Question Warren Baldock · Aug 5, 2020

## BPL and Workflow - check/authorisation of HL7 Message

Hi Everyone,

I'm currently implementing an interface solution to send through data to community pharmacies here in the UK from our hospital PAS system. As part of this project i have created a BPL which calls a SQL operation to infiltrate our Data warehouse and add to the message - this is all done and working as i expect.

What I now need to implement is something through Workflow- the idea is the hospital pharmacy team wish to approve and authorise the message before it is sent onto the outbound operation, so i have set up the workflow, set up the actions to enable the pharmacist to approve / reject., and as part of that i have taken some of the fields within the HL7 message, set to context variables and then im able to pull those into the workflow task request as %Formfields and %formValues, which works great for single fields. This is then arranged via a custom form/ csp page.

What im wondering is if it is possible at all to "tabulate" a repeating HL7 segment (in this instance OBX) and then display that within the form e.g:

## HL7 Message example (its all test data)

1	MSH   ^~\&   CSCLRC   RTG   TIE   RTG   20200113132714   655127217104   ADT ^ A03 ^ ADT A03   600000461706   P					
2	EVN   _   20200113132714   _   IDS-C					
3	PID   1   2   02038625 ^ 2 ^ 2 ^ T C ^ FACIL ^ RTG   2   GPTEST ^ MAGNYCOURS   2   19760104000000   M   2   2					
4	D1   _   _   BARTON ^ _ ^ M83065 ^ _ ^ _ ^ _ ^ ^ ^ ^ NATNL   G8344731 ^ SHILTON ^ AL ^ _ ^ _ ^ ^ ^ ^ DR ^ _ ^ ^ ^ ^ NATGP ^ _					
5	V1   1   I   CMAU ^ RDMHL1MAU ^ RDMHL1MAUBAYA1BED3 ^ RTG ^ NORMAL ^ BEDSPACE ^ _ ^ RDMHL1MAUBAYA1					
6	2   2   2   3   2   2   2   2   2   2					
7	ZU1   2 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
8	OBX   1   mirtazapine   NULL   -					
9	OBX   2   omeprazole   NULL   _					
10	OBX   3   tamsulosin hydrochloride   400micrograms   _					
11	OBX   4   warfarin sodium   NULL   every DAY at 6pm					

Custom workflow form: (note not finished so ordering all over the place, and just put the HL7 message into the form just so i could see it.)

		Use	er: WARREN		Licensed to: Derby Hospitals NHS Foundation Trust			
Q	Search		Go Last u	update: Today at 13:18:38				
#	# Priority Subject		Message		Role		Assigned to Tim	ne
1 Highest Community Pharmacy Referral			Review Required for Patie		PharmOutcomes Referrals		WARREN Tod	day
- Do	tails for selected	titom	Relinguish Save A	pprove Reject				
- De	tails for selected	1 liem	Treiniquian Oave A	pprove Reject				
Subject				Deinsibu	A sector and The	Time Orested		
	munity Dharman	v Deferral		Priority	Assigned To	Time Created	Role	
	nunity Pharmac	y Referral		Phoney	WARREN	Today at 12:28:53	Role Pharr	mC
Messag	ge	y Referral atient:02038625 for Episo	de ID:2019V3751474	Phoney				mC
Messag Revie	ge w Required for P	atient:02038625 for Episo			WARREN			mC
Messag Revie Pleas	ge w Required for P se review d	atient:02038625 for Episo Ietails below and	select Approve		WARREN			m(
Messag Revie Pleas	ge w Required for P se review d	atient:02038625 for Episo	select Approve		WARREN			mC
Messag Review Pleas If Appro	ge w Required for P se review d	atient:02038625 for Episo Ietails below and	select Approve		WARREN			mC
Messag Review Pleas If Appro	ge w Required for P se review d oved, information	atient:02038625 for Episo letails below and will be sent to Community F	select Approve	e or Reject as r	warren			mC
Messag Review Pleas If Appro-	ge w Required for P se review d oved, information pital Number	atient:02038625 for Episo letails below and will be sent to Community F 02038625	select Approve Pharmacy electronically	e or Reject as r	warren			mC
Messag Review Pleas If Appro-	ge w Required for P se review d oved, information pital Number Name	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST	select Approve harmacy electronically Visit ID Admission Date	e or Reject as ru 2019V3751474 20200113131100	warren			mC
Messag Review Pleas If Approved Hos	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant	e or Reject as re 2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bomm	WARREN equired.	Today at 12:28:53	Phari	
Messag Revier Pleas If Approversion Hos MSHI <sup>4</sup>	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender ^~\& CSCLRC F	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 20200113	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714 65512721711	e or Reject as re 2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bomm 04 ADT^AO3^ADT_AO	WARREN equired.	Today at 12:28:53	Pharr 8   LZO_R2_4 EVN  20200	
Messag Revier Pleas If Approversion Hos MSHI <sup>/</sup> PID[1]	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender ^-\& CSCLRC F   02038625^^^R	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 202000113 TG^FACIL^RTG  GPTE	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714[6551272171] ST^MAGNYCOURS	2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bomm 04 ADT-A03^ADT_A0 19760104000000 M	WARREN equired.	Today at 12:28:53 ?[2.4]34990  AL NE GBR UTF- JK^HOME     428815009    P	Pharr 8   LZO_R2_4 EVN  20200    A    N  ""~""	)11
Messag Review If Approversion Hos MSHI <sup>2</sup> PID[1] PD1	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender ^~\& CSCLRC F   02038625^^^R BARTON^^M83	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 20200113 TG^FACIL^RTG  GPTE 3065^^^^NATNL G83447	select Approve wharmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714 65512721711 ST^MAGNYCOURS  731^SHILTON^AL^^^	2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bommi 04 ADT^AO3^ADT_A( 119760104000000 M  DR^NATGP^^6000	WARREN equired.	Today at 12:28:53	Pharr 8   LZO_R2_4 EVN  20200    A    N  ""~""	)11
Messag Review If Approvements Hos Hos MSHI' PIDI1I PD1III Medic	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender ^-\& CSCLRC F   02038625^^AR BARTON^^M83 al Assessment I	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 20200113 TG^FACIL^RTG IGPTE 3065^^^NATNL G83447 Unit 22 2019V3751474^*	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714 65512721711 ST^MAGNYCOURS  ST^MAGNYCOURS  A^RTG  G8237772^5	2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bomm 04 ADT^A03^ADT_A0 119760104000000 M  DR^^NATGP^^6000 STOKES-	WARREN equired.	Today at 12:28:53 ?[2.4]34990] AL NE GBR UTF- JK^HOME     428815009     P] CMAU^RDMHL1MAU^RDMHL	Phar 8   LZO_R2_4 EVN  20200    A    N   <sup>mr_mr_mr</sup>	)11 NO
Messag Review If Approversion Hos Da MSHI/ PIDI11 PD111 Medic LAMP	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender ^-\& CSCLRC F   02038625^^^R BARTON^^NB BARTON^^NB	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 20200113 TG^FACIL^RTG  GPTE 3065^^^AATNL G83447 WATGP^M83078^^600	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714 65512721711 ST^MAGNYCOURS] 731^SHILTON^AL^AA ^ARTG  G8237772^S 0000044531 6550460	e or Reject as re 2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bommi 04 ADT^A03^ADT_A0 [19760104000000 M  DR^^NATGP^^6000 STOKES- 089107^Bommireddy^	WARREN equired.	Today at 12:28:53 ?[2.4]34990  AL NE GBR UTF- JK^HOME     428815009    P	Pharr 8   LZO_R2_4 EVN  20200    A    N  ""~"~"" 1MAUBAYA1BED3^RTG^N 564191^Bommireddy^Rajer	011 NO nd
Messag Review If Approversion Hos Da MSHI/ PIDI11 PD111 Medic LAMP, PV211	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender ^-\& CSCLRC F   02038625^^^R BARTON^^NB BARTON^^NB	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 20200113 TG^FACIL^RTG \GR4T MATGPTE SU22019V3751474^ ^^AATGP^M83078^^600 31100 ZU1  8	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714 65512721711 ST^MAGNYCOURS] 731^SHILTON^AL^AA ^ARTG  G8237772^S 0000044531 6550460	e or Reject as re 2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bommi 04 ADT^A03^ADT_A0 [19760104000000 M  DR^^NATGP^^6000 STOKES- 089107^Bommireddy^	WARREN equired.	Today at 12:28:53 P[2.4]34990  AL NE GBR UTF- JK^HOME     428815009    P  CMAU^RDMHL1MAU^RDMHL SDSID^^^600000134174~C4:	Pharr 8   LZO_R2_4 EVN  20200    A    N  ""~"~"" 1MAUBAYA1BED3^RTG^N 564191^Bommireddy^Rajer	011 NO nd
Messag Review If Approversion Hos MSHI' PIDI1I PD11I PD11II Medic LAMP PV2III	ge w Required for P se review C oved, information pital Number Name ate of Birth Gender A~\& CSCLRC F  02038625^^AR BARTON^^AR BARTON^^AR 31  1 202001161	atient:02038625 for Episo letails below and will be sent to Community F 02038625 MAGNYCOURS GPTEST 19760104000000 M RTG TIE RTG 20200113 TG^FACIL^RTG IGPTE 3065^^AA^NATNL G83447 Unit 22 2019V3751474^ VNATGPAM83078^^600 131100 ZU1  8	select Approve harmacy electronically Visit ID Admission Date Discharge Date Ward Consultant 132714 65512721711 ST^MAGNYCOURS] 731^SHILTON^AL^AA ^ARTG  G8237772^S 0000044531 6550460	e or Reject as re 2019V3751474 20200113131100 2020011313265 MAU - Medical Assessm Rajendranadh Bommi 04 ADT^A03^ADT_A0 [19760104000000 M  DR^^NATGP^^6000 STOKES- 089107^Bommireddy^	WARREN equired.	Today at 12:28:53 P[2.4]34990  AL NE GBR UTF- JK^HOME     428815009    P  CMAU^RDMHL1MAU^RDMHL SDSID^^^600000134174~C4:	Pharr 8   LZO_R2_4 EVN  20200    A    N  ""~"~"" 1MAUBAYA1BED3^RTG^N 564191^Bommireddy^Rajer	011 NO nd

Ive assigned the values within the custom form to context variables, and they can then be pulled into the form which works great

How (if possible) can i do similar with a repeating segment within the HL7 Message - can i "tabulate" that information and display it at all?

Open to suggestions of course- first time I've used BPL and workflow, certainly the first time workflow has been considered in our trust so not a lot of knowledge out there.

Thanks in advance - happy to give further detail where required.

## <u>#HL7</u> <u>#Ensemble</u>

Source URL: https://community.intersystems.com/post/bpl-and-workflow-checkauthorisation-hl7-message