a hospital stay, in order to assess whether they have done the necessary tasks.			x		x	x	x	x		x					x	x							User research	V2, L45		HD	
15	Users can view information that comes from any relevant NHS system, that is, NHS/Social care systems are interoperable.	Data must be immediately transferable/available to the receiving clinicians once handover has taken place, and in some cases beforehand.		x				x	x	x	x								x							Meeting	CUI		HD	
18	Users can monitor the documentation used in handover when they are physically away from the place of handover and the items being handed over. Remote users can also be aware of items they have been made responsible for while located elsewhere	Some users may want to remotely monitor the items that are under the responsibility of their team or that might be/have been their responsibility. This can be done by being able to monitor both the documentation used in handover. Relates to RID 118. They will also need to be able to be aware of items that they have become responsible for e.g. new tasks.	A paediatric SHO working down in A&E wants to be able to monitor the patients on the children's ward and to see if they have been allocated any tasks in their absence from the ward.			x		x	x	x	x					x			x							Observation	V3, V4		HD	
26	Users are supported in having handovers involving a large group of people from different roles.	Typically MDT meetings. Relates to RID 1. Necessary to have adaptable summary of patients and handover lists.				x		x	x	x	x								x							Observation	V4		HD	
28	Users can record information that is uniquely part of the handover process. This is distinct from the information that is being handed over.	Users may need to record information about the reason for the handover, as well as the information that they are handing over. This information will be unique to the handover event.	If there is a rationale for a handover such as "please clean fridge" or "please check bloods for patient x".			x		x	x	x	x		x						x							Meeting	CUI		HD	
30	Users are not inhibited in further patient care even if the handover process is incomplete.	Handover may not happen/be incomplete or late - users must still be able to care for the patient and use the patient's record even if this is the case. (The incomplete process should be documented).	If handover cannot take place and therefore is not documented, users are not locked out of that patient's record until the handover has been accepted.			x			x	x	x				x				x							Meeting	CUI		HD	

33	Users can easily and quickly make updates to information during handover (including tasks). These updates are reflected in the patient's record.	Users need to be able to add tasks and change information during the handover without overly disrupting the handover. Any changes made to the information must be part of the 'source' information and not solely made on a 'handover copy' of it. If it is too arduous to add a task at handover it may lead users to resorting to paper notes.	On-call is often the time when the most difficult patients to handover are those that are sick and have just arrived, and may not be on the computer system/list. Therefore key information may be disseminated verbally at handover which is not currently written. It would be useful to capture this.			x			x	x			x			x			x		x					Inferred	V4		HD
34	Depending on context, users can view documentation for handover that is continually up to date.	Though it will be useful if documentation used in handover is as up to date as the situation allows, in some contexts there will be extra importance attached to having a 'real-time' view on the set of information. A continually updated view may of course be useful for things other than handover. Some clinical areas require an ad-hoc handover resource which is up-to-date all the time, current examples include a shared whiteboard or an annotated ward list. These form the basis of handovers.	Ward whiteboards currently fulfil this function in hospitals (A&E and labour wards often have more detail). Communal patient lists such as handover diaries may attempt to provide a similar function.			x		x	x	x	x		x			x	x		x							User research	V9		HD
36	Users can handover items (e.g. patients or tasks for patients) outside of a designated 'handover' time. Handover initiation and acceptance works as usual.	Handover will not just occur at shift handovers or main 'handover events'. Smaller ad-hoc handovers such as for one task must be possible, as well as the effective management of this handover.	For jobs that occur during a shift that a nurse needs to let another nurse or a doctor know that they need doing, there needs to be a system for distributing, tracking and completing the task.			x			x	x					x				x							User research	V11		HD
37	Users can collect, analyse and report on the information relating to the handover event, and the information used in the handover. This may be used to plan and allocate resources.		Senior staff can tell how long the handovers are taking, what proportion are being carried out unsatisfactorily, how many jobs staff are being required to do, etc.			x					x								x							User research	V11, L45		HD
38	Users can handover satisfactorily in exceptional circumstances, such as when no documentation has been completed.		Ambulance services transferring someone acutely before documentation has been done.			x		x	x	x	x				x				x							Meeting	CUI		HD
39	Users can update the information before, during and after handover. These updates are performed on the patient record.	If a user updates information used in the handover they update the source of the information - not just a 'handover copy'. Appropriate mechanisms should be in place to ensure that any additional information input to the record after the handover, by the giver, is flagged to the receiver.	For example, adding a task to the 'master' task list for the patient			x		x	x	x	x								x		x					User research	V29		HD
46	Where there is the suspicion that information used in handover is incorrect or there are discrepancies between two sources of information, users can easily identify which information is correct or initiate processes to identify this.	The preparation for handover is often a process of working out what information is correct e.g. has the patient had this particular task done yet? During this, users need to be able to identify which is the correct (e.g. most up to date) information.	The handover documentation says that the patient has not had their medication, but their nurse says that they have.			x		x	x	x	x								x							Focus groups	CUI		HD
47	All users involved in a handover can read the documentation used in handover simultaneously.		The handover information may be communally displayed on the wall.			x			x	x									x							Workshop	L49		HD
59	Users of different roles, and individuals within those roles can use the list of items used in handover as personal 'tick-lists'.	Once a list of patients has been created, different users may want to use that list to check-mark whether they have completed an action in relation to each of the patients in that list. This may be actions that are in addition to the formal task management.	A pharmacist can tick off patients they have reviewed on the ward, SHOs can tick off patients that have been seen on the ward round, physician assistants can tick off the patients whose records they have checked for blood test requests.	x				x	x	x	x		x						x							Workshop	L49		HD
62	Users are encouraged to use written documentation as well as the verbal channel during handover.	Currently many handovers are purely verbal. Though verbal handover is useful, supplementing with written documentation (even just that the handover has taken place) is a good idea.	There is a list of patients to be handed over that is communally discussed at the handover.			x		x	x	x	x								x	x						User research	LAS		HD
64	Users are clear, at all times, who has responsibility for an item (such as a patient).	Generic version of RID 12.				x		x	x	x	x				x				x							User research	LAS		HD
65	Users can take account of contextually relevant handover information structures when verbal and written information is handed over.	Some contexts use predefined structures to aid the collation of handover information, the handing over of information and set the expectations of those users being handed over to. The communication of these structures may be made explicit in the written handover information.	Current usage of structure for handover information: MIST for paramedics - (made explicit in handover interface), WEST acronym in air traffic control shift handover, 'system' headings in some nursing shift summary documentation (e.g. breathing, mobility, etc).			x		x	x	x	x		x						x							User research	LAS		HD
66	Users are able to prepare a summary of information to be handed over, if necessary, even if such a summary already exists e.g. if automatically generated.	Preparing a written summary of handover information prior to handover even if one is automatically generated is a loose interpretation of a handover strategy identified by Patterson et al. The idea is that automatically generated summaries do not require users to really think about the handover data. See RID 79.	Prior to handover users giving handover write a short summary of the important issues (with the item's) they are going to handover.			x		x	x				x						x	x						User research	LAS		HD
67	Users are encouraged to question the user handing over.	Interactive questioning is a handover strategy identified by Patterson et al. With comprehensive, automatically generated handover documentation there is a danger that neither side of the handover seeks to question the data or delve deeper beyond what is presented.	User handing over says that the patient has been vomiting quite a lot, the users being handed over to ask whether this is just after eating food or continually.			x			x										x	x						User research	NATS		HD

68	Users can easily identify data missing from the expected handover dataset for that context. Especially relevant to users receiving handover.		The patient's name, date of birth and number are missing from a 'John Doe' patient still to be identified after a major trauma incident.			x		x	x	x	x		x						x								User research	NATS		HD
69	Users can temporarily alter the 'richness' of the data display in order to bring clarity to salient details.		Where there is a handover such as in ITU with a lot of information being transferred, it may be useful to increase or decrease the level of detail of that handover, e.g. fading in/out of observations next to summaries.			x		x	x	x	x		x						x								User research	NATS		HD
70	Users can initiate or delay the handover if necessary. This is especially relevant for non-scheduled handovers.		In paramedic handover to A&E the user handing over makes a request for handover, this can be delayed by the user they are trying to handover to.			x			x	x									x								User research	NATS		HD
71	Users are encouraged to handover items (e.g. patients) in order of priority.	Relates to RID 23 & 106. Contradicts RID 127.				x			x									x	x								User research	NATS		HD
72	Users can handover according to information governance and privacy considerations. That is to say, is it not easy for other patients to see/overhear handovers about other patients.	Handovers will usually contain private information and information which other patients should not see or hear. Currently handover often has to be conducted in communal areas due to space limitation or the fixed location of artefacts used in handover e.g. a whiteboard. Future handover should try to minimise the necessity to handover in places where other patients might overhear.	Communal artefacts such as detailed labour ward whiteboards are useful for handover (so should be in private), but also useful to be able to access very easily (so should be in public areas). Linked electronic large-scale displays could allow handover information to be in a private room, and ward information to be on public view.			x			x				x							x								User research	LAS		HD
73	Users can review the documentation to be used in handover, prior to the handover taking place.	It is good practice that users receiving handover make themselves aware of the situation before the handover takes place. Therefore the documentation to be used in handover should be available for them to review before the handover. This documentation may include the equivalent of 'activity logs'.	While waiting for the shift handover to take place, the nurse can read the observation charts to get an overall picture of how the patient has been doing. Once the handover takes place they can ask questions about the information they have seen.			x		x											x								User research	L15		HD
76	Users see information displayed using symbols and abbreviations that they can clearly understand. This implies those in standard use in the NHS.	Symbols and abbreviations must be clearly understood by all users. Symbols and abbreviations may not be NHS data standards but they should conform to those in use in the NHS.	Mg, Mcg, 3/7, TTO, (?)	x				x	x	x	x								x								Workshop	L45		HD
78	All users are encouraged to take ownership of the information in the shared documentation used in handover.	Where documentation used in handover is used communally e.g. patient records, this should mean that everyone takes responsibility for it's accuracy and for being up to date, rather than nobody. How this might be achieved is unclear.				x		x	x	x	x								x	x							User research	NATS		HD
79	Users do not have to duplicate existing information unnecessarily in order to prepare for handover. That is to say, information duplication should be minimised.	When preparing for handover, the duplication of existing data should be minimised for users. Where possible, information is 'automatically populated' in documentation used in handover. Data duplication MAY be necessary if deemed an appropriate handover strategy (see RID 66).				x		x											x								Workshop			HD
80	All users can update the documentation used in handover simultaneously before, during and after handover. This does not extend to being able to update the same bit of data simultaneously. The clinical application conventions for update management should be followed.	Related to RID 9, 33, 39.	The outgoing users may have forgotten to add something and the incoming may want to make notes on the same patient during handover. Currently some wards may have handover documents as shared files on a network, this means that only one person can update the document (for all patients on the ward) at a time.			x		x	x	x	x								x		x						Workshop			HD
81	Users are encouraged to use standardised handover processes and information (relevant to their context).	Although it is inevitable that people will adapt the system to their own needs, and furthermore NEED to be able to do this, there should be some attempt and standardisation through good practice across the health sector.	Paramedic handover standards.			x							x						x	x							Workshop			HD
82	Users can easily determine which items have been handed over and which are left to handover.		A 'handed over' status icon. Items can be physically referenced such as the paper strips used in Air Traffic Control.			x			x	x			x					x	x								Workshop			HD
85	Users can highlight and prioritise patients and non-patient tasks. Tasks can be highlighted and prioritised WITHIN a patient's dataset.	Patients may need to be highlighted in order to indicate priority. Non-patient tasks are OK to be prioritised. Patent-related task prioritisation could be dangerous, therefore the patients need to be prioritised first, followed by prioritisation of task for each patient.	Patients requiring review, urgent investigations, urgent results awaited, review before discharge.	x	x			x	x	x	x		x			x		x	x								Workshop			HD
86	Users are encouraged to have a synchronous handover.	With accurate, easily accessible, up to date documentation, users might be discouraged from having synchronous handovers. However, they should be encouraged to have synchronous handovers.	Handover protocols seem a likely way to encourage synchronous handover. Monitoring of the handover 'handshake' could be a way to check whether this was happening.			x			x										x	x							Workshop			HD
88	Users can make personal notes during the handover. These notes are recorded by the system, but not necessarily part of any patient's record. (Governance)	Some users currently take notes during handover in order to help them manage/remember tasks/information. The act of taking notes may help users remember them, rather than using the notes as a memory aid. Taking personal notes is not intended to be a facility for staff to record information that they want to transfer informally (e.g. 'this patient is a nightmare'). Because personal notes might be used in this way, this requirement may need to be reconsidered.				x			x				x						x								Workshop			HD

91	Users can view patient observations that have been electronically captured and automatically populated in the system. Automatic alerts can be associated with parameters.	Increasingly, patient observations are being captured electronically and can be fed into patient records and monitored remotely. Documentation used in handover may utilise these is some situations.	There is an existing handover system that has an alert flag associated with automatically captured parameters as part of the handover dataset.	x				x	x	x	x		x				x		x							Observation	Henry Dowlen	VitalPAC	HD
93	Users can include audio or video information as part of the documentation used in handover.	In some contexts asynchronous handover (or partly asynchronous handover) is carried out using audio recording. This has some disadvantages, but may be useful in some circumstances. Audio and video documentation may also be an important part of the 'normal' patient record, e.g. a video of surgery.	Nurses in intensive care can record short audio summaries for patient handover in situations where there is not time to have a full written documentation-supported handover.			x		x	x	x	x		x						x							Observation	Henry Dowlen		HD
94	Users can use machine-readable identification to support patient identification.		Bar coding, RFID tags.	x				x	x	x	x								x			x				Observation	Henry Dowlen		HD
96	Users can print out aspects of the documentation used in handover, such as lists of patients to be handed over. These printouts will be subject to information governance rules. Care must be taken that printouts do not discourage users from using the electronic documentation.	Currently handover documentation is on paper, often printed patient lists. This is because of their mobility and ease of updating. However, paper lists have considerable disadvantages and therefore great care must be taken with their use - users must not be discouraged from viewing or updating the electronic documentation. In addition, there should be strict information governance rules about the use of the printouts e.g. that leaving them lying around is a disciplinary offence.		x				x	x	x	x								x	x						Observation	Henry Dowlen		HD
99	Users have minimal interruption while handover is going on.		An 'intelligent' messaging system could defer all non-urgent messages sent to the users involved in handover until after the handover has finished.			x			x	x									x							User research	L15		HD
101	Users are encouraged to establish a leader for the handover.	It is not clear from the handover literature whether there should be one leader for the handover, or a leader for the receiving and a leader for the giving of handover. A single leader is likely to be the more practical.				x		x	x	x	x								x							User research	L15		HD
103	Users are not be unduly constrained to have a handover in a fixed place, time and duration. However, they may be encouraged to do so.	It is good practice to have handovers at a fixed place, fixed time and for a roughly pre-determined duration. However it may be necessary to alter these according to circumstances. Users should still be able to handover as usual in these differing circumstances.	Due to an electrical fault, handover has to be moved to another room. Users involved can be notified ahead of time and can use another large screen Display to display the documentation used in handover.			x		x	x	x									x							User research	L25		HD
104	Users must 'manually remove' tasks and items from being current in the system. For example, completed tasks are not automatically archived or removed once their due date has past. User intervention is required to remove and sign off tasks.	If the documentation used in handover represents a view of information that is broadly 'current' then 'old' information must somehow be removed from the current view (into some representation of the past). To ensure that users have acknowledged tasks and items these must be 'manually removed' from the current view, rather than automatically removed. Relates to RID 122.		x	x			x	x	x	x					x		x	x							Observation	James Fone		HD
105	Users are prevented from accidentally updating the information used in handover.	Generic application requirement.		x															x		x					Observation	James Fone		HD
107	For certain handover contexts, users are discouraged from initiating certain kinds of actions during the handover as they may distract the users from handover itself.	During handover, users should be focused on the handover. With the possibility of being able to initiate actions at any time (e.g. computerised order entry), users may be tempted to carry out actions while the handover is ongoing. In some circumstances users should be encouraged to focus on the handover as opposed to immediately carrying out the actions identified in handover. Carrying out these actions MAY distract the users from handover and MAY increase the length of handover.	If users in handover try to order tests electronically during shift handover they receive a warning message reminding them that they should defer this action until after handover. This warning message is communally displayed so that all users in handover can see that the user is potentially not giving their full attention to the handover. During some types of handover it may be advantageous to order tests such as during a handover on a post-take ward round.			x			x	x									x	x						User research	L15		HD
108	For certain handover contexts, users are encouraged to 'read back' key information to ensure correctness.	For critical information, 'read back' helps ensure correctness. Certain handover contexts will require an extra degree of certainty in information handed over.	Where handover is not face-to-face and two patients have very similar names on the same ward, and one patient is not for resuscitation, the user receiving handover should read back the name and DNR status of that patient. This could be encouraged via a reminder prompt.			x			x	x									x	x						User research	L15		HD
109	Users are encouraged to clarify ambiguous information used in handover.	Users RECEIVING handover in particular should be encouraged to clarify ambiguous information with the user handing over.				x			x	x			x						x	x						Workshop			HD
110	Users can access documentation to be used in handover that is a single reliable source.	Currently handover is often done using multiple paper sources of information, therefore it is often laborious or hard to determine what is the most up to date information.		x				x	x	x	x								x							Workshop			HD
111	Users can access the documentation used in handover at all times and places during their work.			x				x	x	x	x								x							Workshop			HD

112	Users can update the documentation used in handover for items they are responsible for, e.g. nurses looking after patients update the documentation for those patients.	The users who are responsible for particular items update those items in the documentation themselves; rather than the documentation to be used in handover being updated by a third party e.g. a ward manager, or a 'documentation administrator'.				x		x											x		x					Observation	James Fone		HD
114	Users have access and update control restricted according to their profile.			x				x	x	x	x								x		x					Observation	Henry Dowlen		HD
116	Users in handover can view the same handover documentation whether they are co-located or not.	Handover in some contexts may have to occur over the phone. The same documentation used in handover needs to be available to both users.				x			x	x					x				x							User research	L5		HD
118	Users can 'externally' monitor the documentation of the handover event. Users who were not present at the handover can understand what took place (users may not be physically located at the place the handover is taking place, or they could miss it altogether).	Some users such as senior staff on call may want to monitor the status of their team and the status of the items under the responsibility of their team. This can be done by being able to monitor both the documentation used in handover and the documentation of the handover event (including 'handshake'). Relates to RID 18.	A consultant on call can access the handover summary via the internet.			x		x	x	x	x				x				x							User research	LAS		HD
127	Users are encouraged to handover items in a consistent order irrespective of the situation (e.g. bed order).	Contradicts RID 71. Related to RID 106 and 23.	Ward patients are usually handed over in bed number order.			x			x									x	x	x									
134	Users are encouraged to check information for any 'automatic' information population of the documentation used in handover to avoid data duplication.					x		x	x	x	x		x						x	x									
135	Users can have information used in handover forwarded to them.		iBleep system.			x		x	x	x	x								x										
142	Users can access basic management and organisational information on hospital procedures, line management, access to services, consultant on call, etc.			x				x	x	x	x								x										
143	Users can access local clinical processes, procedures and protocols			x				x	x	x	x								x										
146	Users can view generic clinical information related to local procedures, protocols and guidelines.	Needs to have good generic information such as a broad context for the patient group , e.g. all surgical patients in hospital. Access to local protocols and procedures, emergency procedures, e.g. what to do in case of fire, violence, etc.		x					x	x	x		x					x	x							Meeting	dience review		IL
147	Users can view management information such as name of their line manager or consultant in charge.			x					x	x									x							Meeting	dience review		IL
148	Users should be able to use historical data in resource and human management systems and for commissioning purposes.			x							x								x							Meeting	dience review		IL
ENCOURAGEMENT/DISCOURAGEMENT																													
56	Users are able to log incomplete tasks				x			x	x	x	x					x				x						Observation	James Fone		HD
62	Users are encouraged to use written documentation as well as the verbal channel during handover.	Currently many handovers are purely verbal. Though verbal handover is useful, supplementing with written documentation (even just that the handover has taken place) is a good idea.	There is a list of patients to be handed over that is communally discussed at the handover.			x		x	x	x	x								x	x						User research	LAS		HD
66	Users are able to prepare a summary of information to be handed over, if necessary, even if such a summary already exists e.g. if automatically generated.	Preparing a written summary of handover information prior to handover even if one is automatically generated is a loose interpretation of a handover strategy identified by Patterson et al. The idea is that automatically generated summaries do not require users to really think about the handover data. See RID 79.	Prior to handover users giving handover write a short summary of the important issues (with the item's) they are going to handover.			x		x	x				x						x	x						User research	LAS		HD
67	Users are encouraged to question the user handing over.	Interactive questioning is a handover strategy identified by Patterson et al. With comprehensive, automatically generated handover documentation there is a danger that neither side of the handover seeks to question the data or delve deeper beyond what is presented.	User handing over says that the patient has been vomiting quite a lot, the users being handed over to ask whether this is just after eating food or continually.			x			x										x	x						User research	NATS		HD
78	All users are encouraged to take ownership of the information in the shared documentation used in handover.	Where documentation used in handover is used communally e.g. patient records, this should mean that everyone takes responsibility for it's accuracy and for being up to date, rather than nobody. How this might be achieved is unclear.				x		x	x	x	x								x	x						User research	NATS		HD
81	Users are encouraged to use standardised handover processes and information (relevant to their context).	Although it is inevitable that people will adapt the system to their own needs, and furthermore NEED to be able to do this, there should be some attempt and standardisation through good practice across the health sector.	Paramedic handover standards.			x							x						x	x						Workshop			HD
86	Users are encouraged to have a synchronous handover.	With accurate, easily accessible, up to date documentation, users might be discouraged from having synchronous handovers. However, they should be encouraged to have synchronous handovers.	Handover protocols seem a likely way to encourage synchronous handover. Monitoring of the handover 'handshake' could be a way to check whether this was happening.			x			x										x	x						Workshop			HD

96	Users can print out aspects of the documentation used in handover, such as lists of patients to be handed over. These printouts will be subject to information governance rules. Care must be taken that printouts do not discourage users from using the electronic documentation.	Currently handover documentation is on paper, often printed patient lists. This is because of their mobility and ease of updating. However, paper lists have considerable disadvantages and therefore great care must be taken with their use - users must not be discouraged from viewing or updating the electronic documentation. In addition, there should be strict information governance rules about the use of the printouts e.g. that leaving them lying around is a disciplinary offence.		x				x	x	x	x								x	x						Observation	Henry Dowlen		HD
107	For certain handover contexts, users are discouraged from initiating certain kinds of actions during the handover as they may distract the users from handover itself.	During handover, users should be focused on the handover. With the possibility of being able to initiate actions at any time (e.g. computerised order entry), users may be tempted to carry out actions while the handover is ongoing. In some circumstances users should be encouraged to focus on the handover as opposed to immediately carrying out the actions identified in handover. Carrying out these actions MAY distract the users from handover and MAY increase the length of handover.	If users in handover try to order tests electronically during shift handover they receive a warning message reminding them that they should defer this action until after handover. This warning message is communally displayed so that all users in handover can see that the user is potentially not giving their full attention to the handover. During some types of handover it may be advantageous to order tests such as during a handover on a post-take ward round.			x			x	x										x	x						User research	L15		HD
108	For certain handover contexts, users are encouraged to 'read back' key information to ensure correctness.	For critical information, 'read back' helps ensure correctness. Certain handover contexts will require an extra degree of certainty in information handed over.	Where handover is not face-to-face and two patients have very similar names on the same ward, and one patient is not for resuscitation, the user receiving handover should read back the name and DNR status of that patient. This could be encouraged via a reminder prompt.			x			x	x										x	x						User research	L15		HD
109	Users are encouraged to clarify ambiguous information used in handover.	Users RECEIVING handover in particular should be encouraged to clarify ambiguous information with the user handing over.				x			x	x			x							x	x						Workshop			HD
127	Users are encouraged to handover items in a consistent order irrespective of the situation (e.g. bed order).	Contradicts RID 71. Related to RID 106 and 23.	Ward patients are usually handed over in bed number order.			x			x										x	x	x									
134	Users are encouraged to check information for any 'automatic' information population of the documentation used in handover to avoid data duplication.					x		x	x	x	x		x							x	x									
UPDATING																													
9	All users can update the documentation used in handover, during handover. In addition, these updates should be reflected in the patient record, i.e. in the source data.	Users giving, receiving and present in handover may need to update the documentation used in handover. The degree to how simultaneous this is must be further defined. As usual, these updates are performed on the 'source data' not just a 'handover copy'.				x			x	x									x		x						Meeting	CUI		HD
33	Users can easily and quickly make updates to information during handover (including tasks). These updates are reflected in the patient's record.	Users need to be able to add tasks and change information during the handover without overly disrupting the handover. Any changes made to the information must be part of the 'source' information and not solely made on a 'handover copy' of it. If it is too arduous to add a task at handover it may lead users to resorting to paper notes.	On-call is often the time when the most difficult patients to handover are those that are sick and have just arrived, and may not be on the computer system/list. Therefore key information may be disseminated verbally at handover which is not currently written. It would be useful to capture this.			x			x	x			x			x				x		x						Inferred	V4		HD
39	Users can update the information before, during and after handover. These updates are performed on the patient record.	If a user updates information used in the handover they update the source of the information - not just a 'handover copy'. Appropriate mechanisms should be in place to ensure that any additional information inputed to the record after the handover, by the giver, is flagged to the receiver.	For example, adding a task to the 'master' task list for the patient			x		x	x	x	x									x		x						User research	V29		HD
80	All users can update the documentation used in handover simultaneously before, during and after handover. This does not extend to being able to update the same bit of data simultaneously. The clinical application conventions for update management should be followed.	Related to RID 9, 33, 39.	The outgoing users may have forgotten to add something and the incoming may want to make notes on the same patient during handover. Currently some wards may have handover documents as shared files on a network, this means that only one person can update the document (for all patients on the ward) at a time.			x		x	x	x	x									x		x						Workshop			HD
105	Users are prevented from accidentally updating the information used in handover.	Generic application requirement.		x																x		x						Observation	James Fone		HD
112	Users can update the documentation used in handover for items they are responsible for, e.g. nurses looking after patients update the documentation for those patients.	The users who are responsible for particular items update those items in the documentation themselves; rather than the documentation to be used in handover being updated by a third party e.g. a ward manager, or a 'documentation administrator'.				x		x												x		x						Observation	James Fone		HD
114	Users have access and update control restricted according to their profile.			x				x	x	x	x									x		x						Observation	Henry Dowlen		HD
141	Users can view provenance for information such as when it was last updated.			x				x	x	x	x		x									x									
PATIENT IDENTIFICATION																													

11	Users can clearly and uniquely identify patients using standard NHS patient identifiers. (EXAMPLE DATASET PART)	There needs to be clear identification of which patient is being handed-over in both the documentation used in handover and any verbal handover. NHS standards on patient identification should be followed here.	Possible set: (full name, dob, NHS number, location)	x				x	x	x	x		x	x					x			x				Meeting	V1		HD
49	Users can view and record patient demographics and attributes that make up a unique patient identifier. (EXAMPLE DATASET PART)		Name, dob, location, contact details, next of kin, NHS number, photo, bar coding.	x				x	x	x	x		x	x								x				Document review	All		HD
77	Users in certain contexts can use supplementary patient identifiers in addition to the standard NHS set.	Not all contexts that clinical handover occurs in may be able to uniquely identify a patient with standard NHS identifiers alone. Supplementary identifiers should be used as appropriate.	Social security number for handover involving social services.	x				x	x	x	x		x									x				Meeting	CUI		HD
94	Users can use machine-readable identification to support patient identification.		Bar coding, RFID tags.	x				x	x	x	x								x			x				Observation	Henry Dowlen		HD