UCSF TOTAL KNEE ARTHROPLASTY ENHANCED RECOVERY PATHWAY

			ANESTHESIA	SURGERY	NURSING	PHYSICAL THERAPY	PATIENT
DAYS B4	PREPARE/APS		Prepare Consult: deliver instructions via MyChart, email, mail, or in-person	Patient education	Administer questionaires (RAPT, Knee Society Score, UCLA Activity Level, SF12v2, WOMAC, KOOS)	Educate patients in pre- operative teaching class	Complete questionnaires
				Surgery scheduling, discharge planning initiation			Enroll in MyChart
			Enter pre-op orders (see below)	Screen for anemia with Hemocue	Give patient Boost Breeze and instructions		Review educational material, attend pre-op teaching class
				Informed consent			
DOS PRE-OP			Pre-op warming, IV placement	Complete consent, site marking, 24-hour update, risks/benefits note Vancomycin 1 G IV (for revisions), surgeon to order	Complete pre-op RN checklists		If there is any chance of pregnancy, please discuss with RN/MD.
	MEDICATIONS	ANALGESICS	Gabapentin 600mg once				
			Acetaminophen 1000mg once		Apply warming gown to patient		Nothing by mouth after midnight, except Boost Breeze 2 hr before coming to hospital (surgery may be delayed if consumed later)
			Celecoxib (if eGFR>60) 400mg once	Notify anesthesia teams of patients with anticipated early discharge	Gabapentin, APAP, Celecoxib given once with water (<100ml)		
	REGIONAL		Adductor canal block - Single shot for primary TKA and catheter placement for revisions: ropivacaine 0.2% 25 mL		Additional medications may also be ordered		Risks of surgery and anesthesia will be discussed
INTRA-OP	IVF		15-20 mL/kg (IBW) crystalloid during case	Periarticular injection: Ropivacaine 0.2% 75 mL, +/- epi 0.1 mg			
	TEMP		Maintain patient temperature above 36.0 C				
	MEDICATIONS	ABX	Antibiotic: Cefazolin				
		INFUSIONS	If opioid-tolerant (>100 MEQs), ketamine 0.2 mg/kg IV bolus then an infusion at 2 mcg/kg/min. Consult the APS after completing ketamine infusion orderset (APEX).				
		TXA	TXA 10 mg/kg IV prior to incision and 10 mg/kg IV at deflation of tourniquet (exclude pt with h/o embolic event, hypercoaguable d/o, cardiac or peripheral stents in place)				
		PONV	Ondansetron 4mg IV x 1				
			Decadron 4-8 mg IV x 1 if >2 PONV risk factor				
	ANESTHETIC		SAB: 10-15 mg bupivacaine, +/- fentanyl 10-15 mcg (Discuss any IT morphine with APS and surgical team)				
			GA for patient refusal or contraindication of SAB				
PACU	MEDICATIONS		Order opioid of choice for severe pain: Hydomorphone or	Labs: only if indicated	Hydomorphone or Morphine IV PRN (severe		
			Order antiemetics				
			Adductor canal catheter infusion: Ropivacaine 0.2% at 8				

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		SURGERY/PAIN SERVICE		SURGERY	NURSING	PHYSICAL THERAPY	PATIENT
FLOOR/ICU POD 0	MEDICATIONS	Gabapentin	300mg PO TID	Bowel regimen for opioid-induced constipation: Colace + Senna	Vital signs q4, I&O qshift, daily weight, incision care.		Ankle pumps and circles in bed, 10x every hour
		Acetaminophen	1000mg PO q8H		Out of bed (OOB) with RN		Incentive Spirometry x15 q 1H
		Celecoxib (if eGFR>60)	200mg PO BID	Order PT	Advance to regular diet		Advance to regular diet
		If opioid-tolerant (>100 MEQs), continue ketamine infusion 2 mcg/kg/min and maintain daily opioid requirement.		Labs: only if indicated	Foley Catheter to gravity		Out of bed (OOB) with RN
		Oxycodone PRN moderate pain, morphine or hydromorphine PRN severe pain. If patient requires initation of PCA, consider initiation of					
		Adductor canal catheter infusion: Ropivacaine 0.2% at 8					
FLOOR/ICU POD 1	MEDICATIONS	Gabapentin	300mg PO TID	Labs: CBC, chemistry panel	Vital Signs q 4H, I&O shift, weight daily, surgical incision care	Evaluate, educate, and mobilize patients. Goals: OOB, start walk, up to chair for all meals.	Sit up in chair for all meals. Do knee exercises 3x/day. Bridge knee in bed.
		Acetaminophen	1000mg PO q8H		DVT ppx: Enoxaparin 40 mg SQ 0600		
		Celecoxib	200mg PO BID		Regular Diet	Make discharge disposition and DME recommendations	Incentive Spirometry x15 q 1H
		Stop ketamine infusion and PCA (if used) when adductor canal catheter removed.			Remove Foley Catheter in AM		Regular Diet
					Apply ice to knee		
		Adductor canal catheter infusion: Ropivacaine 0.2% at 8 mL/hr. Removal at 1800.			Ambulation: as per PT		
FLOOR/ICU POD 2	MEDICATIONS	Gabapentin	300mg PO TID	Labs: CBC, chemistry panel only if indicated	Vital Signs q 4H, I&O shift, weight daily, surgical incision care abdomen	Complete education and mobility training. Goals for DC home: I HEP, walk >200', manage stairs if house has them, proper use of AD, family training.	Continue exercises 3x/day
		Acetaminophen	1000mg PO q8H		Ambulation: as per PT		Incentive Spirometry x15 q 1H
		Celecoxib	200mg PO BID	Rx: bowel regimen, DVT ppx	Regular Diet		Regular Diet
				Rx: Celecoxib 200mg PO BID #28 (14 days)	DVT ppx: Enoxaparin 40 mg SQ daily	Order mobility DME if discharged to	
				Rx: Gabapentin 300mg PO TID #42 (14 days)			
				OTC: Acetaminophen 1000mg PO q8H ATC.			

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		SURGERY/PAIN SERVICE	SURGERY	NURSING	PHYSICAL THERAPY	PATIENT
POST-DISCHARGE	2 WEEK		Assess wound, pain control, functional and neuorvascular status. Suture/staple removal. severe, persistent pain: consider referral to UCSF	Administer questionaires (Knee Society Score, UCLA Activity Level, SF12v2, WOMAC, KOOS) at 6 month and 1 year follow-up.		Continue PT: home vs outpatient (focus gait, strength, ROM). acute rehab or skilled nursing facility, discharge planning slowly. Wean from assistive devices direction of physical therapist.
	6 WEEK		Assess pain control, functional and neurovascular status. Obtain x-rays, med reconcillation. For severe, persistent pain: consider referral to UCSF chronic pain clinic			