



Dubai Health Authority

NABIDH Program

HL7 API Documentation – Code Tables V01

Version 1.0

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1. Introduction

1.1. Overview of API Documentation

1.2. About this Document

Effective sharing of clinical patient information between providers involved in patient care is widely regarded as a key strategy to improve healthcare outcomes. NABIDH collects, aggregates, normalizes, and presents clinical patient data from various organizations in support of this strategy.

This document outlines the integration implementation guidelines that will be used by the facilities in Dubai to provide patient clinical data to NABIDH Health Information Exchange (HIE) solution. The facilities EMR system will send patient clinical information to NABIDH via HL7 message format and/or C-CDA message format. The following are incorporated in and made part of this document structure:

- HL7 V2.5 Message Structure Specifications
 - ADT Messages sending patients admitting/discharge or transfer information,
 - ORM Messages sending notification for placing new orders, cancellation of existing orders, discontinuation, holding, etc.
 - RDE Messages sending notifications related to single order or multiple pharmacy or treatment application's encoding of the pharmacy/treatment order.
 - MDM Messages sending patient documents details such as Discharge summary, History and physical examination, Procedure note, Transfer summary, etc.
 - VXU Messages sending patient immunization information.
- CCDA Message Structure Specifications
 - C-CDA Messages sending patient clinical data in CDA document format.
- NABIDH Coding Guidelines
 - NABIDH defined code tables About Facilities and how they can use this Portal (Target Audience)

Provider Data Source (Sending Organization): Collects patient registration and clinical information within healthcare EMR system. Forwards this information to NABIDH (Receiving Organization) system. This document will help the providers technical team to build the integration program to send the patient data against the message specifications details mentioned in the following sections.

DHA NABIDH and HIE (Receiving Organization): Receives patient registration and clinical information from Provider Data Source (Sending Organization). NABIDH system to have Clinician Portal where Facilities and Practitioners can access the patient unified care record. NABIDH system will also have separate Patient Portal for the patients where they can access their patient information received from multiple Provider Data Sources.

1.3. NABIDH Supported Message Content

NABIDH HIE platform currently supports HL7 v2.5 and C-CDA v2.1, and facilities EMR system shall comply with the messages specifications details, segments, fields, and the implementation guidelines provided in this document.

Message conforming to HL7 v2.5 standards are identified as ADT, ORM, ORU, RDE, MDM and VXU message types and C-CDA v2.1 standards are identified as ITI-41 Provide and register document (v3) and ITI-44 Patient Add / Update (v3) message types.

2. Data Flow Diagram

2.1. Inbound Data Flow and Integration Architecture

Following diagram depicts the inbound data flow and integration architecture details to explain how the patient data will be exchanged to and from DHA NABIDH and HIE system to perform specific transactional operations. Each message is meant to perform specific tasks when it is triggered for Example ADT^A01: to admit, discharge and transfer a patient.

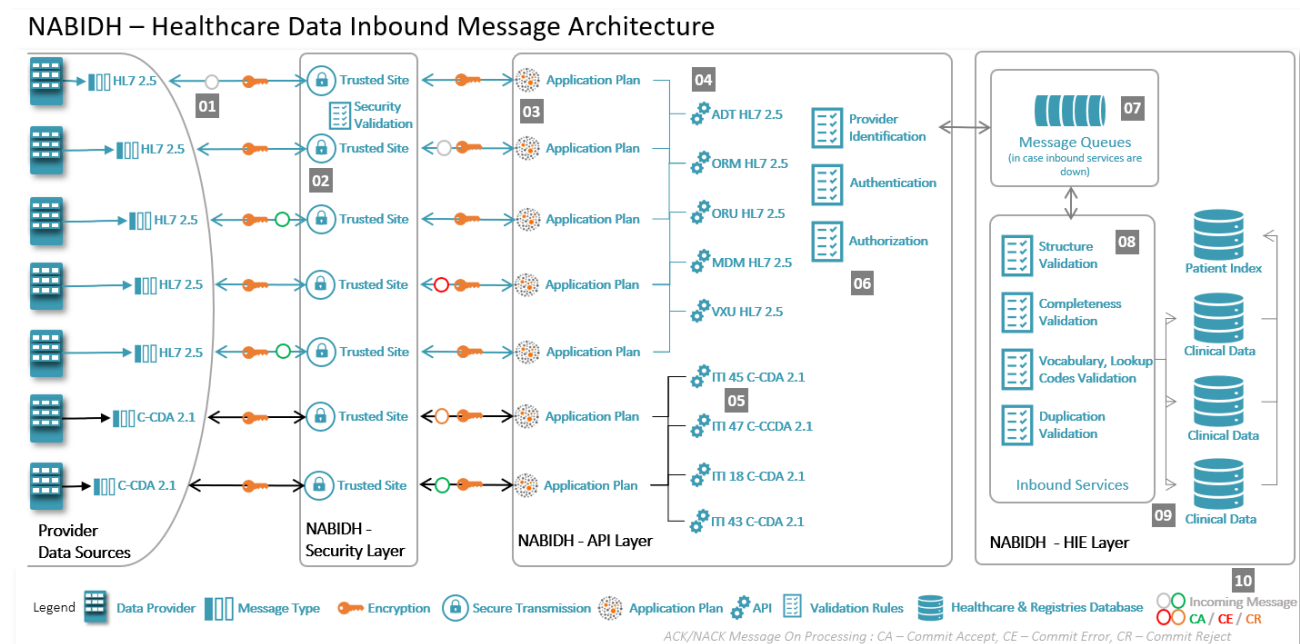


Figure 1- Inbound Data Flow and Integration Architecture

To begin receiving an HL7 message from a facility to HIS system you need to check the connectivity to the endpoints. A coded HL7 message is triggered from the facilities (provider trusted websites), the message passes through three integrated layers of NABIDH (Security Layer > API Layer > HIE Layer). Initially, a message is received from a provider facility and an authorization and authentication process is performed on it, the message goes through the NABIDH security layer after verification and validation. The next step is HL7 message touches the API layer and again here identification, authentication and authorization is performed on it. The messages successfully pass the API layer when authenticated, otherwise the system triggers an error message. If the message is authenticated successfully, the message is queued at HIE layer where the message undergoes the structure, completeness, code validation process and checked for duplication and then reaches the subsequent patient inbox, clinical data if needed to be accessed and exchanged with the facilities. Each message has its unique transactional task when triggered for example ADT when triggered will facilitate patient admission, discharge, and transfer.

Below table provide description of the data flow and architecture details to the reader to establish better understanding around the NABIDH HIE integration solution.

Ref	Reference Description	Ref	Reference Description
01.	Provider Data Source sends HL7 v2.5 message or C-CDA v2.1 message	02.	NABIDH Security Layer validates the sending organization integration system
03.	NABIDH API Layer identifies the message against Application Plan created for the Provider and calls relevant API based on the trigger event.	04.	Relevant HL7 API then authenticates the message, authorizes the message, and send it to HIE Layer
05.	Relevant C-CDA API then authenticates message, authorizes the message, and send it to HIE Layer	06.	This shows the validation rules that will be performed at the API Layer.
07.	HIE Queue receives the message from API Layer and sends to HIE Inbound Services	08.	HIE Inbound Services will validates the message content and stores the message in HIE databases
09.	This shows HIE clinical data sources	10.	This shows message commit acknowledgement values, CA (used for ACK), CE (used for NACK), CR (used for NACK)

2.2. Code Sets

Below are the guidelines defined and mandate by DHA Regulations, valid codes should be set as per these guidelines.

ID	Field Name	Implementation Guidelines
PID.12	Country	https://www.eclaimlink.ae/dhd_codes.aspx (DHA/eClaim)
PID.28	Nationality	https://www.eclaimlink.ae/dhd_codes.aspx (DHA/eClaim)
DG1.3	Diagnosis Code – DG1	https://www.eclaimlink.ae/dhd_codes.aspx (ICD10 CM codes should be sent)
DRG.1	Diagnostic Related Group	https://www.eclaimlink.ae/dhd_codes.aspx (IR-DRG)
PR1.3	Procedure Code	https://www.eclaimlink.ae/dhd_codes.aspx (CPT4 codes should be sent, CDT codes should be sent for dental)
RXO.1	Requested Give Code	https://www.eclaimlink.ae/dhd_codes.aspx (DDC)
RXE.2	Give Code	https://www.eclaimlink.ae/dhd_codes.aspx (DDC)
RXA.5	Administered Code	https://www.eclaimlink.ae/dhd_codes.aspx (DDC)

2.3. Code Tables

The following tables are defined for use in fields of data types ID, IS and CE. The code tables listed here are, meant to be user defined, meaning that they are defined by HealthShare rather than the HL7 agency. Sending in values other than those specified may affect what is displayed in the Clinical Viewer.

Values derived from tables not listed in this section shall be used according to the rules published in the HL7 v2.5 standard for such tables and the data types of the elements in which they are sent.

Table NAB001: Administration Sex

If no gender is submitted, the patient’s gender will appear in the Clinical Viewer as “NS,” for “Not Specified.”

Value	Description	Comment
A	Ambiguous	
F	Female	
M	Male	
N	Not applicable	
O	Other	
U	Unknown	

Table NAB002: Marital Status

Value	Description	Comment
A	Separated	

B	Unmarried	
C	Common law	
D	Divorced	
E	Legally Separated	
G	Living together	
I	Interlocutory	
M	Married	
N	Annulled	
O	Other	
P	Domestic partner	
R	Registered domestic partner	
S	Single	
T	Unreported	
U	Unknown	
W	Widowed	

Table NAB003: Religion

Value	Description	Comment
BMA	Buddhist: Mahayana	
BTH	Buddhist: Theravada	
BUD	Buddhist	
CAT	Christian: Roman Catholic	
CHR	Christian	
ERL	Ethnic Religionist	
HIN	Hindu	
HOT	Hindu: Other	
HSH	Hindu: Shaivites	
MOS	Muslim	
MOT	Muslim: Other	
MSH	Muslim: Shiite	
MSU	Muslim: Sunni	
OTH	Other	
SIK	Sikh	
VAR	Unknown	

Table NAB004: Race

Value	Description	Comment
1002-5	American Indian or Alaska Native	
2028-9	Asian	
2054-5	Black or African American	
2076-8	Native Hawaiian or Other Pacific Islander	
2106-3	White	
2131-1	Other Race	

Table NAB005: Ethnic Group

Value	Description	Comment
H	Hispanic or Latino	
N	Not Hispanic or Latino	
U	Unknown	

Table NAB006: Patient Class

Value	Description	Comment
B	Obstetrics	
C	Commercial Account	

E	Emergency	
I	Inpatient	
N	Not Applicable	
O	Outpatient	
P	Preadmit	
R	Recurring patient	
U	Unknown	

Table NAB007: Admission Type

Value	Description	Comment
A	Accident	
C	Elective	
E	Emergency	
L	Labor and Delivery	
N	Newborn (Birth in healthcare facility)	
R	Routine	
U	Urgent	

Table NAB008: Hospital Service

Value	Description	Comment
CAR	Cardiac Service	
MED	Medical Service	
PUL	Pulmonary Service	
SUR	Surgical Service	
URO	Urology Service	

Table NAB009: Re-Admission Indicator

Value	Description	Comment
R	Re-Admission	

Table NAB010: Admit Source

Value	Description	Comment
1	Physician referral	
2	Clinic referral	
3	HMO referral	
4	Transfer from a hospital	
5	Transfer from a skilled nursing facility	
6	Transfer from another health care facility	
7	Emergency room	
8	Court/law enforcement	
9	Information not available	

Table NAB011: Ambulatory Status

Value	Description	Comment
A0	No functional limitations	
A1	Ambulates with assistive device	
A2	Wheelchair/stretchers bound	
A3	Comatose; non-responsive	
A4	Disoriented	
A5	Vision impaired	
A6	Hearing impaired	

A7	Speech impaired	
A8	Non-English speaking	
A9	Functional level unknown	
B1	Oxygen therapy	
B2	Special equipment (tubes, IVs, catheters)	
B3	Amputee	
B4	Mastectomy	
B5	Paraplegic	
B6	Pregnant	

Table NAB012: Discharge Disposition

Value	Description	Comment
01	Discharged to home or self care (routine discharge)	
02	Discharged/transferred to another short term general hospital for inpatient care	
03	Discharged/transferred to skilled nursing facility (SNF)	
04	Discharged/transferred to an intermediate care facility (ICF)	
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution	
06	Discharged/transferred to home under care of organized home health service organization	
07	Left against medical advice or discontinued care	
08	Discharged/transferred to home under care of Home IV provider	
09	Admitted as an inpatient to this hospital	
10 ...19	Discharge to be defined at state level, if necessary	
20	Expired (i.e. dead)	
21 ... 29	Expired to be defined at state level, if necessary	
30	Still patient or expected to return for outpatient services (i.e. still a patient)	
31 ... 39	Still patient to be defined at state level, if necessary (i.e. still a patient)	
40	Expired (i.e. died) at home	
41	Expired (i.e. died) in a medical facility; e.g., hospital, SNF, ICF, or free standing hospice	
42	Expired (i.e. died) – place unknown	

Table NAB013: Bed Status

Value	Description	Comment
C	Closed	
H	Housekeeping	
O	Occupied	
U	Unoccupied	
K	Contaminated	
I	Isolated	

Table NAB014: Visit Indicator

Value	Description	Comment
A	Account Level (default)	
V	Visit Level	

Table NAB015: Diagnosis Type

Value	Description	Comment
A	Admitting	
W	Working	
F	Final	

Table NAB016: Diagnosis Classification

Value	Description	Comment
C	Consultation	
D	Diagnosis	
M	Medication (antibiotic)	
O	Other	
R	Radiological scheduling (not using ICDA codes)	
S	Sign and symptom	
T	Tissue diagnosis	
I	Invasive procedure not classified elsewhere (IV, catheter, etc.)	

Table NAB017: Coverage Type

Value	Description	Comment
H	Hospital / Institutional	
P	Physician / Professional	
B	Both Hospital and Physician	

Table NAB018: Abnormal Flags

Value	Description	Comment
<	Below absolute low-off instrument scale	
>	Above absolute high-off instrument scale	
A	Abnormal (applies to non-numeric results)	
AA	Very abnormal (applies to non-numeric units, analogous to panic limits for numeric units)	
B	Better--use when direction not relevant	
D	Significant change down	
H	Above high normal	
HH	Above upper panic limits	
I	Intermediate. Indicates for microbiology susceptibilities only.	
L	Below low normal	
LL	Below lower panic limits	
MS	Moderately susceptible. Indicates for microbiology susceptibilities only.	
N	Normal (applies to non-numeric results)	
R	Resistant. Indicates for microbiology susceptibilities only.	
S	Susceptible. Indicates for microbiology susceptibilities only.	
U	Significant change up	
VS	Very susceptible. Indicates for microbiology susceptibilities only.	
W	Worse--use when direction not relevant	
null	No range defined, or normal ranges don't apply	

Table NAB019: Confidentiality Code

Value	Description	Comment
V	Very restricted	
R	Restricted	
U	Usual control	
EMP	Employee	
UMW	Unwed mother	
VIP	Very important person or celebrity	
PSY	Psychiatric patient	
AID	AIDS patient	
HIV	HIV(+) patient	
ETH	Alcohol/drug treatment patient	

Table NAB020: Observation Result Status Codes Interpretation

Value	Description	Comment
C	Record coming over is a correction and thus replaces a final result.	
D	Deletes the OBX record.	
F	Final results; Can only be changed with a corrected result.	
I	Specimen in lab; results pending.	
N	Not asked; used to affirmatively document that the observation identified in the OBX was not sought when the universal service ID in OBR-4 implies that it would be sought.	
O	Order detail description only (no result).	
P	Preliminary results.	
R	Results entered – not verified.	
S	Partial results.	
U	Results status change to final without retransmitting results already sent as “preliminary.” E.g., radiology changes status from preliminary to final.	
W	Post original as wrong, e.g., transmitted for wrong patient.	
X	Results cannot be obtained for this observation.	

Table NAB021: Diagnostic Service Section ID

Value	Description	Value	Description
AU	Audiology	OSL	Outside Lab
BG	Blood Gases	OT	Occupational Therapy
BLB	Blood Bank	OTH	Other
CH	Chemistry	OUS	OB Ultrasound
CP	Cytopathology	PF	Pulmonary Function
CT	CAT Scan	PHR	Pharmacy
CTH	Cardiac Catheterization	PHY	Physician (Hx. Dx, admission note, etc.)
CUS	Cardiac Ultrasound	PT	Physical Therapy
EC	Electrocardiac (e.g., EKG, EEC, Holter)	RAD	Radiology
EN	Electroneuro (EEG, EMG,EP,PSG)	RC	Respiratory Care (therapy)
HM	Hematology	RT	Radiation Therapy
ICU	Bedside ICU Monitoring	RUS	Radiology Ultrasound
IMM	Immunology	RX	Radiograph
LAB	Laboratory	SP	Surgical Pathology
MB	Microbiology	SR	Serology
MCB	Mycobacteriology	TX	Toxicology
MYC	Mycology	VR	Virology
NMR	Nuclear Magnetic Resonance	VUS	Vascular Ultrasound
NMS	Nuclear Medicine Scan	XRC	Cineradiograph
NRS	Nursing Service Measures		

Table NAB022: Route

Value	Description	Value	Description
AP	Apply Externally	MTH	Mouth/Throat
B	Buccal	NG	Nasogastric
DT	Dental	NP	Nasal Prongs*
EP	Epidural	NS	Nasal
ET	Endotracheal Tube*	NT	Nasotracheal Tube
GTT	Gastrostomy Tube	OP	Ophthalmic
GU	GU Irrigant	OT	Otic
IA	Intra-arterial	OTH	Other/Miscellaneous
IB	Intrabursal	PF	Perfusion
IC	Intracardiac	PO	Oral
ICV	Intracervical (uterus)	PR	Rectal
ID	Intradermal	RM	Rebreather Mask*
IH	Inhalation	SC	Subcutaneous
IHA	Intrahepatic Artery	SD	Soaked Dressing
IM	Intramuscular	SL	Sublingual
IMR	Immerse (Soak) Body Part	TD	Transdermal
IN	Intranasal	TL	Translingual
IO	Intraocular	TP	Topical
IP	Intraperitoneal	TRA	Tracheostomy*
IS	Intrasynovial	UR	Urethral
IT	Intrathecal	VG	Vaginal
IU	Intrauterine	VM	Ventimask
IV	Intravenous	WND	Wound
MM	Mucous Membrane		

Table NAB023: Administration Site

Value	Description	Value	Description
BE	Bilateral Ears	OD	Right Eye
BN	Bilateral Nares	OS	Left Eye
BU	Buttock	OU	Bilateral Eyes
CT	Chest Tube	PA	Perianal
LA	Left Arm	PERIN	Perineal
LAC	Left Anterior Chest	RA	Right Arm
LACF	Left Antecubital Fossa	RAC	Right Anterior Chest
LD	Left Deltoid	RACF	Right Antecubital Fossa
LE	Left Ear	RD	Right Deltoid
LEJ	Left External Jugular	RE	Right Ear
LF	Left Foot	REJ	Right External Jugular
LG	Left Gluteus Medius	RF	Right Foot
LH	Left Hand	RG	Right Gluteus Medius
LIJ	Left Internal Jugular	RH	Right Hand
LLAQ	Left Lower Abd Quadrant	RIJ	Right Internal Jugular
LLFA	Left Lower Forearm	RLAQ	Rt Lower Abd Quadrant
LMFA	Left Mid Forearm	RLFA	Right Lower Forearm
LN	Left Naris	RMFA	Right Mid Forearm
LPC	Left Posterior Chest	RN	Right Naris
LSC	Left Subclavian	RPC	Right Posterior Chest
LT	Left Thigh	RPC	Right Posterior Chest
LUA	Left Upper Arm	RSC	Right Subclavian
LUAQ	Left Upper Abd Quadrant	RT	Right Thigh
LUFA	Left Upper Forearm	RUA	Right Upper Arm
LVG	Left Ventragluteal	RUAQ	Right Upper Abd Quadrant
LVL	Left Vastus Lateralis	RUFA	Right Upper Forearm
NB	Nebulized	RVG	Right Ventragluteal

Table NAB024: Vaccines administered (code = CVX) (parenteral, unless oral is noted)

Value	Description	Value	Description	Value	Description
1	DTP	38	rubella/mumps	75	smallpox
2	OPV	39	Japanese encephalitis	76	Staphylococcus bacterio lysate
3	MMR	40	rabies, intradermal injection	77	tick-borne encephalitis
4	M/R	41	typhoid, parenteral	78	tularemia vaccine
5	measles	42	Hep B, adolescent/high risk infant 2	79	vaccinia immune globulin
6	rubella	43	Hep B, adult4	80	VEE, live
7	mumps	44	Hep B, dialysis	81	VEE, inactivated
8	Hep B, adolescent or pediatric	45	Hep B, NOS	82	adenovirus, NOS1
9	Td (adult)	46	Hib (PRP-D)	83	Hep A, ped/adol, 2 dose
10	IPV	47	Hib (HbOC)	84	Hep A, ped/adol, 3 dose
11	pertussis	48	Hib (PRP-T)	85	Hep A, NOS
12	diphtheria antitoxin	49	Hib (PRP-OMP)	86	IG
13	TIG	50	DTaP-Hib	87	IGIV
14	IG, NOS	51	Hib-Hep B	88	influenza, NOS
15	influenza, split (incl. purified surface antigen)	52	Hep A, adult	89	polio, NOS
16	influenza, whole	53	typhoid, parenteral, AKD (U.S. military)	90	rabies, NOS
17	Hib, NOS	54	adenovirus, type 4	91	typhoid, NOS
18	rabies, intramuscular injection	55	adenovirus, type 7	92	VEE, NOS
19	BCG	56	dengue fever	93	RSV-MAB
20	DTaP	57	hantavirus	94	MMRV
21	Varicella	58	Hep C	95	TST-OT tine test
22	DTP-Hib	59	Hep E	96	TST-PPD intradermal
23	plague	60	herpes simplex 2	97	TST-PPD tine test
24	anthrax	61	HIV	98	TST, NOS
25	typhoid, oral	62	HPV	99	RESERVED - do not use
26	cholera	63	Junin virus	100	pneumococcal conjugate
27	botulinum antitoxin	64	leishmaniasis	101	typhoid, ViCps
28	DT (pediatric)	65	leprosy	102	DTP-Hib-Hep B
29	CMVIG	66	Lyme disease	103	meningococcal C conjugate
30	HBIG	67	malaria	104	Hep A-Hep B
31	Hep A, pediatric, NOS	68	melanoma	105	smallpox, diluted
32	meningococcal	69	parainfluenza-3	106	DTaP, 5 pertussis antigens [i]
33	pneumococcal	70	Q fever	107	DTaP, NOS
34	RIG	71	RSV-IGIV	108	meningococcal, NOS
35	tetanus toxoid	72	rheumatic fever	109	pneumococcal, NOS
36	VZIG	73	Rift Valley fever	998	no vaccine administered
37	yellow fever	74	rotavirus	999	Unknown

Table NAB025: Document Completion Status

Value	Description	Comment
AU	Authenticated	
DI	Dictated	
DO	Documented	
IN	Incomplete	
IP	In Progress	
LA	Legally authenticated	
PA	Pre-authenticated	

Table NAB026: Document Availability Status

Value	Description	Comment
AV	Available for patient care	
CA	Deleted	

OB	Obsolete	
UN	Unavailable for patient care	

Table NAB027: Manufacturers of Vaccines (code = MVX)

Selected values – others are available.

Value	Description	Value	Description
AB	Abbott Laboratories	MA	Massachusetts Public Health Biologic Laboratories
AD	Adams Laboratories, Inc.	MBL	Massachusetts Biologic Laboratories
ALP	Alpha Therapeutic Corporation	MED	MedImmune, Inc.
AR	Armour	MIL	Miles
AVB	Aventis Behring L.L.C.	MIP	Bioport Corporation
AVI	Aviron	MSD	Merck & Co., Inc.
BA	Baxter Healthcare Coporation]	NAB	NABI
BAH	Baxter Health Corporation	NAV	North American Vaccine, Inc.
BAY	Bayer Corporation	NOV	Novartis Pharmaceutical Corporation
BP	Berna Products	NYB	New York Blood Center
BPC	Berna Products Corporation	ORT	Ortho-Clinical Diagnostics.
CEN	Centeon L.L.C.	OTC	Organon Teknika Corporation
CHI	Chiron Corporation	OTH	Other manufacturer
CMP	Celltech Medeva Pharmaceuticals	PD	Parkedale Pharmaceuticals
CON	Connaught	PMC	Aventis Pasteur Inc.
EVN	Evans Medical Limited	PRX	Praxis Biologics
GRE	Greer Laboratories, Inc.	PWJ	PowerJect Pharamaceuticals
IAG	Immuno International AG	SCL	Sclavo, Inc.
IM	Merieux	SI	Swiss Serum and Vaccine Inst.
IUS	Immuno-U.S., Inc.	SKB	GlaxoSmithKline
JPN	The Research Foundation for Microbial Diseases of Osaka University	UNK	Unknown manufacturer
KGC	Korea Green Cross Corporation	USA	United States Army Medical Research and Material Command
LED	Lederle	WA	Wyeth-Ayerst

Table NAB028: Completion Status

Value	Description	Comment
CP	Complete	
NA	Not Administered	
PA	Partially Administered	
RE	Refused	

Table NAB029: Substance / Treatment Refusal Reason

Value	Description	Comment
1	Cost-Related	
2	In Progress	
3	No Consent	
4	Other Vaccine Issues	
5	Temporary Medical Condition	
6	Vaccine Supply Issues	

Table NAB030: Order Control

Value	Description	Value	Description
AF	Order/service refill request approval	PY	Notification of replacement order for outside dispense
CA	Cancel order/service request	RE	Observations/Performed Service to follow
CH	Child order/service	RF	Refill order/service request

CN	Combined result	RL	Release previous hold
CR	Canceled as requested	RO	Replacement order
DC	Discontinue order/service request	RP	Order/service replace request
DE	Data errors	RQ	Replaced as requested
DF	Order/service refill request denied	RR	Request received
DR	Discontinued as requested	RU	Replaced unsolicited
FU	Order/service refilled, unsolicited	SC	Status changed
HD	Hold order request	SN	Send order/service number
HR	On hold as requested	SR	Response to send order/service status request
LI	Link order/service to patient care problem or goal	SS	Send order/service status request
NA	Number assigned	UA	Unable to accept order/service
NW	New order/service	UC	Unable to cancel
OC	Order/service canceled	UD	Unable to discontinue
OD	Order/service discontinued	UF	Unable to refill
OE	Order/service released	UH	Unable to put on hold
OF	Order/service refilled as requested	UM	Unable to replace
OH	Order/service held	UN	Unlink order/service from patient care problem or goal
OK	Order/service accepted & OK	UR	Unable to release
OP	Notification of order for outside dispense	UX	Unable to change
OR	Released as requested	XO	Change order/service request
PA	Parent order/service	XR	Changed as requested
PR	Previous Results with new order/service	XX	Order/service changed, unsol.

Table NAB031: Order Status

Value	Description	Comment
A	Some, but not all, results available	
CA	Order was canceled	
CM	Order is completed	
DC	Order was discontinued	
ER	Error, order not found	
HD	Order is on hold	
IP	In process, unspecified	
RP	Order has been replaced	
SC	In process, scheduled	
CA	Order was canceled	

Table NAB032: Order Type

Value	Description	Comment
LAB	Lab orders / results	
MED	Medication orders	
OBS	Observations	
RAD	Radiology orders / results	
VXU	Vaccines	
OTH	Everything else	

Table NAB033: Results

Value	Description	Comment
A	Some, but not all, results available	
C	Correction to results	
F	Final results; results stored and verified.	Can only be changed with a corrected result.
I	No results available; specimen received; procedure incomplete	
O	Order received; specimen not yet received	
P	Preliminary: A verified early result is available, final results not yet obtained	
R	Results stored; not yet verified	
S	No results available; procedure scheduled, but not done	
X	No results available; Order canceled.	
Y	No order on record for this test.	Used only on queries
Z	No record of this patient.	Used only on queries

Table NAB034: Specimen Type

Value	Description	Value	Description	Value	Description
ABS	Abscess	GASA	Aspirate, Gastric	PRP	Plasma, Platelet rich
ACNE	Tissue, Acne	GASAN	Antrum, Gastric	PSC	Pseudocyst
ACNFLD	Fluid, Acne	GASBR	Brushing, Gastric	PUNCT	Wound, Puncture
AIRS	Air Sample	GASD	Drainage, Gastric	PUS	Pus
ALL	Allograft	GAST	Fluid/contents, Gastric	PUSFR	Pustule
AMP	Amputation	GENV	Genital vaginal	PUST	Pus
ANGI	Catheter Tip, Angio	GRAFT	Graft	QC3	Quality Control
ARTC	Catheter Tip, Arterial	GRANU	Granuloma	RANDU	Urine, Random
ASERU	Serum, Acute	GROSH	Catheter, Groshong	RBITE	Bite, Reptile
ASP	Aspirate	GSOL	Solution, Gastrostomy	RECT	Drainage, Rectal
ATTE	Environmental, Autoclave Ampule	GSPEC	Biopsy, Gastric	RECTA	Abscess, Rectal
AUTOOC	Environment, Attest	GT	Tube, Gastric	RENALC	Cyst, Renal
AUTP	Autopsy	GTUBE	Drainage Tube, Gastrostomy	RENC	Fluid, Renal Cyst
BBL	Blood bag	HBITE	Bite, Human	RES	Respiratory
BCYST	Cyst, Baker's	HBLUD	Blood, Autopsy	SAL	Saliva
BITE	Bite	HEMAQ	Catheter Tip, Hemaquit	SCAR	Tissue, Keloid (Scar)
BLEB	Bleb	HEMO	Catheter Tip, Hemovac	SCLV	Catheter Tip, Subclavian
BLIST	Blisters	HERNI	Tissue, Herniated	SCROA	Abscess, Scrotal
BOIL	Boil	HEV	Drain, Hemovac	SECRE	Secretion(s)
BON	Bone	HIC	Catheter, Hickman	SER	Serum
BOWL	Bowel contents	HYDC	Fluid, Hydrocele	SHU	Site, Shunt
BPU	Blood product unit	IBITE	Bite, Insect	SHUNF	Fluid, Shunt
BRN	Burn	ICYST	Cyst, Inclusion	SHUNT	Shunt
BRSH	Brush	IDC	Catheter Tip, Indwelling	SITE	Site
BRTH	Breath (use EXHLD)	IHG	Gas, Inhaled	SKBP	Biopsy, Skin
BRUS	Brushing	ILEO	Drainage, Ileostomy	SKN	Skin
BUB	Bubo	ILLEG	Source of Specimen Is Illegible	SMM	Mass, Sub-Mandibular
BULLA	Bulla/Bullae	IMP	Implant	SNV	Fluid, synovial (Joint fluid)
BX	Biopsy	INCI	Site, Incision/Surgical	SPRM	Spermatozoa
CALC	Calculus (=Stone)	INFIL	Infiltrate	SPRP	Catheter Tip, Suprapubic
CARBU	Carbuncle	INS	Insect	SPRPB	Catheter Tip, Suprapubic
CAT	Catheter	INTRD	Catheter Tip, Introducer	SPS	Environmental, Spore Strip
CBITE	Bite, Cat	IT	Intubation tube	SPT	Sputum
CLIPP	Clippings	IUD	Intrauterine Device	SPTC	Sputum - coughed
CNJT	Conjunctiva	IVCAT	Catheter Tip, IV	SPTT	Sputum - tracheal aspirate
COL	Colostrum	IVFLD	Fluid, IV	SPUT1	Sputum, Simulated
CONE	Biopsy, Cone	IVTIP	Tubing Tip, IV	SPUTIN	Sputum, Inducted
CSCR	Scratch, Cat	JEJU	Drainage, Jejunal	SPUTSP	Sputum, Spontaneous
CSERU	Serum, Convalescent	JNTFLD	Fluid, Joint	STER	Environmental, Sterrad
CSITE	Catheter Insertion Site	JP	Drainage, Jackson Pratt	STL	Stool = Fecal
CSMY	Fluid, Cystostomy Tube	KELOI	Lavage	STONE	Stone, Kidney
CST	Fluid, Cyst	KIDFLD	Fluid, Kidney	SUBMA	Abscess, Submandibular
CSVR	Blood, Cell Saver	LAVG	Lavage, Bronhial	SUBMX	Abscess, Submaxillary
CTP	Catheter tip	LAVGG	Lavage, Gastric	SUMP	Drainage, Sump
CVPS	Site, CVP	LAVGP	Lavage, Peritoneal	SUP	Suprapubic Tap
CVPT	Catheter Tip, CVP	LAVPG	Lavage, Pre-Bronch	SUTUR	Suture
CYN	Nodule, Cystic	LENS1	Contact Lens	SWGZ	Catheter Tip, Swan Gantz
CYST	Cyst	LENS2	Contact Lens Case	TASP	Aspirate, Tracheal
DBITE	Bite, Dog	LESN	Lesion	TISS	Tissue
DCS	Sputum, Deep Cough	LIQ	Liquid, Unspecified	TISU	Tissue ulcer
DEC	Ulcer, Decubitus	LIQO	Liquid, Other	TLC	Catheter Tip, Triple Lumen
DEION	Environmental, Water (Deionized)	LSAC	Fluid, Lumbar Sac	TRAC	Site, Tracheostomy
DIA	Dialysate	MAHUR	Catheter Tip, Makurkour	TRANS	Transudate
DISCHG	Discharge	MASS	Mass	TSERU	Serum, Trough
DIV	Diverticulum	MBLD	Blood, Menstrual	TSTES	Abscess, Testicular
DRN	Drain	MUCOS	Mucosa	TTRA	Aspirate, Transtracheal
DRNG	Drainage, Tube	MUCUS	Mucus	TUBES	Tubes
DRNGP	Drainage, Penrose	NASDR	Drainage, Nasal	TUMOR	Tumor
EARW	Ear wax (cerumen)	NEDL	Needle	TZANC	Smear, Tzanck
EBRUSH	Brush, Esophageal	NEPH	Site, Nephrostomy	UDENT	Source, Unidentified
EEYE	Environmental, Eye Wash	NGASP	Aspirate, Nasogastric	UR	Urine
EFF	Environmental, Effluent	NGAST	Drainage, Nasogastric	URC	Urine clean catch
EFFUS	Effusion	NGS	Site, Naso/Gastric	URINB	Urine, Bladder Washings

EFOD	Environmental, Food	NODUL	Nodule(s)	URINC	Urine, Catheterized
EISO	Environmental, Isolette	NSECR	Secretion, Nasal	URINM	Urine, Midstream
ELT	Electrode	ORH	Other	URINN	Urine, Nephrostomy
ENVIR	Env., Unidentified Substance	ORL	Lesion, Oral	URINP	Urine, Pedibag
EOTH	Environmental, Other Substance	OTH	Source, Other	URT	Urine catheter
ESOI	Environmental, Soil	PACEM	Pacemaker	USCOP	Urine, Cystoscopy
ESOS	Environmental, Solution (Sterile)	PCFL	Fluid, Pericardial	USPEC	Source, Unspecified
ETA	Aspirate, Endotrach	PDSIT	Site, Peritoneal Dialysis	VASTIP	Catheter Tip, Vas
ETTP	Catheter Tip, Endotracheal	PDTS	Site, Peritoneal Dialysis Tunnel	VENT	Catheter Tip, Ventricular
ETTUB	Tube, Endotracheal	PELVA	Abscess, Pelvic	VITF	Vitreous Fluid
EWHI	Environmental, Whirlpool	PENIL	Lesion, Penile	VOM	Vomitus
EXG	Gas, exhaled (=breath)	PERIA	Abscess, Perianal	WASH	Wash
EXS	Shunt, External	PILOC	Cyst, Pilonidal	WASI	Washing, e.g. bronchial washing
EXUDE	Exudate	PINS	Site, Pin	WAT	Water
FAW	Environmental, Water (Well)	PIS	Site, Pacemaker Insetion	WB	Blood, Whole
FBLOOD	Blood, Fetal	PLAN	Plant Material	WEN	Wen
FGA	Fluid, Abdomen	PLAS	Plasma	WICK	Wick
FIST	Fistula	PLB	Plasma bag	WND	Wound
FLD	Fluid, Other	PLEVS	Serum, Peak Level	WNDA	Wound abscess
FLT	Filter	PND	Drainage, Penile	WNDD	Wound drainage
FLU	Fluid, Body unsp	POL	Polyps	WNDE	Wound exudate
FLUID	Fluid	POPGS	Graft Site, Popliteal	WORM	Worm
FOLEY	Catheter Tip, Foley	POPLG	Graft, Popliteal	WRT	Wart
FRS	Fluid, Respiratory	POPLV	Site, Popliteal Vein	WWA	Environmental, Water
FSCLP	Scalp, Fetal	PORTA	Catheter, Porta	WWO	Environmental, Water (Ocean)
FUR	Furuncle	PPP	Plasma, Platelet poor	WWT	Environmental, Water (Tap)
GAS	Gas	PROST	Prosthetic Device		

Table NAB035: Document Type

Value	Description	Comment
AR	Autopsy report	
CD	Cardiodiagnostics	
CN	Consultation	
DI	Diagnostic imaging	
DS	Discharge summary	
ED	Emergency department report	
HP	History and physical examination	
OP	Operative report	
PC	Psychiatric consultation	
PH	Psychiatric history and physical examination	
PN	Procedure note	
PR	Progress note	
SP	Surgical pathology	
TS	Transfer summary	

Table NAB036: Document Confidentiality Status

Value	Description	Comment
V	Very restricted	
R	Restricted	
U	Usual control	

3. Implementation Guidelines

This section provides details on the interface implementation guidance for the facility technical team.

3.1. Sending Facility (MSH.4)

Sending Facility is a required field that represents the facility originating the application message. For single facility EMRs are set to the Sheryan facility Unique ID. For multi-facility EMRs are set to the name of the EMR.

ID	Field Name	Implementation Guidelines
For Single Facility EMR		
MSH.4.1	Namespace ID	Set to Sheryan facility Unique ID
MSH.4.2	Universal ID	
MSH.4.3	Universal ID Type	
For Multiple Facility EMR		
MSH.4.1	Namespace ID	Set to the name of the EMR
MSH.4.2	Universal ID	
MSH.4.3	Universal ID Type	

3.2. Event Facility (EVN.7)

The following must be populated.

ID	Field Name	Implementation Guidelines
EVN.7.1	Event Facility	Must contain the encounter location Unique Sheryan Facility ID

3.3. Patient Id (PID.2)

If MRN is provided in PID:2, then this field will override any MRN in PID.3 and PID.4. It should have the same format as described in PID.3

ID	Field Name	Implementation Guidelines
PID.2.1	Identifier	The MRN
PID.2.4	Assigning Authority	For multi-facility MRNs, use the EMR code. For single facility MRNs use the Sheryan Facility Unique ID.
PID.2.5	Identifier Type Code	Set to "MRN"

3.4. Patient Identifier List (PID.3), SSN Number – Patient (PID.19)

To be used if patient does not have Emirates id. The Ids to be used are Passport number, GCC number

ID	Field Name	Implementation Guidelines
Primary medical record number (MRN)		
PID.3.1	ID	The MRN
PID.3.4	Assigning Authority	For multi-facility MRNs, use the EMR code. For single facility MRNs use the Sheryan Facility Unique ID.
PID.3.5	Identifier Type Code	Set to MRN
Secondary medical record numbers (for search purposes)		
PID.3.1	ID	The MRN
PID.3.4	Assigning Authority	Use the Sheryan Facility Unique ID
PID.3.5	Identifier Type Code	Set to SMR
Passport Number		
PID.3.1	ID	the passport number
PID.3.4	Assigning Authority	Set to "GOVERNMENT"
PID.3.5	Identifier Type Code	Set to PPN
GCC Number		
PID.3.1	ID	The GCC number
PID.3.4	Assigning Authority	Set to "LOCAL"
PID.3.5	Identifier Type Code	Set to GCC

The Emirate ID must be sent in PID.19

ID	Field Name	Implementation Guidelines
Emirate ID		
PID.19	SSN Number – Patient	Use for Emirate Id of the Patient. Format for emirates id should be validated and number should be 784123412345671

3.5. Encounter Identifiers - Visit Number (PV1.19)

All messages containing encounter-based information must contain a unique encounter ID (in PV1.19). The following subfields must be populated:

ID	Field Name	Implementation Guidelines
PV1.19.1	Id Number	Encounter ID
PV1.19.4	Assigning Authority	Sheryan facility unique identifier to be used.

3.6. Clinician Identifiers - Attending Doctor (PV1.7)

Where a message contains a field recording details of a provider (for example, PV1.7 Attending Doctor) with a type of XCN, the following values are required:

ID	Field Name	Implementation Guidelines
PV1.7.1	Id Number	The Sheryan Unique ID for the provider
PV1.7.2	Surname	
PV1.7.3	Given Name	Message control ID of the message sent by the sending system
PV1.7.4	SecondandFurtherGivenName	
PV1.7.6	Prefix	
PV1.7.7	Degree	
PV1.7.9	Assigning Authority	Set to "SHERYAN"

Note: The same subfields are used for PV1.8 (Referring Doctor), PV1.9 (Consulting Doctor), and PV1.17 (Admitting Doctor), so PV1.8.2 should contain the referring doctor's surname, e.g.

3.7. Coded Element/Value (Data Type CE)

For values which are coded entries (type CE), the following sub-elements are mandatory:

ID	Field Name	Implementation Guidelines
CE.1	Identifier	The code value
CE.2	Text	A textual description of the value
CE.3	Name of Coding System	Name of coding system: a code identifying the system that the coded value belongs to.

The coding system is used for terminology management purposes and must be populated appropriately.

3.8. DHA/eClaim Code-Code Set

Below are the guidelines defined and mandate by DHA Regulations, valid codes should be set as per these guidelines.

ID	Field Name	Implementation Guidelines
PID.12	Country	https://www.eclaimlink.ae/dhd_codes.aspx (DHA/eClaim)
PID.28	Nationality	https://www.eclaimlink.ae/dhd_codes.aspx (DHA/eClaim)
DG1.3	Diagnosis Code – DG1	https://www.eclaimlink.ae/dhd_codes.aspx (ICD10 CM codes should be sent)
DRG.1	Diagnostic Related Group	https://www.eclaimlink.ae/dhd_codes.aspx (IR-DRG)
PR1.3	Procedure Code	https://www.eclaimlink.ae/dhd_codes.aspx (CPT4 codes should be sent, CDT codes should be sent for dental)
RXO.1	Requested Give Code	https://www.eclaimlink.ae/dhd_codes.aspx (DDC)
RXE.2	Give Code	https://www.eclaimlink.ae/dhd_codes.aspx (DDC)
RXA.5	Administered Code	https://www.eclaimlink.ae/dhd_codes.aspx (DDC)

3.9. Data Confidentiality & Privacy

For data confidentiality, below guidelines should be followed by the facility:

No	Data Type	Implementation Guidelines
01	VIPs Data	No VIPs data including documents/lab, Radiology results etc. should be sent to NABIDH
02	Tourists Data	Facilities to flag tourist's data so It will be stored in NABIDH but opt-out to be available on the Patient Portal
03	Patient Opt Out	In case patient opt out, the facilities will still send the data to NABIDH and it will not be available on Patient and Provider Portal

3.10. Discharge summary (ds) format & sequence

A document type of “DS” will be displayed with a doc type of “Discharge Summary” and will be shown on “Discharge Summaries” chart in Clinical Viewer. Any other value will be displayed as the doc type in Clinical Viewer. See [Table NAB035](#)

The table below describes the document type, discharge documents type

Table NAB035: Document Type

Value	Description	Comment
DS	Discharge summary	

3.10.1. Structure Base Type ADT^A03 – Trigger Event A03

The definitions in the table below shall be conformed to by all HL7 source messages sending the following ADT trigger events:

- A03–Discharge event (This event signals the end of a patient's stay in a healthcare facility and to be discharged)

Segment	Description	Usage	Comments
MSH	Message Header	Used	
[{ SFT }]	Software Segment	Not Used	
EVN	Event Type	Used	
PID	Patient Identification	Used	
[PD1]	Additional Demographics	Not Used	
[{ ROL }]	Role	Not Used	
[{ NK1 }]	Next of Kin / Associated Parties	Used	
PV1	Patient Visit	Used	
[PV2]	Patient Visit – Additional Info.	Used	
[{ ROL }]	Role	Not Used	
[{ DB1 }]	Disability Information	Not Used	
[{ AL1 }]	Allergy Information	Used	
[{ DG1 }]	Diagnosis Information	Used	
[DRG]	Diagnosis Related Group	Used	
[{	PROCEDURE begin		
PR1	Procedures	Used	
[{ ROL }]	Role	Not Used	
}}	PROCEDURE end		
[{ OBX }]	Observation / Result	Used	Vital signs, height, weight etc could be sent here (use ORU for results)
[{ GT1 }]	Guarantor	Used	
[{	INSURANCE begin		
IN1	Insurance	Used	
[IN2]	Insurance Additional Info.	Not Used	
[{ IN3 }]	Insurance Additional Info – Cert.	Not Used	
[{ ROL }]	Role	Not Used	
}}	INSURANCE end		
[ACC]	Accident Information	Not Used	

[PDA]	Patient Death and Autopsy	Not Used	
[UB2]	Universal Bill 92 Information	Not Used	
[PDA]	Patient Death and Autopsy	Not Used	