University of Utah Data Coordinating Center

ANNOTATED ECRF FOR PUBLIC USE DATASETS

PECARN Protocol Number 020

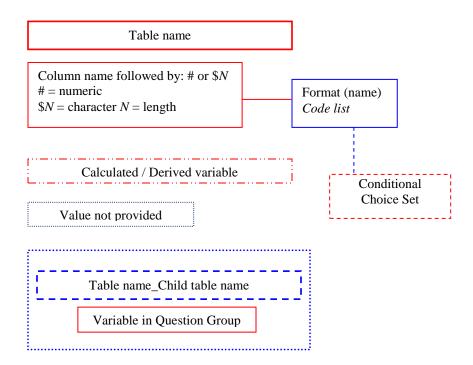
A Clinical Decision Rule to Identify Children with Intra-abdominal Injuries

Primary Investigator: James Holmes, M.D., University of California, Davis

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Annotations key:



Notes:

All dates have been recoded to reflect the number of calendar days from the emergency department triage date at the study site.

Sensitive and/or identifying information entered in free text fields has been removed from the public use datasets.

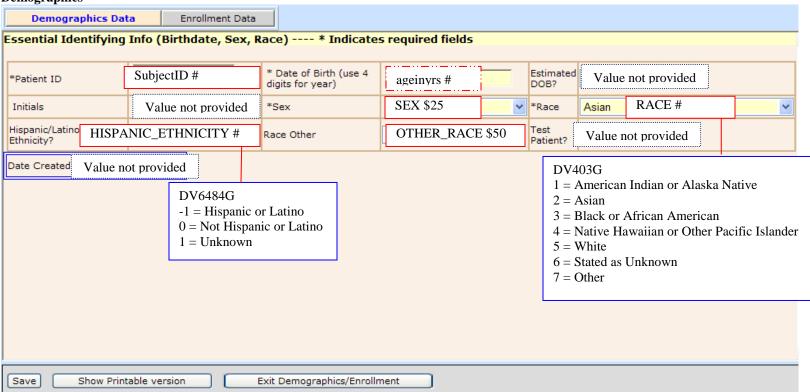
Many of the datasets include only one record per subject (unique identifier *SubjectID*). Other datasets are relational, that is, may have more than one record per patient. These records are uniquely identified by *SubjectID* and *Repeat_Instance*.

The following variables are special ID variables used to link different datasets:

Variable	Table name	Description
CTID#	form4a_abdct	ID for merging form4a_abdct and form4bct
	form4bct	datasets
USID#	form4a_us	ID for merging form4a_us and form4bus datasets
	form4bus	
OtherID #	form4a_abdother	ID for merging form4a_abdother and form4bother
	form4bother_abdangio	datasets
	form4bother_abdmri	
	form4bother_bladder	
	form4bother_pelangio	
	form4bother_uppergi	
CTFindingsID #	form4bct	ID for merging form4bct and form4bct_ctfindings
	form4bct_ctfindings	datasets
US4BID#	form4bus	ID for merging form4bus, form4bus_iaiorgansinj,
	form4bus_ipfluidloc	form4bus_ipfluidloc datasets
	form4bus_iaiorgansinj	
ABDPROCID#	form6c	ID for merging all Form 6c datasets
	form6c_spleeninterv	
	form6c_liverinterv	
	form6c_stomachinterv	
	form6c_smintesinterv	
	form6c_lgintesinterv	
	form6c_kidneyinterv	
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	form6c_gallbladinterv	
	form6c_fascialinterv	
	form6c_urinaryinterv	

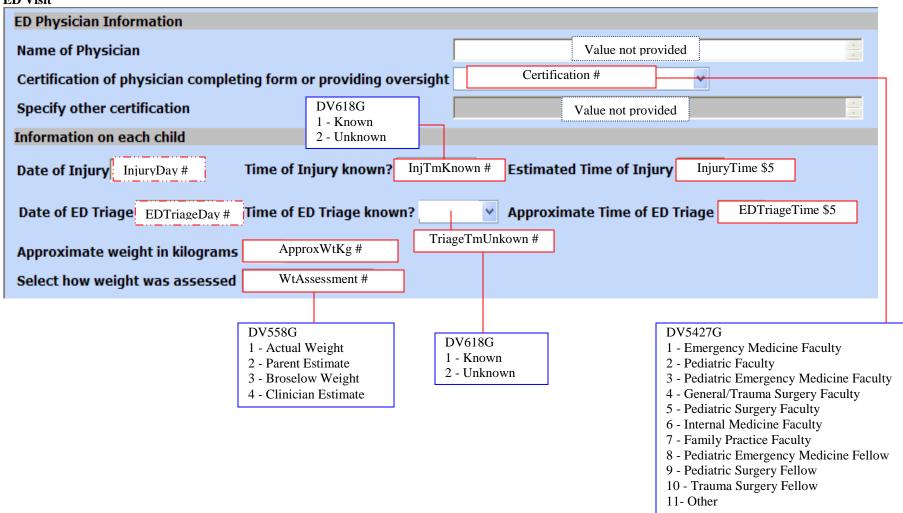
demographics (1 of 1)

Demographics

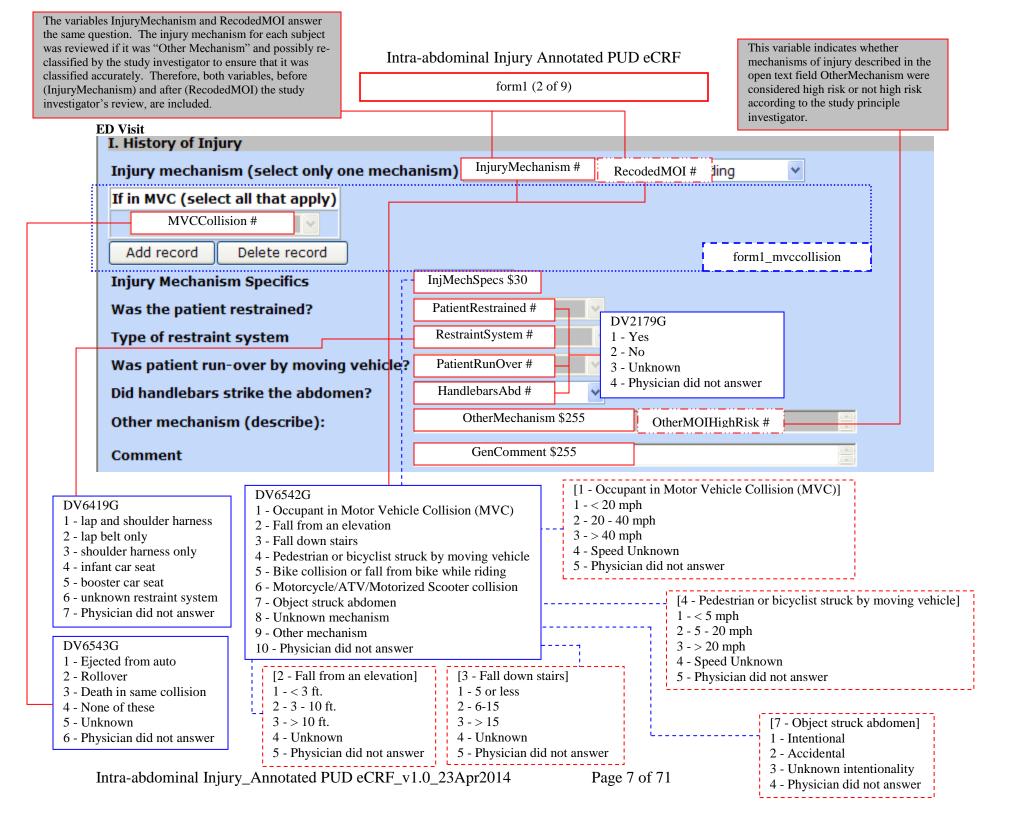


form1 (1 of 9)

ED Visit



Note: ApproxWtKg variable was not validated.

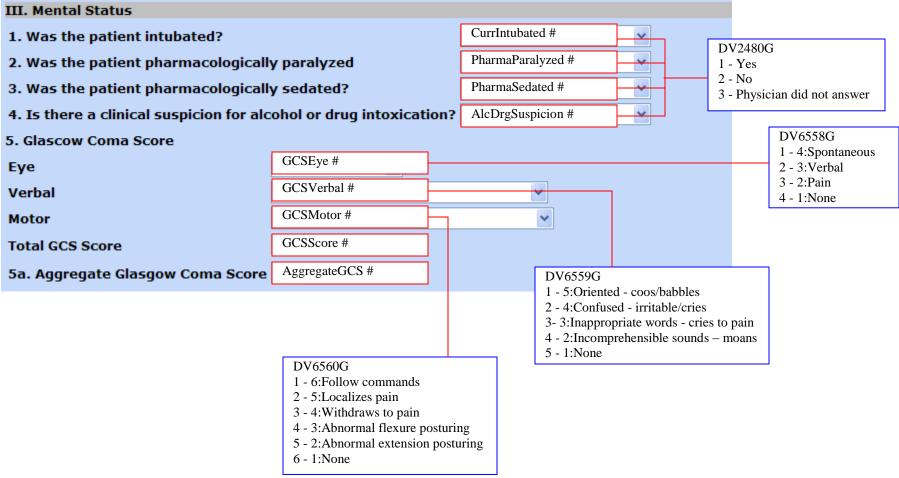


form1 (3 of 9) DV2480G 1 - Yes 2 - No **ED Visit** 3 - Physician did not answer II. Historical examination (complaints) 1. Is the patient preverbal (unable to communicate because of limited verbal skills) Preverbal # DV2767G 2. Does patient complain of abdominal pain? AbdomenPain # 1 - Mild (barely noticeable) 2 - Moderate AbdPainSeverity # 2a. Severity of historical abdominal pain 3 - Severe (intense) 4 - Unknown AbdPainLoc # 2b. Location of abdominal pain 5 - Physician did not answer VomitWretch # 3. Vomiting/Retching ShortBreath # 4. Does patient complain of shortness of breath/difficulty breathing DistractingPain # 5. Does the patient have a distracting painful injury? DV1577G 1 - Diffuse 2 - Localized 3 - Unknown 4 - Physician did not answer DV6147G 1 - Yes 2 - No 3 - Unable to Assess 4 - Physician did not answer DV2179G 1 - Yes 2 - No 3 - Unknown 4 - Physician did not answer

Intra-abdominal Injury Annotated PUD eCRF

form1 (4 of 9)

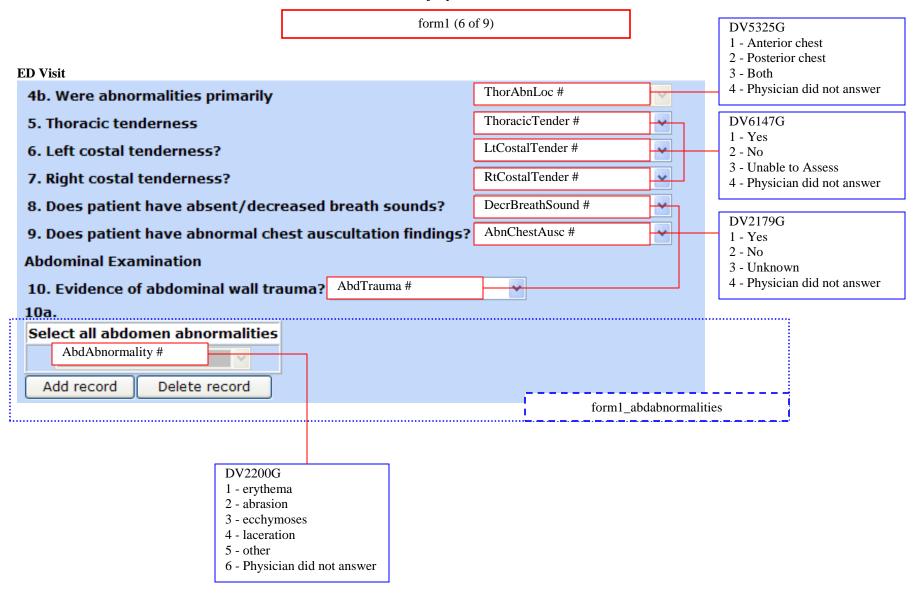




Intra-abdominal Injury Annotated PUD eCRF form1 (5 of 9) DV6575G 1 - Yes 2 - Unknown **ED Visit** 3 - Not Documented **IV. Physical Examination** InitSysBP# 1. Was the initial Systolic Blood Pressure in the ED known? DV400G InitSysBPRange # 1a. Initial Systolic Blood Pressure 1 - Yes 2 - Intubated/BVM 2. Was the initial Respiratory Rate in the ED known? InitResp # 3 - Unknown InitRespRange # 2a. Initial Respiratory Rate 4 - Not documented HRDocumented # 3. Was the initial Heart Rate in the ED known? InitHeartRate # 3a. Initial Heart Rate (beats/min) **Thoracic Examination** 4. Evidence of thoracic trauma? ThoracicTrauma# 4a. Select all thoracic abnormalities ThorAbnormality # Add record Delete record form1_thoracicabnormalities DV6294G DV2480G 1 - erythema 1 - Yes 2 - abrasion 2 - No 3 - ecchymoses 3 - Physician did not answer 4 - subcutaneous air 5 - laceration

6 - other

7 - Physician did not answer



Intra-abdominal Injury Annotated PUD eCRF form1 (7 of 9) DV2480G 1 - Yes **ED Visit** 2 - No SeatBeltSign # 3 - Physician did not answer 11. Is a seat belt sign present? AbdDistention # DV2179G 12. Does the patient have abdominal distention? 1 - Yes BowelSounds # 13. Are bowel sounds absent? 2 - No 3 - Unknown AbdomenTender# v 14. Does patient have abdominal tenderness? 4 - Physician did not answer AbdTenderDegree # 14a. Degree of abdominal tenderness DV1452G 1 - Yes AbdTenderLoc# 14b. Location of abdominal tenderness 2 - No 3 - Did not listen PeritonIrrit# 15. Does the patient have peritoneal irritation? 4 - Physician did not answer RectalBlood # 16. Did patient have blood on rectal examination DV4686G Flank & Pelvic Examination 1 - Mild 2 - Moderate FlankTender# 17. Does the patient have flank tenderness? 3 - Severe 4 - Physician did not answer PelvicTender # 18. Does the patient have pelvic bone tenderness? 18a. form1_pelvtenderloc Pelvic locations that are tender PelvTenderLoc# Add record Delete record DV6626G DV6147G DV414G DV1377G 1 - diffuse 1 - anterior superior iliac crests 1 - Yes 1 - Yes 2 - above the umbilicus

2 - No

3 – Unable to Assess

4 - Physician did not answer

2 - superior pubis

3 - inferior pubis

6 - Physician did not answer

4 - SI joints;

5 - unknown;

2 - No

3 - Rectal exam not performed

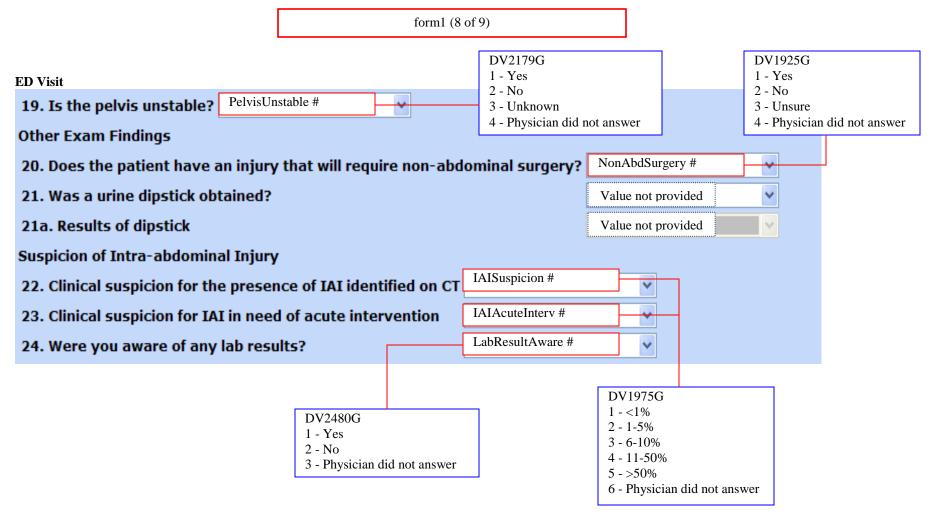
4 - Physician did not answer

3 - below the umbilicus

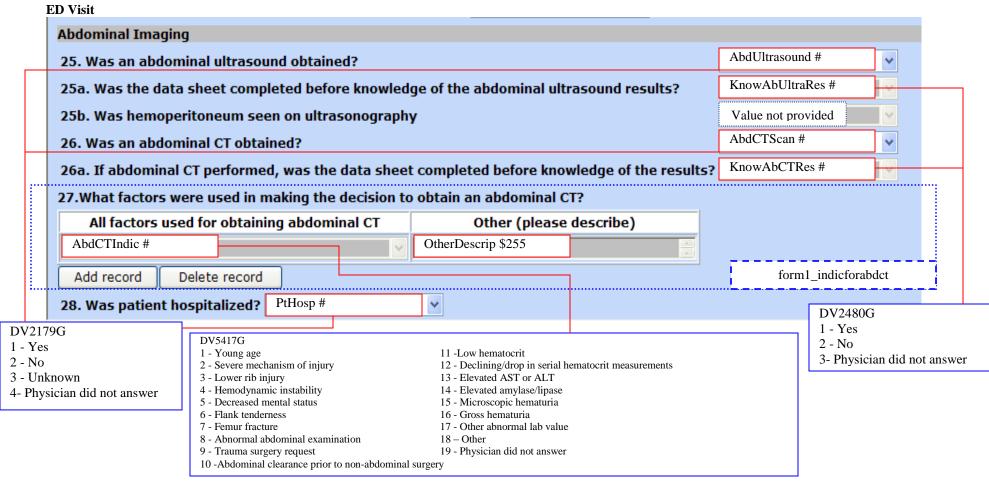
6 - Physician did not answer

4 - peri-umbilical

5 - unknown



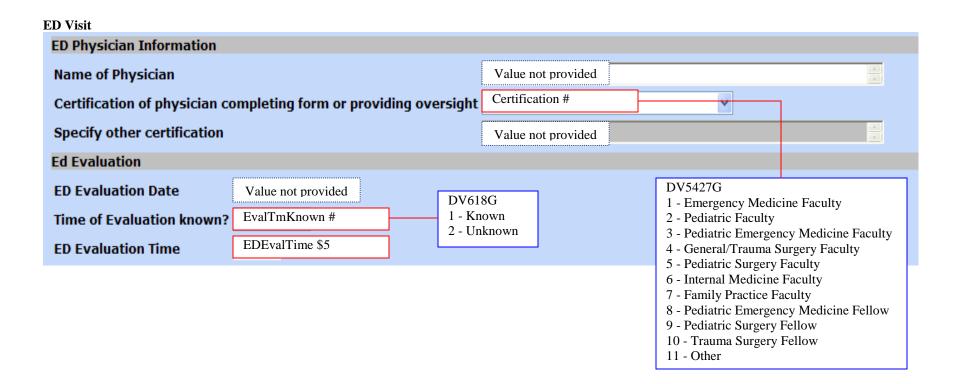
form1 (9 of 9)



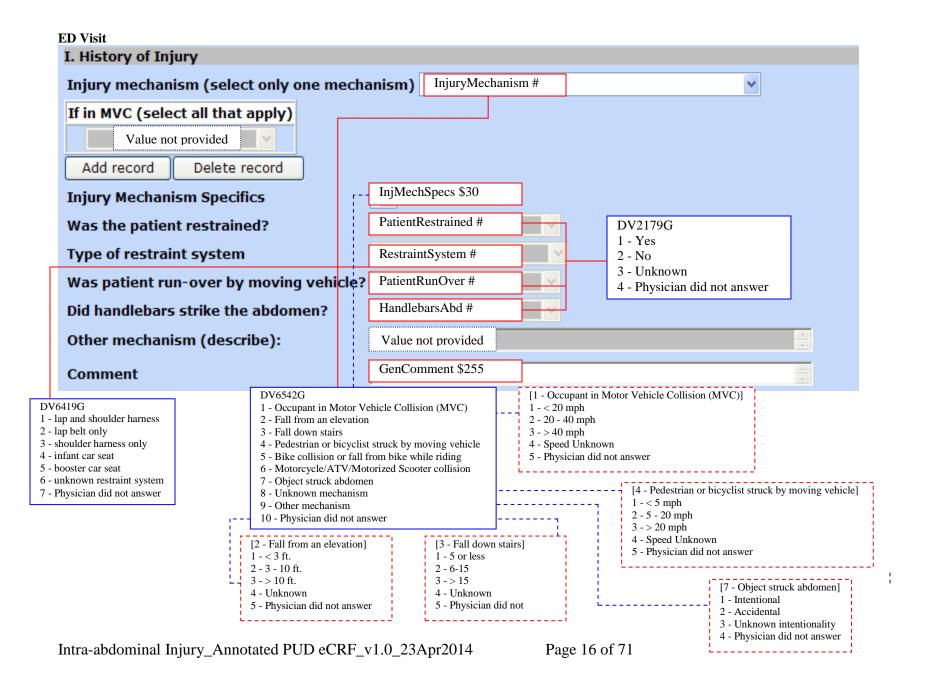
Calculated / derived variable(s) included in the form1 dataset:

Variable	Label	Type	Format	Algorithm / Notes
RefuseFU	Parent/guardian refused telephone or mail follow-up at time of ED visit	#	REFUSEFU	=1 if follow-up refused, =2 if follow-up not refused, =3 if patient was admitted to hospital or died in the ED
			REFUSEFU	
			1 - Yes 2 - No	
			3 - Not applicable per study protocol	

form2 (1 of 8)



form2 (2of 8)

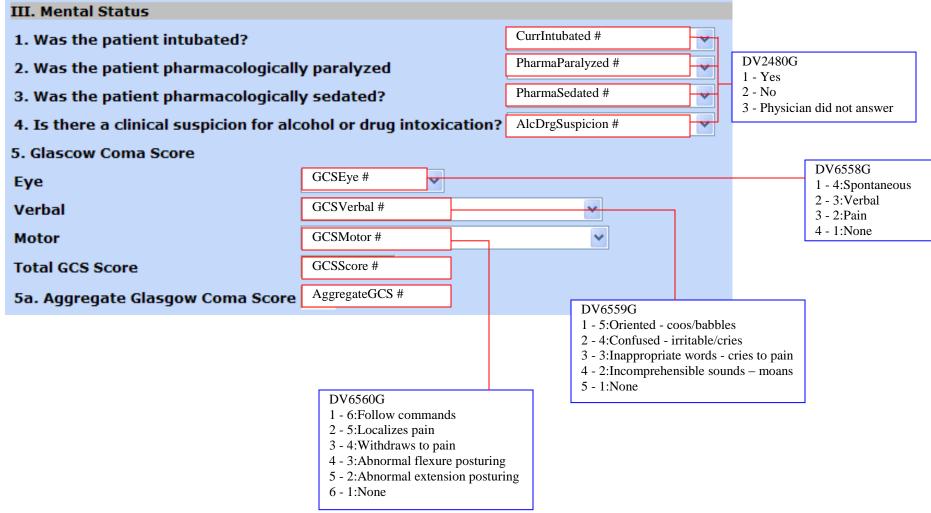


form2 (3 of 8) DV2480G 1 - Yes 2 - No 3 - Physician did not answer **ED Visit** II. Historical examination (complaints) Preverbal # 1. Is the patient preverbal (unable to communicate because of limited verbal skills) DV2767G AbdomenPain # 2. Does patient complain of abdominal pain? 1 - Mild (barely noticeable); 2 - Moderate AbdPainSeverity # 2a. Severity of historical abdominal pain 3 - Severe (intense) 4 - Unknown AbdPainLoc # 2b. Location of abdominal pain 5 - Physician did not answer VomitWretch # 3. Vomiting/Retching ShortBreath # 4. Does patient complain of shortness of breath/difficulty breathing DistractingPain # 5. Does the patient have a distracting painful injury? DV6147G 1 - Yes DV1577G 2 - No 1 - Diffuse 3 - Unable to Assess 2 - Localized 4 - Physician did not answer 3 - Unknown 4 - Physician did not answer DV2179G 1 - Yes 2 - No 3 - Unknown 4 - Physician did not answer

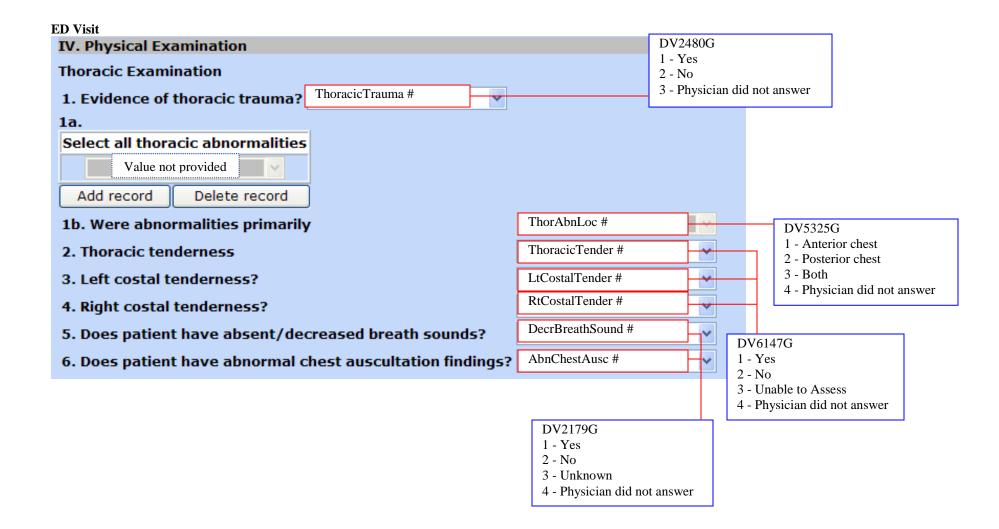
Intra-abdominal Injury Annotated PUD eCRF

form2 (4 of 8)

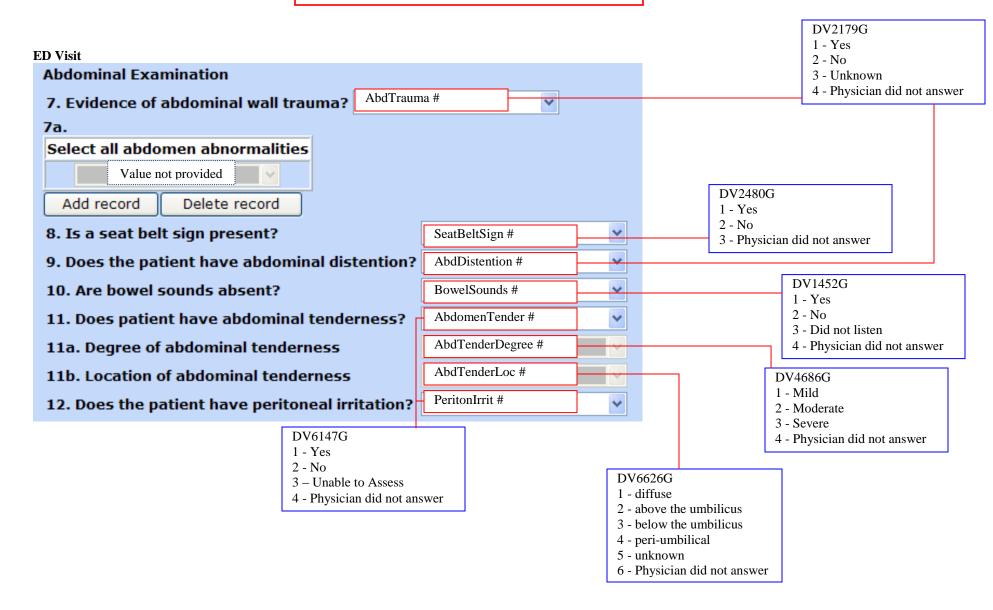




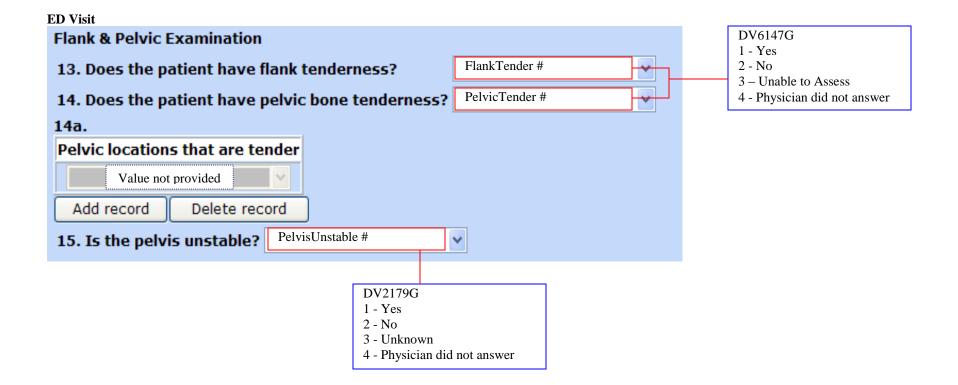
form2 (5 of 8)



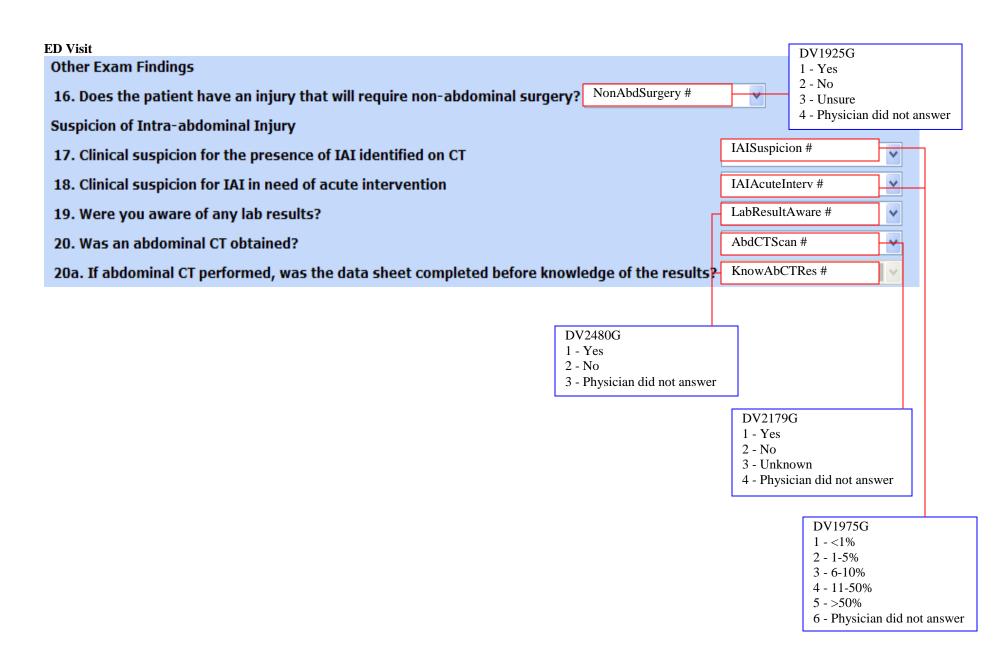
form2 (6 of 8)



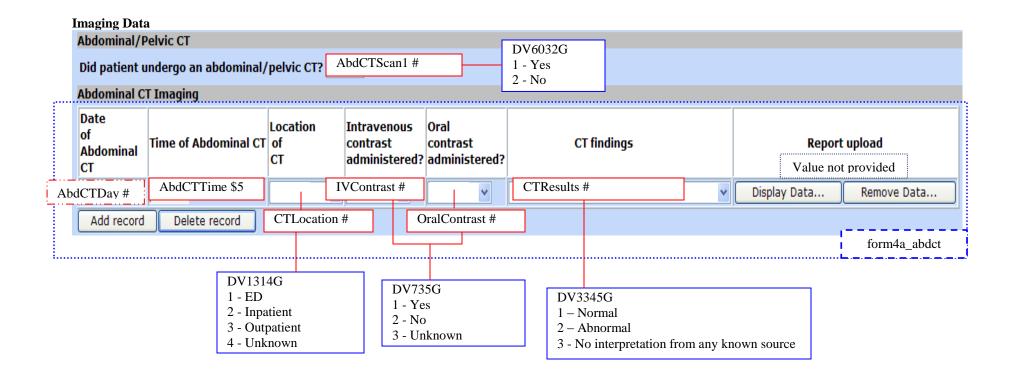
form2 (7 of 8)



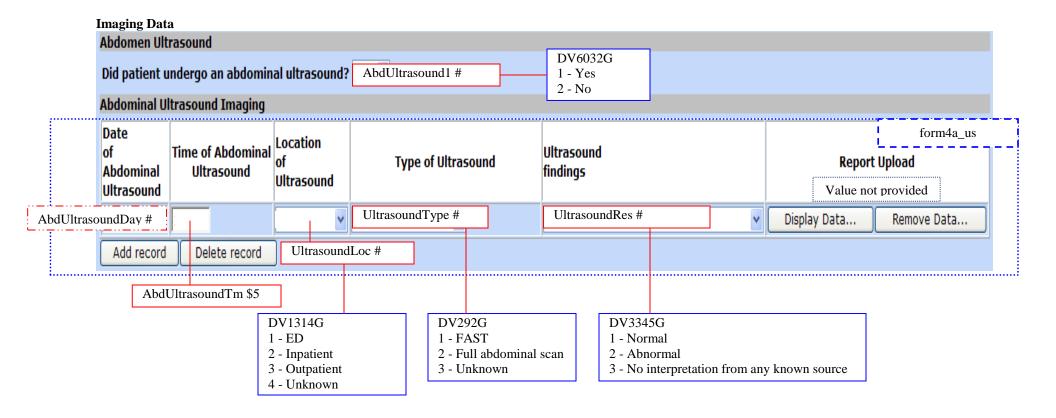
form2 (8 of 8)



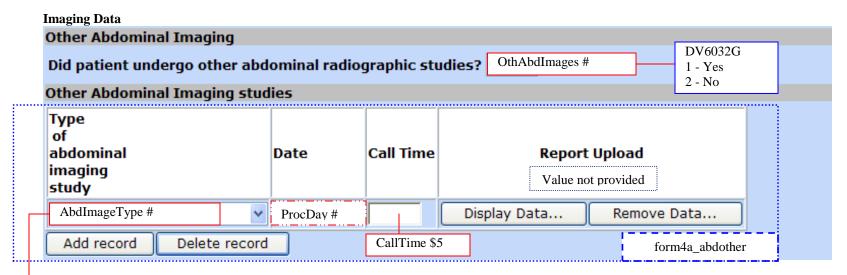
form4a (1 of 4)



form4a (2 of 4)



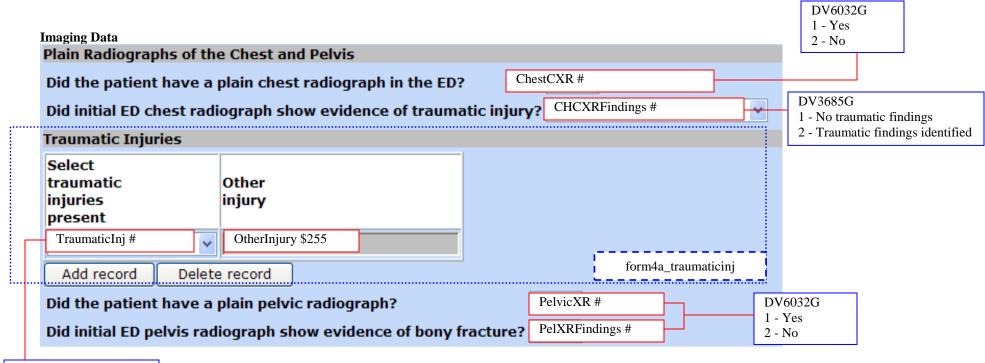
form4a (3 of 4)



DV3645G

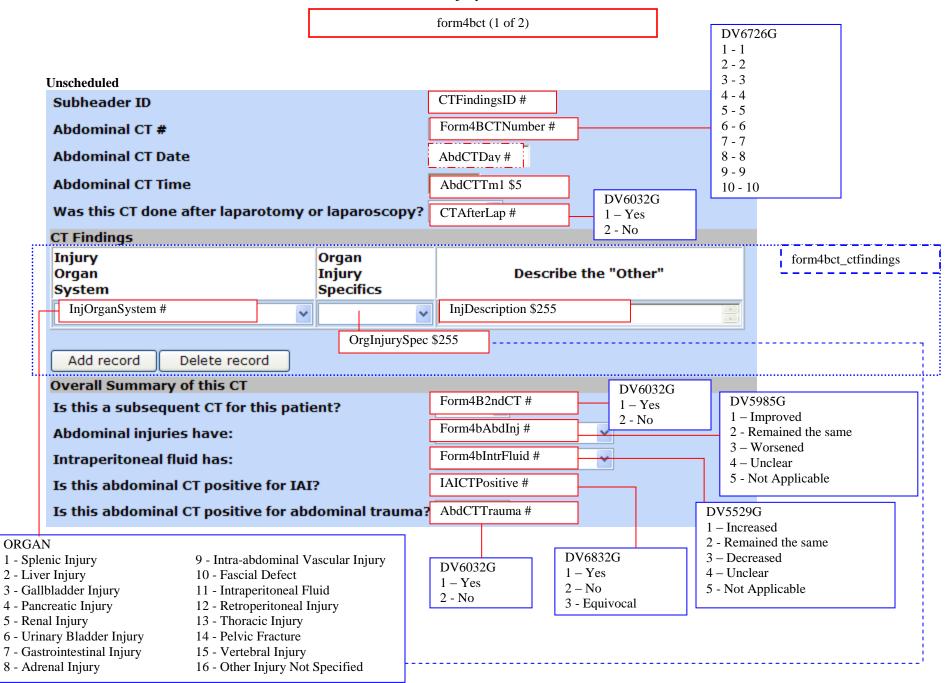
- 1 Abdominal angiography
- 2 Pelvic angiography
- 3 Upper gastrointestinal series
- 4 Abdominal MRI
- 5 Cystogram

form4a (4 of 4)



DV5089G

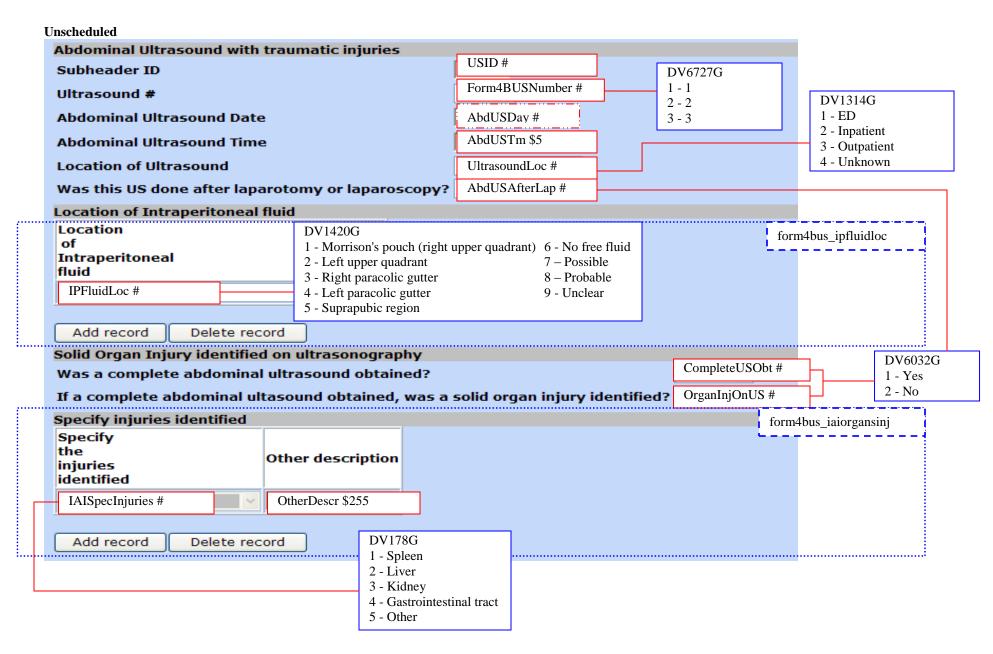
- 1 Pneumothorax
- 2 Hemothorax
- 3 Rib fracture
- 4 Pulmonary contusion
- 5 Pneumomediastinum
- 6 Pneumopericardium
- 7 Diaphragm injury
- 8 Other



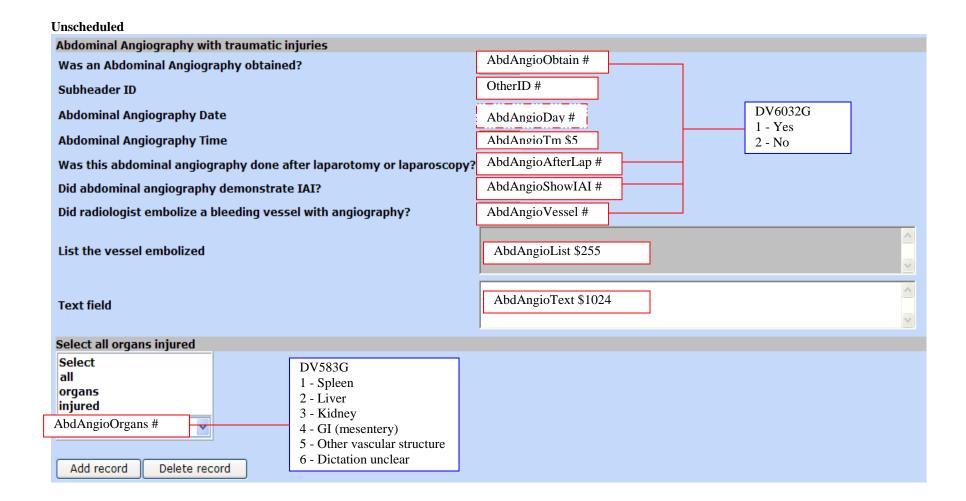
form4bct (2 of 2)

[1 - Splenic Injury] 1 - Laceration 2 - Hematoma 3 - Contusion 4 - Rupture 5 - Traumatic infarction 6 - Contrast extravasation 8 - Dictation unclear 9 - Possible 10 - Probable 66 - Other	[2 - Liver Injury] 1 - Laceration 2 - Hematoma 3 - Contusion 4 - Traumatic infarction 5 - Contrast extravasation 6 - Hepatic avulsion 7 - Biloma 9 - Dictation unclear 10 - Possible 11 - Probable	[3 - Gallbladder Injury] 1 - Avulsion 2 - Contusion 4 - Dictation unclear 5 - Possible 6 - Probable 66 - Other [8 - Adrenal Injury] 1 - Hemorrhage	[4 - Pancreatic Injury] 1 - Laceration 2 - Ductal injury 3 - Contusion 5 - Dictation unclear 6 - Possible 7 - Probable 66 - Other	[5 - Renal Injury] 1 - Laceration 2 - Hematoma 3 - Contusion 4 - Devascularization 6 - Dictation unclear 7 - Possible 8 - Probable 66 - Other	
[6 - Urinary Bladder Injury] 1 - Hematoma 2 - Intraperitoneal rupture 3 - Extraperitoneal rupture 5 - Dictation unclear 6 - Possible 7 - Probable 66 - Other	66 - Other [7 - Gastrointestinal Injury] 1 - Free Air 2 - Bowel wall edema/thickening 3 - Bowel wall hematoma 4 - Bowel was contusion 5 - Mesenteric streaking 6 - Mesenteric hematoma	2 - Dictation unclear 4 - Possible 5 - Probable 66 - Other [10 - Fascial Defect] 1 - Dictation unclear 2 - Possible 3 - Probable 66 - Describe	1 - Dictation unclea 2 - Possible 3 - Probable 66 - Describe [11 - Intraperitonea 1 - Right upper quad 2 - Left upper quad 3 - Right paracolic 4 - Left paracolic g	Fluid] Irant ant utter	
[12 - Retroperitoneal Injury] 1 - Dictation unclear 2 - Possible 3 - Probable 66 - Describe	7 - Extravasation of contrast from mesentery 9 - Dictation unclear 10 - Possible 11 - Probable 66 - Other	[14 - Pelvic Fracture	5 – Pelvis 6 - Around the pancreas/duodenum 8 - Dictation unclear 9 – Possible 10 – Probable 66 - Other		
[13 - Thoracic Injury] 1 - Pulmonary contusion 2 - Pneumothorax 3 - Hemothorax 4 - Rib fracture 5 - Sternal fracture 6 - Aortic injury 7 - Tracheal bronchial disruption 8 - Cardiac contusion 9 - Pneumopericardium 10 - Diaphragm injury 11 - Hemopericardium 13 - Dictation unclear 14 - Possible 15 - Probable 66 - Other	[16 - Other Injury Not Specif 66 - Other		1 - T: 2 - T: 3 - T: 4 - L: 5 - L: 7 - L: 8 - L: 9 - T: 10 - V	11 12 12 12 13 14 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	

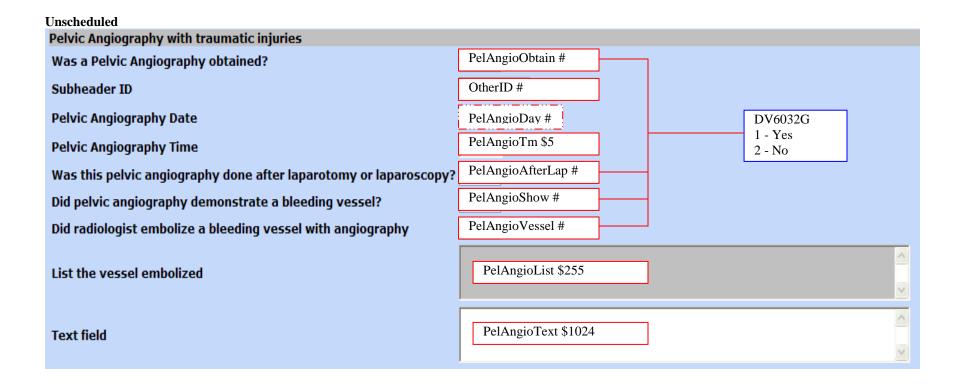
form4bus (1 of 1)



form4bother_abdangio (1 of 1)



form4bother_pelangio (1 of 1)

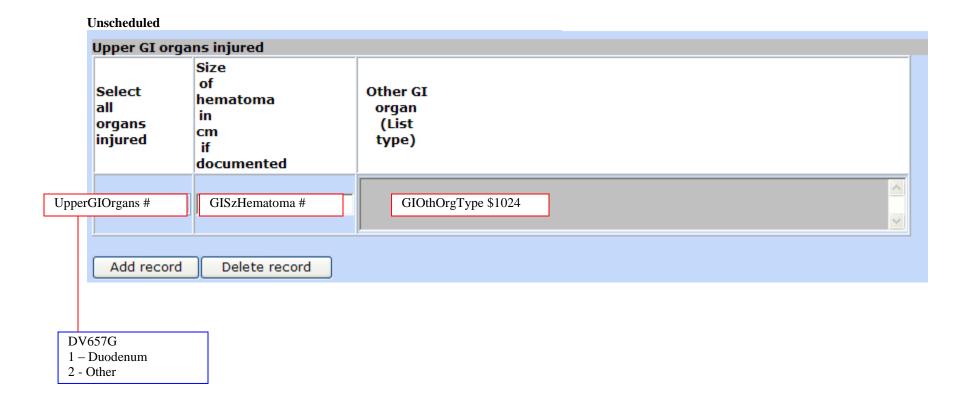


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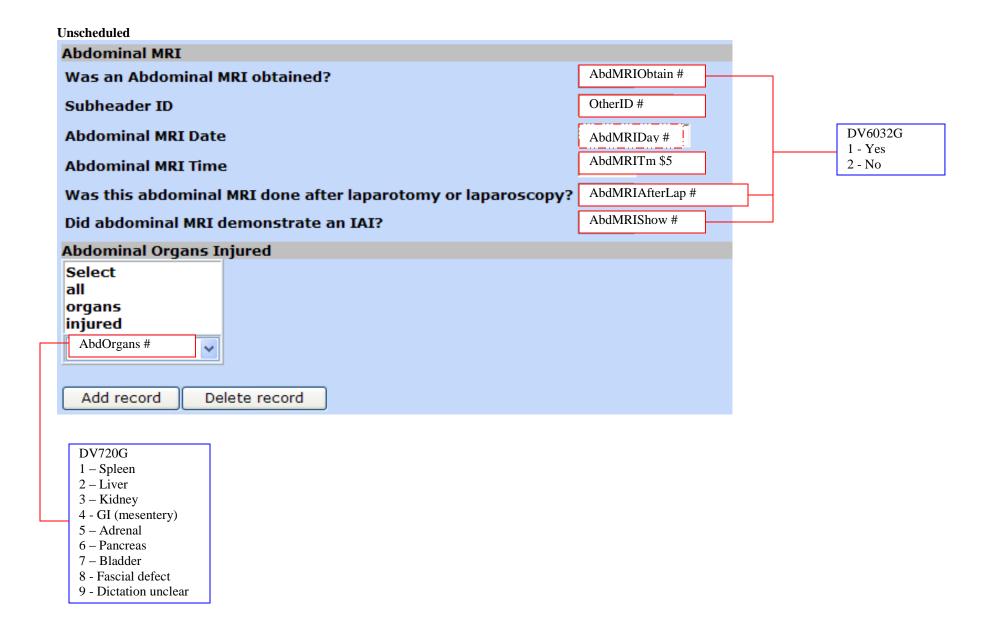
form4bother_uppergi (1 of 2)

Unscheduled **Upper Gastrointestinal Series** UpperGIObtain # Was an Upper Gastrointestinal Series obtained? OtherID# Subheader ID DV6032G 1 – Yes UpperGIDay # **Upper GI Series Date** 2 - No UpperGITm \$5 **Upper GI Series Time** UpperGIAfterLap # Was this upper GI series done after laparotomy or laparoscopy? UpperGIShow # Did upper GI series demonstrate an IAI? UpperGIText \$1024 **Text field**

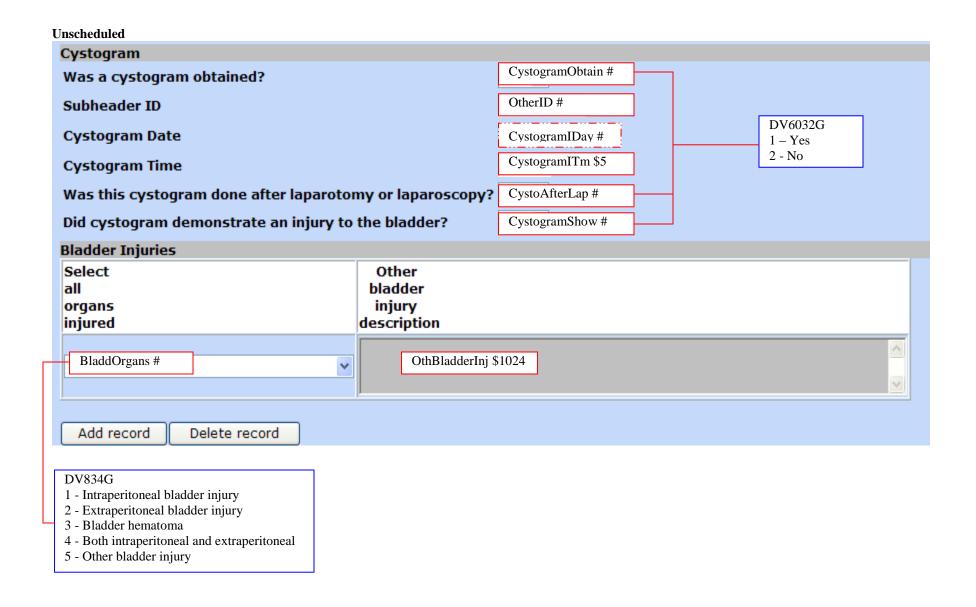
form4bother_uppergi (2 of 2)



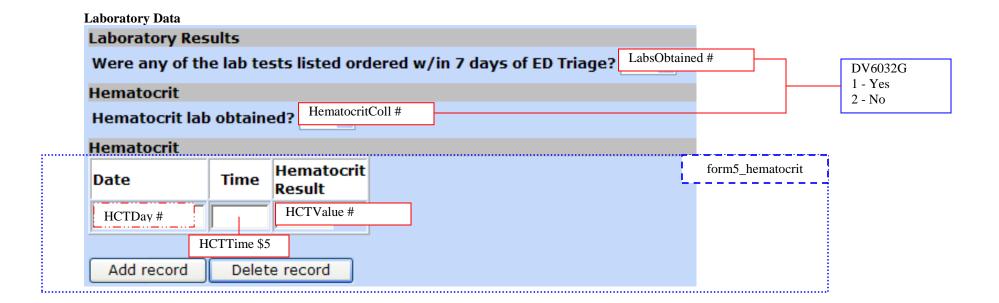
form4bother_abdmri (1 of 1)



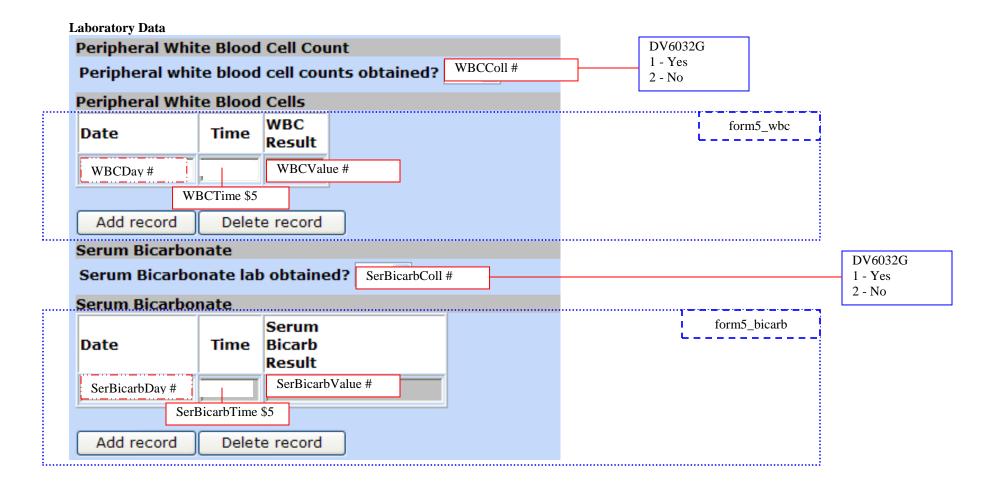
form4bother bladder (1 of 1)



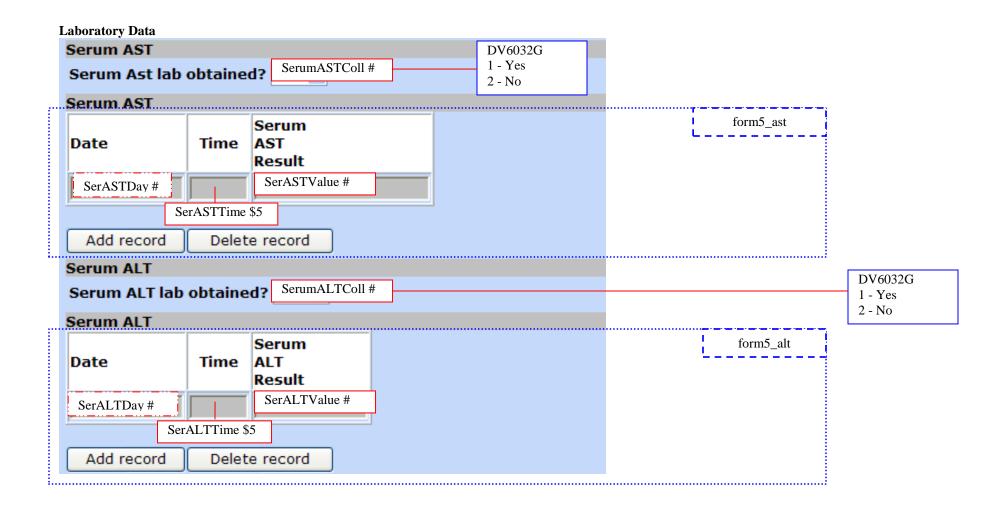
Intra-abdominal Injury Annotated PUD eCRF form5 (1 of 5)



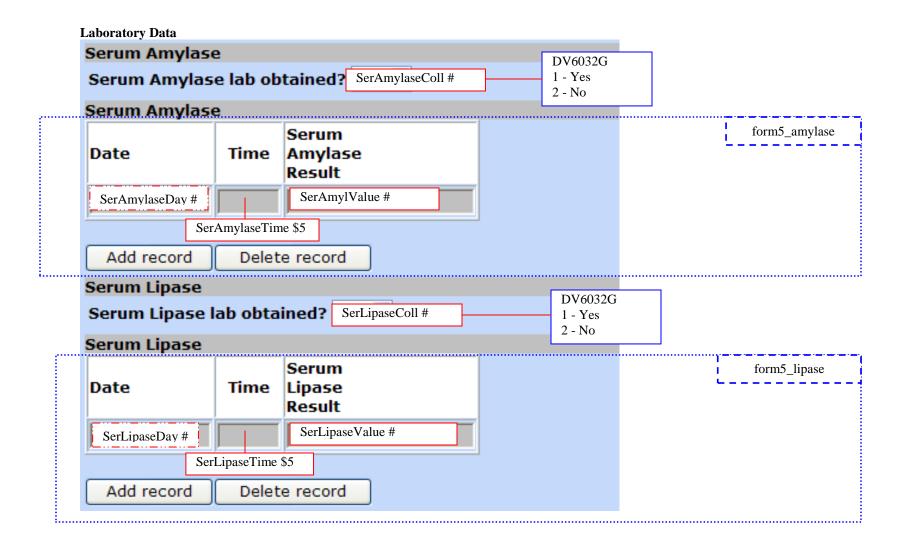
form5 (2 of 5)



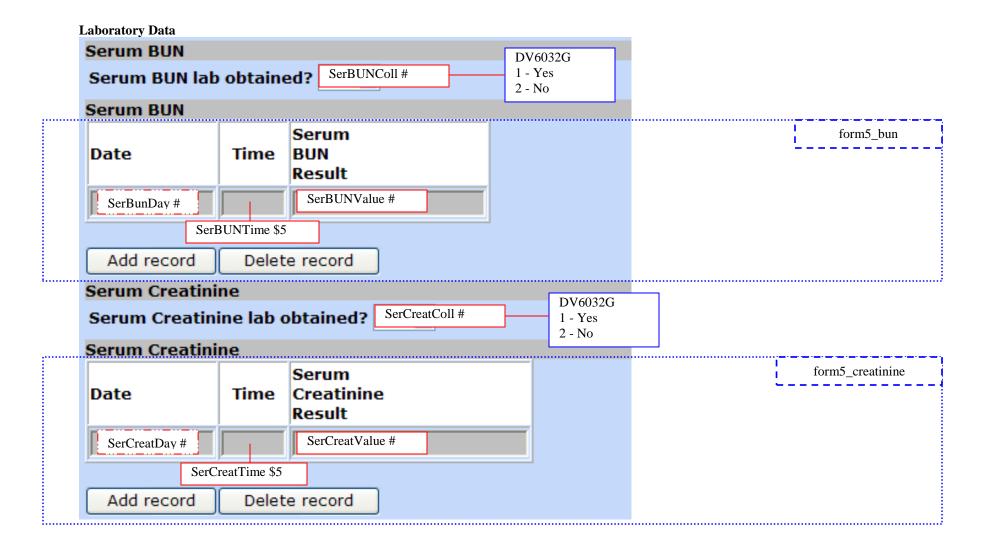
form5 (3 of 5)



form5 (4 of 5)



form5 (5 of 5)



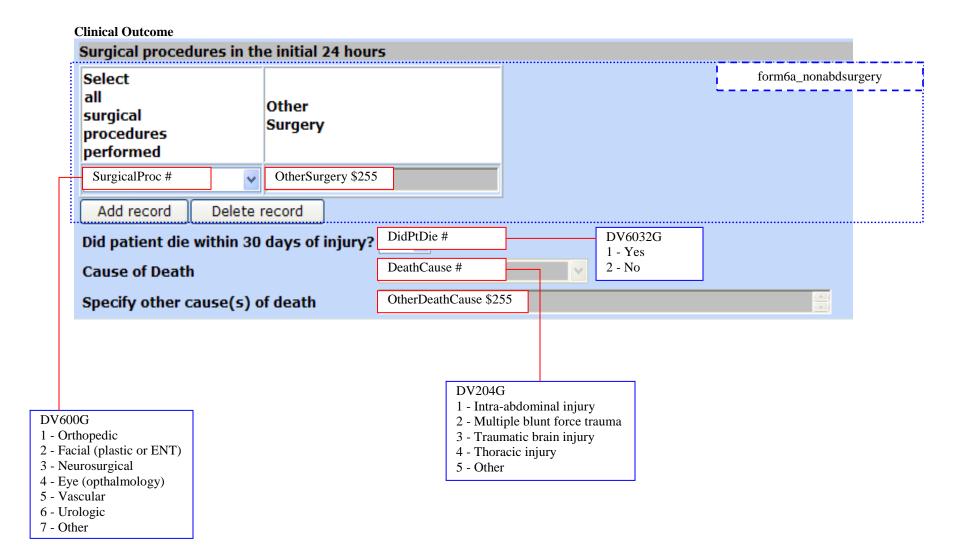
form6a (1 of 3)

Clinical Outcome Clinical Outcome - RA Data Collection Form Other specify or Name of Hospital **Disposition from the ED** IAIEDDisp # Value not provided PtSubsAdmitted # DV6032G Patient subsequently admitted within 30 days of ED Discharge 1 - Yes PtReAdmitted # 2 - No Patient readmitted to hospital within 30 days of ED Triage Date of hospital discharge DayofDischarge # DV6577G 1 - Home 2 - Against Medical Advice (AMA) 3 - Death in ED 4 - Admit- general inpatient 5 - Admit short-stay/observation unit 6 - Operating Room 7 - ICU 8 - Transferred to another hospital 9 - Other

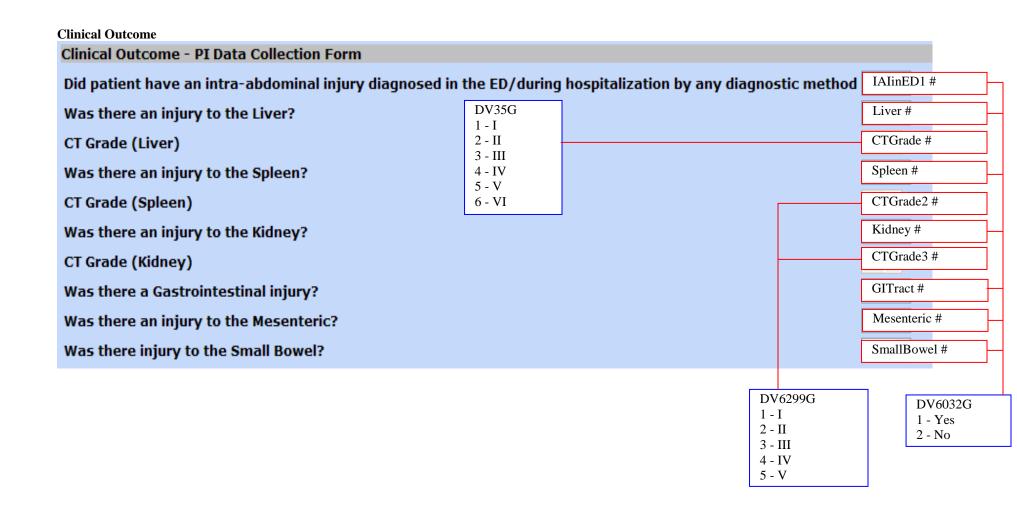
form6a (2 of 3)

-	Clinical Outcome ICD9 codes upon discharge				
I	ICD9 Code Description				
Value not provided Value not provided Ualue not provided					
	Add record Delete record	ı	IAIinED1#		
D	Did patient have an intra-abdominal injury diagnosed in the ED/during hospitalization by any diagnostic method Did patient undergo a diagnostic peritoneal lavage (DPL)?				
D				DiagPerLavage #	
v	as the DPL abnormal?		DPLAbnormal #		
v	a laparascopy (surgical visualization) performed?		Laparoscopy #		
R	eport Upload (Laparoscopy)	Value not provided	Upload Dat	ta	
V	Vas a laparatomy (abdominal surgery) performed?		Laparotomy1	#	
R	eport Upload (Laparotomy)	Value not provided	Upload Dat	ta	
Т	horacic (chest) injury diagnosed in ED &/or during hospitalization?		ThoracicInjur	:y #	
P	lvic fracture diagnosed in ED &/or during hospitalization?		PelvicFracture #		
A	ny non-abdominal surgical procedures in the first 24 hours after ED triage?		NonAbdSurg #		
				DV6032G 1 - Yes 2 - No	

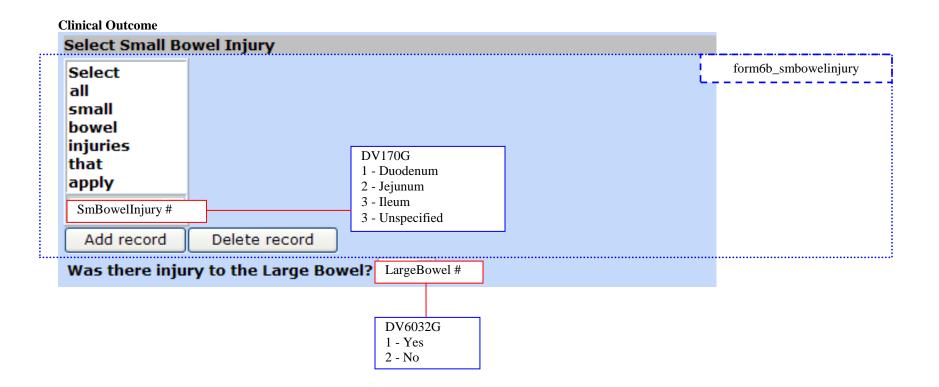
form6a (3 of 3)



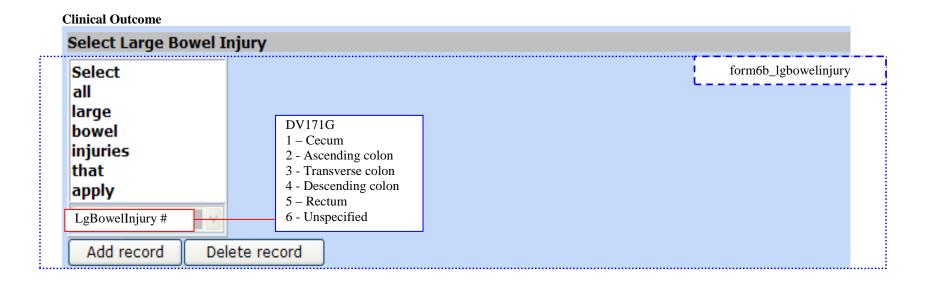
form6b (1 of 6)



form6b (2 of 6)



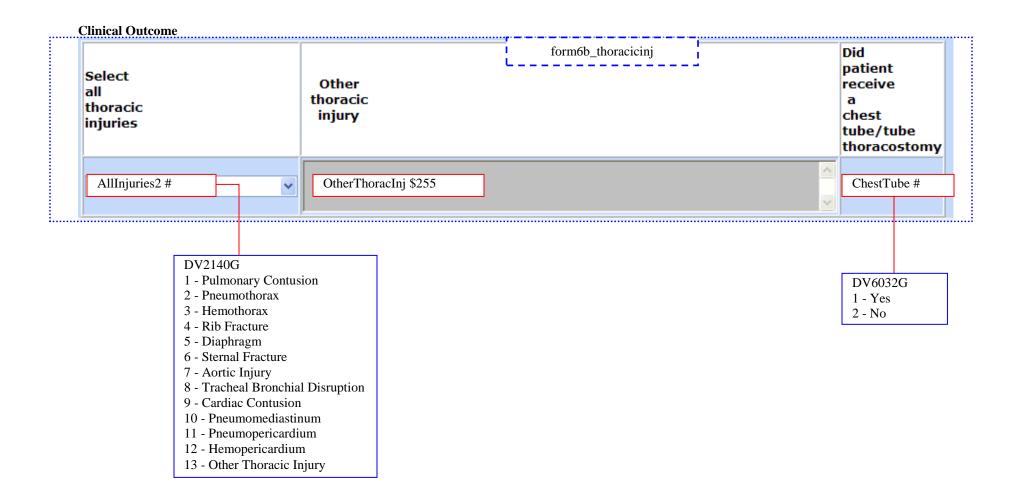
form6b (3 of 6)



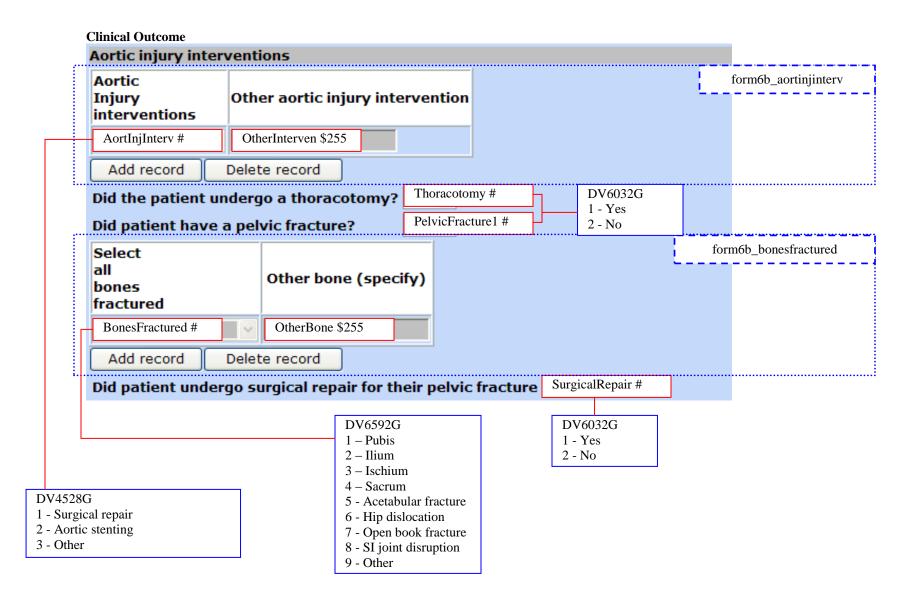
form6b (4 of 6)

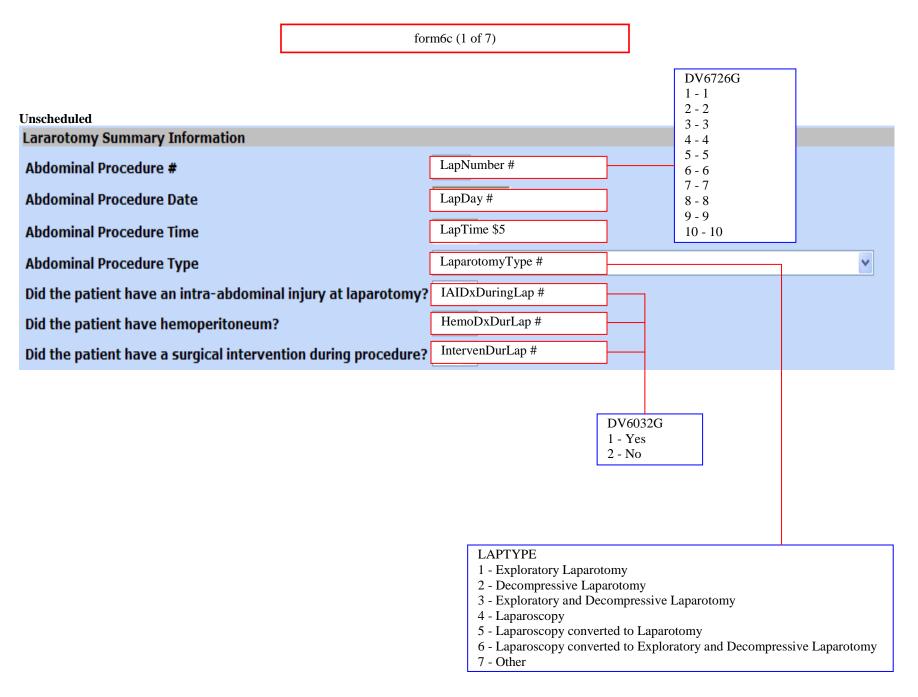
Clinical Outcome Pancreas # Was there injury to the Pancreas? Gallbladder# Was there injury to the Gallbladder? FascialInjury # Was there a Fascial injury? AdrenalGland # Was there injury to the Adrenal gland? UrinaryBladder# Was there injury to the Urinary bladder? DV6032G VascularStruct # Was there injury to the Vascular structure? 1 - Yes HemoperitFluid # Was there injury to the Hemoperitoneum/free fluid? 2 - No Was an Other organ not listed injured? OtherChecked # TOrgansOther \$255 Please specify Other Organ Injured BldTransfusion # Did patient have a blood transfusion secondary to anemia/hemorrhage from IAI injury IVFluids # Patient kept NPO and received IV fluids for greater than or equal to 2 days Was there a urinalysis done at the initial ED visit documented with an RBC/HPF result? Value not provided # of RBC/HPF Value not provided ThoracicInjury1# Did patient have a thoracic injury? DV4705G 1 - Yes 2 - Probably 3- Can't Tell 4 - No

form6b (5 of 6)

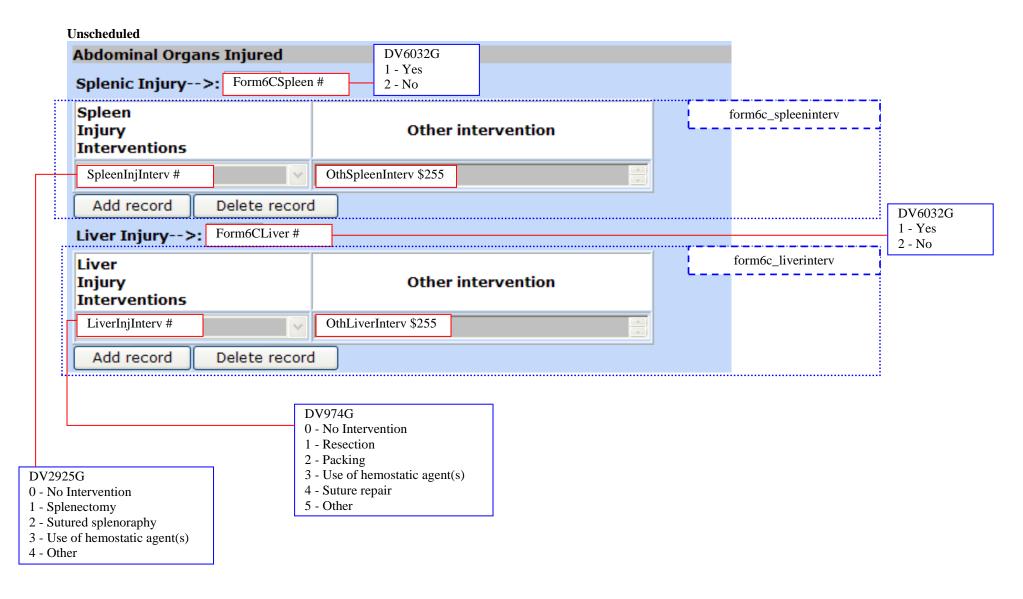


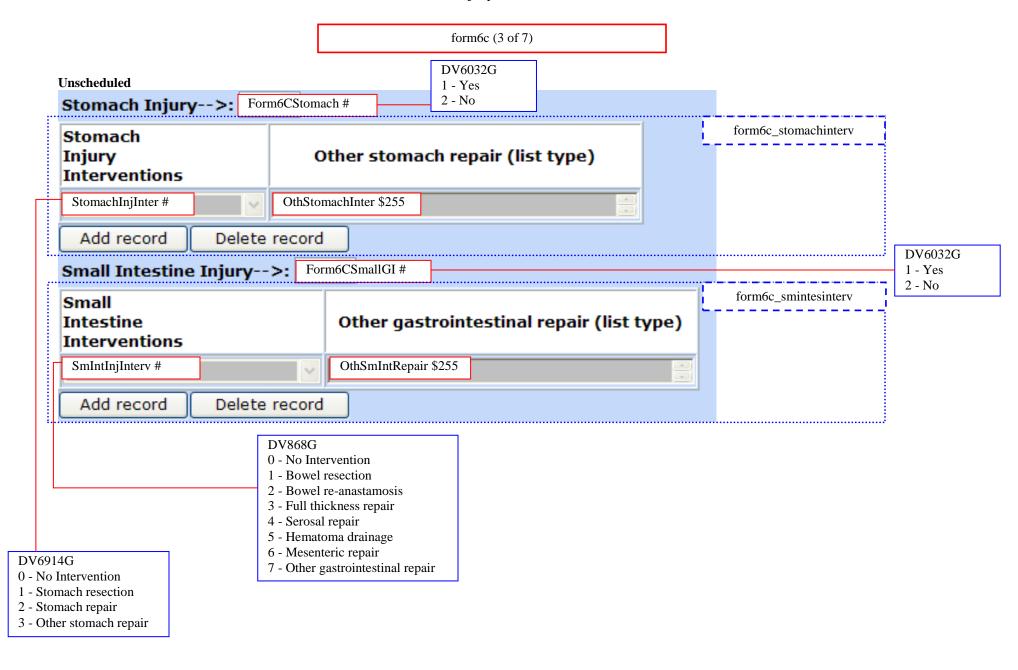
form6b (6 of 6)



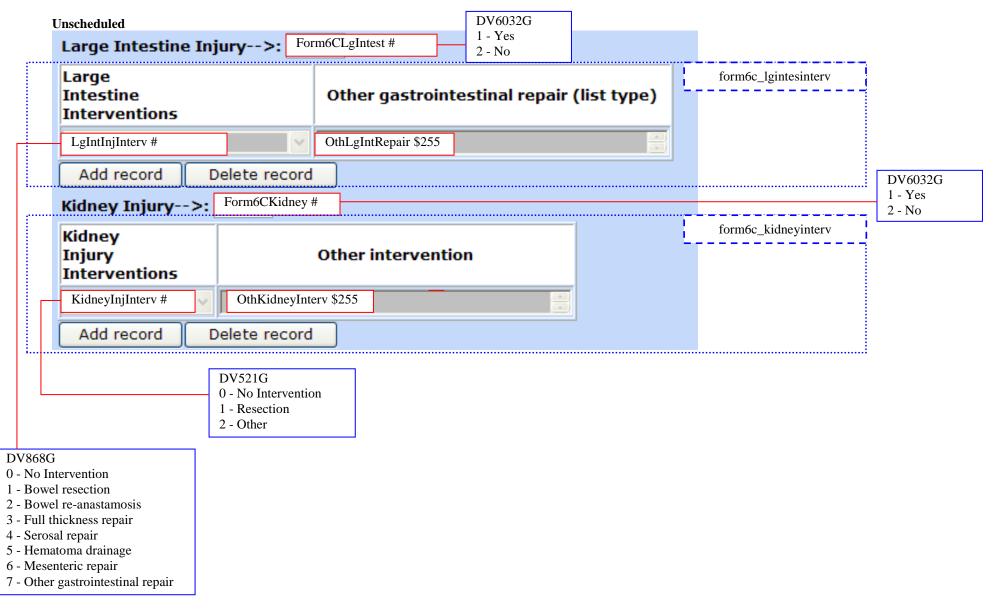


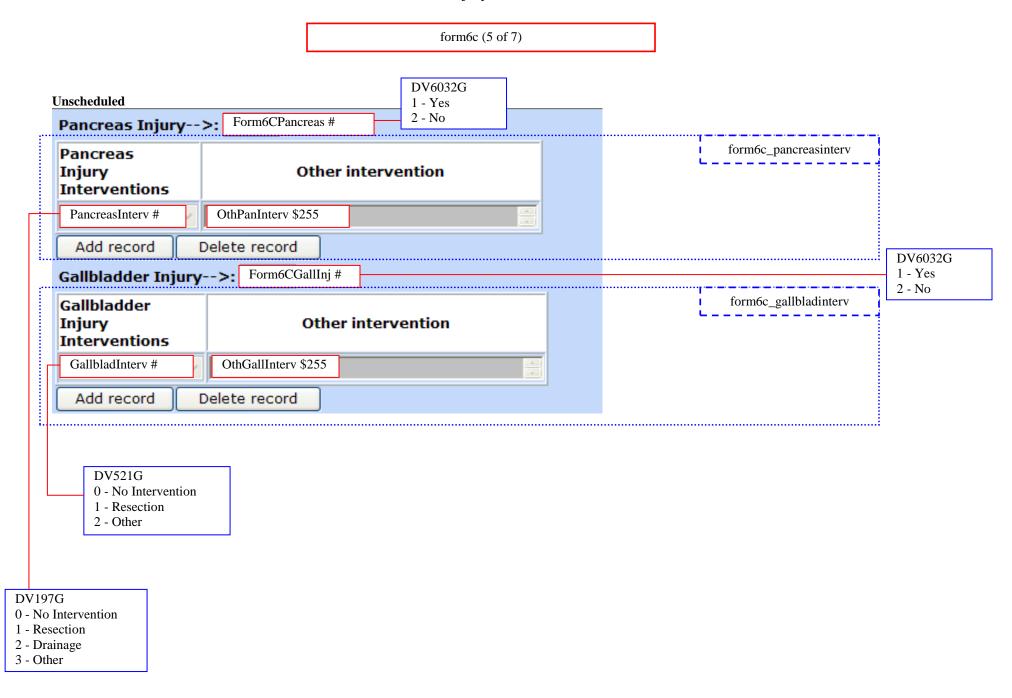
form6c (2 of 7)



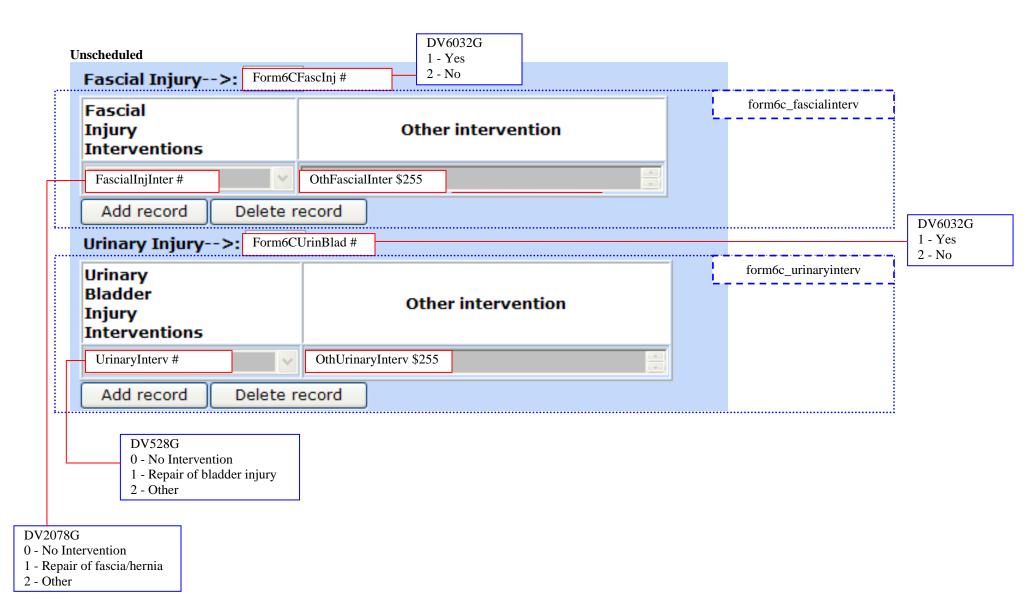


form6c (4 of 7)

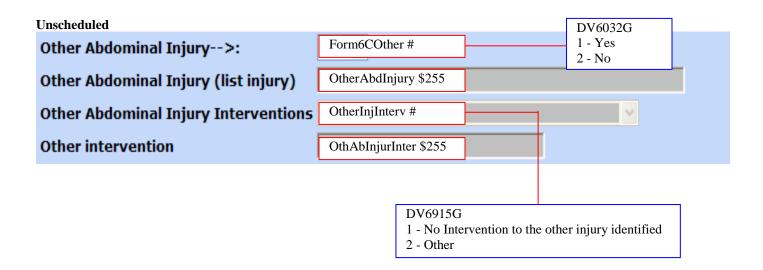




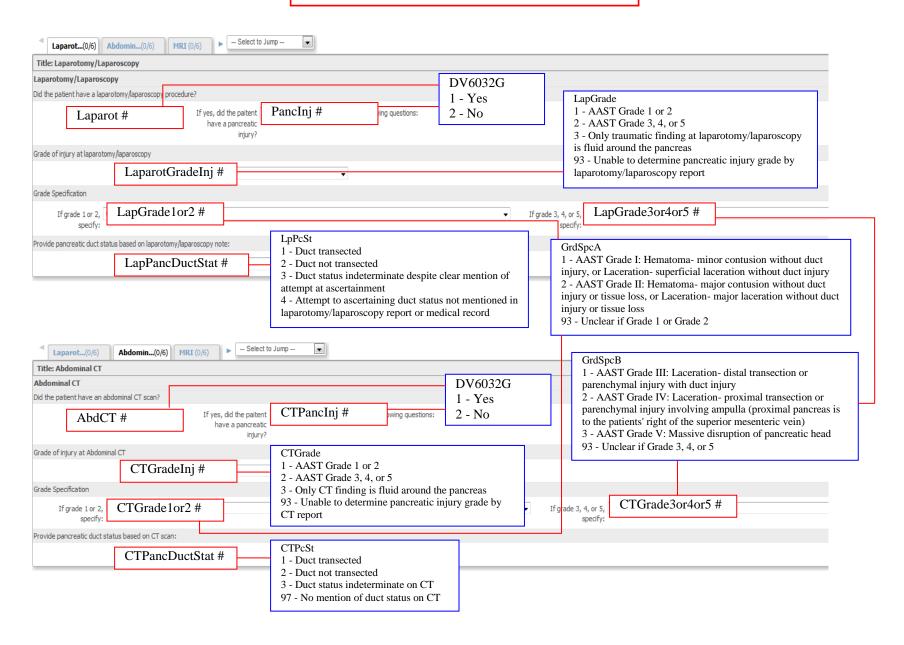
form6c (6 of 7)



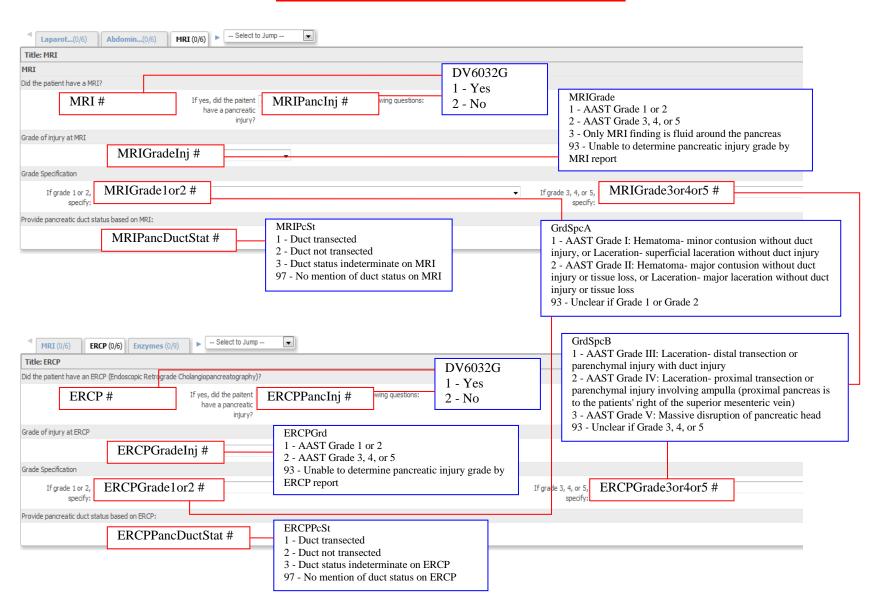
form6c (7 of 7)



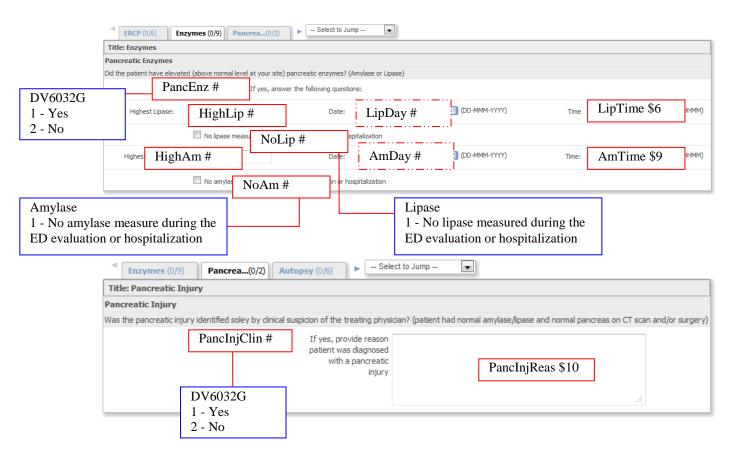
form7apancinj_spec (1 of 6)



form7apancinj_spec (2 of 6)

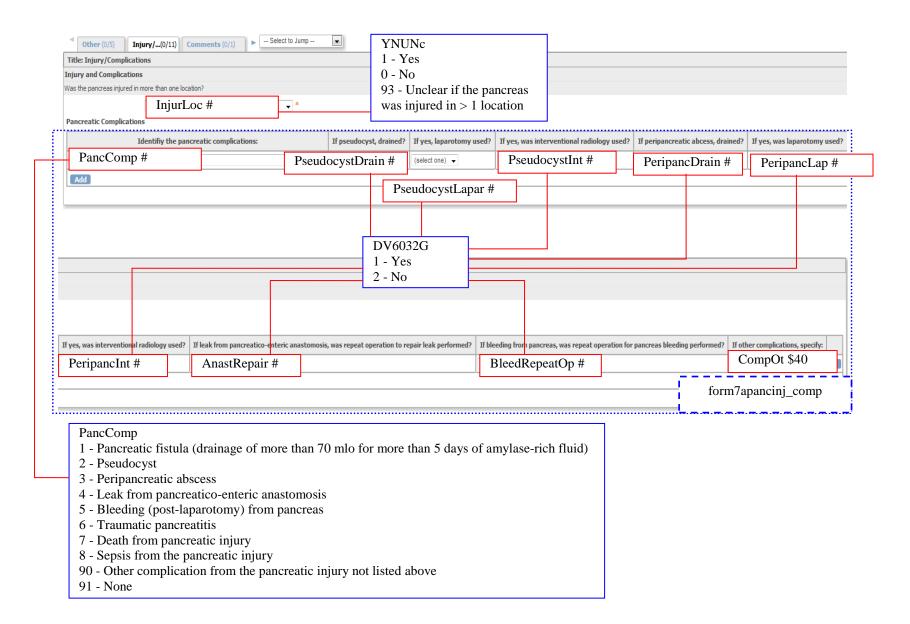


form7apancinj_spec (3 of 6)



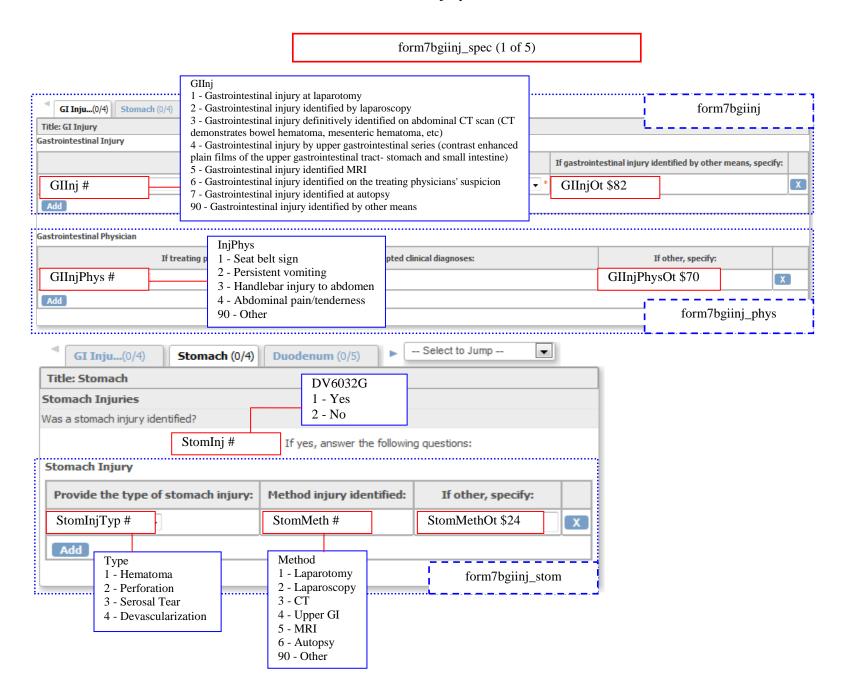
form7apancinj_spec (4 of 6) -- Select to Jump --Pancrea...(0/2) Autopsy (0/6) Other (0/5) Title: Autopsy DV6032G Autopsy 1 - Yes Did the patient have an autopsy? AutoPancInj # If yes, did the paitent ing guestions: 2 - No Autopsy # AtGrd have a pancreation 1 - AAST Grade 1 or 2 injury? 2 - AAST Grade 3, 4, or 5 Grade of injury at autopsy 3 - Only autopsy finding is fluid around the pancreas AutoGradeInj# Grade Specification AutoGrade1or2# If grade 3, 4, or 5 AutoGrade3or4or5 # If grade 1 or specif Provide pancreatic duct status based on autopsy: AtPcSt GrdSpcA AutoPancDuctStat # 1 - AAST Grade I: Hematoma- minor contusion without duct 1 - Duct transected injury, or Laceration- superficial laceration without duct injury 2 - Duct not transected 3 - Duct status indeterminate on autopsy 2 - AAST Grade II: Hematoma- major contusion without duct injury or tissue loss, or Laceration-major laceration without duct 97 - No mention of duct status on autopsy injury or tissue loss 93 - Unclear if Grade 1 or Grade 2 -- Select to Jump --GrdSpcB Autopsy (0/6) Other (0/5) | Injury/...(0/11) DV6032G 1 - AAST Grade III: Laceration- distal transection or Title: Other 1 - Yes parenchymal injury with duct injury Other 2 - AAST Grade IV: Laceration- proximal transection or 2 - No parenchymal injury involving ampulla (proximal pancreas is Was the pancreatic injury identified by other means? to the patients' right of the superior mesenteric vein) If yes, specify PancInjOtMethod \$19 PancInjOt # 3 - AAST Grade V: Massive disruption of pancreatic head 93 - Unclear if Grade 3, 4, or 5 Grade of injury identified by other means OtGrade OtGradeInj# 1 - AAST Grade 1 or 2 2 - AAST Grade 3, 4, or 5 Grade Specification OtGrade1or2# OtGrade3or4or5# If grade 1 or 2, If grade 3, 4, or 5, specify: specify:

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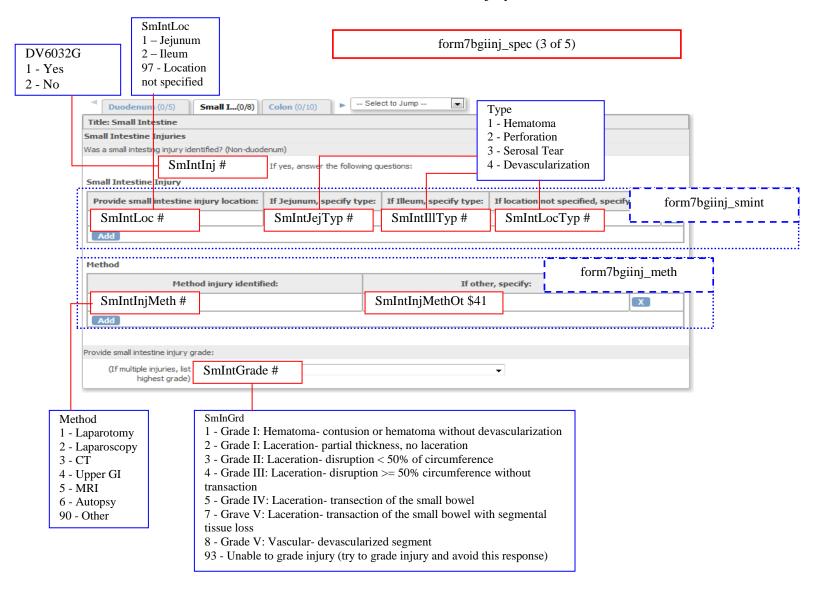
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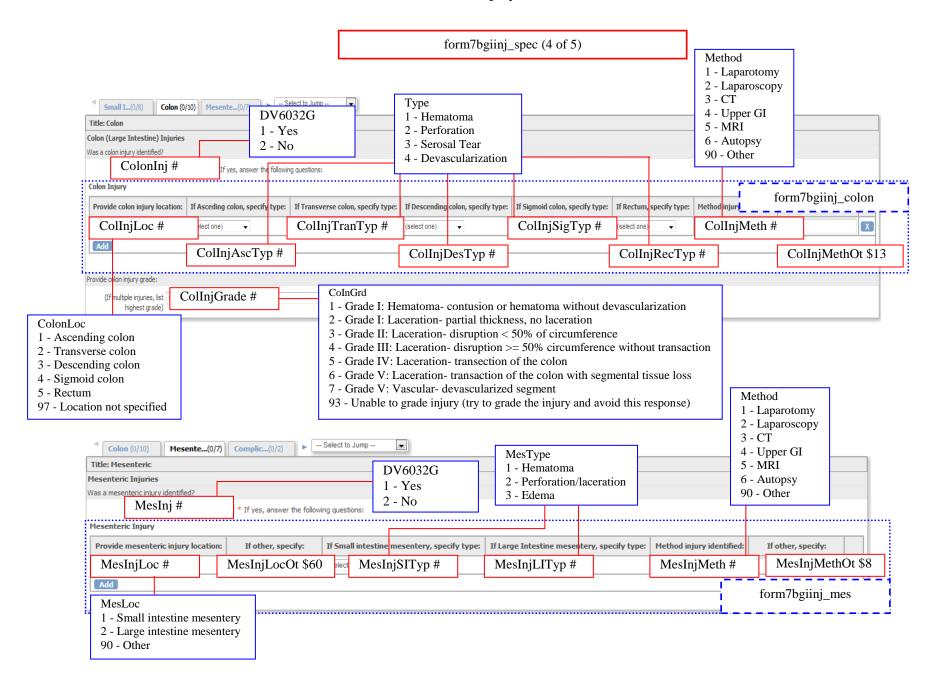


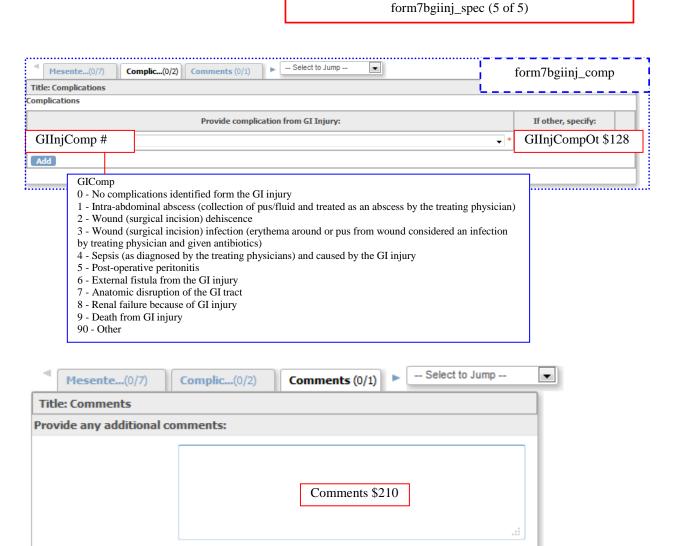


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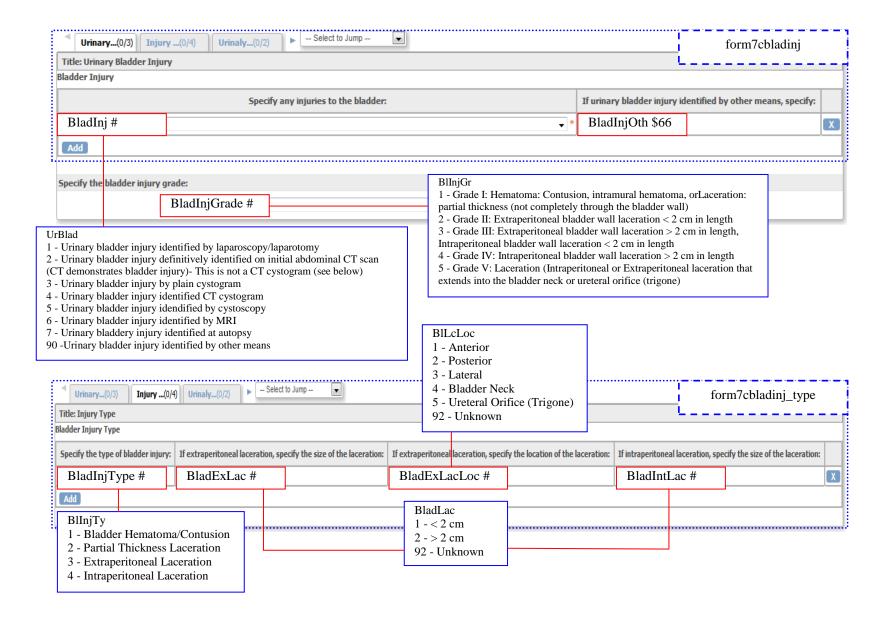
• -- Select to Jump --GI Inju...(0/4) Stomach (0/4) Duodenum (0/5) Title: Duodenum DV6032G Method 1 - Laparotomy **Duodenum Injuries** 1 - Yes 2 - Laparoscopy 2 - No Was a duodenum injury identified? 3 - CT 4 - Upper GI DuodInj# If yes, answer the following questions: 5 - MRI 6 - Autopsy **Duodenum Injury** 90 - Other Provide the type of duodenum injury: Method injury identified: If other, specify: DuodMethOt \$41 DuodInjTyp# DuodMeth# Add form7bgiinj_duod Type Provide duodenal injury grade: 1 - Hematoma 2 - Perforation DuodInjGrade # (If multiple injuries, list 3 - Serosal Tear highest grade) 4 - Devascularization DuoGrd 1 - Grade I: Hematoma- involving single portion of the duodenum 2 - Grade I: Laceration- partial thickness, no laceration 3 - Grade II: Hematoma- involving more than one portion 4 - Grade II: Laceration- disruption < 50% of circumference 5 - Grade III: Laceration- disruption 50-75% circumference of 2nd portion 6 - Grade III: Laceration- disruption 50-100% circumference of 1st, 3rd, 4th portion of the duodenum 7 - Grade IV: Laceration- disruption of > 75% circumference of 2nd portion 8 - Grade IV: Involving ampulla or distal common bile duct 9 - Grade V: Laceration: massive disruption of duodenalpancreatic complex 10 - Grade V: Vascular- devascularization of duodenum 93 - Unable to grade injury (Try to grade the injury and avoid this response)

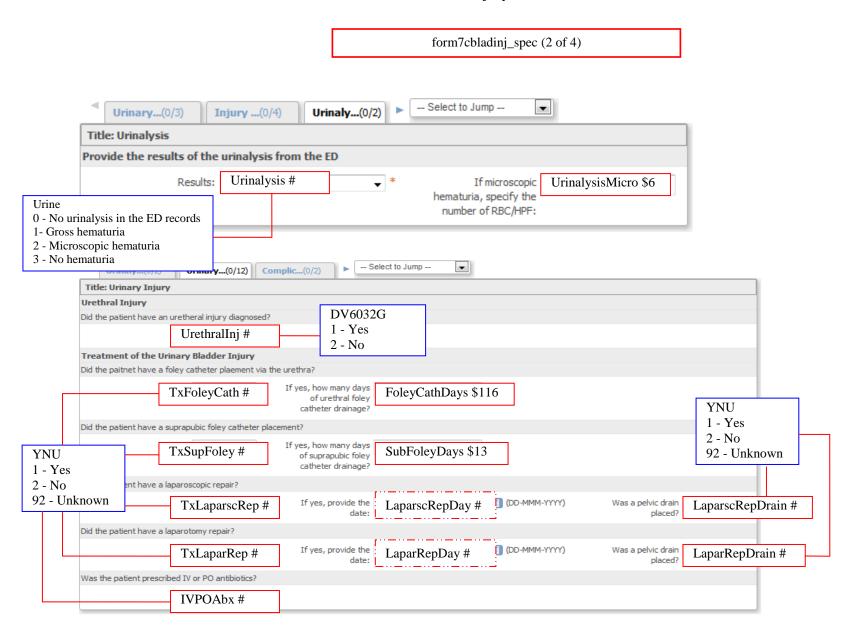




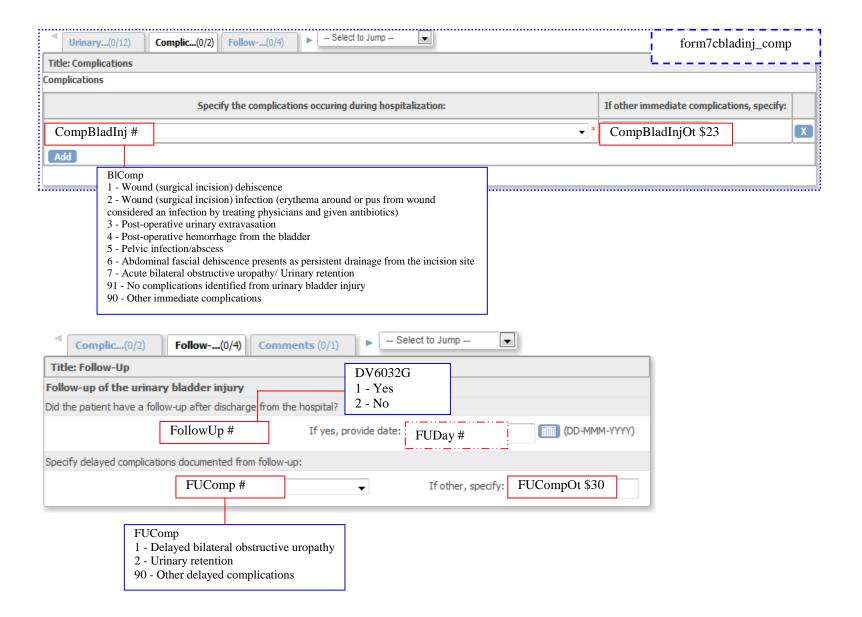


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