

Urology Reconstruction v1.0: Pre-Operative Plan

[Approval & Citation](#)

[Summary of Version Changes](#)

[Explanation of Evidence Ratings](#)

Inclusion Criteria

- Urology patients undergoing any of following surgeries:
 - bladder neck reconstruction
 - bladder augmentation
 - catheterizable channel (Malone, Mitrofanoff, Monti)
 - cecostomy

First surgical consultation visit

- ❑ Complete Planning Sheet (requesting surgery in ~16 weeks)
- Identify necessary consults
 - ❑ Social Work consult
 - ❑ Nutrition screen
 - ❑ OT/PT screen, as needed
 - ❑ Pre- and Post-Bowel Management Home (RPM)
- Schedule
 - ❑ Schedule pre-op visit (MD & RN)
 - ❑ Schedule PASS clinic if necessary
 - ❑ Determine need for bowel prep and pre-admission
 - ❑ Post-op visit four weeks post-surgery

Labs and Imaging

- ❑ Order CBC, BMP, Cystatin C, Pre Albumin
- ❑ Verify UDS performed within 2 years, RBUS within 1 year if undergoing bladder surgery

Education

- ❑ Provide patient education handouts

Surgery Coordinator schedules surgery and consults

Urology Nursing
Four weeks after first surgical visit

- ❑ Checks with Surgery Coordinator for scheduling progress
- ❑ Ensures labs have been drawn

Criteria to meet **6 weeks prior to surgery**:
Consults requested have been met:

- ❑ Social Work consult
- ❑ Nutrition consult, if needed
- ❑ OT/PT consult, if needed
- ❑ Pre- and Post-Bowel Management Home established
- ❑ Establish post-op bowel management plan

❑ **Labs:** CBC , BMP, Cystatin C, Pre Albumin within past 4 months

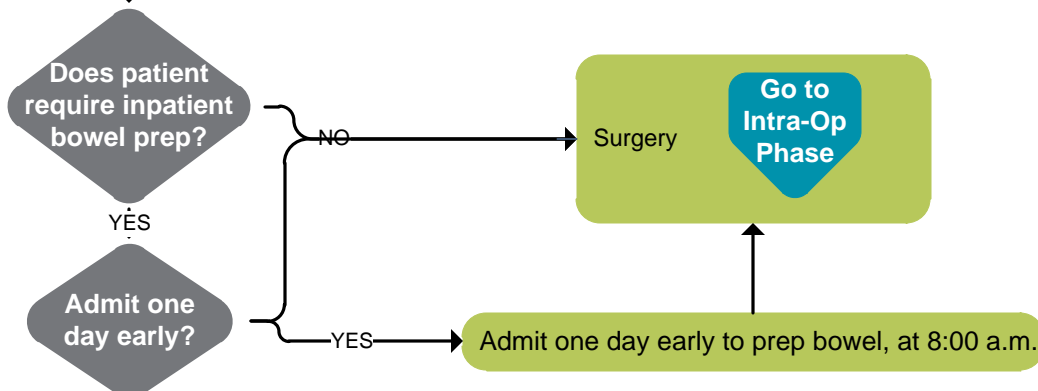
6 weeks prior to surgery:
Contact Surgery Coordination as to whether or not conditions for surgery have been met

Conditions Met — Conditions Not Met

- ❑ Nursing notifies surgeon of urine sample results
- ❑ For asymptomatic bacteriuria, treat for 3 days prior to surgery
- ❑ For cystitis, treat for 7 days prior to surgery
- ❑ If undergoing Malone or cecostomy, send prescription for Nichols prep

- ❑ Confirm surgery date
- ❑ Collect urine sample 1-2 weeks prior
- ❑ Complete Pre-Op Urology RN teaching visit
- ❑ Complete Pre-Op Urology surgeon visit
- ❑ Confirm Post-Op imaging is scheduled
- ❑ Confirm Post-Op Urology MD visit
- ❑ Confirm Post-Op RN teaching visit

- ❑ Cancel surgery date
- ❑ Schedule routine clinic visit



Urology Reconstruction v1.0: Intra-Operative Plan

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[Explanation of Evidence Ratings](#)

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Antibiotic prophylaxis

- **If preop Ucx treated**, include culture-directed prophylaxis x 24 hours
- **If GI tract involved**, cefazolin + metronidazole x 24 hours
- **If no GI tract and preop Ucx negative**, cefazolin x 24 hour

VTE prophylaxis

If indicated, place SCDs prior to induction

If case is contaminated and >6 hours, use separate closing tray, wound protector, and change gown/gloves for closing

Label all catheters clearly before leaving OR

Go to Inpatient Post-Op Phase

Urology Reconstruction v1.0: Post-Operative Plan

[Approval & Citation](#)

[Summary of Version Changes](#)

[Explanation of Evidence Ratings](#)

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 - cecostomy

If new Malone/cecostomy

Once tolerating regular diet:

- start home bowel management and
- Begin 15mL antegrade NS flushes daily

After tolerating regular diet for 1 week:

- Start antegrade flushes via Malone/cecostomy with home volume/recipe

VTE Prophylaxis

Continue VTE prophylaxis or initiate pharmacologic VTE prophylaxis as per VTE Prophylaxis for Reconstructive Surgery document guidance.

If Bladder Surgery

On POD#3:

- Begin irrigating suprapubic tube twice a day with 30mL NS (may irrigate PRN before POD#3 if catheters not draining well)
- Flush all other bladder drainage tubes with 10mL NS daily
- Teach family to irrigate tubes

Diet

- On POD#0, begin clear liquid diet, advance to regular as tolerated
- contact nutrition services if concerns identified preoperatively

Activity

All patients: out of bed 6-8 hrs/ day

Ambulatory patients

- Ambulate 4x per day
- PT if unable to meet activity goals on POD#1
- OT as needed

Non-ambulatory patients

- Activity out of bed 4x per day (i.e. transfer to chair, trip around unit in wheelchair)
- PT beginning on POD#1
- OT beginning on POD#1

Floor RN provides family with list of supplies.

Preparation for Discharge:

- Patient Goals for Recovery and Discharge and Urology Rounds Description POD#0
- Discharge coordinator/Urology APP to communicate urinary catheter Fr size and supply needs to Uro RN via e-mail prior to discharge Urologytriage@seattlechildrens.org
- If new Malone or cecostomy, RPM team/care coordination to order supplies prior to discharge.
- Schedule post-op visits (RN visit, MD, Radiology if needed, Child Life if needed, SW if needed, Nutrition if needed)
- Prescribe one dose of antibiotics to be taken on day of bladder catheter removal
- Family education: (PE2040) Suprapubic and Mitrofanoff catheter care and depart instructions

Discharge Criteria

- Preparation for Discharge complete
- Teaching complete per PE3046

Go to
Outpatient
Follow-Up

Urology Reconstruction v1.0: Outpatient Follow-Up

[Approval & Citation](#)

[Summary of Version Changes](#)

[Explanation of Evidence Ratings](#)

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4 Weeks Post-Surgery Visit

If Bladder Surgery:

- Patient takes one dose of antibiotics prior to visit
- For new bladder augments, obtain cystogram via suprapubic catheter
- MD visit to review imaging and remove catheters
- Urology RN visit to have patient/family practice skills
- Plan suprapubic tube removal (must exhibit successful bladder emptying for ≥ 24 hours); okay to do with APP or local Urologist
- Schedule RV with RBUS in 6 weeks
- Ensure supplies are ordered

If New Malone:

- Obtain abdominal Xray
- Remove Malone catheter and have patient/family practice in clinic
- Ensure supplies are ordered

If New Cecostomy:

- Obtain abdominal Xray
- Schedule RV with General Surgery ARNP in 3 months for cecostomy change
- Ensure supplies are ordered

Urology Reconstruction Pathway Approval & Citation

Approved by the CSW Urology Reconstruction team for February 5, 2019

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Retrieval Website: <https://www.seattlechildrens.org/pdf/urology-reconstruction-pathway.pdf>

Please cite as:

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Evidence Ratings

This pathway was developed through local consensus based on published evidence and expert opinion as part of Clinical Standard Work at Seattle Children's. Pathway teams include representatives from Medical, Subspecialty, and/or Surgical Services, Nursing, Pharmacy, Clinical Effectiveness, and other services as appropriate.

When possible, we used the GRADE method of rating evidence quality. Evidence is first assessed as to whether it is from randomized trial or cohort studies. The rating is then adjusted in the following manner (from: Guyatt G et al. J Clin Epidemiol. 2011;4:383-94.):

Quality ratings are *downgraded* if studies:

- Have serious limitations
- Have inconsistent results
- If evidence does not directly address clinical questions
- If estimates are imprecise OR
- If it is felt that there is substantial publication bias

Quality ratings are *upgraded* if it is felt that:

- The effect size is large
- If studies are designed in a way that confounding would likely underreport the magnitude of the effect OR
- If a dose-response gradient is evident

Guideline – Recommendation is from a published guideline that used methodology deemed acceptable by the team.

Expert Opinion – Our expert opinion is based on available evidence that does not meet GRADE criteria (for example, case-control studies).

Quality of Evidence:

★★★★ High quality

★★★○ Moderate quality

★★○○ Low quality

★○○○ Very low quality

Guideline

Expert Opinion

[Return to Home](#)

[To Bibliography](#)

Summary of Version Changes

- **Version 1.0 (2/5/2019):** Go live

[Return to Home](#)

Medical Disclaimer

Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required.

The authors have checked with sources believed to be reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication.

However, in view of the possibility of human error or changes in medical sciences, neither the authors nor Seattle Children's Healthcare System nor any other party who has been involved in the preparation or publication of this work warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such information.

Readers should confirm the information contained herein with other sources and are encouraged to consult with their health care provider before making any health care decision.

[Return to Home](#)

Bibliography

Literature Search Strategy

Literature searches were conducted in May of 2018. The search targeted synthesized literature on urinary bladder surgery, urinary tract surgery, urogenital abnormalities surgery, intraperitoneal surgery as well as the topics of digestive system surgical procedures or urologic surgical procedures. A search for synthesis level literature was conducted for prevention of venous thrombosis or venous thromboembolism and heparin. The search was conducted for 2008 to current and limited to English. The search was executed in Ovid Medline, Embase, Cochrane Database of Systematic Review, National Guidelines Clearinghouse and the Turning Research into Practice database (TRIP) databases.

Identification

Records identified through database searching (n=710)

Additional records identified through other sources (n=0)

Screening

Records after duplicates removed (n=701)

Records screened (n=701)

Records excluded (n=662)

Eligibility

Records assessed for eligibility (n=39)

Articles excluded (n=33)

Did not answer clinical question (n=12)

Did not meet quality threshold (n=9)

Outdated relative to other included study (n=12)

Included

Studies included in pathway (n=6)

Flow diagram adapted from Moher D et al. BMJ 2009;339:bmj.b2535

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